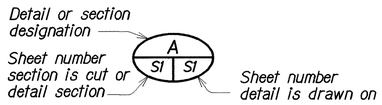
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	H-1EF-01-06MR	2009	31	40

INDEX TO DRAWINGS

ABBREVIATIONS

AB	Anchor Bolt	FF	Front Face	P.C.	Point of Curb
Abut.	Abutment	Fin.	Finish	PL	Plate
		Ftg.	Footing	P.T.	Point of Tangent
℄	Baseline				
Bm., bm.	Beam	Galv.	Galvanized	Rdwy., rdwy.	Roadway
Brg.	Bearing	Gr., gr.	Grade	Ref.	Reference
				Req'd	Required
℄	Center line	Lg., lg.	Long		
Cl., Clr., cl.	Clear			Sta.	Station
Conc.	Concrete	Max.	Maximum		
Cont.	Continuous	Min., min.	Minimum	T&B	Top and Bottom
				Typ.	Typical
Dia., ø	Diameter		North		
		No.	Number	w/	with
ea.	Each				
EF	Each Face	o.c.	On Center		
Eq.	Equal				
Exist.	Existing				

SYMBOLS



BRIDGE GENERAL NOTES

GENERAL SPECIFICATIONS:

General Specifications: Hawaii Department of Transportation, Hawaii Standard Specification for Road, Bridge and Public Works Construction, 2005, together with Special Provisions prepared for this contract.

DESIGN SPECIFICATIONS:

(A) AASHTO 2007 LRFD Bridge Design Specifications (Fourth Edition) and its subsequent interim specifications with interim suppliements and modifications by the HDOT Highway Division.

(B) "Design Criteria for Bridges and Structures" dated April 15, 2008.

LOADS:

(A) Railing Test Level: TL-4

MATERIALS:

(A) All concrete strengths shall have a 28-day compressive strength of 4,000 psi unless otherwise noted. All concrete shall have a maximum W/C Ratio of 0.45.

(B) The use of any calcium chloride in any concrete is prohibited.

(C) All reinforcing steel shall be ASTM A615 Grade 60 unless otherwise noted.

(D) Reinforcing steel shall be ASTM A706 where welded connections are required.

MATERIALS (Cont.):

(E) All structural steel shall be ASTM A992 hot dip galvanized after fabrication, unless otherwise noted.

(F) All anchor bolts, washers and nuts shall be AASHTO M164 hot dip galvanized after fabrication, unless otherwise specified.

(G) Hollow Structural Steel Shapes shall conform to ASTM A500, Grade B.

(H) All welding shall conform to the latest ANSI / AASHTO / AWS D1.5 Bridge Welding Code. All welds shall be ground smooth. Unless noted

(I) Epoxy shall conform to ASTM C881 Grade III, Class C, Type IV.

REINFORCEMENT:

(A) The covering measured from the surface of the concrete to the face of any reinforcing bars shall be as follows, except as otherwise shown:

(1) Concrete cast against and permanently exposed to earth = 3"

(2) All others unless otherwise noted = 2"

(B) Reinforcing bars shall be detailed in accordance with the latest edition of the AASHTO LRFD bridge design specifications unless otherwise noted.

(C) Minimum clear spacing between parallel bars shall be 1½times the diameter of bars (for non bundled bars). In no case shall the clear distance between the bars be less than 1½ times the maximum size of the coarse aggregate or 1½".

(D) All dimensions relating to reinforcing bars are to centers of bars unless otherwise noted.

(E) Reinforcing bars shall be securely tied at all intersections and lap splices except where the spacing of intersections is less than one foot in each direction, in which case alternate intersections shall be tied.

CONSTRUCTION NOTES:

(A) The Contractor shall verify all dimensions and site conditions and shall report any discrepancies in writing to the Engineer before commencing work or ordering materials.

(B) The Contractor shall verify all site condition and not rely upon these plans for existing, dimensions, elevations and azimuths, stream channel location, roads, roadway gutters, curbs and sidewalks, etc.. Conditions may differ from those shown.

(C) The Contractor shall be solely responsible for the protection of adjacent properties, utilities and existing and new structures from damage due to construction. Repairing any damage shall be at the Contractor's own expense, to the satisfaction of the Engineer.

(D) The Contractor shall verify the location of all utility lines and notify the respective owners before commencing with excavation, and any temporary piling or sheeting.

(E) Except as otherwise noted, all vertical dimensions are measured plumb.

(F) For concrete finish see Standard Specifications and Special Provisions.

(G) Construction joints may be relocated or additional ones added subject to the approval of the Engineer.

(H) Unless otherwise noted, all exposed concrete edges shall be chamfered ¾" x¾".

(I) The Contractor shall verify the location and size of all existing reinforcing bars prior to drilling.

(J) Drilled holes in existing concrete for reinforcing steel dowels shall not be left unfilled for more than 8 hours. Epoxy in drilled holes shall be able to develop the full strength of the dowels prior to pouring concrete around reinforcing steel dowels. Follow all manufacturer's recommendations for dowel and epoxy.

(K) Contractor shall unplug, clean and maintain existing drains during construction of the project. This work shall be incidental to the various Contract items.

CONSTRUCTION NOTES (Cont.):

(L) Location of drilled holes shown in plans are approximate. Prior to placing holes in concrete, the Contractor shall locate all reinforcing steel, anchor bolts, thru bolts holes, etc. and adjust the location of the drilled holes to clear of them. Final hole locations are subject to the approval of the Engineer.

(M) Bolts and nuts for guardrail connections shall bear flush against concrete surfaces. Wedge washers shall be used as required.

(N) When only portions of concrete are to be demolished. The intersections between the demolished concrete and the concrete that is to remain shall have a ¾ inch deep sawcut around the entire perimeter of the demolished area.

(O) At the time concrete is placed, reinforcing shall be free from mud, oil, laitance or other coatings adversely affecting bond capacity.

(P) The concrete surfaces which new concrete is poured against shall be roughened to a full amplitude of ¼ of an inch and cleaned.

(Q) All existing reinforcing shall remain in place and shall not be damaged in any way unless otherwise noted.

(R) All existing reinforcing that is to remain in place shall have a minimum concrete cover of 2".

(S) The Contractor shall restore the bridge name inscribed in railing when it is obstructed or removed. This work shall be considered incidental to the cost of the end posts.

(T) New concrete surfaces shall match the finish of the existing structure any reveals, patterns, or decorative features shall also match the existing structure.

GENERAL:

(A) All items noted incidental will not be paid for separately.

(B) Standard Plans refer to all structures in general, except for modifications as may be required for special conditions. For such modifications refer to the corresponding detailed drawings.

(C) Plans of the existing bridges are available for review from the Highways Design Branch located at the State Department of Transportation, Highways Division Kakuhihewa Building, Room 609, 601 Kamokila Boulevard, Kapolei, HI 96707 (phone number 692-7586).

(D) Temporarily relocate highway lighting conduit, pullboxes, etc. obstructing construction as needed. This work shall be considered incidental to the various contract items.

ORIGINAL PLAN	SURVEY PLOTTED BY	XXX	DATE XXX 1991
	DRAWN BY	XXX	XXX 1991
	TRACED BY		XXX 1991
NOTE BOOK	DESIGNED BY	XXX	XXX 1991
No. XXXXXXX	QUANTITIES BY	XXX	XXX 1991
	CHECKED BY	XXX	XXX 1991

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

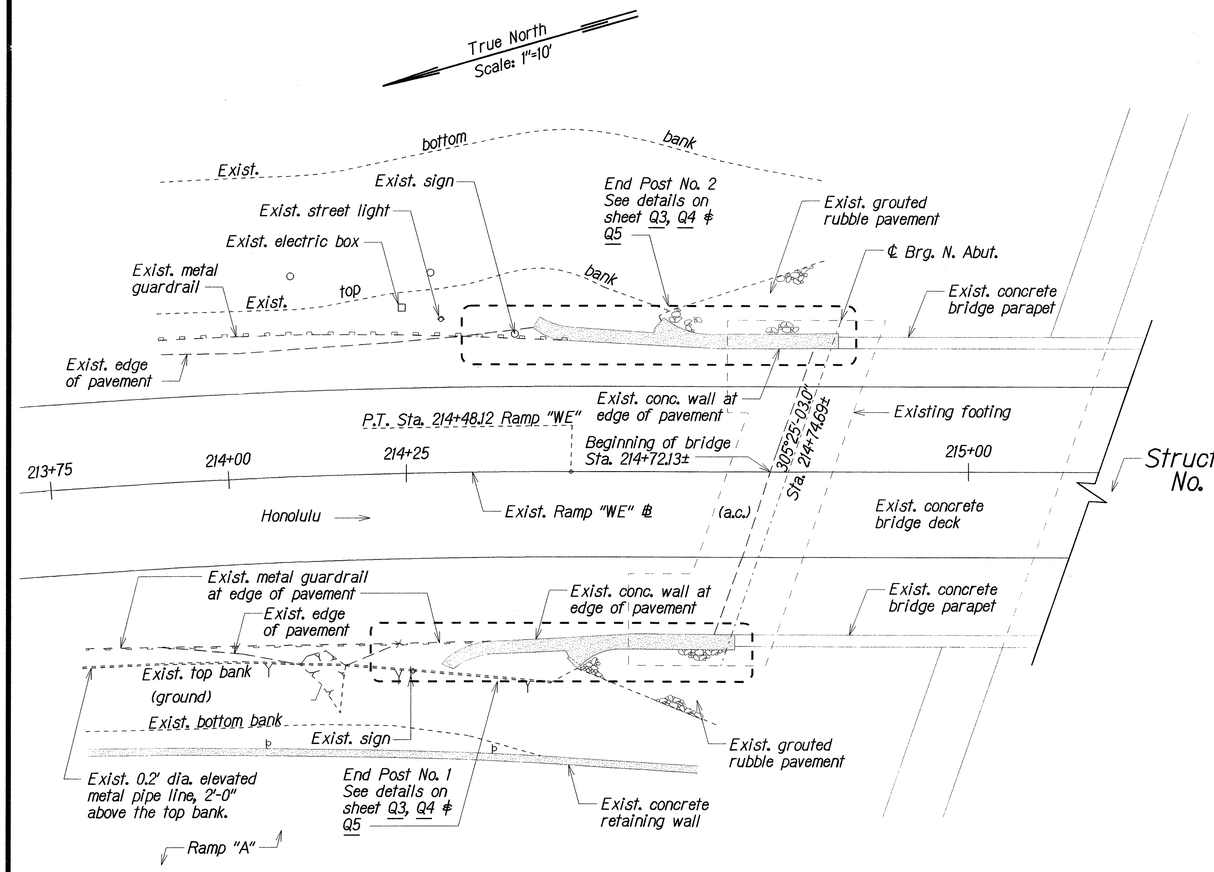
INDEX, ABBREVIATIONS, SYMBOLS and BRIDGE GENERAL NOTES

