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CALVIN T. MIYAHARA
LICENSED PROFESSIONAL ENGINEER
NO. 8133-S
HAWAII, U.S.A.

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SIGNATURE 4-30-18 EXPIRATION DATE OF THE LICENSE

STATE OF HAWAI'I
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Scale: None Date: Mar. 2016

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SIGNATURE 4-30-18 EXPIRATION DATE OF THE LICENSE

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# STRUCTURAL GENERAL NOTES

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

2. Design Specifications:
   (A) AASHTO LRFD Bridge Design Specifications Seventh Edition (2014) including all subsequent interim revisions and editions.
   (B) State of Hawaii Department of Transportation Highways Division "Design Criteria for Bridges and Structures" dated August 8, 2014.

3. Loads:
   (A) Railing Test Level: TL-3

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 A 615 Grade 60 deformed bars unless otherwise noted.
   (D) Grade 100 reinforcing steel shall be $MMFX_2$ Grade 100 or equivalent.
   (E) Reinforcing steel shall be ASTM A 706 where welded connections are required.
   (F) All structural steel shall be ASTM A 36 hot dip galvanized after fabrication, unless otherwise noted.
   (G) All anchor bolts, washers and nuts shall be AASHTO M164 hot dip galvanized after fabrication, unless otherwise specified.
   (H) All welding shall conform to the latest ANSI / AASHTO / AWS D1.5 Bridge Welding Code. All welds shall be ground smooth. Unless noted otherwise, all welding shall be shielded arc welding done with E70 electrodes.
   (I) All stainless steel shall be duplex stainless steel Type 2205 with a minimum yield strength of 65 ksi and a minimum tensile strength of 95 ksi.

5. 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) Deck slabs
         a. Top bars = 2 1/2"
         b. Bottom bars = 1 1/2"
      (2) Concrete cast against and permanently exposed to earth = 3"
      (3) 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 1 1/2 times the diameter of bars (for non bundled bars). In no case shall the clear distance between the bars be less than 1 1/2 times the maximum size of the coarse aggregate or 1 1/2".
   (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.
   (F) Glass Fiber Reinforced Polymer Bars (GFRP)
      (1) Glass Fiber Reinforced Polymer (GFRP) rebar shall have a minimum tensile strength of 110 ksi for #4 bar and smaller. All others shall have a minimum tensile strength of 95 ksi. The allowable stress is equal to 1/4 of the tensile strength.

5. Reinforcement (Cont.):
   (F) Glass Fiber Reinforced Polymer Bars (GFRP) (Cont.)
      (2) The modulus of elasticity of the GFRP bar shall be a minimum of 5,900,000 psi.
      (3) Minimum concrete cover for the GFRP bars shall be 3/4" unless otherwise noted.
      (4) Minimum lap splice lengths for the GFRP bars shall be 42 bar diameters unless otherwise noted.
      (5) All GFRP bars shall be securely tied in place.
      (6) The GFRP bars may be cut in the field with a masonry or diamond blade.
      (7) All work including materials and bends shall follow Manufacturer's recommendations.

6. 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 conditions 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 3/4" x 3/4".
   (J) The Contractor shall verify the location and size of all existing reinforcing bars prior to drilling.
   (K) 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.
   (L) 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.
   (M) Contractor shall unplug, clean and maintain existing drains during construction of the project.
   (N) Bolts and nuts for guardrail connections shall bear flush against concrete surfaces. Wedge washers shall be used as required.
   (O) 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 3/4 inch deep sawcut around the entire perimeter of the demolished area.

6. Construction Notes (Cont.):
   (P) The concrete surfaces which new concrete is poured against shall be roughened to a full amplitude of 1/4 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.
   (U) Guardrails that are to remain may be removed to performed the construction work and restored after the work is done. The guardrail and posts shall not be damaged in anyway. Damaged guardrail and guardrail posts shall be replaced at the expense of the contractor.
   (V) Precast element lifting and leveling device. Device shall be capable of leveling the precast element to meet grade requirements for acceptance. The precast element shall not be loaded when supported by the leveling device. The leveling device shall not bear any load upon completion of the under footing grouting process. All steel components in the leveling device that will remain permanently embedded in the concrete shall be either hot-dip galvanized per ASTM F2329 or mechanical galvanized per ASTM B695. Threaded leveling bolt shall conform to ASTM C1045. Nuts shall be heavy B-25 matching coil thread nut. Steel plate shall conform to ASTM A500, Grade B.

