## STATE OF HAWAII DEPARTMENT OF TRANSPORTATION AIRPORTS

## ADDENDUM NO. 1 FOR CONCRETE SPALL REPAIRS AT TERMINAL 2 ROADWAYS DANIEL K. INOUYE INTERNATIONAL AIRPORT HONOLULU, OAHU, HAWAII STATE PROJECT NO. AO1043-33 AIP PROJECT NO. 3-15-0005-XXX MARCH 6, 2024

This Addendum makes the following amendments to the Solicitation.

## A. TABLE OF CONTENTS

1. Delete the **TABLE OF CONTENTS** dated November 2023 and replace with the attached **TABLE OF CONTENTS** dated r3/6/24.

## B. PART 0.B - BIDDING DOCUMENTS TO BE SUBMITTED WITH BID

- Delete PROPOSAL SCHEDULE, pages P-8 through P-13, dated November 2023 and replace with attached PROPOSAL SCHEDULE pages P-8 through P-13 dated r3/6/24.
- 2. Delete CERTIFICATION OF COMPLIANCE WITH FAA BUY AMERICAN PREFERENCE – EQUIPMENT/BUILDING PROJECTS dated November 2023, and replace with attached CERTIFICATION OF COMPLIANCE WITH FAA BUY AMERICAN PREFERENCE – EQUIPMENT/BUILDING PROJECTS dated r3/6/24.

## C. WAGE RATES

1. Delete the **Federal Wage Rate Schedule** dated 11/10/2023 and replace with the attached **Federal Wage Rate Schedule** dated 01/19/2024.

## D. PART 0.E – REQUIRED FEDERAL AIRPORT IMPROVEMENT PROGRAM (AIP) CONTRACT PROVISIONS

 Delete the Type I, II, III Equipment/Building, and IV Buy American Waivers Issued dated 1/4/2024 and replace with the attached Type I, II, III Equipment/Building, and IV Buy American Waivers Issued dated 2/23/2024.

## E. PART II – TECHNICAL PROVISIONS

- Delete SECTION 01010 DESCRIPTION OF WORK, dated r01/27/19 in its entirety and replace with the attached SECTION 01010 – DESCRIPTION OF WORK, dated r3/6/24.
- 2. Delete SECTION 01560 ENVIRONMENTAL CONTROLS, dated V1 07/2022 in its entirety and replace with SECTION 01560 – GENERAL ENVIRONMENTAL, HEALTH, & SAFETY CONTROLS, dated r03/6/24.
- Delete SECTION 01561 CONSTRUCTION SITE RUNOFF CONTROL PROGRAM, dated r05/05/23 in its entirety and replace with SECTION 01561 – CONSTRUCTION SITE POLLUTION CONTROLS, dated r03/6/24. The Stormwater Pollution Prevention Plan (SWPPP) Template and Construction Connection, Discharge, and Surface Runoff Permit included in the original bid documents remain unchanged.
- Delete SECTION 01562 MANAGEMENT OF CONTAMINATED MEDIA, dated r10/21/2020 in its entirety and replace with SECTION 01562 – MANAGEMENT OF CONTAMINATED MEDIA, SOIL DISPOSAL, AND SOIL REUSE, dated r03/6/24.
- 5. Delete SECTION 03320 HYBRID POLYMER CONCRETE (HPC), dated November 2023 in its entirety and replace with SECTION 03320 HYBRID POLYMER CONCRETE (HPC), dated r3/6/24.
- 6. Delete SECTION 03700 EMBEDDED GALVANIC ANODES, dated November 2023 in its entirety and replace with SECTION 03700 – EMBEDDED GALVANIC ANODES, dated r3/6/24.
- 7. Delete **SECTION 05120 STRUCTURAL STEEL**, dated November 2023 in its entirety and replace with **SECTION 01520 STRUCTURAL STEEL**, dated r3/6/24.
- 8. Add and make a part of the specifications the attached **SECTION 07680 – EPOXY SURFACE TREATMENT**, dated r3/6/24.

9. Delete **SECTION 07916 – EXPANSION JOINT**, dated November 2023 in its entirety and replace with **SECTION 07916 – EXPANSION JOINT**, dated r3/6/24.

## F. PLANS:

- 1. Delete Sheet **S-0001** Structural Notes, dated 01/19/2024 and replace with the attached Sheet **S-0001** STRUCTURAL NOTES, dated 03/01/24.
- Delete Sheet S-1009 Ewa Connecting Link 2<sup>nd</sup> Level Plan, dated 01/19/2024 and replace with the attached Sheet S-1009 EWA CONNECTING LINK 2<sup>ND</sup> LEVEL PLAN, dated 03/01/24.
- Delete Sheet S-1018 DH Connecting Link 2<sup>nd</sup> Level Plan, dated 01/19/2024 and replace with the attached Sheet S-1018 DH CONNECTING LINK 2<sup>ND</sup> LEVEL PLAN, dated 03/01/24.
- 4. Delete Sheet **S-3005** Connecting Link Repair Sequence Cont., dated 01/19/2024 and replace with the attached Sheet **S-3005** CONNECTING LINK REPAIR SEQUENCE CONT., dated 03/01/24.
- Delete Sheet S-4000 Terminal 2 Departures Roadway Enlarged Reflected Ceiling Plan A, dated 01/19/2024 and replace with the attached Sheet S-4000 TERMINAL 2 DEPARTURES ROADWAY ENLARGED REFLECTED CEILING PLAN A, dated 03/01/24.
- Delete Sheet S-4001 Terminal 2 Departures Roadway Enlarged Reflected Ceiling Plan B, dated 01/19/2024 and replace with the attached Sheet S-4001 TERMINAL 2 DEPARTURES ROADWAY ENLARGED REFLECTED CEILING PLAN B, dated 03/01/24.
- Delete Sheet S-4002 Terminal 2 Departures Roadway Enlarged Reflected Ceiling Plan C, dated 01/19/2024 and replace with the attached Sheet S-4002 TERMINAL 2 DEPARTURES ROADWAY ENLARGED REFLECTED CEILING PLAN C, dated 03/01/24.
- Delete Sheet S-4003 Terminal 2 Departures Roadway Enlarged Reflected Ceiling Plan D, dated 01/19/2024 and replace with the attached Sheet S-4003 TERMINAL 2 DEPARTURES ROADWAY ENLARGED REFLECTED CEILING PLAN D, dated 03/01/24.
- Delete Sheet S-4004 Terminal 2 Departures Roadway Enlarged Reflected Ceiling Plan E, dated 01/19/2024 and replace with the attached Sheet S-4004 TERMINAL 2 DEPARTURES ROADWAY ENLARGED REFLECTED CEILING PLAN E, dated 03/01/24.

- Delete Sheet S-4005 Terminal 2 Departures Roadway Enlarged Reflected Ceiling Plan F, dated 01/19/2024 and replace with the attached Sheet S-4005 TERMINAL 2 DEPARTURES ROADWAY ENLARGED REFLECTED CEILING PLAN F, dated 03/01/24.
- Delete Sheet S-4006 Terminal 2 Departures Roadway Enlarged Reflected Ceiling Plan G, dated 01/19/2024 and replace with the attached Sheet S-4006 TERMINAL 2 DEPARTURES ROADWAY ENLARGED REFLECTED CEILING PLAN G, dated 03/01/24.
- Delete Sheet S-4007 Terminal 2 Departures Roadway Enlarged Reflected Ceiling Plan H, dated 01/19/2024 and replace with the attached Sheet S-4007 TERMINAL 2 DEPARTURES ROADWAY ENLARGED REFLECTED CEILING PLAN H, dated 03/01/24.
- Delete Sheet S-4008 Terminal 2 Departures Roadway Enlarged Reflected Ceiling Plan I, dated 01/19/2024 and replace with the attached Sheet S-4008 TERMINAL 2 DEPARTURES ROADWAY ENLARGED REFLECTED CEILING PLAN I, dated 03/01/24.
- Delete Sheet S-4009 Terminal 2 Departures Roadway Enlarged Reflected Ceiling Plan J, dated 01/19/2024 and replace with the attached Sheet S-4009 TERMINAL 2 DEPARTURES ROADWAY ENLARGED REFLECTED CEILING PLAN J, dated 03/01/24.
- Delete Sheet S-4010 Terminal 2 Departures Roadway Enlarged Plan A, dated 01/19/2024 and replace with the attached Sheet S-4010 TERMINAL 2 DEPARTURES ROADWAY ENLARGED PLAN A, dated 03/01/24.
- Delete Sheet S-4011 Terminal 2 Departures Roadway Enlarged Plan B, dated 01/19/2024 and replace with the attached Sheet S-4011 TERMINAL 2 DEPARTURES ROADWAY ENLARGED PLAN B, dated 03/01/24.
- 17. Delete Sheet **S-4012** Terminal 2 Departures Roadway Enlarged Plan C, dated 01/19/2024 and replace with the attached Sheet **S-4012** TERMINAL 2 DEPARTURES ROADWAY ENLARGED PLAN C, dated 03/01/24.
- Delete Sheet S-4013 Terminal 2 Departures Roadway Enlarged Plan D, dated 01/19/2024 and replace with the attached Sheet S-4013 TERMINAL 2 DEPARTURES ROADWAY ENLARGED PLAN D, dated 03/01/24.
- 19. Delete Sheet **S-4014** Terminal 2 Departures Roadway Enlarged Plan E, dated 01/19/2024 and replace with the attached Sheet **S-4014** TERMINAL 2 DEPARTURES ROADWAY ENLARGED PLAN E, dated 03/01/24.
- 20. Delete Sheet S-4015 Terminal 2 Departures Roadway Enlarged Plan F,

dated 01/19/2024 and replace with the attached Sheet **S-4015** TERMINAL 2 DEPARTURES ROADWAY ENLARGED PLAN F, dated 03/01/24.

- 21. Delete Sheet **S-4016** Terminal 2 Departures Roadway Enlarged Plan G, dated 01/19/2024 and replace with the attached Sheet **S-4016** TERMINAL 2 DEPARTURES ROADWAY ENLARGED PLAN G, dated 03/01/24.
- Delete Sheet S-4017 Terminal 2 Departures Roadway Enlarged Plan H, dated 01/19/2024 and replace with the attached Sheet S-4017 TERMINAL 2 DEPARTURES ROADWAY ENLARGED PLAN H, dated 03/01/24.
- Delete Sheet S-4018 Terminal 2 Departures Roadway Enlarged Plan I, dated 01/19/2024 and replace with the attached Sheet S-4018 TERMINAL 2 DEPARTURES ROADWAY ENLARGED PLAN I, dated 03/01/24.
- 24. Delete Sheet **S-4019** Terminal 2 Departures Roadway Enlarged Plan J, dated 01/19/2024 and replace with the attached Sheet **S-4019** TERMINAL 2 DEPARTURES ROADWAY ENLARGED PLAN J, dated 03/01/24.
- Delete Sheet S-4081 Ewa Connecting Link 1<sup>st</sup> Level Partial Reflected Ceiling Plan A, dated 01/19/2024 and replace with the attached Sheet S-4081 EWA CONNECTING LINK 1<sup>ST</sup> LEVEL PARTIAL REFLECTED CEILING PLAN A, dated 03/01/24.
- Delete Sheet S-4082 Ewa Connecting Link 1<sup>st</sup> Level Partial Reflected Ceiling Plan B, dated 01/19/2024 and replace with the attached Sheet S-4082 EWA CONNECTING LINK 1<sup>ST</sup> LEVEL PARTIAL REFLECTED CEILING PLAN B, dated 03/01/24.
- Delete Sheet S-4083 Ewa Connecting Link 1<sup>st</sup> Level Partial Reflected Ceiling Plan C, dated 01/19/2024 and replace with the attached Sheet S-4083 EWA CONNECTING LINK 1<sup>ST</sup> LEVEL PARTIAL REFLECTED CEILING PLAN C, dated 03/01/24.
- Delete Sheet S-4084 Ewa Connecting Link 1<sup>st</sup> Level Partial Reflected Ceiling Plan D, dated 01/19/2024 and replace with the attached Sheet S-4084 EWA CONNECTING LINK 1<sup>ST</sup> LEVEL PARTIAL REFLECTED CEILING PLAN D, dated 03/01/24.
- Delete Sheet S-4085 Ewa Connecting Link 1<sup>st</sup> Level Partial Reflected Ceiling Plan E, dated 01/19/2024 and replace with the attached Sheet S-4085 EWA CONNECTING LINK 1<sup>ST</sup> LEVEL PARTIAL REFLECTED CEILING PLAN E, dated 03/01/24.
- 30. Delete Sheet **S-4087** Ewa Connecting Link 2<sup>nd</sup> Level Partial Reflected Ceiling Plan G, dated 01/19/2024 and replace with the attached Sheet **S-4087** EWA

CONNECTING LINK 2<sup>ND</sup> LEVEL PARTIAL REFLECTED CEILING PLAN G, dated 03/01/24.

- Delete Sheet S-4088 Ewa Connecting Link 2<sup>nd</sup> Level Partial Reflected Ceiling Plan H, dated 01/19/2024 and replace with the attached Sheet S-4088 EWA CONNECTING LINK 2<sup>ND</sup> LEVEL PARTIAL REFLECTED CEILING PLAN H, dated 03/01/24.
- Delete Sheet S-4090 Ewa Connecting Link 2<sup>nd</sup> Level Partial Reflected Ceiling Plan J, dated 01/19/2024 and replace with the attached Sheet S-4090 EWA CONNECTING LINK 2<sup>ND</sup> LEVEL PARTIAL REFLECTED CEILING PLAN J, dated 03/01/24.
- Delete Sheet S-4104 Ewa Connecting Link Partial Repair Plan A, dated 01/19/2024 and replace with the attached Sheet S-4104 EWA CONNECTING LINK PARTIAL REPAIR PLAN A, dated 03/01/24.
- Delete Sheet S-4105 Ewa Connecting Link Partial Repair Plan B, dated 01/19/2024 and replace with the attached Sheet S-4105 EWA CONNECTING LINK PARTIAL REPAIR PLAN B, dated 03/01/24.
- Delete Sheet S-4106 Ewa Connecting Link Partial Repair Plan C, dated 01/19/2024 and replace with the attached Sheet S-4106 EWA CONNECTING LINK PARTIAL REPAIR PLAN C, dated 03/01/24.
- Delete Sheet S-4107 Ewa Connecting Link Partial Repair Plan D, dated 01/19/2024 and replace with the attached Sheet S-4107 EWA CONNECTING LINK PARTIAL REPAIR PLAN D, dated 03/01/24.
- Delete Sheet S-4108 Ewa Connecting Link Partial Repair Plan F, dated 01/19/2024 and replace with the attached Sheet S-4108 EWA CONNECTING LINK PARTIAL REPAIR PLAN F, dated 03/01/24.
- Delete Sheet S-4109 Ewa Connecting Link Partial Repair Plan E, dated 01/19/2024 and replace with the attached Sheet S-4109 EWA CONNECTING LINK PARTIAL REPAIR PLAN E, dated 03/01/24.
- Delete Sheet S-4110 Ewa Connecting Link Partial Repair Plan G, dated 01/19/2024 and replace with the attached Sheet S-4110 EWA CONNECTING LINK PARTIAL REPAIR PLAN G, dated 03/01/24.
- Delete Sheet S-4111 Ewa Connecting Link Partial Repair Plan H, dated 01/19/2024 and replace with the attached Sheet S-4111 EWA CONNECTING LINK PARTIAL REPAIR PLAN H, dated 03/01/24.

- 41. Delete Sheet **S-4112** Ewa Connecting Link Partial Repair Plan I, dated 01/19/2024 and replace with the attached Sheet **S-4112** EWA CONNECTING LINK PARTIAL REPAIR PLAN I, dated 03/01/24.
- 42. Delete Sheet **S-4113** Ewa Connecting Link Partial Repair Plan J, dated 01/19/2024 and replace with the attached Sheet **S-4113** EWA CONNECTING LINK PARTIAL REPAIR PLAN J, dated 03/01/24.
- 43. Delete Sheet **S-4114** Ewa Connecting Link Partial Repair Plan K, dated 01/19/2024 and replace with the attached Sheet **S-4114** EWA CONNECTING LINK PARTIAL REPAIR PLAN K, dated 03/01/24.
- 44. Delete Sheet **S-4119** Terminal 2 3<sup>rd</sup> Level Roadway Partial Repair Plan B, dated 01/19/2024 and replace with the attached Sheet **S-4119** TERMINAL 2 3<sup>RD</sup> LEVEL ROADWAY PARTIAL REPAIR PLAN B, dated 03/01/24.
- 45. Delete Sheet S-4120 Terminal 2 3<sup>rd</sup> Level Roadway Partial Repair Plan C, dated 01/19/2024 and replace with the attached Sheet S-4120 TERMINAL 2 3<sup>RD</sup> LEVEL ROADWAY PARTIAL REPAIR PLAN C, dated 03/01/24.
- 46. Delete Sheet S-4121 Terminal 2 3<sup>rd</sup> Level Roadway Partial Repair Plan D, dated 01/19/2024 and replace with the attached Sheet S-4121 TERMINAL 2 3<sup>RD</sup> LEVEL ROADWAY PARTIAL REPAIR PLAN D, dated 03/01/24.
- 47. Delete Sheet S-4122 Terminal 2 3<sup>rd</sup> Level Roadway Partial Repair Plan E, dated 01/19/2024 and replace with the attached Sheet S-4122 TERMINAL 2 3<sup>RD</sup> LEVEL ROADWAY PARTIAL REPAIR PLAN E, dated 03/01/24.
- Delete Sheet S-4124 DH Concourse 1<sup>st</sup> Level Partial Reflected Ceiling Plan A, dated 01/19/2024 and replace with the attached Sheet S-4124 DH CONCOURSE 1<sup>ST</sup> LEVEL PARTIAL REFLECTED CEILING PLAN A, dated 03/01/24.
- Delete Sheet S-4125 DH Concourse 1<sup>st</sup> Level Partial Reflected Ceiling Plan B, dated 01/19/2024 and replace with the attached Sheet S-4125 DH CONCOURSE 1<sup>ST</sup> LEVEL PARTIAL REFLECTED CEILING PLAN B, dated 03/01/24.
- Delete Sheet S-4126 DH Concourse 1<sup>st</sup> Level Partial Reflected Ceiling Plan C, dated 01/19/2024 and replace with the attached Sheet S-4126 DH CONCOURSE 1<sup>ST</sup> LEVEL PARTIAL REFLECTED CEILING PLAN C, dated 03/01/24.
- 51. Delete Sheet **S-4127** DH Concourse 1<sup>st</sup> Level Partial Reflected Ceiling Plan D,

dated 01/19/2024 and replace with the attached Sheet **S-4127** DH CONCOURSE 1<sup>ST</sup> LEVEL PARTIAL REFLECTED CEILING PLAN D, dated 03/01/24.

- 52. Delete Sheet S-4128 DH Concourse 1<sup>st</sup> Level Partial Reflected Ceiling Plan E, dated 01/19/2024 and replace with the attached Sheet S-4128 DH CONCOURSE 1<sup>ST</sup> LEVEL PARTIAL REFLECTED CEILING PLAN E, dated 03/01/24.
- Delete Sheet S-4129 DH Concourse 1<sup>st</sup> Level Partial Reflected Ceiling Plan F, dated 01/19/2024 and replace with the attached Sheet S-4129 DH CONCOURSE 1<sup>ST</sup> LEVEL PARTIAL REFLECTED CEILING PLAN F, dated 03/01/24.
- Delete Sheet S-4130 DH Concourse 1<sup>st</sup> Level Partial Reflected Ceiling Plan G, dated 01/19/2024 and replace with the attached Sheet S-4130 DH CONCOURSE 1<sup>ST</sup> LEVEL PARTIAL REFLECTED CEILING PLAN G, dated 03/01/24.
- 55. Delete Sheet S-4131 DH Concourse 1<sup>st</sup> Level Partial Reflected Ceiling Plan H, dated 01/19/2024 and replace with the attached Sheet S-4131 DH CONCOURSE 1<sup>ST</sup> LEVEL PARTIAL REFLECTED CEILING PLAN H, dated 03/01/24.
- 56. Delete Sheet **S-4132** DH Concourse 2<sup>nd</sup> Level Partial Plan A, dated 01/19/2024 and replace with the attached Sheet **S-4132** DH CONCOURSE 2<sup>ND</sup> LEVEL PARTIAL PLAN A, dated 03/01/24.
- 57. Delete Sheet **S-4133** DH Concourse 2<sup>nd</sup> Level Partial Plan B, dated 01/19/2024 and replace with the attached Sheet **S-4133** DH CONCOURSE 2<sup>ND</sup> LEVEL PARTIAL PLAN B, dated 03/01/24.
- 58. Delete Sheet **S-4134** DH Concourse 2<sup>nd</sup> Level Partial Plan C, dated 01/19/2024 and replace with the attached Sheet **S-4134** DH CONCOURSE 2<sup>ND</sup> LEVEL PARTIAL PLAN C, dated 03/01/24.
- 59. Delete Sheet **S-4135** DH Concourse 2<sup>nd</sup> Level Partial Plan D, dated 01/19/2024 and replace with the attached Sheet **S-4135** DH CONCOURSE 2<sup>ND</sup> LEVEL PARTIAL PLAN D, dated 03/01/24.
- Delete Sheet S-4136 DH Concourse 2<sup>nd</sup> Level Partial Plan E, dated 01/19/2024 and replace with the attached Sheet S-4136 DH CONCOURSE 2<sup>ND</sup> LEVEL PARTIAL PLAN E, dated 03/01/24.

- 61. Delete Sheet **S-4137** DH Concourse 2<sup>nd</sup> Level Partial Plan F, dated 01/19/2024 and replace with the attached Sheet **S-4137** DH CONCOURSE 2<sup>ND</sup> LEVEL PARTIAL PLAN F, dated 03/01/24.
- 62. Delete Sheet **S-4138** DH Concourse 2<sup>nd</sup> Level Partial Plan G, dated 01/19/2024 and replace with the attached Sheet **S-4138** DH CONCOURSE 2<sup>ND</sup> LEVEL PARTIAL PLAN G, dated 03/01/24.
- 63. Delete Sheet **S-4139** DH Concourse 2<sup>nd</sup> Level Partial Plan H, dated 01/19/2024 and replace with the attached Sheet **S-4139** DH CONCOURSE 2<sup>ND</sup> LEVEL PARTIAL PLAN H, dated 03/01/24.
- 64. Delete Sheet **S-4140** DH Concourse 2<sup>nd</sup> Level Partial Plan I, dated 01/19/2024 and replace with the attached Sheet **S-4140** DH CONCOURSE 2<sup>ND</sup> LEVEL PARTIAL PLAN I, dated 03/01/24.
- Delete Sheet S-4141 DH Concourse 2<sup>nd</sup> Level Partial Reflected Ceiling Plan A, dated 01/19/2024 and replace with the attached Sheet S-4141 DH CONCOURSE 2<sup>ND</sup> LEVEL PARTIAL REFLECTED CEILING PLAN A, dated 03/01/24.
- Delete Sheet S-4142 DH Concourse 2<sup>nd</sup> Level Partial Reflected Ceiling Plan B, dated 01/19/2024 and replace with the attached Sheet S-4142 DH CONCOURSE 2<sup>ND</sup> LEVEL PARTIAL REFLECTED CEILING PLAN B, dated 03/01/24.
- Delete Sheet S-4143 DH Concourse 2<sup>nd</sup> Level Partial Reflected Ceiling Plan C, dated 01/19/2024 and replace with the attached Sheet S-4143 DH CONCOURSE 2<sup>ND</sup> LEVEL PARTIAL REFLECTED CEILING PLAN C, dated 03/01/24.
- Delete Sheet S-4144 DH Concourse 2<sup>nd</sup> Level Partial Reflected Ceiling Plan D, dated 01/19/2024 and replace with the attached Sheet S-4144 DH CONCOURSE 2<sup>ND</sup> LEVEL PARTIAL REFLECTED CEILING PLAN D, dated 03/01/24.
- Delete Sheet S-4145 DH Concourse 2<sup>nd</sup> Level Partial Reflected Ceiling Plan E, dated 01/19/2024 and replace with the attached Sheet S-4145 DH CONCOURSE 2<sup>ND</sup> LEVEL PARTIAL REFLECTED CEILING PLAN E, dated 03/01/24.
- Delete Sheet S-4146 DH Concourse 2<sup>nd</sup> Level Partial Reflected Ceiling Plan F, dated 01/19/2024 and replace with the attached Sheet S-4146 DH CONCOURSE 2<sup>ND</sup> LEVEL PARTIAL REFLECTED CEILING PLAN F, dated 03/01/24.

- Delete Sheet S-4147 DH Concourse 2<sup>nd</sup> Level Partial Reflected Ceiling Plan G, dated 01/19/2024 and replace with the attached Sheet S-4147 DH CONCOURSE 2<sup>ND</sup> LEVEL PARTIAL REFLECTED CEILING PLAN G, dated 03/01/24.
- Delete Sheet S-4148 DH Concourse 2<sup>nd</sup> Level Partial Reflected Ceiling Plan H, dated 01/19/2024 and replace with the attached Sheet S-4148 DH CONCOURSE 2<sup>ND</sup> LEVEL PARTIAL REFLECTED CEILING PLAN H, dated 03/01/24.
- 73. Delete Sheet **S-4149** DH Concourse 3<sup>rd</sup> Level Partial Plan A, dated 01/19/2024 and replace with the attached Sheet **S-4149** DH CONCOURSE 3<sup>RD</sup> LEVEL PARTIAL PLAN A, dated 03/01/24.
- 74. Delete Sheet **S-4150** DH Concourse 3<sup>rd</sup> Level Partial Plan B, dated 01/19/2024 and replace with the attached Sheet **S-4150** DH CONCOURSE 3<sup>RD</sup> LEVEL PARTIAL PLAN B, dated 03/01/24.
- 75. Delete Sheet S-4151 DH Concourse 3<sup>rd</sup> Level Partial Plan C, dated 01/19/2024 and replace with the attached Sheet S-4151 DH CONCOURSE 3<sup>RD</sup> LEVEL PARTIAL PLAN C, dated 03/01/24.
- 76. Delete Sheet **S-4152** DH Concourse 3<sup>rd</sup> Level Partial Plan D, dated 01/19/2024 and replace with the attached Sheet **S-4152** DH CONCOURSE 3<sup>RD</sup> LEVEL PARTIAL PLAN D, dated 03/01/24.
- 77. Delete Sheet **S-4153** DH Concourse 3<sup>rd</sup> Level Partial Plan E, dated 01/19/2024 and replace with the attached Sheet **S-4153** DH CONCOURSE 3<sup>RD</sup> LEVEL PARTIAL PLAN E, dated 03/01/24.
- Delete Sheet S-4154 DH Concourse 3<sup>rd</sup> Level Partial Plan F, dated 01/19/2024 and replace with the attached Sheet S-4154 DH CONCOURSE 3<sup>RD</sup> LEVEL PARTIAL PLAN F, dated 03/01/24.
- 79. Delete Sheet **S-4155** DH Concourse 3<sup>rd</sup> Level Partial Plan G, dated 01/19/2024 and replace with the attached Sheet **S-4155** DH CONCOURSE 3<sup>RD</sup> LEVEL PARTIAL PLAN G, dated 03/01/24.
- Delete Sheet S-4156 DH Concourse 3<sup>rd</sup> Level Partial Plan H, dated 01/19/2024 and replace with the attached Sheet S-4156 DH CONCOURSE 3<sup>RD</sup> LEVEL PARTIAL PLAN H, dated 03/01/24.

- 81. Delete Sheet **S-4157** DH Concourse 3<sup>rd</sup> Level Partial Plan I, dated 01/19/2024 and replace with the attached Sheet **S-4157** DH CONCOURSE 3<sup>RD</sup> LEVEL PARTIAL PLAN I, dated 03/01/24.
- 82. Delete Sheet **S-4158** DH Concourse 3<sup>rd</sup> Level Partial Plan J, dated 01/19/2024 and replace with the attached Sheet **S-4158** DH CONCOURSE 3<sup>RD</sup> LEVEL PARTIAL PLAN J, dated 03/01/24.
- Delete Sheet S-4159 DH Concourse 3<sup>rd</sup> Level Partial Plan K, dated 01/19/2024 and replace with the attached Sheet S-4159 DH CONCOURSE 3<sup>RD</sup> LEVEL PARTIAL PLAN K, dated 03/01/24.
- Delete Sheet S-4160 DH Concourse 3<sup>rd</sup> Level Partial Reflected Ceiling Plan B, dated 01/19/2024 and replace with the attached Sheet S-4160 DH CONCOURSE 3<sup>RD</sup> LEVEL PARTIAL REFLECTED CEILING PLAN B, dated 03/01/24.
- Delete Sheet S-4161 DH Concourse 3<sup>rd</sup> Level Partial Reflected Ceiling Plan C, dated 01/19/2024 and replace with the attached Sheet S-4161 DH CONCOURSE 3<sup>RD</sup> LEVEL PARTIAL REFLECTED CEILING PLAN C, dated 03/01/24.
- Delete Sheet S-4162 DH Concourse 3<sup>rd</sup> Level Partial Reflected Ceiling Plan D, dated 01/19/2024 and replace with the attached Sheet S-4162 DH CONCOURSE 3<sup>RD</sup> LEVEL PARTIAL REFLECTED CEILING PLAN D, dated 03/01/24.
- Delete Sheet S-4163 DH Concourse 3<sup>rd</sup> Level Partial Reflected Ceiling Plan E, dated 01/19/2024 and replace with the attached Sheet S-4163 DH CONCOURSE 3<sup>RD</sup> LEVEL PARTIAL REFLECTED CEILING PLAN E, dated 03/01/24.
- Delete Sheet S-4164 DH Concourse 3<sup>rd</sup> Level Partial Reflected Ceiling Plan F, dated 01/19/2024 and replace with the attached Sheet S-4164 DH CONCOURSE 3<sup>RD</sup> LEVEL PARTIAL REFLECTED CEILING PLAN F, dated 03/01/24.
- Delete Sheet S-4165 DH Concourse 3<sup>rd</sup> Level Partial Reflected Ceiling Plan G, dated 01/19/2024 and replace with the attached Sheet S-4165 DH CONCOURSE 3<sup>RD</sup> LEVEL PARTIAL REFLECTED CEILING PLAN G, dated 03/01/24.
- 90. Delete Sheet **S-4166** DH Concourse 3<sup>rd</sup> Level Partial Reflected Ceiling Plan H, dated 01/19/2024 and replace with the attached Sheet **S-4166** DH

CONCOURSE 3<sup>RD</sup> LEVEL PARTIAL REFLECTED CEILING PLAN H, dated 03/01/24.

- Delete Sheet S-4170 DH Connecting Link 1st Level Partial Reflected Ceiling Plan D, dated 01/19/2024 and replace with the attached Sheet S-4170 DH CONNECTING LINK 1<sup>ST</sup> LEVEL PARTIAL REFLECTED CEILING PLAN D, dated 03/01/24.
- 92. Delete Sheet S-4171 DH Connecting Link 1st Level Partial Reflected Ceiling Plan E, dated 01/19/2024 and replace with the attached Sheet S-4171 DH CONNECTING LINK 1<sup>ST</sup> LEVEL PARTIAL REFLECTED CEILING PLAN E, dated 03/01/24.
- Delete Sheet S-4172 DH Connecting Link 1st Level Partial Reflected Ceiling Plan F, dated 01/19/2024 and replace with the attached Sheet S-4172 DH CONNECTING LINK 1<sup>ST</sup> LEVEL PARTIAL REFLECTED CEILING PLAN F, dated 03/01/24.
- 94. Delete Sheet S-4175 DH Connecting Link 1st Level Partial Reflected Ceiling Plan I, dated 01/19/2024 and replace with the attached Sheet S-4175 DH CONNECTING LINK 1<sup>ST</sup> LEVEL PARTIAL REFLECTED CEILING PLAN I, dated 03/01/24.
- 95. Delete Sheet S-4177 DH Connecting Link 1st Level Partial Reflected Ceiling Plan K, dated 01/19/2024 and replace with the attached Sheet S-4177 DH CONNECTING LINK 1<sup>ST</sup> LEVEL PARTIAL REFLECTED CEILING PLAN K, dated 03/01/24.
- Delete Sheet S-4191 DH Connecting Link Partial Repair Plan A, dated 01/19/2024 and replace with the attached Sheet S-4191 DH CONNECTING LINK PARTIAL REPAIR PLAN A, dated 03/01/24.
- 97. Delete Sheet **S-4192** DH Connecting Link Partial Repair Plan B, dated 01/19/2024 and replace with the attached Sheet **S-4192** DH CONNECTING LINK PARTIAL REPAIR PLAN B, dated 03/01/24.
- Delete Sheet S-4193 DH Connecting Link Partial Repair Plan C, dated 01/19/2024 and replace with the attached Sheet S-4193 DH CONNECTING LINK PARTIAL REPAIR PLAN C, dated 03/01/24.
- Delete Sheet S-4194 DH Connecting Link Partial Repair Plan D, dated 01/19/2024 and replace with the attached Sheet S-4194 DH CONNECTING LINK PARTIAL REPAIR PLAN D, dated 03/01/24.

- 100. Delete Sheet **S-4195** DH Connecting Link Partial Repair Plan E, dated 01/19/2024 and replace with the attached Sheet **S-4195** DH CONNECTING LINK PARTIAL REPAIR PLAN E, dated 03/01/24.
- 101. Delete Sheet S-4196 DH Connecting Link Partial Repair Plan F, dated 01/19/2024 and replace with the attached Sheet S-4196 DH CONNECTING LINK PARTIAL REPAIR PLAN F, dated 03/01/24.
- 102. Delete Sheet **S-4197** DH Connecting Link Partial Repair Plan G, dated 01/19/2024 and replace with the attached Sheet **S-4197** DH CONNECTING LINK PARTIAL REPAIR PLAN G, dated 03/01/24.
- 103. Delete Sheet S-4198 DH Connecting Link Partial Repair Plan H, dated 01/19/2024 and replace with the attached Sheet S-4198 DH CONNECTING LINK PARTIAL REPAIR PLAN H, dated 03/01/24.
- 104. Delete Sheet S-4199 DH Connecting Link Partial Repair Plan I, dated 01/19/2024 and replace with the attached Sheet S-4199 DH CONNECTING LINK PARTIAL REPAIR PLAN I, dated 03/01/24.
- 105. Delete Sheet **S-4200** DH Connecting Link Partial Repair Plan J, dated 01/19/2024 and replace with the attached Sheet **S-4200** DH CONNECTING LINK PARTIAL REPAIR PLAN J, dated 03/01/24.
- 106. Delete Sheet **S-4201** DH Connecting Link Partial Repair Plan K, dated 01/19/2024 and replace with the attached Sheet **S-4201** DH CONNECTING LINK PARTIAL REPAIR PLAN K, dated 03/01/24.
- 107. Delete Sheet S-5006 DH Concourse 2<sup>nd</sup> Level Planter Modifications, dated 01/19/2024 and replace with the attached Sheet S-5006 DH CONCOURSE 2<sup>ND</sup> LEVEL PLANTER MODIFICATIONS, dated 03/01/24.
- 108. Delete Sheet **S-5007** Connecting Link Modifications, dated 01/19/2024 and replace with the attached Sheet **S-5007** CONNECTING LINK MODIFICATIONS, dated 03/01/24.
- 109. Delete Sheet **S-5008** Connecting Link Drain Modification, dated 01/19/2024 and replace with the attached Sheet **S-5008** CONNECTING LINK DRAIN MODIFICATION, dated 03/01/24.
- 110. Delete Sheet **S-5009** Connecting Link Drain Modification Cont., dated 01/19/2024 and replace with the attached Sheet **S-5009** CONNECTING LINK DRAIN MODIFICATION CONT., dated 03/01/24.

- 111. Delete Sheet S-6012 Ewa Concourse 3<sup>rd</sup> Level Repair Schedule Cont., dated 01/19/2024 and replace with the attached Sheet S-6012 EWA CONCOURSE 3<sup>RD</sup> LEVEL REPAIR SCHEDULE CONT., dated 03/01/24.
- 112. Delete Sheet **S-6025** DH Concourse 3<sup>rd</sup> Level Soffit and Façade Repair Schedule, dated 01/19/2024 and replace with the attached Sheet **S-6025** DH CONCOURSE 3<sup>RD</sup> LEVEL SOFFIT AND FAÇADE REPAIR SCHEDULE, dated 03/01/24.
- 113. Delete Sheet S-6028 DH Connecting Link 2<sup>nd</sup> Level Soffit and Façade Repair Schedule Cont., dated 01/19/2024 and replace with the attached Sheet S-6028 DH CONNECTING LINK 2<sup>ND</sup> LEVEL SOFFIT AND FAÇADE REPAIR SCHEDULE CONT., dated 03/01/24.

The following is provided for information.

## E. PRE-BID MEETING MINUTES

1. Attached are the February 15, 2024 pre-bid meeting minutes and attendance sheet for information.

## F. RESPONSES TO REQUEST FOR INFORMATION (RFI'S / QUESTIONS)

1. The attached Responses to Request for Information is provided for information.

## G. EXCEL FILE

1. The attached zip file named "AO1043-33 Addendum No. 1 Excel Files.zip" is provided for information.

Please acknowledge receipt of this Addendum No. 1 by recording the date of its receipt in the space provided on Page P-4 of the Proposal.

L Gef.

NATHAN KANESHIGE Engineering Program Manager

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# CONCRETE SPALL REPAIRS AT TERMINAL 2 ROADWAYS DANIEL K. INOUYE INTERNATIONAL AIRPORT HONOLULU, OAHU, HAWAII STATE PROJECT NO. AO1043-33 AIP PROJECT NO. 3-15-0005-XXX

#### Item Approx. Unit Total Description Unit No. Quantity Price **General Requirements** I. **Construction Site Runoff** 01561.1 L.S. L.S. L.S. \$ Control Program Mobilization (Not to exceed 6% of the Total Amount for 01700 Comparison of Bids L.S. L.S. L.S. \$ (excluding this item and all Allowances)) Site Work II 02222.1 Selective Demolition L.S. L.S. L.S. \$ 02577 **Pavement Marking** L.S. L.S. L.S. \$ III. Concrete Ewa Connecting Link 03300.1 L.S. L.S. L.S. \$ **Planter Modifications** Ewa Connecting Link Drain L.S. 03300.2 L.S. L.S. \$ Relocation Diamond Head Connecting 03300.3 L.S. L.S. L.S. \$ Link Planter Modifications Diamond Head Connecting L.S. 03300.4 L.S. L.S. \$ Link Drain Relocation Diamond Head Concourse 03300.5 Second Level Planter L.S. L.S. L.S. \$ Modifications Ewa Connecting Link 03320.1 L.S. L.S. L.S. \$ **Roadway Regrading** Diamond Head Connecting 03320.2 L.S. L.S. L.S. \$ Link Roadway Regrading

## **PROPOSAL SCHEDULE**

Item No.	Description	Approx. Quantity	Unit	Unit Price	Total
03730.1	Terminal 2 Departures Roadway Concrete Super Structure Overhead Spall and Delamination Repairs	1,207	S.F.	\$	\$
03730.2	Terminal 2 Departures Roadway Concrete Super Structure Overhead Crack Repairs	L.S.	L.S.	L.S.	\$
03730.3	Terminal 2 Departures Roadway Concrete Deck Repairs	589	S.F.	\$	\$
03730.4	Ewa Concourse 1 <sup>st</sup> Level Soffit and Façade Spall, Delamination, and Finish Repairs	197	S.F.	\$	\$
03730.5	Ewa Concourse 1 <sup>st</sup> Level Soffit and Façade Crack Repairs	L.S.	L.S.	L.S.	\$
03730.6	Ewa Concourse 2 <sup>nd</sup> Level Ground, Soffit, and Façade Spall, Delamination, and Finish Repairs	7,680	S.F.	\$	\$
03730.7	Ewa Concourse 2 <sup>nd</sup> Level Ground, Soffit, and Façade Crack Repairs	L.S.	L.S.	L.S.	\$
03730.8	Ewa Concourse 3 <sup>rd</sup> Level Ground, Soffit and Façade Spall, Delamination, and Finish Repairs	619	S.F.	\$	\$
03730.9	Ewa Concourse 3 <sup>rd</sup> Level Ground, Soffit and Façade Crack Repairs	L.S.	L.S.	L.S.	\$
03730.10	Ewa Connecting Link Overhead Spall and Delamination Repairs	494	S.F.	\$	\$
03730.11	Ewa Connecting Link Overhead Crack Repairs	L.S.	L.S.	L.S.	\$
03730.12	Ewa Connecting Link Ground Spall and Delamination Repairs	836	S.F.	\$	\$
03730.13	Ewa Connecting Link Ground Crack Repairs	L.S.	L.S.	L.S.	\$
03730.14	Diamond Head Concourse 1 <sup>st</sup> Level Soffit and Façade Spall, Delamination, and Finish Repairs	776	S.F.	\$	\$

Item No.	Description	Approx. Quantity	Unit	Unit Price	Total
03730.15	Diamond Head Concourse 1 <sup>st</sup> Level Soffit and Façade Crack Repairs	L.S.	L.S.	L.S.	\$
03730.16	Diamond Head Concourse 2 <sup>nd</sup> Level Ground, Soffit, and Façade Spall, Delamination, and Finish Repairs	3,780	S.F.	\$	\$
03730.17	Diamond Head Concourse 2 <sup>nd</sup> Level Ground, Soffit, and Façade Crack Repairs	L.S.	L.S.	L.S.	\$
03730.18	Diamond Head Concourse 3 <sup>rd</sup> Level Ground, Soffit and Façade Spall, Delamination, and Finish Repairs	451	S.F.	\$	\$
03730.19	Diamond Head Concourse 3 <sup>rd</sup> Level Ground, Soffit and Façade Crack Repairs	L.S.	L.S.	L.S.	\$
03730.20	Diamond Head Connecting Link Overhead Spall and Delamination Repairs	2,248	S.F.	\$	\$
03730.21	Diamond Head Connecting Link Overhead Crack Repairs	L.S.	L.S.	L.S.	\$
03730.22	Diamond Head Connecting Link Ground Spall and Delamination Repairs	437	S.F.	\$	\$
03730.23	Diamond Head Connecting Link Ground Crack Repairs	L.S.	L.S.	L.S.	\$
IV. Ma	asonry				
04200.1	Ewa Connecting Link CMU Wall Replacement	L.S.	L.S.	L.S.	\$
04200.2	Diamond Head Concourse 3 <sup>rd</sup> Level Turn Around CMU Wall Repair	L.S.	L.S.	L.S.	\$
04200.3	Diamond Head Connecting Link CMU Wall Replacemen	t L.S.	L.S.	L.S.	\$
<u>V. M</u>	etals				
05120.1	Ewa Concourse 2 <sup>nd</sup> Level Turn Around Guardrail	L.S.	L.S.	L.S.	\$
05120.2	Ewa Connecting Link Guardrail	L.S.	L.S.	L.S.	\$

Item No.	Description	Approx. Quantity	Unit	Unit Price	Total
05120.3	Diamond Head Connecting Link Guardrails	L.S.	L.S.	L.S.	\$
VII.	Thermal and Moisture Protection				
07916.1	Terminal 2 Departures Roadway Expansion Joint Spot Repairs	L.S.	L.S.	L.S.	\$
07916.2	Ewa Concourse 2 <sup>nd</sup> Level Sidewalk Expansion Joint	L.S.	L.S.	L.S.	\$
07916.3	Ewa Connecting Link Expansion Joints	L.S.	L.S.	L.S.	\$
07916.4	Terminal 2 3 <sup>rd</sup> Level Roadway Expansion Joint Spot Repairs	L.S.	L.S.	L.S.	\$
07916.5	Diamond Head Concourse 2 <sup>nd</sup> Level Sidewalk Expansion Joint	L.S.	L.S.	L.S.	\$
07916.6	Diamond Head Connecting Link Expansion Joints	L.S.	L.S.	L.S.	\$
<u>V.</u> 15400.1	<u>Mechanical</u> Plumbing	L.S.	L.S.	L.S.	\$
VI.	Electrical				
16050.1	Ewa Concourse 2 <sup>nd</sup> and 3 <sup>rd</sup> Level Receptacle Replacement	L.S.	L.S.	L.S.	\$
16050.2	Ewa Concourse Connecting Link Receptacle Demolition	L.S.	L.S.	L.S.	\$
16050.3	Ewa Concourse 3 <sup>rd</sup> Floor Traffic Signal Demolition	L.S.	L.S.	L.S.	\$
16050.4	Diamond Head Concourse 2 <sup>nd</sup> and 3 <sup>rd</sup> Level Miscellaneous Receptacle and Lighting Replacement and/or Demolition	L.S.	L.S.	L.S.	\$
16050.5	Diamond Head Concourse Connecting Link Receptacle Demolition	L.S.	L.S.	L.S.	\$
16500.1	Ewa Concourse 2 <sup>nd</sup> and 3 <sup>rd</sup> Level Lighting Replacement and/or Demolition	L.S.	L.S.	L.S.	\$

Item No.	Description	Approx. Quantity	Unit	Unit Price	Total	
16500.2	Ewa Concourse Connecting Link Lighting	L.S.	L.S.	L.S.	\$ <u> </u>	
16500.3	Diamond Head Concourse 2 <sup>nd</sup> Floor Lighting	L.S.	L.S.	L.S.	\$	
16500.4	Diamond Head Concourse Connecting Link Lighting	L.S.	L.S.	L.S.	\$	
16500.5	Diamond Head Concourse 3 <sup>rd</sup> Floor Lighting	L.S.	L.S.	L.S.	\$	
VII. A	llowances					
01562.1	Management of Contaminated Medias	Allowance	Allowanc	e Allowance	\$	50,000
01565.1	Security Measures	Allowance	Allowanc	e Allowance	\$	80,000
02222.2	Unforeseen Conditions	Allowance	Allowanc	e Allowance	\$	100,000
03730.24	Additional Unforeseen Concrete Spall and Crack Repairs	Allowance	Allowanc	e Allowance	\$	1,000,000
04200.4	Additional Unforeseen CMU Repairs	Allowance	Allowanc	e Allowance	\$	50,000
13282.1	RCRA Hazardous Waste Disposal	Allowance	Allowanc	e Allowance	\$	50,000
15400.2	Unforeseen Plumbing Scope of Work	Allowance	Allowanc	e Allowance	\$	100,000
15400.3	Irrigation System Modifications	Allowance	Allowanc	e Allowance	\$	100,000
16500.6	Unforeseen Electrical Reroutes and Tie-Ins	Allowance	Allowanc	e Allowance	\$	550,000

#### TOTAL AMOUNT FOR COMPARISON OF BIDS

\$

The bid prices herein shall include all labor, materials, equipment, and incidentals necessary to construct all items in place, including installation and testing of equipment, complete and ready for operation, all in accordance with the plans and specifications.

Notes:

- 1. Bid shall include all Federal, State, County and other applicable taxes.
- 2. The TOTAL AMOUNT FOR COMPARISON OF BIDS shall be used to determine the lowest responsible bidder.
- 3. Bidders must complete all unit prices and amounts. Failure to do so shall be grounds for rejection of bid.
- 4. If a discrepancy occurs between the unit price and the total, the unit price shall govern.
- 5. The State reserves the right to reject any or all Bids and to waive any defects in said Bids in the best interest of the State.

- 6. Submission of a Bid is a warranty that the bidder has made an examination of the project site and is fully aware of all conditions to be encountered in performing the work and the requirements of the plans and specifications.
- The bidder's attention is directed to Section 2.11 BID SECURITY and Section 2.24 REQUIREMENTS OF CONTRACT BONDS of the "General Provisions", as amended by the Special Provisions.
- 8. Bidders shall be paid for actual work performed as directed by the Engineer for allowance items. Bidder will not be paid overhead and profit for unused allowance funds.
- 9. If the TOTAL AMOUNT FOR COMPARISON OF BIDS exceeds the funds available for the project, then the State reserves the right to negotiate with the lowest, responsive, responsible bidder as permitted under Section 103D-302, Hawaii Revised Statutes (HRS), to further reduce the scope of work and award a contract thereafter.
- 10. <u>Federal forms located on Proposal pages P-15 through P-25 shall be submitted by the close</u> of business, 4:30 p.m. Hawaii Standard Time (HST), five (5) days after bid opening. Failure to submit these forms shall result in rejection of bid. Forms shall be emailed to the State <u>Project Manager at valerie.sh.sasuga@hawaii.gov.</u>
- 11. Bidders shall submit and <u>upload the complete proposal to HIePRO</u> prior to the bid opening date and time. Proposals received after said due date and time shall not be considered. Original (wet ink, hard copy) proposal documents are not required to be submitted. Contract award shall be based on evaluation of proposals submitted and uploaded to HIePRO. Any additional support documents explicitly designated as <u>confidential and/or proprietary</u> shall be uploaded as a <u>separate file</u> to HIePRO. Do not include confidential and/or proprietary documents with the proposal. The record of each bidder and respective bid shall be open to public inspection.

## FAILURE TO UPLOAD THE COMPLETE PROPOSAL TO HIEPRO SHALL BE GROUNDS FOR REJECTION OF THE BID.

If there is a conflict between the specification document and the HIePRO solicitation, the specifications shall govern and control, unless otherwise specified.

## <u>CERTIFICATION OF COMPLIANCE WITH FAA BUY AMERICAN PREFERENCE –</u> <u>EQUIPMENT/BUILDING PROJECTS</u>

As a matter of bid responsiveness, the bidder or offeror must complete, sign, date, and submit this certification statement with their proposal. The bidder or offeror must indicate how they intend to comply with 49 USC § 50101, the Bipartisan Infrastructure Law (BIL) Build America, Buy America Act (BABA), and other related Made in America Laws, U.S. statutes, guidance, and FAA policies, by selecting one of the following certification statements. These statements are mutually exclusive. Bidder must select one or the other (i.e., not both) by inserting a checkmark ( $\checkmark$ ) or the letter "X".

- □ Bidder or offeror hereby certifies that it will comply with 49 USC § 50101, BABA, and other related Made in America Laws, U.S. statutes, guidance, and policies of the FAA by:
  - a) Only installing iron, steel, and manufactured products produced in the United States;
  - b) Only installing construction materials defined as an article, material, or supply other than an item of primarily iron or steel; a manufactured product; cement and cementitious materials; aggregates such as stone, sand, or gravel; or aggregate binding agents or additives – that are or consist primarily of non-ferrous metals; plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables); glass (including optic glass); lumber; or drywall that have been manufactured in the United States;
  - c) Installing manufactured products for which the Federal Aviation Administration (FAA) has issued a waiver as indicated by inclusion on the current FAA Nationwide Buy American Waivers Issued listing; or
  - d) Installing products listed as an Excepted Article, Material or Supply in Federal Acquisition Regulation Subpart 25.108.

By selecting this certification statement, the bidder or offeror agrees:

- a) To provide to the Airport Sponsor or the FAA evidence that documents the source and origin of the iron, steel, and/or manufactured product.
- b) To faithfully comply with providing U.S. domestic product.
- c) To furnish U.S. domestic product for any waiver request that the FAA rejects.
- d) To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.
- e) To certify that all construction materials used in the project are manufactured in the U.S.
- □ The bidder or offeror hereby certifies it cannot comply with the 100 percent Buy American Preferences of 49 USC § 50101(a) and BABA but may qualify for either a Type 3 or Type 4 waiver under 49 USC § 50101(b). By selecting this certification statement, the bidder or offeror agrees:
  - a) To submit to the Airport Sponsor five calendar days after bid opening, a formal waiver request and required documentation that supports the type of waiver being requested.
  - b) That failure to submit the required documentation within the specified timeframe is cause for a non-responsive determination that may result in rejection of the proposal.