INTERSTATE ROUTE H-1 PAVEMENT RESURFACING
Kaimakani Street to Salt Lake Viaduct
Project No. H-1EF-01-06MR

Scale: As Noted — Date: August, 2008

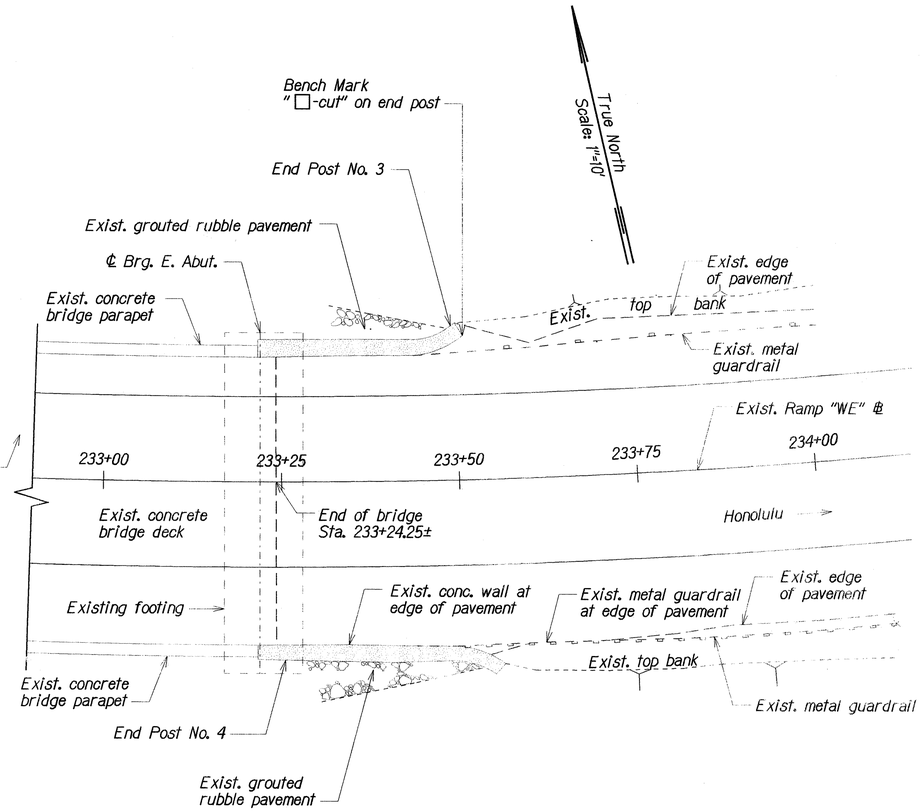
SHEET No. Q1 OF 10 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	H-1EF-01-06MR	2009	32	40



EXIST. PARTIAL PLAN - NORTH ABUTMENT

Structure No. 3



EXIST. PARTIAL PLAN - EAST ABUTMENT

HALAWA INTERCHANGE STRUCTURE NO. 3

Scale: 1"=10'-0"

ORIGINAL PLAN			
NOTE BOOK			
No. XXXXXXXX			
SURVEY PLOTTED BY	XXX	DATE	XXX 1991
DRAWN BY	. . .		. . . . .
TRACED BY	XXX		XXX 1991
DESIGNED BY	XXX		XXX 1991
QUANTITIES BY	XXX		XXX 1991
CHECKED BY	XXX		XXX 1991

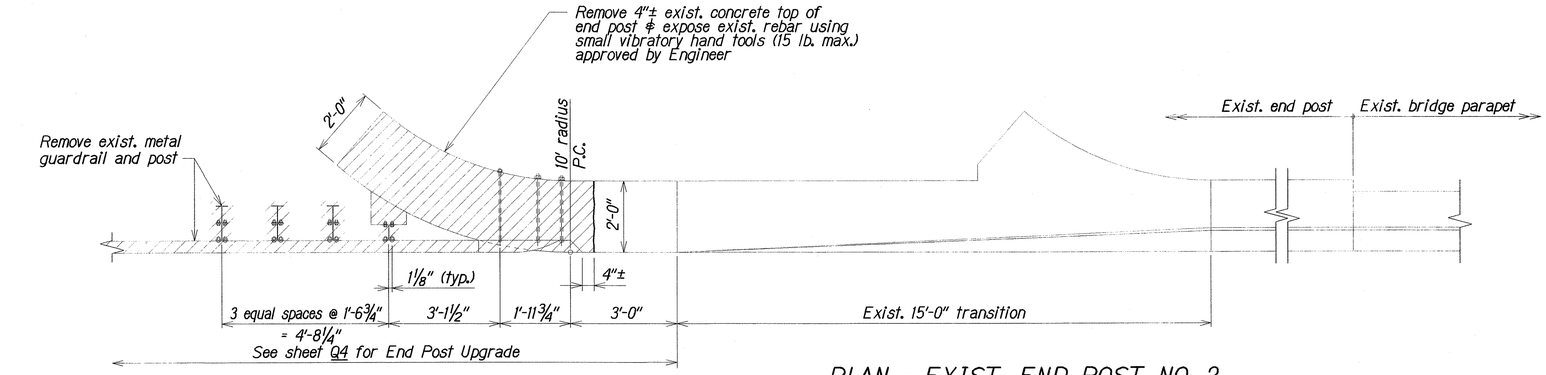
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

HALAWA INTERCHANGE STRUCTURE NO. 3
NORTH AND EAST ABUTMENT
EXISTING PARTIAL LAYOUT PLANS
INTERSTATE ROUTE H-1 PAVEMENT RESURFACING
Kaimakani Street to Salt Lake Viaduct
Project No. H-1EF-01-06MR

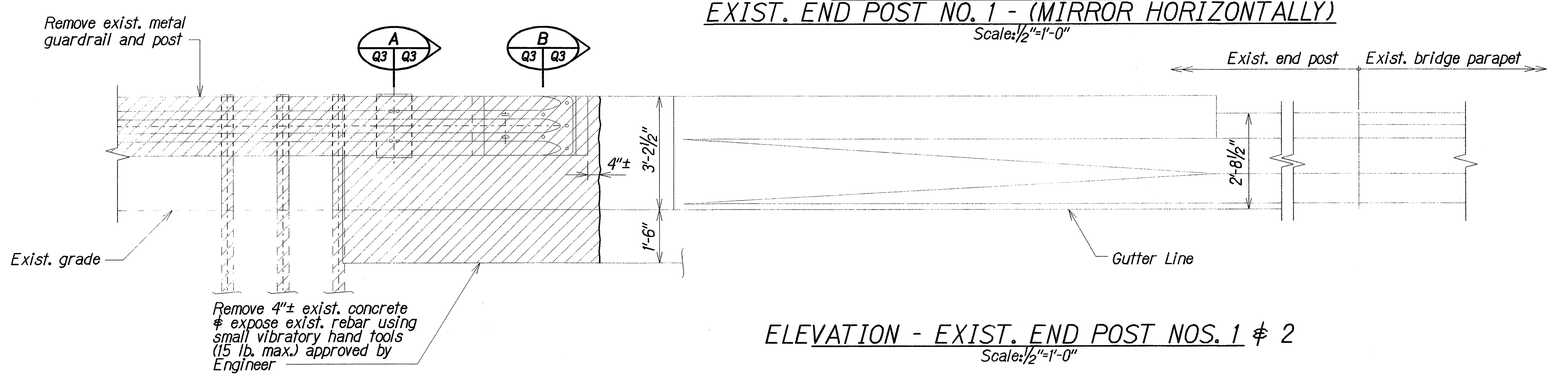
Scale: As Noted — Date: August, 2008

SHEET No. Q2 OF 10 SHEETS

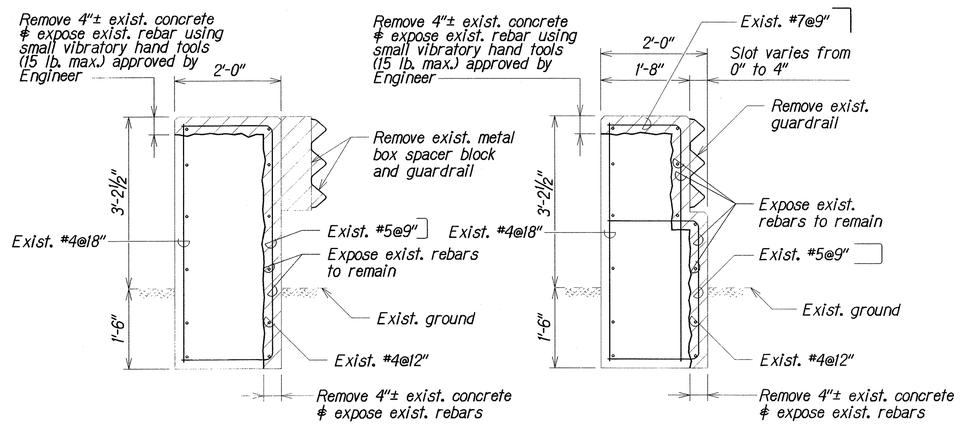
FED. ROAD DIST. NO.	STATE	PROJ. NO	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	H-IEF-01-06MR	2009	33	40



PLAN - EXIST. END POST NO. 2
EXIST. END POST NO. 1 - (MIRROR HORIZONTALLY)
Scale: ½"=1'-0"



ELEVATION - EXIST. END POST NOS. 1 & 2
Scale: ½"=1'-0"



SECTION A Q3 Q3

SECTION B Q3 Q3

EXIST. & DEMOLITION END POST NOS. 1 & 2 DETAILS
HALAWA INTERCHANGE STRUCTURE NO. 3
Scale: ¾"=1'-0"

Note:
All existing reinforcing steel shall remain in place and shall not be damaged in anyway unless otherwise noted.