7. General:
   (A) All items not shown on the proposal schedule will not be paid for separately and shall be considered incidental to the various pay items.
   (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.
   (E) See civil and electrical plans for additional new facilities and removal and relocating of existing facilities.

| ORIGINAL PLANS | SURVEY PLOTTED BY | DATE |
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STRUCTURAL GENERAL NOTES

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-H1-1(242)

Scale: None Date: Mar. 2016

SHEET No. S0.4 OF 21 SHEETS

# SYMBOLS AND ABBREVIATIONS

| | |
|---|---|
| & | And |
| @ | At |
| Ø | Diameter |
| ≥ | Greater Than or Equal to |
| ≤ | Less Than or Equal to |
| # | Number |
| Abut. | Abutment |
| Abbr. | Abbreviation |
| Add. | Additional |
| Alt. | Alternate |
| AB | Anchor Bolt |
| AC | Asphaltic Concrete |
| Approx. | Approximate |
| Az. | Azimuth |
| Bk. | Back |
| Bal. | Balance |
| ℄ | Baseline |
| Bm. | Beam |
| Brg., Brgs. | Bearing, Bearings |
| BVC | Beginning of Vertical Curve |
| Bet. | Between |
| BF | Both Faces |
| BW | Both Ways |
| BFE | Bottom of Footing Elevation |
| Bot., Bott., B | Bottom |
| BOF | Bottom of Footing |
| Br. | Bridge |
| Blt. | Bolt |
| Cant. | Cantilever |
| CIP | Cast Iron Pipe |
| ℄ | Center line |
| CG | Center of Gravity |
| cc | Center to Center |
| CFCW | Continuous Flashing Compound Waterproofing |
| Cl. | Class |
| Clr. | Clearance |
| CO | Clean Out |
| Col. | Column |
| Conc. | Concrete |
| CBW | Concrete Barrier Wall |
| CMU | Concrete Masonry Unit |
| Conn. | Connection |
| Const. | Construction |
| CJ | Construction Joint |
| Cntl. Jt. | Control Joint |
| CLSM | Controlled Low Strength Material |
| Cont. | Continuous |
| CSL | Crosshole Sonic Log |
| CF | Cubic Feet |
| CY, Cu. Yd. | Cubic Yard |
| Det. | Detail |
| Dia. | Diameter |
| Diaph. | Diaphragm |
| Dim. | Dimension |
| Dist. | Distance |
| DO | Ditto |
| Dwls. | Dowels |
| Dn. | Down |
| Dbl. | Double |
| DI | Drain Inlet, Ductile Iron |
| Dwg., Dwgs. | Drawing, Drawings |
| DS | Drilled Shaft |
| E | East |
| EA, Ea., ea. | Each |
| EF | Each Face |
| EFH | Each Face Horizontal |
| EFV | Each Face Vertical |
| EW | Each Way |
| EPE | Existing Edge of Pavement |
| EPS | Expanded Polystyrene |
| ES | Edge of Shoulder |
| Elec. | Electrical |
| EMH | Electrical Manhole |
| El., Elev. | Elevation |
| Emb. | Embankment |
| EVC | End of Vertical Curve |
| Eq. | Equal |
| Est. | Estimated |
| Exc. | Excavation |
| Excl. | Excluding |
| Exist., Ex. | Existing |
| Exp., (E) | Expansion |
| EJ | Expansion Joint |
| Ext. | Exterior |
| (F) | FIxed |
| FA | Force account |
| FB | Flat Bar |
| FC | Compression Stresses |
| f'c | Specified Compressive Strength of Concrete at 28 days |
| f'ci | Specified Compressive Strength of Concrete at Time of Initial Prestress |
| FF | Far Face. Front Face |
| Fig. | Figure |
| Fin. Gr. | Finish Grade |
| FRP | Fiberglass Reinforced Plastic |
| FT | Tensile Stresses |
| Ftg. | Footing |
| Ft. | Feet, Foot |
| Ga. | Gage, Gauge |
| Galv. | Galvanized |
| G, Gir. | Girder |
| GDI | Grated Drain Inlet |
| GFRP | Glass Fiber Reinforced Polymer Rebar |
| Gr. | Grade |
| Grd. | Ground |