- c) To faithfully comply with providing U.S. domestic products at or above the approved U.S. domestic content percentage as approved by the FAA.
- d) To furnish U.S. domestic product for any waiver request that the FAA rejects.
- e) To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.

## **Required Documentation**

**Type 2 Waiver (Nonavailability)** – The iron, steel, manufactured goods or construction materials are not available in sufficient quantity or quality in the United States. The required documentation for a Type 2 Nonavailability waiver is:

- a) Completed Content Percentage Worksheet and Final Assembly Questionnaire.
- b) Record of thorough market research, consideration where appropriate of qualifying alternate items, products, or materials including;
- c) A description of the market research activities and methods used to identify domestically manufactured items capable of satisfying the requirement, including the timing of the research and conclusions reached on the availability of sources.

**Type 3 Waiver** – The cost of the components and subcomponents produced in the United States is more than 60 percent of the cost of all components and subcomponents of the "facility/project". The required documentation for a Type 3 waiver is:

- a) Completed Content Percentage Worksheet and Final Assembly Questionnaire including;
- b) Listing of all product components and subcomponents that are not comprised of 100 percent U.S. domestic content (excludes products listed on the FAA Nationwide Buy American Waivers Issued listing and products excluded by Federal Acquisition Regulation Subpart 25.108; products of unknown origin must be considered as non-domestic products in their entirety).
- c) Cost of non-domestic components and subcomponents, excluding labor costs associated with final assembly at place of manufacture.
- d) Percentage of non-domestic component and subcomponent cost as compared to total "facility/project" component and subcomponent costs, excluding labor costs associated with final assembly at place of manufacture.

**Type 4 Waiver (Unreasonable Costs)** – Applying this provision for iron, steel, manufactured goods or construction materials would increase the cost of the overall project by more than 25 percent. The required documentation for a Type 4 Unreasonable Costs waiver is:

- a) A completed Content Percentage Worksheet and Final Assembly Questionnaire including;
- b) At minimum, two comparable equal bids and/or offers.
- c) Receipt or record that demonstrates that supplier scouting called for in Executive Order 14005 indicates that no domestic source exists for the project and/or component.
- d) Completed waiver applications for each comparable bid and/or offer.

**False Statements**: Per 49 USC § 47126, this certification concerns a matter within the jurisdiction of the Federal Aviation Administration and the making of a false, fictitious, or fraudulent certification may render the maker subject to prosecution under Title 18, United States Code.

Bidder (Company Name)

Signature

Date

Name and Title of Signing Official

"General Decision Number: HI20240001 01/19/2024

Superseded General Decision Number: HI20230001

State: Hawaii

Construction Types: Building, Heavy (Heavy and Dredging), Highway and Residential

Counties: Hawaii Statewide.

BUILDING CONSTRUCTION PROJECTS; RESIDENTIAL CONSTRUCTION PROJECTS (consisting of single family homes and apartments up to and including 4 stories); HEAVY AND HIGHWAY CONSTRUCTION PROJECTS AND DREDGING

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(1).

<pre>If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022:</pre>	<ul> <li>Executive Order 14026</li> <li>generally applies to the contract.</li> <li>The contractor must pay all covered workers at least \$17.20 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2024.</li> </ul>
If the contract was awarded on	Executive Order 13658
January 29, 2022, and the	contract.
contract is not renewed or extended on or after January	<pre> . The contractor must pay all    covered workers at least</pre>
30, 2022:     	<pre>\$12.90 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2024.</pre>

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at http://www.dol.gov/whd/govcontracts.

Modification	Number	Publication	Date
0		01/05/2024	
1		01/12/2024	

SAM.gov

ASBE0132-001 09/03/2023

2

	Rates	Fringes
Asbestos Workers/Insulator Includes application of all insulating materials, protective coverings, coatings and finishes to all types of mechanical systems. Also the application of firestopping material for wall openings and penetrations in walls, floors, ceilings and curtain walls	.\$ 44.80	27.50
BOIL0627-005 01/01/2021		
	Rates	Fringes
BOILERMAKER	.\$ 37.25	31.25
BAT10001 001 03/03/2023	Rates	Fringes
BRICKLAYER Bricklayers and Stonemasons Pointers, Caulkers and Weatherproofers	.\$ 48.03 .\$ 48.28	32.38 32.38
BRHI0001-002 09/05/2023		
	Rates	Fringes
Tile, Marble & Terrazzo Worker Terrazzo Base Grinders Terrazzo Floor Grinders and Tenders Tile, Marble and Terrazzo Workers	.\$ 44.69 .\$ 43.14 .\$ 46.50	33.95 33.95 33.95
CARP0745-001 10/01/2021		
	Rates	Fringes
Carpenters: Carpenters; Hardwood Floor Layers; Patent Scaffold Erectors (14 ft. and over); Piledrivers; Pneumatic Nailers; Wood Shinglers and Transit and/or Layout Man Millwrights and Machine Erectors Power Saw Operators (2	.\$ 51.25 .\$ 51.50	24.84 24.84
h.p. and over)	.\$ 51.40	24.84
CARP0/45-002 09/04/2023		

Fringes

Rates

2/29/24, 9:20 AM		SAM.gov
Workers and Lathers	53.00	27.74
ELEC1186-001 08/22/2023		
	Rates	Fringes
Electricians:		
Cable Splicers	5 61.64	31.91
Electricians	5 54.55	31.70
Telecommunication worker	5 38.00	14.84
ELEC1186-002 08/22/2023		
	Rates	Fringes
Line Construction:		
Cable Splicers	61.64	31.91
Groundmen/Truck Drivers	5 40.91	26.03
Heavy Equipment Operators	5 49.10	29.37
Linemen	5 54.55	31.70
Telecommunication worker	38.00	14.84
ELEV0126-001 01/01/2023		
	Rates	Fringes
ELEVATOR MECHANIC	5 68.08	37, 335+a+b
	00.00	57:5551415
ENGI0003-002 09/03/2018		
	Rates	Fringes
Diver (Aqua Lung) (Scuba))		
Diver (Aqua Lung) (Scuba)		
(over a depth of 30 feet)	5 66.00	31.26
Diver (Aqua Lung) (Scuba)		
(up to a depth of 30 feet)	56.63	31.26
Stand-by Diver (Aqua Lung)		
(Scuba)	5 47.25	31.26
Diver (Other than Aqua Lung)		
Diver (Other than Aqua		
Lung)	5 66.00	31.26
Diver Tender (Other than		
Aqua Lung)	5 44.22	31.26
Stand-by Diver (Other than	47 25	21 26
Aqua Lung)	47.25	31.26
Ainhonno Hoist Oponaton		
for Heliconter	15 80	21 26
$C_0$ -Pilot of Helicopton	5 45 QQ	21 26
Pilot of Heliconter	5 46 11	31.20
Power equinment operator -	, 40.TT	51.20
tunnel work		
GROUP 1	\$ 42 24	31 26
GROUP 2	5 42 35	31 26
GROUP 3	\$ 42 52	31 26
GROUP 4	\$ 42.79	31 26
GROUP 5	5 43.10	31.26
		21 20

Ρ

GROUP	7\$	44.07	31.26
GROUP	8\$	44.18	31.26
GROUP	9\$	44.29	31.26
GROUP	9A\$	44.52	31.26
GROUP	10\$	44.58	31.26
GROUP	10A\$	44.73	31.26
GROUP	11\$	44.88	31.26
GROUP	12\$	45.24	31.26
GROUP	12A\$	45.60	31.26
ower equip	oment operators:		
GROUP	1\$	41.94	31.26
GROUP	2\$	42.05	31.26
GROUP	3\$	42.22	31.26
GROUP	4\$	42.49	31.26
GROUP	5\$	42.80	31.26
GROUP	6\$	43.45	31.26
GROUP	7\$	43.77	31.26
GROUP	8\$	43.88	31.26
GROUP	9\$	43.99	31.26
GROUP	9A\$	44.22	31.26
GROUP	10\$	44.28	31.26
GROUP	10A\$	44.43	31.26
GROUP	11\$	44.58	31.26
GROUP	12\$	44.94	31.26
GROUP	12A\$	45.30	31.26
GROUP	13\$	42.22	31.26
GROUP	13A\$	42.49	31.26
GROUP	13B\$	42.80	31.26
GROUP	13C\$	43.45	31.26
GROUP	13D\$	43.77	31.26
GROUP	13E\$	43.88	31.26

#### POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Fork Lift (up to and including 10 tons); Partsman (heavy duty repair shop parts room when needed).

GROUP 2: Conveyor Operator (Handling building material); Hydraulic Monitor; Mixer Box Operator (Concrete Plant).

GROUP 3: Brakeman; Deckhand; Fireman; Oiler; Oiler/Gradechecker; Signalman; Switchman; Highline Cableway Signalman; Bargeman; Bunkerman; Concrete Curing Machine (self-propelled, automatically applied unit on streets, highways, airports and canals); Leveeman; Roller (5 tons and under); Tugger Hoist.

GROUP 4: Boom Truck or dual purpose ""A"" Frame Truck (5 tons or less); Concrete Placing Boom (Building Construction); Dinky Operator; Elevator Operator; Hoist and/or Winch (one drum); Straddle Truck (Ross Carrier, Hyster and similar).

GROUP 5: Asphalt Plant Fireman; Compressors, Pumps, Generators and Welding Machines (""Bank"" of 9 or more, individually or collectively); Concrete Pumps or Pumpcrete Guns; Lubrication and Service Engineer (Grease Rack); Screedman.

GROUP 6: Boom Truck or Dual Purpose ""A""Frame Truck (over 5 tons); Combination Loader/Backhoe (up to and including 3/4 cu. yd.); Concrete Batch Plants (wet or dry); Concrete Cutter, Groover and/or Grinder (self-propelled unit on streets, highways, airports, and canals); Conveyor or Concrete Pump (Truck or Equipment Mounted); Drilling Machinery (not to apply to waterliners, wagon drills or jack hammers); Fork Lift (over 10 tons); Loader (up to and including 3 and 1/2 cu. yds); Lull High Lift (under 40 feet); Lubrication and Service Engineer (Mobile); Maginnis

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Internal Full Slab Vibrator (on airports, highways, canals and warehouses); Man or Material Hoist; Mechanical Concrete Finisher (Large Clary, Johnson Bidwell, Bridge Deck and similar); Mobile Truck Crane Driver; Portable Shotblast Concrete Cleaning Machine; Portable Boring Machine (under streets, highways, etc.); Portable Crusher; Power Jumbo Operator (setting slip forms, etc., in tunnels); Rollers (over 5 tons); Self-propelled Compactor (single engine); Self-propelled Pavement Breaker; Skidsteer Loader with attachments; Slip Form Pumps (Power driven by hydraulic, electric, air, gas, etc., lifting device for concrete forms); Small Rubber Tired Tractors; Trencher (up to and including 6 feet); Underbridge Personnel Aerial Platform (50 feet of platform or less).

GROUP 7: Crusher Plant Engineer, Dozer (D-4, Case 450, John Deere 450, and similar); Dual Drum Mixer, Extend Lift; Hoist and/or Winch (2 drums); Loader (over 3 and 1/2 cu. yds. up to and including 6 yards.); Mechanical Finisher or Spreader Machine (asphalt), (Barber Greene and similar) (Screedman required); Mine or Shaft Hoist; Mobile Concrete Mixer (over 5 tons); Pipe Bending Machine (pipelines only); Pipe Cleaning Machine (tractor propelled and supported); Pipe Wrapping Machine (tractor propelled and supported); Roller Operator (Asphalt); Self-Propelled Elevating Grade Plane; Slusher Operator; Tractor (with boom) (D-6, or similar); Trencher (over 6 feet and less than 200 h.p.); Water Tanker (pulled by Euclids, T-Pulls, DW-10, 20 or 21, or similar); Winchman (Stern Winch on Dredge).

GROUP 8: Asphalt Plant Operator; Barge Mate (Seagoing); Cast-in-Place Pipe Laying Machine; Concrete Batch Plant (multiple units); Conveyor Operator (tunnel); Deckmate; Dozer (D-6 and similar); Finishing Machine Operator (airports and highways); Gradesetter; Kolman Loader (and similar); Mucking Machine (Crawler-type); Mucking Machine (Conveyor-type); No-Joint Pipe Laying Machine; Portable Crushing and Screening Plant; Power Blade Operator (under 12); Saurman Type Dragline (up to and including 5 yds.); Stationary Pipe Wrapping, Cleaning and Bending Machine; Surface Heater and Planer Operator, Tractor (D-6 and similar); Tri-Batch Paver; Tunnel Badger; Tunnel Mole and/or Boring Machine Operator Underbridge Personnel Aerial Platform (over 50 feet of platform).

GROUP 9: Combination Mixer and Compressor (gunite); Do-Mor Loaderand Adams Elegrader; Dozer (D-7 or equal); Wheel and/or Ladder Trencher (over 6 feet and 200 to 749 h.p.).

GROUP 9A: Dozer (D-8 and similar); Gradesetter (when required by the Contractor to work from drawings, plans or specifications without the direct supervision of a foreman or superintendent); Push Cat; Scrapers (up to and including 20 cu. yds); Self-propelled Compactor with Dozer; Self-Propelled, Rubber-Tired Earthmoving Equipment (up to and including 20 cu. yds) (621 Band and similar); Sheep's Foot; Tractor (D-8 and similar); Tractors with boom (larger than D-6, and similar).

GROUP 10: Chicago Boom; Cold Planers; Heavy Duty Repairman or Welder; Hoist and/or Winch (3 drums); Hydraulic Skooper (Koehring and similar); Loader (over 6 cu. yds. up to and including 12 cu. yds.); Saurman type Dragline (over 5 cu. yds.); Self-propelled, rubber-tired Earthmoving Equipment (over 20 cu. yds. up to and including 31 cu. yds.) (637D and similar); Soil Stabilizer (P & H or equal); Sub-Grader (Gurries or other automatic type); Tractors (D-9 or equivalent, all attachments); Tractor (Tandem Scraper); 2/29/24, 9:20 AM

Watch Engineer.

GROUP 10A: Boat Operator; Cable-operated Crawler Crane (up to and including 25 tons); Cable-operated Power Shovel, Clamshell, Dragline and Backhoe (up to and including 1 cu. yd.); Dozer D9-L; Dozer (D-10, HD41 and similar) (all attachments); Gradall (up to and including 1 cu. yd.); Hydraulic Backhoe (over 3/4 cu. yds. up to and including 2 cu. yds.); Mobile Truck Crane Operator (up to and including 25 tons) (Mobile Truck Crane Driver Required); Self-propelled Boom Type Lifting Device (Center Mount) (up to and including 25 tons) (Grove, Drott, P&H, Pettibone and similar; Trencher (over 6 feet and 750 h.p. or more); Watch Engineer (steam or electric).

GROUP 11: Automatic Slip Form Paver (concrete or asphalt); Band Wagon (in conjunction with Wheel Excavator); Cable-operated Crawler Cranes (over 25 tons but less than 50 tons); Cable-operated Power Shovel, Clamshell, Dragline and Backhoe (over 1 cu. yd. up to 7 cu. yds.); Gradall (over 1 cu. yds. up to 7 cu. yds.); DW-10, 20, etc. (Tandem); Earthmoving Machines (multiple propulsion power units and 2 or more Scrapers) (up to and including 35 cu. yds.,"" struck"" m.r.c.); Highline Cableway; Hydraulic Backhoe (over 2 cu. yds. up to and including 4 cu. yds.); Leverman; Lift Slab Machine; Loader (over 12 cu. yds); Master Boat Operator; Mobile Truck Crane Operator (over 25 tons but less than 50 tons); (Mobile Truck Crane Driver required); Pre-stress Wire Wrapping Machine; Self-propelled Boom-type Lifting Device (Center Mount) (over 25 tons m.r.c); Self-propelled Compactor (with multiple-propulsion power units); Single Engine Rubber Tired Earthmoving Machine (with Tandem Scraper); Tandem Cats; Trencher (pulling attached shield).

GROUP 12: Clamshell or Dipper Operator; Derricks; Drill Rigs; Multi-Propulsion Earthmoving Machines (2 or more Scrapers) (over 35 cu. yds ""struck""m.r.c.); Operators (Derricks, Piledrivers and Cranes); Power Shovels and Draglines (7 cu. yds. m.r.c. and over); Self-propelled rubber-tired Earthmoving equipment (over 31 cu. yds.) (657B and similar); Wheel Excavator (up to and including 750 cu. yds. per hour); Wheel Excavator (over 750 cu. yds. per hour).

GROUP 12A: Dozer (D-11 or similar or larger); Hydraulic Excavators (over 4 cu. yds.); Lifting cranes (50 tons and over); Pioneering Dozer/Backhoe (initial clearing and excavation for the purpose of providing access for other equipment where the terrain worked involves 1-to-1 slopes that are 50 feet in height or depth, the scope of this work does not include normal clearing and grubbing on usual hilly terrain nor the excavation work once the access is provided); Power Blade Operator (Cat 12 or equivalent or over); Straddle Lifts (over 50 tons); Tower Crane, Mobile; Traveling Truss Cranes; Universal, Liebher, Linden, and similar types of Tower Cranes (in the erection, dismantling, and moving of equipment there shall be an additional Operating Engineer or Heavy Duty Repairman); Yo-Yo Cat or Dozer.

GROUP 13: Truck Driver (Utility, Flatbed, etc.)

GROUP 13A: Dump Truck, 8 cu.yds. and under (water level); Water Truck (up to and including 2,000 gallons).

GROUP 13B: Water Truck (over 2,000 gallons); Tandem Dump Truck, over 8 cu. yds. (water level).

2/29/24. 9:20 AM SAM.gov GROUP 13C: Truck Driver (Semi-trailer. Rock Cans, Semi-Dump or Roll-Offs). GROUP 13D: Truck Driver (Slip-In or Pup). GROUP 13E: End Dumps, Unlicensed (Euclid, Mack, Caterpillar or similar); Tractor Trailer (Hauling Equipment); Tandem Trucks hooked up to Trailer (Hauling Equipment) BOOMS AND/OR LEADS (HOURLY PREMIUMS): The Operator of a crane (under 50 tons) with a boom of 80 feet or more (including jib), or of a crane (under 50 tons) with leads of 100 feet or more, shall receive a per hour premium for each hour worked on said crane (under 50 tons) in accordance with the following schedule: Booms of 80 feet up to but not including 130 feet or Leads of 100 feet up to but not including 130 feet 0.50 Booms and/or Leads of 130 feet up to but not including 180 feet 0.75 Booms and/or Leads of 180 feet up to and including 250 feet 1.15 Booms and/or Leads over 250 feet 1.50 The Operator of a crane (50 tons and over) with a boom of 180 feet or more (including jib) shall receive a per hour premium for each hour worked on said crane (50 tons and over) in accordance with the following schedule: Booms of 180 feet up to and including 250 feet 1.25 Booms over 250 feet 1.75 ENGI0003-004 09/04/2017 Rates Fringes Dredging: (Boat Operators) Boat Deckhand.....\$ 41.22 30.93 Boat Operator.....\$ 43.43 30.93 Master Boat Operator.....\$ 43.58 30.93 Dredging: (Clamshell or Dipper Dredging) GROUP 1.....\$ 43.94 30.93 GROUP 2.....\$ 43.28 30.93 GROUP 3....\$ 42.88 30.93 GROUP 4.....\$ 41.22 30.93 Dredging: (Derricks) GROUP 1.....\$ 43.94 30.93 GROUP 2.....\$ 43.28 30.93 GROUP 3.....\$ 42.88 30.93 GROUP 4.....\$ 41.22 30.93 Dredging: (Hydraulic Suction Dredges) GROUP 1.....\$ 43.58 30.93 GROUP 2.....\$ 43.43 30.93 GROUP 3.....\$ 43.28 30.93 GROUP 4.....\$ 43.22 30.93 GROUP 5.....\$ 37.88 26.76 Group 5....\$ 42.88 30.93 GROUP 6.....\$ 37.77 26.76 Group 6.....\$ 42.77 30.93 GROUP 7....\$ 36.22 26.76

2/29/24. 9:20 AM	SAM.gov
Group 7\$ 41.22	30.93
CLAMSHELL OR DIPPER DREDGING CLASSIFICATIO	INS
GROUP 1: Clamshell or Dipper Operator. GROUP 2: Mechanic or Welder; Watch Engine	er.
GROUP 3: Barge Mate; Deckmate.	
GROUP 4: Bargeman; Deckhand; Fireman; Oil	.er.
HYDRAULIC SUCTION DREDGING CLASSIFICATIONS	,
GROUP 1: Leverman.	
GROUP 2: Watch Engineer (steam or electri	.c).
GROUP 3: Mechanic or Welder. GROUP 4: Dozer Operator	
GROUP 5: Deckmate.	
GROUP 6: Winchman (Stern Winch on Dredge)	
GROUP /: Deckhand (can operate anchor sc Deckmate): Fireman: Leveeman: Oiler.	cow under direction of
DENVICE CLASSIFICATIONS	
GROUP 1: Operators (Derricks, Piledrivers	and Cranes).
GROUP 3: Deckmate: Saurman Type Dragline (OVer 5 Cu GROUP 3: Deckmate: Saurman Type Draglin	ner (up to and
including 5 yards).	
GROUP 4: Deckhand, Fireman, Oiler.	
ENGI0003-044 09/03/2018	
Rates	Fringes
Power Equipment Operators	
(PAVING)	
Asphalt Concrete Material Transfer	32.08
Asphalt Plant Operator\$ 43.35	32.08
Asphalt Raker\$ 41.96	32.08
Asphalt Spreader Operator\$ 43.44 Cold Planer \$ 43.75	32.08
Combination Loader/Backhoe	52100
(over 3/4 cu.yd.)\$ 41.96	32.08
Complication Loader/Backhoe (up to 3/4 cu.vd.)\$ 40.98	32.08
Concrete Saws and/or	
Grinder (self-propelled	
airports and canals)\$ 42.92	32.08
Grader\$ 43.75	32.08
Laborer, Hand Roller\$ 41.46	32.08
under)\$ 42.92	32.08
Loader (over 2 1/2 cu.	
yds. to and including 5	32 08
Roller Operator (five tons	52.00
and under)\$ 41.69	32.08
Roller Operator (over five	32 08
Screed Person\$ 42.92	32.08
Soil Stabilizer\$ 43.75	32.08
IRON0625-001 09/01/2023	
Rates	Fringes

Ironworkers:	\$ 46.50	39.00
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a. Employees will be paid \$.50 per hour more while working in tunnels and coffer dams; \$1.00 per hour more when required to work under or are covered with water (submerged) and when they are required to work on the summit of Mauna Kea, Mauna Loa or Haleakala.

LAB00368-001 09/05/2023

R	ates	Fringes
Laborers:		
Driller\$	41.45	25.06
Final Clean Up\$	30.85	20.32
Gunite/Shotcrete Operator		
and High Scaler\$	41.15	25.06
Laborer I\$	40.65	25.06
Laborer II\$	38.05	25.06
Mason Tender/Hod Carrier\$	41.15	25.06
Powderman\$	41.65	25.06
Window Washer (bosun chair).\$	40.15	25.06

#### LABORERS CLASSIFICATIONS

Laborer I: Air Blasting run by electric or pneumatic compressor; Asphalt Laborer, Ironer, Raker, Luteman, and Handroller, and all types of Asphalt Spreader Boxes; Asphalt Shoveler; Assembly and Installation of Multiplates, Liner Plates, Rings, Mesh, Mats; Batching Plant (portable and temporary); Boring Machine Operator (under streets and sidewalks); Buggymobile; Burning and Welding; Chainsaw, Faller, Logloader, and Bucker; Compactors (Jackson Jumping Jack and similar); Concrete Bucket Dumpman; Concrete Chipping; Concrete Chuteman/Hoseman (pouring concrete) (the handling of the chute from ready-mix trucks for such jobs as walls, slabs, decks, floors, foundations, footings, curbs, gutters, and sidewalks); Concrete Core Cutter (Walls, Floors, and Ceiling); Concrete Grinding or Sanding; Concrete: Hooking on, signaling, dumping of concrete for treme work over water on caissons, pilings, abutments, etc.; Concrete: Mixing, handling, conveying, pouring, vibrating, otherwise placing of concrete or aggregates or by any other process; Concrete: Operation of motorized wheelbarrows or buggies or machines of similar character, whether run by gas, diesel, or electric power; Concrete Placement Machine Operator: operation of Somero Hammerhead, Copperheads, or similar machines; Concrete Pump Machine (laying, coupling, uncoupling of all connections and cleaning of equipment); Concrete and/or Asphalt Saw (Walking or Handtype) (cutting walls or flatwork) (scoring old or new concrete and/or asphalt) (cutting for expansion joints) (streets and ways for laying of pipe, cable or conduit for all purposes); Concrete Shovelers/Laborers (Wet or Dry); Concrete Screeding for Rough Strike-Off: Rodding or striking-off, by hand or mechanical means prior to finishing; Concrete Vibrator Operator; Coring Holes: Walls, footings, piers or other obstructions for passage of pipes or conduits for any purpose and the pouring of concrete to secure the hole; Cribbers, Shorer, Lagging, Sheeting, and Trench Jacking and Bracing, Hand-Guided Lagging Hammer Whaling Bracing; Curbing (Concrete and Asphalt); Curing of Concrete (impervious membrane and form oiler) mortar and other materials by any mode or method; Cut Granite Curb Setter (setting, leveling and grouting of all precast concrete or stone curbs); Cutting and Burning Torch (demolition); Dri Pak-It Machine; Environmental Abatement: removal of asbestos, lead, and bio hazardous materials (EPA and/or OSHA certified); Falling, bucking, yarding, loading or burning of all trees or timber on construction site;

Addendum No. 1 r3/6/24 9/18
#### 2/29/24. 9:20 AM

Spreading for any purpose; Guinea Chaser (Grade Checker) for general utility trenches, sitework, and excavation; Headerboard Man (Asphalt or Concrete); Heat Welder of Plastic (Laborers' AGC certified workers) (when work involves waterproofing for waterponds, artificial lakes and reservoir) heat welding for sewer pipes and fusion of HDPE pipes; Heavy Highway Laborer (Rigging, signaling, handling, and installation of pre-cast catch basins, manholes, curbs and gutters); High Pressure Nozzleman - Hydraulic Monitor (over 100# pressure); Jackhammer Operator; Jacking of slip forms: All semi and unskilled work connected therewithin; Laying of all multi-cell conduit or multi-purpose pipe; Magnesite and Mastic Workers (Wet or Dry)(including mixer operator); Mortar Man; Mortar Mixer (Block, Brick, Masonry, and Plastering); Nozzleman (Sandblasting and/or Water Blasting): handling, placing and operation of nozzle; Operation, Manual or Hydraulic jacking of shields and the use of such other mechanical equipment as may be necessary; Pavement Breakers; Paving, curbing and surfacing of streets, ways, courts, under and overpasses, bridges, approaches, slope walls, and all other labor connected therewith; Pilecutters; Pipe Accessment in place, bolting and lining up of sectional metal or other pipe including corrugated pipe; Pipelayer performing all services in the laying and installation of pipe from the point of receiving pipe in the ditch until completion of operation, including any and all forms of tubular material, whether pipe, HDPE, metallic or non-metallic, conduit, and any other stationary-type of tubular device used for conveying of any substance or element, whether water, sewage, solid, gas, air, or other product whatsoever and without regard to the nature of material from which tubular material is fabricated; No-joint pipe and stripping of same, Pipewrapper, Caulker, Bander, Kettlemen, and men applying asphalt, Laykold, treating Creosote and similar-type materials (6-inch) pipe and over); Piping: resurfacing and paving of all ditches in preparation for laying of all pipes; Pipe laying of lateral sewer pipe from main or side sewer to buildings or structure (except Contactor may direct work be done under proper supervision); Pipe laying, leveling and marking of the joint used for main or side sewers and storm sewers; Laying of all clay, terra cotta, ironstone, vitrified concrete, HDPE or other pipe for drainage; Placing and setting of water mains, gas mains and all pipe including removal of skids; Plaster Mortar Mixer/Pump; Pneumatic Impact Wrench; Portable Sawmill Operation: Choker setters, off bearers, and lumber handlers connected with clearing; Posthole Digger (Hand Held, Gas, Air and Electric); Powderman's Tender; Power Broom Sweepers (Small); Preparation and Compaction of roadbeds for railroad track laying, highway construction, and the preparation of trenches, footings, etc., for cross-country transmission by pipelines, electrical transmission or underground lines or cables (by mechanical means); Raising of structure by manual or hydraulic jacks or other methods and resetting of structure in new locations, including all concrete work; Ramming or compaction; Rigging in connection with Laborers' work (except demolition), Signaling (including the use of walkie talkie) Choke Setting, tag line usage; Tagging and Signaling of building materials into high rise units; Riprap, Stonepaver, and Rock Slinger (includes placement of stacked concrete, wet or dry and loading, unloading, signaling, slinging and setting of other similar materials); Rotary Scarifier (including

multiple head concrete chipping Scarifier); Salamander Heater, Drying of plaster, concrete mortar or other aggregate; Scaffold Erector Leadman; Scaffolds: (Swing and hanging) including maintenance thereof; Scaler; Septic Tank/Cesspool and Drain Fields Digger and Installer; Shredder/Chipper (tree branches, brush, etc.); Stripping and Setting Forms; Stripping of Forms: Other than panel forms which are to be re-used in their original form, and stripping of forms on all flat arch work; Tampers (Barko, Wacker, and similar type); Tank Scaler and Cleaners; Tarman; Tree Climbers and Trimmers; Trencher (includes hand-held, Davis T-66 and similar type); Trucks (flatbed up to and including 2 1/2 tons when used in connection with on-site Laborers'work; Trucks (Refuse and Garbage Disposal) (from job site to dump); Vibra-Screed (Bull Float in connection with Laborers' work); Well Points, Installation of or any other dewatering system.

Laborer II: Asphalt Plant Laborer; Boring Machine Tender; Bridge Laborer; Burning of all debris (crates, boxes, packaging waste materials); Chainman, Rodmen, and Grade Markers; Cleaning, clearing, grading and/or removal for streets, highways, roadways, aprons, runways, sidewalks, parking areas, airports, approaches, and other similar installations; Cleaning or reconditioning of streets, ways, sewers and waterlines, all maintenance work and work of an unskilled and semi-skilled nature; Concrete Bucket Tender (Groundman) hooking and unhooking of bucket; Concrete Forms; moving, cleaning, oiling and carrying to the next point of erection of all forms; Concrete Products Plant Laborers; Conveyor Tender (conveying of building materials); Crushed Stone Yards and Gravel and Sand Pit Laborers and all other similar plants; Demolition, Wrecking and Salvage Laborers: Wrecking and dismantling of buildings and all structures, with use of cutting or wrecking tools, breaking away, cleaning and removal of all fixtures, All hooking, unhooking, signaling of materials for salvage or scrap removed by crane or derrick; Digging under streets, roadways, aprons or other paved surfaces; Driller's Tender; Chuck Tender, Outside Nipper; Dry-packing of concrete (plugging and filling of she-bolt holes); Fence and/or Guardrail Erector: Dismantling and/or re-installation of all fence; Finegrader; Firewatcher; Flagman (Coning, preparing, stablishing and removing portable roadway barricade devices); Signal Men on all construction work defined herein, including Traffic Control Signal Men at construction site; General Excavation; Backfilling, Grading and all other labor connected therewith; Digging of trenches, ditches and manholes and the leveling, grading and other preparation prior to laying pipe or conduit for any purpose; Excavations and foundations for buildings, piers, foundations and holes, and all other construction. Preparation of street ways and bridges; General Laborer: Cleaning and Clearing of all debris and surplus material. Clean-up of right-of-way. Clearing and slashing of brush or trees by hand or mechanical cutting. General Clean up: sweeping, cleaning, wash-down, wiping of construction facility and equipment (other than ""Light Clean up (Janitorial) Laborer. Garbage and Debris Handlers and Cleaners. Appliance Handling (job site) (after delivery unlading in storage area); Ground and Soil Treatment Work (Pest Control); Gunite/Shotcrete Operator Tender; Junk Yard Laborers (same as Salvage Yard); Laser Beam ""Target Man"" in connection with Laborers' work; Layout Person for Plastic (when work involves waterproofing for waterponds, artificial lakes and reservoirs); Limbers, Brush Loaders, and Pilers; Loading, Unloading, carrying, distributing and handling of all rods and material for use in reinforcing

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concrete construction (except when a derrick or outrigger operated by other than hand power is used); Loading, unloading, sorting, stockpiling, handling and distribution of water mains, gas mains and all pipes; Loading and unloading of all materials, fixtures, furnishings and appliances from point of delivery to stockpile to point of installation; hooking and signaling from truck, conveyance or stockpile; Material Yard Laborers; Pipelayer Tender; Pipewrapper, Caulker, Bander, Kettlemen, and men applying asphalt, Laykold, Creosote, and similar-type materials (pipe under 6 inches); Plasterer Laborer; Preparation, construction and maintenance of roadbeds and sub-grade for all paving, including excavation, dumping, and spreading of sub-grade material; Prestressed or precast concrete slabs, walls, or sections: all loading, unloading, stockpiling, hooking on of such slabs, walls or sections; Quarry Laborers; Railroad, Streetcar, and Rail Transit Maintenance and Repair; Roustabout; Rubbish Trucks in connection with Building Construction Projects (excluding clearing, grubbing, and excavating); Salvage Yard: All work connected with cutting, cleaning, storing, stockpiling or handling of materials, all cleanup, removal of debris, burning, back-filling and landscaping of the site; Sandblasting Tender (Pot Tender): Hoses and pots or markers; Scaffolds: Erection, planking and removal of all scaffolds used for support for lathers, plasters, brick layers, masons, and other construction trades crafts; Scaffolds: (Specially designed by carpenters) laborers shall tend said carpenter on erection and dismantling thereof, preparation for foundation or mudsills, maintenance; Scraping of floors; Screeds: Handling of all screeds to be reused; handling, dismantling and conveyance of screeds; Setting, leveling and securing or bracing of metal or other road forms and expansion joints; Sheeting Piling/trench shoring (handling and placing of skip sheet or wood plank trench shoring); Ship Scalers; Shipwright Tender; Sign Erector (subdivision traffic, regulatory, and street-name signs); Sloper; Slurry Seal Crews (Mixer Operator, Applicator, Squeegee Man, Shuttle Man, Top Man); Snapping of wall ties and removal of tie rods; Soil Test operations of semi and unskilled labor such as filling sand bags; Striper (Asphalt, Concrete or other Paved Surfaces); Tool Room Attendant (Job Site); Traffic Delineating Device Applicator; Underpinning, lagging, bracing, propping and shoring, loading, signaling, right-of-way clearance along the route of movement, The clearance of new site, excavation of foundation when moving a house or structure from old site to new site; Utilities employees; Water Man; Waterscape/Hardscape Laborers; Wire Mesh Pulling (all concrete pouring operations); Wrecking, stripping, dismantling and handling concrete forms an false work.

LAB00368-002 09/04/2023

Rates Fringes Landscape & Irrigation Laborers GROUP 1.....\$ 27.85 16.45 GROUP 2.....\$ 28.85 16.45 GROUP 3.....\$ 22.55 16.45

LABORERS CLASSIFICATIONS

GROUP 1: Installation of non-potable permanent or temporary irrigation water systems performed for the purposes of Landscaping and Irrigation architectural horticultural

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work; the installation of drinking fountains and permanent or temporary irrigation systems using potable water for Landscaping and Irrigation architectural horticultural purposes only. This work includes (a) the installation of all heads, risers, valves, valve boxes, vacuum breakers (pressure and non-pressure), low voltage electrical lines and, provided such work involves electrical wiring that will carry 24 volts or less, the installation of sensors, master control panels, display boards, junction boxes, conductors, including all other components for controllers, (b) and metallic (copper, brass, galvanized, or similar) pipe, as well as PVC or other plastic pipe including all work incidental thereto, i.e., unloading, handling and distribution of all pipes fittings, tools, materials and equipment, (c) all soldering work in connection with the above whether done by torch, soldering iron, or other means; (d) tie-in to main lines, thrust blocks (both precast and poured in place), pipe hangers and supports incidental to installation of the entire irrigation system, (e) making of pressure tests, start-up testing, flushing, purging, water balancing, placing into operation all irrigation equipment, fixtures and appurtenances installed under this agreement, and (f) the fabrication, replacement, repair and servicing oflandscaping and irrigation systems. Operation of hand-held gas, air, electric, or self-powered tools and equipment used in the performance of Landscape and Irrigation work in connection with architectural horticulture; Choke-setting, signaling, and rigging for equipment operators on job-site in the performance of such Landscaping and Irrigation work; Concrete work (wet or dry) performed in connection with such Landscaping and Irrigation work. This work shall also include the setting of rock, stone, or riprap in connection with such Landscape, Waterscape, Rockscape, and Irrigation work; Grubbing, pick and shovel excavation, and hand rolling or tamping in connection with the performance of such Landscaping and Irrigation work; Sprigging, handseeding, and planting of trees, shrubs, ground covers, and other plantings and the performance of all types of gardening and horticultural work relating to said planting; Operation of flat bed trucks (up to and including 2 1/2 tons).:

GROUP 2. Layout of irrigation and other non-potable irrigation water systems and the layout of drinking fountains and other potable irrigation water systems in connection with such Landscaping and Irrigation work. This includes the layout of all heads, risers, valves, valve boxes, vacuum breakers, low voltage electrical lines, hydraulic and electrical controllers, and metallic (coppers, brass, galvanized, or similar) pipe, as well as PVC or other plastic pipe. This work also includes the reading and interpretation of plans and specifications in connection with the layout of Landscaping, Rockscape, Waterscape, and Irrigation work; Operation of Hydro-Mulching machines (sprayman and driver), Drillers, Trenchers (riding type, Davis T-66, and similar) and fork lifts used in connection with the performance of such Landscaping and Irrigation work; Tree climbers and chain saw tree trimmers, Sporadic operation (when used in connection with Landscaping, Rockscape, Waterscape, and Irrigation work) of Skid-Steer Loaders (Bobcat and similar), Cranes (Bantam, Grove, and similar), Hoptos, Backhoes, Loaders, Rollers, and Dozers (Case, John Deere, and similar), Water Trucks, Trucks requiring a State of Hawaii Public Utilities Commission Type 5 and/or type 7 license, sit-down type and ""gang"" mowers, and other self-propelled, sit-down operated machines not listed under Landscape & Irrigation Maintenance Laborer; Chemical

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spraying using self-propelled power spraying equipment (200 gallon capacity or more).

GROUP 3: Maintenance of trees, shrubs, ground covers, lawns and other planted areas, including the replanting of trees, shrubs, ground covers, and other plantings that did not ""take"" or which are damaged; provided, however, that re-planting that requires the use of equipment, machinery, or power tools shall be paid for at the rate of pay specified under Landscape and Irrigation Laborer, Group 1; Raking, mowing, trimming, and runing, including the use of ""weed eaters"", hedge trimmers, vacuums, blowers, and other hand-held gas, air, electric, or self-powered tools, and the operation of lawn mowers (Note: The operation of sit-down type and ""gang"" mowers shall be paid for at the rate of pay specified under Landscape & Irrigation Laborer, Group 2); Guywiring, staking, propping, and supporting trees; Fertilizing, Chemical spraying using spray equipment with less than 200 gallon capacity, Maintaining irrigation and sprinkler systems, including the staking, clamping, and adjustment of risers, and the adjustment and/or replacement of sprinkler heads, (Note: the cleaning and gluing of pipe and fittings shall be paid for at the rate of pay specified under Landscape & Irrigation Laborer(Group 1); Watering by hand or sprinkler system and the peformance of other types of gardening, yardman, and horticultural-related work.

LABO0368-003 09/05/2023

	I	Rates	Fringes
Underground	Laborer	44.25	24.06
GROUP	1	41.25	24.96
GROUP	3\$	43.25	24.96
GROUP	4\$	44.25	24.96
GROUP	5\$	44.50	24.96
GROUP GROUP	6\$ 7\$	44.60 44.85	24.96 24.96

GROUP 1: Watchmen; Change House Attendant.

GROUP 2: Swamper; Brakeman; Bull Gang-Muckers, Trackmen; Dumpmen (any method); Concrete Crew (includes rodding and spreading); Grout Crew; Reboundmen

GROUP 3: Chucktenders and Cabletenders; Powderman (Prime House); Vibratorman, Pavement Breakers

GROUP 4: Miners - Tunnel (including top and bottom man on shaft and raise work); Timberman, Retimberman (wood or steel or substitute materials thereof); Blasters, Drillers, Powderman (in heading); Microtunnel Laborer; Headman; Cherry Pickerman (where car is lifted); Nipper; Grout Gunmen; Grout Pumpman & Potman; Gunite, Shotcrete Gunmen & Potmen; Concrete Finisher (in tunnel); Concrete Screed Man; Bit Grinder; Steel Form Raisers & Setters; High Pressure Nozzleman; Nozzleman (on slick line); Sandblaster-Potman (combination work assignment interchangeable); Tugger

GROUP 5: Shaft Work & Raise (below actual or excavated ground level); Diamond Driller; Gunite or Shotcrete Nozzleman; Rodman; Groundman

GROUP 6: Shifter

GROUP 7: Shifter (Shaft Work & Raiser)

* PAIN1791-001 01/01/2024		
	Rates	Fringes
Painters: Brush Sandblaster; Spray	\$ 40.50 \$ 41.65	29.78 30.05
PAIN1889-001 07/01/2023		
	Rates	Fringes
Glaziers	\$ 44.00	38.37
PAIN1926-001 03/05/2023		
	Rates	Fringes
Soft Floor Layers	\$ 39.77	33.80
* PAIN1944-001 01/07/2024		
	Rates	Fringes
Taper	\$ 45.20	35.45
PLAS0630-001 09/04/2023		
	Rates	Fringes
PLASTERER	\$ 46.12	34.53
PLAS0630-002 09/04/2023		
	Rates	Fringes
Cement Masons: Cement Masons Trowel Machine Operators	\$ 44.12 \$ 44.27	33.63 33.63
* PLUM0675-001 01/07/2024		
	Rates	Fringes
Plumber, Pipefitter, Steamfitter & Sprinkler Fitter.	\$ 52.33	30.40
R00F0221-001 11/06/2022		
	Rates	Fringes
Roofers (Including Built Up, Composition and Single Ply)	\$ 43.15	21.21
SHEE0293-001 03/05/2023		
	Rates	Fringes
Sheet metal worker	\$ 47.37	31.71
* SUHI1997-002 09/15/1997		
	Rates	Fringes
Drapery Installer	\$ 13.60 **	1.20

 FENCE ERECTOR (Chain Link

 Fence)......
 9.33 \*\*
 1.65

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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\*\* Workers in this classification may be entitled to a higher minimum wage under Executive Order 14026 (\$17.20) or 13658 (\$12.90). Please see the Note at the top of the wage determination for more information. Please also note that the minimum wage requirements of Executive Order 14026 are not currently being enforced as to any contract or subcontract to which the states of Texas, Louisiana, or Mississippi, including their agencies, are a party.

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at

https://www.dol.gov/agencies/whd/government-contracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (iii)).

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The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

#### Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

#### Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

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#### WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- \* an existing published wage determination
- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter
- \* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour National Office because National Office has responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the

Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations Wage and Hour Division U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION"



FAA Office of Airports

# Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 2/23/2024)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

**NOTICE:** L-823 Connectors do not have independent utility needed to consider it as a component that warrants a Buy American waiver. For purposes of Buy American Preferences, the FAA considers these products as sub-components of the larger airfield lighting equipment being installed.