ORIGINAL PLAN	SURVEY PLOTTED BY	XXX	DATE
	DRAWN BY		
NOTE BOOK	TRACED BY	XXX	
	DESIGNED BY	XXX	
No. XXXXXXXX	QUANTITIES BY	XXX	
	CHECKED BY		

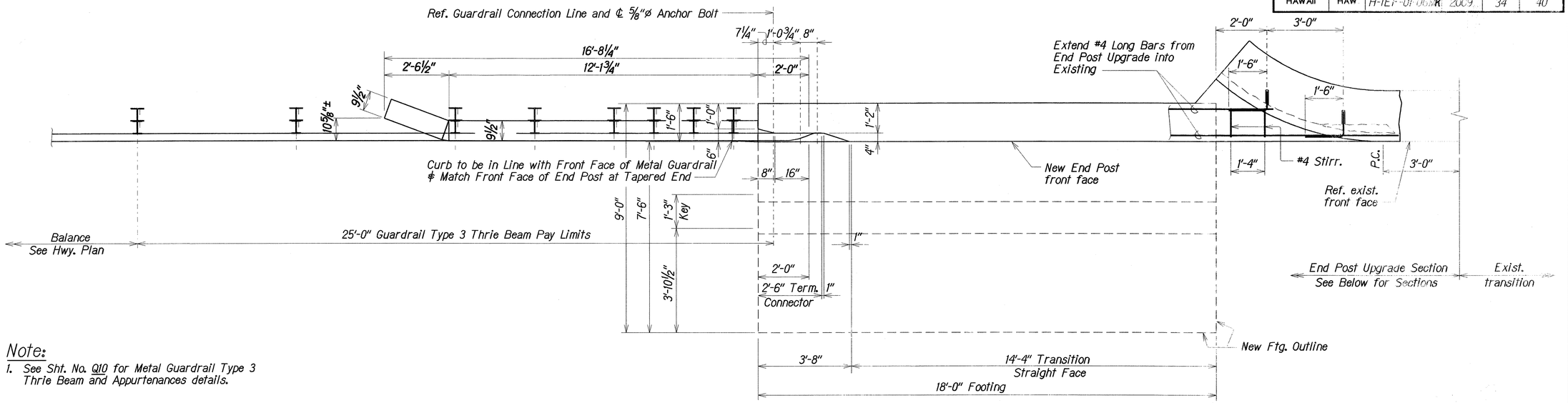
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

HALAWA INTERCHANGE STRUCTURE NO. 3
EXISTING & DEMOLITION
END POST NOS. 1 & 2 DETAILS
INTERSTATE ROUTE H-1: PAVEMENT RESURFACING
Kaimakani Street to Salt Lake Viaduct
Project No. H-IEF-01-06MR

Scale: As Noted — Date: August, 2008

SHEET No. Q3 OF 10 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	H-IEF-01-06(R)	2009	34	40

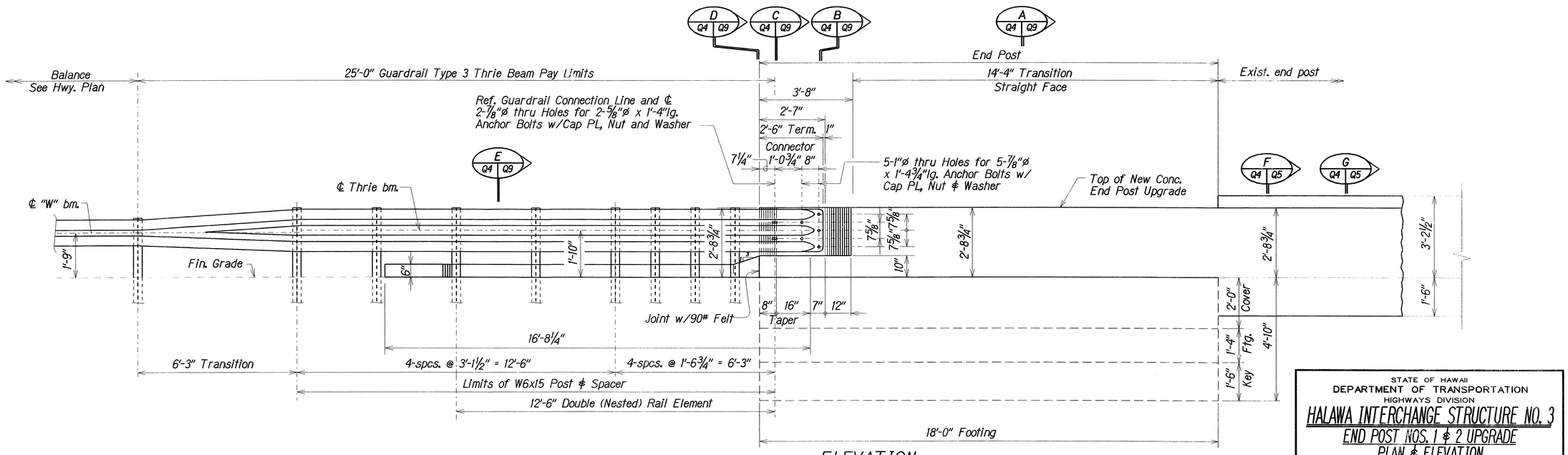


Note:

1. See Sht. No. Q10 for Metal Guardrail Type 3 Thrie Beam and Appurtenances details.

PLAN

Scale: 1/2" = 1'-0"



ELEVATION

Scale: 1/2" = 1'-0"

END POST NOS. 1 & 2 UPGRADE

ORIGINAL PLAN	SURVEY PLOTTED BY	XXX DATE
	DRAWN BY	
	TRACED BY	XXX
NOTE BOOK	DESIGNED BY	XXX
	QUANTITIES BY	XXX
N. XXXXXXXX	CHECKED BY	XXX

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

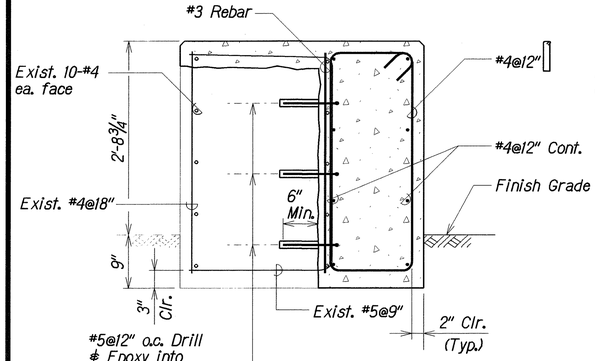
HALAWA INTERCHANGE STRUCTURE NO. 3
END POST NOS. 1 & 2 UPGRADE
PLAN & ELEVATION

INTERSTATE ROUTE H-1 PAVEMENT RESURFACING
Kaimakani Street to Salt Lake Viaduct
Project No. H-IEF-01-06MR

Scale: As Noted — Date: August, 2008

SHEET No. Q4 OF 10 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	H-IEF-01-06MR	2009	35	40



SECTION H (Q8 | Q5)
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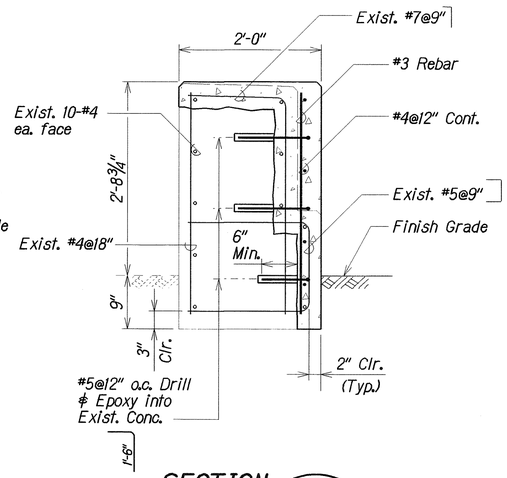
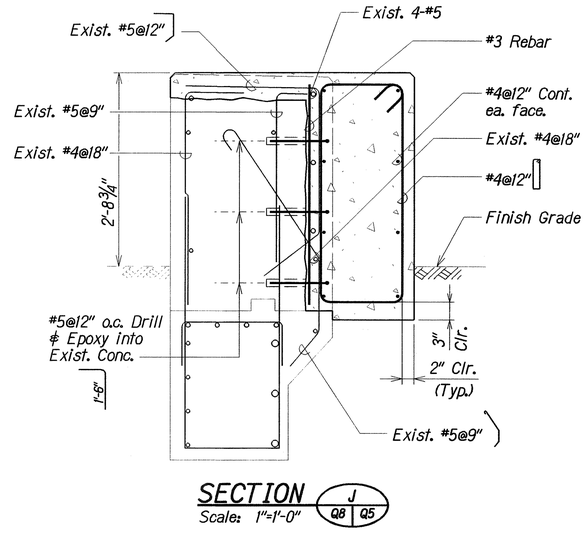