| GRP | Grouted Rubble Pavement |
| Ht. | Height |
| (H) | Hinge |
| Horiz., H | Horizontal |
| HDOT | State of Hawaii Department of Transportation |
| HDPE | High Density Polyethylene |
| HS | High strength |
| HECO | Hawaiian Electric Company |
| IB | Inbound |
| In. | Inch |
| ID | Inside Diameter |
| IF | Inside Face |
| Int. | Interior |
| Inv. | Invert |
| Jt. | Joint |
| K | Kips |
| KF | Kip Foot |
| KSF | Kips Per Square Foot |
| KSI | Kips Per Square Inch |
| KLF | Kips Per Linear Foot |
| L | Length |
| lb., lbs., LBS. | Pound, Pounds |
| Ltg. Std. | Lighting Standard |
| LF, Lin. Ft. | Linear Feet/Foot |
| LS | Lump Sum |
| Longit. | Longitudinal |
| M | Modified |
| MH | Manhole |
| Max. | Maximum |
| Mech. | Mechanical |
| Min. | Minimum |
| Misc. | Miscellaneous |
| MPH | Miles Per Hour |
| NF | Near Face |
| N | North |
| NIC | Not in Contract |
| No. | Number |
| NTS | Not to Scale |
| O/S | Offset |
| oc | On Center |
| Opn'g | Opening |
| OB | Outbound |
| OD | Outside Diameter |
| OG | Outside Girder, Outbound Girder |
| Perf. | Perforated |
| PL | Plate |
| PCC | Portland Cement Concrete |
| PC | Point of Curvature |
| PCF | Pounds per Cubic Foot |
| P(e) | Effective Prestress Force After All Losses |
| PPM | Parts Per Million |
| PSF | Pounds per Square Foot |
| PSI, psi | Pounds per Square Inch |
| PLF | Pounds per Linear Foot |
| PI | Point of Intersection of Tangents |
| PIVC | Point of Intersection of Vertical Curve |
| PT | Point of Tangency |
| Pt., Pts. | Point, Points |
| PRC | Point of Reverse Curvature |
| PVC | Polyvinyl Chloride |
| Prestr. | Prestressed |
| P/S | Prestressed Strands |
| PB | Pull Box |
| Rad., R | Radius |
| RF | Rear Face |
| Rebar | Reinforcing Bar |
| Ref. | Reference |
| Reinf. | Reinforced, Reinforcing, Reinforcement |
| Req'd. | Required |
| Ret. | Retaining |
| ROW | Right of Way |
| Rdwy. | Roadway |
| Sect. | Section |
| SRW | Segmental Retaining Wall |
| Sht. | Sheet |
| Sim. | Similar |
| Sl. | Slope |
| S | South |
| Spc., Spg. | Spaces, Spacing |
| Sprd. | Spread |
| Spec. | Specification |
| SF | Square Feet |
| SY | Square Yard |
| SS | Stainless Steel |
| Std. | Standard |
| Sta. | Station |
| Stiff. | Stiffener |
| Stirr. | Stirrup |
| Stl. | Steel |
| Str. | Straight |
| Struct. | Structure |
| SE | Super Elevation |
| Symm. | Symmetrical |
| Tan. | Tangent |
| TC | Continuity Tendons |
| Temp. | Temporary |
| TD | Deck Tendon |
| Thk. | Thick |
| T | Top |
| T&B | Top and Bottom |
| TCE | Top of Column (and Bent Cap Soffit) Elevation |
| TOD | Top of Deck |
| TOP | Top of Pier |
| TFE | Top of Footing Elevation |
| Tot. | Total |
| Transv. | Transverse |
| TS | Structural Tubing |
| TSS | Tendon For Girder in Simply Supported Condition |
| Typ. | Typical |
| Undergrd. | Underground |
| Var. | Varies |
| Vert., V | Vertical |
| VC | Vertical Curve |
| VESLMC | Very Early Strength Latex Modified Concrete |
| W/C | Water/Cement |
| w/ | With |
| W | West |
| WWF | Welded Wire Fabric |
| WW | Wingwall |
| WP | Work Point, Working Point |
| WS | Water Surface |
| Yr. | Year |

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 109 | 354 |

CALVIN T. MIYAHARA — LICENSED PROFESSIONAL ENGINEER — NO. 8133-S — HAWAII, U.S.A.

