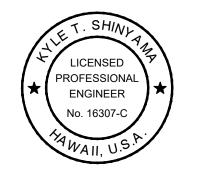
### GENERAL NOTES

- 1. The scope of work for this project includes the rehabilitation of Honolua Bridge. The project includes new abutments outside of the existing abutments to remain, approach slabs and concrete superstructure that has a load capacity consistent with current design standards, has MASH 2016 compliant parapets, signage and striping compliant with HDOT and MUTCD standards, and a temporary traffic detour road and temporary bridge constructed on the makai side of the highway right-of-way to allow the road to remain open during construction. The proposed bridge deck will be 18-feet wide and 40-feet long.
- 2. The Contractor shall perform all applicable construction work in accordance with the "Department of Transportation, Highways Division, Standard Plans", as amended and "Hawaii Standard Specifications for Road and Bridge Construction, 2005", as amended for the State of Hawaii.
- 3 The Contractor shall verify the location of all existing utilities, whether shown on the plans or not, and shall be responsible for the repair of replacement of the same in the event of damages due to his construction practices, at no cost to the State.
- 4. All dimensions and details shown on the drawings shall be checked and verified prior to the start of construction, and any discrepancies shall be immediately brought to the attention of the Engineer for clarification.
- 5. The Contractor's attention is directed to the following Sections: Subsection 104.11 Utilities and Services; Subsection 107.06 Contractor Duty Regarding Public Convenience; and Section 645 Work Zone Traffic Control.
- 6. The Contractor is reminded of the requirements of Subsection 105.16 Subcontracts, which requires him to perform work to not less than 30 percent of the total contract cost less deductible items. Non-compliance with the Subsection may be grounds for rejection of bid.
- 7. At the end of each day's work, the Contractor shall remove all equipment and other obstructions to permit free and safe passage of public traffic.
- 8. The existence and location of underground utilities, manholes, monuments and structures as shown on the plans are from the latest available data, but the accuracy is not guaranteed. The encountering of other obstacles during the course of work is possible. The Contractor shall tone for the exact locations and depths of all underground facilities, either shown on or omitted from the plans, in areas where work, such as the placement of sign posts, traffic signal conduits, etc. may affect these properties. Toning shall be considered incidental to the various contract items and will not be paid for separately. The Contractor shall be held liable for any damages incurred to the existing facilities and/or improvements as a result of his operations.
- 9. Prior to beginning work on the project, the Contractor shall request toning of utilities from One Call Center, phone 811 or 1-866-423-7287.
- 10. Contractor shall exercise extreme caution to preserve BENCHMARKS (Survey Monuments). Whenever the center of a Survey Monument is less than three (3) feet from the edge of construction, the Contractor shall retain a Licensed Land Surveyor to reference the location of said Survey Monument.
- 11. Benchmarks that are disturbed or destroyed shall be restored under a Licensed Land Surveyor's direction. Copies of field notes, descriptions and new values of the new benchmark shall be sent to the Department of Transportation, Highways Division, Cadastral Engineering Section, for review and approval prior to construction.

- 12. All new reference survey monuments shall be set under a Licensed Land Surveyor's direction. Copies of field notes, descriptions and values of the new survey monuments shall be sent to the Department of Transportation, Highways Division, Cadastral Engineering Section, for review and approval prior to construction.
- 13. The Contractor shall indemnify and be solely responsible for the protection of adjacent properties, utilities and existing structures from damages due to construction. Repairing any damage shall be at the Contractor's own expense and to the satisfaction of the Engineer.
- 14. Smooth riding connections shall be constructed at all limits of project, including the beginning and end of project, connecting approaches, side streets, walkways and driveways as shown on the plans and/or as directed by the Engineer. This work shall be considered incidental to asphalt concrete and will not be paid for separately.
- 15. The Contractor shall clean and remove any accumulation of aggregates along the roadside within 10 feet of the edge of pavement. This work shall be considered incidental to bulk of work or the various contract items and will not be paid for separately.
- 16. Removal and disposal of existing asphalt concrete pavement, and any debris shall be considered incidental to their respective bid items.
- 17. All saw cutting work shall be considered incidental to Roadway Excavation or Asphalt Concrete or various contract items or their respective bid items.
- 18. Prior to placement of new aggregate subbase course, the existing subbase shall be compacted to a relative compaction greater than or equal to 95%.
- 19. The Contractor shall provide and maintain for access to and from all existing driveways, sidewalks and ADA access routes, and side streets and cross streets at all times. This work shall be considered incidental to curb ramps, or sidewalk, or the various contract items and will not be paid for separately.
- 20. Except during actual working hours, all signs which do not pertain to the construction activity, such as "MEN WORKING" and "FLAGMEN AHEAD" shall be covered or laid down. However, all signs necessary for safety of the public shall be maintained
- 21. The Contractor shall employ a Hawaii Registered Professional Surveyor to perform all construction stakeouts, the cost of which shall be borne by the Contractor.
- 22. The Contractor shall make his own arrangements for, and pay for all temporary utilities required for his work.
- 23. The Contractor shall procure and pay for all licenses and permits and shall give all notices necessary and incidental to the due and lawful prosecution of the work.
- 24. The Contractor shall remove and dispose all silt and debris deposited in drainage facilities, roadways and other areas resulting from his work. The cost incurred for any necessary remedial action ordered by the Engineer shall be paid for by the Contractor.
- 25. Construction activities shall be limited to normal working daylight hours and weekdays.