SECTION I (Q8 | Q5)
Scale: 1"=1'-0"



SECTION J (Q8 | Q5)
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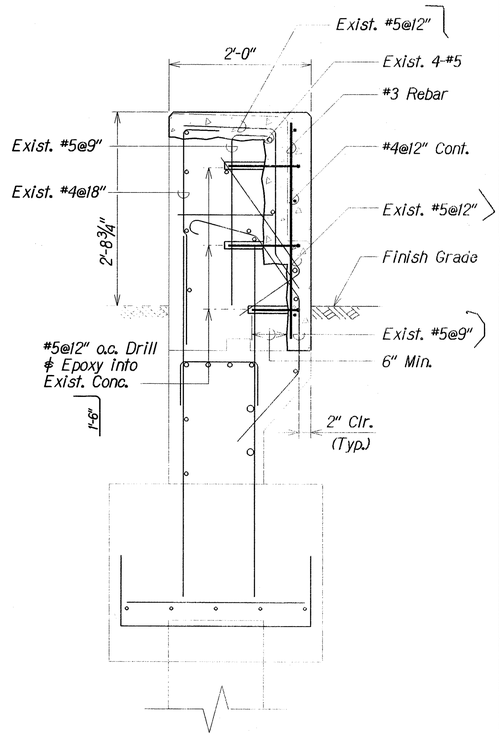
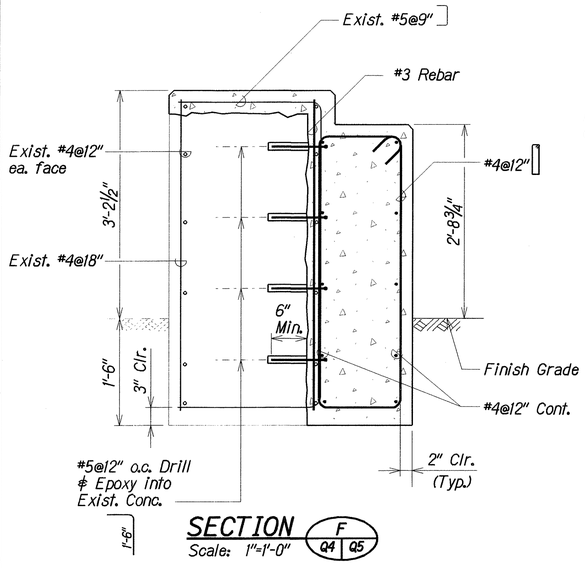


SECTION K (Q8 | Q5)
Scale: 1"=1'-0"

STRUCTURAL NO. 15



SECTION F (Q4 | Q5)
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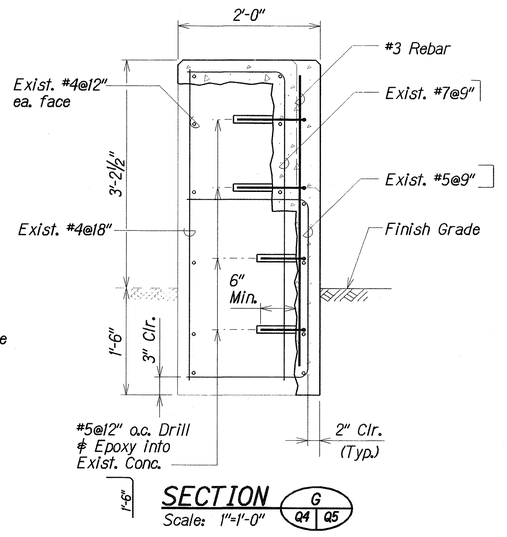


SECTION G (Q4 | Q5)
Scale: 1"=1'-0"

STRUCTURAL NO. 3

TYPICAL SECTIONS - END POST UPGRADE DETAILS

ORIGINAL PLAN		DATE
	SURVEY PLOTTED BY	XXX
	DRAWN BY	XXX
	TRACED BY	XXX
NOTE BOOK	DESIGNED BY	XXX
	QUANTITIES BY	XXX
No. XXXXXXXX	CHECKED BY	XXX

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

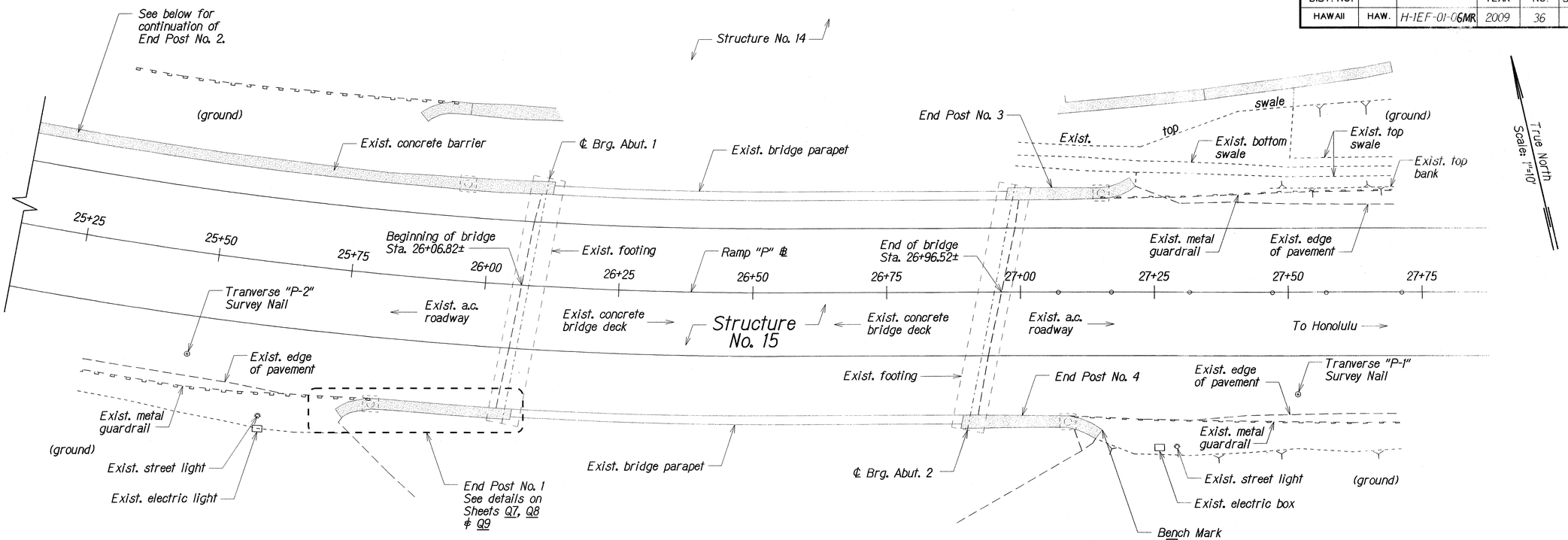
END POST UPGRADE DETAILS
SECTIONS

INTERSTATE ROUTE H-1 PAVEMENT RESURFACING
Kalmakani Street to Salt Lake Viaduct
Project No. H-IEF-01-06MR

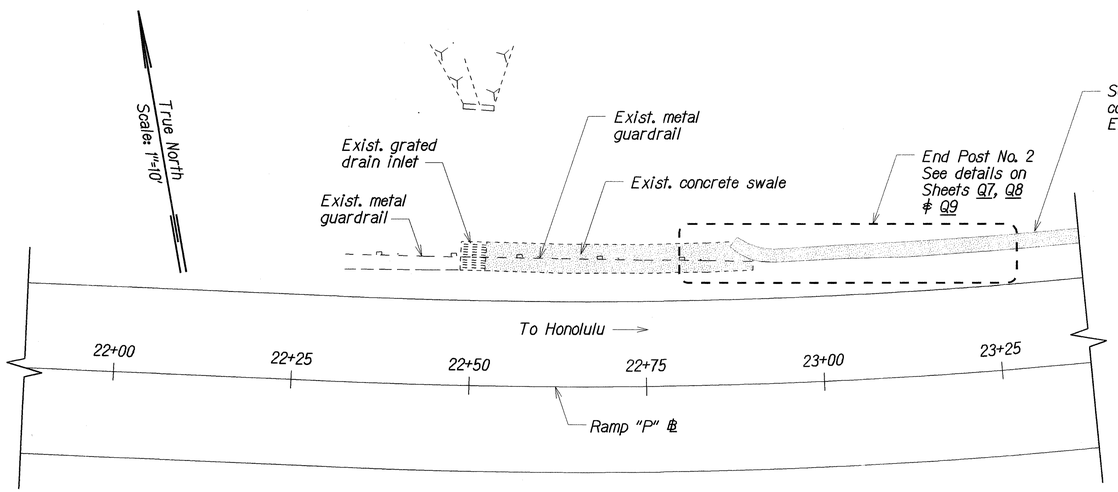
Scale: As Noted — Date: August, 2008

SHEET No. Q5 OF 10 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	H-1EF-01-06MR	2009	36	40



EXIST. PARTIAL PLAN



EXIST. PARTIAL PLAN

ORIGINAL PLAN		DATE
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	DRAWN BY XXX	XXX 1997
NOTE BOOK	TRACED BY XXX	XXX 1997
	DESIGNED BY XXX	XXX 1997
No. XXXXXXX	QUANTITIES BY XXX	XXX 1997
	CHECKED BY XXX	XXX 1997

HALAWA INTERCHANGE STRUCTURE NO. 15

Scale: 1"=10'-0"