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4-30-18
SIGNATURE — EXPIRATION DATE OF THE LICENSE

STATE OF HAWAI'I
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

## SYMBOLS AND ABBREVIATIONS

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

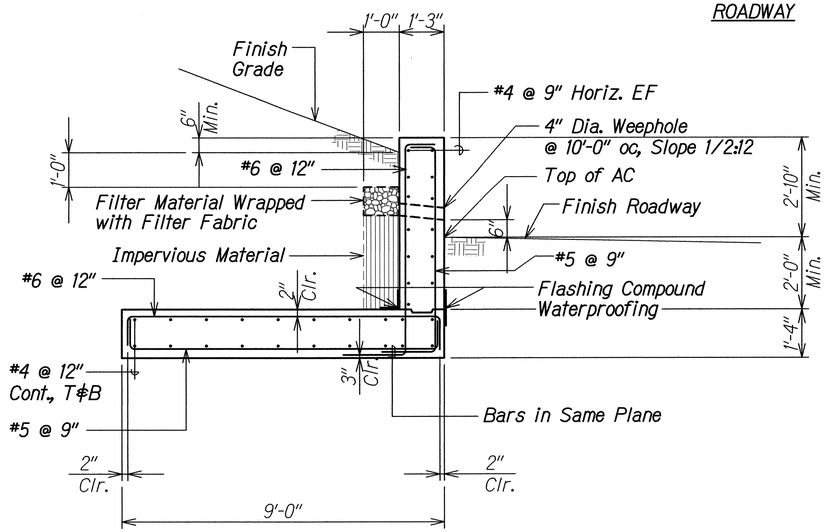
Scale: None — Date: Mar. 2016

SHEET No. S0.5 OF 21 SHEETS

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

DRAWING NAME: Z:\00_ONGOING\12-032-H1 GRAIL & SHLDR MDL ST TO PUNCHBOWL WOO\01 CAD\03-XX-16\H1C-MP-S0005 ABBREV.DWG PLOT TIME: 03-25-16, 10:34 AM

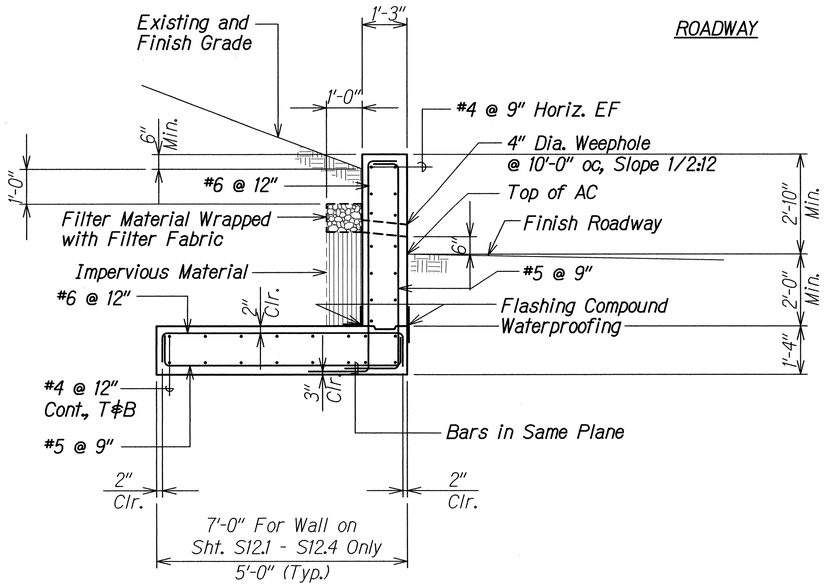
| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 110 | 354 |