Waiver Type	Manufacturer	Product	Effective Date
	ABB E-Mobility		
Type III Equipment/Building	Incorporated	Terra DC Fast Charger T184 BAA CTEP/NTEP	1/15/2024
	ABB E-Mobility		
Type III Equipment/Building	Incorporated	Terra DC Fast Charger T124 Dual CCS1 BABA	1/15/2024
	ABB E-Mobility		
Type III Equipment/Building	Incorporated	Terra DC Fast Charger T184 Single ADA	1/15/2024
	ABB E-Mobility		
Type III Equipment/Building	Incorporated	Terra Direct Current Fast Charger T184 BAA ADA	1/15/2024
	ABB E-Mobility		
Type III Equipment/Building	Incorportated.	Terra DC Fast Charger T184 HC CC	1/15/2024
	ADB Safegate Americas,		
Type III Equipment/Building	LLC	L-895 Elevated Light Stake Mounting	1/15/2024
	Webasto Charging		
Type III Equipment/Building	Systems, Incorporated	DVS400 480V-600V ADK-CEC	1/15/2024
	Webasto Charging		
Type III Equipment/Building	Systems, Incorportated	ASSY Top 50Hz GSE 600-380	1/15/2024
		Reflective Media TTB 1325D Type IVA (Flex-O-Lite) Glass	
Type III Equipment/Building	Potters Industries	Beads	9/26/2023
	ABD Safegate Americas	L-862(L) Runway Edge Light High Intensity (HIRL)	
Type III Equipment/Building	LLC	EREX2XXXXXXXX02	8/26/2023
	ADB Safegate Americas.	L-862E(L) Runway Threshold Light, High Intensity (HITHL)	
Type III Equipment/Building	LLC	EREX2XXXXFXX02	8/26/2023
	ADB Safegate Americas.	L-852G(L) Inpavement Runway Guard Light, model	
Type III Equipment/Building	LLC	RSRG11XX1NYXX2X1	7/22/2023
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The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
	DBT Transporation		
Type III Equipment/Building	Services LLC	AWOS 2	7/22/2023
	DBT Transportation		
Type III Equipment/Building	Services LLC	AWOS 1	7/22/2023
	DBT Transportation		
Type III Equipment/Building	Services LLC	AWOS 3	7/22/2023
	DBT Transportation		
Type III Equipment/Building	Services LLC	AWOS 3P	7/22/2023
	DBT Transportation		
Type III Equipment/Building	Services LLC	AWOS 3PT	7/22/2023
	DBT Transportation		_ / /
Type III Equipment/Building	Services LLC	AWOS AV	7/22/2023
	ADB Safegate Americas,	L-830, Isolation Transformers, 60Hz Model	
Type III Equipment/Building	LLC	1STXXX66601001	7/8/2023
Type III Equipment/Building	Crown USA Incorporated	F-AB-297 TT-P-1952F Type II Black Marking Paint	7/8/2023
Type III Equipment/Building	Crown USA Incorporated	F-AG-355 TT-P-1952F Type II Bicycle Green Marking Paint	7/8/2023
Type III Equipment/Building	Crown USA Incorporated	F-AL-397 TT-P-1952F Type II Blue Marking Paint	7/8/2023
Type III Equipment/Building	Crown USA Incorporated	F-LFY-295 TT-P-1952F Type II L.F. Yellow Marking Paint	7/8/2023
Type III Equipment/Building	Crown USA Incorportated	F-AR-399 TT-P-1952F Type II Red Marking Paint	7/8/2023
Type III Equipment/Building	Crown USA Incorportated	F-AR-D-399 TT-P-1952F Type II Dark Red Marking Paint	7/8/2023
Type III Equipment/Building	Crown USA Incorportated	F-AW-292 TT-P-1952F Type II White Marking Paint	7/8/2023
Type III Equipment/Building	Hillcrest Industries, Inc.	Reflective Media TTB 1325D Type 1A – Glass Beads	7/8/2023
Type III Equipment/Building	E-One, Inc.	Ecologic Test Cart	7/1/2023

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	NoFoam Systems	NoFoam Tester (Model C) w kits	7/1/2023
Type III Equipment/Building	NoFoam Systems	NoFoam Tester Model P w kits	7/1/2023
Type III Equipment/Building	ADB Safegate Americas, LLC	L-852T LED (L) Omni-directional In-pavement Taxiway Edge Light RSTEX1XP3NXNXXX2	3/25/2023
Type III Equipment/Building	SPX Aids for Aviation	L-863 Portable Runway and Taxiway Lighting AV-70-863-B- SW-CP	3/25/2023
Type III Equipment/Building	SPX Aids to Aviation	L-863 Portable Runway and Taxiway Lighting AC-70-863-B- RF-SW-CP	3/25/2023
Type III Equipment/Building	All Weather Incorporated	Automated Weather Observation System AWOS II	3/6/2023
Type III Equipment/Building	Cherokee Nation 3S	Automated Weather Observation System AWOS-C	3/6/2023
Type III Equipment/Building	All Weather Incorporated	Automated Weather Observation System III P/T	2/25/2023
Type III Equipment/Building	All Weather Incorporated	Automated Weather Observation System III-P	2/25/2023
Type III Equipment/Building	All Weather Incorportated	Automated Weather Observation System AWOS I	2/25/2023
Type III Equipment/Building	All Weather Incorportated	Automated Weather Observation System Altimeter/Visibility (AV)	2/25/2023
Type III Equipment/Building	All Weather Incorportated	Automated Weather Observation System III	2/25/2023
Type III Equipment/Building	Potters Industries (Flex- O-Lite)	Reflective Media TTB 13215D Type IA (Flex-O-Lite) Glass Beads	8/27/2022
Type III Equipment/Building	GBA Components, LLC	Inpavement Light EB-83A Coated Bolts	8/7/2022
Type III Equipment/Building	ADB Safegate Americas, LLC	L-850D(L) RSRT212XXXFXXX1 Inpavement Runway Threshold Light	7/30/2022
Type III Equipment/Building	ADB Safegate Americas, LLC	L-852A (LED) Model RSTA21XXXNXXX2X1 Inpavement Taxiway Centerline Light	7/17/2022

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
	ADB Safegate Americas,	L-852B (LED) Model RSTB21XXXNXXX2X1 Inpavement	- / - /
Type III Equipment/Building	LLC	Centerline Light	//1//2022
	ADB Safegate Americas,	L-852C (LED) Model RSTC21XXXNXXX2X1 Inpavement	
Type III Equipment/Building	LLC	Taxiway Centerline Light	7/17/2022
	ADB Safegate Americas,	L-852D (LED) Model RSTD21XXXNXXX2X1 Inpavement	
Type III Equipment/Building	LLC	Centerline Light	7/17/2022
	ADB Safegate Americas.	L-852J (LED) Model RSTJ21XXXCXXX2X1 Inpavement	
Type III Equipment/Building	LLC	Taxiway Centerline Light	7/17/2022
	ADB Safegate Americas	I-852K(LED) Innavement Taxiway Centerline Light Model	
Type III Fauipment/Building		RSTK21XXXCXXX2X1	7/17/2022
	ADB Safegate Americas	I-852S (IED) Model RSSB21XXXNRNX2X1 Innavement Ston	.,,
Type III Equipment/Building		Bar Light	7/17/2022
Type III Equipment/Building	ELec ELash Technology	L-880 (LED) Precision Approach Dath Indicator	7/17/2022
	FLash Technology		//1//2022
		Flash Technology L-881 (LED) Precision Approach Path	7 4 7 10000
Type III Equipment/Building	Flash Technology	Indicator	//1//2022
	Potters Industries (Flex-	Reflective Media TT-B 1325D Type III (Flex-O-Lite) Glass	
Type III Equipment/Building	O-Lite)	Beads, 1.9 Index of Refraction	7/17/2022
		L-850A(L) RSRC11XXXNXXXX1 Inpavement Runway	
Type III Equipment/Building	ADB Safegate	Centerline Light	6/18/2022
		L-850B(L) RSRZ11XX1XWNXXX1 Inpavement Touchdown	
Type III Equipment/Building	ADB Safegate	Zone Light	6/18/2022
		I-850C (I) RSRE11XXXCXXXXX1 Inpavement Runway Edge	
Type III Equipment/Building	ADB Safegate	Light	6/18/2022
		I-850D(I) RSRN212XXXRXXX1 Innavement Runway End	-, -, -==
Type III Equipment/Building	ADB Safegate	light	6/18/2022
Type in Equipment, building	ADD Suleguie	-1011V	0/ 10/ 2022

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	ADB Safegate	L-850T(L) RSRS21XX1NRNRXX1 Runway Status Light	6/18/2022
Type III Equipment/Building	Airport Lighting Company	L-821 Airport Lighting Control Panel	2/26/2022
Type III Equipment/Building	Airport Lighting Company	L-880 LED Precision Approach Path Indicator	2/26/2022
Type III Equipment/Building	Airport Lighting Company	L-881 LED Abbreviated Precision Approach Path Indicator	2/26/2022
Type III Equipment/Building	ADB Safegate	High Intensity Runway Edge L-862(L) ERES2YW33S00002	11/27/2021
Type III Equipment/Building	ADB Safegate	High Intensity Runway Edge Light L-862(L) ERES2GR13SF0002	11/27/2021
Type III Equipment/Building	ADB Safegate	High Intensity Runway Edge Light L-862(L) ERES2WY33S00002	11/27/2021
Type III Equipment/Building	Webasto Charging Systems Incorportated	Posicharge DVS 300 Electric Vehicle Charger	11/27/2021
	Multi-Electric		- / /
Type III Equipment/Building	Manufacturing	LED E Runway Elevated Threshold End Light	9/18/2021
Type III Fauinment/Building	Manufacturing	LED Runway Elevated Edge - L-862 (L)	9/18/2021
Type III Equipment/Building	Airport Lighting Company	L-890 Lighting Control & Monitoring System	7/17/2021
Type III Equipment/Building	Airport Lighting Company	High Intensity Runway Edge Light, L-862 LED	5/8/2021
		L-861SE LED Medium Intensity Runway & Taxiway Edge	
Type III Equipment/Building	Airport Lighting Company	Light	5/8/2021
Type III Equipment/Building	Airport Lighting Company	L-862 E LED HIgh Intensity Runway Threshold Light	5/8/2021
Type III Equipment/Building	Hali-Brite Incorporated	L-801 A (LED) Medium Intensity Beacon	4/24/2021
Type III Equipment/Building	Hali-Brite Incorportated	L-802 A (LED) High Intensity Beacon	4/24/2021
Type III Equipment/Building	Musco Lighting	TLC for LED <sup>®</sup> Light-Structure System™ Apron Flood Lighting	4/11/2021
Type III Equipment/Building Type III Equipment/Building Type III Equipment/Building Type III Equipment/Building Type III Equipment/Building Type III Equipment/Building Type III Equipment/Building	Manufacturing Airport Lighting Company Airport Lighting Company Airport Lighting Company Airport Lighting Company Hali-Brite Incorporated Hali-Brite Incorportated	LED Runway Elevated Edge - L-862 (L) L-890 Lighting Control & Monitoring System High Intensity Runway Edge Light, L-862 LED L-861SE LED Medium Intensity Runway & Taxiway Edge Light L-862 E LED HIgh Intensity Runway Threshold Light L-801 A (LED) Medium Intensity Beacon L-802 A (LED) High Intensity Beacon	9/18/202 7/17/202 5/8/202 5/8/202 5/8/202 4/24/202 4/24/202 4/11/202

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	Flight Light Inc.	L-810 Obstruction Light Single Head LED	4/3/2021
Type III Equipment/Building	Flight Light Inc.	L-810 Obstuctruction Light Double Head LED	4/3/2021
Type III Equipment/Building	Airport Lighting Company	L-847 Switch, Circuit Selector	3/20/2021
Type III Equipment/Building	ADB Safegate	L-849 -L Runway End Identification Lights - E1101012	8/8/2020
	Webasto Charging		
Type III Equipment/Building	Systems, Incorporated	DVS 400 Electric Charging Station	5/2/2020
	Webasto Charging		
Type III Equipment/Building	Systems, Incorporated	MVS 400 Electric Charging Station	5/2/2020
	Webasto Charging		- /- /
Type III Equipment/Building	Systems, Incorporated	MVS 800 Electric Charging Station	5/2/2020
		L-893, Lighted Visual Aid to Indicate Temporary Runway	
Type III Equipment/Building	Hali-Brite Incorporated	Closure LED RCM-D L-893 (L)	4/26/2020
		L-893, Lighted Visual Aid to Indicate Temporary Runway	
Type III Equipment/Building	Hali-Brite incorporated	Closure, LED RCM-D	4/26/2020
_		L-861 Lights, Runway & Taxiway Edge, Medium Intensity	
Type III Equipment/Building	ADB Safegate	EMIS2NG01S00000	4/11/2020
		L-861 Lights, Runway & Taxiway Edge, Medium Intensity	
Type III Equipment/Building	ADB Safegate	EMIS2NG01S00100	4/11/2020
		L-861 Lights, Runway & Taxiway Edge, Medium Intensity	
Type III Equipment/Building	ADB Safegate	EMIS2NG01SF0000	4/11/2020
		L-861 Lights, Runway & Taxiway Edge, Medium Intensity	
Type III Equipment/Building	ADB Safegate	EMIS2NG02S00000	4/11/2020
		L-861 Lights, Runway & Taxiway Edge, Medium Intensity	
Type III Equipment/Building	ADB Safegate	EMIS2NG0ASL0000	4/11/2020
		L-861 Lights, Runway & Taxiway Edge, Medium Intensity	
Type III Equipment/Building	ADB Safegate	EMIS2NG0BSL0000	4/11/2020

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Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2NG0CSL0000	4/11/2020
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2NG0CSM0000	4/11/2020
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RG01S00100	4/11/2020
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RG01SF0000	4/11/2020
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RG02S00000	4/11/2020
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RG02S00100	4/11/2020
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RG03S00000	4/11/2020
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RG03S00100	4/11/2020
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RG03SF0000	4/11/2020
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RG03SF0100	4/11/2020
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RG04S00000	4/11/2020
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RG04S00100	4/11/2020

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RG04SF0000	4/11/2020
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RG04SF0100	4/11/2020
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RG05S00000	4/11/2020
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RG05SC0000	4/11/2020
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RG05SC0100	4/11/2020
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RG06SC0000	4/11/2020
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RG07S00000	4/11/2020
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RG07SC0000	4/11/2020
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RG07SF0000	4/11/2020
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RG09S00000	4/11/2020
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RG0BSM0000	4/11/2020
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RG0CSL0000	4/11/2020

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RN09SL0000	4/11/2020
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2YG01S00100	4/11/2020
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2YR01S00100	4/11/2020
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2YR03S00100	4/11/2020
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2YY02S00100	4/11/2020
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS6WY09S00000	4/11/2020
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS8RG05SC0000	4/11/2020
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS8RN05SC0000	4/11/2020
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS8RR05S00000	4/11/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2RG28SF0002	4/11/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2RN01S00002	4/11/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2RR03S00102	4/11/2020

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2RR35S00002	4/11/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2RR38S00002	4/11/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2RY28S00002	4/11/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2RY31S00002	4/11/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2RY33S00002	4/11/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2RY33S00102	4/11/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2RY35S00002	4/11/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2WW31S00002	4/11/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2WW31S00102	4/11/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2WW33S00002	4/11/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2WW33S00102	4/11/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2YG31SF0002	4/11/2020

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	ADb Safegate	L-862 Lights, Runway Edge, High Intensity ERES2RR03S00002	4/11/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2GN05MI0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2GN05SF0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2GN05SF0102	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2GN09MI0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2GN09MI002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2GN11SF0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2GN15SF0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2GR08SF0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2GR11MF0102	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2GR11SF0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2GR13MF0102	4/4/2020

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2GR13SF0102	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2GR13SM0102	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2GR15MF0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2GR15SF0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2GR19SF0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2GR25MF0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2GR25SF0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2GR29SF0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2GW31SF0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2GY33SF0102	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2GY35SF0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2NG21SF0002	4/4/2020

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2NG23SF0102	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2NG25SF0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2NG25SF0102	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2RG21MF0102	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2RG21SF0102	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2RG23MF0102	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2RG23SF0102	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2RG25SF0102	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2RG29SF0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2RG31SF0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2RN01M00002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2RN05S00002	4/4/2020

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2RN09M00002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2RR01S00002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2RR03S00102	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2RR15S00002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2RR25S00002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2RR31M00002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2RR31S00002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2RR35S00002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2RW31S00002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2RY23S00102	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2RY31M00002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2RY31S00002	4/4/2020

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2RY35S00002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2WG31SF0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2WR31S00002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2WW31M00002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2WW31S00002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2WW31S00102	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2WW33M00102	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2WW33S00002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2WW33S00102	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2WW35M00002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2WW35S01102	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2WW39M00002	4/4/2020

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2WY31M00002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2WY31S00002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2WY31S00102	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2WY33M00102	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2WY33S00102	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2WY39M00002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2WY39S00002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2YG33SF0102	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2YG35SF0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2YR13S00102	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2YR31M00002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2YR31S00002	4/4/2020

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2YR35S00002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2YR39M00002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2YR39S00002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2YW31S00002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2YW33M00102	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2YW33S00102	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2YW35M00002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2YW39M00002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2YW39S00002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2GN05SI0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2GN11SF0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2GN13SF0002	4/4/2020

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2GN13SF0102	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2GN18SF0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2GR05SI0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2GR11SF0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2GR11SF0102	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2GR12SF0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2GR13SF0102	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2GR15SF0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2GR18SF0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2GY31SF0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2GY33SF0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2GY33SF0102	4/4/2020

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2GY35SF0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2NG21SF0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2NG23SF0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2NG23SF0102	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2NG28SF0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2RG21SF0102	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2RG22SF0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2RG23SF0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2RG23SF0102	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2RG25SF0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2RN05S00002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2RR01S00002	4/4/2020

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	ADB Safegate	L-862(L) High Intensity Runway Edge Light EREL2GN13SF0102	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2RG21SF0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2WW35S00002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2WY35S00002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2YW35S00002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2RG21SF0002	4/4/2020
Type III Equipment/Building	ADB safegate	L-862 Lights, Runway Edge, High Intensity EREL2RG25SF0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-826 L L-862 Lights, Runway Edge, High Intensity EREL 24 IN N/G W/ARC 1.5 CPLG 12 FAA	3/15/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL 14 IN G/N N/ARC 2 CPLG 11.5	3/15/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL 14 IN G/N W/ARC 2 CPLG 11.5	3/15/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL 14 IN G/R W/ARC 2 CPLG 11.5 FAA	3/15/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL 24 IN G/N W/ARC 1.5 CPLG 12	3/15/2020

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
		L-862 Lights, Runway Edge, High Intensity EREL 24 IN G/Y	
Type III Equipment/Building	ADB Safegate	W/ARC 1.5 CPLG 12 FAA	3/15/2020
Type III Equipment/Building	Crown USA Inc.	Marking TTP-1952F Type I Black	3/15/2020
Type III Equipment/Building	Crown USA Inc.	Marking TTP-1952F Type I Blue	3/15/2020
Type III Equipment/Building	Crown USA Inc.	Marking TTP-1952F Type I Red	3/15/2020
Type III Equipment/Building	Crown USA Inc.	Marking TTP1952F Type I L.F. Yellow	3/15/2020
Type III Equipment/Building	Crown USA Inc.	Marking Type 1952F Type I White	3/15/2020
Type III Equipment/Building	Diamond Vogel	Marking - 7503 Blue Waterborne Traffic Paint	2/17/2020
Type III Equipment/Building	Diamond Vogel	Marking - UC 1509 White Waterborne Traffic Paint	2/17/2020
Type III Equipment/Building	Diamond Vogel	Marking - UC 3584 Yellow Waterborne Traffic Paint	2/17/2020
Type III Equipment/Building	Diamond Vogel	Marking - UC 5503 Red Waterborne Traffic Paint	2/17/2020
Type III Equipment/Building	Diamond Vogel	Marking - UC 9507 Black Waterborne Traffic Paint	2/17/2020
Type III Equipment/Building	Avlite Systems	L-880 LED Precision Approach Path Indicator	1/24/2020
Type III Equipment/Building	Avlite Systems	L-881 LED Abbreviated Precision Approach Path Indicator	1/24/2020
		L-861 Lights, Runway & Taxiway Edge, Medium Intensity	
Type III Equipment/Building	ADB Safegate	EMIS2WG04S00000	12/7/2019
		L-861 Lights, Runway & Taxiway Edge, Medium Intensity	
Type III Equipment/Building	ADB Safegate	EMIS2WG04S00100	12/7/2019
		L-861 Lights, Runway & Taxiway Edge, Medium Intensity	
Type III Equipment/Building	ADB Safegate	EMIS2WG07S00000	12/7/2019
		L-861 Lights, Runway & Taxiway Edge, Medium Intensity	
Type III Equipment/Building	ADB Safegate	EMIS2WR01S00000	12/7/2019
		L-861 Lights, Runway & Taxiway Edge, Medium Intensity	
Type III Equipment/Building	ADB Safegate	EMIS2WR01S00100	12/7/2019

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WR03S00000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WR03S00100	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WR04S00000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WR07S00000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WW01S00000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WW01S00100	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WW02S00000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WW02S00100	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WW03S00000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WW03S00100	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WW04S00000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WW04S00100	12/7/2019

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WW05S00000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WW05S00100	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WW06S00000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WW07S00000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WW09S00000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WW09SL0000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WW09SM0000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WW0ASL0000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WW0ASM0000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WW0BSL0000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WW0BSM0000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WW0CSL0000	12/7/2019

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WW0CSM0000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WY01S00000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WY01S00100	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WY02S00000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WY02S00100	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WY03S00000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WY03S00100	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WY04S00000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WY04S00100	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WY05S00000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WY05S00100	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WY06S00000	12/7/2019

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WY07S00000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WY09S00000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2YG01S00000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2YG02S00000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2YG03S00000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2YG03S00100	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2YG04S00000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2YG04S00100	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2YN03S00100	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2YR01S00000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2YR03S00000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2YR04S00000	12/7/2019

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2YY01S00000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2YY01S00100	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2YY03S00000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2YY03S00100	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2YY04S00000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2YY04S00100	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS6NG09S00000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS6NR09S00000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS6RG09S00000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS6WW09S00000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS8RR05SC0000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS8WW05S00000	12/7/2019
The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS8WY05S00000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RG09SM0000	11/23/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RN09SM0000	11/23/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RN0ASL0000	11/23/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RN0ASM0000	11/23/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RN0BSL0000	11/23/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RN0BSM0000	11/23/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RN0CSL0000	11/23/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RN0CSM0000	11/23/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RR01S00000	11/23/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RR01S00100	11/23/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RR02S00000	11/23/2019

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RR03S00000	11/23/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RR03S00100	11/23/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RR04S00000	11/23/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RR04S00100	11/23/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RR07S00000	11/23/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RR09S00000	11/23/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RW09SL0000	11/23/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RW09SM0000	11/23/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RW0ASL0000	11/23/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RW0ASM0000	11/23/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RW0BSL0000	11/23/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RW0BSM0000	11/23/2019

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RW0CSL0000	11/23/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RW0CSM0000	11/23/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WG01S00000	11/23/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WG01S00100	11/23/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WG03S00000	11/23/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WG03S00100	11/23/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WR04S00100	11/23/2019
Type III Equipment/Building	ADB Safegate	L-861(L) Medium Intensity Runway Edge Light EMIS2NG03S00100	11/16/2019
Type III Equipment/Building	ADB Safegate	L-861(L) Medium Intensity Runway Edge Light EMIS2NG03S00000	11/16/2019
Type III Equipment/Building	ADB Safegate	L-861(L) Medium Intensity Runway Edge Light EMIS2NG03SF0000	11/16/2019
Type III Equipment/Building	ADB Safegate	L-861(L) Medium Intensity Runway Edge Light EMIS2NG04S00000	11/16/2019
Type III Equipment/Building	ADB Safegate	L-861(L) Medium Intensity Runway Edge Light EMIS2NG04S00100	11/16/2019

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	ADB Safegate	L-861(L) Medium Intensity Runway Edge Light EMIS2NG07S00000	11/16/2019
Type III Equipment/Building	ADB Safegate	L-861(L) Medium Intensity Runway Edge Light EMIS2NG09SL0000	11/16/2019
Type III Equipment/Building	ADB Safegate	L-861(L) Medium Intensity Runway Edge Light EMIS2NG09SM0000	11/16/2019
Type III Equipment/Building	ADB Safegate	L-861(L) Medium Intensity Runway Edge Light EMIS2NR01S00000	11/16/2019
Type III Equipment/Building	ADB Safegate	L-861(L) Medium Intensity Runway Edge Light EMIS2NR01S00100	11/16/2019
Type III Equipment/Building	ADB Safegate	L-861(L) Medium Intensity Runway Edge Light EMIS2NR03S00000	11/16/2019
Type III Equipment/Building	ADB Safegate	L-861(L) Medium Intensity Runway Edge Light EMIS2NR03S00100	11/16/2019
Type III Equipment/Building	ADB Safegate	L-861(L) Medium Intensity Runway Edge Light EMIS2NR04S00000	11/16/2019
Type III Equipment/Building	ADB Safegate	L-861(L) Medium Intensity Runway Edge Light EMIS2NR04S00100	11/16/2019
Type III Equipment/Building	ADB Safegate	L-861(L) Medium Intensity Runway Edge Light EMIS2RG0ASL0000	11/16/2019
Type III Equipment/Building	ADB Safegate	L-861(L) Medium Intensity Runway Edge Light EMIS2RG0ASM0000	11/16/2019
Type III Equipment/Building	ADB Safegate	L-861(L) Medium Intensity Runway Edge Light EMIS2RG0BSL0000	11/16/2019

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
		L-861(L) Medium Intensity Runway Edge Light	
Type III Equipment/Building	ADB Safegate	EMIS2RG0CSM0000	11/16/2019
		In-Pavement Stationary Runway Weather Information	
Type III Equipment/Building	Vaisala	System RWS200	11/16/2019
Type III Equipment/Building	Astronics DME	L-852S Inpavement Taxiway Lights L-R-1-0	10/26/2019
Type III Equipment/Building	Astronics DME	L-852T-L 1 G2 Inpavement Taxiway Lights	10/26/2019
Type III Equipment/Building	Astronics DME	L-852X Inpavement Taxiway Lights L-G2	10/26/2019
Type III Equipment/Building	Astronics DME	L-852X-L G2 Inpavement Taxiway Lights	10/26/2019
Type III Equipment/Building	Astronics DME	L-862L HIgh Intensity runway Edge Lights	10/26/2019
Type III Equipment/Building	Franklin Paint Company	P-620 Black Waterborne Traffic Paint	10/26/2019
Type III Equipment/Building	Franklin Paint Company	P-620 Green Waterborne Traffic Paint	10/26/2019
Type III Equipment/Building	Franklin Paint Company	P-620 Red Waterborne Traffic Paint	10/26/2019
Type III Equipment/Building	Franklin Paint Company	P-620 White Waterborne Traffic Paint	10/26/2019
Type III Equipment/Building	Franklin Paint Company	P-620 Yellow Waterborne Traffic Paint	10/26/2019
	Millerbernd		
Type III Equipment/Building	Manufacturing Company	L-867 Light Base, Non-Load Bearing	10/26/2019
	Millerbernd		
Type III Equipment/Building	Manufacturing Company	L-868 Light Base, Load Bearing	10/26/2019
	Millerbernd		
Type III Equipment/Building	Manufacturing Company	L-894 Elevated Light Cover 12"	10/26/2019
	Millerbernd		10/20/2010
Type III Equipment/Building	Manufacturing Company	L-894 Elevated Light Cover 16"	10/26/2019
			10/20/2010
i ype iii Equipment/Building	wix Support Equipment	Electric venicle Charging Station Cable Mangement System	10/26/2019
		L-862 (L) High Intensity Runway Edge Light	40/40/2010
Type III Equipment/Building	ADB Safegate	ERELZGN135F0102	10/19/2019

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2GN13SF0102	10/19/2019
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2GN15SF0002	10/19/2019
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2GN15SF0102	10/19/2019
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2GR15SF0102	10/19/2019
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2GY33SF0102	10/19/2019
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2NG23SF0102	10/19/2019
Type III Equipment/Building	ADB Safegate	L-861 L Runway & Taxiway Edge Medium Intensity Lights	10/1/2019
Type III Equipment/Building	ADB Safegate	L-862 E L Runway Edge High Intensity Lights ERES2WW35S00002	10/1/2019
Type III Equipment/Building	ADB Safegate	L-862 Runway Edge High Intensity Lights EREL2RG21SF0002	10/1/2019
Type III Equipment/Building	ADB Safegate	L-862 Runway Edge High Intensity Lights EREL2WW35S00002	10/1/2019
Type III Equipment/Building	Minit charger, LLC	ALT22-480-1 Altus 22kW Dual Port Charger with BIW Cables	10/1/2019
Type III Equipment/Building	Multi-Electric Mfg., Inc.	L-852 E LED Inpavement Taxiway Light	10/22/2018
Type III Equipment/Building	Multi-Electric Mfg., Inc.	L-852 F LED Inpavement Taxiway Light	10/22/2018
Type III Equipment/Building	Multi-Electric Mfg., Inc.	L-852 S LED Inpavement Taxiway Light	10/22/2018

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	Multi-Electric Mfg., Inc.	L-852 T LED Inpavement Taxiway Light	10/22/2018
	Astronics DME		
Type III Equipment/Building	Corporation	L-804 V Holding Poisition Edge Light	8/27/2018
	Astronics DME		
Type III Equipment/Building	Corporation	L-829 Monitored Constant Current Regulator	8/27/2018
	Astronics DME		
Type III Equipment/Building	Corporation	L-849 I LED Runway End Indentification Lights	8/27/2018
	Astronics DME		
Type III Equipment/Building	Corporation	L-850 A LED Runway Inpavement Lights	8/27/2018
	Astronics DME		
Type III Equipment/Building	Corporation	L-850 B LED Runway Inpavement Lights	8/27/2018
	Astronics DME		
Type III Equipment/Building	Corporation	L-850 I Runway Inpavement Light	8/2//2018
	Astronics DME		0/27/2040
Type III Equipment/Building	Corporation	L-858 Runway and Taxiway Signs	8/2//2018
		Snow Removal Equipment - Dual Engine Chassis w/ Rwy	- 4 4
Type III Equipment/Building	Kodiack America, LLC	Broom & Air Blast	8/27/2018
Type III Equipment/Building	Multi-Electric Mfg., Inc.	L-850 A LED Inpavement Runway Light	8/27/2018
Type III Equipment/Building	Multi-Electric Mfg., Inc.	L-850 B LED Inpavement Runway Light	8/27/2018
Type III Equipment/Building	Multi-Electric Mfg., Inc.	L-850 C LED Inpavement Runway Light	8/27/2018
Type III Equipment/Building	Multi-Electric Mfg., Inc.	L-850 D LED Inpavement Runway Light	8/27/2018
Type III Equipment/Building	Multi-Electric Mfg., Inc.	L-850 E LED Inpavement Runway Light	8/27/2018
Type III Equipment/Building	Multi-Electric Mfg., Inc.	L-850 T LED Inpavement Runway Light	8/27/2018
		P-620 AirMark Preformed Thermoplastic Pavement	
Type III Equipment/Building	Ennis-Flint Company	Markings	8/4/2018
Type III Equipment/Building	Multi-Electric Mfg., Inc.	L-852 A LED Inpavement Taxiway Light	7/29/2018

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	Multi-Electric Mfg., Inc.	L-852 B LED Inpavement Taxiay Light	7/29/2018
Type III Equipment/Building	Multi-Electric Mfg., Inc.	L-852 C LED Inpavement Taxiway Light	7/29/2018
Type III Equipment/Building	Multi-Electric Mfg., Inc.	L-852 D LED Inpavement Taxiway Light	7/29/2018
Type III Equipment/Building	Multi-Electric Mfg., Inc.	L-852 J LED Inpavement Taxiway Light	7/29/2018
Type III Equipment/Building	Multi-Electric Mfg., Inc.	L-852 K LED Inpavement Taxiway Light	7/29/2018
Type III Equipment/Building	Airport Lighting Company	L-828 Constant Current Regulator	7/24/2018
Type III Equipment/Building	Airport Lighting Company	L-829 Monitored Constant Current Regulator	7/24/2018
Type III Equipment/Building	Eaton Crouse-Hinds	L-852 G LED Inpavement Taxiaway Light	7/22/2018
Type III Equipment/Building	Hughey & Phillips	L-810 Low Intensity LED , Double, VAC	1/21/2017
Type III Equipment/Building	Hughey & Phillips	L-810 Low Intensity LED, Single, VAC	1/21/2017
	Astronics DME		
Type III Equipment/Building	Corporation	L-858 B LED Runway Runway & Taxiway Signs	10/17/2016
	Astronics DME		
Type III Equipment/Building	Corporation	L-858 L LED Runway & Taxiway Signs	10/17/2016
	Astronics DME		
Type III Equipment/Building	Corporation	L-858 R LED Runway & Taxiway Signs	10/17/2016
Type III Equipment/Building	Eaton Crouse-Hinds	L-850 C Runway Inpavement Lights	10/10/2016
Type III Equipment/Building	Vaisala	AW20, AWOS III	8/1/2016
Type III Equipment/Building	Vaisala	AW20-SPLIT, AWOS A	8/1/2016
Type III Equipment/Building	Vaisala	AW20-SPLIT, AWOS AV	8/1/2016
Type III Equipment/Building	Vaisala	AW20-SPLIT, AWOS I	8/1/2016
Type III Equipment/Building	Vaisala	AW20-SPLIT, AWOS II	8/1/2016
Type III Equipment/Building	Vaisala	AW20-SPLIT, AWOS III	8/1/2016
Type III Equipment/Building	Vaisala	AW20-SPLIT, AWOS IIIP	8/1/2016
Type III Equipment/Building	Vaisala	AW20-SPLIT, AWOS IIIPT	8/1/2016

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	Vaisala	AW20-SPLIT, AWOS IIIT	8/1/2016
Type III Equipment/Building	Vaisala	AW20-SPLIT, AWOS IV Z	8/1/2016
Type III Equipment/Building	Vaisala	AW20-STA, AWOS A	8/1/2016
Type III Equipment/Building	Vaisala	AW20-STA, AWOS AV	8/1/2016
Type III Equipment/Building	Vaisala	AW20-STA, AWOS II	8/1/2016
Type III Equipment/Building	Vaisala	AW20-STA, AWOS IIIP	8/1/2016
Type III Equipment/Building	Vaisala	AW20-STA, AWOS IIIPT	8/1/2016
Type III Equipment/Building	Vaisala	AW20-STA, AWOS IIIT	8/1/2016
Type III Equipment/Building	Vaisala	AW20-STA, AWOS IV Z	8/1/2016
Type III Equipment/Building	Vaisala	AW20-STA, AWS I	8/1/2016
Type III Equipment/Building	Jaquith Industries	L-894 12" Elevated Light Cover Baseplate	5/17/2016
Type III Equipment/Building	Jaquith Industries	L-894 16" Elevated Light Cover Baseplate	5/17/2016
Type III Equipment/Building	Jaquith Industries	L-895 Light Mounting Stake	5/17/2016
Type III Fauinment/Building	The Sherwin-Williams	P-620, 1952, TT-P-Hotline Waterborne Durable Type III - White Marking Paint TM2452	5/14/2016
Type in Equipment, building	The Sherwin-Williams	P.620 1052 TT-P. Hotling Waterborne Durable Type III	5/14/2010
Type III Equipment/Building	Company	Yellow Marking Paint TM2453	5/14/2016
Type III Equipment/Building	The Sherwin-Williams Company	P-620, TT-P- 1952, Hotline Waterborne Type I/II - Yellow Marking Paint TM2259	5/14/2016
		P-620, TT-P-1952 Hotline Waterborne Type I/II w	
	The Sherwin-Williams	Algaecide, Fungicide, & Rust Inhibitor - Red Marking Paint	
Type III Equipment/Building	Company	TM2544	5/14/2016
	The Sherwin-Williams	P-620, TT-P-1952 Hotline Waterborne Type I/II - White	
Type III Equipment/Building	Company	Marking Paint TM2152	5/14/2016

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
	The Sherwin-Williams	P-620, TT-P-1952 Hotline Waterborne Type III w Algaecide,	F /1 A /201 C
Type III Equipment/Building	Company	Fungicide, & Rust Inhibitor - White Marking Paint 1M2564	5/14/2016
	The Sherwin-Williams	P-620, TT-P-1952, Hotline Waterborne Durable Type III -	
Type III Equipment/Building	Company	Black Marking Paint TM2140	5/14/2016
	The Sherwin-Williams	P-620, TT-P-1952, Hotline Waterborne Durable Type III -	
Type III Equipment/Building	Company	Blue Marking Paint TM2142	5/14/2016
	The Sherwin-Williams	P-620, TT-P-1952, Hotline Waterborne Durable Type III -	
Type III Equipment/Building	Company	Green Marking Paint TM2143	5/14/2016
	The Sherwin-Williams	P-620, TT-P-1952, Hotline Waterborne Durable Type III -	
Type III Equipment/Building	Company	Red Marking Paint TM2141	5/14/2016
	The Sherwin-Williams	P-620 TT-P-1952 Hotline Waterborne Type I/II - Black	<b></b>
Type III Fauipment/Building	Company	Marking Paint TM2221	5/14/2016
	The Shorwin Williams	R 620 TT R 1052 Hotling Waterborne Type I/II - Rlue	5/11/2010
Type III Equipment/Puilding	Company	Marking Daint TM2224	E/14/2016
			5/14/2010
	The Sherwin-Williams	P-620, TT-P-1952, Hotline Waterborne Type I/II - Green	
Type III Equipment/Building	Company	Marking Paint 1M2226	5/14/2016
	The Sherwin-Williams	P-620, TT-P-1952, Hotline Waterborne Type I/II - Red	
Type III Equipment/Building	Company	Marking Paint TM2222	5/14/2016
	The Sherwin-Williams	P-620, TT-P-1952, Hotline Waterborne Type I/II - Yellow	
Type III Equipment/Building	Company	Marking Paint TM2153	5/14/2016
		P-620, TT-P-1952, Hotline Waterborne Type I/II w	
	The Sherwin-Williams	Algaecide, Fungicide, & Rust Inhibitor - Black Marking Paint	
Type III Equipment/Building	Company	TM2543	5/14/2016

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
	The Sherwin-Williams	P-620, TT-P-1952, Hotline Waterborne Type III w Algaecide,	
Type III Equipment/Building	Company	Fungicide, & Rust Inhibitor - Blue Marking Paint TM2545	5/14/2016
	The Sherwin-Williams	P-620, TT-P-1952, Hotline Waterborne Type III w Algaecide,	
Type III Equipment/Building	Company	Fungicide, & Rust Inhibitor - Yellow Marking Paint TM2565	5/14/2016
	The Sherwin-Williams	P-620, TT-P-1952, Hotline Waterborne, Type I/II - White	
Type III Equipment/Building	Company	Marking Paint TM2248	5/14/2016
	The Sherwin-Williams	P-620, TT-P-1952, Type III w Agaecide & Rust Inihibitor -	
Type III Equipment/Building	Company	Black Marking Paint TM2540	5/14/2016
	The Sherwin-Williams	P-620, TT-P-1952, Type III w Algaecide, Fungicide & Rust	
Type III Equipment/Building	Company	Inhibitor - White Marking Paint TM2538	5/14/2016
	The Sherwin-Williams	P-620, TT-P-1952, Type III w Algaecide, Fungicide, & Rust	
Type III Equipment/Building	Company	Inihibitor - Yellow Marking Paint TM2539	5/14/2016
Type III Equipment/Building	Boshchung America, LLC	Airport Winter Safety and Operations, RWIS	1/2/2016
	Astronics DME		
Type III Equipment/Building	Corporation	L-804 Holding Position Edge Light	8/4/2015
Type III Equipment/Building	ADB Safegate	L-806 LED, Wind Cones-Frangible	5/15/2015
Type III Equipment/Building	ADB Safegate	L-806 Wind Cones - Frangible	5/15/2015
Type III Equipment/Building	ADB Safegate	L-850 D, Incandescent Inpavement Lights	5/15/2015
Type III Equipment/Building	ADB Safegate	L-850 E, Incandescent Inpavement Lights	5/15/2015
Type III Equipment/Building	ADB Safegate	L-850 F, Incandescent Inpavement Lights	5/15/2015
Type III Equipment/Building	ADB Safegate	L-861 E, LED Runway Edge, Medium Intensity Lights	5/15/2015
Type III Equipment/Building	ADB Safegate	L-861 LED, Medium Intensity Runway Edge Lights	5/15/2015
Type III Equipment/Building	ADB Safegate	L-804 LED, Holding Position Edge Light	5/5/2015

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	ADB Safegate	L-810 LED, Obstruction Lights	5/5/2015
Type III Equipment/Building	ADB Safegate	L-849 C, LED, Runway End Identification Lights	5/5/2015
Type III Equipment/Building	ADB Safegate	L-849 E, LED, Runway End Identification Lights	5/5/2015
Type III Equipment/Building	ADB Safegate	L-850 A, Q/I, Runway, Inpavement Lights	5/5/2015
Type III Equipment/Building	ADB Safegate	L-850 B, Q/I Runway, Inpavement Lights	5/5/2015
Type III Equipment/Building	ADB Safegate	L-850 C LED, Runway, Inpavement Lights	5/5/2015
Type III Equipment/Building	ADB Safegate	L-850 C, Q/I Runway, Inpavement Lights	5/5/2015
Type III Equipment/Building	ADB Safegate	L-850 D, LED Runway, Inpavement Lights	5/5/2015
Type III Equipment/Building	ADB Safegate	L-852 A, LED, Taxiway, Inpavement Lights	5/5/2015
Type III Equipment/Building	ADB Safegate	L-852 A, Q, Taxiway, Inpavement Lights	5/5/2015
Type III Equipment/Building	ADB Safegate	L-852 B, LED Taxiway, Inpavement Lights	5/5/2015
Type III Equipment/Building	ADB Safegate	L-852 B, Q, Taxiway, Inpavement Lights	5/5/2015
Type III Equipment/Building	ADB Safegate	L-852 C, LED Taxiway, Inpavement Lights	5/5/2015
Type III Equipment/Building	ADB Safegate	L-852 C, Q, Taxiway, Inpavement Lights	5/5/2015
Type III Equipment/Building	ADB Safegate	L-852 D, LED Taxiway, Inpavement Lights	5/5/2015
Type III Equipment/Building	ADB Safegate	L-852 D, Q, Taxiway, Inpavement Lights	5/5/2015
Type III Equipment/Building	ADB Safegate	L-852 E, Q, Taxiway, Inpavement Lights	5/5/2015
Type III Equipment/Building	ADB Safegate	L-852 G, LED, Taxiway, Inpavement Lights	5/5/2015
Type III Equipment/Building	ADB Safegate	L-852 G, Q, Taxiway, Inpavement Lights	5/5/2015
Type III Equipment/Building	ADB Safegate	L-852 J, LED Taxiway, Inpavement Lights	5/5/2015
Type III Equipment/Building	ADB Safegate	L-852 S, Q, Taxiway, Inpavement Lights	5/5/2015
Type III Equipment/Building	ADB Safegate	L-852 T, LED Taxiway, Inpavement Lights	5/5/2015
Type III Equipment/Building	ADB Safegate	L-858, LED, Runway and Taxiway Signs	5/5/2015
Type III Equipment/Building	ADB Safegate	L-861 SE, Q, Runway Edge, Medium Intensity Lights	5/5/2015
Type III Equipment/Building	ADB Safegate	L-861 T, LED Taxiway Edge, Medium Intensity Lights	5/5/2015

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	ADB Safegate	L-861, Q, Runway Edge, Medium Intensity Lights	5/5/2015
Type III Equipment/Building	ADB Safegate	L-861E, Q, Runway Edge, Medium Intensity Lights	5/5/2015
Type III Equipment/Building	ADB Safegate	L-862 E, Q, Runway Edge, High Intensity Lights	5/5/2015
Type III Equipment/Building	ADB Safegate	L-862, Q, Runway Edge, High Intensity Lights	5/5/2015
Type III Equipment/Building	ADB Safegate	L-880 LED, Precision Approach Path Indicator	5/5/2015
Type III Equipment/Building	ADB Safegate	L-881 LED, Abbreviated Precision Approach Path Indicator	5/5/2015
Type III Equipment/Building	Atg Airports, Ltd.	L-850 B Runway Inpavement Lights	2/2/2015
Type III Equipment/Building	Atg Airports, Ltd.	L-850 A Runway Inpavement Lights	1/20/2015
Type III Equipment/Building	Atg Airports, Ltd.	L-850 C Runway Inpavement Lights	1/17/2015
	Astronics DME		
Type III Equipment/Building	Corporation	L-849 A LED Runway End Identification Lights	10/27/2014
Type III Equipment/Building	Rheinmetall Defence	DEBRA FOD	10/21/2014
Type III Equipment/Building	Ennis-Flint Company	A-A-2886B Black Runway Marking Paint	8/16/2014
Type III Equipment/Building	Ennis-Flint Company	A-A-2886B Blue Runway Marking Paint	8/16/2014
Type III Equipment/Building	Ennis-Flint Company	A-A-2886B Red Runway Marking Paint	8/16/2014
Type III Equipment/Building	Ennis-Flint Company	A-A-2886B White Runway Marking Paint	8/16/2014
Type III Equipment/Building	Ennis-Flint Company	A-A-2886B Yellow Runway Marking Paint	8/16/2014
Type III Equipment/Building	Ennis-Flint Company	TT-P-1952E Black Type I/II Fast Dry Runway Marking Paint	8/16/2014
Type III Equipment/Building	Ennis-Flint Company	TT-P-1952E Black Type III Runway Marking Paint	8/16/2014
Type III Equipment/Building	Ennis-Flint Company	TT-P-1952E Blue Type I/II Fast Dry Runway Marking Paint	8/16/2014
Type III Equipment/Building	Ennis-Flint Company	TT-P-1952E Blue Type III Runway Marking Paint	8/16/2014

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Manufacturer	Product	Effective Date
Ennis-Flint Company	TT-P-1952E Green Type I/II Fast Dry Runway Marking Paint	8/16/2014
Ennis-Flint Company	TT-P-1952E Green Type III Runway Marking Paint	8/16/2014
Ennis-Flint Company	TT-P-1952E Red Type I/II Fast Dry Runway Marking Paint	8/16/2014
Ennis-Flint Company	TT-P-1952E Red Type III Runway Marking Paint	8/16/2014
Ennis-Flint Company	TT-P-1952E White Type I/II Fast Dry Runway Marking Paint	8/16/2014
Ennis-Flint Company	TT-P-1952E White Type III Runway Marking Paint	8/16/2014
Ennis-Flint Company	TT-P-1952E Yellow Type I/II Fast Dry Runway Marking Paint	8/16/2014
Ennis-Flint Company	TT-P-1952E Yellow Type III Runway Marking Paint	8/16/2014
	L-861 T LED Runway & Taxiway Edge, Medium Intensity	
Manairco	Lights	6/27/2014
Eaton Crouse-Hinds	L-850 A LED Runway Inpavement Lights	6/16/2014
Eaton Crouse-Hinds	L-850 B LED Runway Inpavement Lights	6/16/2014
<b>Containment Solutions</b>	CSI Tank 10 - 10,000 Gallon Tank DWT Fuel Storage Tank	5/13/2014
<b>Containment Solutions</b>	CSI Tank 10 - 12,000 Gallon Tank DWT Fuel Storage Tank	5/13/2014
<b>Containment Solutions</b>	CSI Tank 10 - 15,000 Gallon Tank DWT Fuel Storage Tank	5/13/2014
<b>Containment Solutions</b>	CSI Tank 10 - 2,000 Gallon DWT Fuel Storage Tank	5/13/2014
<b>Containment Solutions</b>	CSI Tank 10 - 20,000 Gallon Tank DWT Fuel Storage Tank	5/13/2014
	ManufacturerEnnis-Flint CompanyEnnis-Flint CompanyContainment SolutionsContainment SolutionsContainment SolutionsContainment SolutionsContainment Solutions	ManufacturerProductEnnis-Flint CompanyTT-P-1952E Green Type I/II Fast Dry Runway Marking PaintEnnis-Flint CompanyTT-P-1952E Green Type III Runway Marking PaintEnnis-Flint CompanyTT-P-1952E Red Type I/II Fast Dry Runway Marking PaintEnnis-Flint CompanyTT-P-1952E Red Type I/II Fast Dry Runway Marking PaintEnnis-Flint CompanyTT-P-1952E White Type I/I Fast Dry Runway Marking PaintEnnis-Flint CompanyTT-P-1952E White Type I/I Fast Dry Runway Marking PaintEnnis-Flint CompanyTT-P-1952E White Type I/II Fast Dry Runway Marking PaintEnnis-Flint CompanyTT-P-1952E Yellow Type I/II Fast Dry Runway Marking PaintEnnis-Flint CompanyTT-P-1952E Yellow Type I/II Fast Dry Runway Marking PaintEnnis-Flint CompanyTT-P-1952E Yellow Type I/II Fast Dry Runway Marking PaintEnnis-Flint CompanyTT-P-1952E Yellow Type III Runway Marking PaintEnnis-Flint CompanyIT-P-1952E Yellow T

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	<b>Containment Solutions</b>	CSI Tank 10 - 25,000 Gallon Tank DWT Fuel Storage Tank	5/13/2014
Type III Equipment/Building	<b>Containment Solutions</b>	CSI Tank 10 - 30,000 Gallon Tank DWT Fuel Storage Tank	5/13/2014
Type III Equipment/Building	<b>Containment Solutions</b>	CSI Tank 10 - 35,000 Gallon DWT Fuel Storage Tank	5/13/2014
Type III Equipment/Building	<b>Containment Solutions</b>	CSI Tank 4 - 1,000 Gallon DWT Fuel Storage Tank	5/13/2014
Type III Equipment/Building	<b>Containment Solutions</b>	CSI Tank 4 - 600 Gallon DWT Fuel Storage Tank	5/13/2014
Type III Equipment/Building	<b>Containment Solutions</b>	CSI Tank 6 - 4,000 Gallon DWT Fuel Storage Tank	5/13/2014
Type III Equipment/Building	<b>Containment Solutions</b>	CSI Tank 6 - 2,500 Gallon DWT Fuel Storage Tank	5/13/2014
Type III Equipment/Building	<b>Containment Solutions</b>	CSI Tank 6 - 3,000 Gallon DWT Fuel Storage Tank	5/13/2014
Type III Equipment/Building	<b>Containment Solutions</b>	CSI Tank 6 - 5,000 Gallon DWT Fuel Storage Tank	5/13/2014
Type III Equipment/Building	<b>Containment Solutions</b>	CSI Tank 6 - 6,000 Gallon DWT Fuel Storage Tank	5/13/2014
Type III Equipment/Building	<b>Containment Solutions</b>	CSI Tank 8 - 12,000 Gallon Tank DWT Fuel Storage Tank	5/13/2014
Type III Equipment/Building	<b>Containment Solutions</b>	CSI Tank 8 - 8,000 Gallon DWT Fuel Storage Tank	5/13/2014
Type III Equipment/Building	<b>Containment Solutions</b>	CSI Tank 8 -15,000 Gallon Tank DWT Fuel Storage Tank	5/13/2014
Type III Equipment/Building	<b>Containment Solutions</b>	CSI Tank 8 -5,000 Gallon DWT Fuel Storage Tank	5/13/2014
Type III Equipment/Building	Service Wire Company	L-824, Underground Electrical Cables for Airfield Circuits	5/4/2014
		L-861 LED Runway & Taxiway Edge, Medium Intensity	
Type III Equipment/Building	Airport Lighting Company	Lights	3/29/2014
	Davies Imperial Coatings,		
Type III Equipment/Building	Inc.	A-A-2886B Black Runway Marking Paint (5385)	3/24/2014
Type III Equipment/Building	Eaton Crouse-Hinds	L-852 A LED Taxiway Inpavement Lights	2/25/2014

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	Eaton Crouse-Hinds	L-852 B LED Taxiway Inpavement Lights	2/25/2014
Type III Equipment/Building	Eaton Crouse-Hinds	L-852 C LED Taxiway Inpavement Lights	2/25/2014
Type III Equipment/Building	Eaton Crouse-Hinds	L-852 D LED Taxiway Inpavement Lights	2/25/2014
Type III Equipment/Building	Eaton Crouse-Hinds	L-852 J LED Taxiway Inpavement Lights	2/25/2014
Type III Equipment/Building	Eaton Crouse-Hinds	L-852 K LED Taxiway Inpavement Lights	2/25/2014
	Astronics DME		
Type III Equipment/Building	Corporation	L-852 B LED Taxiway, Inpavement Lights	11/16/2013
	Astronics DME		
Type III Equipment/Building	Corporation	L-852 C LED Taxiway, Inpavement Lights	11/16/2013
	Astronics DME	L-861 E LED Runway & Taxiway Edge, Medium Intensity	
Type III Equipment/Building	Corporation	Lights	11/16/2013
	Astronics DME	L-861 SE LED Runway & Taxiway Edge, Medium Intensity	
Type III Equipment/Building	Corporation	Lights	11/16/2013
	Davies Imperial Coatings,		
Type III Equipment/Building	Inc.	A-A-2886B Black Runway Marking Paint (5383)	10/19/2013
6	Davies Imperial Coatings,		
Type III Equipment/Building	Inc.	A-A-2886B Blue Runway Marking Paint (5274)	10/19/2013
	Davies Imperial Coatings,		
Type III Equipment/Building	Inc.	A-A-2886B Blue Runway Marking Paint (5344)	10/19/2013
	Davies Imperial Coatings,		10/10/2012
Type III Equipment/Building	Inc.	A-A-2886B Blue Runway Marking Paint (5384)	10/19/2013
Turne III Fausiane ent (Duildin e	Davies Imperial Coatings,	A A 200CD Creater Durante Martine Drivet (527C)	10/10/2012
	INC.	A-A-2886B Green Kunway Warking Paint (5376)	10/19/2013
Tune III Fauinment/Duilding	Davies Imperial Coatings,	A A 2006D Croop Dupway Marking Daint (5200)	10/10/2012
Type III Equipment/Building	Inc.	A-A-2880B Green Runway Warking Paint (5386)	10/19/2013

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
	Davies Imperial Coatings,		
Type III Equipment/Building	Inc.	A-A-2886B Red Runway Marking Paint (5345)	10/19/2013
	Davies Imperial Coatings,		
Type III Equipment/Building	Inc.	A-A-2886B Red Runway Marking Paint (5375)	10/19/2013
	Davies Imperial Coatings,		
Type III Equipment/Building	Inc.	A-A-2886B White Runway Marking Paint (5281)	10/19/2013
	Davies Imperial Coatings,		
Type III Equipment/Building	Inc.	A-A-2886B Yellow Runway Marking Paint (5342)	10/19/2013
	Davies Imperial Coatings,		
Type III Equipment/Building	Inc.	A-A-2886B Yellow Runway Marking Paint (5372)	10/19/2013
	Davies Imperial Coatings,		
Type III Equipment/Building	Inc.	A-A-2886B Yellow Runway Marking Paint (5382)	10/19/2013
	Davies Imperial Coatings,		
Type III Equipment/Building	Inc.	IL SPEC Red Runway Marking Paint (5408)	10/19/2013
	Davies Imperial Coatings,		
Type III Equipment/Building	Inc.	IL SPEC Yellow Runway Marking Paint (4636)	10/19/2013
	Davies Imperial Coatings,		
Type III Equipment/Building	Inc.	TT-P-1952E Type II Blue Runway Marking Paint (4834)	10/19/2013
	Davies Imperial Coatings,		
Type III Equipment/Building	Inc.	TT-P-1952E Type II Green Runway Marking Paint (5192)	10/19/2013
	Davies Imperial Coatings,		
Type III Equipment/Building	Inc.	TT-P-1952E Type II Red Runway Marking Paint (4836)	10/19/2013
	Davies Imperial Coatings,		
Type III Equipment/Building	Inc.	TT-P-1952E Type II Yellow Runway Marking Paint (4477)	10/19/2013
	Davies Imperial Coatings,		
Type III Equipment/Building	Inc.	TT-P-1952E Type II Yellow Runway Marking Paint (8511)	10/19/2013

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
	Davies Imperial Coatings,		
Type III Equipment/Building	Inc.	TT-P-1952E Type II Yellow Runway Marking Paint (9511)	10/19/2013
	Davies Imperial Coatings,		
Type III Equipment/Building	Inc.	TT-P-1952E Type III Blue Runway Marking Paint (5433)	10/19/2013
	Davies Imperial Coatings,		
Type III Equipment/Building	Inc.	TT-P-1952E Type III Green Runway Marking Paint (5435)	10/19/2013
	Davies Imperial Coatings,		
Type III Equipment/Building	Inc.	TT-P-1952E Type III Red Runway Marking Paint (5434)	10/19/2013
	Davies Imperial Coatings,		
Type III Equipment/Building	Inc.	TT-P-1952E Type III Yellow Runway Marking Paint (5431)	10/19/2013
Type III Equipment/Building	Airport Lighting Company	L-804, Holding Position Edge Light	9/21/2013
	Honeywell Airport		
Type III Equipment/Building	Systems	L-828 F20 Constant Current Regulator	9/21/2013
	Honeywell Airport		
Type III Equipment/Building	Systems	L-828 W10 Constant Current Regulator	9/21/2013
	Honeywell Airport		
Type III Equipment/Building	Systems	L-829 S04 Constant Current Regulator with Monitor	9/21/2013
	Honeywell Airport		
Type III Equipment/Building	Systems	L-829-F04, Constant Current Regulator	9/9/2013
	Honeywell Airport		
Type III Equipment/Building	Systems	L-829-F30, Constant Current Regulator	9/9/2013
	Honeywell Airport		- <b>1</b> - <b>1</b>
Type III Equipment/Building	Systems	L-829-F70, Constant Current Regulator	9/9/2013
	Honeywell Airport		
Type III Equipment/Building	Systems	L-829-S30, Constant Current Regulator	9/9/2013