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

HALAWA INTERCHANGE STRUCTURE NO. 15

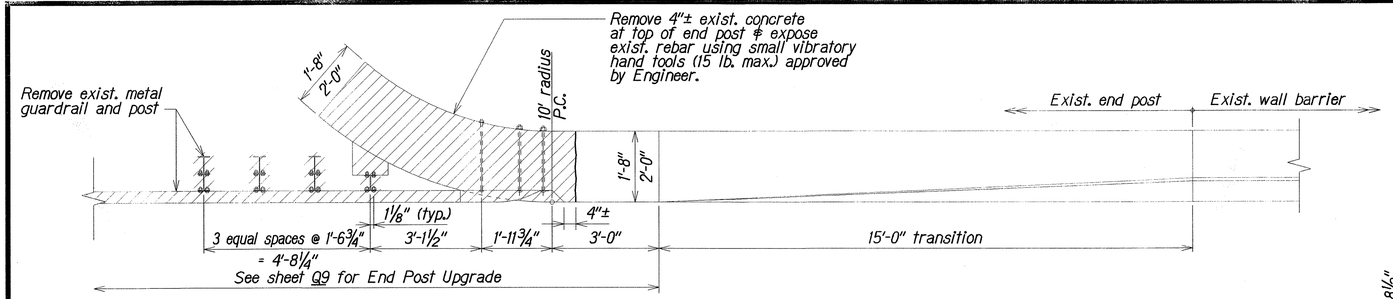
EXISTING PARTIAL LAYOUT PLANS

INTERSTATE ROUTE H-1 PAVEMENT RESURFACING
Kaimakani Street to Salt Lake Viaduct
Project No. H-1EF-01-06MR

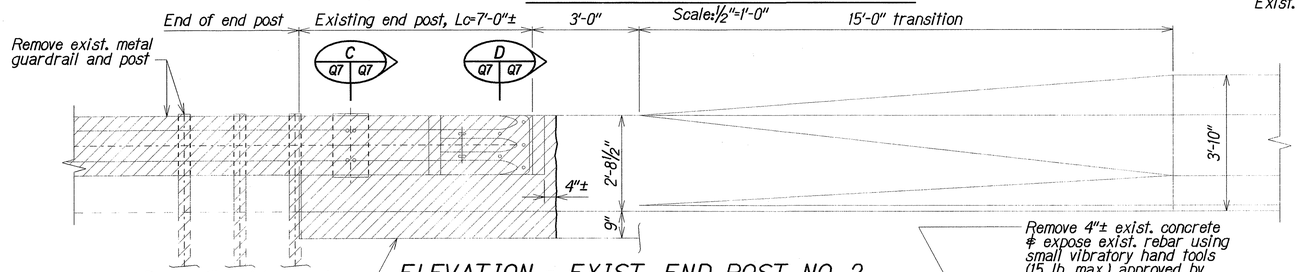
Scale: As Noted Date: August, 2008

SHEET No. Q6 OF 10 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	H-1EF-01-06MR	2009	37	40

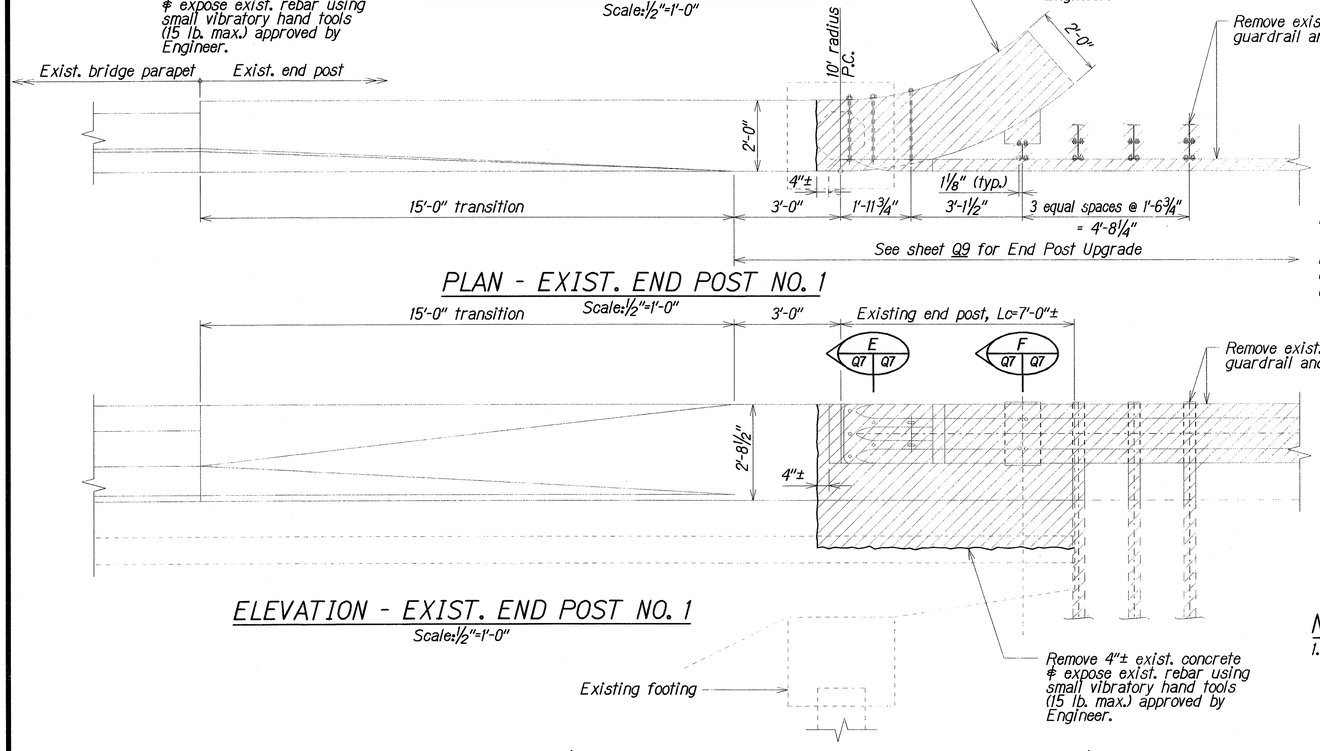


PLAN - EXIST. END POST NO. 2



ELEVATION - EXIST. END POST NO. 2

Scale: 1/2"=1'-0"



PLAN - EXIST. END POST NO. 1

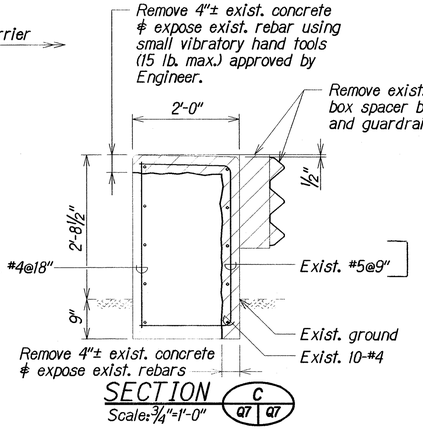
Scale: 1/2"=1'-0"

ELEVATION - EXIST. END POST NO. 1

Scale: 1/2"=1'-0"

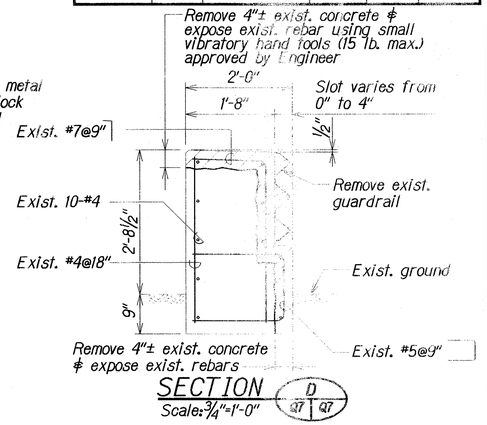
EXISTING & DEMOLITION END POST NOS. 1 & 2 DETAILS

HALAWA INTERCHANGE STRUCTURE NO. 15



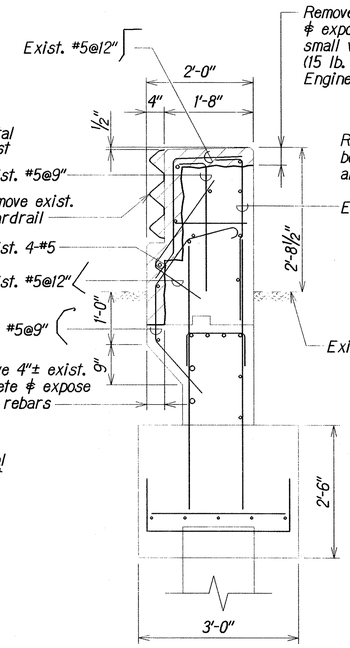
SECTION C Q7 Q7

Scale: 3/4"=1'-0"



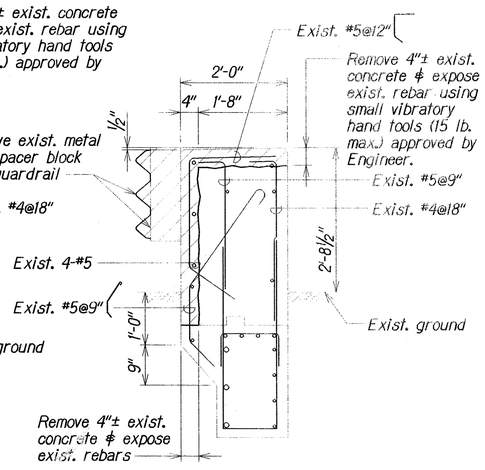
SECTION D Q7 Q7

Scale: 3/4"=1'-0"