## RETAINING WALL SECTION A

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

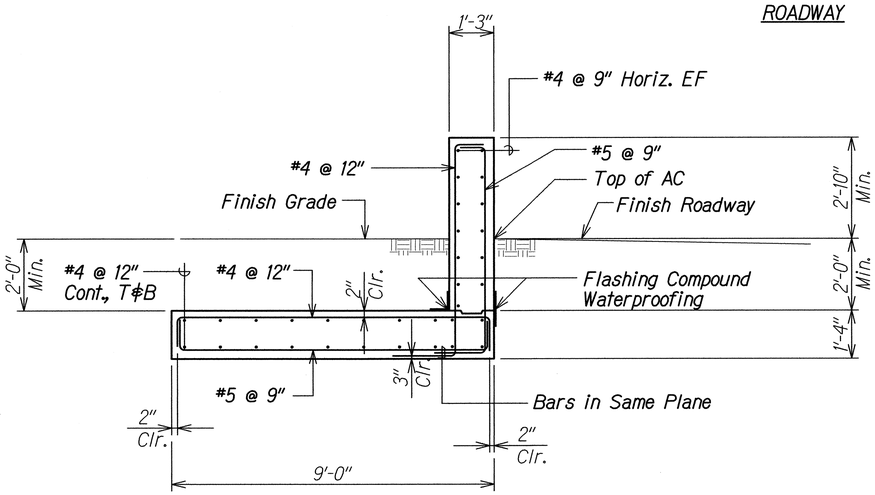
S0.6 | S0.6




## RETAINING WALL TYPICAL SECTION B

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

S0.6 | S0.6




## RETAINING WALL SECTION C

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

S0.6 | S0.6

| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
|---|---|---|
| | DRAWN BY | |
| NOTE BOOK | TRACED BY | |
| No. | DESIGNED BY | |
| | QUANTITIES BY | |
| | CHECKED BY | |

DRAWING NAME: Z:\OO ONGOING\12-032-H1 GRAIL & SHLDR IMPL ST TO PUNCHBOWL WOC\01 CAD\03-XX-16\H1G-MP-S0006 RETAING WALL SECT-SK1.DWG PLOT TIME: 03-25-16, 1:04 PM

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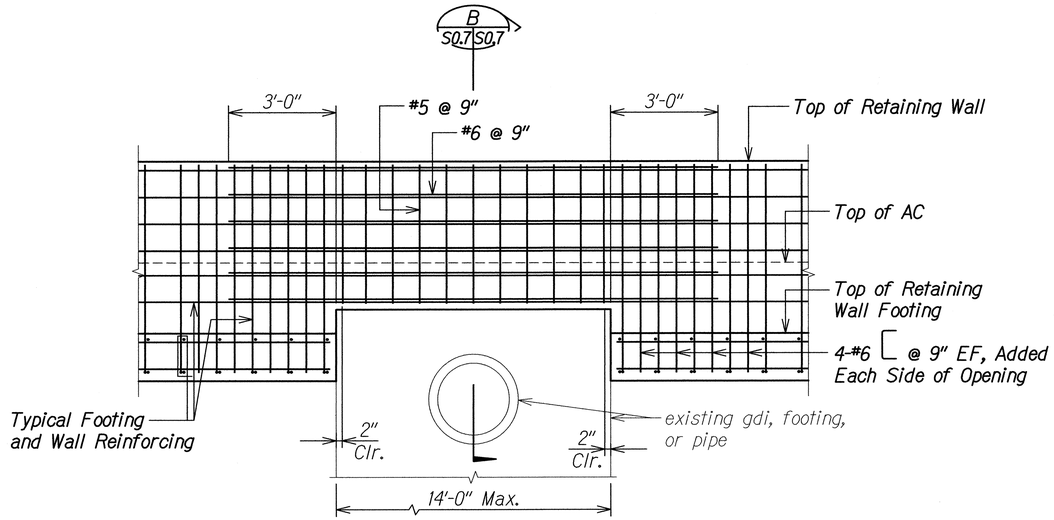
# TYPICAL RETAINING WALL SECTIONS

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: Nonetoted Date: Mar. 2016

SHEET No. S0.6 OF 21 SHEETS

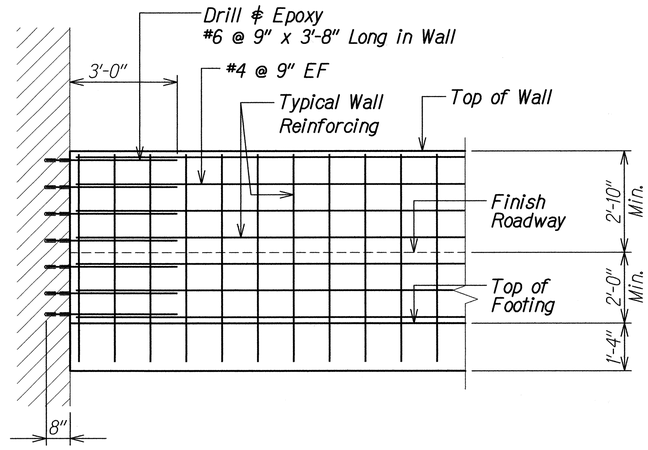
| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 111 | 354 |