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	Honeywell Airport Systems	L-829-S70, Constant Current Regulator	9/9/2013
Type III Equipment/Building	Amerace - Thomas & Betts Corporation	L-830-16 Isolation Transformer, 60Hz, 10/15 Watts, 6.6/6.6 Amperes	7/9/2013
Type III Equipment/Building	Amerace - Thomas & Betts Corporation	L-830-17 Isolation Transformer, 60Hz, 20/25 Watts, 6.6A/6.6A Amperes	7/9/2013
Type III Equipment/Building	Astronics DME Corporation	L-852 D LED Taxiway, Inpavement Lights	7/7/2013
Type III Equipment/Building	Astronics DME Corporation	L-852 A LED Taxiway, Inpavement Lights	3/26/2013
Type III Equipment/Building	Astronics DME Corporation	L-861 E Halogen Edge Light	3/26/2013
Type III Equipment/Building	Astronics DME Corporation	L-861 Halogen Lights	3/26/2013
Type III Equipment/Building	Astronics DME Corporation	L-861 LED Runway & Taxiway Edge, Medium Intensity Lights	3/26/2013
Type III Equipment/Building	Astronics DME Corporation	L-861 T - Halogen Taxiway Light	3/26/2013
Type III Equipment/Building	Astronics DME Corporation	L-861 T LED Runway & Taxiway Edge, Medium Intensity Lights	3/26/2013
Type III Equipment/Building	Point Light Corporation	L-861 E LED Runway & Taxiway Edge, Medium Intensity Lights	3/26/2013
Type III Equipment/Building	Point Light Corporation	L-861 SE LED Runway & Taxiway Edge, Medium Intensity Lights	3/26/2013
Type III Equipment/Building	Point Light Corporation	L-861 T LED Runway & Taxiway Edge, Medium Intensity Lights	3/26/2013

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
		L-862 E LED Runway & Taxiway Edge, Medium Intensity	
Type III Equipment/Building	Point Light Corporation	Lights	3/26/2013
	Advanced Drainage		
Type III Equipment/Building	Systems (ADS)	D-705 10" Pipe Underdrain w/sock	3/10/2013
	Advanced Drainage		
Type III Equipment/Building	Systems (ADS)	D-705 4" Pipe Underdrain w/sock	3/10/2013
	Advanced Drainage		- 4 4
Type III Equipment/Building	Systems (ADS)	D-705 6" Pipe Underdrain w/sock	3/10/2013
	Advanced Drainage		
Type III Equipment/Building	Systems (ADS)	D-705 8" Pipe Underdrain W/sock	3/10/2013
Type III Equipment/Building	DME (Astronics)	L-852T-L-X LED, Inpavement, OMNI	3/9/2013
Type III Equipment/Building	Vaisala	AWOS A	1/6/2013
Type III Equipment/Building	Vaisala	AWOS A/V	1/6/2013
Type III Equipment/Building	Vaisala	AWOSI	1/6/2013
Type III Equipment/Building	Vaisala	AWOS II	1/6/2013
Type III Equipment/Building	Vaisala	AWOS III, III-T, III-P, III-PT, III-PTZ	1/6/2013
Type III Equipment/Building	Kodiack America, LLC	Snow Blower & Runway Broom Equipment	10/10/2012
Type III Equipment/Building	ADB Safegate	L-830, Isolation Transformer, 60Hz	7/28/2012
Type III Equipment/Building	TREX Aviation Systems	FOD Finder XM-Mobile	5/25/2012
Type III Equipment/Building	Stratech Systems Limited	iFerret TM FOD System	5/5/2012
Type II - Insufficient Quantity and/or Quality	Eaton Crouse-Hinds	L-852 J LED Taxiway Inpavement Lights	5/4/2012
Type II - Insufficient Quantity and/or Quality	Metalite Aviation Lighting	L-880, Precision Approach Path Indicator, LEDs	5/4/2012
Type II - Insufficient Quantity and/or Quality	Metalite Aviation Lighting	L-881, Abbreviated Precision Approach Path Indicator, LEDs	5/4/2012
Type III Equipment/Building	ADB Safegate	L-849 A, LED Runway End Identification Lights	5/4/2012
Type III Equipment/Building	ADB Safegate	L-850 A, LED Runway Inpavement Lights	5/4/2012

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	ADB Safegate	L-850 B, LED Runway Inpavement Lights	5/4/2012
Type III Equipment/Building	ADB Safegate	L-852 K, LED Taxiway Inpavement Lights	5/4/2012
Type III Equipment/Building	ADB Safegate	L-852 S, LED Taxiway Inpavement Lights	5/4/2012
Type III Equipment/Building	Vaisala	Inpavement Runway Sensors	5/4/2012
Type III Equipment/Building	Precision Control Systems	L-890, Lighting Control & Monitoring System	4/3/2012
Type III Equipment/Building	All Weather, Inc.	AWOS I - 900 Series	11/27/2011
Type III Equipment/Building	All Weather, Inc.	AWOS II - 900 Series	11/27/2011
Type III Equipment/Building	All Weather, Inc.	AWOS III - 3000 Series	11/27/2011
Type III Equipment/Building	All Weather, Inc.	AWOS III - 900 Series	11/27/2011
Type III Equipment/Building	FlexStake, Inc.	L-853, Retro reflective Markers	9/11/2011
Type III Equipment/Building	QinetiQ	Tarsier FOD System	9/11/2011
Type III Equipment/Building	TREX Aviation Systems	FOD Finder XF -Fixed	9/11/2011
Type III Equipment/Building	X-Sight	FODetect Systems	7/26/2011
Type III Equipment/Building	Flash Technology	L-856, High Intensity Obstruction Lights	3/28/2011
Type III Equipment/Building	Flash Technology	L-864, Red Obstruction Lights	3/28/2011
Type III Equipment/Building	Sherwin Industries, Inc.	L-893, Lighted Visual Aid for Runway Closure	3/28/2011
Type III Equipment/Building	ADB Safegate	L-854, Radio Controls	2/1/2011
Type III Equipment/Building	ADB Safegate	L-860, Low Intensity Runway Edge Lights	2/1/2011
Type III Equipment/Building	Flight Light	L-810, Lights-Obstruction (Various Types)*	1/18/2011
Type III Equipment/Building	Flight Light	L-828, Constant Current Regulators (Various Types)*	1/18/2011
Type III Equipment/Building	Flight Light	L-861 LED Runway & Taxiway Edge, Medium Intensity Lights	1/18/2011
Type III Equipment/Building	Southwire Company	L-824, Underground Electrical Cables for Airfield Circuits	1/16/2011

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	Nehring Electrical Works	L-824, Underground Electrical Cables for Airfield Circuits	11/23/2010
Type III Equipment/Building	Point Light Corporation	L-806, Wind Cones-Frangible	11/20/2010
Type III Equipment/Building	Point Light Corporation	L-807, Wind Cones-Rigid	11/20/2010
Type III Equipment/Building	Point Light Corporation	L-810, Lights-Obstruction	11/20/2010
Type III Equipment/Building	Point Light Corporation	L-861 LED Runway & Taxiway Edge, Medium Intensity Lights	11/20/2010
Type III Equipment/Building	Point Light Corporation	L-862, Runway Edge-Threshold-Stop Bar Lights	11/20/2010
Type III Equipment/Building	Point Light Corporation	L-864, Red Obstruction Lights	11/20/2010
	Amerace - Thomas &		
Type III Equipment/Building	Betts Corporation	L-830-1, Isolation Transformer, 60Hz 30/45 Watts, 6.6/6.6A	9/19/2010
	Amerace - Thomas &		
Type III Equipment/Building	Betts Corporation	L-830-10, Isolation Transformer, 60Hz 300 Watts, 6.6/6.6A	9/19/2010
	Amerace - Thomas &		
Type III Equipment/Building	Betts Corporation	L-830-18, Isolation Transformer, 60Hz 150 Watts, 6.6/6.6A	9/19/2010
	Amerace - Thomas &		
Type III Equipment/Building	Betts Corporation	L-830-3, Isolation Transformer, 60Hz 65 Watts, 6.6/6.6A	9/19/2010
	Amerace - Thomas &		
Type III Equipment/Building	Betts Corporation	L-830-4, Isolation Transformer, 60Hz 100 Watts, 6.6/6.6A	9/19/2010
	Amerace - Thomas &		
Type III Equipment/Building	Betts Corporation	L-830-6, Isolation Transformer, 60Hz 200 Watts, 6.6/6.6A	9/19/2010
Type III Equipment/Building	Tenco Industries Inc.	202 LMM Snow Blower	8/27/2010
Type III Equipment/Building	Flash Technology	L-865, White Obstruction Lights	8/17/2010
Type III Equipment/Building	Rural Electric	L-854, Radio Controls	8/17/2010
Type III Equipment/Building	ADB Safegate	L-821, Airport Lighting Control Panel	8/7/2010

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	Flash Technology	L-849, Runway End Identification Lights	6/21/2010
Type III Equipment/Building	Flash Technology	L-859, Flashing Omnidirectional Lights	6/21/2010
Type III Equipment/Building	Airport Lighting Company	L-880, Precision Approach Path Indicator	4/27/2010
Type III Equipment/Building	Airport Lighting Company	L-881, Abbreviated Precision Approach Path Indicator	4/27/2010
Type III Equipment/Building	Neubert Aero Corp	Dynamic Friction Decelerometer	4/27/2010
Type III Equipment/Building	Neubert Aero Corp	Dynamic Friction Tester	4/27/2010
Type III Equipment/Building	Rural Electric	L-821, Airport Lighting Control Panel	4/27/2010
Type III Equipment/Building	Rural Electric	L-890, Lighting Control & Monitoring System	4/27/2010
Type III Equipment/Building	Safe-Hit	L-853, Retroreflective Markers	3/20/2010
Type III Equipment/Building	Daimler	Freightliner M2 Carrier Vehicle	1/12/2010
Type III Equipment/Building	Millard Towers Limited	L-891 - Low Impact Resistant Structures	12/22/2009
Type III Equipment/Building	Millard Towers Limited	L-892 - Frangible Support Structure	12/22/2009
Type II - Insufficient Quantity and/or Quality	OCEM	L-852 S LED Taxiway Inpavement Lights	12/1/2009
	Prysmian Cables and		
Type III Equipment/Building	Systems, Inc.	L-824, Underground Electrical Cables for Airfield Circuits	10/4/2009
Type III Equipment/Building	Airport Lighting Company	L-861 Runway & Taxiway Edge, Medium Intensity Lights	9/13/2009
Type III Equipment/Building	Airport Lighting Company	L-862, Runway Edge-Threshold-Stop Bar Lights	9/13/2009
	Strobe Approach Lighting		
Type III Equipment/Building	Technology, LLC	L-849, Runway End Identification Lights	8/25/2009
	Strobe Approach Lighting		
Type III Equipment/Building	Technology, LLC	L-859, Flashing Omnidirectional Lights	8/25/2009
Type III Equipment/Building	LoneStar	P-632, Bituminous Pavement Rejuvenator	8/17/2009
	Pavement Rejuvenation		
Type III Equipment/Building	International, LP	P-632, Bituminous Pavement Rejuvenator	8/16/2009

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	Soundproof Windows	Single Hung 36 X 72 Window	8/14/2009
Type III Equipment/Building	ADB Safegate	L-828, Constant Current Regulators	7/28/2009
Type III Equipment/Building	ADB Safegate	L-829, Monitored Constant Current Regulators	7/28/2009
Type III Equipment/Building	ADB Safegate	L-890, Lighting Control & Monitoring System	7/28/2009
	Airfield Guidance Sign		
Type III Equipment/Building	Manufacturers, Inc.	L-858, Runway & Taxiway Signs	7/28/2009
Type III Equipment/Building	Rural Electric	L-867, Non-Load Bearing Light Box	7/24/2009
Type III Equipment/Building	Rural Electric	L-868, Load Bearing Light Box	7/24/2009
Type III Equipment/Building	ADB Safegate	L-890, Lighting Control & Monitoring System	7/20/2009
Type III Equipment/Building	Olson Industries	L-867, Non-Load Bearing Light Box	7/19/2009
Type III Equipment/Building	Olson Industries	L-868, Load Bearing Light Box	7/19/2009
Type III Equipment/Building	Standard Signs, Inc.	L-858, Runway & Taxiway Signs	7/10/2009
Type III Equipment/Building	Eaton Crouse-Hinds	L-890, Lighting Control & Monitoring System	6/30/2009
	Airport Lighting		
Type III Equipment/Building	Equipment	L-867, Non-Load Bearing Light Box	6/29/2009
	Airport Lighting		
Type III Equipment/Building	Equipment	L-868, Load Bearing Light Box	6/29/2009
Type III Equipment/Building	Eaton Crouse-Hinds	L-801, Beacons-Medium Intensity	6/28/2009
Type III Equipment/Building	Eaton Crouse-Hinds	L-802, Beacons-High Intensity	6/28/2009
Type III Equipment/Building	Eaton Crouse-Hinds	L-804 Holding Position Edge Light	6/28/2009
Type III Equipment/Building	Eaton Crouse-Hinds	L-806, Wind Cones-Frangible	6/28/2009
Type III Equipment/Building	Eaton Crouse-Hinds	L-807, Wind Cones-Rigid	6/28/2009
Type III Equipment/Building	Eaton Crouse-Hinds	L-823, Primary Connector Kits	6/28/2009
Type III Equipment/Building	Eaton Crouse-Hinds	L-828, Constant Current Regulators	6/28/2009
Type III Equipment/Building	Eaton Crouse-Hinds	L-829, Regulators, Constant Current with Monitor	6/28/2009

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	Eaton Crouse-Hinds L-830, Isolation Transformers, 60Hz		6/28/2009
Type III Equipment/Building	Eaton Crouse-Hinds	L-847, Circuit Selector Switch	6/28/2009
Type III Equipment/Building	Eaton Crouse-Hinds	L-852, Taxiway Inpavement Lights	6/28/2009
Type III Equipment/Building	Eaton Crouse-Hinds	L-858, Runway & Taxiway Signs	6/28/2009
		L-861 LED Runway & Taxiway Edge, Medium Intensity	
Type III Equipment/Building	Eaton Crouse-Hinds Lights		6/28/2009
Type III Equipment/Building	Eaton Crouse-Hinds L-862, Runway Edge-Threshold-Stop Bar Lights		6/28/2009
Type III Equipment/Building	Eaton Crouse-Hinds	L-880, Precision Approach Path Indicator	6/28/2009
Type III Equipment/Building	Eaton Crouse-Hinds	L-881, Abbreviated Precision Approach Path Indicator	6/28/2009
Type III Equipment/Building	Eaton Crouse-Hinds	L-884, Power & Control Unit	6/28/2009
Type III Equipment/Building	ADB Safegate	L-804, Holding Position Edge Light	6/26/2009
Type III Equipment/Building	ADB Safegate	L-807, Wind Cones-Rigid	6/26/2009
Type III Equipment/Building	ADB Safegate	L-810, Lights-Obstruction	6/26/2009
Type III Equipment/Building	ADB Safegate	L-827, Monitors-Regulator	6/26/2009
Type III Equipment/Building	ADB Safegate	L-828, Constant Current Regulators	6/26/2009
Type III Equipment/Building	ADB Safegate	L-829, Monitored Constant Current Regulators	6/26/2009
Type III Equipment/Building	ADB Safegate	L-847, Circuit Selector Switch	6/26/2009
Type III Equipment/Building	ADB Safegate	L-853, Retroreflective Markers	6/26/2009
Type III Equipment/Building	ADB Safegate	L-858, Runway & Taxiway Signs	6/26/2009
Type III Equipment/Building	ADB Safegate	L-861 Runway & Taxiway Edge, Medium Intensity Lights	6/26/2009
Type III Equipment/Building	ADB Safegate	L-862, Runway Edge-Threshold-Stop Bar Lights	6/26/2009
Type III Equipment/Building	ADB Safegate	L-880, Precision Approach Path Indicator	6/26/2009
Type III Equipment/Building	ADB Safegate	L-881, Abbreviated Precision Approach Path Indicator	6/26/2009
Type III Equipment/Building	ADB Safegate	L-884, Power & Control Unit	6/26/2009

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	Halibrite	L-801, Beacons-Medium Intensity	6/23/2009
Type III Equipment/Building	Halibrite	L-802, Beacons-High Intensity	6/23/2009
Type III Equipment/Building	Halibrite	L-806, Wind Cones-Frangible	6/23/2009
Type III Equipment/Building	Halibrite	L-807, Wind Cones-Rigid	6/23/2009
Type III Equipment/Building	Halibrite L-893, Lighted Visual Aid for Runway Closure		6/23/2009
Type III Equipment/Building	Manairco	L-801, Beacons-Medium Intensity	6/23/2009
Type III Equipment/Building	Manairco	L-828, Constant Current Regulators	6/23/2009
Type III Equipment/Building	Manairco	L-861 Runway & Taxiway Edge, Medium Intensity Lights	6/23/2009
Type III Equipment/Building	Multi-Electric	L-804, Holding Position Edge Light	6/23/2009
Type III Equipment/Building	Multi-Electric	L-861 LED Runway & Taxiway Edge, Medium Intensity Lights	6/23/2009
Type III Equipment/Building	Multi-Electric	L-862, Runway Edge-Threshold-Stop Bar Lights	6/23/2009
Type III Equipment/Building	Multi-Electric	L-880, Precision Approach Path Indicator	6/23/2009
Type III Equipment/Building	Multi-Electric	L-881, Abbreviated Precision Approach Path Indicator	6/23/2009
Type III Equipment/Building	DME	L-861 LED Runway & Taxiway Edge, Medium Intensity Lights	6/21/2009
Type III Equipment/Building	DME	L-862, Runway Edge-Threshold-Stop Bar Lights	6/21/2009
Type III Equipment/Building	Integro	L-830, Isolation Transformers, 60Hz	6/21/2009
Type III Equipment/Building	Jaquith Industries	L-867, Non-Load Bearing Light Box	6/21/2009
Type III Equipment/Building	Jaquith Industries	L-868, Load Bearing Light Box	6/21/2009
Type III Equipment/Building	Jaquith Industries	L-891 - Low Impact Resistant Structures	6/21/2009
Type III Equipment/Building	Jaquith Industries	L-892 - Frangible Support Structure	6/21/2009

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

The following components or subcomponents are steel or manufactured goods that have an FAA specification number and have been determined to be 1) 100% United States product and 2) produced in the United States.

Waiver Type	Manufacturer	Product	Effective Date
100% US and US Final Assembly	Integro	L-823 Plug and Receptacle, Cable Connectors	6/10/2009
	MCB		
100% US and US Final Assembly	Industries	EB-83 bolts	1/31/2011
	MCB		
100% US and US Final Assembly	Industries	2-part washers (used with 3/8" x 16 by various length bolts)	10/14/2015
	MCB		
100% US and US Final Assembly	Industries	18-8 fasteners (various length bolts)	12/27/2016

#### **DIVISION 1 - GENERAL REQUIREMENTS**

#### SECTION 01010 - DESCRIPTION OF WORK

#### PART 1 – GENERAL

#### 1.01 RELATED DOCUMENTS

The General Provisions for Construction Projects (2016), Special Provisions, and General Requirements of the Specifications, apply to the work specified in this section.

#### 1.02 <u>SUMMARY</u>

- A. Section Includes:
  - 1. Description of Work
  - 2. Location of the work.
  - 3. Hours of work
  - 4. Safety
  - 5. Operation of airport facilities during construction
  - 6. Disposal of excess soil materials
  - 7. Construction stakes, lines and grades.
  - 8. Special project requirements

#### 1.03 VEHICLE PARKING

Parking passes may be purchased at a monthly rate of \$175.00 plus a one-time fee of \$25.00 for parking access card. These passes are subject to approval by the Airport Manager and availability of parking spaces. All costs associated with obtaining parking passes shall be the responsibility of the Contractor.

#### 1.04 PROVISIONS FOR FIELD OFFICE/STORAGE SPACE

Pending the availability of space on airport property, the State will issue Revocable Permit(s) to the Contractor for the use of the space, assessed at a monthly fee of \$25 for each Revocable Permit issued. The space(s) may be used for a field office, staging of materials and equipment, vehicle parking or other uses subject to the approval of the State. All spaces shall be subject to the requirements of Section 01561 - CONSTRUCTION SITE RUNOFF CONTROL PROGRAM.

Since space on airport property is extremely limited, the State does not guarantee that space(s) provided to the Contractor will be in close proximity to the project site. The State will make every effort to provide the Contractor with space on airport property,

however, should the State determine that no space is available for such use(s), the responsibility shall then be on the Contractor to find space outside of airport property.

#### 1.05 DESCRIPTION OF WORK

- A. Terminal 2 Departures Roadway
  - 1. Isolated overhead Spall repairs accessible from the Arrivals Level Roadway.
  - 2. Isolated pavement repairs along the Departures Level Roadway
    - a. Spall and epoxy overlay repairs
    - b. Overlay repairs
    - c. Partial expansion joint repairs
- B. Ewa Concourse 1st, 2nd, and 3rd Level Roadways
  - 1. Spall and crack repairs throughout the 1st level, 2nd level and 3rd level roadways. These include, but are not limited to, the sidewalks, railings, curbs, columns, planters and beams.
  - 2. Expansion joint (parallel to roadway) nosing and waterproofing repair.
  - 3. Expansion joint (perpendicular to roadway) and waterproofing repair, through the soffit and sidewalks.
  - 4. Miscellaneous electrical work
  - 5. Storm drain piping work
- C. Diamond Head Concourse 1st, 2nd, and 3rd Level Roadways
  - 1. Spall and crack repairs throughout the 1st level, 2nd level, and 3rd level roadways. These include, but are not limited to, the sidewalks, railings, curbs, columns, planters and beams.
  - 2. Expansion joint (parallel to roadway) nosing and waterproofing repair.
  - 3. Expansion joint (perpendicular to roadway) and waterproofing repair, through the soffit and sidewalks.
  - 4. Planter and light pole column demolition and replacement. Fixed planter is to be removed and replaced with a sidewalk. Concrete columns are to be removed and replaced with metal light poles.
  - 5. Miscellaneous electrical work

- 6. Storm drain piping work
- D. Ewa and Diamond Head Connecting Links
  - 1. Spall and crack repairs throughout the 1st level, 2nd level, and 3rd level roadways. These include, but are not limited to, the overhead soffits, railings, and roadways.
  - 2. Planter demolition. Planters will be removed and replaced with sidewalks. Metal railing will be added to raise railing height to match existing height.
  - 3. Existing epoxy roadway coating removal and concrete repairs below.
  - 4. Replacement/relocation of roadway drain inlets and associated piping, trench drain replacement.
  - 5. Expansion joint nosing/waterproofing removal and restoration.
  - 6. Demolition of CMU wall and replacement with new guardrail
  - 7. Removal of concrete railing and strip lighting; replace with wall mounted step light fixtures
  - 8. Hybrid polymer concrete and epoxy overlay installation to grade roadway to new drains and protect concrete.
- E. Terminal 2 3rd Level Roadway
  - 1. Expansion joints waterproofing repair and nosing replacement.

#### 1.06 LOCATION OF THE WORK

- A. The work to be performed under this contract is located at the Daniel K. Inouye International Airport, Honolulu, Oahu, Hawaii.
- B. Conditions:
  - 1. The Main Terminal and airport roadways shall remain operational at all times. Any damage to existing areas caused by the Contractor shall be repaired by the Contractor at no cost to the State.
  - 2. Upon award of the contract, the Contractor, at their cost, shall obtain all permits required for this project.
  - 3. The use of steel plates or traffic control measures required to maintain open roadways during non-working hours shall be considered incidental to the contractor's work activities and separate or additional payment will not be made thereof.

#### 1.07 HOURS OF WORK

- A. Work shall be performed to minimize the impact to the operation of Wiki Wiki bus system and the traveling public.
  - 1. Work activities at the Terminal 2 Departures roadway and Terminal 2 Arrivals roadway shall occur between 9:00 p.m. and 5:00 a.m. During nonworking hours, safe public access to the Arrivals and Departures passenger loading zones must be provided.
    - a. Departures Level:
      - 1) During work activity hours, only one (1) lane on each side of the median may be closed, with the length of lane closure subject to DOT-A approval.
      - 2) All lanes must be reopened during non-work activity hours, with no construction barriers, etc. allowed to remain on the roadways.
    - b. Arrivals Level:
      - During work activity hours, only one (1) lane on each side of the median may be closed, with the length of lane closure subject to DOT-A approval.
      - Only half of each permittee's zones (e.g. taxi, rental car shuttles, other designated transportation services) may be blocked off at a time. Zones are marked at the site.
    - c. Access to parking facilities and rental car facilities must be maintained at all times.
    - d. Contractor shall provide flagmen to direct traffic during active flight times that may occur during work activity hours. Active flight schedule times must be checked every night on the Flight Information Display System and are subject to change daily.
    - e. The underside spall repairs to the Departures roadway must occur from the ground level. While performing these repairs, the 2<sup>nd</sup> level lane(s) directly above must be simultaneously closed during working hours, until the repair material has cured in accordance with the manufacturer's recommended time before receiving traffic.
  - 2. Work activities at the Ewa Concourse 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> level roadways shall occur between 9:00 p.m. and 5:00 a.m. During non-working hours, safe and unobstructed access to and from the Ewa Concourse must be provided for Wiki Wiki Shuttle operations.
    - a. One (1) lane access must be maintained for Wiki Wiki Shuttle access at all times.

- b. Loud noise-generating work may not be performed while the gates are being used for active flight activities. Active flight schedule times shall be checked every night on the Flight Information Display System and are subject to change daily. Any work that will impact the usage of gates shall be coordinated with Ramp Control.
- 3. Work activities at the Diamond Head Concourse 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> level roadways shall occur between 9:00 p.m. and 5:00 a.m. During non-working hours, safe and unobstructed access to and from the Diamond Head Concourse must be provided for Wiki Wiki Shuttle operations.
  - a. One (1) lane access must be maintained for Wiki Wiki Shuttle access at all times.
  - b. Loud noise-generating work may not be performed while the gates are being used for active flight activities. Active flight schedule times shall be checked every night on the Flight Information Display System and are subject to change daily. Any work that will impact the usage of gates shall be coordinated with Ramp Control.
- 4. Work activities at the Ewa Connecting Link roadways shall occur between 10:00 p.m. and 5:00 a.m. During non-working hours, safe and unobstructed access along the Ewa Connecting Link must be provided for Wiki Wiki Shuttle operations.
  - a. Only one (1) connecting link ramp from ground to second level, either Ewa or Diamond Head, may be closed at any given time to perform repair work.
  - b. All roadways at the connecting link must be reopened for Wiki Wiki shuttle operations during non-work hours.
  - c. Ewa and Diamond Head connecting links may not be worked on simultaneously in case unforeseen access is needed to concourse upper floors.
- 5. Work activities at the Diamond Head Connecting Link roadways shall occur between 10:00 p.m. and 5:00 a.m. If work performed is not loud, odorous, dusty, and does not cause any obstruction to Airport operations other than the listed allowable closures in the subparagraphs below, additional work hours may be granted, subject to DOT-A approval.
  - a. Only one (1) connecting link ramp from ground to second, either Ewa or Diamond Head, may be closed at any given time to perform repair work.
  - The following two segments of the Diamond Head connecting link may be fully closed for the duration of their specific construction periods: 1) Section from Diamond Head Concourse 2<sup>nd</sup> Level to Terminal 2 3<sup>rd</sup> level, and 2) Section from Terminal 2 3<sup>rd</sup> level to

Diamond Head Concourse 3<sup>rd</sup> level. These two sections may not be worked on simultaneously.

- c. Ewa and Diamond Head connecting links may not be worked on simultaneously in case unforeseen access is needed to concourse upper floors.
- 6. Work activities at Terminal 2 3<sup>rd</sup> level roadway shall occur between 9:00 p.m. and 5:00 a.m. During non-working hours, safe and unobstructed access along the Terminal 2 3<sup>rd</sup> level roadway must be provided for Wiki Wiki Shuttle operations
- 7. In the event of an emergency, airport operations shall take precedence over all construction activities.
- 8. Contractor shall submit a proposed construction schedule and phasing plan to DOT-A for review and approval no later than 180 days after award of the contract. Contractor shall attend meetings with DOT-A, construction management consultant, and affected stakeholders prior to the preparation of the schedule and phasing plan, to review the operational restrictions being imposed on the project.
- 9. The Contractor shall coordinate their schedule with the DOT-A if rescheduling of work or intermittent work is required, such work shall be performed at no extra cost to the State. If the Contractor elects to work overtime, compensation for State employees and for construction management consultant as authorized by DOT-A shall be the Contractor's obligation to pay in accordance with Section 7.6 of the General Provisions.
- B. Contractor shall clean work areas at the end of each working shift. Rubbish, loose materials, etc. shall be disposed of daily. Tools and equipment shall not be left unattended during working hours. This includes tools left in unlocked vehicles, in the bed of pickup trucks, or in unlocked job sites. TSA citations may result in fines in excess of \$13,000 per violation and/or the confiscation of AOA Badges. Materials shall be safely secured and stored in an area designated by the Airport Manager.

#### 1.08 <u>SAFETY</u>

- A. The Contractor shall take the necessary precautions to protect his workers and other personnel from injuries. The rules and regulations promulgated by the Occupational Safety and Health Acts are applicable and made a part of these specifications.
- B. Barricades and warning signs shall be erected by the Contractor in the work area to properly protect all personnel in the area.
- C. During the progress of the work debris, empty crates, waste, material drippings, etc., shall be removed by the Contractor at the end of each workday and the work area shall be left clean and orderly.

#### 1.09 OPERATION OF AIRPORT FACILITIES DURING CONSTRUCTION

- A. The Contractor shall coordinate the phases of work under this contract with the Engineer to permit the continuing operation of existing Airport facilities and to minimize disruption to pedestrian and vehicular traffic.
- B. Utility Maintenance: During the construction of this contract, existing utility services serving occupied or used facilities shall not be disrupted except where authorized in writing by authorities having jurisdiction. Contractor shall provide temporary services during interruptions to existing utilities, as acceptable to the Engineer. Damages to the existing utility facilities by the Contractor will be repaired at the Contractor's expense.
- C. Outages for water, power, communications, air conditioning or any other utility, if necessary, shall be kept to a minimum and scheduled for off-peak hours, generally from 12:00 a.m. to 6:00 a.m. The Contractor shall submit written requests (Outage Requests) to the Engineer for such outages no later than twenty-one (21) calendar days in advance. The request shall include a description of work and the duration of the outage. Outage Requests shall also be required for disruptions or changes to traffic and airport operations, and for the start of construction activities in any new area. The Contractor shall not proceed with such outage work until written approval is received from the State.

#### 1.10 DISPOSAL OF EXCESS SOIL MATERIALS

A. Off-Site Disposal of Excess Soil Material

Any excess soil material and rubbish disposed of outside the Airport property shall be the responsibility of the Contractor. The Contractor shall make all arrangements and bear all costs involved therewith, and disposal shall be in compliance with the local authorities such as the Department of Health, etc.

#### 1.11 CONSTRUCTION STAKES, LINES AND GRADES

- A. The Contractor shall perform all construction layout and reference staking necessary for the proper control and satisfactory completion of all structures, grading, paving, drainage, sewer, water, and all other appurtenances required for the completion of the work.
- B. Existing horizontal and vertical survey control points for the project are shown on the plans. The Contractor shall verify the location of all control points prior to the start of construction.
- C. The Department will not be responsible for delays in setting stakes and marks.
- D. All control points and stakes or marks which the Engineer may set shall be preserved by the Contractor. If such control points, stakes or marks are destroyed or disturbed by the Contractor, the cost of replacing such stakes or marks will be charged against the Contractor and deducted from payments due the Contractor.

- E. The Contractor shall be responsible for the placement and preservation of adequate ties to all control points whether established by the Contractor or by the Engineer.
- F. All original, additional or replacement stakes, marks, references and batterboards which may be required for the construction operations, shall be furnished, set and properly referenced by the Contractor. The Contractor shall be solely and completely responsible for the accuracy of the line and grade of all features of the work. Any errors or apparent discrepancies found in previous surveys, the plans and specifications shall be called to the Engineer's attention by the Contractor for correction or interpretation prior to proceeding with the work.
- G. Before construction is started on any structure which is referenced to an existing structure or topographical feature, the Contractor shall check the pertinent locations and grades of the existing structures or topographical features to determine whether the locations and grades shown on the plans are correct.
- H. All construction staking shall be performed by qualified personnel under the direct supervision of a person with an engineering background who is experienced in the direction of such work and is acceptable to the Engineer.
- I. All stakes and markers used for control staking shall be of the same quality as used by the Department for this purpose. For slope limits, pavement edges, gutter lines, et cetera, where so called "working" stakes are commonly used, stakes of different quality may be acceptable.
- J. The Department may check the Contractor's control of the work at any time as the work progresses. The Contractor will be informed of the results of these checks, but the Department by doing so will in no way relieve the Contractor of its responsibility for the accuracy of the layout work. The Contractor shall, at his expense, correct or replace any deficient or inaccurate layout and construction work. If, as a result of these deficiencies or inaccuracies, the Department is required to make further studies, redesign, or both, all expenses incurred by the Department due to such deficiencies or inaccuracies, the costs will be deducted from any payments due the Contractor.
- K. The Contractor shall furnish all necessary personnel, engineering equipment and supplies, materials, and transportation incidental to the accurate and satisfactory completion of this work.

Unless otherwise provided, all requirements imposed by this section and performed by the Contractor shall be considered incidental to the various contract items and not separate or additional payment will be made thereof.

#### 1.12 SPECIAL PROJECT REQUIREMENTS

A. Upon receipt of the Contract, the Contractor shall process and return the Contract to the State' Contract Office within five (5) calendar days.

B. The State intends to issue the Notice to Proceed for the Project to the Contractor immediately after contract execution. The Contractor shall be able to commence work on this date.

PART 2 – PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

#### PART 4 – MEASUREMENT AND PAYMENT

#### 4.01 BASIS OF MEASUREMENT AND PAYMENT

Work under this section will not be measured nor paid for separately but shall be considered incidental to and included in the bid prices for the various items of work in this project.

#### END OF SECTION
# SECTION 01560 - GENERAL ENVIRONMENTAL, HEALTH, & SAFETY CONTROLS

# <u> PART I – GENERAL</u>

# 1.01 RELATED DOCUMENTS

The General Provisions for Construction Projects (2016), Special Provisions and General Requirements of the Specifications, apply to the work specified in this Section.

## 1.02 DESCRIPTION

This section addresses the prevention of environmental pollution as the result of construction operations under this contract. For the purpose of this specification, environmental pollution is defined as the presence of chemical, physical, or biological elements or agents that adversely affect human health or welfare, unfavorably alter ecological balances of importance to human life, adversely affect other species of importance, or degrade the utilization of the environment for aesthetic and recreational purposes.

## 1.03 <u>REFERENCES</u>

All work shall conform to the most recent edition of the following Federal, State, and Local regulations, unless otherwise noted or specified on the drawings or in these specifications. Where conflicts among the requirements or with these specifications exists, the most stringent requirements shall apply.

- A. DOTA Construction Site Runoff Control Program <u>http://hidot.hawaii.gov/airports/doing-</u> <u>business/engineering/environmental/construction-site-runoff-control-program</u>
  - 1. DOTA Construction Activities Best Management Practices (BMP) Field Manual.
- B. Department of Health (DOH) Hazard Evaluation & Emergency Response (DOH HEER) <u>https://health.hawaii.gov/heer/</u>
- C. State of Hawaii Administrative Rules, Title 11, Department of Health (DOH)
  - 1. Chapter 46, Community Noise Control.
  - 2. Chapter 59, Ambient Air Quality.
  - 3. Chapter 60.1, Air Pollution Control.
  - 4. Chapters 260.1, 261.1, 262.1, 263.1, 264.1, 265.1, 266.1, 268.1, 270.1, 271.1, 273.1, and 279.1, Hazardous Waste Management.
  - 5. Chapter 451, State Contingency Plan.

- 6. Chapter 501, Asbestos Requirements.
- D. CFR Title 40, Protection of the Environment, Chapter I, Environmental Protection Agency.
- E. CFR Title 42, Public Health, Chapter I, Public Health Service, Department of Health and Human Services.

# 1.04 SUBMITTALS

- A. The Contractor shall submit the following items as required:
  - 1. Individual Wastewater System (IWS) Final Report: For projects involving the construction of an individual wastewater system, an IWS Final Report is required to be submitted to the DOTA Engineering Branch, Environmental Section (AIR-EE) for approval, prior to submitting to DOH Wastewater Branch and prior to project closeout.
  - 2. Underground Injection Control (UIC) Well Final Report: For new drainage well construction and existing drainage well modification, a UIC Well Final Report is required to be submitted to AIR-EE for review and approval, prior to submitting to DOH Safe Drinking Water Branch (SDWB), and prior to project closeout. The Final Report shall also be submitted within the deadline specified on the UIC Approval to Construct. If a project involves abandoning an existing drainage well, written instructions shall be obtained from DOH SDWB and a copy provided to AIR-EE prior to backfilling the demolished well. All supporting documentation requested by DOH post demolition work shall be completed and provided to AIR-EE for review prior to submitting to DOH SDWB.
  - 3. AST (Flammable/Combustible Liquid) Tank Installation: Provide signed record of Final Inspection issued by County Fire Department.
  - 4. Waste Manifests: If a project will generate hazardous waste, the Contractor shall prepare waste manifests in accordance with HAR 11-262 and provide records to AIR-EE.
- B. The Contractor shall comply with all applicable regulations and maintain records of permits, licenses, certificates, and other environmental regulatory requirement correspondence. Submit copies of permits, licenses, certifications, inspection reports, releases, notices, receipts for fee payments, correspondence, records, and similar documents, established for compliance with environmental regulations bearing on performance of the work.

## PART 2 - PRODUCTS (Not Used)

## PART 3 - EXECUTION

# 3.01 AIR POLLUTION CONTROL

CONCRETE SPALL REPAIRS AT TERMINAL 2 ROADWAYS DANIEL K. INOUYE INTERNATIONAL AIRPORT STATE PROJECT NO.: AO1043-33 AIP PROJECT NO.: 3-15-0005-XXX

- A. Emission: The Contractor shall not be allowed to operate equipment and vehicles that show excessive emissions of exhaust gases until corrective repairs or adjustments are made, as determined by the Engineer.
- B. Dust: The Contractor, for the duration of the contract, shall maintain all excavations, embankments, haul roads, permanent access roads, plant sites, waste disposal areas, borrow areas, graded areas, staging and storage areas, and all other work areas within or outside the project limits free from dust that would cause a hazard or nuisance to the work or operations of other Contractors, or to persons or property. Industry-accepted methods, that meet requirements of DOTA Construction BMP Field Manual as noted in Specification 01561 and that meet stabilization suitable for the area or materials involved.
- C. Burning on Airport property shall not be permitted.

#### 3.02 SPILL CONTROL

A. The Contractor shall follow the DOTA Construction Site Runoff Program and relevant documents, such as the Construction BMP Field Manual to implement BMPs to prevent spills and leaks and report and cleanup spills and leaks immediately, as required.

#### 3.03 DISPOSAL

- A. All unusable debris and waste material shall be hauled away to an appropriate local landfill. Contractor shall control dust during loading operations.
- B. Contractor shall consult with the landfill and conduct any required waste characterization to ensure that waste meets the landfill's requirements for size, type, etc.
- C. No burying of debris or waste materials, except for materials that are specifically indicated elsewhere in these specifications as suitable for backfill, shall be permitted on the project site.
- D. Contractor shall manage all construction materials, debris, and waste in a manner that prevents Foreign Object Debris (FOD) from reaching the airfield, where it could be an aircraft safety hazard.

#### 3.04 HAZARDOUS MATERIALS CONTROL

Hazardous materials shall be properly stored and handled. The use of prohibited hazardous materials, e.g., asbestos, lead paint, and polychlorinated biphenyls (PCBs), in the construction of this project shall be strictly prohibited. Any corrective action to remove and replace hazardous material and contaminated work areas shall be at the sole expense of the Contractor.

#### 3.05 OCCUPATIONAL HEALTH AND SAFETY

CONCRETE SPALL REPAIRS AT TERMINAL 2 ROADWAYS DANIEL K. INOUYE INTERNATIONAL AIRPORT STATE PROJECT NO.: A01043-33 AIP PROJECT NO.: 3-15-0005-XXX The Contractor shall at all times comply with all State of Hawaii and Federal rules and regulations related to occupational health and safety and develop and follow a Health and Safety Plan describing measures the Contractor will employ to protect the health and safety of their employees. Include measures required to protect the public from dangers associated with their work.

# PART 4 – MEASUREMENT AND PAYMENT

# 4.01 BASIS OF MEASUREMENT AND PAYMENT

All work specified in this Section shall not be measured nor paid for separately but shall be considered incidental to item 01561, Construction Site Pollution Controls.

# **END OF SECTION**

# SECTION 01561 - CONSTRUCTION SITE POLLUTION CONTROLS

## PART 1 – GENERAL

#### 1.01 RELATED DOCUMENTS

The General Provisions for Construction Projects (2016), Special Provisions and General Requirements of the Specifications, apply to the work specified in this Section.

#### 1.02 DESCRIPTION

- A. This Section describes procedures for the proper application of management and engineering controls at State of Hawaii, Department of Transportation, Airports (DOTA) construction sites so that pollutants do not impact any storm drainage system, State water, soil, or groundwater.
- B. The Contractor shall supply all labor, materials, and equipment necessary for the management of stormwater during construction and to carry out the work in accordance with these specifications, and all applicable Federal, State, and local regulations and latest amendments.
- C. This Section also applies to construction support activities including concrete or asphalt batch plants, rock crushing plants, equipment staging yards/areas, material storage areas, excavated material disposal areas, borrow areas, waste management facilities, sanitary facilities, material storage areas, and temporary equipment fueling locations, regardless of their proximity to the Airport Property and State Right-of-Way. For areas serving multiple construction projects or operating beyond the completion of the construction project in which it supports, the Contractor shall be responsible for securing the necessary permits, clearances, and documents, and following the conditions of the permits and clearances, at no cost to the State.
- D. The Contractor shall be responsible for all subcontractors, suppliers, and vendors, and shall ensure that the means and methods of construction activities of subcontractors, suppliers, and vendors are in full compliance with this Section.
- E. The Contractor shall examine and be familiar with documents related to stormwater management at the airports and shall comply with related requirements for construction stormwater control. Should a requirement not be clearly described within the construction plans, specifications, permits and other applicable bid documents, notify the Engineer immediately for interpretation.

#### 1.03 <u>REFERENCES</u>

All work shall conform to the most recent edition of the following, unless otherwise noted or specified on the drawings or in these specifications. Where conflicts among the requirements or with these specifications exists, the most stringent requirements shall apply.

CONCRETE SPALL REPAIRS AT TERMINAL 2 ROADWAYS DANIEL K. INOUYE INTERNATIONAL AIRPORT STATE PROJECT NO.: AO1043-33 AIP PROJECT NO.: 3-15-0005-XXX

- A. DOTA Construction Site Runoff Control Program <u>http://hidot.hawaii.gov/airports/doing-</u> business/engineering/environmental/construction-site-runoff-control-program
  - 1. DOTA Construction Activities Best Management Practices (BMP) Field Manual.
  - 2. DOTA Environmental Requirements for Construction Projects Standard Operating Procedures.
  - 3. DOTA Stormwater Management Plans (SWMPs) for the Daniel K. Inouye International Airport (HNL) and Kahului Airport (OGG), as applicable.
  - 4. DOTA Industrial SWPPPs for the HNL, OGG, and the Lihue Airport (LIH), as applicable.
- B. State of Hawaii Administrative Rules, Title 11, Department of Health (DOH) <u>https://health.hawaii.gov/opppd/department-of-health-administrative-rules-title-11/</u>
  - 1. Chapter 54, Water Quality Standards
  - 2. Chapter 55, Water Pollution Control
  - 3. Chapter 451, State Contingency Plan
- C. United States (U.S.) Code of Federal Regulations (CFR), Title 40, Chapter I: Environmental Protection Agency.
- D. Hawaii Revised Statutes (HRS), Part I, Chapter 128D, "Environmental Response Law".

## PART 2 – PRODUCTS

## 2.01 MATERIALS

Comply with applicable materials described in the current DOTA Construction Activities BMP Field Manual. Refer to FAA Advisory Circulars and DOTA District Office, including Wildlife Hazard Management Plan, for additional guidance and conditions. In addition, materials shall comply with the following:

A. Grass: The FAA and USDA recommend the following grass species when requiring grass: "No-Mow" bermudagrass ("Green Velvet") (Cynodon dactylon) or Seashore paspalum (Paspalum vaginatum). These species possess higher than average drought resistance, saline soil tolerances, and most importantly, do not produce seed heads attractive to the majority of hazardous avian species. Use stolons, sprigs, or plugs to avoid providing hazardous species with a readily available food source. The use of seeds is generally not allowed.

Alternative grass species shall only be applied with the approval by the Engineer

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after consultation with United States Department of Agriculture (USDA) airport representative. This includes, but is not limited to, sodding, cuttings, and planting. Grass shall be a quick-growing species. Grass shall be suitable to the area and provide a temporary cover that will not compete later with permanent cover.

B. Irrigation: Any required irrigation shall be done after dark to reduce instances of water becoming a hazardous wildlife attractant.

## PART 3 – EXECUTION

#### 3.01 PRE-CONSTRUCTION REQUIREMENTS

Do not begin construction activities until all submittals detailed in this Subsection are completed, submitted to the Engineer, and accepted in writing by AIR-EE.

- A. Water Pollution, Dust, Sediment, and Erosion Control Meeting: Schedule a water pollution, dust, sediment, and erosion control meeting with the Engineer after all documents required by AIR-EE are submitted to the Engineer and accepted in writing by AIR-EE. The meeting shall be scheduled a minimum of 14 calendar days prior to the Start Work Date. At a minimum, the meeting shall be attended by the Contractor, subcontractors whose work may provide an impact to stormwater or site environmental conditions, Engineer, AIR-EE, and any authorized representatives of the designated attendees. The meeting will discuss the sequence of work and plans and proposals for water pollution, dust, sediment, and erosion controls.
- B. Land Disturbance Calculations: The Contractor is responsible for calculating the total land disturbance for the life of the project and complying with all environmental requirements associated with the total land disturbance calculated. Disturbance of land is defined by Hawaii Department of Health as "the penetration, turning, or moving of soil or resurfacing of pavement with exposure of the base course or the exposure of bare soil or ground surface, including the land surface exposed by construction roads, baseyards, staging areas, demolition, headquarters, and parking areas. It does not include grass or weed cutting, bush or tree trimming or felling that leaves soil or ground intact. It includes 'grubbing' in its normal meaning of the use of equipment to knock down and push vegetation out of the way, typically uprooting vegetation and disturbing the ground surface."

Land disturbing activities that shall be included in the disturbance area calculation shall follow the guidance provided in the Environmental Requirements for Construction Projects Standard Operating Procedures.

C. Site-Specific BMP (SSBMP) Plan or Stormwater Pollution Prevention Plan (SWPPP): The Contractor shall submit a SSBMP Plan (for projects disturbing less than one acre) or SWPPP (for projects disturbing one acre or more) using the latest DOTA template for acceptance by AIR-EE. If a SSBMP Plan or SWPPP was prepared by the Designer, the Contractor shall revise the plan using the latest template to include additional information required of the Contractor and any changes the Contractor proposes. The SSBMP Plan or SWPPP shall include site-specific temporary BMPs following requirements and practices outlined in DOTA's "Construction Activities BMP Field Manual." All AIR-EE comments shall be resolved and the SSBMP Plan or SWPPP approved prior to the start of land-disturbing activities, including those activities that are needed for the implementation of the BMPs. Submission of the complete and acceptable SSBMP Plan or SWPPP is the sole responsibility of the Contractor, and additional contract time will not be issued for delays due to incompleteness.

- D. SSBMP Plan/SWPPP Modifications: Modify, as necessary, and resubmit amended SSBMP Plan or SWPPP and construction schedules to the Engineer for acceptance by AIR-EE. Amendments to the SSBMP Plan or SWPPP shall be made under the following circumstances at a minimum:
  - 1. Conditions that develop during construction that were unforeseen during the design and pre-construction stages that could impact stormwater, soil, or groundwater.
  - 2. Changes to the Contractor's Means and Methods of Construction that could impact stormwater, soil, or groundwater.
  - 3. Omitted conditions that should have been allowed for in the accepted documents.
  - 4. A SSBMP Plan measure that replaces an accepted SSBMP Plan measure that was not satisfactorily performing.
  - 5. Revised dates of installation and/or removal of SSBMP Plan measures.

SSBMP Plan/SWPPP modifications shall be submitted to the Engineer and accepted in writing by AIR-EE before implementing the revised site-specific BMPs in the field. Amendments to the SSBMP Plan or SWPPP shall be included with the original SSBMP Plan or SWPPP and documented in the Amendment Log.

- E. Documentation: A copy of the accepted original or amended SSBMP Plan or SWPPP, with the signed certification by the authorized representative filed with DOH for SWPPPs, shall be kept on site or at an accessible location so that it can be made available at the time of an on-site inspection, or upon request by the Engineer, AIR-EE, DOTA's designated authorized representative, and/or DOH/EPA Representative.
- F. NPDES Construction Permit: If the total land disturbance for the life of the project, including all construction support activity areas, is one acre or more, coverage under an NPDES Permit Authorizing Discharges of Storm Water Associated with Construction Activity (NPDES Construction Permit) authorizing stormwater discharges associated with construction activity is required from the Department of Health, Clean Water Branch (CWB).

- 1. Do not begin land-disturbing activities until the CWB has issued an Individual NPDES Permit or NGPC. Conduct land-disturbing activities in accordance with the conditions of the NPDES Permit and/or NGPC.
- 2. The Contractor shall submit a Notification of Start to CWB a minimum of seven calendar days before the start of construction and provide AIR-EE with a record of submittal.
- 3. Before construction begins, the Contractor shall assign one of their personnel as the Duly Authorized Representative, in accordance with Section 15 of Appendix A, Chapter 1155. The Duly Authorized Representative is responsible for compliance with the NPDES Construction Permit (i.e., operations of the construction project) and shall certify, sign, and date various documents, including the SWPPP and SWPPP inspection documents.
- G. Solid Waste Disclosure: Submit the Solid Waste Disclosure Form for Construction Sites, if applicable, to the DOH Solid Waste Branch as specified on the form within 7 calendar days before the start of construction activities and provide a copy to the Engineer. Provide a copy of all the disposal receipts from the facility permitted by the Department of Health to receive solid waste to the Engineer. This shall also include documentation from any intermediary facility where solid waste is stored, handled or processed.
- H. NPDES Hydrotesting Permit: If hydrotesting activities require effluent discharge into State waters or drainage systems, coverage under an NPDES Hydrotesting Waters Permit authorizing discharges associated with hydrotesting is required from the CWB. Do not begin hydrotesting activities until the CWB has issued an Individual NPDES Permit or NGPC for hydrotesting. Conduct Hydrotesting operations in accordance with the conditions of the NPDES Permit and/or NGPC.
- I. NPDES Dewatering Permit: If dewatering activities require effluent discharge into State waters or drainage systems, coverage under an NPDES Dewatering Permit authorizing discharges associated with dewatering is required from the CWB. Do not begin dewatering activities until the CWB has issued an Individual NPDES Permit or NGPC for dewatering. Conduct dewatering operations in accordance with the conditions of the permit or NGPC.
- J. Construction BMP Training: All Contractor's and subcontractor's employees on the project shall complete the DOTA Construction BMP Training prior to entering the construction site and every calendar year thereafter. All Contractor and subcontractor personnel involved with construction project responsibilities shall also be trained on the site-specific BMPs that are utilized during construction and spill response. Records of completion and/or training roster sign-in sheet shall be up to date and included in the SWPPP or SSBMP Plan. Additional training required by AIR-EE shall be at no additional time or cost to the project. There are two training options:

- 1. All Contractor and subcontractor employees involved with construction project responsibilities watch the DOTA Construction BMP Training Video located on the DOTA Construction Site Runoff Control Program webpage and complete the <u>DOTA Construction BMP Training Survey</u> with a passing score, or
- 2. The Contractor and subcontractor supervisors/managers watch the DOTA Construction BMP Training Video located on the DOTA Construction Site Runoff Control Program webpage, complete the <u>DOTA Construction BMP</u> <u>Training Survey</u> with a passing score, then train all employees involved with construction project responsibilities and submit a sign-in roster documenting all employees trained at the bottom of the <u>DOTA</u> <u>Construction BMP Training Survey</u>.