SECTION E Q7 Q7

Scale: 3/4"=1'-0"



SECTION F Q7 Q7

Scale: 3/4"=1'-0"

NOTE:

1. Expose Exist. Rebars to Remain

ORIGINAL PLAN	SURVEY PLOTTED BY	XXX	DATE	XXX 2007
	DRAWN BY			
NOTE BOOK	TRACED BY	XXX		XXX 2007
	DESIGNED BY	XXX		XXX 2007
	QUANTITIES BY	XXX		XXX 2007
No. XXXXXXX	CHECKED BY	XXX		XXX 2007

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

HALAWA INTERCHANGE STRUCTURE NO. 15

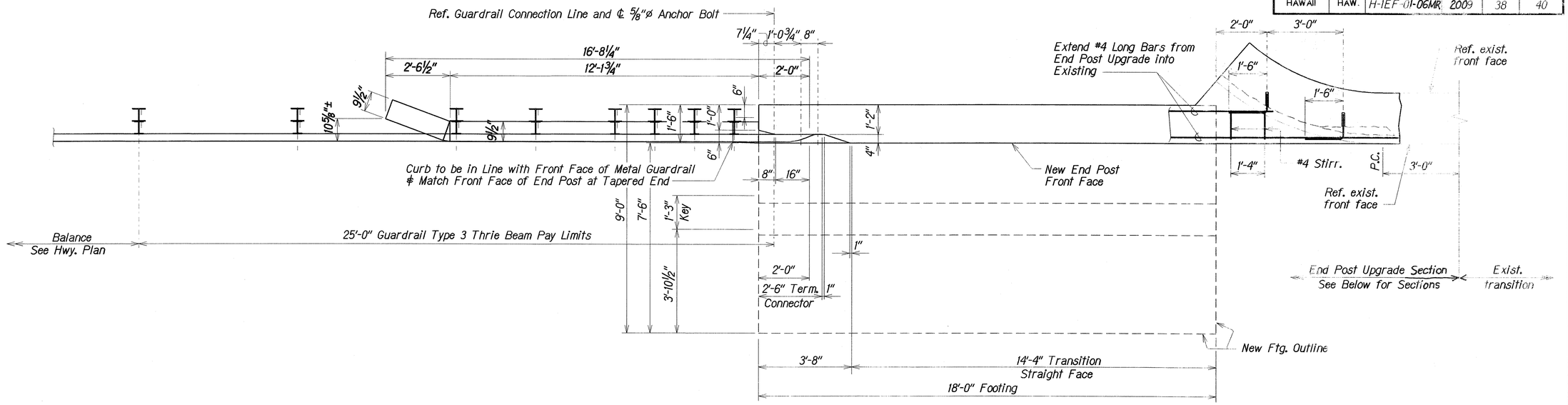
EXISTING & DEMOLITION END POST NOS. 1 & 2 DETAILS

INTERSTATE ROUTE H-1 PAVEMENT RESURFACING
Kaimakani Street to Salt Lake Viaduct
Project No. H-1EF-01-06MR

Scale: As Noted
Date: August, 2008

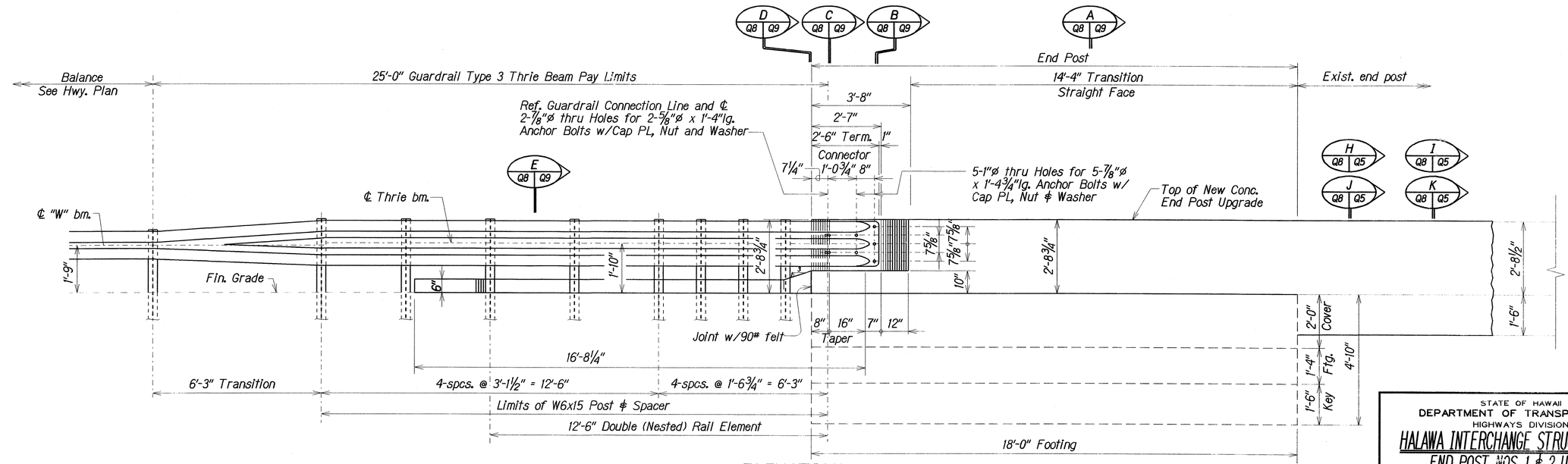
SHEET No. Q7 OF 10 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	H-IEF-01-06MR	2009	38	40



PLAN

Scale: ½" = 1'-0"



ELEVATION

Scale: ½" = 1'-0"

END POST NOS. 1 & 2 UPGRADE

ORIGINAL PLAN	SURVEY PLOTTED BY	XXX	DATE
	DRAWN BY	XXX	
NOTE BOOK	TRACED BY	XXX	
	DESIGNED BY	XXX	
No. XXXXXXX	QUANTITIES BY	XXX	
	CHECKED BY	XXX	

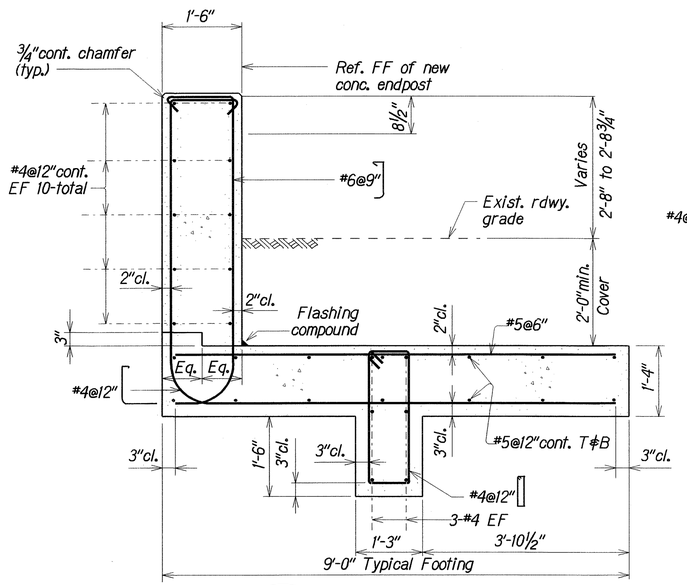
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

HALAWA INTERCHANGE STRUCTURE NO. 15
END POST NOS. 1 & 2 UPGRADE
PLAN & ELEVATION
INTERSTATE ROUTE H-1 PAVEMENT RESURFACING
Kaimakani Street to Salt Lake Viaduct
Project No. H-IEF-01-06MR

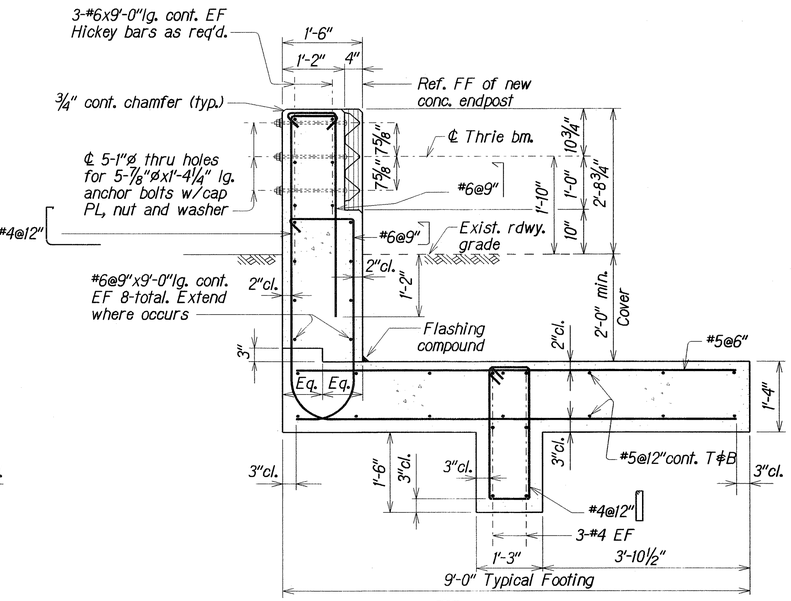
Scale: As Noted — Date: August, 2008

SHEET No. Q8 OF 10 SHEETS

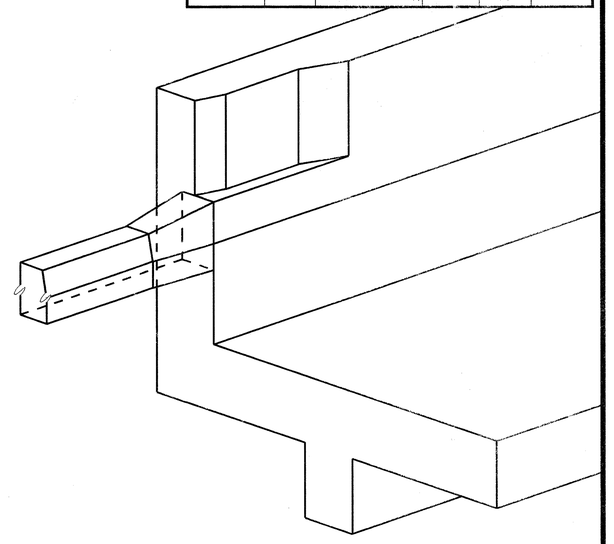
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	H-1E F-01-06MR	2009	39	40



