STANDARD PLANS SUMMARY

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR		TOTAL SHEETS
HAWAII	HAW.	H1I-01-96M	1996	2	6

STAND PLAN	ı	TITLE	DATE
B-01		Notes and Miscellaneous Details	07/01/86
B-02			
B-03	•	Typical Structure Excavation and Backfill Pay Limits	07/01/86
B-04	•		
B-05			,
B-06		Concrete Box Girder	07/01/86
B-07		Concrete Box Girder	07/01/86
B-08		Concrete Box Girder	07/01/86
B-09			
B-10			
B-11			
B-12		Prestressed Concrete Piles	r07/16/90
B-13	•	Prestressed Concrete Piles	r07/16/90

D-01 ·	Chain Link Fence With Toprail	r03/06/87
D-02	Chain Link Fence Without Toprail	r07/26/90
D-03	Wire Fence With Metal Posts	07/01/86
D-04	Typical Details of Curbs and/or Gutters	07/01/86
D-05	Typical Details of Reinforced Concrete Drop Driveway	07/01/86
D-06	Centerline and Reference Survey Monument	07/01/86
D-07 ·	Street Survey Monument	07/01/86
D-08	Landscaping Shrub and Tree Planting	07/01/86
D-09	Field Office	07/01/86
D-10	Field Office	07/01/86
D-11 ·	Project Site Laboratory	07/01/86
D-12	Project Site Laboratory	07/01/86
D-13 ·	Field Office & Project Site Laboratory	07/01/86

Type A. B. C and D Catch Basin

Type A1, B1, C1 and D1 Catch Basin

07/01/86

07/01/86

H-03	Type A2, B2, C2 and D2 Catch Basin	07/01/86
H-04	Typical Reinforcing Details for Catch Basins	07/01/86
H-05	Type A, B and C Storm Drain Manhole	07/01/86
H-06	Type D and E Storm Drain Manhole	07/01/86
H-07	Type F Storm Drain Manhole	07/01/86
H-08	Catch Basin and Manhole Casting	07/01/86
H-09 ·	Type A-9 and A-9P Frames and Grates	07/01/86
H-10	Type A-9B Frames and Grates	07/01/86
H-11 ·	Type 61614 and 61214 Grated Drop Inlet	07/01/86
H-12	Type 61616 Grated Drop Inlet	07/01/86
H-13	61214, 61614 & 61616 Steel Frames and Grates	07/01/86
H-14	61214B Steel Frame and Grates	07/01/86
H-15	61614B Steel Frame and Grates	07/01/86
H-16 ·	Concrete and Cement Rubble Masonry Structures	r10/16/90
H-17	Inlet Structures	r10/16/90
H-18	Flared End Section for Culverts	07/01/86
H-19 ·	Outlet Structures	r02/15/91
H-20	Concrete Spillway Inlet	07/01/86
H-21 ·	18" Slotted C.M.P. Drain	07/01/86
H-22	C.M.P. Coupling Details Standard Joint	r10/16/90
H-23	Hat Shaped Coupling Band	r10/16/90