<u>DOTA Construction BMP Training Survey:</u> https://hidot.hawaii.gov/airports/doingbusiness/engineering/environmental/construction-bmp-training-survey/

K. Construction Connection, Discharge, and Surface Runoff Permit: The Contractor shall complete the Contractor's section of the Construction Connection, Discharge, and Surface Runoff Permit and submit to AIR-EE for review. All AIR-EE comments shall be resolved prior to the start of land-disturbing activities.

# 3.02 CONSTRUCTION REQUIREMENTS

- A. Construction Start: Do not expose or disturb surface area of earth material or initiate any land-disturbing activities until submittals detailed in Subsection 01561.3.01 – Pre-construction Requirements are completed, submitted to the Engineer and accepted in writing by AIR-EE. Once installation of BMPs is allowed, a Pre-construction BMP Inspection is conducted, and all deficiencies that are noted during the inspection shall be corrected prior to any other ground disturbance.
- B. BMP Installation and Maintenance: Provide, install, maintain, monitor, repair and replace BMPs as needed to maintain efficacy. Address all inspection comments received from the Engineer, AIR-EE, and/or DOTA's designated authorized representative.
- C. Protect temporarily or permanently disturbed soil surface from rainfall impact, runoff, and wind before the end of each work day. Coordinate and schedule the work to the maximum extent possible to minimize the amount of exposed or disturbed surface area of earth material.
- D. Install and maintain stabilized construction entrances/exits, including any wheel washes, to minimize tracking of dirt and mud onto roadways, sidewalks, and other paved areas. Restrict traffic to stabilized construction entrance areas only. Clean dirt, mud, or other material tracked onto the road, sidewalk, or other paved area by the end of the same day in which the track-out occurs. If tracking is excessive or sediment is being transported farther along the pavement or

sidewalk by other vehicles traveling outside of the construction site, conduct cleaning and sweeping immediately. Modify stabilized construction entrances/exits, as needed, to prevent mud from being tracked onto road. Stabilize entire access roads if necessary.

- E. Maintain all excavations, embankments, haul roads, permanent access roads, plant sites, waste disposal areas, borrow areas, and all other work areas within the project limits free from dust that would cause a hazard to the work, airport operations, operations of other contractors, or to persons or property. If chemicals are used as soil stabilizers for erosion and dust control, submit the manufacturer's product data sheets of the chemicals to the Project Manager for acceptance by AIR-EE. Oil treating shall not be used. Dust screens and fabrics are not allowed to be mounted on, or to inhibit the view of, the TSA and AOA Security Fences.
- F. Cover exposed surfaces of materials completely with tarpaulin or a similar device when transporting aggregate, soil, excavated material, or other materials that may be a source of fugitive dust.
- G. Protect ditches, channels, and other drainageways leading away from cuts and fills at all times by:
  - 1. Hydromulching cuts and fills that may erode.
  - 2. Installing check dams or other silt control devices.
  - 3. Other methods acceptable to AIR-EE.
- H. Clean up and remove any pollutant that is attributed to the Contractor. Care shall be taken to ensure that no petroleum/chemical products, bituminous materials, or other deleterious substances, including debris, are allowed to fall, flow, leach, or otherwise enter the sewage systems or storm drains. Deposition of solid waste or the discharge of liquid waste, such as fuels, lubricants, bituminous waste, untreated sewage and other pollutants that may contaminate stormwater, surface waters, soil, or groundwater shall not be permitted.
- I. Disturbed Area Stabilization: Immediately initiate stabilization of exposed soil areas upon completion of land-disturbing activities for areas where disturbance has permanently or temporarily ceased on any portion of the site. Land-disturbing activities have permanently ceased when clearing and excavation within any area of the construction site that will not include permanent structures has been completed. Land-disturbing activities have temporarily ceased when clearing, grading, or excavation within any area of the site will not resume for a period of 14 or more calendar days, but such activities will resume in the future. The term "immediately" is used in this Section to define the deadline for initiating stabilization measures. "Immediately" means as soon as practicable, but no later than the end of the next work day, following the day when the land-disturbing activities have temporarily or permanently ceased.

- 1. After the initiation of stabilization, stabilization activities shall be completed according to the following timeline:
  - a. For projects with an NPDES Construction Permit:
    - For construction areas discharging into waters not impaired for nutrients or sediments, complete installation of stabilization measures within 14 calendar days after the temporary or permanent cessation of land-disturbing activities.
    - For construction areas discharging into nutrient or sediment impaired waters, complete installation of stabilization measures within 7 calendar days after the temporary or permanent cessation of land-disturbing activities.
  - b. For projects without an NPDES Construction Permit, complete stabilization within 14 calendar days after the temporary or permanent cessation of land-disturbing activities.
- J. Notice of Cessation: For projects with an NPDES Construction Permit, the Contractor shall submit a Notice of Cessation to CWB within seven calendar days after the end of the month that the project was completed and provide AIR-EE with a record of submittal.
- K. Changes to Land-disturbing Activities: The Contractor shall be responsible to prepare a new SWPPP or SSBMP Plans or amend existing SWPPP or SSBMP Plans if changes to the project or to the Contractor's activities result in landdisturbing activities additional to those previously approved:
  - 1. Land-disturbing activity outside of the approved limits is NOT allowed until approval and proper permits are received. Revised documents, including an updated SWPPP or SSBMP Plan, shall be submitted to and approved by AIR-EE prior to conducting additional land-disturbing activities.
  - 2. If coverage under an NPDES Construction Permit is needed, no activity in the additional area may occur until the additional permit coverage is granted:
    - a. If the project was already granted coverage under an NPDES Construction Permit, additional coverage shall be obtained from CWB for the additional area, either by adding the area to existing project documents, and applying for NPDES Construction Permit coverage for the entire project OR by creating new documents and obtaining separate NPDES Construction Permit coverage for the additional area.
    - b. If the new disturbed area will result in the total disturbed area

equaling one (1.0) acre or more for a project without existing NPDES Construction Permit coverage, NPDES Construction Permit coverage shall be obtained from CWB that will cover all land-disturbing activities anticipated for the life of the project.

#### 3.03 INSPECTIONS

Refer to the DOTA Construction Site Runoff Program for information pertaining to AIR-EE BMP inspections (pre-construction, routine, and final). Contractor self-inspections shall occur based on the frequency outlined in the SSBMP Plan and, if applicable, NPDES Permit (HAR 11-55) and SWPPP requirements.

- A. Corrective Actions: The Contractor shall be responsible for the correction of all deficiencies identified during any of the above inspections.
  - 1. If the Contractor fails to satisfactorily address inspection deficiencies, the DOTA reserves the right to employ outside assistance or use the State's own labor forces to provide necessary corrective measures. The Contractor will be fully responsible for all related cost and time. The State will charge the Contractor such incurred costs plus any associated project engineering costs and will make appropriate deductions from the Contractor's progress payment. Additionally, DOTA can issue liquidated damages for deficiencies not resolved to DOTA's satisfaction and for illicit discharges or contaminant discharges to soil, groundwater, surface water, or State waters (see Appendix A).
  - 2. Failure to install or maintain site-specific BMP measures may result in the assessment of liquidated damages (Appendix B). Depending on the severity of the deficiencies, additional enforcement actions, such as suspension of work and/or termination of the contract (with the Contractor's Surety being fully responsible for all additional costs incurred by the State), can be conducted and assessed against the Contractor.
  - 3. For all citations or fines received by the DOTA for non-compliance, including non-compliance with NPDES Permit conditions, the Contractor shall reimburse the State within 30 calendar days for the full amount of outstanding cost that the State has incurred. The State may deduct incurred costs from the Contractor's progress payments; however, the Contractor shall be responsible for reimbursing the State if the costs exceed remaining payments owed to the Contractor.
  - 4. The Contractor shall be responsible for all citations, fines and penalties levied by DOH or EPA against the State due to the Contractor's failure to satisfactorily address site-specific BMP deficiencies and/or any Contractor's illicit discharges. The State may make the appropriate deductions from the Contractor's progress payment.; however, the Contractor shall be responsible for reimbursing the State if the costs of correction exceed remaining payments owed to the Contractor.

## PART 4 – MEASUREMENT AND PAYMENT

#### 4.01 BASIS OF MEASUREMENT AND PAYMENT

The work specified in this Section will be paid for at the contract lump sum price. Payment shall be full compensation for work prescribed in this Section and contract documents, including but not limited to, all labor, materials, tools, equipment, and all incidentals necessary to install, maintain, monitor, repair, replace, modify, and remove site-specific BMP measures.

<u>Item No.</u>	ltem	<u>Unit</u>

01561.1 Construction Site Runoff Control Program Lump Sum

Partial payments shall be paid in the Monthly Progress Payment as follows:

- A. 20% of the line item price shall be paid upon the satisfactory completion of the Pre-construction BMP Inspection and associated corrective actions accepted by AIR-EE or their designated authorized representative, as described in Section 01561.3.03(A), above.
- B. 70% of the line item price shall be paid in equal monthly payments over the duration of the contract. Failure to satisfactorily apply, maintain, or modify BMP measures and devices, and/or submittals shall result in the withholding of monthly progress payments for this line item.

For projects that will disturb one acre or more of land, or will be part of a larger common plan of development that will disturb one acre or more of land, payments shall be made only after Routine BMP Inspections described in Section 01561.3.03 above have been satisfactorily completed, and associated corrective actions accepted by AIR-EE or their designated authorized representative.

C. The remaining 10% of the line item price shall be paid after all temporary BMP measures have been satisfactorily removed.

Payment will be made only after the satisfactory completion of the Final BMP Inspection and associated corrective actions accepted by AIR-EE or their designated authorized representative, and acceptance of the Post-construction BMPs by AIR-EE or their designated authorized representative.

Liquidated Damages, up to \$25,000 per day (Appendix A), shall be assessed for each non-compliance of the BMP requirements described in this Section. The Contractor shall not be entitled to recover any Liquidated Damages assessed, even after the deficiencies have been corrected.

The Liquidated Damages cited in Appendix A are in excess of reimbursement for any citations, fines, or penalties levied by any regulatory agency against the State due to the Contractor's violations of clean water regulations or standards.

# Appendix A. Liquidated Damages Schedule for Non-Compliances

Non-Compliance	Amount
Failure to obtain coverage under an NPDES Construction Permit for construction activities associated with a project that will disturb one acre or more of land, or will be part of a larger common plan of development that will disturb one acre or more of land, as defined by DOH.	\$1,000 per calendar day per violation.
Failure to obtain coverage under an NPDES Hydrotesting Permit for hydrotesting activities that will require effluent discharge into State waters or drainage systems.	\$1,000 per calendar day per violation.
Failure to obtain coverage under an NPDES Dewatering Permit for dewatering activities that will require effluent discharge into State waters or drainage systems.	\$1,000 per calendar day per violation.
Failure to comply with the conditions specified in an NPDES Permit, or any other applicable permit.	\$1,000 per calendar day per violation.
Failure to schedule a Pre-construction BMP Inspection and receive acceptance of all associated corrective actions prior to conducting land-disturbing activities.	\$1,000 per calendar day per violation.
Failure to provide corrective actions accepted by AIR-EE or their designated authorized representative by the deadlines identified in the BMP inspection report.	\$1,000 per calendar day per violation.
Failure to have the accepted SSBMP Plan and amendments or the accepted SWPPP and amendments available at a project construction site.	\$1,000 per calendar day per violation.
Failure to properly install or maintain a BMP specified by the SSBMP Plan, SWPPP, contract drawings and documents, or permit.	\$2,000 per calendar day per violation.

Non-Compliance	Amount
Failure to have an accepted amendment to the SSBMP Plan or an accepted amendment to the SWPPP prior to implementing changes to previously accepted BMPs.	\$2,000 per calendar day per violation.
Note: Advance review and acceptance can be provided to satisfy this non-compliance. However, for projects with an NGPC or NPDES permit, the written amendment shall still be formally submitted for certification and signature by the authorized representative identified in the NGPC or NDPES Permit.	
Failure to conduct required inspections.	\$1,000 for each of the first ten violations, \$2,500 for each of the next ten violations, \$5,000 for each subsequent violation.
Failure to maintain required records such as BMP inspection reports, rain gauge data logs, etc.	\$500 per calendar day for the first ten days of each violation, \$1,000 per calendar day for the next ten days of each violation, \$2,500 per calendar day for each subsequent day of violation.
Any violation resulting in a polluted discharge.	Up to \$25,000 per calendar day per violation.
Note: Liquidated Damages shown in the Table discretion of the DOTA.	e shall be assessed at the

# Assessment of Liquidated Damages for Non-Compliance:

The Contractor may be assessed liquidated damages by issuance of an Enforcement Letter. The Enforcement Letter shall indicate the amount of liquidated damages that are assessed for the non-compliances which shall be deducted from the Contractor's next progress payment. The Enforcement Letter will be sent electronically via e-mail and a hard copy to the Contractor's designated representative(s), identified in Section 01561.3.01(2)(d), responsible for the Contractor's Construction Site Runoff Control Program. An Enforcement Letter may be issued with or without previous verbal notifications, written warnings, or official enforcement letters (i.e. Warning Letter or Notice of Violation (NOV).

Liquidated Damages may be assessed for the following:

CONCRETE SPALL REPAIRS AT TERMINAL 2 ROADWAYS DANIEL K. INOUYE INTERNATIONAL AIRPORT STATE PROJECT NO.: AO1043-33 AIP PROJECT NO.: 3-15-0005-XXX

- Non-compliances listed in the Table, herein, included in Appendix A.
- Non-compliances have not been corrected in the timeframes noted.
- Corrective actions are not completed after a verbal notification, written warning (email or formal letter), or NOV is issued.
- Contractors are non-responsive to DOTA's directives.
- Repeated non-compliance.
- A polluted discharge has occurred.

The number of days used for the liquidated damages calculations shall start on the day that the non-compliance was required to be corrected and shall end on the day that the non-compliance is corrected and accepted. If DOTA's personnel are not able to go out in the field to verify that the BMP deficiencies are corrected in the timeframe specified, the Contractor can send photographs showing the corrected deficiency via e-mail to the DOTA Engineer and AIR-EE along with documentation on how the deficiency was corrected. The DOTA Engineer and AIR-EE may visit the site to verify the corrective actions are acceptable. If the corrective actions are acceptable, then the clock stops on the day that the documentation was received.

# The Contractor shall not be entitled for compensation for any liquidated damages or penalty, fine, or citations assessed and deducted from the Contractor's progress payments, even after corrective actions have been taken.

END OF SECTION

# SECTION 01562 – MANAGEMENT OF CONTAMINATED MEDIA, SOIL DISPOSAL, AND SOIL REUSE

# PART 1 – GENERAL

# 1.01 RELATED DOCUMENTS

The General Provisions for Construction Projects (2016), Special Provisions and General Requirements of the Specifications, apply to the work specified in this Section.

## 1.02 DESCRIPTION

- A. This Section describes procedures for the management of known and/or unknown contaminated media (e.g., soil, sediment, groundwater, soil vapor, and building materials) and disposal and on-site reuse of either contaminated or uncontaminated soil/sediment (referred to herein as "soil"), that may be disturbed or generated during excavation or demolition activities, or other construction activities associated with this project.
- B. All soil shall be treated as potentially contaminated until it is determined otherwise.
- C. The Contractor shall supply all labor, materials, and equipment necessary for the removal, temporary storage, testing, handling, backfilling and management of soil and contaminated media to carry out the work in accordance with these specifications, and all applicable Federal, State, and local regulations and latest amendments.
- D. The Contractor shall follow the State of Hawaii, Department of Transportation, Airports (DOTA) Programmatic Environmental Hazard Evaluation and Environmental Hazard Management Plan (DOTA EHE-EHMP), a Construction-Environmental Hazard Management Plan (C-EHMP) Addendum, or a Site-Specific C-EHMP, whichever applies to the project.
- E. The Contractor and their Qualified Environmental Professional shall review any site-specific investigation reports (e.g., Phase II Environmental Site Assessment [ESA]) or construction management plans, etc.) to understand the conditions that may affect work performance.
- F. Qualified Environmental Professional: The Contractor shall employ a Qualified Environmental Professional (QEP) who possesses a minimum of five (5) years of experience providing environmental oversight for the management of contaminated media during construction activities, who shall assist in the preparation of the Contractor's C-EHMP (Site-Specific or Addendum). The QEP shall be identified in the applicable EHMP document.
- G. Should the Contractor deviate from the DOTA EHE-EHMP, C-EHMP Addendum, or Site-Specific EHMP, the Contractor shall be responsible to prepare or modify any existing Hawaii Department of Health (DOH) required C-EHMP (Site-specific

or Addendum). Any deviation from construction EHMPs will require approval by DOH and the DOTA Engineering Branch, Environmental Section (AIR-EE) prior to implementation. The Contractor shall detail deviations from standard practices and explain how those deviations will be protective of human health and the environment.

- H. The primary contaminant-related hazards addressed by the DOTA EHE-EHMP or a C-EHMP include, but are not limited to, the following Contaminants of Potential Concern (COPCs):
  - Petroleum-related Hydrocarbons, e.g., TPH-g, TPH-d, TPH-o, BTEX, and PAHs
  - Constituents of light distillate fuels and/or Chlorinated Solvents (together considered volatile organic compounds or VOCs)
  - Polychlorinated Biphenyls (PCBs)
  - Pesticides, e.g., Chlordane, Dieldrin
  - Metals, e.g., Arsenic, Barium, Cadmium, Total Chromium, Lead, Mercury, Selenium, and Silver
  - Per- and Polyfluoroalkyl Substances (PFAS)

In addition, free petroleum product (e.g., gasoline, aviation gasoline, diesel fuel, jet fuel, motor oils, lubricating oils) may be encountered in soil or groundwater in areas of previous petroleum releases.

Soil vapor may be present from volatile COPCs present in subsurface soil or groundwater.

Should changes in site conditions or additional site information identify contaminants or risks to human health and/or the environment not addressed by the DOTA EHE-EHMP or C-EHMP (Site-Specific or Addendum), the Contractor shall be responsible to revise, update, and finalize a C-EHMP (Site-Specific or Addendum), to be reviewed and approved by AIR-EE and the DOH Hazard Evaluation and Emergency Response (HEER) Office.

The Contractor shall coordinate with AIR-EE, as well as have any C-EHMP (Site-Specific or Addendum) approved by the HEER Office, prior to the start or continuation (in the case of an Addendum) of any related ground disturbing activities.

## 1.03 <u>REFERENCES</u>

All work shall conform to the latest edition of the following, unless otherwise noted or specified on the drawings or in these specifications. Where conflicts among the requirements or with these specifications exists, the most stringent requirements shall apply.

- A. DOTA Construction Site Runoff Control Program <u>https://hidot.hawaii.gov/airports/doing-</u> <u>business/engineering/environmental/construction-site-runoff-control-program/</u>
  - 1. DOTA EHE-EHMP
  - 2. DOTA Construction Best Management Practices (BMP) Field Manual
- B. Department of Health (DOH) Hazard Evaluation & Emergency Response (DOH HEER) <u>https://health.hawaii.gov/heer/</u>
  - 1. Technical Guidance Manual (TGM) for Implementation of the State Contingency Plan (including updates).
  - 2. Guidance for Soil Stockpile Characterization and Evaluation of Imported and Exported Fill Material.
  - 3. HEER Office Screening for Environmental Hazards at Sites with Contaminated Soil and Groundwater.
  - 4. HEER Office Construction EHMP and EHMP Addendum Template
- C. State of Hawaii Administrative Rules, Title 11, DOH https://health.hawaii.gov/opppd/department-of-health-administrative-rules-title-11/
  - 1. Chapter 54 Water Quality Standards
  - 2. Chapter 58.1 Solid Waste Management Control
  - 3. Chapter 59 Ambient Air Quality Standards
  - 4. Chapter 11-260.1-279.1 Hazardous Waste Management: General Provisions
  - 5. Chapter 280.1 Underground Storage Tanks
  - 6. Chapter 451 State Contingency Plan
- D. The Hawaii Environmental Response Law (Hawaii Revised Statutes [HRS] Chapter 128D) and the State Contingency Plan (Hawaii Administrative Rules [HAR] Title 11, Chapters 451-1–451-24).
- E. American Petroleum Institute (API) RP 2219 <u>https://www.api.org/oil-and-natural-gas/health-and-safety/refinery-and-plant-safety/occupational-safety/rp-2219</u>
- F. United States Code of Federal Regulations (CFR), Title 29: Labor https://www.ecfr.gov/current/title-29

- G. CFR, Title 40: Protection of the Environment <u>https://www.ecfr.gov/current/title-40</u>
  - 1. Part 50, "National Primary and Secondary Ambient Air Quality Standards A".
  - 2. Part 122, "EPA Administered Permit Program: The National Pollutant Discharge Elimination System".
  - 3. Part 261, "Identification and Listing of Hazardous Waste".
  - 4. Part 263, "Standards Applicable to Transporters of Hazardous Waste".
  - 5. Part 302, "Designation, Reportable Quantities, and Notification".
- H. CFR, Title 49: Transportation https://www.ecfr.gov/current/title-49
  - 1. Part 171, "General Information, Regulations, and Definitions".
  - 2. Part 172, "Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, Training Requirements, and Security Plans".
- I. U.S. EPA Comprehensive Environmental Restoration, Compensation, and Liability Act (CERCLA), Section 107(1), exemption for cleanup of legally applied pesticide products. <u>https://www.epa.gov/enforcement/superfund-enforcement-authorities</u>

# PART 2 – PRODUCTS (Not Used)

# PART 3 – EXECUTION

# 3.01 GENERAL WORK PROCEDURES

- A. Prior to beginning work, the Contractor, the Contractor's Qualified Environmental Professional, and the Engineer or their representative shall review and discuss all available information pertaining to contamination or potential contamination at the work site.
- B. It should be noted that, in some cases, the contamination (e.g., soil contaminated with metals, PCBs, pesticides, PFAS, etc.) may not be identifiable through visual and/or olfactory observation, and contaminant-specific field screening techniques may need to be implemented.
- C. Potential or suspected contaminated media from separate locations or sources shall not be mixed or placed together without the approval of the Qualified Environmental Professional and AIR-EE.
- D. The removal, transfer, or handling of explosive or flammable media shall be

conducted using explosion-proof pumps and equipment. If a vacuum truck is used for removal of liquids or residues, the area of operation for the vacuum truck shall be vapor free. Discharge the vacuum pump exhaust gases through a hose of adequate size and length downwind of the truck and tank area. Vacuum truck operating and safety practices shall conform to API RP 2219. Collect tank residues in drums, tanks, or tank trucks labeled according to 49 CFR 171 and 49 CFR 172 and dispose of as required by regulation.

- E. Follow Decontamination regulations and procedures as necessary.
- F. Soil excavation, grading, and any disturbance of contaminated soil may cause a potential exposure to Contractor's employees and the public from the release of vapors or fugitive dust. The routes of exposure to dusts are by inhalation, ingestion, and dermal contact. The Contractor shall use engineering controls such as water spraying and wind barriers to control fugitive dust. The Contractor shall use engineering controls to mitigate the release and exposure to soil vapors.
- G. The Contractor shall test excavated soil for the presence of COPC and managed in accordance with this Section and relevant guidance and regulations.
- H. Report construction activities in areas with contaminated soil or groundwater by completing the appropriate forms in the DOTA EHE-EHMP, Appendix B.3 Construction Activities Release Response Plan. Submit the forms to the DOH Office of Hazard Evaluation and Emergency Response (HEER) Office and provide a copy of the forms to the Engineer and AIR-EE.
- I. All correspondence with DOH and other regulatory agencies must include the Engineer and AIR-EE.

# 3.02 PRECONSTRUCTION REQUIREMENTS

- A. Submit the following a minimum of 30 calendar days prior to beginning any ground disturbing activities, for approval by AIR-EE.
  - 1. The Contractor's revisions to the C-EHMP Addendum or Site-Specific C-EHMP completed in the design phase, or creation of a C-EHMP addendum if deviating from the DOTA EHE-EHMP, that includes, but is not limited to:
    - a. Procedures, engineering controls, and methods the Contractor will use during the excavation, soil stockpiling and segregation, temporary storage, testing, handling, treatment, backfilling, and disposal of contaminated media, work area isolation, construction barriers, dust control, decontamination, and emergency management.
    - b. Names of the Contractor's and their subcontractor's qualified personnel who will be supervising or managing contaminated

materials at the site. Include the personnel's phone number and qualifications.

- c. Name(s) of the Contractor's Qualified Environmental Professional, including their qualifications.
- d. Proposed schedule of work.
- e. Location map of temporary contaminated stockpiles and other contaminated media storage, including infrastructure such as pipes and appurtenances, if applicable.
- f. All documents required as part of the appendices to the DOTA EHE-EHMP (e.g., health and safety plan and completing the management plans in the appendices) or C-EHMP (Site-Specific or Addendum) applicable appendices (e.g., health and safety plan, construction material documents, etc.).

# 3.03 CONSTRUCTION REQUIREMENTS

- A. Soil Excavation and Stockpiling:
  - Notify the HDOH HEER Office at least 90 calendar days prior to disturbing contaminated soil at "HEER Sites" as defined <u>HI DOH e-</u> <u>Permitting System - Notification of Construction Activities (HEER Office).</u> <u>Version 1.6 (hawaii.gov)</u> or most recent version available. Obtain AIR-EE's review and concurrence prior to submittal to DOH.
  - 2. The disturbance of contaminated media shall be performed in accordance with the DOTA EHE-EHMP or the Contractor's approved C-EHMP (Site-Specific or Addendum), where applicable. The HEER Office and AIR-EE shall be immediately notified if contaminated media not previously known or anticipated is encountered. The HEER Office will determine whether additional sampling is required. The Contractor shall provide a location map with Global Positioning System (GPS) coordinates and approximate depth below ground surface at which contaminated media were encountered to the Engineer and AIR-EE.
  - 3. Any soil stockpile shall not exceed 100 cubic yards unless approved in the applicable C-EHMP document. If deviating from the plan, approval from DOH is required. Soils placed in watertight containers shall be covered with plastic sheeting or positioned under a roof when not in active use. Soil stockpiles and containers shall be located at least 50 feet from drainage features, surface waters, and stormwater drainage paths.
  - 4. Any liquid-phase oil or free product associated with the contaminated soil shall be drained prior to stockpiling. If feasible, the free product should be separated from the soil, properly stored, profiled, and disposed of at an approved recycling or disposal facility.

# B. Soil Testing and Disposal:

The contractor shall test all soil generated during excavation, demolition, or other construction activities. Sampling and testing of stockpiles shall be, at a minimum, in accordance with the latest edition of the DOH's Guidance for Soil Stockpile Characterization and Evaluation of Imported and Exported Fill Material. The Contractor's QEP shall direct the soil sampling collection and testing methods in accordance with the most current guidelines. Stockpiles shall be tested using multi-increment (MI) sampling methodology in accordance with the TGM. Alternative sampling approaches, and appropriate decision unit (DU) volumes for large volume soil stockpiles, should be discussed with AIR-EE and may be utilized on a case-by-case basis when approved by the HEER Office.

Note that in accordance with DOTA policy, no soil from airport property shall be reused offsite, even if the soil appears acceptable for unrestricted reuse based on testing conducted. Exceptions to this policy may only occur with the written approval of the Engineer and AIR-EE.

- 1. Offsite Soil Disposal
  - a. The Contractor shall confirm the disposal facility's sampling requirements, as well as their standards for disposal.
  - b. Soil that is a regulated hazardous waste shall be disposed at an approved United States Environmental Protection Agency (EPA) regulated facility.
  - c. Soil that is above the Hawaii Department of Health (DOH) Tier 1 Environmental Action Levels (EAL) for unrestricted use but not a regulated hazardous waste shall be disposed of at a DOH or EPA permitted disposal facility (i.e., landfill), unless on-site reuse is approved by the Engineer and AIR-EE as described below.
  - d. For any contaminated media removed from Airport property to an approved facility, the Contractor shall be responsible for its legal disposal.
- 2. On-site Soil Reuse
  - a. The Contractor shall test all soils designated for on-site reuse. Soil that does not exceed applicable DOH Tier 1 Environmental Action Levels (EAL) for unrestricted use may be reused on-site (within construction site boundaries) with AIR-EE approval.
  - b. Soil with contaminants that exceed DOH Tier 1 EALs may be approved for on-site (within construction site boundaries) reuse with written approval from AIR-EE and when the following conditions are met:

- i. Contaminated soil is reused within other contaminated areas in the proximity of its original location.
- ii. Contaminated soil is reused no less than 150 meters from the nearest surface water or surface water inlet.
- iii. Contaminated soil is reused at an elevation above the tidally influenced high water table, and at least one foot below the finish surface grade, with the most contaminated soil placed at the bottom of the excavation and cleanest soil toward the ground surface. A minimum of one foot of clean soil shall comprise the final, top backfill layer and, unless waived by DOTA and DOH, an impervious layer shall cap this top layer.
- iv. Contaminated soil is not reused within or beneath the footprint of a permanent building structure.
- v. Contaminated soil to be reused cannot contain free oil, oil sheens, oil stains, or total petroleum hydrocarbons (TPH) concentrations exceeding 5,000 milligrams per kilogram (mg/kg).
- C. Groundwater Management: Groundwater may be contaminated by petroleum hydrocarbons, dissolved metals, PFAS, VOCs, and/or pesticides, and may be encountered during soil excavation or dewatering activities.
  - 1. If contaminated groundwater is discovered at a previously unknown source or site on the project, the Contractor shall immediately notify the Engineer, AIR-EE, and HEER Office. Provide a location map with GPS coordinates and approximate mean sea level depth of the groundwater at which the contamination was encountered.
  - 2. The disturbance of contaminated groundwater shall be performed in accordance with the DOTA EHE-EHMP, or C-EHMP (Site-Specific or Addendum), where applicable. The HEER Office will determine whether additional sampling is required.
  - 3. If free product is present in the extracted groundwater, it shall be separated from the groundwater, profiled, and disposed of at an DOH-approved recycling/disposal facility. Free product shall not be moved from one excavation to another. Engineering measures shall be taken to prevent the transfer of the free product during dewatering. Water contaminated with free product shall not be discharged from a dewatering pit.
  - 4. Releases of contaminated groundwater to surface water bodies or areas beyond the work area is prohibited.

- 5. Groundwater shall only be re-infiltrated in the ground with the prior approval of AIR-EE and HEER Office. Under circumstances where contaminated groundwater cannot be re-infiltrated, proper disposal at a licensed facility shall be conducted. Notification to the appropriate agencies and other pertinent information related to the discharge shall be conducted by copying the Engineer and AIR-EE on all correspondence and copies of correspondence provided upon request.
- 6. The Contractor is responsible for the legal disposal or discharge of groundwater that is not re-infiltrated and shall provide AIR-EE with copies of waste manifests.
- 7. For groundwater containerized and removed from Airport property, the Contractor shall have representative samples taken and tested in accordance with DOH guidelines, standards, and regulations. A copy of the groundwater test results shall be submitted to AIR-EE. The groundwater shall not be disposed offsite without the approval of the Engineer and a written approval from the DOH-permitted facility receiving the groundwater indicating that they acknowledge the groundwater test results and providing their approval to dispose the groundwater at their facility. Transport off-site shall occur in DOT-approved containers or mobile tanks. Documentation for the removal of containerized groundwater is required in the Close-Out Report detailed in Section 3.04.
- 8. With approval from AIR-EE and oversight from the QEP, small volumes of groundwater may be disposed via evaporation from a constructed (lined) pond or basin, with solid residuals properly tested and disposed in accordance with this specification.
- 9. Release Reporting: Encountering previously unknown contaminated soil or groundwater during subsurface construction activities is considered a release and shall be reported to the HEER Office. Copies of the DOH Release Report, DOH-issued Release Number, and email correspondence (if applicable), shall be furnished to the Engineer and AIR-EE. The Contractor shall be responsible for release reporting and AIR-EE shall be included on all correspondence with the HEER office.
- 10. Contractor shall comply with DOTA and HEER Office requirements. A written report shall be provided to the HEER Office. The Hawaii Hazardous Substance Written Follow-up Notification Form is provided in the DOTA EHE-EHMP, Appendix B.1. Photos shall be included to document the incident. The Contractor shall keep a copy of the completed Form B.1 and provide copies of the written report to the Engineer and AIR-EE.
- 11. Report all leaks and spills immediately to AIR-EE, DOTA personnel, and regulatory agencies in accordance with the airport-specific DOTA Spill Reporting Fact Sheet available via the DOTA Construction Site Runoff

Control Program Webpage at <u>https://hidot.hawaii.gov/airports/doing-business/engineering/environmental/construction-site-runoff-control-program/</u>.

<u>Releases that occur during construction activities or releases due to</u> <u>unforeseen events (spills) shall be reported immediately.</u>

- D. Underground Storage Tanks (USTs) and Utility Pipes:
  - 1. For any UST or pipeline, whether unexpectedly discovered or a planned removal, the nature of the UST or pipeline and whether they are inactive shall be determined prior to removal. Immediately notify the Engineer, AIR-EE and HEER Office of any unexpected encounter with a UST or buried piping.
  - 2. The Contractor shall record field observations of the UST and pipelines. These observations shall include, but are not limited to, the following:
    - a. Location relative to fixed landmarks, including GPS coordinates. Provide a location map that shows the UST and pipelines that were encountered. The map shall include a North arrow and a scale.
    - b. Depth, diameter, length, and type of piping. Describe the condition of the pipe.
    - c. Volume and type of fuel or product, including analytical laboratory reports for the product recovered.
    - d. Beginning and ending fluid levels, if applicable.
    - e. Flow rates, if applicable.
    - f. Direction of flow.
    - g. Detailed photographs.
    - h. Detailed description of actions taken following the discovery, such as cutting, product removal, and disposal.
  - 3. Provide records of the field observations to the Engineer, AIR-EE, and HEER Office.
  - 4. The removal of all USTs must comply with HAR § 11-280.1, and all correspondence related to identification, removal, and documentation must be provided to the Engineer and AIR-EE. Only personnel knowledgeable and trained in pipeline and UST removal shall cut, drain, and remove USTs and pipelines. Hazardous conditions, particularly those created by explosive vapors and releases of product to the

environment, shall be mitigated prior to removal activities. If any waste pipe or UST components are to be stored on-site prior to disposal, the area shall be lined with polyethylene plastic sheeting, 20 mil or thicker, and bermed to contain any free product. Provisions shall be in place to contain viscous products that may liquify after exposure to atmospheric heating. The waste pipe segments shall be drained of any residual product and stored on appropriate dunnage with the ends of the pipe sealed or covered to protect the interior of the pipe from contact with rainwater and wind.

- 5. All removed pipelines and USTs shall be properly disposed or recycled.
- 6. The Contractor shall prepare and submit a UST Removal Report, including the results of all sampling activities required under HAR § 11-280.1, to the Engineer, AIR-EE, and the DOH SHWB (UST Program).

# 3.04 POST-CONSTRUCTION REQUIREMENTS

- A. Submit a Project Close-out Report within 30 calendar days after work is completed. The Close-out Report shall contain the following applicable contents:
  - 1. A signed letter certifying that the removal and disposal of all contaminated materials were completed in accordance with the DOTA EHE-EHMP or Contractor's approved C-EHMP (Site-Specific or Addendum), and all applicable Federal, State, and local rules and regulations.
  - 2. All approved DOTA EHE-EHMP deviation request forms. (Reference Appendix B of the DOTA EHE-EHMP.)
  - 3. Any Site-Specific EHMP(s) or Long-term EHMP(s). For locations at an airport for which DOTA has already established a Site-Specific EHMP from previous projects, the DOTA's Site-Specific EHMP shall remain applicable, with any approved amendments resulting from a change in site conditions due to construction.
  - 4. All testing and laboratory results, including chain of custody, for any soil/sediment, groundwater, soil vapor, or other media sampling and analysis.
  - 5. Any results from air monitoring.
  - 6. Record of Field Observations, including location map with GPS coordinates, limits, and depths of any contaminated media (soil, groundwater, etc.) that were encountered at previously unknown source or sites on the project. Include a copy of the completed Hawaii Hazardous Substance Written Follow-up Notification form that was submitted to DOH and all other associated documents.

- 7. If contaminated soil was disposed off-site (off Airport Property), include the following:
  - a. A copy of the signed agreement from the receiving facility acknowledging the sample test results and indicating acceptance of the soil.
  - b. Documentation of the quantity of soil received by the facility.
  - c. Copies of the test results of the soil sampling.
  - d. All certifications, disposal forms, waste manifests, and summary logs.
- 8. If any soil was approved for reuse on-site (within the construction site boundaries), at a minimum, include the following:
  - a. Copies of the test results of the soil sampling.
  - b. The quantity of soil that was re-used on-site.
  - c. Location map of the re-used soil. Include GPS coordinates of its emplaced limits.
  - d. A brief description of the purpose of the reused soil (e.g., general fill, utility trench backfill material, etc.). Include the depth and thickness of its placement.
  - e. Photos of the site after placement of the re-use soil has been completed.
- 9. Record of Field Observation of any unanticipated UST or pipeline discovered during construction activities, including a copy of the completed DOH Notice of Intent to Close Underground Storage Tanks form, UST Closure Report, and all other associated documents.
- 10. The Close-out Report may be distinct to each contaminated media type/source. For sites with multiple contaminated media types/sources, Close-out Reports for each contaminated media type can be submitted separately or combined into a project-wide compilation of reports.

## PART 4 – MEASUREMENT AND PAYMENT

#### 4.01 BASIS OF MEASUREMENT AND PAYMENT

Work under this Section will be paid for under the various contract items as shown below.

For ALLOWANCE items in the Proposal Schedule, the allowance is an estimate and the amount shall not exceed the maximum amount shown in the Proposal Schedule. Payment shall be the actual cost as invoiced by the Contractor and approved by the DOTA Engineer. The Contractor shall be allowed to include overhead, profit, insurance and/or other mark-ups, as stipulated in Section 9.5 of the 2016 General Provisions for Construction Projects, Air and Water Transportation Facilities Divisions.

<u>Item No.</u>	ltem	<u>Unit</u>
01562.1	Management of Contaminated Media, Soil Disposal, and Soil Reuse	Allowance

Should the DOTA receive reports of any illegal dumping of material, and if illegal dumping is confirmed to have occurred, the DOTA will assess a Liquated Damages amount of \$5,000 per truck per day, until the illegally dumped material has been cleaned up or the incident has been remedied to the satisfaction of the Engineer with the DOH's concurrence. The Contractor shall not be entitled to recover any Liquidated Damages assessed, even after the non-compliance has been corrected.

The Contractor shall be responsible for reimbursing DOTA for all citations, fines, and penalties levied by DOH, EPA, Department of Labor and Industrial Relations, or any other regulatory agency against the State due to the Contractor's failure to properly manage contaminated medias, including non-compliance with the DOTA EHE-EHMP, DOTA Site-Specific EHMP, or and Site-specific C-EHMP or C-EHMP Addendum. The Contractor shall reimburse the State within 30 calendar days for the full amount of any outstanding cost that the State has incurred. The State may deduct all incurred costs from the Contractor's monthly progress payments; however, the Contractor shall be responsible for reimbursing the State if the costs of correction exceed remaining payments owed to the Contractor.

If the Contractor fails to satisfactorily address the non-compliance item, DOTA reserves the right to employ outside assistance or use the State's own labor forces to provide necessary corrective measures. The Contractor shall be fully responsible for all cost and time. The State shall charge the Contractor such incurred costs plus any associated project engineering costs and shall make appropriate deductions from the Contractor's monthly progress payment.

## END OF SECTION

CONCRETE SPALL REPAIRS AT TERMINAL 2 ROADWAYS DANIEL K. INOUYE INTERNATIONAL AIRPORT STATE PROJECT NO.: AO1043-33 AIP PROJECT NO.: 3-15-0005-XXX

# SECTION 03320 - HYBRID POLYMER CONCRETE (HPC)

## PART 1 – GENERALS

# 1.01 RELATED DOCUMENTS

The General Provisions for Construction Projects (2016), Special Provisions, and General Requirements of the Specifications, apply to the work specified in this Section.

#### 1.02 <u>SUMMARY</u>

- A. Section includes polymer concrete overlay system to be installed at the Ewa and Diamond Head Connecting Links to provide a protective coating and grading to new drain locations.
- B. Provide a polymer concrete system containing engineered resins designed for bridge deck overlays, patching, resurfacing applications and grade corrections.
  - 1. Work includes substrate preparation.
- C. Related Sections: The following items are not included in this Section and are specified under the designated Sections:
  - 1. Section 03300 STRUCTURAL CONCRETE
  - 2. Section 03730 CONCRETE REPAIRS
  - 3. Section 07680 EPOXY SURFACE TREATMENT
  - 4. Section 07916 EXPANSION JOINT

#### 1.03 DESCRIPTION OF WORK

- A. The work shall include the furnishing of all labor, materials, equipment and any other related miscellaneous items necessary to completely construct all Hybrid Polymer Concrete as shown on the plans and as specified herein. HPC shall be used for overlay and joint repair work.
- B. HPC shall be 100% solids, thermosetting hybrid polymer concrete and composed of the following three components: two-component reactive hybrid polymer resin binder and blend of specified aggregates.
- 1.04 <u>SUBMITTALS</u>
  - A. Submittals: Comply with project requirements for submittals as specified in Section 01300 SUBMITTALS.
  - B. Prior to the start of this work, provide the following submittals in one complete set for acceptance. Indicate clearly the name of the product and its manufacturer on pertinent submittals. No work that is related to these submittals shall be

performed until written acceptance has been received. Submit all items listed to DOT-A for approval 30 days prior to installation.

- 1. Detailed step by step Work Plan procedures for all aspects of the work including:
  - a. Determining surface profiles and compressive strengths.
  - b. Cleaning and roughening substrata.
  - c. Placement (handling, mixing, consolidating, finishing, curing, and texturing) of HPC.
  - d. Testing for delaminations.
  - e. The method and materials used to contain, collect, and dispose of the concrete debris generated by the scarifying process, including provisions for protecting adjacent traffic from flying debris.
- 2. The HPC mix design and the estimated curing time based on anticipated temperatures.
- 3. Certificates of compliance and test reports for all materials used in the HPC mix.
- 4. Manufacturer's written instructions for the installation of the overlay system and the storage of all overlay materials.
- 5. The name of the manufacturer of the HPC materials including the name and phone number of the Manufacturer's Technical Representative.
  - a. HPC shall be produced by the same manufacturer as the epoxy surface treatment as noted in Section 07680 EPOXY SURFACE TREATMENT, to ensure material compatibility and warranty coverage.
- 6. Information on the HPC including shelf life, working times, and placement rates.
- 7. Detailed information on all equipment and materials that will be used for all aspects of the work including but not limited to determining surface profiles and compressive strengths, quality control (QC) plan, placing (handling, mixing, consolidating, finishing, curing, and texturing) of HPC, and testing for delaminations.
  - a. The QC Plan shall designate a QC Manager, who shall be present at the jobsite and have full authority to request any action necessary for the operation of the QC Plan providing it complied with the contract documents and acceptance of DOT-A.

- b. The QC Manager shall be certified in all test methods used and be responsible for the required field quality control in sampling and testing in conformance with the accepted quality control plan, test methods and contract documents. All sampling shall be performed in the presence of DOT-A. DOT-A is not responsible or shall be regarded as part of the contractor's QC team. It is the responsibility of the contractor and the QC Manager to ensure that the test procedure being used is compliant with the test method standard. Inspections are performed for the exclusive benefit of the State. The inspection of or the failure to inspect the work shall not relieve the Contractor of obligations to fulfill the contract as prescribed, to correct defective work, and to replace unsuitable or rejected materials regardless of whether payment for such work has been made. DOT-A has the right to reject the test if DOT-A feels that it is non-compliant, e.g., the technician who performed the test is not certified or the material testing laboratory is not accredited to perform the required tests. Maintain and have available upon request, the current test standard methods documentation being used, referenced documents, complete records of sampling, testing, corrective actions, and quality control inspection results.
- 8. Detailed plans and procedures including complying to noise variances, and controlling of work to appropriately minimize dust and air borne debris from cleaning and roughening the substrata, mixing and placing concrete, and cleaning operations, and to prevent water runoffs.
- 9. Planned actions to maintain adherence to limitations and requirements of the following variables with regards to HPC work:
  - a. Equipment and traffic control near or on work areas during placement and curing operations.
  - b. Inclement weather.
  - c. Moisture and temperature requirements for the materials being used.
- 10. Test reports of compressive strengths, tensile strengths, bond strengths, and maturity readings during the progress of the work. Reports shall be submitted once every 2 weeks.

## 1.05 QUALITY CONTROL

A. Manufacturer Qualifications: A firm experienced in manufacturing products or systems similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units. As applicable, procure products from manufacturers able to meet qualification requirements, warranty requirements, and technical or factory-authorized service representative requirements.

- B. Installer Qualifications: A firm or individual experienced in installing work similar in material, design, and extent to that indicated for this Project, whose work has resulted in construction with a record of successful in-service performance.
- C. Source Limitations: All components listed in this section shall be provided by a single manufacturer or approved by the primary manufacturer.

# 1.06 DELIVERY, STORAGE, AND HANDLING

- A. All materials shall be delivered in their original unopened containers in new undamaged condition, bearing the manufacturer's label, specifying date of manufacturing, batch number, trade name, and quantity. Each shipment of resin binder shall be accompanied by a Safety Data Sheet (SDS).
- B. The material shall be stored to prevent damage by the elements and to ensure the preservation of their quality and fitness for the work. The storage space shall be kept clean, covered, cool and dry.
- C. Stored materials shall be inspected prior to their use and shall meet the requirements of this Specification at the time of use. Any material which is rejected because of failure to meet the required tests or that has been damaged so as to cause rejection shall be immediately replaced at no additional expense to the State.
- D. Sufficient material to perform the entire HPC application shall be in storage at the site prior to any field application, so that there shall be no delay in procuring the material for each day's application.
- E. The contractor shall arrange to have the material supplier furnish technical service related to application of material and health and safety training for personnel who are to handle the HPC.

# 1.07 PRE-INSTALLATION CONFERENCE

Prior to scheduled commencement of the installation and associated work, conduct a meeting at the project site with the installer, DOT-A, manufacturer's representative and any other persons directly involved with the performance of the Work. The Installer shall record conference discussions and to include decisions and agreements reached (or disagreements), and furnish copies of recorded discussions to each attending party. The main purpose of this meeting is to review foreseeable methods and procedures related to the Work.

## 1.08 PROJECT CONDITIONS

- A. Weather: Proceed with work only when existing and forecasted weather conditions permit. HPC application should not proceed when precipitation is imminent. Ambient temperatures shall be above 36°F (2°C) when applying HPC.
- B. All surfaces to receive the overlay shall be free from visible water, and dew. Application of the HPC shall be conducted in well-ventilated areas.

- C. Minimum age of concrete must be 21-28 days depending on curing and drying conditions.
- D. Contractor shall ensure adequate protection during installation of the HPC system.

#### 1.09 <u>WARRANTY</u>

A. Warranty: Provide manufacturer's standard warranty. Materials warranty shall be for a minimum of one year starting at the date of Substantial Completion.

## PART 2 – PRODUCTS

## 2.01 <u>MATERIALS</u>

A. Two-component Resin Binder. The resin binder shall be solvent-free, moistureinsensitive, two-component Reactive thermoset polymer binder conforming to the following requirements in Table 1:

Quality Characteristic	Test Method	Requirement
Viscosity (RV2 @ 20 RPM)	ASTM C881 / AASHTO M 235	1000 — 1500 cP
Flash Point	ASTM D3278	>250° F
VOC Content	ASTM D2369*	<10 g/L
Gel Time	C881 / AASHTO M 235	10 minutes minimum
Tensile Strength (7 days)	ASTM D638, Type I Specimen	1500 — 2500 psi
Tensile Elongation	ASTM D638	50% minimum at 7 days
Adhesion to Concrete	ASTM C1583 (ACI 503R)	250 psi or 100% substrate failure at 24 hrs
Water Absorption (24 hrs.)	ASTM D570	0.5% maximum
Type D Hardness	ASTM D2240	60 - 80
Thermal Compatibility	ASTM C884	PASS
Chloride Ion Permeability	AASHTO T277	<10.0 Coulombs
*Method E, 55-60 mil thickr	Iess	
Other Requirements:		
-No volatile chemical odors -No explosive catalysts or ing	redients allowed	

Table 1. Physical Requirements for HPC Resin Binder

-Material must be MADE IN THE USA

- B. Aggregates. The aggregate for the HPC shall conform to this section and conform to the following;
  - 1. Gradation, see Table 2.

Table 2 – Gradations

Percent
passing
100
98-100
77-100
60-82
34-56
5-25
0-15
0-7
0-3

- 2. The aggregate absorption shall not exceed 1.5% as determined by ASTM C566 or as otherwise approved by DOT-A.
- 3. The HPC aggregate temperature must be between 45 degrees F and 100 degrees F at the time of mixing.
- C. Topping Aggregate. Furnish aggregate meeting the requirements listed in Table 3 and Table 4 unless otherwise specified by DOT-A. Deliver the aggregate to the construction site in bags or super sacks labeled clearly for identification. Provide aggregate that is virgin, clean, dry, and free from foreign matter. A sample of the aggregate lot/batch shall be supplied upon request.

 Table 3 – Testing Requirements

<b>Test Data Description</b>	<b>Test Procedure</b>	Requirements
Gradation	ASTM C136	See Table 4
Moisture	ASTM C566	NCAT 0.5%
MOHS Hardness	MOHS Scale	>7.0
Micro-Deval	AASGTO T327	ODOT <10%
Absorption	ASTM C127	NCAT 2.0%

Table 4 – Surface Course Gradations

Topping Aggregate	
Sieve Size	Percent Passing
No. 4	100
No. 8	30-75
No. 16	0-5
# PART 3 - EXECUTION

# 3.01 <u>GENERAL</u>

- A. The HPC manufacturer shall have a representative on the job site for the startup of the project and at least the first two days of the HPC overlay installation. The HPC representative must report any work or materials that may result in non-compliant work to DOT-A, who may suspend any item of work that is suspect and does not meet the requirements of this specification. Resumption of work will occur only after the manufacturer's representative and DOT-A are satisfied that appropriate remedial action has been taken by the Contractor. No work shall proceed and materials will not be accepted if manufacturer's technical representative is not on site for the startup of the project.
- B. During surface preparation and application, precaution shall be taken to assure that traffic is protected from rebound, dust and construction activities. Dust in the air at night may, due to headlights and floodlights become an opaque vision barrier to motorists. The Contractor must not allow this to happen. Appropriate shielding shall be provided as required and as directed by DOT-A at no additional cost. The Contractor shall provide suitable protection as needed to protect all exposed areas not to receive HPC such as parapets, drains, etc. All damage and defacement resulting from the application shall be cleaned and, or repaired to DOT-A's satisfaction at no additional cost to the State.