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- 26. The Contractor shall not damage any roots of the protected trees during roadway excavation.
- 27. Any work specified in the contract but not listed separately in the proposal schedule shall be considered incidental to other various contact items and shall not be paid for separately.
- 28. All workers within the State right-of-way who are exposed to either vehicles using the roadway or to construction equipment shall wear high-visibility safety apparel that meets the Performance Class 2 or 3 requirements of ANSI/ISEA 107-2004. "Workers" is defined as people on foot whose duties place them within the State right-of-way, such as, but not limited to construction and maintenance forces, equipment operator, survey crews, utility crews, responders to incidents (e.g., EMT and firemen), and law enforcement personnel directing traffic, investigating accidents, handling lane closures and obstructed roadways.



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GENERAL NOTES FOR CONSTRUCTION - 1

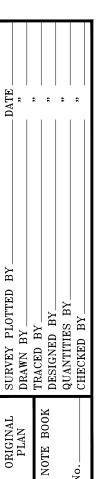
STATE OF HAWAI'I
DEPARTMENT OF TRANSPORTATION

Honoapi'ilani Highway Rehabilitation of Honolua Bridge F.A.P No. BR-030-1(37)

Scale: As Shown

Date: August 2024

SHEET No. *C1.02* OF *42* SHEETS



## NOTES FOR CONSTRUCTION WITHIN STATE RIGHT OF WAY

- 1. The Contractor shall obtain a Permit to Perform Work Upon State Highways from the Maui District State Highways Office, at 650 Palapala Drive, prior to commencement of work within State Highway Right-of-Way.
- 2. Construction and restoration of all existing highway facilities within State Right-of-Way shall be done in accordance with all applicable sections of the current "Standard Specifications for Road and Bridge Construction, 2005", as amended of the State of Hawaii.
- 3. Work may be performed only between the hours of 7:00 a.m. and 3:30 p.m., Monday through Friday, except holidays, unless otherwise permitted by the Engineer.
- 4. The Contractor shall provide, install, and maintain all necessary signs, lights, flares, barricades, markers, cones and other protective facilities and shall take all necessary precautions for the protection and for the convenience and safety of public traffic. All such protective facilities and precautions to be taken shall conform with the "Administrative Rules of Hawaii Governing the use of Traffic Control Devices at Work Sites on or adjacent to Public Streets and Highways" adopted by the Director of Transportation, and the current U.S. Federal Highway Administration "Manual on Uniform Traffic Control Devices for Streets and Highway, Part VI Traffic Controls for Street and Highway Construction and Maintenance. A traffic control plan shall be incorporated into the construction plans and must be approved by the Division prior to the issuance of the permit.
- 5. No material and/or equipment shall be stockpiled or otherwise stored within Highway Rights-of-Way except at locations designated in writing and approved by the District Engineer.
- 6. Compaction test shall be taken in accordance with the "Specifications for Installation of Miscellaneous Improvements within State Highways", as follows:
  - A. Subbase: 1 compaction test for each 300 lineal feet or fraction thereof or minimum 1 test per day.
  - B. Base Course: 1 compaction test for each 200 lineal feet of fraction thereof or minimum 1 test per day.
  - C. One compaction test for each 300 lineal feet of trench or fraction thereof. A copy of the results shall be submitted to the District Engineer.
- 7. The Contractor shall be required to provide adequate, safe, non-skid bridging material over the trench, including shoring, when trenching in pavement areas, to handle all types of vehicular traffic.
- 8. Longitudinal drainage along the highway shall be maintained.