STANDAR PLAN NO	1 1 1 1 1	DATE	
TE-01 •	Miscellaneous Sign Details	07/01/86	
TE-02	Galvanized Flanged Channel Sign Post Mounting	07/01/86	
TE-03	Galvanized Square Tube Sign Post Mounting	07/01/86	
TE-04 ·	Regulatory Signs	r09/01/87	
TE-05 ●	Warning Signs	07/01/86	
TE-06	Miscellaneous Signs	r11/03/89	
TE-07	Reserved	07/01/86	
TE-08	Construction Signs	r09/01/87	
TE-09	Miscellaneous Intersection Signs	r03/06/87	
TE-10	Reserved	07/01/86	
TE-11	Bike Route Sign and Supplementary Plates	07/01/86	
TE-12	State Route Marker and Auxiliary Markers	07/01/86	
TE-13	Interstate Route Marker	07/01/86	
TE-14	State Route Marker and Border Detail for Guide Signs	07/01/86	
TE-15	Route Marker Assemblies	07/01/86	
TE-16	Miscellaneous Reflector Markers	07/01/86	
TE-17 ·	Type II Object Markers	07/01/86	
TE-18	Mileposts	07/01/86	
		07/01/86	
TE-19	Reserved Overhead Stan Supports	07/01/86	
TE-20	Overhead Sign Supports Overhead Sign Support Pow Truck Type Aluminum	Annual Control of the	
TE-21 ·	Overhead Sign Support, Box Truss Type, Aluminum	07/01/86	
TE-22	Foundation Details and Schedules		
TE-23	Supports for Ground Mounted Guide Sign	r11/03/89	
TE-24	Breakaway Sign Supports for Ground Mounted Guide Signs	07/01/86	
TE-25	Laminated Aluminum Sign Panels (Overhead)	07/01/86	
TE-26 ·	Laminated Aluminum Sign Panels (Ground Mounted)	07/01/86	
TE-27 ·	Solid Aluminum Extruded Sign Panel and Accessory Details	07/01/86	
TE-28 ·	Guide Signs Luminaire Mountings	07/01/86	
TE-29 ·	Reserved	07/01/86	
TE-30	Raised Pavement Markers and Striping	r05/09/90	
TE-31 ·	Miscellaneous Pavement Markings	r05/09/90	
TE-32 ·	Miscellaneous Pavement Markings	r05/09/90	
TE-33 ·	Miscellaneous Pavement Markings	r11/03/8	
TE-34 ·	Reserved	07/01/80	
TE-35 ·	Pavement Alphabets, Numbers & Symbols	07/01/80	
TE-36	Pavement Alphabets, Numbers & Symbols	07/01/80	
TE-37	Reserved	07/01/8	
TE-38	Traffic Signal System, Miscellaneous Details	r11/03/89	
TE-39	Traffic Signal System, Miscellaneous Details	07/01/8	
TE-40	Loop Detectors	r11/03/8	
TE-41	Pullboxes	07/01/8	
TE-42	Type III Traffic Signal Standard	07/01/8	
TE-43	Concrete Pullbox (2' x 3')	07/01/8	
TE-44	Reserved	07/01/8	

STANDARD PLAN NO.	1		
TE-45	Reserved	07/01/86	
TE-46	Reserved	07/01/86	
TE-47	Reserved	07/01/86	
TE-48	Reserved	07/01/86	
TE-49	Reserved	07/01/86	
TE-50	Metal Guardrail	r03/06/87	
TE-51	Metal Guardrail	r09/01/87	
TE-52	Metal Guardrail with Rubrail	r11/03/89	
TE-53	Metal Guardrail with Rubrail at Obstruction	r09/01/87	
TE-54	Beam Type Guardrail with Rubrail at Obstruction (Shoulder Installation)	r11/03/89	
TE-55	Metal Guardrail Connection to Concrete Barrier	r11/03/89	
TE-56	Concrete Barrier Transition	07/01/86	
TE-57	Guardrail Type 3. Thrie Beam	r11/03/89	
TE-57A	Guardrail Type 3, Modified Thrie Beam	11/03/89	
TE-58	Approach End Flare, One & Two Way Roadway	07/01/86	
TE-59	Trailing End Flare, One & Two Way Roadway	r11/03/89	
TE-60	Anchor Block Details	07/01/86	
TE-61	Breakaway Cable Terminal (BCT)	r11/03/89	
TE-62	Breakaway Cable Terminal (BCT)	r09/01/87	
TE-63	Guardrail Type 4 (Rigid Barrier)	r09/01/87	
TE-64	Portable Concrete Barrier	r11/03/89	
TE-65	Guardrail Type 4, Miscellaneous	r09/01/87	
TE-66 ●	Barricades	07/01/86	
TE-67	Delineation & Pavement Markings at Bridges	07/01/86	
TE-68	Wheelchair Ramps	r07/18/94	
TE-69	Wheelchair Ramps	r07/18/94	