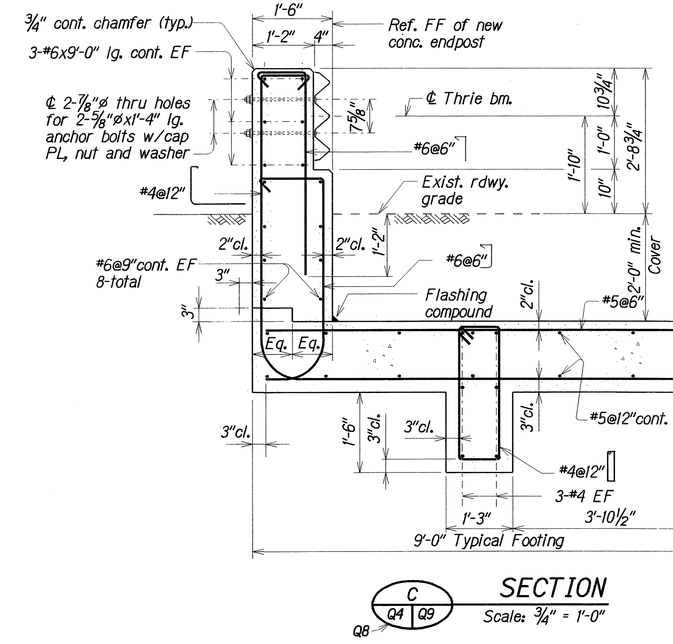
A Q4 Q9 Q8 SECTION
Scale: ¾" = 1'-0"



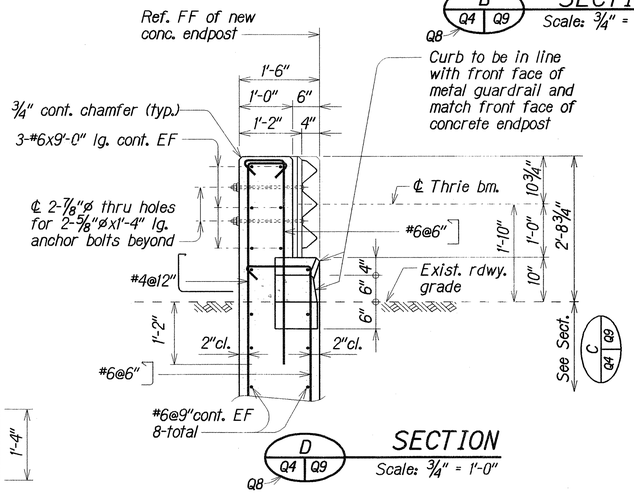
B Q4 Q9 Q8 SECTION
Scale: ¾" = 1'-0"



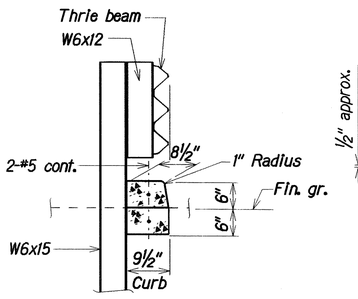
PARTIAL ISOMETRIC VIEW
END POST
Not to Scale



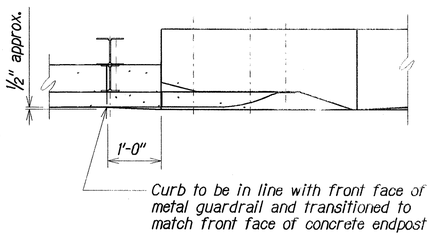
C Q4 Q9 Q8 SECTION
Scale: ¾" = 1'-0"



D Q4 Q9 Q8 SECTION
Scale: ¾" = 1'-0"



E Q4 Q9 Q8 SECTION
Scale: ¾" = 1'-0"



PARTIAL PLAN
Scale: ¾" = 1'-0"

TYPICAL SECTIONS - END POST UPGRADE DETAILS

ORIGINAL PLAN
SURVEY PLOTTED BY XXX DATE
DRAWN BY .....
TRACED BY XXX
DESIGNED BY XXX
QUANTITIES BY XXX
CHECKED BY XXX
NOTE BOOK
N: XXXXXXXX

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

END POST UPGRADE DETAILS
TYPICAL SECTIONS AND PARTIAL ISOMETRIC VIEW

INTERSTATE ROUTE H-1 PAVEMENT RESURFACING
Kaimakani Street to Salt Lake Viaduct
Project No. H-1E F-01-06MR

Scale: As Noted
Date: August, 2008

SHEET No. 09 OF 10 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	H-1EF-01-9GMR	2009	40	40

NOTES:

A. The work necessary to connect guardrail to concrete end post shall include all labor, materials, tools, equipment and incidentals necessary to complete the work and will not be paid for separately.

B. Lap terminal connector and rail element in direction of traffic to prevent snagging.

C. All anchor bolts shall be high strength bolts conforming to the requirements of ASTM 325 and Standard Specification, Section 713.04.

D. Anchor bolt length shall be such that a snug fit of the elements and full thread engagement plus 1/4" (max) is attained.

E. "Terminal Connector", "Transition Section" and thrie beam shall be fabricated from 10 gauge steel conforming to the requirements of AASHTO M 180, Type II, Class B.

F. "Terminal Connector" and standard spacer, including all anchor bolts, cap PL, nuts and washers, shall be hot-dip galvanized after fabrication.

G. Cap PL shall be fabricated from ASTM A709.

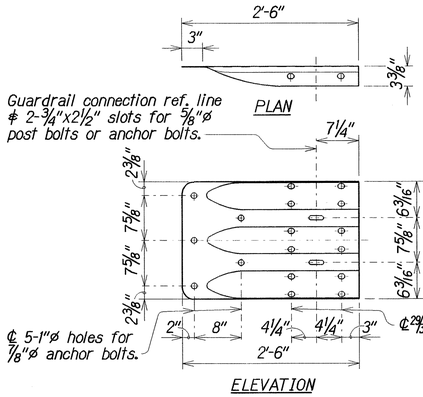
H. First 25'-0" of guardrail adjoining "Terminal Connector" shall be galvanized steel and supports spaced as shown on the detail drawings. This section of rail shall be placed on tangent to end post or parallel to roadway, unless conditions at site renders it impossible to do so. Flare point to be determined in field.

I. Double (nest 1st panel) thrie beam elements at all end post connections, except on highways with one-way traffic pattern, use single thrie beam elements at end post on trailing end only.

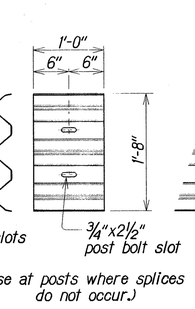
J. Where double (nested) beam occur, 12" "Back-up Plate" not required.

K. Heads of through anchor bolts shall be placed on the traffic side of the rail.

L. All steel shapes, rails and plates shall conform to ASTM A709 specifications.

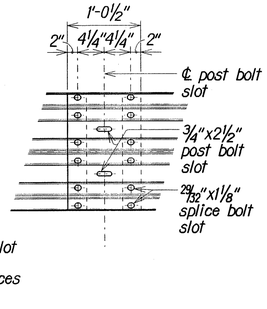


TERMINAL CONNECTOR
Scale: 1" = 1'-0"

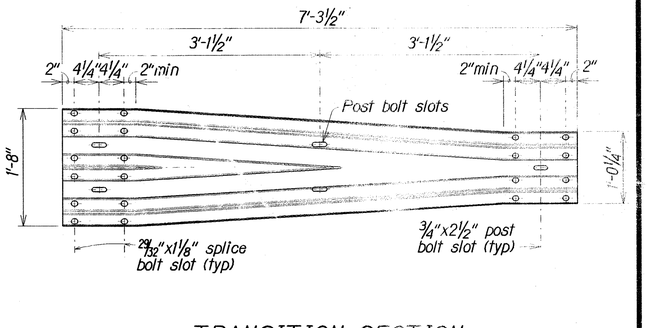


(Use at posts where splices do not occur.)