#### 3.02 EQUIPMENT

- A. Use a continuous automated volumetric mixer. Mechanically operated mixers or hand mixing may only be used as a backup during repairs, or for applications less than a cubic yard. Follow manufacturer's recommendations. Contractor must submit all mechanical and hand application methods for approval by DOT-A prior to starting any work.
- B. When mixing and applying manually, mix only the amount of material that can be used within its pot life. Proportion each liquid component carefully into a clean pail or drum. Mix thoroughly for 3 minutes with a Jiffy mixer on low speed (400-600rpm). To prepare a repair mortar, slowly add 200-250 lbs. of the engineered aggregate to every 4-gal of mixed polymer. Mix only until all aggregate is wetted out. Manufacturer's representative shall be present during hand mixing operations.

#### 3.03 PRE-OPERATIONAL CONFERENCE

Schedule a meeting with the Contractor, and supplier's representatives involved in construction operation of the HPC and DOT-A, at a mutually agreed time, to discuss and verify the methods of accomplishing all phases of the HPC operations, contingency planning, and standards of workmanship for the completed items of work. Include the Contractor's superintendents, foremen, subcontractors, and supplier's technical representatives, and all key personnel involved with the HPC work as

attendees of the pre-operation conference. Do not begin placement of HPC before DOT-A accepts the pre-operational conference as completed.

# 3.04 SURFACE PREPARATION

- A. Use the procedures of ICRI (International Concrete Repair Institute) Guideline No. 03730 "Guide for Surface Preparation for the Repair of Deteriorated Concrete Resulting from Reinforcement Steel Corrosion", ICRI Guideline 03732 "Selecting and Specifying Concrete Surface, Surface Preparation for Seaters, Coatings and Polymer Overlays" sections of ACI 546.14 "Guide for Concrete Repair". The Contractor shall be responsible for any falsework requirements, debris, noise and pollution control on and below the repair area.
- B. The concrete surface shall be prepared by removing all material which may act as bond breaker between the existing surface and the HPC.
- C. The textured or scarified pavement preparation method shall remove all dirt, oil and other foreign materials, as well as any unsound concrete or laitance from the surface and edges against which new HPC is to be placed. The concrete surface may require retexturing where penetration of foreign material is evident. No contamination of the retextured or scarified concrete surface shall be permitted.
- D. The surface preparation shall meet the following requirements:
  - 1. New Pavement. On new concrete, the surface shall be given a very rough texture while still plastic by use of a wire comb or other approved texturing device which will produce a bondable surface acceptable to the DOT-A.
  - 2. Existing Pavement or Deck. On existing concrete, the surface shall be prepared by shot blasting or approved equal. Electric tools having an impact energy of 15 pounds or less may be used for areas where the Contractor is unable to shot blast upon approval of DOT-A. Produce a concrete substrate surface with a minimum roughness of approximately 1 inch amplitude or an ICRI concrete surface profile (CSP) of 7. The preparation method shall not produce a polished or slick surface.
  - Existing concrete containing previously placed repair materials. On existing concrete with previously placed unsound or magnesium phosphate repair products, these materials shall be removed prior to placing the HPC. Contractor shall follow Section 03730 – CONCRETE REPAIRS. The exposed concrete surface shall meet the requirements contained in Paragraph 3.04D.2 of this specification.
  - 4. Existing Concrete with Penetrating Sealer and aggregate topping. Remove all loose sand/aggregate. Clean surface to be free of any dust, dirt, oil, and debris prior to placing any HPC.
  - 5. Existing angle iron for expansion joints shall be cleaned and roughened per manufacturer's recommendations to ensure proper bond.

## 3.05 TRAFFIC AND EQUIPMENT CONTROL ON CONNECTING LINK

- A. Construction vehicles shall not exceed a 5-mph speed limit within 200 feet of the placement area in both directions during HPC placement and curing.
- B. Equipment, vehicles, and personnel, etc. shaft not contaminate the prepared deck surface.
- C. Equipment shall not be located on spans undergoing deck HPC unless approved by DOT-A.
- D. The Contractor shall not permit compressors or other equipment that produce vibrations on the span undergoing deck HPC work. Equipment shall not be located on spans undergoing deck HPC unless approved by DOT-A.
- E. Vehicular traffic shall not exceed a 35-mph speed limit on the bridge span during HPC placement and curing.
- F. The connecting link roadway shall not be used as a storage area for equipment or for stockpiling materials. Loads exceeding 125 psf or 4,000 lb concentrated load shall not be used on the connecting link unless approved by DOT-A.

# 3.06 PLACEMENT OF HPC

- A. After surface preparation concrete surfaces shall be structurally sound, clean, free of dirt, powdered concrete, loose mortar particles, paint, film, protective coatings, efflorescence, laitance, and other matter detrimental to proper adhesion of the new HPC. Contractor shall ensure proper cleanliness. Work surfaces must be free of ridges, fins or sharp projections. All reinforcing bars in the repair area shall be made free of all scale and loose rust by using either powered rotary wire bristle brush or abrasive blasting. Needle gunning may be used as preliminary step for removal of loose rust. Do not overly vibrate the reinforcing bars.
- B. Expansion joints, drains and grates shall be adequately isolated prior to placing the HPC as approved. HPC shall not affect the design and function of the expansion joints, drains, and grates. Do not place HPC within 6 feet of another area where the deck surface is being prepared.
- C. The HPC discharged from the mixer shall be uniform in composition and consistency. Mixing capability shall be such that initial and final finishing operations can proceed at a steady pace.
- D. The hybrid polymer resin binder in the HPC shall be 12-15 percent by weight of the dry aggregate. The contractor shall determine the exact percentage as approved by DOT-A.
- E. The HPC overlay shall be placed at a minimum thickness of 3/4 inch.
- F. Any falsework and formwork required shall be considered incidental to this work.

# 3.07 HOT WEATHER CONCRETING

Do not place concrete where ambient temperature is above 90 degrees F unless design mix and placement method conform to ACI 305 R-91 Hot Weather Concreting. When ambient temperature is above 90 degrees F, cool reinforcing steel, forms, and other surfaces to below 90 degrees F with approved methods by DOT-A before placing of concrete.

## 3.08 FINISHING HPC

- A. Finishing equipment shall be capable of consolidating the HPC and striking off the HPC to the final grade, thickness and cross-sections as shown in the contract documents.
- B. For repairs or placements of less than 2 cubic yards or areas inaccessible to selfpropelled finishing equipment, finish while the HPC is plastic and workable using a roller screed, air screed, or approved equal. Contractor has the option of using other methods of finishing HPC as long as the selected method leaves a uniform, level finish, free of slick or puddled resin areas. DOT-A must approve methods prior to constructing trial overlay. Finish the concrete to meet the requirements of the Paragraph 3.11 – Surface Testing.
- C. Topping aggregate. The Contractor shall use methods and equipment for broadcasting the surface topping aggregate on to the plastic, in-place HPC overlay material in accordance with the Manufacturer's recommendations. Aggregate topping shall be initiated immediately after final finishing operations of the HPC overlay and while the HPC surface is still wet to ensure proper embedment of the aggregate topping. Sweep, vacuum, or blow excess aggregate topping from surface after the HPC is tack-free.

#### 3.09 <u>CURING</u>

Traffic and construction equipment shall not be permitted on the HPC for at least 3 hours and until the HPC surface is tack free. Refer to HPC technical data sheet curing schedule for estimated cure times.

#### 3.10 CONSTRUCTION JOINTS

Use construction joints only with the acceptance of DOT-A and in accordance with the Contract documents.

## 3.11 SURFACE TESTING

- A. The finished HPC shall conform to the following requirements when tested by the Contractor in the presence of DOT-A within 14 days following the placement of concrete:
  - 1. Surface Flatness. The surface of the HPC shall not vary more than 1/8 inch under a 10-foot straightedge placed parallel to the traffic lanes.

2. Surface Condition. The surface of the HPC shall be sound and free from delaminations and cracks greater than 0.01 inch in width.

# 3.12 <u>TESTING HPC</u>

- A. Compressive strength shall be in accordance with ASTM C 579 Standard Test Methods for Compressive Strength of Chemical-Resistant Mortars, Grouts, Monolithic Surfacing's, and Polymer Concretes. The compressive strength shall be a minimum of 1500 psi at 24 hours and 3500 psi at 7 days.
- B. A minimum of three Pull-off tests at locations selected by DOT-A shall be performed for each LOT. Testing may be conducted on a separate concrete substrate representing the field conditions upon approval of DOT-A. Testing will be performed in accordance with ASTM C1583 and the manufacturer's recommendations. A passing test is the failure of the concrete substrate or bond strength above 250 psi at 24 hours. A passing substrate failure is when more than 50% of the substrate covers the specimen being tested. Fill core holes with HPC approved by DOT-A.

# 3.13 QUALITY CONTROL (QC)

- A. HPC Sampling and Testing. Perform QC concrete sampling and testing in accordance with the QC plan and following requirements:
  - 1. QC tests shall include temperature and preparing compressive strength cubes for testing at later dates. Perform HPC tests on the initial delivery for each mix each day. Ensure that QC technicians are certified, and the materials testing laboratory are accredited in the test method being used. Ensure all technicians that are performing the sampling and performing the testing are certified in the test placement operation at each placement site and the testing is done in an accredited material testing laboratory. A LOT shall be one day's production per mixing and placement method, once every maximum of 10 cubic yards of HPC. Cast a set of cubes representing the LOT from the sample of HPC.
  - 2. Maintain a logbook with records of relevant details of all tests. Provide a copy of new entries at the end of each work day. Make available for inspection by DOT-A during the normal working hours of construction. At the end of the project, deliver the original logbook to DOT-A. The original logbook will become property of DOT-A.

# 3.14 ACCEPTANCE AND CORRECTIVE ACTION

A. The completed HPC overlay surface with topping aggregate must be uniform in texture and appearance. HPC shall meet the compressive strength and bond strength requirements. Contractor shall repair or replace all HPC that does not meet the approval of DOT-A at no additional cost to the State. Repair methods shall be submitted to DOT-A for approval.

- B. Correct all defects in material and work, as directed, at no additional cost to DOT-A, according to the following:
  - 1. Remove and replace HPC overlay that DOT-A determines has any raveling, delamination, streaking, or bond test failure.
  - 2. Replace with acceptable HPC overlay at the contractor's expense. Ensure the minimum replacement is the full lane width and the length of the defect plus five lane feet on the up-station and down-station side of the edge of the defect area and as accepted by DOT-A. Replaced areas will be retested and evaluated for acceptance or further corrective action.
  - 3. Any roadway features disturbed by the work or the installer's operations shall be restored with the same materials and design as directed by DOT-A at no additional cost to the agency.

# 3.15 VERIFICATION AND INDEPENDENT ASSURANCE

DOT-A may perform Verification sampling and testing for its own use for internal assurance and acceptance testing. Furnish sufficient quantity of each mix for verification and independent assurance sampling and testing as required by DOT-A. When DOT-A performs verification, the Contractor may perform the same tests on the HPC at the same time.

#### PART 4 – MEASUREMENT AND PAYMENT

#### 4.01 BASIS OF MEASUREMENT AND PAYMENT

Hybrid Polymer Concrete work involving removal of the existing epoxy overlay, surface preparation, and regrading of the Ewa and Diamond Head Connecting Links with Hybrid Polymer Concrete, shall be paid for at the contract Lump Sum prices for the <u>Ewa Connecting Link Roadway Regrading</u>, and <u>Diamond Head Connecting Link</u> <u>Roadway Regrading</u>. The contract prices paid shall be full compensation for all labor, tools, equipment, and all other incidentals necessary to complete the work.

<u>Item No.</u> 03320.1	<u>Item</u> Ewa Connecting Link Roadway Regrading	<u>Unit</u> Lump Sum
03320.2	Diamond Head Connecting Link Roadway Regrading	Lump Sum

END OF SECTION

## SECTION 03700 - EMBEDDED GALVANIC ANODES

#### PART 1 – GENERAL

#### 1.01 RELATED DOCUMENTS

The General Provisions for Construction Projects (2016), Special Provisions, and General Requirements of the Specifications, apply to the work specified in this Section.

#### 1.02 SUMMARY

- A. This section includes anodes to be used at concrete spall repair locations.
- B. This Section includes furnishing all labor, tools, materials, equipment and services necessary to properly install embedded galvanic anodes.
- C. Embedded galvanic anodes are designed to provide localized corrosion protection. When placed at the appropriate spacing along the perimeter of concrete repairs or along the interface between new/existing concrete, the anodes mitigate corrosion and the formation of new corrosion sites in the adjacent existing concrete.
- D. Related sections
  - 1. SECTION 03730 CONCRETE REPAIRS

#### 1.03 <u>REFERENCES</u>

- A. ACI Repair Application Procedure (RAP) Bulletin 8 Installation of Embedded Galvanic Anodes
- B. ACI Guideline No. 222 Corrosion of Metals in Concrete
- C. ACI 562 Code Requirements for Evaluation, Repair and Rehabilitation of Concrete Buildings
- D. ASTM B418– Standard Specification for Cast and Wrought Galvanic Zinc Anodes
- E. ICRI Guideline 310.1R Guide for Surface Preparation for the Repair of Deteriorated Concrete resulting from Reinforcing Steel Corrosion
- F. ISO 12696 Cathodic Protection of Steel in Concrete

#### 1.04 <u>SUBMITTALS</u>

A. Submit in accordance with Section 01300 – SUBMITTALS.

# B. Product Data

1. Product data of all galvanic anodes used for concrete repairs. Product data shall also include test data, certificates, and manufacturer's instructions for installation.

# 1.05 MANUFACTURER EXTENDED LIMITED WARRANTY

- A. Contractor shall provide a Limited Warranty with a notarized signature from a corporate officer of the anode manufacturer.
- B. The Limited Warranty shall state the following:
  - 1. The published anode spacing guidelines for anode size and spacing are based on an estimated minimum 20-year anode service life in the environment it is installed.
  - 2. The galvanic anodes will remain electrochemically active and produce galvanic current in relation to the environment in which it is installed for a minimum of 5 years from the date of anode installation.
  - 3. The anode unit, including its constituents, does not include intentionally added substances that may cause corrosion to reinforcing steel over the life of the structure.
  - 4. The galvanic anodes meet all building and repair code requirements.

#### 1.06 QUALITY ASSURANCE

- A. The contractor will enlist and pay for a technical representative employed by the galvanic anode manufacturer to provide training and on-site technical assistance during the initial installation of the galvanic anodes. The technical representative shall be a NACE-qualified corrosion technician (NACE CP2 Cathodic Protection Technician or higher).
- B. The qualified corrosion technician shall have verifiable experience in the installation and testing of embedded galvanic protection systems for reinforced concrete structures.
- C. The contractor shall coordinate its work with the designated corrosion technician to allow for site support during project startup and initial anode installation. The corrosion technician shall provide contractor training and support for development of application procedures, verification of electrical continuity, and project documentation.

## PART 2 - PRODUCTS

## 2.01 EMBEDDED GALVANIC ANODES

- A. Embedded galvanic anodes shall be an alkali-activated using high pH, and embedded in concrete repairs. The anodes shall be pre-manufactured with zinc in compliance with ASTM B418 Type II cast around an integral, unspliced, uncoated, non-galvanized double loop steel tie wire and encased in a highly alkaline cementitious shell with a pH of 14 or greater. Galvanic anode shall have a minimum zinc mass of 160 grams per anode.
- B. The galvanic anodes shall be alkali-activated and shall contain no intentionally added chloride, bromide or other constituents that are corrosive to reinforcing steel as per ACI 562. The anode size and spacing shall deliver a minimum current density to the steel adjacent to the repair of 0.15mA/ft<sup>2</sup> for the 20-year design life taking into account an anode aging factor calculated from previous field installations and the in-service environment.
- C. Embedded galvanic anodes shall be one of the following:
  - 1. Galvashield XP4 as manufactured by Vector Corrosion Technologies.
  - 2. Galvashield XPX as manufactured by Vector Corrosion Technologies.
  - 3. Substitution Requests: Application for approved equals shall be requested in writing as noted in the Notice to Bidders. Application for galvanic anode approved equals shall include verification of the following information:
    - a. The zinc anode is alkali-activated with an alkaline cementitious shell with a pH of 14 or greater.
    - b. The galvanic anode shall contain no intentionally added constituents which are corrosive to reinforcing steel, e.g. chloride, bromide, etc.
    - c. The anode manufacturer shall provide documented performance data from field installations showing that the anodes have remained active for a minimum of 20 years in service and meet the ISO 12696 Cathodic Prevention Standard.
    - d. Project design calculations showing that the minimum specified current density to reinforcing steel adjacent to the repair will be achieved 20 years after installation. The design calculations shall take into consideration expected in-service temperature and humidity conditions in the environment in which the anodes are to be placed in service and use a galvanic anode aging factor derived from field monitoring for at least one anode aging step (time until the current halves).
    - e. The galvanic anode shall have been used in a minimum of ten projects of similar size and application.

- f. The galvanic anode units shall be supplied with solid zinc core (ASTM B418) cast around an uncoated, non-galvanized, non-spliced steel tie wire for wrapping around the reinforcing steel and twisting to provide a durable steel-to-steel connection between the tie wire and the reinforcing steel.
- g. The anode manufacturer shall provide third party product evaluation, such as from Concrete Innovations Appraisal Service, BBA, etc.

#### 2.02 REPAIR MATERIALS

Follow specification Section 03730 - CONCRETE REPAIRS.

#### 2.03 DELIVERY, STORAGE AND HANDLING

Deliver, store, and handle all materials in accordance with manufacturer's instructions. Anode units shall be stored in dry conditions in the original unopened containers in a manner to avoid exposure to extremes of temperature and humidity.

#### PART 3 - EXECUTION

#### 3.01 CONCRETE REMOVAL AND REPAIR

Follow specification Section 03730 – CONCRETE REPAIRS.

#### 3.02 GALVANIC ANODE INSTALLATION

- A. Install anode units and repair material immediately following preparation and cleaning of the steel reinforcement.
- B. Place the galvanic anodes as close as possible to the interface with the parent concrete maximum 4 in. while still providing sufficient clearance between anodes and substrate to allow the repair material to fully encase the anode.
  - 1. Place the anode such that the preformed grooved edges fit along a single bar or at the intersection between two bars and secure to each clean bar.
  - 2. If less than 1 in. of concrete cover is expected, place anode beneath the bar and secure to clean reinforcing steel or increase the size of the repair cavity to accommodate the anodes.
- C. Wrap the tie wires around the clean reinforcing steel at least one full turn in opposite directions and bring the two free ends together and twist tight to create a secure electrical connection that will not allow anode movement during concrete placement.
- D. Electrical Continuity
  - 1. Confirm electrical connection between anode tie wire and reinforcing steel by measuring DC resistance (ohm  $\Omega$ ) or DC potential (mV) with a multi-

meter. Electrical connection is acceptable if the DC resistance measured with the multi-meter is 1  $\Omega$  or less or the DC potential is 1 mV or less.

2. Confirm electrical continuity of the exposed reinforcing steel within the repair area. Electrical continuity shall be established by tying discontinuous steel to continuous steel using steel tie wire when necessary. Electrical continuity within the repair area is acceptable if the DC resistance measured with multi-meter is 1  $\Omega$  or less or the potential is 1 mV or less.

## 3.03 CONCRETE OR MORTAR REPLACEMENT

- A. If the repair procedures require the concrete surface to be saturated with water, do not damage the anode nor allow the anode units to be soaked for greater than 20 minutes.
- B. Complete the repair with the repair material, taking care not to damage, loosen or leave voids around the anode.

# PART 4 – MEASUREMENT AND PAYMENT

# 4.01 BASIS OF MEASUREMENT AND PAYMENT

Work under this section will not be measured nor paid for separately, but shall be considered incidental to and included in the prices bid for the various items of work in this project.

# END OF SECTION

# **DIVISION 05 – METALS**

# SECTION 05120 - STRUCTURAL STEEL

#### PART 1 – GENERAL

#### 1.01 RELATED DOCUMENTS

The General Provisions for Construction Projects (2016), Special Provisions, and General Requirements of the Specifications, apply to the work specified in this Section.

#### 1.02 <u>SUMMARY</u>

- A. Section Includes:
  - 1. Structural steel for guardrails at the Ewa Connecting Link and Diamond Head Connecting Link and Ewa Concourse turn around.
  - 2. Railing extension for connecting link planter modifications.
- B. Related Sections:
  - 1. Section 05519 POST-INSTALLED CONCRETE ANCHORS

#### 1.03 <u>DEFINITIONS</u>

Structural Steel: Elements of structural-steel frame, as classified by AISC 303, "Code of Standard Practice for Steel Buildings and Bridges."

#### 1.04 PERFORMANCE REQUIREMENTS

- A. Traffic railings on the Ewa and Diamond Head Connecting Links shall conform to the Manual for Assessing Safety Hardware, test level of the following:
  - 1. TL-1 (Test Level One) For low-speed areas with design speed of 30 mph or less.

#### 1.05 <u>SUBMITTALS</u>

- A. Submit in accordance with Section 01300 SUBMITTALS.
- B. Product Data: For each type of product indicated.
- C. Shop Drawings: Show fabrication of structural-steel components.
  - 1. Include details of cuts, connections, splices, camber, holes, and other pertinent data.
  - 2. Include embedment drawings.

- 3. Indicate welds by standard AWS symbols, distinguishing between shop and field welds, and show size, length, and type of each weld. Show backing bars that are to be removed and supplemental fillet welds where backing bars are to remain.
- 4. Indicate type, size, and length of bolts.
- 5. For structural-steel connections indicated to comply with design loads, include structural design data signed and sealed by a licensed engineer in the state of Hawaii responsible for their preparation.
- D. Welding Procedure Specifications (WPSs) and Procedure Qualification Records (PQRs): Provide according to AWS D1.1/D1.1M, "Structural Welding Code Steel," for each welded joint whether prequalified or qualified by testing, including the following:
  - 1. Power source (constant current or constant voltage).
  - 2. Electrode manufacturer and trade name, for demand critical welds.
- E. Qualification Data: For qualified fabricator, and testing agency.
- F. Welding certificates.
- G. Paint Compatibility Certificates: From manufacturers of topcoats applied over shop primers, certifying that shop primers are compatible with topcoats.
- H. Mill test reports for structural steel, including chemical and physical properties.
- I. Product Test Reports: For the following:
  - 1. Bolts, nuts, and washers including mechanical properties and chemical analysis.
- J. Source quality-control reports.

# 1.06 QUALITY CONTROL

- A. Fabricator Qualifications: A qualified fabricator that participates in the AISC Quality Certification Program and is designated an AISC-Certified Plant, Category STD. If an AISC-Certified Plant is not used then special inspection of the fabrication shall be provided in accordance with the Source Quality Control section. Contractor shall pay for fabrication special inspection.
- B. Installer Qualifications: A qualified installer who participates in the AISC Quality Certification Program and is designated an AISC-Certified Erector, Category ACSE.
- C. Welding Qualifications: Qualify procedures and personnel according to AWS D1.1/D1.1M, "Structural Welding Code Steel."

1. Welders and welding operators performing work on bottom-flange, demandcritical welds shall pass the supplemental welder qualification testing, as required by AWS D1.8. FCAW-S and FCAW-G shall be considered separate processes for welding personnel qualification.

# 1.07 DELIVERY, STORAGE, AND HANDLING

- A. Store materials to permit easy access for inspection and identification. Keep steel members off ground and spaced by using pallets, dunnage, or other supports and spacers. Protect steel members and packaged materials from corrosion and deterioration.
  - 1. Do not store materials on structure in a manner that might cause distortion, damage, or overload to members or supporting structures. Repair or replace damaged materials or structures as directed.
- B. Store fasteners in a protected place in sealed containers with manufacturer's labels intact.
  - 1. Fasteners may be repackaged provided Owner's testing and inspecting agency observes repackaging and seals containers.
  - 2. Clean and relubricate bolts and nuts that become dry or rusty before use.
  - 3. Comply with manufacturers' written recommendations for cleaning and lubricating ASTM F 1852 fasteners and for retesting fasteners after lubrication.

#### 1.08 <u>COORDINATION</u>

- A. Coordinate selection of shop primers with topcoats to be applied over them. Comply with paint and coating manufacturers' recommendations to ensure that shop primers and topcoats are compatible with one another.
- B. Coordinate installation of anchorage items to be embedded in or attached to other construction without delaying the Work. Provide setting diagrams, sheet metal templates, instructions, and directions for installation.

# PART 2 – PRODUCTS

#### 2.01 STRUCTURAL-STEEL MATERIALS

- A. Plate: ASTM A 36
- B. Guardrail W-Beam: AASHTO M 180-18
- C. Welding Electrodes: Comply with AWS requirements.

#### 2.02 BOLTS, CONNECTORS, AND ANCHORS

A. Threaded rods shall follow requirements of Section 05519 – POST-INSTALLED CONCRETE ANCHORS

#### 2.03 <u>GROUT</u>

A. Nonmetallic, Shrinkage-Resistant Grout: ASTM C 1107, factory-packaged, nonmetallic aggregate grout, noncorrosive and nonstaining, mixed with water to consistency suitable for application and a 30-minute working time.

#### 2.04 FABRICATION

- A. Structural Steel: Fabricate and assemble in shop to greatest extent possible. Fabricate according to AISC's "Code of Standard Practice for Steel Buildings and Bridges" and AISC 360.
  - 1. Mark and match-mark materials for field assembly.
  - 2. Complete structural-steel assemblies, including welding of units, before starting shop-priming operations.
- B. Thermal Cutting: Perform thermal cutting by machine to greatest extent possible.
  - 1. Plane thermally cut edges to be welded to comply with requirements in AWS D1.1/D1.1M.
- C. Bolt Holes: Cut, drill, or punch standard bolt holes perpendicular to metal surfaces.
- D. Finishing: Accurately finish ends of columns and other members transmitting bearing loads.
- E. Holes: Provide holes required for securing other work to structural steel and for other work to pass through steel framing members.
  - 1. Cut, drill, or punch holes perpendicular to steel surfaces. Do not thermally cut bolt holes or enlarge holes by burning.
  - 2. Baseplate Holes: Cut, drill, mechanically thermal cut, or punch holes perpendicular to steel surfaces.

#### 2.05 SHOP CONNECTIONS

A. Weld Connections: Comply with AWS D1.1/D1.1M and AWS D1.8 for tolerances, appearances, welding procedure specifications, weld quality, and methods used in correcting welding work.

#### 2.06 <u>GALVANIZING</u>

- A. Hot-Dip Galvanized Finish: Apply zinc coating by the hot-dip process to structural steel according to ASTM A 123.
  - 1. Fill vent and drain holes that will be exposed in the finished Work unless they will function as weep holes, by plugging with zinc solder and filing off smooth.

## 2.07 SOURCE QUALITY CONTROL

- A. Testing Agency: DOT-A will engage an independent testing and inspecting agency to perform shop tests and inspections and prepare test reports.
  - 1. Provide testing agency with access to places where structural-steel work is being fabricated or produced to perform tests and inspections.
- B. Correct deficiencies in Work that test reports and inspections indicate does not comply with the Contract Documents.
- C. Welded Connections: In addition to visual inspection, shop-welded connections will be tested and inspected according to AWS D1.1/D1.1M and the following inspection procedures, at testing agency's option:
  - 1. Liquid Penetrant Inspection: ASTM E 165.
  - 2. Magnetic Particle Inspection: ASTM E 709; performed on root pass and on finished weld. Cracks or zones of incomplete fusion or penetration will not be accepted.
  - 3. Ultrasonic Inspection: ASTM E 164.
  - 4. Radiographic Inspection: ASTM E 94.

# PART 3 – EXECUTION

#### 3.01 EXAMINATION

- A. Verify, with Contractor's steel Erector present, elevations of concrete- and masonry-bearing surfaces and locations of anchor rods, bearing plates, and other embedments for compliance with requirements.
  - 1. Prepare a certified survey of bearing surfaces, anchor rods, bearing plates, and other embedments showing dimensions, locations, angles, and elevations.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

## 3.02 PREPARATION

- A. Provide temporary shores, guys, braces, and other supports during erection to keep structural steel secure, plumb, and in alignment against temporary construction loads and loads equal in intensity to design loads. Remove temporary supports when permanent structural steel, connections, and bracing are in place unless otherwise indicated.
  - 1. Do not remove temporary shoring supporting composite deck construction until cast-in-place concrete has attained its design compressive strength.

# 3.03 ERECTION

- A. Set structural steel accurately in locations and to elevations indicated and according to AISC 303 and AISC 360.
- B. Base Plates: Clean concrete- and masonry-bearing surfaces of bond-reducing materials, and roughen surfaces prior to setting plates. Clean bottom surface of plates.
  - 1. Set plates for structural members on wedges, shims, or setting nuts as required.
  - 2. Weld plate washers to top of baseplate.
  - 3. Snug-tighten anchor rods after supported members have been positioned and plumbed. Do not remove wedges or shims but, if protruding, cut off flush with edge of plate before packing with grout.
  - 4. Promptly pack grout solidly between bearing surfaces and plates so no voids remain. Neatly finish exposed surfaces; protect grout and allow to cure. Comply with manufacturer's written installation instructions for shrinkage-resistant grouts.
- C. Maintain erection tolerances of structural steel within AISC's "Code of Standard Practice for Steel Buildings and Bridges."
- D. Align and adjust various members that form part of complete frame or structure before permanently fastening. Before assembly, clean bearing surfaces and other surfaces that will be in permanent contact with members. Perform necessary adjustments to compensate for discrepancies in elevations and alignment.
  - 1. Level and plumb individual members of structure.
- E. Splice members only where indicated.
- F. Do not use thermal cutting during erection unless approved by DOT-A. Finish thermally cut sections within smoothness limits in AWS D1.1/D1.1M.

G. Do not enlarge unfair holes in members by burning or using drift pins. Ream holes that must be enlarged to admit bolts.

## 3.04 FIELD QUALITY CONTROL

- A. Bolted Connections: Bolted connections will be tested following requirements of Section 05519 POST-INSTALLED CONCRETE ANCHORS.
- B. Correct deficiencies in Work that test reports and inspections indicate does not comply with the Contract Documents.

#### 3.05 REPAIRS AND PROTECTION

Galvanized Surfaces: Clean areas where galvanizing is damaged or missing and repair galvanizing to comply with ASTM A780/A780M.

#### PART 4 – MEASUREMENT AND PAYMENT

#### 4.01 BASIS OF MEASUREMENT AND PAYMENT

Guardrail installation work, where indicated on the construction document drawings, shall be paid for at the contract Lump Sum prices for the <u>Ewa Concourse Turn Around</u> <u>Guardrail</u>, <u>Ewa Connecting Link Guardrail</u>, and <u>Diamond Head Connecting Link</u> <u>Guardrails</u>. The contract prices paid shall be full compensation for all labor tools, equipment, and all other incidentals necessary to complete the work.

<u>Item No.</u> 05120.1	<u>Item</u> Ewa Concourse 2 <sup>nd</sup> Level Turn Around Guardrail	<u>Unit</u> Lump Sum
05120.2	Ewa Connecting Link Guardrail	Lump Sum
05120.3	Diamond Head Connecting Link Guardrails	Lump Sum

All other structural steel specified in this section shall be considered incidental to and included in the bid prices for the various items of work in this project.

# END OF SECTION

# SECTION 07680 - EPOXY SURFACE TREATMENT

## <u> PART 1 – GENERAL</u>

## 1.01 RELATED DOCUMENTS

A. The General Provisions of the contract, including the General Provisions for Construction Projects (2016), Special Provisions, and General Requirements of the Specifications, apply to the work specified in this Section.

#### 1.02 SUMMARY

- A. Section includes work for applying surface treatment by spreading resin binder and aggregate on hybrid polymer concrete surfaces. The Ewa and Diamond Head connecting link roadways shall receive Epoxy Surface Treatment after new hybrid polymer concrete has been placed to match existing Ewa and Diamond Head Concourse 2<sup>nd</sup> Level roadway finish.
- B. Related Sections
  - 1. Section 03300 STRUCTURAL CONCRETE for new concrete shown on plans for connecting link modifications.
  - 2. Section 03320 HYBRID POLYMER CONCRETE (HPC) for new roadway surfacing receiving epoxy surface treatment.
  - 3. Section 03730 CONCRETE REPAIR for defective concrete repairs at the connecting link roadways.

#### 1.03 SUBMITTALS

- A. Epoxy Surface Treatment Submittal Requirements: Prior to the start of this work, provide six copies of the following submittals in one complete set for acceptance. Indicate clearly the name of the product and its manufacturer on pertinent submittals. No work that is related to these submittals shall be performed until written acceptance has been received.
  - 1. The name and contact information of the resin binder and aggregate manufacturer's technical representative and other key personnel.
    - a. Resin binder shall be CE330 Epoxy Binder as produced by FasTrac Construction Products to ensure final product uniformity with existing epoxy surface treatment at the Ewa and Diamond Head Concourse roadways completed in Phase 1, under Airport project AO1043-32 Ewa and DH Concourse Roadway Improvements.
  - 2. A list of projects with owner' contact information on which a minimum of 10,000 square yards of surfacing treatment has been installed within the past five years.

- a. List the following for each project submitted:
  - 1) Project Name
  - 2) Locations (state, routes, and Identifiers)
  - 3) Scope of work
  - 4) Products used
  - 5) Approximate date of the system was completed, accepted, and opened to traffic
  - b. If the minimum installation requirement is not met, manufacturer's representative must be present at all times during installation to ensure proper workmanship. In lieu of list of projects, submit the following information of the manufacturer's representative who will be on site during installation:
    - 1) First and last name
    - 2) Company
    - 3) Email address
    - 4) Phone number.
- B. Crack Penetrating Sealer Submittal Requirements. Prior to the start of this work, provide six copies of the name and contact information of the resin binder and aggregate manufacturer's technical representative and other key personnel in one complete set for acceptance. Indicate clearly the name of the product and its manufacturer on pertinent submittals. No work that is related to these submittals shall be performed until written acceptance has been received.
- C. Quality Control (QC) Plan: Submit a QC Plan in accordance with Paragraph 1.04A.
- D. Work Plan: Submit a Work Plan in accordance with Paragraph 1.04B.

#### 1.04 QUALITY CONTROL

A. Submit a QC Plan to DOT-A for acceptance a minimum of 30 days prior to the installation and the Just-In-Time-Training (JITT). Resubmittal of the document will require another 30 days for each resubmittal. Discuss the QC Plan requirements at the JITT, pre-construction, pre-installation, and progress meetings. The JITT shall not be held unless the QC Plan is accepted 30 days before it is held. Work shall not start on the surface treatment including the test strip until the JITT has been completed, QC Plan, and the Work Plan have both been accepted. The QC Plan shall contain at a minimum the following information:

- 1. Names and contact information for key personnel, project superintendent, and lead technician responsible for field quality control sampling and testing.
- 2. Location of resin binder production plants and batch production records.
- 3. Location of aggregate production plants and batch production records.
- 4. Proposed method of installation at each location identified to receive surfacing.
- 5. Resin binder and aggregate manufacturer's material information including:
  - a. Recommended placement instructions
  - b. Mixing Instructions
  - c. Recommended installation temperatures
  - d. Anticipated gel and cure times at various expected ambient temperatures for all sites.
  - e. Methods of safe storage and handling
  - f. Applicable installation and material limitations
  - g. Disposable methods for excess missed resin binder and associated components
  - h. Production plant location contact information for the quality control/quality assurance (OC/OQ) personnel where additional information can be requested concerning record keeping methods, inspection methods, equipment calibration records, and accreditation certificates.
- 6. The QC Plan shall designate a QC Manager, who shall be present at the jobsite and have a full authority to request any action necessary for the operation of the QC Plan providing it complies with the contract documents and acceptance of DOT-A.
  - a. The QC Manager shall be certified in all test methods used and be responsible for the required field quality control in sampling and testing in conformance with the accepted quality control plan, test methods, and contract documents. All sampling shall be performed in the presence of and with no direction by DOT-A. DOT-A is not responsible or shall be regarded as part of the contractor's QC team. It is the responsibility of the contractor and the QC Manager to ensure that the test procedure being used is compliant with the test method standard. Inspections are performed for the exclusive benefit of the state. The inspection of or the failure to inspect the work shall not relieve the Contractor of obligations to fulfill the contract as prescribed, to correct

defective work, and to replace unsuitable or rejected materials regardless of whether payment for such work has been made. DOT-A has the right to reject the test if it feels that it is non-compliant, e.g., the technician that performed the test if not certified or the material testing laboratory accredited to the tests performed. DOT-A is under no obligation to correct or direct non-compliant procedures if observed. Maintain and have available upon request, the current test standard methods documentation being used, referenced documents, complete records of sampling, testing, corrective actions, and quality control inspection results.

- b. A technical representative from the resin binder manufacturer shall be present at the JITT, Test Application, e.g., deck repair, surface preparation, installation and acceptance of the surface treatment, and at the construction site for the first two days of the surface treatment.
- B. Work Plan: Submit a Work Plan for both the epoxy surface treatment and crack penetrating sealer to DOT-A for approval 14 days prior to the installation. Discuss the Work Plan requirements at the pre-construction, pre-installation, and progress meetings. The Work Plan shall contain at a minimum the following information:
  - 1. Method of surface preparation and required surface condition for adequate bonding.
  - 2. Method of crack repair/defective concrete repair of existing concrete deck.
  - 3. Construction during inclement weather, Plan for the occurrence of rain, moisture and temperature requirements for the materials being used.
  - 4. Mixing ratio and application rates for resin binder and aggregate.
  - 5. Application Method
  - 6. Curing time and requirements for opening to traffic.
  - 7. Corrective actions that will be taken for unsatisfactory installation practices.

# 1.05 DELIVERY, STORAGE AND HANDLING

- A. Storage and Handling. All materials shall be delivered in their original containers bearing the manufacturer's label, specifying date of manufacturing, batch number, trade name, and quantity. Each shipment of resin binder shall be accompanied by a Safety Data Sheet (SDS).
- B. The material shall be stored to prevent damage by the elements and to ensure the preservation of their quality and fitness for the work. The storage space shall be kept clean and dry.
- C. Stored materials shall be inspected prior to their use, and shall meet the requirements of this Specification at the time of use.

- D. Any material which is rejected because of failure to meet the required tests or that has been damaged so as to cause rejection shall be immediately replaced at no additional expense to the State.
- E. Sufficient material to perform the entire penetrating sealer application shall be in storage at the site prior to any field application, so that there shall be no delay in procuring the material for each day's application.
- F. The contractor shall arrange to have the material supplier furnish technical service related to application of material and health and safety training for personnel who are to handle the penetrating sealer.

# 1.06 <u>WARRANTY</u>

A. Warranty: Provide manufacturer's standard warranty. Materials warranty shall be for a minimum of one year starting at the date of Substantial Completion.

# PART 2 - PRODUCTS

# 2.01 PENETRATING CRACK SEALER

- A. Epoxy Sealer shall be a solvent-free 0-VOC, two-component, 100% solids, moisture insensitive, low viscosity, low modulus epoxy flood-coat penetrating sealer. Epoxy shall meet the current ASTM C881, Type III, Grade 1, Classes B & C specifications and the requirements listed in
- B. Table 1 below.

Property	Requirement
Viscosity (ASTM D2393)	<50 cps
Gel Time (60 g mass)	45 minutes
Tack Free Time (73° F or 23° C)	3 to 5 hours
Tensile Properties (ASTM D638), 7 day	Tensile Strength 1,800 psi
cure	Tensile Elongation: 75%
Bond Strength (ASTM C882)	2 day cure: 1,500 psi
	14 day cure: 2,000 psi
Compressive Properties (ASTM D695)	7 day cure Compressive Strength:
	3,000 psi
	Compressive Modulus: 90,000 psi
Bond Strength (ASTM C1583/ACI 503R)	300 psi
Shrinkage on Cure (ASTM D2566)	0.002
Thermal Compatibility (ASTM C884)	Pass
Water Absorption (ASTM D570)	0.2% (24 hr)
Chloride Ion Permeability (ASTM C1202)	0.0 coulomb

#### Table 1. Penetrating Crack Sealer Requirements

C. Topping Aggregate. Furnish aggregate meeting the requirements listed in tables below unless otherwise specified by DOT-A. Deliver the aggregate to the construction site in bags or super sacks labeled clearly for identification. Provide aggregate that is virgin, clean, dry, and free from foreign matter. Ensure aggregate

meets the requirements in Table 2 and Table 3. Ensure aggregate is angular, consists of natural silica sand, basalt, or other nonfriable aggregate, and contains less than 0.2 percent moisture when tested in accordance with ASTM C 566. A sample of the aggregate lot/batch shall be supplied upon request.

Property	Test Method	Testing Lab. Results
Gradation	ASTM C136	See Table 3
Moisture	ASTM C566	NCAT 0.0%
MOHS Hardness	MOHS Scale	7+
Aggregate Soundness	AASHTO T104	NCAT 0.2%
LA Abrasion	AASHTO T96	NCAT 14.6%
Micro-Deval	AASHTO T327	ODOT 2.6%
Absorption	ASTM C127	NCAT 1.0%
Fractured Faces	ASTM D5821	NCAT 100%

#### Table 2. Topping Aggregate Requirements

#### Table 3. Aggregate Gradation Requirements

Sieve size	Percentage Passing
No. 10	100
No. 12	99
No. 14	98
No. 16	84
No. 20	37
No. 30	9
No. 40	2
No. 50	0.5
No. 60	0.1
No. 100	0.1
Pan	0

#### 2.02 EPOXY SURFACE TREATMENT RESIN BINDER SYSTEM

- A. Provide a resin binder system meeting the requirements of Table 1 below, recommended by the manufacturer as suitable for use on the intended pavement surface. A sample of the resin binder system for reach lot/batch shall be supplied upon request.
  - 1. Note: All materials shall be virgin; free of secondary components, volatile solvents, and external/conventional flexibilizers. Component batches shall be interchangeable.

Property	Requirement	Test Method
Viscosity	10-30 Poise	ASTM D2556 <sup>*1</sup>
Cure Rate (Set to Touch)	3 hours max	ASTM D1640 <sup>*2</sup>
Shore D Durometer Hardness	60-80	ASTM D2240
Compressive Modulus	130,000 psi maximum	ASTM D695
Ultimate Tensile Strength		ASTM D638 <sup>*3</sup>
Elongation at Break Point	40%-70%	ASTM D638 <sup>*3</sup>
Adhesive Strength (Bond to Concrete at 24 hrs)	250 psi min. or 100% concrete substrate failure	ASTM C1583 <sup>*4</sup>
Thermal Compatibility	PASS	ASTM C88
Water Absorption	1% max	ASTM D570

Table 4. Two Component Resin Requirements

\*ASTM Material Properties Test Method Table Notes:

1. Mix test sample for 2 minutes. Test at a temperature of  $73 \pm 1^{\circ}$ F.

2. Prepare specimens of 50-55 wet mil thickness.

3. Prepare Type I specimens.

- 4. Follow manufacturer's recommendation for curing before testing.
- 2. A test report, dated within 90 days of contract award, consisting of a certification by an AASHTO recourse/CCRL accredited independent testing laboratory showing compliance with the requirements of this specification and material properties. Include the accredited laboratory's test results with the certification.
- 3. Product data sheets and specifications from the manufacturer showing instructions, application recommendations and methods, product properties.

WORKING TIME		
Surface Temperature (°F)	Maximum Working Time* (minutes)	
50	45	
60	35	
70	20	
80	11	
90	9	
100	7	
110	6	
120	4	
*Include mix time, resin binder and aggregate		

Table 5. Epoxy Working Time

placement.

Note: Consult manufacturer for surface temperatures exceeding 120°F

#### 2.03 EPOXY SURFACE TREATMENT AGGREGATE

Furnish aggregate meeting the requirements listed in the tables below unless Α. otherwise specified by DOT-A. Deliver the aggregate to the construction site in bags or super sacks labeled clearly for identification. Provide aggregate that is virgin, clean, dry, and free from foreign matter. A sample of the aggregate lot/batch shall be supplied upon request.

Test Data Description	Test Procedure	Testing Lab. Requirements
Gradation	ASTM C136	See Table 4
Moisture	ASTM C566	NCAT 0.0%
Micro-Deval	AASHTO T327	ODOT 2.6%
Absorption	ASTM C127	NCAT 1.0%

#### Table 6. Aggregate Requirements

#### Table 7 Addedate Gradation

Sieve size	Percentage passing
No. 4	100
No. 8	30-75
No. 16	0-5

# PART 3 - EXECUTION

## 3.01 CRACK PENETRATING SEALER EQUIPMENT

- A. For the epoxy healer sealer, provide a distribution system or distributor capable of accurately blending the epoxy resin and hardening agent, and uniformly and accurately applying the epoxy materials at the specified rate to the bridge deck in such a manner as to cover 100 percent of the work area, including 1 inch of the vertical face of curb/barrier. Provide a fine aggregate spreader capable of uniformly and accurately applying dry aggregate to cover 100 percent of the epoxy material. Provide a self-propelled vacuum truck.
  - 1. For hand applications, provide calibrated containers, a Jiffy® type mixer for mixing and stiff bristle brooms suitable for applying the epoxy. Aggregate shall be hand broadcast to refusal onto the wet epoxy.
  - 2. For mechanical applications, provide meter-mixing equipment that will automatically and accurately proportion the components in accordance with the manufacturer's recommendations and will mix and continuously place the penetrating sealer. Ensure the operation proceeds in such a manner that will not allow the mixed materials to segregate, dry, be exposed or otherwise harden in such a way as to impair the retention and bonding of broadcasted aggregate.
  - 3. Coverage is approximate depending on surface profile and volume of cracks.

#### 3.02 CRACK PENETRATING SEALER SURFACE PREPARATION

- A. Surface preparation shall conform to the following requirements:
  - 1. Sweep the surface clean.
  - 2. Blow the surface clean to remove dust and laitance.
  - 3. Clean cracks greater than 0.25-inch-wide and pretreat per resin binder manufacturer's recommendations.
  - 4. All laitance, contaminants, paint, markers and foreign material, must be removed from the surface.
  - 5. If the prepared surface is contaminated prior to installing the surface treatment, abrasive blast, sweep and blow the surface clean.
  - 6. Placement.

#### 3.03 CRACK PENETRATING SEALER MIXING

A. Precondition material to 65°-85°F (18°-29°C) before using. Measure and mix one part by volume of Part A with one part by volume of Part B for three minutes with

a low speed (< 450 rpm) drill using a jiffy mixer or paddle. Mix only as much material as can be used within the pot life. Air, material, and surface temperature must be 50°F (10°C) and rising prior to mixing or installation. For mechanical applications consult material manufacturer for proper mixing and dispensing equipment.

# 3.04 CRACK PENETRATING SEALER APPLICATION

- A. Ensure handling and mixing of the epoxy resin and hardening agent is performed in a safe manner to achieve the desired results in accordance with the manufacturer's recommendations or as directed by the Engineer. Do not place penetrating sealer when the concrete surface is less than 50 degrees Fahrenheit (F) or ambient air temperature is forecast to fall below 50 degrees F within 8 hours of application. Do not place healer sealer materials if weather or surface conditions are such that the material cannot be properly handled, placed, and cured according to the manufacturer's requirements and the specified requirements for traffic control.
- B. At the start of each shift and prior to application of the Penetrating Sealer and following the surface prep, all expansion joints, drains and grates shall be adequately isolated utilizing construction paper to prevent any penetrating sealer from entering drainage and joint systems. The construction paper will then be removed prior to full cure of the epoxy.
- C. The Penetrating Sealer will be applied utilizing an epoxy pump system specially designed for epoxies. The epoxy pump is mounted on the rear of a truck which also houses two 250 Gallon totes of material. The totes to be used will be between 65°- 85°F. The pump is equipped with a detailed digital read out displaying the gallons per minute and total volume of both part A and B. It also gives the total volume of material pumped. This allows for easy verification of the correct amount of material applied to the surface and at the correct ratio of 1:1.
- D. The mixed epoxy will be dispensed onto the concourse deck surface, this will be followed by a ground laborer(s) using a saw-toothed/notched squeegee to spread the sealer meeting the 25-30 mill wet thickness. Any variation in the surface (i.e., cracks) surface conditions will result in penetrating sealer being spread until refusal.
- E. Following 5 minutes of the material being worked into the surface, the topping aggregate / sand application will start. Adjacent to the sealer application will be a truck with a bulk sand pot with the topping sand. Special care will be given as to not direct the hose directly to the surface disrupting or causing the epoxy material to disperse. Special care will also be taken to minimize dust during the process. DOT-A will approve the method. The topping sand will be applied to the point of refusal.
- F. Hand broadcasting of the topping sand is allowed provided the sand can be applied over the wet resin within 10 minutes of the resin having been placed. Spike shoes will need to be worn by any person who may come in contact with wet placed sealer without aggregate.

- G. To ensure no wet spots exist, a final walk of the surface will be done immediately behind the sand application to ensure no wet areas of epoxy shining through are present. In the case wet areas are visible, additional sand will be applied to these areas manually to the point of refusal. Once all material has cured and inspected, a full sweep/vacuum will commence prior to opening to traffic.
  - H. Ensure application of aggregate is of sufficient quantity so the entire surface is covered in excess. Ensure no bleed through or wet spots are visible in the overlay. Remove and replace any areas with wet spots or where epoxy has bled through. Minimize all foot traffic on the uncured epoxy and ensure any foot traffic will only be done with steel spiked shoes approved by the Engineer. Do not allow traffic or equipment on the penetrating sealer surface during the curing period. Remove all loose aggregate after the curing period with a vacuum or broom without tearing or damaging the surface. Ensure all expansion joints are free of loose aggregate, epoxy and other debris.

# 3.05 CRACK PENETRATING SEALER CURING

A. Refer to manufacturer's curing schedule for estimated cure times.

# 3.06 EPOXY SURFACE PROTECTION PREPARATION

- A. Surface Preparation for concrete decks with a crack penetrating sealer and aggregate topping overlay shall conform to the following requirements:
  - 1. Sweep the surface clean with a vacuum sweeper.
  - 2. Below the surface clean using oil-free air to remove dust, laitance, and other deleterious material that may affect the bonding of the surface treatment from the surface.
  - 3. All laitance, contaminants, paint, markers, and foreign material that may inhibit the bond of the surface treatment, shall be removed from the surface before sweeping with vacuum sweeper.
  - 4. If the prepared surface is contaminated prior to installing the surface treatment, abrasive blast, sweep and blow the surface clean.
- B. Surface Preparation for on new concrete shall be abrasive blast, sweep and blow the surface clean. Abrasive blast shall create a surface profile to CSP-3.

# 3.07 EPOXY SURFACE PROTECTION TEST APPLICATION

- A. The test application shall be a part of the production location before starting production work. Resin binder manufacturer's representative shall be present during the test application. The test application shall meet the following requirements:
  - 1. Install a minimum of 200 square yards.

- 2. Shall be constructed using the same method and equipment as the production work.
- 3. Shall construct an additional test application for each method proposed for the production work.
- 4. Shall replicate field conditions, including ambient and surface temperatures, time period, anticipated for production work.
- 5. Shall demonstrate surface preparation method as outlined in the QC Plan
- 6. Shall demonstrate that the data management system is capable of documenting ambient and surface temperatures, quantities of resin binder and aggregate, coverage rates, and reporting application rates in real time.
- 7. Determine the initial set time for the resin binder.