- 9. Pavement striping shall be done by the Contractor. Pavement marking and striping shall be Thermoplastic Extrusion.
- 10. Approval of permit construction plans shall be valid for a period of one year thereof from the date of notification of approval to the applicant. In the event construction does not commence within the one-year period, the applicant will be required to re-submit his construction plans for Division's review and approval.
- 11. All regulatory, guide and construction signs and barricades shall be of high-intensity reflective sheeting.
- 12. The Contractor shall exercise care when excavating in this area. Damages to the existing facilities shall be immediately reported to the respective Utility Companies, County and State Agency. The repair work shall be done at the Contractor's expense.
- 14. The Contractor shall inform the HDOT-Maui Office at 873-3535 at least five (5) days prior to any lane closures or changes to existing lanes.
- 5. Where pedestrian walkways exist, they shall be maintained in passable and accessible condition complying with ADAAG 4.3 as required by ADAAG 4.1.1(4). Walkways at intersections shall be likewise provided.
- Plastic marking tape: Provide plastic marking tape that is acid and alkali resistant polyethylene film 6 inches wide with minimum thickness of 0.004 inch. Provide tape with minimum strength of 1750 psi crosswise. Manufacture tape with integral wires, foil, backing or other means to enable detection by a metal detector when the tape is buried up to 3 feet deep. Manufacture tape specifically for marking and locating underground utilities. Provide the metallic core of the tape encased in a protective jacket or provided with other means to protect it from corrosion. Conform to the following tape color and bear a continuous printed inscription describing the specific utility.

Red: Electric

Yellow: Gas, Oil, Dangerous Materials

Orange: Telephone, Telegraph, Television, Police, Fire and Communications

Blue: Water Systems
Green: Sewer Systems

17. The Contractor shall provide the District Engineer with As-Built plans upon completion of the work done in the State Right-of-Way. This shall be done prior to the Department's release of the performance bond.

## PUBLIC HEALTH, SAFETY AND CONVENIENCE NOTES

DIST. NO.

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FISCAL YEAR

NO.

- 1. The Contractor shall observe and comply with all Federal, State, and Local Laws required for the protection of public health and safety and environmental quality.
- 2. The Contractor, at his own expense, shall keep the project and its surrounding areas free from dust nuisance. The work shall be in accordance with the Air Pollution Standards and Regulations of the State Department of Health.
- 3. The Contractor shall be responsible for the cleaning and removal of all silt and debris generated by his work and deposited and accumulated within downstream waterways, ditches and drain pipes and on public and private roadways. The Contractor agrees to reimburse the State or County of Maui, the costs expended in performance of the above work if required for public health and safety, or made necessary by non-performance by the Contractor.
- 4. The Contractor shall provide, install, and maintain all necessary signs, lights, flares, barricades, markers, cones and other protective facilities and shall take all necessary precautions for the protection, convenience and safety of the public.
- 5. The Contractor shall submit a Noise Pollution Control Plan when applying for a construction permit.



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STATE OF HAWAI'I

DEPARTMENT OF TRANSPORTATION

HIGHWAYS DIVISION

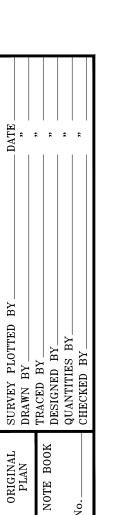
GENERAL NOTES FOR CONSTRUCTION - 2

Honoapi'ilani Highway Rehabilitation of Honolua Bridge F.A.P No. BR-030-1(37)