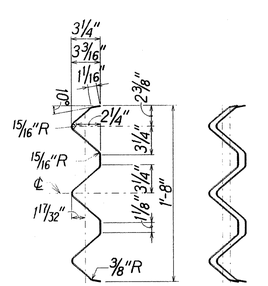
BACKUP PLATE
Scale: 1" = 1'-0"



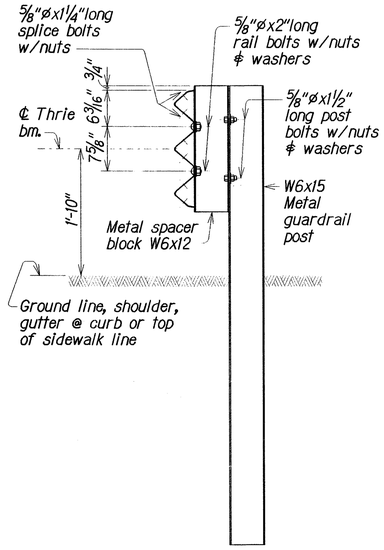
RAIL SPLICE
Scale: 1" = 1'-0"



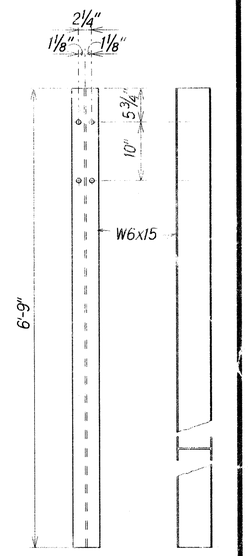
TRANSITION SECTION
Scale: 1" = 1'-0"



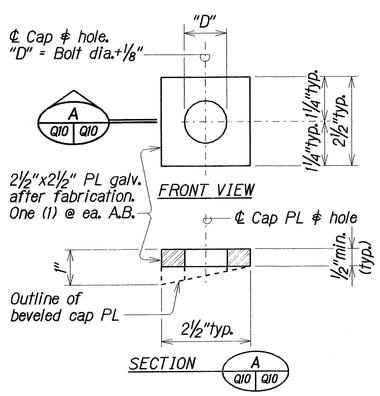
SECTION THRU RAIL ELEMENT
Scale: 1 1/2" = 1'-0"



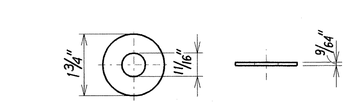
TYPICAL SECTION
METAL GUARDRAIL ON METAL POST WITH METAL SPACER BLOCK
Scale: 1" = 1'-0"



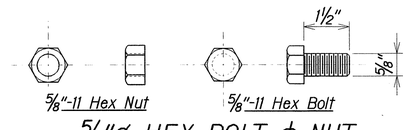
POST DETAILS
Scale: 1" = 1'-0"



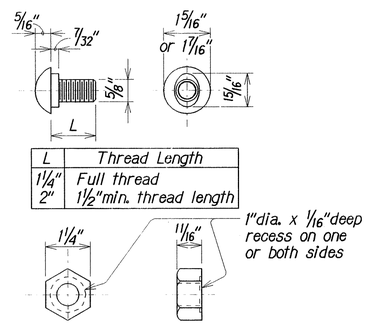
CAP (BEARING) PLATE DETAIL
Scale: 6" = 1'-0"



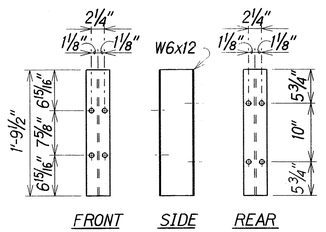
STEEL WASHER FOR 5/8"ø BOLT
Scale: 6" = 1'-0"



5/8"ø HEX BOLT ℄ NUT
Scale: 6" = 1'-0"



5/8"ø BUTTON HEAD BOLT ℄ RECESS NUT
Scale: 6" = 1'-0"



SPACER BLOCK DETAILS
Scale: 1" = 1'-0"

ORIGINAL PLAN	SURVEY PLOTTED BY	XXX	DATE
	DRAWN BY	XXX	
	TRACED BY	XXX	
NOTE BOOK	DESIGNED BY	XXX	
	QUANTITIES BY	XXX	
No. XXXXXXX	CHECKED BY	XXX	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

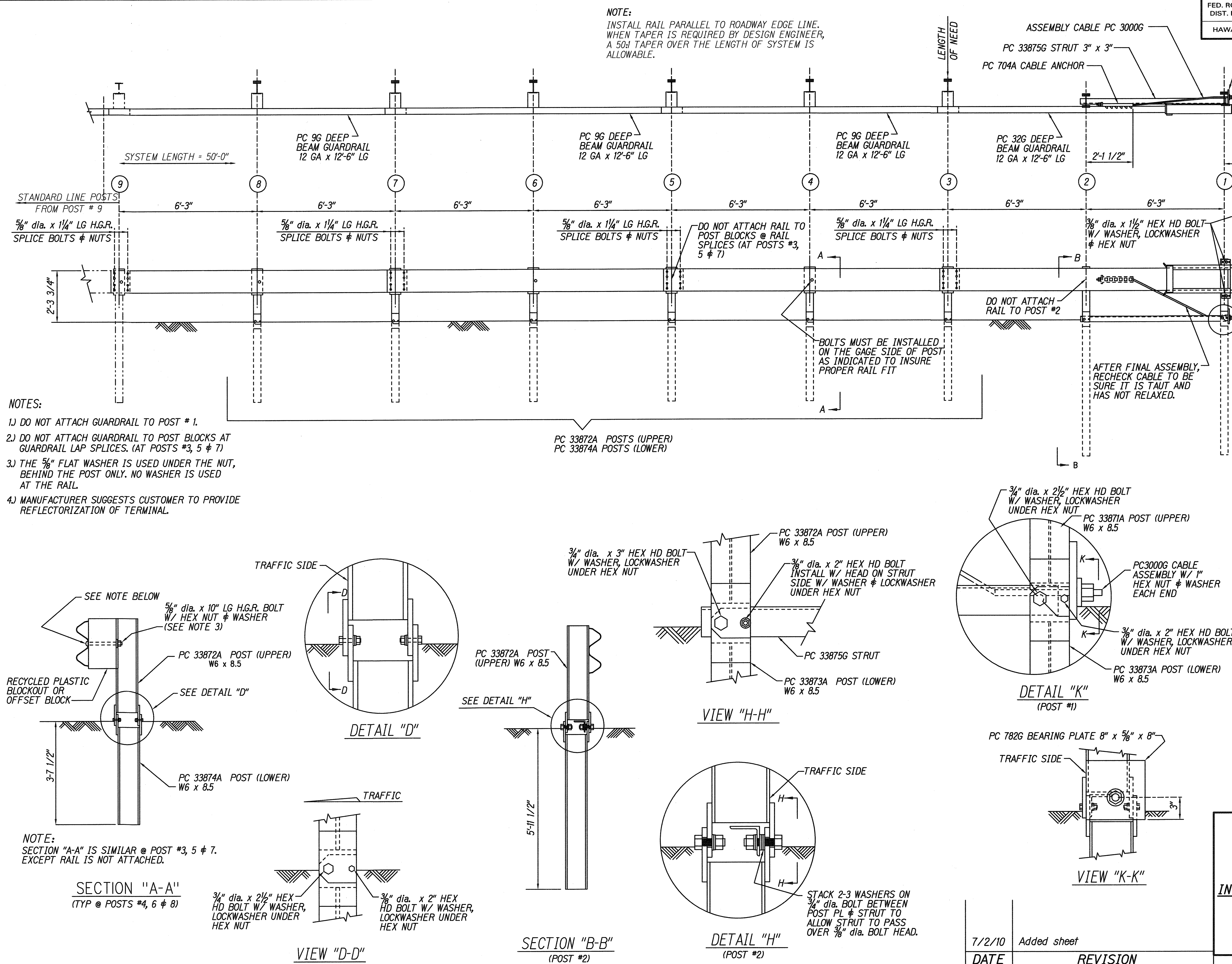
END POST UPGRADE DETAILS
METAL GUARDRAIL TYPE 3 THRIE BEAM and APPURTENANCES DETAILS
INTERSTATE ROUTE H-1 PAVEMENT RESURFACING
Kaimakani Street to Salt Lake Viaduct
Project No. H-1EF-01-9GMR

Date: August, 2008

SHEET No. Q10 OF 10 SHEETS

METAL GUARDRAIL TYPE 3 THRIE BEAM AND APPURTENANCES DETAILS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	H-1EF-01-06MR	2009	C.O. 40S-1	40



BILL OF MATERIAL

PC	QTY	DESCRIPTION
9G	3	12 GA./12'6"/6'3"/S (GUARDRAIL)
32G	1	12 GA./12'6"/6'3"/S ANC (GUARDRAIL)
704A	1	CABLE ANCHOR BRACKET
782G	1	5/8" x 8" x 8" BEARING PLATE
995A	1	ET-2000 PLUS EXTRUDER
3000G	1	CABLE 3/4" x 6'6"
3300G	6	5/8" WASHER
3340G	38	5/8" HEX NUT
3360G	32	5/8" dia. x 1 1/4" SPLICE BOLT
3500G	6	5/8" dia. x 10" POST BOLT
3701G	19	3/4" WASHER
3704G	16	3/4" HEX NUT
3717G	15	3/4" dia. x 2 1/2" HEX HD BOLT
3718G	1	3/4" dia. x 3" HEX HD BOLT
3900G	2	1" WASHER
3910G	2	1" HEX NUT
5326B	6	RECYCLED PLASTIC BLOCKOUT OR OFFSET BLOCK
4254G	18	3/8" WASHER
4255G	2	3/8" FENDER WASHERS
4258G	16	3/8" LOCKWASHER
4261G	2	3/8" dia. x 1 1/2" HEX HD BOLT
4699G	16	3/4" LOCKWASHER
6321G	16	3/8" dia. x 2" HEX HD BOLT
6405G	18	3/8" HEX NUT
33871A	1	ET2000 HBA POST #1 TOP
33872A	7	ET2000 HBA POST #2-#8 TOP
33873A	2	ET2000 HBA POST #1-#2 BOTTOM
33874A	6	ET2000 HBA POST #3-#8 BOTTOM
33875G	1	6'-6" ANGLE STRUT ET HBA

DATE	REVISION
7/2/10	Added sheet

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ET-2000 PLUS

INTERSTATE ROUTE H-1 RESURFACING
Kaimakani St. to Salt Lake Viaduct
Project No. NH-072-1(54)

Scale: NTS   Date: July, 2010

SHEET No. 1 OF 1 SHEETS

C.O. 40S–1

ORIGINAL PLAN / SURVEY PLOTTED BY / DRAWN BY / TRACED BY / DESIGNED BY / QUANTITIES BY / CHECKED BY / NOTE BOOK / DATE