#### 3.08 EPOXY SURFACE PROTECTION SURFACE APPLICATION

- A. The following information is required in a real time reporting method:
  - 1. The volume of mixed resin binder per square yard being applied.
  - 2. The mixed resin binder mil thickness on average throughout the application width per square yard.
  - 3. The volume of aggregate applied throughout the application width per square yard.
  - 4. The ambient and pavement surface temperature during the application period.
- B. Apply the blended resin binder on the pavement surface plane in a uniform application with a minimum thickness of 60 mils. Verify thickness using a Wet-Mil fil thickness gauge every 75-100 lineal feet of application. Ensure the surfacing aggregate is applied uniformly at a rate of 14-17 pounds per square yard within the working time per Table 5.

#### 3.09 EPOXY SURFACE PROTECTION APPLICATION METHOD

- A. Expansion Joints, drains and grates shall be adequately isolated to prevent any surface treatment from entering drainage and joint systems. The surface treatment discharged from the mixer shall be uniform in composition and consistency. Mixing capability shall be such that initial and final finishing operations can proceed at a steady pace.
  - B. Continuous application must be applied utilizing an epoxy pump system specially designed for epoxies. The epoxy pump is mounted on the rear of a truck which also houses two 250 Gallon totes of material. The totes to be used will be between 65°- 85°F. The pump is equipped with a detailed digital read out

displaying the gallons per minute and total volume of both part A and B. It also gives the total volume of material pumped. This allows for easy verification of the correct amount of material applied to the surface and at the correct ratio of 1:1. The mixed epoxy will be dispensed onto the concourse deck surface, this will be followed by a ground laborer(s) using a saw-toothed/notched squeegee to spread the sealer meeting the manufacturer specified wet mil thickness.

- C. Adjacent to the sealer application will be a truck with a bulk sand pot with the topping sand. Special care will be given as to not direct the hose directly to the surface disrupting or causing the epoxy material to disperse. The application equipment shall install the surfacing at a minimum application rate of 20 linear feet per minute. Perform a final sweep of loose aggregates and debris from the areas adjacent to the applied surface treatment within end of work shift. Ensure all expansion joints are free of loose aggregate, epoxy, and other debris.
- D. For small, odd shaped areas inaccessible to the continuous applicator truck, mixed epoxy is dispensed from the truck by hand through a mixing wand onto the area to be treated, Contractor shall use a notched squeegee to evenly spread the epoxy according to the manufacturer's recommendations. Broadcast aggregate by hand onto the wet epoxy until rejection and epoxy surface is completely covered with aggregate. Spike shoes will need to be worn by any person who may come in contact with wet placed sealer without aggregate.

# 3.10 EPOXY SURFACE PROTECTION CURING

A. Traffic and construction equipment shall not be permitted on the completed surface treatment overlay for 2 hours or until the surface treatment is tack free, whichever is later.

# 3.11 ACCEPTANCE AND CORRECTIVE ACTION

- A. The completed crack penetration and epoxy surface treatment shall be free of any smooth or wet areas such as those resulting from insufficient quantities of topping aggregate. Completed overlay surface must be uniform in thickness, texture and appearance.
- B. At the discretion of DOT-A, Tensile Bond testing shall be performed for each placement per day. Testing may be conducted on a separate concrete substrate representing the field conditions upon approval of DOT-A. Testing will be performed in accordance with ASTM C 1583 and the manufacturer's recommendations. A passing test is the failure of the concrete substrate or bond strength above 250 psi at 24 hours. Fill cored holes with approved material specified in Section 03730 –Concrete Repairs.
- C. Correct all defects in material and work, as directed, at no additional cost to the State, according to the following:
  - 1. Remove and replace surfacing treatment that DOT-A determines has any raveling, delamination, streaking, or bond test failure.

- 2. Replace with acceptable surface treatment at the installer's expense. Replaced areas will be retested and evaluated for acceptance or further corrective action.
- 3. Any roadway features disturbed by the work or the installer's operations shall be restored with the same materials and design as directed by DOT-A at no additional cost to the State.

# PART 4 – MEASUREMENT AND PAYMENT

# 4.01 BASIS OF MEASUREMENT AND PAYMENT

Work under this section will not be measured not paid for separately, but shall be considered incidental to and included in the prices bid for the various items of work in this project.

# END OF SECTION

# **DIVISION 07 – THERMAL AND MOISTURE PROTECTION**

# SECTION 07916 - EXPANSION JOINT

# <u> PART 1 – GENERAL</u>

# 1.01 RELATED DOCUMENTS

The General Provisions for Construction Projects (2016), Special Provisions, and General Requirements of the Specifications, apply to the work specified in this Section.

#### 1.02 <u>SUMMARY</u>

- A. Section includes expansion joint waterproofing systems.
- B. Related Sections:
  - 1. Section 03300 STRUCTURAL CONCRETE
  - 2. Section 03320 HYBRID POLYMER CONCRETE (HPC)
  - 3. Section 03730 CONCRETE REPAIRS

#### 1.03 ADMINISTRATIVE REQUIREMENTS

- A. Pre-Installation Conference:
  - 1. Convene at Project site 2 weeks prior to beginning work of this Section.
  - 2. Attendance: Contractor, Construction Manager, joint seal installer, joint seal manufacturer representative, and related trades.
  - 3. Review and discuss:
    - a. Joint seal manufacturer's requirements, project conditions, substrate requirements allowable structural movement at joints, and protection of completed work.
    - b. Transitions in plane and direction, and requirement for continuity of seal through watertight transitions from wall expansion joint to other interfacing expansion joint systems at adjacent construction.

#### 1.04 <u>SUBMITTALS</u>

- A. Submit in accordance with Section 01300 SUBMITTALS.
- B. Action Submittals:
  - 1. Shop Drawings:
    - a. Indicate joint locations, dimensions, and adjacent construction.

- b. Provide details for transitions in plane and direction for continuity of seal through watertight transitions from wall expansion joint to other interfacing expansion joint systems at adjacent construction.
- 2. Product Data: Material description and application instructions.
- 3. Samples:
  - a. Minimum 6 inch long samples of each joint seal.
- C. Informational Submittals:
  - 1. Manufacturer's certification that:
    - Products are capable of withstanding temperature of 150 degrees F (65 degrees C) for 3 hours while compressed to minimum of movement capability dimension without evidence of bleeding of impregnation medium from material.
    - b. Same material after heat stability test and after cooling to room temperature will self-expand to maximum of movement capability dimension within 24 hours at 68 degrees F (20 degrees C).

# 1.05 QUALITY CONTROL

- A. Manufacturer Qualifications:
  - 1. Minimum 10 years documented experience in production of specified materials.
  - 2. Certified to ISO 9001 and 14001.
- B. Installer Qualifications: Minimum 2 years documented experience in work of this Section.

# 1.06 DELIVERY, STORAGE AND HANDLING

A. In accordance with manufacturer's instructions.

#### 1.07 <u>WARRANTY</u>

- A. Main Expansion Joint Warranty: Provide manufacturer's standard warranty. Materials warranty shall be for a minimum of the following starting at the date of Substantial Completion. System warranty shall be for the following duration in accordance with specified system.
  - 1. Warranty Length: 5 years

## PART 2 - PRODUCTS

## 2.01 <u>MATERIALS</u>

- A. Roadway Expansion Joint Seal, Main Waterproofing:
  - 1. System: Extruded sealing gland with punched flanges embedded in highstrength, flexible, impact-absorbing elastomeric concrete nosing.
  - 2. Gland:
    - a. Description: Extruded thermoplastic vulcanizate gland with punched flanges and heat welded transitions.
    - b. Shore A hardness: Minimum 65, tested to ASTM D 2240.
    - c. Tensile strength: Minimum 1,000 PSI, tested to ASTM D 412.
    - d. Ultimate elongation, Minimum 400 percent, tested to ASTM D 412.
  - 3. Nosing:
    - a. Description: High strength, flexible, impact-absorbing elastomeric concrete material composed of two-part polyurethane resin reinforced with silica free aggregate.
    - b. Aggregate: Sand and fiberglass
    - c. Aggregate to Resin Ratio: 2 parts aggregate max to 1 part resin
    - d. Tensile strength: 490 PSI, tested to ASTM D638.
    - e. Compressive strength: Minimum 4,000 PSI, tested to ASTM D695.
    - f. Adhesion to primed concrete: Minimum 400 PSI, tested to ASTM D2734.
    - g. Impact resistance: No cracking at 19 inches, tested to ASTM D5628.
    - h. Shore A hardness: 54.0, tested to ASTM D2240.
  - 4. Color: Black.
- B. Roadway Expansion Joint Seal, Non Fire-Retardant Secondary Waterproofing:
  - 1. System: Precompressed, silicone coated and acrylic impregnated-foam hybrid installed into field-applied epoxy adhesive, with silicone sealant band on joint faces.
  - 2. Form: Procompressed to less than nominal material size for installation into designed joint size equal to material nominal size.

- 3. Movement capability: Plus or minus 50 percent, total 100 percent; pass ASTM E1399.
- 4. Adhesive: Epoxy type, furnished by joint seal manufacturer.
- 5. Silicone: Field applied sealant band at face of seal so substrate interface, furnished by joint seal manufacturer; same material and color as factory coating.
  - a. Abrasion resistance: Maximum 1 percent wight loss, tested to ASTM D4060.
  - b. Fuel resistance: Pass ASTM C719 and ASTM C1135
- C. Roadway Expansion Joint Seal, Fire-Retardant Secondary Waterproofing
  - 1. System: Traffic grade upper silicone sealing surface, and factory coated on underside with intumescent fireproofing material, adhered to fire-retardant impregnated foam backing installed into field-applied epoxy adhesive.
  - 2. Form: Precompressed to less than nominal material size for installation into designed joint size equal to material nominal size.
  - 3. Fire protection rating: 3 hours, tested to UL 2079.
  - 4. Movement capability: Plus or minus 25 percent; total 50 percent.
  - 5. Color: To be selected and approved by DOT-A.
  - 6. Adhesive: Epoxy type, furnished by joint seal manufacturer.
  - 7. Silicone: Field applied sealant band at face of seal to substrate interface, furnished by joint seal manufacturer; same material and color as factory coating.
    - a. Abrasion resistance: Maximum 1 percent weight loss, tested to ASTM D4060.
    - b. Fuel resistance: Pass ASTM C719 and ASTM C1135.
  - 8. Intumescent Sealant: Field applied to face of joints, furnished by joint seal manufacturer.

#### PART 3 - EXECUTION

#### 3.01 PREPARATION

A. Clean joints thoroughly; remove loose and foreign matter that could impair adhesion or performance.
#### 3.02 INSTALLATION

- A. Install joint seal in accordance with manufacturer's instructions and approved Shop Drawings.
- B. Remove joint seal from precompressed packaging, immediately insert into joint, and allow to expand.
- C. Use temporary retainers if required to maintain joint seals in position until expansion is complete.
- D. Secondary Waterproofing:
  - 1. To be installed after topping slab nosing is demolished, but before topping slab nosing is repaired.
- E. Main Waterproofing:
  - 1. To be installed after topping slab nosing is cured to waterproofing manufacturer's recommendations.

#### PART 4 – MEASUREMENT AND PAYMENT

#### 4.01 BASIS OF MEASUREMENT AND PAYMENT

Expansion joint installation involving concrete edge restoration, nosing material installation, sealing gland installations, and all other items shown in the contract drawings incidental to creating a water tight seal at expansion joints where indicated on plans shall be paid for at the contract Lump Sum prices for the <u>Terminal 2</u> <u>Departures Roadway Expansion Joint Spot Repairs</u>, <u>Ewa Concourse 2<sup>nd</sup> Level</u> <u>Sidewalk Expansion Joint</u>, <u>Ewa Connecting Link Expansion Joints</u>, <u>Terminal 2 3<sup>rd</sup> Level Roadway Expansion Joint Spot Repairs</u>, <u>Diamond Head Concourse 2<sup>nd</sup> Level</u> <u>Sidewalk Expansion Joint</u>, and <u>Diamond Head Connecting Link Expansion Joints</u>. The contract prices shall be full compensation for all labor, tools, equipment, and other incidentals necessary to complete work.

<u>Item No.</u> 07916.1	Item Terminal 2 Departures Roadway Expansion Joint Spot Repairs	<u>Unit</u> Lump Sum
07916.2	Ewa Concourse 2nd Level Sidewalk Expansion Joint	Lump Sum
07916.3	Ewa Connecting Link Expansion Joints	Lump Sum
07916.4	Terminal 2 3rd Level Roadway Expansion Joint Spot Repairs	Lump Sum

07916.5	Diamond Head Concourse 2nd Level Sidewalk Expansion Joint	Lump Sum
07916.6	Diamond Head Connecting Link Expansion Joints	Lump Sum
	END OF SECTION	

## 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. CITY AND COUNTY OF HONOLULU: AMENDED IBC, 2018
- B. THE CONTRACTOR SHALL COMPARE ALL THE CONTRACT DOCUMENTS WITH EACH OTHER AND REPORT IN WRITING TO THE 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 THE 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.
- 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.

DEMOLITION, REMOVAL AND RELOCATION WORK:

- A. THE CONSTRUCTION DRAWINGS INDICATE THE GENERAL EXTENT OF REQUIRED DEMOLITION AND REMOVAL WORK.
- B. THE 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 THE STATE.
- C. ALL NECESSARY PRECAUTIONS SHALL BE TAKEN TO INSURE AGAINST DAMAGE TO EXISTING ITEMS AND FEATURES REMAINING IN PLACE.
- 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 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.

### **DESIGN CRITERIA**

- 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.V.W. mmmmmm

### 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 DOT-A 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. THE CONTRACTOR SHALL CORRECT DEFECTIVE WORK AT NO ADDITIONAL COST TO THE STATE AND PAY FOR RE-INSPECTION AS REQUIRED.

- SPECIAL INSPECTORS SHALL KEEP RECORDS OF INSPECTIONS. В. REPORTS SHALL INDICATE THAT WORK INSPECTED WAS DONE IN CONFORMANCE WITH APPROVED CONSTRUCTION DOCUMENTS. THE INSPECTOR SHALL SUBMIT A FINAL SIGNED REPORT TO DOT-A.
- C. THE FOLLOWING TYPE OF WORK LISTED IN THE IBC, SECTION 1705, AS AMENDED BY THE CITY, REQUIRES SPECIAL INSPECTION:
- 1. CONCRETE CONSTRUCTION
- a. PLACEMENT OF REINFORCING STEEL
  - b. PLACEMENT OF CONCRETE
  - TEMPERATURE AND TECHNIQUES.
  - d. POST INSTALLED CONCRETE BOLTS.
- 2. MASONRY CONSTRUCTION
- a. PLACEMENT OF REINFORCING STEEL INCLUDING
- PRESTRESSING TENDONS. b. MORTAR AND MORTAR JOINTS
  - c. PLACEMENT OF GROUT

# 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 4000 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. 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 DOT-A FOR APPROVAL, UNLESS OTHERWISE NOTED.
- 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.
- CONSTRUCTION JOINTS IN FLOOR SHALL BE LOCATED WITHIN THE MIDDLE THIRD OF SPANS OF SLABS, BEAMS AND GIRDERS. JOINTS IN GIRDERS SHALL BE OFFSET A MINIMUM DISTANCE OF TWO TIMES THE WIDTH OF AN INTERSECTING BEAM.
- K. LEAVE FORMWORK FOR BEAM SOFFITS, JOISTS, SLABS, AND OTHER STRUCTURAL ELEMENTS THAT SUPPORT WEIGHT OF CONCRETE IN PLACE UNTIL CONCRETE HAS ACHIEVED ITS 28 DAY DESIGN COMPRESSIVE STRENGTH.

## **REINFORCING STEEL**

- A. REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO ASTM A615, GRADE 60.
- Β. CLEAR CONCRETE COVER FOR REINFORCING BARS SHALL BE 2" MINIMUM 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.
- D. REINFORCING STEEL SHALL BE SPLICED WHERE INDICATED ON PLANS. PROVIDE LAP SPLICE LENGTH PER TYPICAL DETAILS AND SCHEDULE, UNLESS OTHERWISE NOTED.

c. INSPECTION FOR MAINTENANCE OF SPECIFIED CURING

- E. MECHANICAL SPLICE CONNECTORS SHALL DEVELOP IN TENSION 125 PERCENT OF THE SPECIFIED MINIMUM YIELD STRENGTH OF **REINFORCING BARS.**
- F. STANDARD HOOKS ON REINFORCING BARS USED SHALL COMPLY WITH ACI 318, SECTION 25.3.1.
- G. MINIMUM REINFORCEMENT BEND DIAMETERS SHALL COMPLY WITH ACI 318, SECTION 25.3.2.

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.
  - 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.
- 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.
- 3. 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:

- AS APPROVED BY DOT-A.
- REPAIR WORK.
- TEXTURE AND ARCHITECTURAL DESIGN.

STRUCTURAL STEEL:

- OTHERWISE NOTED.

- OTHERWISE NOTED.
- SOCIETY.
- WELDING PROCEDURES TO BE USED.
- H. WELDING ELECTRODES SHALL BE E70XX.
- A123 AND ALL BE PAINTED IN THE SHOP.
- UNLESS OTHERWISE NOTED.

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

G. THE CONTRACTOR SHALL RESTORE TO THEIR ORIGINAL CONDITION OR BETTER ALL IMPROVEMENTS DAMAGED AS A RESULT OF THE

H. ALL REPAIR WORK SHALL MATCH ADJACENT SURFACES IN COLOR,

A. FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION MANUAL OF STEEL CONSTRUCTION, FOURTEENTH EDITION.

B. STRUCTURAL STEEL SHALL CONFORM TO ASTM A36 UNLESS

C. PLATES AND BARS SHALL CONFORM TO ASTM A36.

D. STEEL PIPES SHALL CONFORM TO ASTM A53, TYPE E OR S, GRADE B.

E. BOLTS SHALL CONFORM TO ASTM A307, GRADE A UNLESS

F. WELDS AND WELDING PROCEDURES SHALL CONFORM TO THE STRUCTURAL WELDING CODE AWS D1.1 OF THE AMERICAN WELDING

G. WELDING SHALL BE PERFORMED BY WELDERS PREQUALIFIED FOR

I. STEEL SHALL BE HOT-DIPPED GALVANIZED ACCORDING TO ASTM

J. ALL ANCHOR BOLTS, AND OTHER ITEMS TO BE CAST IN CONCRETE SHALL BE HOT-DIPPED GALVANIZED ACCORDING TO ASTM A153





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This work was prepared by me or under my supervision

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# CONSTRUCTION DOCUMENTS

**JANUARY 19, 2024** DATE

**PROJECT TITLE :** 

**CONCRETE SPALL REPAIRS AT TERMINAL 2 ROADWAYS** 

AT DANIEL K. INOUYE INTERNATIONAL AIRPORT HONOLULU, OAHU, HAWAII **PROJECT NO.:** 

AO1043-33

SHEET TITLE:

STRUCTURAL NOTES

DATE :

01/19/2024 SHEET

DWG. NO. S-0001

200F 634 SHEETS

CONNECTING LINK SEQUENCE OF WORK:

SEE SHEET S-3004 TO S-3005 FOR DETAILS

STEP 1 PLANTER MODIFICATION. SEE SHEET S-5007 FOR DETAILS.

- 1. DEMOLISH EXISTING PLANTER RAILING AND WALL BELOW RAILING.
- 2. REMOVE REMAINING WATERPROOFING MEMBRANE AND FLASHING.
- 3. CAST NEW CONCRETE SIDEWALK EXTENSION.
- 4. INSTALL STEEL RAILING AND LIGHTING SYSTEM.

STEP 2 REMOVE EXISTING EPOXY COATING ALONG ROADWAY.

STEP 3A CONCRETE REPAIRS

- 1. CONCUSSIVELY SOUND EXPOSED CONCRETE TO IDENTIFY SPALL/DELAMINATION LOCATIONS AND SIZES. MARK SPALLS/DELAMINATIONS AND CRACK LOCATIONS IN FIELD WITH PAINT OR CHALK PRIOR TO BEGINNING REPAIRS.
- 2. DOT-A TO VERIFY MARKED LOCATIONS AND APPROVE QUANTITIES FOR REPAIR.
- 3. AFTER GIVEN WRITTEN APPROVAL FROM DOT-A, CONCRETE REPAIRS MAY BEGIN.

STEP 3B DRAIN RELOCATION. SEE SHEET S-5008 FOR DETAILS

- 1. USING A GROUND PENETRATING RADAR, VERIFY LOCATION IN ROADWAY SLAB WHERE THERE IS NO COLUMN OR GIRDER BENEATH THE SLAB ON ALL ROADWAY LEVELS. MARK WHERE CONCRETE OPENINGS SHALL BE MADE FOR NEW DRAIN INLET AND DOWN SPOUT.
- 2. DOT-A TO APPROVE MARKED LOCATIONS FOR NEW DOWN SPOUT.
- 3. AFTER GIVEN WRITTEN APPROVAL FROM DOT-A, CONCRETE MODIFICATIONS FOR DRAIN INLET AND DOWN SPOUT INSTALLATION MAY BEGIN.

CONCRETE REPAIRS AND DRAIN RELOCATION WORK MAY BE COMPLETED SEQUENTIALLY OR SIMULTANEOUSLY PER CONTRACTORS MEANS AND METHODS.

STEP 4 INSTALL EXPANSION JOINT WATERPROOFING. SEE SHEET S-5011

STEP 5 INSTALL HYBRID POLYMER CONCRETE (HPC) TOPPING ONCE CONCRETE REPAIRS AND DRAIN RELOCATION ARE COMPLETE. FINISH HPC SURFACE WITH EPOXY SURFACE TREATMENT. 

ADDITIONAL NOTES:

CONTRACTOR TO PHASE CONNECTING LINK REPAIRS SUCH THAT WIKI WIKI SHUTTLE OPERATIONS MAY CONTINUE THROUGHOUT THE CONSTRUCTION PERIOD. WORK HOURS SHALL BE DEFINED IN THE CONSTRUCTION SPECIFICATIONS. PHASING PLAN SHALL BE SUBMITTED TO DOT A FOR REVIEW AND ·····



EWA CONNECTING LINK 2ND LEVEL PLAN

S-1009 SCALE: 1/32" = 1'-0"



CONNECTING LINK SEQUENCE OF WORK:

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# DH CONNECTING LINK 2ND LEVEL PLAN

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















DR-S-S187 MATCH DRS-E EC 47 EC 48 DR-S-D25 W2TICKETING W4 $\frown$ LEGEND: EC - EMERGENCY ZONE COLUMN my my TERMINAL 2 DEPARTURES ROADWAY ENLARGED REFLECTED CEILING PLAN F SCALE: 1/8" = 1'-0" S-4005















































EWA CONNECTING LINK 1ST LEVEL PARTIAL REFLECTED CEILING PLAN E

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











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		AT DANIEL K. INOUYE INTERNATIONAL AIRPORT HONOLULU, OAHU, HAWAII				
		PROJECT NO.:				
		AO1043-33				
		SHEET TITLE:				
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3/16" = 1'-0"

















TRUE NORTH SCALE: 3/16" = 1'-0"	STATE OF HAWAII DEPARTMENT OF TRANSPORTATION AIRPORTS
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NOTE: 1. FOR REPAIR SCHEDULE SEE SHEET S-6018

BACKGROUND IS IN RELATION TO DIAMOND HEAD 2ND LEVEL. REPAIRS ARE ACCESSIBLE FROM 1ST LEVEL

![](_page_234_Figure_4.jpeg)

3/16" = 1'-0"

![](_page_234_Figure_5.jpeg)

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

![](_page_251_Figure_0.jpeg)

![](_page_251_Picture_2.jpeg)


























0 TRUE NORTH 3/16" = 1'-

16





Ο TRUE NORTH 3/16" = 1'-

16'





0 TRUE NORTH 3/16" = 1'-

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OTE:
OR REPAIR SCHEDULE
EE SHEET S-6024





# NOTE: FOR REPAIR SCHEDULE SEE SHEET S-6024





# NOTE: FOR REPAIR SCHEDULE SEE SHEET S-6024





3/16" = 1'-0"

01/19/2024 SHEET : 214OF 634 SHEETS DWG. NO.

DATE :

S-4166







IOTE:	
OR REPAIR SCHEDULE	
SEE SHEET S-6026	







MATCH LINE DCS-I NOTE: FOR REPAIR SCHEDULE SEE SHEET S-6028 3RD LEVEL CONNECTING -LINK TO DIAMOND HEAD CONCOURSE 3RD LEVEL ROADWAY CENTERLINE DH CONNECTING LINK 2ND LEVEL PARTIAL REFLECTED CEILING PLAN K

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

S-4177



























RELOCATED DRAIN. DM19 SEE SHEETS S-4195 THROUGH S-4199 FOR EXACT LOCATION MATCH LINE DCL-I HPC OVERLAY AND EPOXY SUFRACE TREATMENT SEE SPECIFICATIONS FOR INSTALLATION REQUIREMENTS. RELOCATED DRAIN. SEE SHEETS S-4195 THROUGH S-4199 FOR EXACT LOCATION NOTE: SEE CIVIL FOR HPC GRADING DH CONNECTING LINK PARTIAL REPAIR PLAN J SCALE: 3/16" = 1'-0" S-4200












ITEM     ID#     LENGTH (IN)     WIDTH (IN)     REPAIR DETAIL     ADDITIONAL COMMENTS       CRACK     E3-R-CR135     61     2/S-5002     IN RAILING	
ITEM     ID#     LENGTH (IN)     WIDTH (IN)     REPAIR DETAIL     ADDITIONAL COMMENTS       CRACK     E3-R-CR135     61     2/S-5002     IN RAILING	·
CRACK E3-SW-CR136 71 1/S-5002 IN SIDEWALK	
CRACK         E3-R-CR137         61         2/S-5002         IN RAILING	
CRACK         E3-SW-CR138         71         1/S-5002         IN SIDEWALK	
CRACK E3-R-CR139 61 2/S-5002 IN RAILING	
CRACK E3-SW-CR140 71 1/S-5002 IN SIDEWALK	
CRACK         E3-R-CR141         61         2/S-5002         IN RAILING	
CRACK E3-SW-CR142 71 1/S-5002 IN SIDEWALK	
CRACKE3-P-CR182382/S-5002PLANTER BOX - BETWEEN COLUMN 21 AND 29	
CRACK         E3-SW-CR183         46         1/S-5002         CURB - BETWEEN COLUMN 21 AND 29	
CRACK E3-R-CR832 390 2/S-5002 IN THE RAILINING	
CRACK E3-R-CR833 390 2/S-5002 IN THE RAILINING	
CRACK E3-R-CR834 390 2/S-5002 IN THE RAILINING	
CRACK         E3-R-CR837         390         2/S-5002         IN THE RAILINING	
DELAM         E3-R-D136         16         8         1/S-5000         IN THE RAILINING	
MAP     E3-R-MC035     86     24     1/S-5000     IN THE RAILINING	

	EWA CONCOURSE 3RD LEVEL GROUND REPAIR SCHEDULE									
	PLAN K SHEET S-4068									
ITEM	ID#	LENGTH (IN)	WIDTH (IN)	REPAIR DETAIL	ADDITIONAL COMMENTS					
CRACK	E3-R-CR127	61		2/S-5002	IN RAILING					
CRACK	E3-SW-CR128	71		1/S-5002	IN SIDEWALK					
CRACK	E3-R-CR129	61		2/S-5002	IN RAILING					
CRACK	E3-SW-CR130	71		1/S-5002	IN SIDEWALK					
CRACK	E3-R-CR131	61		2/S-5002	IN RAILING					
CRACK	E3-SW-CR132	71		1/S-5002	IN SIDEWALK					
CRACK	E3-R-CR133	61		2/S-5002	IN RAILING					
CRACK	E3-SW-CR134	71		1/S-5002	IN SIDEWALK					
CRACK	E3-P-CR180	38		2/S-5002	PLANTER BOX - BETWEEN COLUMN 17 AND 20					
CRACK	E3-SW-CR181	46		1/S-5002	CURB - BETWEEN COLUMN 17 AND 20					
CRACK	E3-R-CR823	203		2/S-5002	IN THE RAILINING					
CRACK	E3-R-CR826	390		2/S-5002	IN THE RAILINING					
CRACK	E3-R-CR828	234		2/S-5002	IN THE RAILINING					
DELAM	E3-R-D022	32	16	1/S-5000	IN THE RAILINING					
DELAM	E3-R-D024	94	16	1/S-5000	IN THE RAILINING					
DELAM	E3-R-D031	55	24	1/S-5000	IN THE RAILINING					
DELAM	E3-R-D125	32	16	1/S-5000	IN THE RAILINING					
DELAM	E3-R-D129	86	16	1/S-5000	IN THE RAILINING					
SPALL	E3-R-S127	13	8	1/S-5000	IN THE RAILINING - WITH EXPOSED BAR					
SPALL	E3-R-S130	39	16	1/S-5000	IN THE RAILINING					

EWA CONCOURSE 3RD LEVEL GROUND REPAIR SCHEDULE
PLAN L SHEET S-4069

ITEM	ID#	LENGTH (IN)	WIDTH (IN)	REPAIR DETAIL	ADDITIONAL COMMENTS
CRACK	E3-R-CR119	61		2/S-5002	IN RAILING
CRACK	E3-SW-CR120	71		1/S-5002	IN SIDEWALK
CRACK	E3-R-CR121	61		2/S-5002	IN RAILING
CRACK	E3-SW-CR122	71		1/S-5002	IN SIDEWALK
CRACK	E3-R-CR125	61		2/S-5002	IN RAILING
CRACK	E3-SW-CR126	71		1/S-5002	IN SIDEWALK
CRACK	E3-P-CR178	38		2/S-5002	PLANTER BOX - BETWEEN COLUMN 11 AND 17
CRACK	E3-SW-CR179	46		1/S-5002	CURB - BETWEEN COLUMN 11 AND 17
CRACK	E3-R-CR815	390		2/S-5002	IN THE RAILINING
CRACK	E3-R-CR816	141		2/S-5002	IN THE RAILINING
CRACK	E3-R-CR821	125		2/S-5002	IN THE RAILINING
DELAM	E3-R-D018	24	16	1/S-5000	IN THE RAILINING
DELAM	E3-R-D020	102	16	1/S-5000	IN THE RAILINING
DELAM	E3-R-D119	50	16	1/S-5000	IN THE RAILINING
DELAM	E3-R-D817	47	16	1/S-5000	IN THE RAILINING

REPAIR ID# CODE

<u>E2-R-S001</u> 

LOCATION		
DR - DEPARTURES ROADWAY	S - SOFFIT	S - SPALL
E1 - EWA WING LEVEL 1	F - FACADE	D - DELAMINATION
E2 - EWA WING LEVEL 2	CMU - CMU WALL	CR - CRACK
E3 - EWA WING LEVEL 3	EC - OUTER ROADWAY COLUMN	M - MISCELLANEOUS
EC1 - EWA CONNECTING LINK 1ST LEVEL	IC - INNER ROADWAY COLUMN	MC - MAP CRACKS
EC2 - EWA CONNECTING LINK 2ND LEVEL	C - CURB	T - TILE REPLACEMENT
DH1 - DIAMOND HEAD WING LEVEL 1	P - EXISTING PLANTER	SC - STEEL CORROSION
DH2 - DIAMOND HEAD WING LEVEL 2	PS - PEDESTRIAN SIDEWALK	DT - DELAMINATED TILE
DH3 - DIAMOND HEAD WING LEVEL 3	SW - SIDEWALK	CW - CEMENT WASH DELAMIN
DC1 - DIAMOND HEAD CONNECTING LINK 1ST LEVEL	R - RAILING	
DC2 - DIAMOND HEAD CONNECTING LINK 2ND LEVEL	W - WALL ALONG WING ROADWAY	
	HB - BEAM SUPPORTING TRELLIS	
	D - ROADWAY DECK	

	EWA CONCOURSE 3RD LEVEL GROUND REPAIR SCHEDULE									
	PLAN M SHEET S-4070									
ПЕМ	ID#	LENGTH (IN)	WIDTH (IN)	REPAIR DETAIL	ADDITIONAL COMMENTS					
CRACK	E3-R-CR115	61		2/S-5002	IN RAILING					
CRACK	E3-SW-CR116	71		1/S-5002	IN SIDEWALK					
CRACK	E3-R-CR117	61		2/S-5002	IN RAILING					
CRACK	E3-SW-CR118	71		1/S-5002	IN SIDEWALK					
CRACK	E3-P-CR176	38		2/S-5002	PLANTER BOX - BETWEEN COLUMN 9 AND 10					
CRACK	E3-SW-CR177	46		1/S-5002	CURB - BETWEEN COLUMN 9 AND 10					
CRACK	E3-SW-CR220	71		1/S-5002	IN SIDEWALK					
CRACK	E3-R-CR810	359		2/S-5002	IN THE RAILINING					
CRACK	E3-R-CR811	390		2/S-5002	IN THE RAILINING					
DELAM	E3-R-D014	195	24	1/S-5000	IN THE RAILINING					
DELAM	E3-R-D112	55	13	1/S-5000	IN THE RAILINING					
DELAM	E3-R-D113	390	24	1/S-5000	ENTIRE SECTION					

	EWA CONCOURSE 3RD LEVEL GROUND REPAIR SCHEDULE PLAN N SHEET S-4071									
ITEM	ID#	LENGTH (IN)	WIDTH (IN)	REPAIR DETAIL	ADDITIONAL COMMENTS					
CRACK	E3-SW-CR108	71		1/S-5002	IN SIDEWALK					
CRACK	E3-SW-CR110	71		1/S-5002	IN SIDEWALK					
CRACK	E3-SW-CR112	71		1/S-5002	IN SIDEWALK					
CRACK	E3-R-CR113	61		2/S-5002	IN RAILING					
CRACK	E3-SW-CR114	71		1/S-5002	IN SIDEWALK					
CRACK	E3-R-CR804	188		2/S-5002	IN THE RAILINING					
CRACK	E3-R-CR805	390		2/S-5002	IN THE RAILINING					
CRACK	E3-R-CR807	390		2/S-5002	IN THE RAILINING					
CRACK	E3-R-CR808	188		2/S-5002	IN THE RAILINING					
DELAM	E3-R-D003	11	8	1/S-5000	IN THE RAILINING					
SPALL	E3-R-S009	55	24	1/S-5000	IN CURB AT JOINT					

PLAN O SHEET S-4072									
ITEM	ID#	LENGTH (IN)	WIDTH (IN)	REPAIR DETAIL	ADDITIONAL COMMENTS				
CRACK	E3-R-CR101	61		2/S-5002	IN RAILING				
CRACK	E3-SW-CR102	71		1/S-5002	IN SIDEWALK				
CRACK	E3-SW-CR104	71		1/S-5002	IN SIDEWALK				
CRACK	E3-SW-CR106	71		1/S-5002	IN SIDEWALK				
CRACK	E3-P-CR174	38		2/S-5002	PLANTER BOX - BETWEEN COLUMN 0 AND 9				
CRACK	E3-SW-CR175	46		1/S-5002	CURB - BETWEEN COLUMN 0 AND 9				
CRACK	E3-R-CR801	312		2/S-5002	IN THE RAILINING				
CRACK	E3-R-CR806	297		2/S-5002	IN THE RAILINING				
SPALL	E3-R-S102	344	2	1/S-5000	IN THE RAILINING - WITH EXPOSED BAR				

EWA CONCOURSE 3RD LEVEL GROUND REPAIR ADDITIONAL 10% CONTINGENCY FOR BID							
	TOTAL	10% ADDITIONAL					
SPALLS (SF)	515	52	ADD 52 SF OF SPALLS				
CRACKS (LF)	1455	146	ADD 146 LF OF CRACKS				
	•						

- <u>NUMBER</u> DESIGNATION



	DIAMOND HEAD CONCOURSE 3RD LEVEL SOFFIT AND FAÇADE REPAIR SCHEDULE										
	PLAN A SHEET S-4159										
ITEM	ID#	LENGTH (IN)	WIDTH (IN)	REPAIR DETAIL	ADDITIONAL COMMENTS						
CRACK	DH3-S-CR065	188		2/S-5002	LONGITUDINAL CRACK IN SOFFIT = 12' L X 0.01'' W						
DELAM	DH3-S-D527	11	3	1/S-5000	BOTTOM FACE OF VERTICAL ELEMENT AT CELL 34						
DELAM	DH3-S-D528	21	6	1/S-5000	BOTTOM FACE OF VERTICAL ELEMENT AT CELL 34						
DELAM	DH3-S-D529	32	8	1/S-5000	BOTTOM FACE OF VERTICAL ELEMENT AT CELL 34						
SPALL	DH3-S-S525			1/S-5000	EDGE SPALLS AND CELL 35 (15% SECTION LOSS)						
SPALL	DH3-S-S526	16	1	1/S-5000	ABOVE CELL 35, 2 CRACKS						
SPALL	DH3-S-S530			1/S-5000	ABOVE CELL 32						

DIAMOND HEAD CONCOURSE 3RD LEVEL SOFFIT AND FAÇADE REPAIR SCHEDULE										
ITEM	ID#	LENGTH (IN)	WIDTH (IN)	REPAIR DETAIL	ADDITIONAL COMMENTS					
CRACK	DH3-S-CR048	188		2/S-5002	TRANSVERSE CRACK IN SOFFIT = 12' L X 0.009" W					
CRACK	DH3-S-CR049	188		2/S-5002	TRANSVERSE CRACK IN SOFFIT = 12' L X 0.009" W					
CRACK	DH3-S-CR052	188		2/S-5002	TRANSVERSE CRACK IN SOFFIT = 12' L X 0.009" W					
CRACK	DH3-S-CR053	188		2/S-5002	TRANSVERSE CRACK IN SOFFIT = 12' L X 0.009" W					
CRACK	DH3-S-CR054	188		2/S-5002	TRANSVERSE CRACK IN SOFFIT = 12' L X 0.009" W					
CRACK	DH3-S-CR055	188		2/S-5002	TRANSVERSE CRACK IN SOFFIT = 12' L X 0.009" W					
CRACK	DH3-S-CR056	188		2/S-5002	TRANSVERSE CRACK IN SOFFIT = 12' L X 0.009" W					
DELAM	DH3-F-D533			1/S-5000	ABOVER CELL 28 VERTICAL FACE, WITH RUST					
DELAM	DH3-F-D537			1/S-5000	ABOVE CELL 27 (15% SECTION LOSS)					
SPALL	DH3-F-S531	19	11	1/S-5000	ABOVE CELL 30 VERTICAL FACE (10% SECTION LOSS)					
SPALL	DH3-F-S532			1/S-5000	ABOVE CELL 30 VERTICAL FACE					
SPALL	DH3-S-S534	8	7	1/S-5000	ABOVE CELL 28 BOTTOM FACE					
CDALL				1/8 5000	2 SPALLS WITH SPALL W/ EXPOSED REBAR EXPOSED, ABOOVE CELL 28					
SPALL	DH3-F-3030			1/3-5000	VERTICAL FACE					
SPALL	DH3-F-S536	15	8	1/S-5000	ABOVE CELL 27 (15% SECTION LOSS)					
SPALL	DH3-F-S538	6	4	1/S-5000	ABOVE CELL 27 (10% SECTION LOSS)					
SPALL	DH3-F-S539	4	2	1/S-5000	ABOVE CELL 26 IN DIAGINAL FACE					

	DIAMOND HEAD CONCOURSE 3RD LEVEL SOFFIT AND FAÇADE REPAIR SCHEDULE PLAN C SHEET S-4161							
ITEM	ID#	LENGTH (IN)	WIDTH (IN)	REPAIR DETAIL	ADDITIONAL COMMENTS			
CRACK	DH3-S-CR040	16		2/S-5002	TRANSVERSE CRACK IN SOFFIT = 2' L X 0.01" W			
CRACK	DH3-S-CR042	172		2/S-5002	LONGITUDINAL CRACK IN SOFFIT = 11' L X 0.009" W			
CRACK	DH3-S-CR043	172		2/S-5002	TRANSVERSE CRACK IN SOFFIT = 11' L X 0.009" W			
CRACK	DH3-S-CR044	94		2/S-5002	TRANSVERSE CRACK IN SOFFIT = 6' L X 0.009" W			
CRACK	DH3-S-CR046	188		2/S-5002	LONGITUDINAL CRACK IN SOFFIT = 12' L X 0.009'' W			
CRACK	DH3-S-CR540	4		2/S-5002	SCATTERED AREAS OF CRACKS W/ EFFLORESCENCE, ABOVE CELL 25 VERTICAL FACE			
CRACK	DH3-F-CR547	8		2/S-5002	ABOVE CELL 21 VERTICAL FACE			
DELAM	DH3-F-D549			1/S-5000	ABOVE CELL 21 VERTICAL FACE, 2 DELAMINATIONS			
SPALL	DH3-S-S541	7	4	1/S-5000	ABOVE CELL 25 VERTICAL FACE			
SPALL	DH3-S-S542			1/S-5000	ABOVE CELL 24 BOTTOM FACE (20% SECTION LOSS)			
SPALL	DH3-S-S543	125	3	1/S-5000	ABOVE CELL 25 AND 24 BOTTOM FACE			
SPALL	DH3-S-S544			1/S-5000	ABOVER CELL 23 VERTICAL FACE, 2 SPALLS			
SPALL	DH3-F-S545	16	6	1/S-5000	ABOVE CELL 22 VERTICAL FACE			
SPALL	DH3-F-S546	11	2	1/S-5000	ABOVE CELL 22 VERTICAL FACE			
SPALL	DH3-F-S548	7	6	1/S-5000	ABOVE CELL 21 VERTICAL FACE			

	DIAMOND HEAD CONCOURSE 3RD LEVEL SOFFIT AND FAÇADE REPAIR SCHEDULE							
	PLAN D SHEET S-4162							
ITEM	ID#	LENGTH (IN)	WIDTH (IN)	REPAIR DETAIL	ADDITIONAL COMMENTS			
DELAM	DH3-F-D550	11	6	1/S-5000	ABOVE CELL 20 VERTICAL FACE			
DELAM	DH3-F-D551			1/S-5000	ABOVE CELL 20 VERTICAL FACE, 2 DELAMINATIONS			
DELAM	DH3-F-D552			1/S-5000	ABOVE CELL 19 VERTICAL FACE			
DELAM	DH3-F-D557	6	2	1/S-5000	ABOVE CELL 18 VERTICAL FACE			
SPALL	DH3-F-S553	10	6	1/S-5000	ABOVE CELL 19 VERTICAL FACE			
SPALL	DH3-F-S554	7	4	1/S-5000	ABOVE CELL 18 VERTICAL FACE			
SPALL	DH3-F-S555			1/S-5000	ABOVE CELL 18 VERTICAL FACE			
SPALL	DH3-F-S556			1/S-5000	ABOVE CELL 18 VERTICAL FACE			
SPALL	DH3-F-S558	10	7	1/S-5000	ABOVE CELL 17 VERTICAL FACE			
SPALL	DH3-F-S559	7	4	1/S-5000	ABOVE CELL 17 VERTICAL FACE			

REPAIR ID# CODE

<u>E2-R-S001</u>

STRUCTURAL ELEMENT - REPAIR TYPE LOCATION NUMBER DR - DEPARTURES ROADWAY DESIGNATION S - SOFFIT S - SPALL F - FACADE E1 - EWA WING LEVEL 1 D - DELAMINATION E2 - EWA WING LEVEL 2 CMU - CMU WALL CR - CRACK M - MISCELLANEOUS E3 - EWA WING LEVEL 3 EC - OUTER ROADWAY COLUMN EC1 - EWA CONNECTING LINK 1ST LEVEL IC - INNER ROADWAY COLUMN MC - MAP CRACKS T - TILE REPLACEMENT EC2 - EWA CONNECTING LINK 2ND LEVEL C - CURB DH1 - DIAMOND HEAD WING LEVEL 1 P - EXISTING PLANTER SC - STEEL CORROSION DH2 - DIAMOND HEAD WING LEVEL 2 PS - PEDESTRIAN SIDEWALK DT - DELAMINATED TILE DH3 - DIAMOND HEAD WING LEVEL 3 SW - SIDEWALK CW - CEMENT WASH DELAMINATION DC1 - DIAMOND HEAD CONNECTING LINK 1ST LEVEL R - RAILING DC2 - DIAMOND HEAD CONNECTING LINK 2ND LEVEL W - WALL ALONG WING ROADWAY HB - BEAM SUPPORTING TRELLIS D - ROADWAY DECK

DIAMOND HEAD CONCOURSE 3RD LEVEL SOFFIT AND FAÇADE REPAIR SCHEDU							
PLAN E SHEET S-4163							
ITEM	ID#	LENGTH (IN)	WIDTH (IN)	REPAIR DETAIL	ADDITIONAL COMMENTS		
CRACK	DH3-S-CR023	234		2/S-5002	LONGITUDINAL CRACK IN SOFFIT = 15' L X 0.016		
CRACK	DH3-S-CR024	94		2/S-5002	TRANSVERSE CRACK IN SOFFIT = 6' L X 0.009" \		
CRACK	DH3-S-CR025	110		2/S-5002	TRANSVERSE CRACK IN SOFFIT = 7' L X 0.01" W		
CRACK	DH3-S-CR026	110		2/S-5002	TRANSVERSE CRACK IN SOFFIT = 7' L X 0.01" W		
CRACK	DH3-S-CR027			2/S-5002	3 TRANSVERSE CRACKS IN INNER RIB = 1' L X 0		
CRACK	DH3-S-CR029	125		2/S-5002	TRANSVERSE CRACK IN SOFFIT = 8' L X 0.009" \		
CRACK	DH3-S-CR030	125		2/S-5002	TRANSVERSE CRACK IN SOFFIT = 8' L X 0.009" \		
CRACK	DH3-S-CR032	16		2/S-5002	4 TRANSVERSE CRACKS IN INNER RIB = 1' L X 0		
DELAM	DH3-S-D560	7	4	1/S-5000	ABOVE CELL 17 VERTICAL FACE		
SPALL	DH3-S-D561	6	4	1/S-5000	ABOVE CELL 14 BOTTOM FACE (50% SECTION		

				PL	AN F SHEET S-4164
ITEM	ID#	LENGTH (IN)	WIDTH (IN)	REPAIR DETAIL	ADDITIONAL COMMENTS
CRACK	DH3-S-CR010	156		2/S-5002	TRANSVERSE CRACK IN SOFFIT = 10' L X 0.02" W
CRACK	DH3-S-CR011	78		2/S-5002	TRANSVERSE CRACK IN SOFFIT = 5' L X 0.02" W
CRACK	DH3-S-CR012	78		2/S-5002	LONGITUDINAL CRACK IN SOFFIT = 5' L X 0.02" W
CRACK	DH3-S-CR013	78		2/S-5002	LONGITUDINAL CRACK IN SOFFIT = 5' L X 0.02" W
CRACK	DH3-S-CR014	63		2/S-5002	LONGITUDINAL CRACK IN SOFFIT = 4' L X 0.02" W
CRACK	DH3-S-CR015	16		2/S-5002	15 TRANSVERSE CRACKS = 1' L X 0.012" W EACI
CRACK	DH3-S-CR017	32		2/S-5002	TRANSVERSE CRACK IN SOFFIT = 2' L X 0.012" W
CRACK	DH3-S-CR018	78		2/S-5002	TRANSVERSE CRACK IN SOFFIT = 5' L X 0.012" W
CDACK		16		2/5 5002	7 TOTAL TRANSVERSE CRACKS AROUND PERIN
UNAUN		113-3-01022 10		2/3-3002	EACH
DELAM	DH3-F-D564	8	6	1/S-5000	ABOVE CELL 11 VERTICAL FACE
DELAM	DH3-F-D565	32	4	1/S-5000	ABOVE CELL 11 VERTICAL FACE
SPALL	DH3-F-S562	24	6	1/S-5000	ABOVE CELL 13 DIAGONAL FACE
SPALL	DH3-F-S563			1/S-5000	ABOVE CELL 12 VERTICAL FACE, 3 SPALLS
				1/5 5000	ABOVE CELL 10 VERTICAL FACE, 3 SPALLS, 1 O
SFALL	DH3-F-3000			1/3-5000	BAR (10% SECTION LOSS)

DIAMOND HEAD CONCOURSE 3RD LEVEL SOFFIT AND FAÇADE REPAIR SCHEDU PLAN G SHEET S-4165					
ITEM	ID#	LENGTH (IN)	WIDTH (IN)	REPAIR DETAIL	ADDITIONAL COMMENTS
CRACK	DH3-F-CR569	32		2/S-5002	ABOVE CELL 7 VERTICAL FACE
DELAM	DH3-F-D567	7	4	1/S-5000	ABOVE CELL 8 VERTICAL FACE
DELAM	DH3-F-D568			1/S-5000	ABOVE CELL 8 VERTICAL FACE

DIAMOND HEAD CONCOURSE 3RD LEVEL SOFFIT AND FAÇADE REPAIR SCHEDU PLAN H SHEET S-4166					
ITEM	ID#	LENGTH (IN)	WIDTH (IN)	REPAIR DETAIL	ADDITIONAL COMMENTS
SPALL	DH3-F-S569	63	11	1/S-5000	ABOVE CELL 3 VERTICAL FACE, 2 SPALL W/ EXI LOSS)
SPALL	DH3-F-S570	16	4	1/S-5000	ABOVE CELL 3 VERTICAL FACE (10% SECTION L
SPALL	DH3-F-S571			1/S-5000	ABOVE CELL 3 VERTICAL FACE
SPALL	DH3-F-S572			1/S-5000	ABOVE CELL 4 VERTICAL FACE, 4 SPALL W/ EXI
$\sim$	$\sim$	$\sim$	$\overline{}$		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

	DIAMOND HEAD CONCOURSE 3RD LEVEL SOFFIT AND FAÇADE REPAIR ADDITIONAL 10% CONTINGENCY FOR BID				
	TOTAL	10% ADDITIONAL			
SPALLS (SF)	73	7	ADD 7 SF OF SPALLS		
CRACKS (LF)	315	32	ADD 32 LF OF CRACKS		