NOTE:

STANDARD PLANS APPLICABLE TO THIS PROJECT ARE INDICATED BY A " ● " NEXT TO THE STANDARD PLAN NO. (FOR EXAMPLE: D-O7 ●)

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION

02/15/91 | REVISED H-19 10/16/90 REVISED H-16,H-17, H-22 & H-23 07/26/90 REVISED D-02 07/16/90 | REVISED B-12.B-13 05/09/90 | REVISED TE-30, TE-31 & TE-32 11/03/89 REVISED TE-30, TE-31 & TE-32

REVISED TE-06, TE-31, TE-30, TE-31,

TE-32, TE-33, TE-38, TE-40, TE-52,

TE-54, TE-55, TE-57, TE-59, TE-61,

TE-64, TE-68 & TE-69, ADDED TE-57A

REVISED TE-04, TE-06, TE-08, TE-32,

TE-51, TE-53, TE-54, TE-55, TE-57,

TE-59, TE-62, TE-63, TE-65 & TE-69

DATE

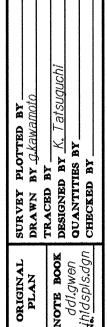
07/18/94 | REVISED TE-68 & TE-69

03/06/87 REVISED D-01, TE-09, TE-40, TE-50, TE-51, TE-57, TE-59, TE-61, TE-63 & TE-64 REVISION

HIGHWAYS DIVISION STANDARD PLANS SUMMARY H-1 GULICK AVENUE OVERPASS AND AALA STREET EXTENSION SEPARATION

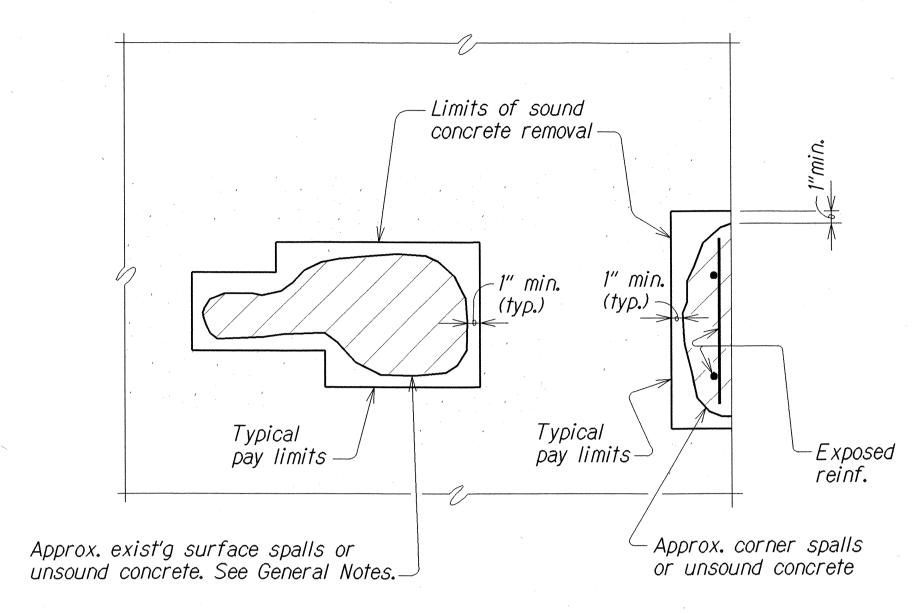
REPAIR BEAM DAMAGE PROJECT NO. H1I-01-96M

Date:JAN, 1996 SHEET No. 1 OF 1 SHEETS



H-02

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	H1I-01-96M	1996	3	6



REFLECTED CEILING PLAN OR ELEVATION Existing bar 1"cl. @ reinf. Splice bar -Corroded or Round damaged area -Approx. exist'g spalls 1" (typ.) Length of weld 1" (typ.) Limits of sound or unsound concreteconcrete removal Existing bar Limits of sound concrete removal 25 4 = 14 Splice bar. (Round bar area equal to or greater than existing bar area). 1"(min.) cl. typ. Splice bar Relocate exist'g reinf. <u>Square</u> as req'd. (typ.)