Scale: As Shown

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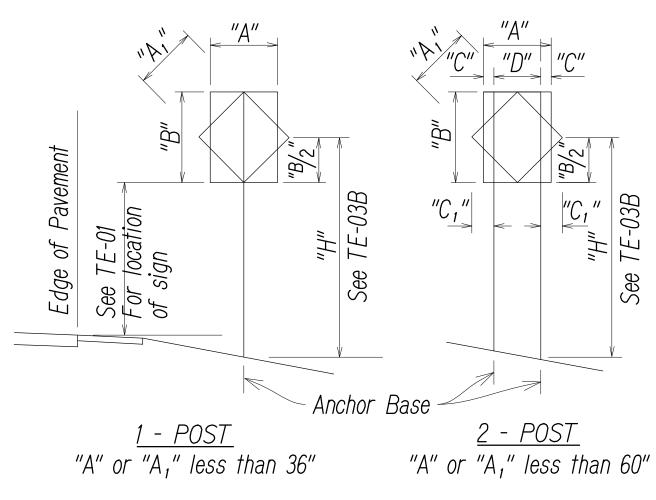


### TRAFFIC NOTES FOR TRAFFIC CONTROL PLAN

- "No Parking" signs shall be posted within any work area and for the buffer and taper areas approaching to work area.
- 2. Three (3) weeks minimum prior to start of work operations, submit for Engineer's review and acceptance detailed site-specific traffic control plans for each intersection covering all phases of work such as painting of mast arms, and replacing controller. Traffic control devices, signs and flagger positions shall be shown. Construction work shall not proceed until the traffic control plans have been accepted by the Engineer.
- 3. The Contractor shall be responsible for obtaining permission from the State and/or, obtaining a Road Permit for all work within the State R/W. The Contractor shall inform private property owners of the purpose and need of the project, and the specific work to take place onsite prior to work start, as applicable. This coordination work and obtaining permission and permit fee shall be considered incidental to the various contract items.

# STATE HISTORIC PRESERVATION DIVISION REQUIREMENTS NOTES

- 1. Should any unanticipated Historic Sites such as walls, platforms, pavements, and mounds, or remains such as artifacts, burials, concentration of charcoal or shells be encountered during construction work, work shall cease in the immediate vicinity of the find and the find shall be protected from further damage. The Contractor shall immediately contact the State Historic Preservation Division at (808)692-8015, which will assess the significance of the find and recommend an appropriate mitigation measure, if necessary.
- 2. See Sheet C1.10 for location of identified historic properties in the project area and the required buffer and protection measures necessary during construction.
- 3. The Contractor shall adhere to the guidelines outlined in the Archaeological Monitoring Plan (AMP) and work with the field archaeologist as necessary. See Specifications Section 691 Archaeological Monitoring for more information.



"A" or "A <sub>1</sub> "	"C"	"C1"
Less than 36"	6"	-
Greater than 36" and less than 48"	9"	19"
Greater than 48"	12"	24"

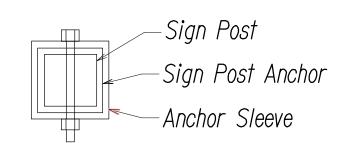
NOTE:
Frame stiffeners are required when D is greater than 24"
See General Notes.