						]	
		DIA	MOND HEAD	CONCOURSE 3R PL	D LEVEL SOFFIT AND FAÇADE REPAIR SCHEDULE AN E SHEET S-4163		TATE OF HAM
ITEM	ID#	LENGTH (IN)	WIDTH (IN)	REPAIR DETAIL	ADDITIONAL COMMENTS	_	A A A A A A A A A A A A A A A A A A A
CRACK	DH3-S-CR023	234 94		2/S-5002 2/S-5002	LONGITUDINAL CRACK IN SOFFIT = 15' L X 0.016'' W	_	
CRACK	DH3-S-CR025	110		2/S-5002	TRANSVERSE CRACK IN SOFFIT = 7' L X 0.01" W	-	
CRACK CRACK	DH3-S-CR026 DH3-S-CR027	110		2/S-5002 2/S-5002	TRANSVERSE CRACK IN SOFFIT = 7' L X 0.01" W 3 TRANSVERSE CRACKS IN INNER RIB = 1' L X 0.009" W EACH	_	
CRACK	DH3-S-CR029	125		2/S-5002	TRANSVERSE CRACK IN SOFFIT = 8' L X 0.009'' W	-	STATE OF HAWAII
CRACK	DH3-S-CR030 DH3-S-CR032	125		2/S-5002 2/S-5002	4 TRANSVERSE CRACK IN SOFFIT - 8 L X 0.009 W 4 TRANSVERSE CRACKS IN INNER RIB = 1' L X 0.009" W EACH	_	DEPARTMENT OF TRANSPORTATION
DELAM SPALL	DH3-S-D560 DH3-S-D561	7 6	4 4	1/S-5000 1/S-5000	ABOVE CELL 17 VERTICAL FACE ABOVE CELL 14 BOTTOM FACE (50% SECTION LOSS)	_	AIRPORTS
		<b>U</b>	•	1,0,0000		_	POUR
		DIA	MOND HEAD	CONCOURSE 3R	D LEVEL SOFFIT AND FAÇADE REPAIR SCHEDULE		
					AN F SHEET S-4164	-	
CRACK	DH3-S-CR010	<u>LENGTH (IN)</u> 156	VVID I H (IN)	2/S-5002	TRANSVERSE CRACK IN SOFFIT = 10' L X 0.02'' W		No. 11475-S
CRACK	DH3-S-CR011	78		2/S-5002	TRANSVERSE CRACK IN SOFFIT = 5' L X 0.02" W		AWAII, U.S.C
CRACK	DH3-S-CR012	78		2/S-5002 2/S-5002	LONGITUDINAL CRACK IN SOFFIT = 5' L X 0.02'' W		Sauch Daul l
CRACK CRACK	DH3-S-CR014 DH3-S-CR015	<u>63</u> 16		2/S-5002 2/S-5002	LONGITUDINAL CRACK IN SOFFIT = 4' L X 0.02" W 15 TRANSVERSE CRACKS = 1' L X 0.012" W EACH IN INNER SIDE OF RIB	-	- Courter punjaca Ci
CRACK	DH3-S-CR017	32		2/S-5002	TRANSVERSE CRACK IN SOFFIT = 2' L X 0.012'' W		04/30/2024 Licensed Expiration Date
CRACK	DH3-S-CR018	78		2/S-5002	TRANSVERSE CRACK IN SOFFIT = 5' L X 0.012" W 7 TOTAL TRANSVERSE CRACKS AROUND PERIMETER OF RIB = 1' L X 0.009" W	-	This work was prepared by me or under my supervision.
	DH3-S-CR022	16	<u> </u>	2/S-5002			DSGN. DRWN. CHKD. APPD.
DELAM	DH3-F-D564 DH3-F-D565	32	<u> </u>	1/S-5000 1/S-5000	ABOVE CELL 11 VERTICAL FACE		MG MG SP -
SPALL	DH3-F-S562	24	6	1/S-5000	ABOVE CELL 13 DIAGONAL FACE		
SPALL	DH3-F-S566			1/S-5000	ABOVE CELL 10 VERTICAL FACE, 3 SPALLS, 1 OF THE SPALLS HAVE EXPOSED	-	KEY PLAN / NOTES:
				1/8-3000	BAR (10% SECTION LOSS)		
		DIA	MOND HEAD	CONCOURSE 3R PL	D LEVEL SOFFIT AND FAÇADE REPAIR SCHEDULE AN G SHEET S-4165		
ITEM	ID#	LENGTH (IN)	WIDTH (IN)	REPAIR DETAIL	ADDITIONAL COMMENTS	-	
CRACK	DH3-F-CR569	32	Λ	2/S-5002	ABOVE CELL 7 VERTICAL FACE		
DELAM	DH3-F-D568	1	4	1/S-5000	ABOVE CELL 8 VERTICAL FACE		
[						1	
		DIA	MOND HEAD	CONCOURSE 3R PL	D LEVEL SOFFIT AND FAÇADE REPAIR SCHEDULE AN H SHEET S-4166		
ITEM	ID#	LENGTH (IN)	WIDTH (IN)	REPAIR DETAIL	ADDITIONAL COMMENTS		
SPALL	DH3-F-S569	63	11	1/S-5000	ABOVE CELL 3 VERTICAL FACE, 2 SPALL W/ EXPOSED REBAR (10% SECTION LOSS)		
SPALL	DH3-F-S570	16	4	1/S-5000	ABOVE CELL 3 VERTICAL FACE (10% SECTION LOSS)	-	
SPALL SPALL	DH3-F-S571 DH3-F-S572			1/S-5000 1/S-5000	ABOVE CELL 3 VERTICAL FACE ABOVE CELL 4 VERTICAL FACE, 4 SPALL W/ EXPOSED REBAR	-	
	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	$\frown$	$\sim$	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			
			DIAMOND H		SE 3RD LEVEL SOFFIT AND FAÇADE REPAIR	5	▲ 03/01/24 ADDENDUM NO. 1
	· · · ·					5	NO. DATE REVISIONS
SPA	LLS (SF)	73	10% ADDI10 7	ADD 7	SF OF SPALLS	$\mathbf{i}$	CONSTRUCTION
CRA	CKS (LF)	315	32	ADD 32	LF OF CRACKS	{	
$\sim$	~~~~~	$\cdots$	$\dots$	~~~~~			DUCUWEN15
							JANUARY 19, 2024
							PROJECT TITLE :
							CONCRETE SPALL REPAIRS
							AT TERMINAL 2 ROADWAVS
							AT DANIEL K INOLIYE INTERNATIONAL AIRPORT
							HONOLULU, OAHU, HAWAII
							PROJECT NO .:
							AO1043-33
							SHEET TITLE:
							DH CONCOURSE 3RD
							I FVFI SOFFIT AND
							SCHEDULE
							DATE : DWG. NO.
							01/19/2024
							SHEET: 5-6()25
							295OF 634 SHEETS
							-

				~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
	2ND LEVEL SOFFIT AND FAÇADE REPAIR SCHEDULE PLAN J SHEET S-4176			EAD CONNECTING LINK SOFFIT AND FAÇADE REPAIR ADDITIONAL 10% CONTINGENCY FOR BID
ITEM ID# LENGTH (IN) WIDTH (IN) REPAIR D		TOTAL 2044	10% ADDITIONAL	
SPALL         DC2-S-S008         11         11         2/S-50           SPALL         DC2-S-S011         19         16         2/S-50	OS     DELAM 17 FROM COLOMIN 2 AND 2-6 OFF NORTH EDGE       03     SPALL W/EXPOSED REBAR, 14' FROM C1 AT MIDSPAN	SPALLS (SF)         2044           CRACKS (LF)         1303	130	ADD 204 SF OF SPALLS ADD 130 LF OF CRACKS
CRACK         DC2-S-CR012         63         2/S-50           CRACK         DC2-S-CR013         63         2/S-50	02 TRANSVERSE CRACK W/EFFLORESCENCE, 14' FROM C1 AND STARS 4' IN FROM 02 TRANSVERSE CRACK W/EFFLORESCENCE			
CRACK         DC2-S-CR014         63         2/S-50           CRACK         DC2-S-CR014         63         2/S-50	02 TRANSVERSE CRACK W/EFFLORESCENCE			
CRACK         DC2-S-CR015         812         2/S-50           CRACK         DC2-S-CR016         94         2/S-50	102     TRANSVERSE CRACK, FULL WIDTH OF BRIDGE W/SCATTERED AREAS OF       102     TRANSVERSE CRACK W/RUST, 9' FROM COLUMN 2 NEAR NORTH EDGE			
CRACK         DC2-S-CR017         39         2/S-50           CRACK         DC2-S-CR018         219         2/S-50	102 TRANSVERSE CRACK, 6' FROM COLUMN 2, NEAR NORTH EDGE 102 DIAGONAL CRACK W/EFELORESCENCE & RUST 3' FROM COLUMN 2			
CRACK         DC2-S-CR019         32         2/S-50	02 TRANSVERSE CRACK W/EFFLORESCENCE			
CRACK         DC2-S-CR020         47         2/S-50           CRACK         DC2-S-CR021         234         2/S-50	02 CRACK WEFFLORESCENCE, 6" FROM COLUMN 2 02 TRANSVERSE CRACK W/ SCATTERED AREAS OF RUST. 8' FROM COLUMN 6 FROM			
CRACK         DC2-S-CR022         188         2/S-50           CRACK         DC2-S-CR023         156         2/S-50	DIAGONAL CRACK W/SCAT AREAS OF EFFLORESCENCE. STARTS AT SOUTH EDGE			
CRACK         DC2-S-CR023         150         2/S-50           CRACK         DC2-S-CR024         63         2/S-50	02     DAGONAL CRACK W/EFFLORESCENCE, 12 FROM COLONIN 2       02     TRANSVERSE CRACK 2'EFFLORESCENCE, 19' RFOM C6 ATMIDSPAN			
CRACK         DC2-S-CR025         32         2/S-50           CRACK         DC2-S-CR026         390         2/S-50	02 CRACK W/EFFLORESCENCE, 15' FROM COLUMN 2 ATMIDSPAN 02 DIAGONAL CRACK W/EFFLORESCENCE & RUST 11' FROM COLUMN 6			
CRACK         DC2-S-CR027         156         2/S-50	02 DIAGONAL CRACK W/EFFLORESCENCE & RUST, 12' FROM COLUMN 6			
CRACK         DC2-S-CR028         47         2/S-50           CRACK         DC2-S-CR029         234         2/S-50	02 TRANSVERSE CRACK W/EFFLORESCENCE & RUST. 10' FROM COLUMN 6 02 DIAGONAL CRACK W/EFFLORESCENCE, 16' FROM COLUMN 6			
MAP         DC2-S-CR030         63         63         1/S-50           CDACK         DC2 S CD031         125         2/S 50	MAP CRACK AREA (4'L X 4'W) W/EFFLORESCENCE, 20' FROM COLUMN 6. CRACKS			
CRACK         DC2-S-CR031         125         2/S-50           SPALL         DC2-S-S033         16         13         2/S-50	DO2     LONG CRACK WEFFLORESCENCE & RUST, 2 FROM COLUMIN 3       003     DELAM, 26' FROM COLUMN 1, 7' INFROM SOUTH EDGE			
SPALL         DC2-S-S034         32         32         2/S-50           SPALL         DC2-S-S035         234         8         2/S-50	003 DELAM, 24' FROM COLUMN 1 AND 2'-6" FROM SOUTH EDGE			
SFALL         DC2-S-S035         234         0         2/S-S0           SPALL         DC2-S-S036         16         16         2/S-50	003 DELAM 14' FROM COLUMN 2			
SPALL         DC2-S-S037         32         16         2/S-50           SPALL         DC2-S-S038         63         32         2/S-50	03 SPALL W/EXPOSED REBAR, 10% SECTION LOSS AT COLUMN 2			
SPALL         DC2-S-S039         47         13         2/S-50	03 DELAM, 26' FROM COLUMN 1 ATMIDSPAN			
SPALL         DC2-S-S040         39         16         2/S-50           SPALL         DC2-S-S041         32         16         2/S-50	003 DELAM, 16' FROM COLUMN 6 NEAR MIDSPAN 003 SPALL W/EXPOSED REBAR, 10% SECTION LOSS, 12'-6'' FROM COLUMN 6			
SPALL         DC2-S-S042         16         16         2/S-50           ODALL         DC2-S-S042         16         16         2/S-50	03 SPALL W/EXPOSED REBAR, 10% SECTION LOSS, 11' FROM COLUMN 2 NEAR MIDSPAN			
SPALL         DC2-S-S043         16         16         2/S-50           SPALL         DC2-S-S044         24         16         2/S-50	03 SPALL W/EXPOSED REBAR, 20% SECTION LOSS, 14 FROM COLUMIN 6 03 SPALL W/EXPOSED REBAR, 30% SECTION LOSS AT NORTHWEST CORNER OF			
SPALL         DC2-S-S045         16         16         2/S-50           SPALL         DC2-S-S046         32         16         2/S-50	003 7' FROM COLUMN 6			
SPALL         DC2-S-S046         32         16         2/S-50           SPALL         DC2-S-S047         16         16         2/S-50	03 SPALL W/EXPOSED REBAR, 10% SECTION LOSS, 20'-6" FROM COLUMN 6			
SPALL DC2-S-S048 16 16 2/S-50	003 11' FROM COLUMN 3			
DH CONNECTING LIN	2ND LEVEL SOFFIT AND FAÇADE REPAIR SCHEDULE PLAN K SHEET S-4177			
ITEM ID# LENGTH (IN) WIDTH (IN) REPAIR I				
CRACK         DC2-S-CR049         78         2/S-50           CRACK         DC2-S-CR050         78         2/S-50	002 CELL 10 WITH EFFLORESCENCE 002 CELL 11 WITH EFFLORESCENCE			
SPALL         DC2-S-S051         24         24         2/S-50           CRACK         DC2 S CR252         188         2/S 50	03 CELL 11 WITH EXPOSED REBAR 15% SECTION LOSS			
CRACK         DC2-S-CR252         188         2/S-5           CRACK         DC2-S-CR053         188         2/S-5	02 CELL 13 SCATTERED DIAGONAL CRACKS WITHEFFLORESCENCE			
CRACK         DC2-S-CR254         188         2/S-50           CRACK         DC2-S-CR055         188         2/S-50	002 CELL 14 SCATTERED DIAGONAL CRACKS WITH EFFLORESCENCE			
CRACK         DC2-S-CR056         188         2/S-50	02 CELL 16 SCATTERED DIAGONAL CRACKS WITH EFFLORESCENCE			
CRACK         DC2-S-CR057         188         2/S-50           CRACK         DC2-S-CR058         188         2/S-50	02 CELL 17 SCATTERED DIAGONAL CRACKS WITH EFFLORESCENCE 02 CELL 18 SCATTERED DIAGONAL CRACKS WITH EFFLORESCENCE			
CRACK         DC2-S-CR059         188         2/S-50           CRACK         DC2-S-CR059         188         2/S-50	02 CELL 19 SCATTERED DIAGONAL CRACKS WITH EFFLORESCENCE			
DELAM         DC2-S-D061         133         47         2/S-50	003 CELL 20 CELL 20			
DELAM         DC2-S-D262         63         47         2/S-50           SPALL         DC2-S-S003         78         32         2/S-50	003 CELL 20 AROUND JOINT 003 SPALL W/EXPOSED REBAR 15% SECTION LOSS			
SPALL         DC2-S-S004         78         47         2/S-50	03 SPALL W/EXPOSED REBAR, 30% SECTION LOSS			
	PLAN L SHEET S-4178			
ITEM ID# LENGTH (IN) WIDTH (IN) REPAIR I	DETAIL ADDITIONAL COMMENTS			
CRACK         DC2-S-CR064         78         2/S-50           CRACK         DC2-S-CR065         94         2/S-50	002       CELL 26 SCATTERED DIAGONAL CRACKS WITH EFFLORESCENCE         002       CELL 27 SCATTERED DIAGONAL CRACKS WITH EFFLORESCENCE			
SPALL DC2-S-S002 32 16 2/S-50	003 2ND LEVEL RAILING			
DH CONNECTING LINK	2ND LEVEL SOFFIT AND FAÇADE REPAIR SCHEDULE PLAN M SHEET S-4179			
ITEM ID# LENGTH (IN) WIDTH (IN) REPAIR D				
SPALL DC2-S-S001 63 16 2/S-50	U3 SPALL WEXPOSED REBAR, 5% SECTION LOSS. 2ND LEVEL RAILING			
REPAIR ID# CODE				
<u>E2-R-S001</u>				
LOCATION S	IRUCTURAL ELEMENT     REPAIR TYPE     NUMBER       SOFET     SOFET     DESIGNATION			
E1 - EWA WING LEVEL 1 F	- SOFFIL S - SPALL <u>DESIGNATION</u> - FACADE D - DELAMINATION			
E2 - EWA WING LEVEL 2 C				
EC1 - EWA CONNECTING LINK 1ST LEVEL	- INNER ROADWAY COLUMN MC - MAP CRACKS			
EC2 - EWA CONNECTING LINK 2ND LEVEL C	- CURB T - TILE REPLACEMENT			
DH2 - DIAMOND HEAD WING LEVEL 2 P	S - PEDESTRIAN SIDEWALK DT - DELAMINATED TILE			
DH3 - DIAMOND HEAD WING LEVEL 3 S DC1 - DIAMOND HEAD CONNECTING LINK 1ST LEVEL R	W - SIDEWALK CW - CEMENT WASH DELAMINATION - RAILING			
DC2 - DIAMOND HEAD CONNECTING LINK 2ND LEVEL	- WALL ALONG WING ROADWAY			
H D	- DEANI SUPPORTING TRELLIS - ROADWAY DECK			



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#### STATE OF HAWAII DEPARTMENT OF TRANSPORTATION AIRPORTS DIVISION

### **MEETING MINUTES**

**DATE**: February 15, 2024

**TIME:** 10:15 a.m.

- LOCATION: Online/Microsoft Teams Meeting
- **PROJECT:** Concrete Spall Repairs at Terminal 2 Roadways Daniel K. Inouye International Airport State Project No. AO1043-33 AIP Project No. 3-15-0005-xxx
- PRESENT: See attached list
- SUBJECT: Pre-Bid Meeting

#### MEETING SUMMARY:

#### I. INTRODUCTIONS

- 1. Introduction of participants involved with the project (State, Design Consultant, CM Consultant).
- 2. Attendees asked to email the State Project Manager, Ms. Valerie Sasuga (valerie.sh.sasuga@hawaii.gov) their contact information (name, company, address, phone number, and email). This information will be used to generate the pre-bid meeting attendance sheet, which will be included with the meeting minutes.

### II. GENERAL DISCUSSION

- 1. As a reminder, anything said at this meeting is for clarification only. The bid documents shall govern over anything said today and discrepancies shall be clarified by addendum.
- 2. This meeting is being recorded.
- 3. Bidders are not allowed to ask questions at this meeting. All questions, including substitution requests, must be submitted in writing no later than March 8, 2024 by 4:00 p.m. Hawaii Standard Time. As noted in Special Provisions Paragraph 2.7, substitution requests shall be submitted via email to the contact person listed in HIePRO for the solicitation and also posted as a question in HIePRO under the question/answer tab referencing the email with the request.

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- 4. Questions received after the deadline will not be addressed, and verbal RFIs will not receive a response.
- 5. Bidding Schedule:

٠	Feb 8, 2024	Advertisement
•	March 8, 2024 @ 4:00pm HST	Last Day to submit Questions and
		Substitution Requests via HIePRO
•	April 12, 2024 @ 2:00pm HST	Deadline to submit Bids via HIePRO

- 6. A valid State of Hawaii General Engineering "A" License is required prior to the award of the contract.
- 7. Project duration is 630 calendar days from the Notice to Proceed (NTP) date.
- 8. Liquidated damages shall be TWO THOUSAND DOLLARS (\$2,000.00) per calendar day for failure to complete the work within the duration noted.
- 9. A complete Proposal package (pages P-1 through P-14) shall be submitted at the time of bid. These forms can be found in Part 0.B of the project specifications. Proposal Schedule must be completely filled in, even if the proposed cost is \$0 for a line item. Failure to fill in all forms or failure to submit all proposal pages shall result in rejection of the bid.
- 10. Federal forms located on Proposal pages P-15 through P-25 shall be submitted by the close of business, 4:30 p.m. HST, five (5) days after bid opening. Failure to submit these forms shall result in rejection of bid. Forms shall be emailed to the State Project Manager.
- 11. Any changes to the bid documents will be issued through an addendum. Bidders are reminded to acknowledge receipt of any addendum(s) on page P-4 of the Proposal.
- 12. This is a state project utilizing FAA funds. Prospective bidders are reminded to comply with all federal requirements, such as using the correct federal wage rates and labor classifications.
- 13. Additionally, bidders are reminded to comply with all Part 0.E Required Federal Airport Improvement Program (AIP) Contract Provisions of the project specifications. This includes, but is not limited to, the Equal Employment Opportunity Clause, Disadvantaged Business Enterprise (DBE) Requirements, Buy American Preferences, General Civil Rights Provisions, and Civil Rights Title VI Assurances.
- 14. This project is subject to a DBE goal of 3.2%. All bidders must email completed DBE forms, included in Part 0.F of the project specifications, to the State Project Manager at valerie.sh.sasuga@hawaii.gov by the close of

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business (4:30pm) on April 17, 2024. Failure to provide these documents shall be cause for rejection of the bid.

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<u>Policy of the State of Hawaii, Department of Transportation's (HDOT) DBE Program</u>: To ensure equal opportunity and non-discrimination in the award and administration of United States DOT-assisted contracts. Contractors shall take all necessary and reasonable steps in accordance with the regulations (49 CFR, Part 26) to ensure that DBE's have an equal opportunity to compete for and perform on contracts.

DBE Goal for this project: 3.2%

- Be sure to document discussions, phone calls, faxes or memos relating to your efforts in meeting the DBE goal.
- DBEs must be certified by the bid opening date.
- DBE subcontractors, manufacturers, suppliers, trucking companies and any second tier subcontractors shall be listed on the respective DBE forms in order to receive credit.

The following forms are due to the Department's Project Manager or designee by the close of business, 4:30 P.M. Hawaii Standard Time (HST), five (5) calendar days after bid opening. These forms are confidential documents and should not be included with the submitted proposals.

1. <u>DBE Confirmation and Commitment Agreement</u>. This form must be signed by the bidder/offeror and each DBE subcontractor, manufacturer, supplier, or trucking company. Information to be provided on the form shall include, among other things, the project number, the DBE's NAICS codes, description of work, bid items with corresponding price information, prime contractor name and contact information DBE name and contact information and subcontractor name and contact information if the DBE is a second tier subcontractor.

To count toward meeting a goal, each DBE firm must be certified in a NAICS code applicable to the kind of work the firm would perform on the contract.

2. DBE Contract Goal Verification and Good Faith Efforts (GFE) Documentation for Construction. List the dollar amount of all subcontractors, manufacturers, suppliers, and trucking companies (both DBE and non-DBE firms). Bidder/offeror must also list the DBE project goal on this form. The bidder/offeror must submit documentation demonstrating how the DBE goal was met or how the bidder/offeror attempted to meet the goal if the goal was not met. This documentation shall include quotations for both DBE and non-DBE subcontractors when a non-DBE is selected over a DBE for the project.

Documentation of good faith efforts is required irrespective of whether the bidder/offeror met the DBE project goal.

The above forms must be complete and provide the necessary information to properly evaluate bids/proposals. Failure to provide any of the above shall be cause for bid/proposal rejection. It is in best interest of the bidder to ensure that that dollar amount listed for DBEs on the DBE Confirmation and Commitment Agreement and the DBE Contract Goal

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### Verification and Good Faith Efforts (GFE) Documentation for Construction are consistent and in alignment with each other.

In determining calendar days, the day from which the period begins to run is not counted, and when the last day of the period is a Saturday, Sunday, or Federal or State holiday, the period extends to the next day that is not a Saturday, Sunday, or Federal or State holiday.

• Calculation of the DBE contract goal for this project is the proportionate contract dollar value of work performed, materials, and goods to be supplied by DBEs. DBE credit shall not be given for mobilization, force account items and allowance items. This DBE contract goal is applicable to all the contract work performed for this project.

DBE contract goal percentage = Contract Dollar Value of the work to be performed by DBE subcontractors, truckers/haulers, and manufacturers, plus 60% of the contract dollar value of DBE suppliers, divided by the sum of all contract items (sum of all contract items is the total amount for comparison of bids less mobilization, force account items, and allowance items).

The Department shall adjust the bidder's/offeror's DBE contract goal to the amount of the project goal if it finds that the bidder/offeror met the goal but erroneously calculated a lower percentage. If the amount the bidder/offeror submits as its contract goal exceeds the project goal, the bidder/offeror shall be held to the higher goal.

- In the bid documents be sure to refer to the DBE Requirements section and pay special attention to:
  - Section VIII. Demonstration of Good Faith Efforts for Contract Award, which summarizes the kinds of efforts that will be considered demonstrative of good faith efforts, and
  - Section IX. Administrative Reconsideration, which describes the process the apparent low bidder may take if they failed to meet the provisions of 49 CFR Sections 26.53(a)
- All federally funded projects awarded after October 1, 2017 are required to use the Certification and Contract Compliance Management System program, an online payment tracking system. This project will be required to use the Certification and Contract Compliance Management System program. HDOT OCR will work with the Project Engineer and selected bidder to get the contract information to create a contract record for the project. Subcontractors, suppliers, manufacturers, trucking companies, etc. that are selected to work on this project are expected to log in (on a regular basis) and indicate if payment was prompt and provide all required information.
- BIDDER REGISTRATION FORM. All firms bidding or quoting on DOT projects, including vendors, subcontractors, manufacturers, truckers, etc., must register as a bidder. Certified DBEs are automatically registered as a bidder with the HDOT. Bidder Registration Form can be found at:

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> https://hidot.hawaii.gov/administration/files/2019/03/Bidder-Registration-Fillable-Form.pdf

- Be sure to check the DBE Directory online at: <u>https://hdot.dbesystem.com/</u> to ensure the DBEs listed are certified.
  - 15. Subject to approval by the Airport Manager and the availability of parking spaces, parking may be purchased at a monthly rate of \$175.00 plus a one-time fee of \$25.00 for a parking access card. All costs associated with obtaining parking passes shall be the responsibility of the Contractor.
  - 16. Pending the availability of space on airport property, the State will issue a Revocable Permit to the Contractor for the use of the space, assessed at a monthly fee of \$25 for each Revocable Permit issued. The space may be used for a field office, staging of materials and equipment, vehicle parking or other uses subject to the approval of the State. All spaces shall be subject to the requirements of Section 01561 Construction Site Runoff Control Program.
  - 17. Since space on airport property is extremely limited, the State does not guarantee that the space provided to the Contractor will be in close proximity to the project site. The State will make every effort to provide the Contractor with space on airport property, however, should the State determine that no space is available for such use(s), the responsibility shall then be on the Contractor to find space outside of airport property.
  - 18. Due to the need to minimize impacts to operations, working hours shall be as defined in Section 01010.
  - 19. Per Section 01561 Construction Site Runoff Control Program, Contractor will have to prepare and submit a site-specific BMP plan within 30 calendar days of contract execution. Contractor may use the SSBMP Plan template included in Section 01561 as a starting point and update as needed. Note that there are liquidated damages associated with non-compliance of the BMP requirements.
  - 20. All of the work is in a secured area. Due to heightened security requirements, there are new security procedures in place. The contractor shall ensure that all access gates are secured at all times. Under no circumstances shall tools, equipment or materials be left in areas where the public can gain access to these items. Other security requirements are stated in Section 01565, Security Measures.
  - 21. Security plan shall be submitted within 14 calendars days after award of contract as specified in Paragraph 1.03 of Section 01565.

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- 22. Subject to approval from the Airport Manager, access to the project site will probably be limited through either Access Checkpoint 'A' or Checkpoint 'C'. All vehicles entering the AOA may be subject to search.
- 23. Requests for AOA badges, AOA stickers, ramp licenses, etc. shall be submitted within 14 calendar days after award of contract. In addition to the requirements stated in the Contract Bid Documents, all Contractors shall comply with the requirements and procedures of the Contractor's Training Guide.
- 24. Monthly billings are required if any work is performed during the month.

### III. PROJECT SCOPE OF WORK

Design Consultant, KAI Hawaii, to provide a brief description of the scope of work.

- The location overview was shown in google earth. Link to the location is provided here: <u>https://earth.google.com/web/search/hnl+airport/@21.33042467,-</u> <u>157.91999598,15.30645464a,1202.46219872d,35y,0h,0t,0r/data=CigiJgok</u> CS7I5VVp5jRAEc35QmCz4zRAGcFTBegRj2PAIccfZcLkj2PA
  - a. The scope of work is broken into 6 major locations throughout the Honolulu International Airport.
    - i. Terminal 2 Departures Roadway
    - ii. Ewa Concourse 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> Levels
    - iii. Diamond Head Concourse 1st, 2nd, and 3rd Levels
    - iv. Ewa Connecting Link
    - v. Diamond Head Connecting Link.
    - vi. Terminal 2 3<sup>rd</sup> Level Roadway
- 2. The overall project scope of work was described as follows:
  - a. Terminal 2 Departures Roadway
    - i. Isolated overhead Spall repairs accessible from the Arrivals Roadway.
    - ii. Isolated pavement repairs along the Departures Roadway
      - 1. Spall and epoxy overlay repairs
      - 2. Overlay repairs
      - 3. Partial expansion joint repairs
  - b. Ewa Concourse 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> Levels
    - i. Spall and crack repairs throughout the 1<sup>st</sup> level, 2<sup>nd</sup> level and 3<sup>rd</sup> level roadways. These include, but are not limited to, the Sidewalks, Railings, Curbs, Columns, Planters and Beams.

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- ii. Expansion joint parallel to roadway nosing and waterproofing repair.
- iii. Expansion joint perpendicular to roadway, through the soffit and sidewalks.
- iv. Miscellaneous electrical work, storm drain piping work
- c. Diamond Head Concourse 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> Levels
  - i. Spall and crack repairs throughout the 1<sup>st</sup> level, 2<sup>nd</sup> level, and 3<sup>rd</sup> level roadways. These include, but are not limited to, the Sidewalks, Railings, Curbs, Columns, Planters and Beams.
  - ii. Expansion joint parallel to roadway nosing and waterproofing repair.
  - iii. Expansion joint perpendicular to roadway, through the soffit and sidewalks.
  - iv. Planter and light pole column demolition and replacement. Fixed planter is to be removed and replaced with a sidewalk. Concrete columns are to be removed and replaced with metal light poles.
  - v. Miscellaneous electrical work
  - vi. Storm drain piping work
- d. Ewa and Diamond Head Connecting Links
  - i. Spall and crack repairs throughout the 1<sup>st</sup> level, 2<sup>nd</sup> level, and 3<sup>rd</sup> level roadways. These include, but are not limited to, the overhead soffits, railings, and roadway.
  - ii. Planter removal. Planters will be removed and replaced with sidewalks. Metal railing will be added to raise railing height to match existing height.
  - iii. Existing epoxy roadway coating removal and concrete repairs below.
  - iv. Replacement/relocation of roadway drain inlets and associated piping, drain relocation to outside of columns, trench drain replacement.
  - v. Expansion joint waterproofing removal and restoration.
  - vi. CMU wall replacement with new guardrail

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- vii. Removal of concrete railing and strip lighting; replace with wall mounted step light fixtures
- viii. Hybrid polymer concrete and epoxy overlay installation to grade roadway to new drains and protect concrete.
- ix. Ewa and Diamond Head connecting links may not be worked on simultaneously in case unforeseen access is needed to concourse upper floors.
- e. Terminal 2 3<sup>rd</sup> Level Roadway
  - i. Expansion joints waterproofing repair and Nosing Replacement.
- 3. Work hours were discussed. Work hours may be referenced in Section 01010 DESCRIPTION OF WORK. For reference they are as follows:
  - a. Terminal 2, Departures Level roadway (2<sup>nd</sup> level roadway & underside of deck)
    9:00 p.m. to 5:00 a.m.
  - b. Ewa Concourse Roadways 9:00 p.m. and 5:00 am
  - c. DH Concourse Roadways 9:00 p.m. and 5:00 am
  - d. Ewa and DH Connecting Links 10:00 p.m. and 5:00 am
  - e. Terminal 2 3<sup>rd</sup> Level Roadways 9:00 pm to 5:00 am
- 4. Storage locations were discussed:
  - a. Based on space availability storage for large equipment and trucks will be determined closer to start of construction.
  - b. Load limit for ramps and concourse roadways are as follows:
    - Ewa and Diamond Head 2<sup>nd</sup> Level Roadways including turn around areas: 5,400 lbs./ axle.
    - Ewa concourse, 3<sup>rd</sup> Level: 19,000 G.W.V.
    - These will be included in the contract plan structural notes as an addendum. In general, heavy equipment, concrete trucks, hauling trucks, roll off bins are not permitted on the roadways.

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- 5. Project Phasing and Limitations were discussed.
  - a. In general, the phasing will be the most challenging part of the project. The Wiki Wiki Shuttle Operations must be maintained throughout the construction process.
    - b. Contractor shall submit proposed construction sequence and phasing for DOTA review and approval.
    - c. In the event of an emergency, airport operations shall take precedence over all construction activities.
    - d. Roadway repair work shall be performed in sections, to leave at least one lane open for traffic, unless otherwise noted.
      - i. Traffic control will be required during both construction and nonconstruction hours.
    - e. While working at the Ewa Connecting Link, no work will be allowed at the DH Connecting Link, and vice versa.
    - f. Terminal 2 (OST) Departures Roadway:
      - i. On the 2<sup>nd</sup> level, for the outside (mauka) two lanes, can only close one lane at a time, and the length of the lane closure is subject to the DOTA approval.
      - ii. On the 2<sup>nd</sup> level, for the inside (makai) three lanes, can only close one lane at a time, and the length of the lane closure is subject to the DOTA approval.
      - iii. On the 1<sup>st</sup> level, for the outside (mauka) three lanes, can only close one lane at a time, and the length of the lane closure is subject to the DOTA approval.
      - iv. On the 1<sup>st</sup> level, for the inside (makai) two lanes, can only close one lane at a time, and the length of the lane closure is subject to the DOTA approval.
      - v. Temporary barriers will not be allowed to remain in any of the traffic lanes during non-working hours.

Please inform us of any omissions or corrections to the minutes of the meeting.

Meeting adjourned at: 10:45 a.m.

Post meeting note: On 2/16/2024, all meeting participants were emailed the link to complete the voluntary Title VI Public Involvement Data Form. Here is the link: https://forms.office.com/pages/responsepage.aspx?id=xt5HOLJj-UOm0FikCqoaEF9tlr5kbRtEtyn6pyXDU3RUNVEwWDJMWUowQkEwUEJLNzdNREILQ TVRQS4u

Project Name:Concrete Spall Repairs at Terminal 2 Roadways<br/>Daniel K. Inouye International AirportProject No.AO1043-33AIP Project No:3-15-0005-xxxMeeting Location:Microsoft Teams

Name: Alex Cross	Company: AECOM	Phone:
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Name: Gavin Yoritomo	Company: AECOM	Phone: (808) 542-0898
Title: Construction Manager	Address:	Fax:
The construction manager		E-Mail: Gavin.Yorimoto@aecom.com
Name: Kurt Kunimune	Company: Bowers+Kubota	Phone: (808) 479-0767
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Name: Brad Begonia	Company: Concrete Surface Designs	Phone:
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Name: Gary Kam	Company: DOTA Contracts Maintenance	Phone: (808) 834-6091
Title	Office	Fax:
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Name: Emmanuel Minde	Company: Global Specialty Contractors, Inc	Phone: (651) 406-8232
Title	Address:	Fax:
1100.		E-Mail:

Project Name:Concrete Spall Repairs at Terminal 2 Roadways<br/>Daniel K. Inouye International AirportProject No.AO1043-33AIP Project No:3-15-0005-xxxMeeting Location:Microsoft Teams

Name: Michael Green	Company: Goldwings Supply Service, Inc.	Phone: (808) 833-6020 x1001	
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		E-Mail: Michael@goldwings-supply.com	
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Title: President & CEO		Fax:	
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Name: Choon Kee Lee	Company: Nan, Inc.	Phone: (808) 797-8125	
Title: Senior Estimator	Address:	Fax:	
		E-Mail: cklee@nanhawaii.com	

Project Name:Concrete Spall Repairs at Terminal 2 Roadways<br/>Daniel K. Inouye International AirportProject No.AO1043-33AIP Project No:3-15-0005-xxxMeeting Location:Microsoft Teams

Name: Tommy Foo	Company: PAC Electric Co., Inc.	Phone: (808) 792-7122	
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Title: Chief Estimator	Contracting LLC	Fax:	
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Name: Mike Inouye	Company: Ralph S. Inouye Co., Ltd.	Phone: (808) 330-4003	
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Name: Alex Cody	Company: Swinerton	Phone: (949) 537-4302	
Title <sup>.</sup> Senior Project Manager	Address:	Fax:	
nao, comor reject manager		E-Mail: Alex.Cody@swinerton.com	
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Title <sup>.</sup>	Address:	Fax:	
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Name: Summer Vaimaona	Company: Swinerton	Phone: (808) 426-7492	
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Name: Brett Gordon	Company: Triton Marine Corporation	Phone:	
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Name: Steven Yuhl	Company: Triton Marine Corporation	Phone:	
Title:	Address:	Fax:	
		E-Mail: syuhl@tritonmarine.us	
Name: Melad Hanna	Company: Watts Constructors LLC	Phone: (808) 348-3829	
Title <sup>.</sup> Project Manager	Address:	Fax:	
nael i reject manager		E-Mail: Melad.Hanna@watts-con.com	
Name: Amgad Ibrahim	Company: Watts Constructors LLC	Phone: (253) 358-5308	
Title: Preconstruction Director	Address:	Fax:	
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Project Name:Concrete Spall Repairs at Terminal 2 Roadways<br/>Daniel K. Inouye International AirportProject No.AO1043-33AIP Project No:3-15-0005-xxxMeeting Location:Microsoft Teams

	-	
Name: Wassim Malaty	Company: Watts Constructors LLC	Phone: (571) 499-0594
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Name:	Company:	Phone:
Title:	Address:	Fax:
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Name:	Company:	Phone:
Title:	Address:	Fax:
		E-Mail:
Name:	Company:	Phone:
Title:	Address:	Fax:
		E-Mail:
Name:	Company:	Phone:
Title:	Address:	Fax:
		E-Mail:
Name:	Company:	Phone:
Title <sup>.</sup>	Address:	Fax:
		E-Mail:
Name:	Company:	Phone:
Title:	Address:	Fax:
		E-Mail:
Name:	Company:	Phone:
Title:	Address:	Fax:
		E-Mail:
Name:	Company:	Phone:
Title:	Address:	Fax:
		E-Mail:
Name:	Company:	Phone:
Title:	Address:	Fax:
		E-Mail:

State Project No. AO1043-33 Concrete Spall Repairs at Terminal 2 Roadways Pre-Bid Meeting February 15, 2024 @ 10:00am

# INTRODUCTIONS

- DOTA
- DOT-OCR (Office of Civil Rights)
- Design Consultant KAI Hawaii
- CM Consultant AECOM Technical Services
- Bidders: please identify yourselves.
  - Email contact information (name, company, address, phone number & email) to State Project Manager (valerie.sh.sasuga@hawaii.gov)

- As a reminder, anything said at this meeting is for clarification only. The bid documents shall govern over anything said today and discrepancies shall be clarified by addendum.
- This meeting is being recorded.
- Bidders are not allowed to ask questions at this meeting. All questions or requests for information must be submitted in writing on HIePRO no later than March 8, 2024 by 4:00 p.m. Hawaii Standard Time. As noted in Special Provisions Paragraph 2.7, substitution requests shall be submitted via email to the contact person listed in HIePRO for the solicitation and also posted as a question in HIePRO under the question/answer tab referencing the email with the request.
- Questions received after the deadline will not be addressed, and verbal RFIs will not receive a response.

- Bidding Schedule
  - February 8, 2024 Advertisement
  - March 8, 2024 @ 4:00p.m. HST Last day to submit questions and substitution requests via HIePRO
  - April 12, 2024 @2:00p.m. HST Deadline to submit bids via HIePRO

- State of Hawaii General Engineering "A" License
- Project duration 630 calendar days
- Liquidated damages \$2,000 per calendar day
- Proposal package (reference Part 0.B of project specifications)
  - Failure to complete all forms or submit all proposal pages shall result in rejection of the bid
  - Receipt of addendums shall be acknowledged on page P-4

- FAA funded project, must comply with all Federal Requirements (Reference Parts 0.C and 0.E)
  - Federal wage rates & classifications
  - Equal Employment Opportunity Clause
  - Disadvantaged Business Enterprise (DBE) Requirements
  - Buy American Preferences
  - General Civil Rights Provisions
  - Civil Rights Title VI Assurances

### • DBE

- Project Goal 3.2%
- Completed DBE forms (reference Part 0.F) must be emailed to the State Project Manager by 4:30p.m. on April 17, 2024
- Failure to submit forms shall be cause for rejection of the bid

### Policy of the State of Hawaii, Department of Transportation's (HDOT) DBE Program:

To ensure equal opportunity and non-discrimination in the award and administration of United States DOT-assisted contracts. Contractors shall take all necessary and reasonable steps in accordance with the regulations (49 CFR, Part 26) to ensure that DBE's have an equal opportunity to compete for and perform on contracts.

DBE Goal for this project: 3.2%

- Be sure to document discussions, phone calls, faxes or memos relating to your efforts in meeting the DBE goal.
- DBEs must be certified by the bid opening date.
- DBE subcontractors, manufacturers, suppliers, trucking companies and any second tier subcontractors shall be listed on the respective DBE forms in order to receive credit.

The following forms are due to the Department's Project Manager or designee by the close of business, 4:30 P.M. Hawaii Standard Time (HST), five (5) calendar days after bid opening. These forms are confidential documents and should not be included with the submitted proposals.

1. <u>DBE Confirmation and Commitment Agreement</u>. This form must be signed by the bidder/offeror and each DBE subcontractor, manufacturer, supplier, or trucking company. Information to be provided on the form shall include, among other things, the project number, the DBE's NAICS codes, description of work, bid items with corresponding price information, prime contractor name and contact information DBE name and contact information and subcontractor.

To count toward meeting a goal, each DBE firm must be certified in a NAICS code applicable to the kind of work the firm would perform on the contract.

2. <u>DBE Contract Goal Verification and Good Faith Efforts (GFE) Documentation</u> <u>for Construction</u>. List the dollar amount of all subcontractors, manufacturers, suppliers, and trucking companies (both DBE and non-DBE firms). Bidder/offeror must also list the DBE project goal on this form. The bidder/offeror must submit documentation demonstrating how the DBE goal was met or how the bidder/offeror attempted to meet the goal if the goal was not met. This documentation shall include quotations for both DBE and non-DBE subcontractors when a non-DBE is selected over a DBE for the project.

Documentation of good faith efforts is required irrespective of whether the bidder/offeror met the DBE project goal.

The above forms must be complete and provide the necessary information to properly evaluate bids/proposals. Failure to provide any of the above shall be cause for bid/proposal rejection. It is in best interest of the bidder to ensure that that dollar amount listed for DBEs on the DBE Confirmation and Commitment Agreement and the DBE Contract Goal Verification and Good Faith Efforts (GFE) Documentation for Construction are consistent and in alignment with each other.

In determining calendar days, the day from which the period begins to run is not counted, and when the last day of the period is a Saturday, Sunday, or Federal or State holiday, the period extends to the next day that is not a Saturday, Sunday, or Federal or State holiday.

 Calculation of the DBE contract goal for this project is the proportionate contract dollar value of work performed, materials, and goods to be supplied by DBEs. DBE credit shall not be given for mobilization, force account items and allowance items. This DBE contract goal is applicable to all the contract work performed for this project.

DBE contract goal percentage = Contract Dollar Value of the work to be performed by DBE subcontractors, truckers/haulers, and manufacturers, plus 60% of the contract dollar value of DBE suppliers, divided by the sum of all contract items (sum of all contract items is the total amount for comparison of bids less mobilization, force account items, and allowance items).

The Department shall adjust the bidder's/offeror's DBE contract goal to the amount of the project goal if it finds that the bidder/offeror met the goal but erroneously calculated a lower percentage. If the amount the bidder/offeror submits as its contract goal exceeds the project goal, the bidder/offeror shall be held to the higher goal.

- In the bid documents be sure to refer to the DBE Requirements section and pay special attention to:
  - Section VIII. Demonstration of Good Faith Efforts for Contract Award, which summarizes the kinds of efforts that will be considered demonstrative of good faith efforts, and
  - Section IX. Administrative Reconsideration, which describes the process the apparent low bidder may take if they failed to meet the provisions of 49 CFR Sections 26.53(a)
- All federally funded projects awarded after October 1, 2017 are required to use the Certification and Contract Compliance Management System program, an online payment tracking system. This project will be required to use the Certification and Contract Compliance Management System program. HDOT OCR will work with the Project Engineer and selected bidder to get the contract information to create a contract record for the project. Subcontractors, suppliers, manufacturers, trucking companies, etc. that are selected to work on this project are expected to log in (on a regular basis) and indicate if payment was prompt and provide all required information.

- BIDDER REGISTRATION FORM. All firms bidding or quoting on DOT projects, including vendors, subcontractors, manufacturers, truckers, etc., must register as a bidder. Certified DBEs are automatically registered as a bidder with the HDOT.
- Bidder Registration Form can be found at: <u>https://hidot.hawaii.gov/administration/files/2019/03/Bidder-Registration-Fillable-Form.pdf</u>
- Be sure to check the DBE Directory online at: <u>https://hdot.dbesystem.com/</u> to ensure the DBEs listed are certified.

### General Project Information

- Parking for Contractor
- Revocable Permit
- Working Hours
- Construction Site Runoff Control Program
- Security Requirements
- Monthly Billings
#### PROJECT SCOPE – LOCATION OVERVIEW



Terminal 2 - Departures Roadway



• Overhead Spall/Crack Repairs



- Second Level Roadway
  - Spall and overlay repairs
  - Overlay only repairs
  - Isolated Expansion joint repairs



• Ewa Concourse



- 1<sup>st</sup> 2<sup>nd</sup> 3<sup>rd</sup> level Concrete Repairs
- Parallel expansion joint repair
- Continued Perpendicular expansion joint repair



• DH Concourse



- 1<sup>st</sup> 2<sup>nd</sup> 3<sup>rd</sup> level Concrete Repairs
- Parallel expansion joint repair
- Continued Perpendicular expansion joint repair



Ewa and DH Connecting Links



Railing/Overhead Spall Repair



Ewa and DH Connecting Links



Planter Removal/Multiple Light fixture installation





#### Roadway Epoxy removal and concrete repair



Ewa and DH Connecting Links



Drain Relocation



#### Expansion Joint Waterproofing replacement



Ewa and DH Connecting Links



Hybrid Polymer Concrete and Epoxy Overlay Installation



Terminal 2 – 3<sup>rd</sup> Level Roadway

• Expansion Joint Waterproofing and Nosing Replacement



#### PROJECT SCOPE – WORK HOURS

- Referenced in Specification Section 01010 DESCRIPTION OF WORK
- Terminal 2, Departures Level roadway (2<sup>nd</sup> level roadway & underside of deck)
  - 9:00 p.m. to 5:00 a.m.
- Ewa Concourse 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> levels
  - 9:00 p.m. to 5:00 a.m.
- Diamond Head Concourse 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> levels
  - 9:00 p.m. to 5:00 a.m.
- Ewa Connecting Link
  - 10:00 p.m. to 5:00 a.m.
- Diamond Head Connecting Link
  - 10:00 p.m. to 5:00 a.m.
- Terminal 2 3<sup>rd</sup> Level Roadway
  - 9:00 p.m. to 5:00 a.m.
- In an emergency, airport operations shall take precedence over all construction activities.

#### PROJECT SCOPE – STORAGE-LOAD LIMIT

- Based on space availability storage for large equipment and trucks will be determined closer to start of construction.
- Ewa and Diamond Head 2<sup>nd</sup> Level Roadways including turn around areas:
  - 5,400 lbs./ axle.
  - Ewa concourse, 3<sup>rd</sup> Level: 19,000 G.W.V.
  - These will be included in the contract plan structural notes as an addendum. In general, heavy equipment, concrete trucks, hauling trucks, roll off bins are not permitted on the roadways.

#### PROJECT SCOPE – PHASING

- Wiki Wiki Shuttle Operations must be maintained throughout construction process.
- Construction sequence and phasing to be submitted for review and approval.
- In the event of an emergency, airport operations shall take precedence over all construction activities.

#### PROJECT SCOPE – PHASING

- The roadway repairs shall be done in sections leaving at least one lane open to traffic, unless otherwise noted.
  - Traffic control will be needed during both construction and non-construction hours.
- Ewa and DH Connecting Link Roads/Ramps (1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> Levels)
  - While working at the Ewa Connecting link roads/ramps, no work will be allowed on the DH connecting link roads/ramps, and vice versa.

# PROJECT SCOPE – LANE CLOSURES

Terminal 2 (OST) Departures Roadway:

- On the 2<sup>nd</sup> level, for the outside (mauka) two lanes, can only close one lane at a time, and the length of the lane closure is subject to the DOTA approval.
- On the 2<sup>nd</sup> level, for the inside (makai) three lanes, can only close one lane at a time, and the length of the lane closure is subject to the DOTA approval.
- On the 1<sup>st</sup> level, for the outside (mauka) three lanes, can only close one lane at a time, and the length of the lane closure is subject to the DOTA approval.
- On the 1<sup>st</sup> level, for the inside (makai) two lanes, can only close one lane at a time, and the length of the lane closure is subject to the DOTA approval.
- Temporary barriers will not be allowed to remain in any of the traffic lanes during non-working hours.

Thank you for attending the pre-bid meeting. We will be issuing an addendum. Reminder to please sign in using the chat feature in Microsoft Teams or if you're calling in by phone, email your contact information to Valerie at <u>valerie.sh.sasuga@hawaii.gov</u>

#### Responses to Request for Information (RFI's/Questions) HiePRO Questions for Solicitation B24001512 Concrete Spall Repairs at Terminal 2 Roadways State Project No. AO1043-33 As of March 6, 2024

1. The HIePRO Notice to Bidders states that the Contractor License Requirements are for Class A licenses only. The requirement on this project for qualified applicants to have Class A licenses may limit the number of applicants who would otherwise be qualified, which may result in increased costs to the taxpayers as a result. Will the Department consider removing the requirement of a Class A license only, and instead require either a Class A "or" a Class B license?

Response: Contractor License Requirements will remain as only Class A.

- 2. Can an editable excel version of the tables on Drawing S-6000 to S-6030 be provided?
  - Response: Excel files will be provided with Addendum No. 1. If any discrepancies between the excel file and construction drawings are present, construction drawings shall govern.

Here is the list of excel files uploaded to HIePRO for this project:

- 01\_Departues Soffit.xlsx
- 02\_Ewa Concourse Level 1 Soffit.xlsx
- 03\_Ewa Concourse Level 2 Ground.xlsx
- 04\_Ewa Concourse Level 2 Soffit.xlsx
- 05\_Ewa Concourse Level 3 Ground.xlsx
- 06\_Ewa Concourse Level 3 Soffit.xlsx
- 07\_Ewa Connecting Link Soffit.xlsx
- 08\_Ewa Connecting Link Ground.xlsx
- 09\_DH Concourse Level 1 Soffit.xlsx
- 10\_DH Concourse Level 2 Ground.xlsx
- 11\_DH Concourse Level 2 Soffit.xlsx
- 12\_DH Concourse Level 3 Ground.xlsx
- 13\_DH Concourse Level 3 Soffit.xlsx
- 14\_DH Connecting Link Soffit.xlsx
- 15\_DH Connecting Link Ground.xlsx

- 3. Section 1.06 of Specification 03700 requires a NACE CP2 or higher to perform all testing. Due to anticipate schedule and timing of construction activities, can a NACE CP1 also be utilized to obtain basic rebar continuity and anode to rebar continuity measurements? All testing results and reporting performed by a NACE CP1 and/or NACE CP2 will be overseen and reviewed by a NACE CP4 and Hawaii PE before issuance.
  - Response: Contractor is to retain a technical representative who meets the criteria of paragraph 1.06 A and 1.06 B. The technical representative responsibilities are listed in paragraph 1.06 C. Paragraph 1.06 C does not require that the technical representative performs all testing.