AT SURFACE

DEC DEC

> KBY DCO

TYPICAL SECTIONS

AT CORNERS

REINFORCING BAR REPAIR SPLICE DETAIL

TYPICAL CONCRETE REPAIRS

Not to Scale

ESTIMATED QUANTITIES					
ITEM NO. DESCRIPTION UNITS QUANT					
676.1000	Spall RepairGulick Avenue Overpass	SF	245*		
676.2000	Spall RepairAala Street Extension Separation	SF	145 *		
677.1000	Crack RepairGulick Avenue Overpass	LF	25		
677.2000	Crack RepairAala Street Extension Separation	LF	25		

* Includes estimated overrun

GENERAL NOTES

- The scope of work consists of repairing spalls and cracks on concrete girders, ceilings, piers and abutments for Gulick Avenue Overpass and Aala Street Extension Separation.
- 2. The Contractor is reminded of the requirements of Subsection 108.01 Subletting of Contract, which requires him to perform work amounting to not less than 50 percent of the total contract cost less deductible items. Non-compliance with this Subsection may be grounds for rejection of bid.
- 3. The Contractor's attention is directed to the following Sections of the Special Provisions: Subsection 107.13 Public Convenience and Safety; Subsection 107.21 Contractor's Responsibility For Utility Property and Services; and Section 645 Traffic Control.
- 4. 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.

REPAIR NOTES:

- 1. All deteriorated, damaged, cracked, spalled, honeycombed concrete or concrete over rusted reinforcing bars shall be removed as shown and repaired with hand-placed mortar.
- 2. Provide minimum 1" concrete cover over reinforcement.
- 3. Reinforcing bars that have rusted more than 25% of their original cross sectional area shall be strengthened as shown on "Reinforcing Bar Repair Splice Detail", this sheet.
- 4. The Engineer shall determine all areas to be repaired and the limits of repair at each area.
- each area.

 uni cure

 5. Apply silane waterproofing as approved by the Engineer. Application shall be according to the manufacturer's recommendations.

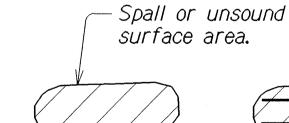
INCIDENTAL ITEMS: The following items shall be considered incidental to the various pay items or repairs and will not be paid for separately:

- 1. Cleaning of all exposed, corroded reinforcing steel to sound metal.
- Reinforcing bars of repair splice for strengthening corroded bars.
- 3. Cutting, relocating existing reinforcing bars or doweling reinforcing bars into the existing concrete deck.
- existing concrete deck. **uni cure**4. Furnishing and application of silane waterproofing material.

GENERAL:

- d. All reinforcing steel to be ASTM A 615 Grade 40.
- 2. All welding shall be done in accordance with the current edition of the Reinforcing Steel Welding Code AWS D1.4.
- 3. Maintenance ♦ control of traffic--See Standard Specifications, Sub-Section 104.04.

SYMBOLS AND ABBREVIATIONS:





-Exposed reinf. bars where occurs.

S.S.: Surface spall (Concrete)

S.C.: Surface crack (Concrete)
H.C.: Hairline crack

S.F. or sq. ft.: Square feet

L.F.: Linear feet

LEGEND FOR AS-BUILT POSTINGS

Squiggly line for as-built deletion

100.00

Double line for as-built deletion

Roadway Text for as-built posting

DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TYPICAL CONCRETE REPAIRS, GENERAL

NOTES AND ESTIMATED QUANTITIES

H-1, GULICK AVENUE OVERPASS AND
ALA STREET EXTENSION SEPARATION

REPAIR BEAM DAMAGE

Project No. HII-01-96M

Date: Dec, 1995

SHEET No. Q1 OF 3 SHEETS

"AS-BUILT"

3