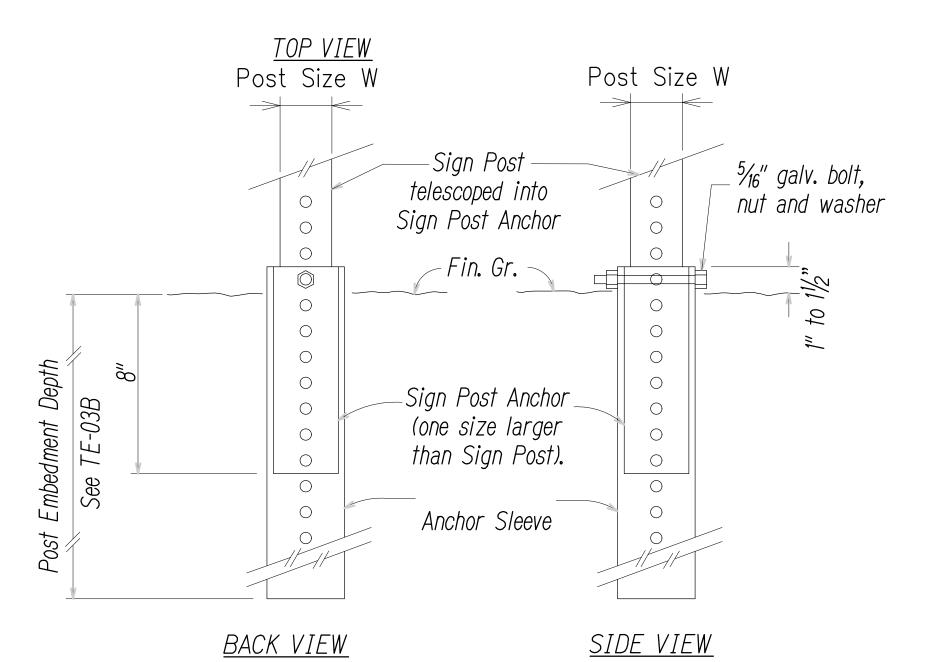
TYPICAL INSTALLATION

Not to scale

### PRE-ENGINEERED STEEL TRUSS BRIDGE NOTES

- 1. Unless otherwise noted, refer to Design Criteria and Design Loads shown on sheet S1.0.
- 2. Pre-engineered Steel Bridge shall be a single-span bridge with clear span length and clear roadway width as indicated in structural drawings.
- 3. Pre-Engineered Steel Bridge shall be pre-fabricated "Acrow Truss Bridge" by Acrow Bridges company, or pre-reviewed equivalent design.
- 4. Bridge railings (guardrail) and bearing devices shall be included as part of the Pre-engineered steel bridge.
- 5. All steel components and bolts shall be hot-dip galvanized per AASHTO M111 (ASTM A123). Bearing pins shall be electro-galvanized.
- 6. Roadway surface shall consist of steel plates with an epoxy aggregate non-skid surface.
- 7. Lifting details and sequence of installation shall be included in shop drawings.
- 8. Submit Shop Drawings and calculations for Engineer's information only prior to fabrication or ordering of materials. Shop Drawings and calculations shall be stamped and signed by a Hawaii Licensed Structural Engineer.





SIGN POST INSTALLATION

ANCHOR BASE DETAIL

Not to scale

## DIST. NO. STATE FED. AID PROJ. NO. FISCAL YEAR SHEET NO. TOTA SHEET MAUI HAW. BR-030-1(37) 2024 5 42

### GALVANIZED SQUARE TUBE SIGN POST MOUNTING NOTES

### 1. <u>Design Specifications</u>:

- Design shall conform w/ the latest AASHTO Standard Specifications for the Structural Supports for Highway Signs, Luminaires \$\pi\$ Traffic Signals and its interim supplements and modifications by the Highways Division, Department of Transportation State of Hawaii.
- (B) Latest HDOT Memorandum with subject title "Design Criteria for Bridges and Structures."

### 2. <u>Loads:</u>

(A) Basic Wind Speed: mph

(B) Recurrence Interval of 10 years.

#### 3. Materials:

- Post shall conform to the Standard Specifications.
- B) All connection bolts shall be AASHTO M164 bolts and anchor bolts shall be AASHTO M314-105 bolt.
- (C) Lap splice nuts and bolts shall be M180, with an ultimate tensile strength of 180 ksi, min.
- D) Aluminum members and surfaces in contact with structural steel shall be isolated with neoprene material as approved by the Engineer.

#### 4. <u>General:</u>

- (A) See General Notes on B-01, TE-01, and TE-03B for additional information.
- B) All posts shall be 12 gage unless otherwise specified or shown on the plans.
- (C) Square tube posts shall be perforated with  $\frac{7}{16}$ "\$\notation\$ holes, 1" o.c., 4 sides, along entire length of post.
- (D) All accessories, fittings and stiffener details (as required) shall be submitted to the Engineer for approval 20 days prior to installation.
- (E) Alternate designs in accordance with the plans and specifications shall use the Service Load Design Method and shall be stamped by a registered structural engineer of the State of Hawaii and submitted to the Engineer for approval
- (F) All sign support posts shall be outside of the clear zone or shielded by an appropriate traffic barrier system. The traffic barrier system shall be submitted to the Engineer for his approval.
- G) The Contractor shall use templates while installing the anchor bolts. Anchor bolts shall be vertical.
- H) Excavation and backfill shall be considered incidental to the cost of the sign foundation.



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APRIL 30, 2026
LIC. EXP. DATE

STATE OF HAWAI'I

DEPARTMENT OF TRANSPORTATION

HIGHWAYS DIVISION

GENERAL NOTES FOR CONSTRUCTION - 3

Honoapi'ilani Highway Rehabilitation of Honolua Bridge F.A.P No. BR-030-1(37)

Scale: **As Shown** 

Date: August 2024

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