## RETAINING WALL AT GDI, FOOTING , OR PIPE - SECTION A

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

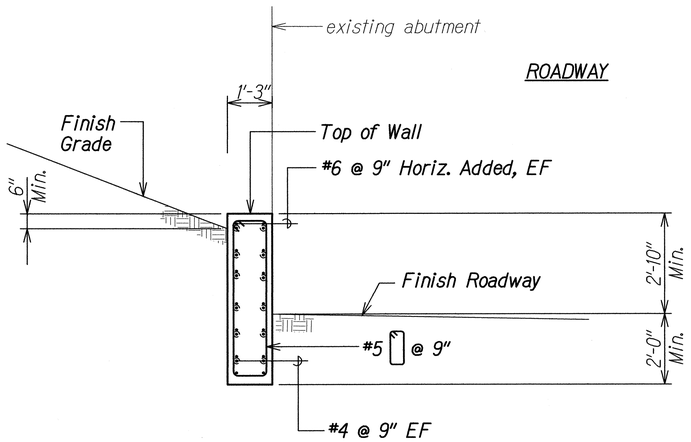
S0.7 S0.7




## RETAINING WALL AT ABUTMENT - ELEVATION C

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

S0.7 S0.7




## RETAINING WALL AT GDI - SECTION B

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

S0.7 S0.7

**Note:**
Provide 1/4" premolded joint filler between wall or wall footing and any adjacent concrete.

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DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

# RETAINING WALL SECTIONS AND ELEVATION

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted Date: Mar. 2016

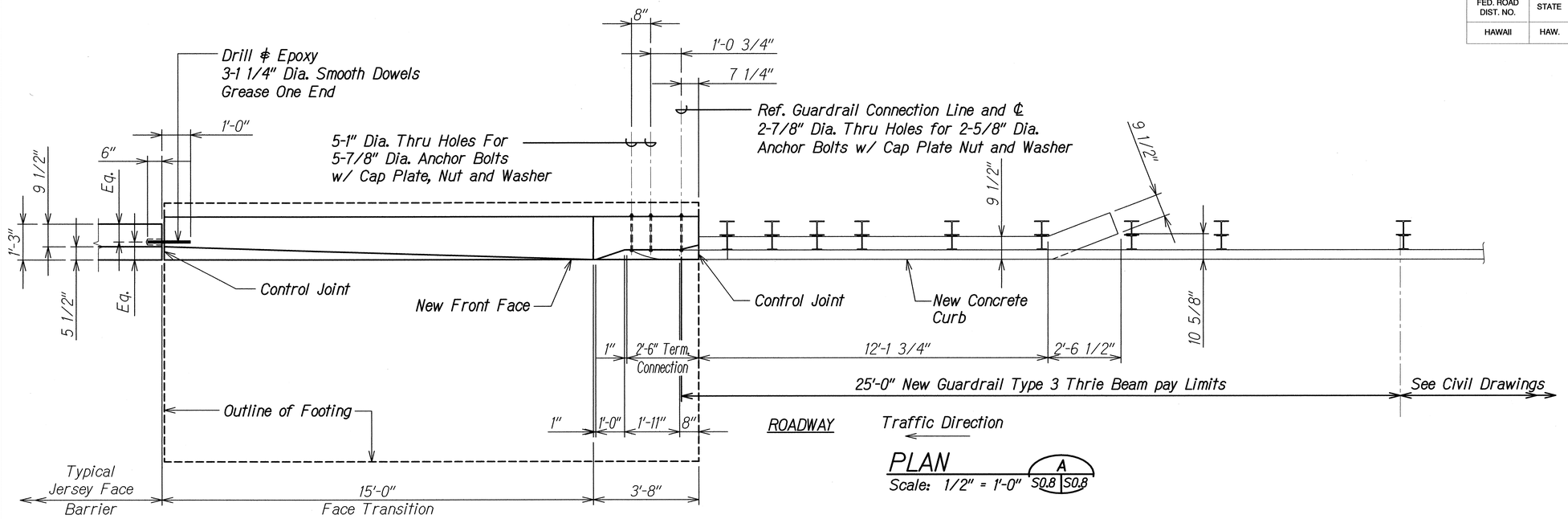
SHEET No. S0.7 OF 21 SHEETS

111

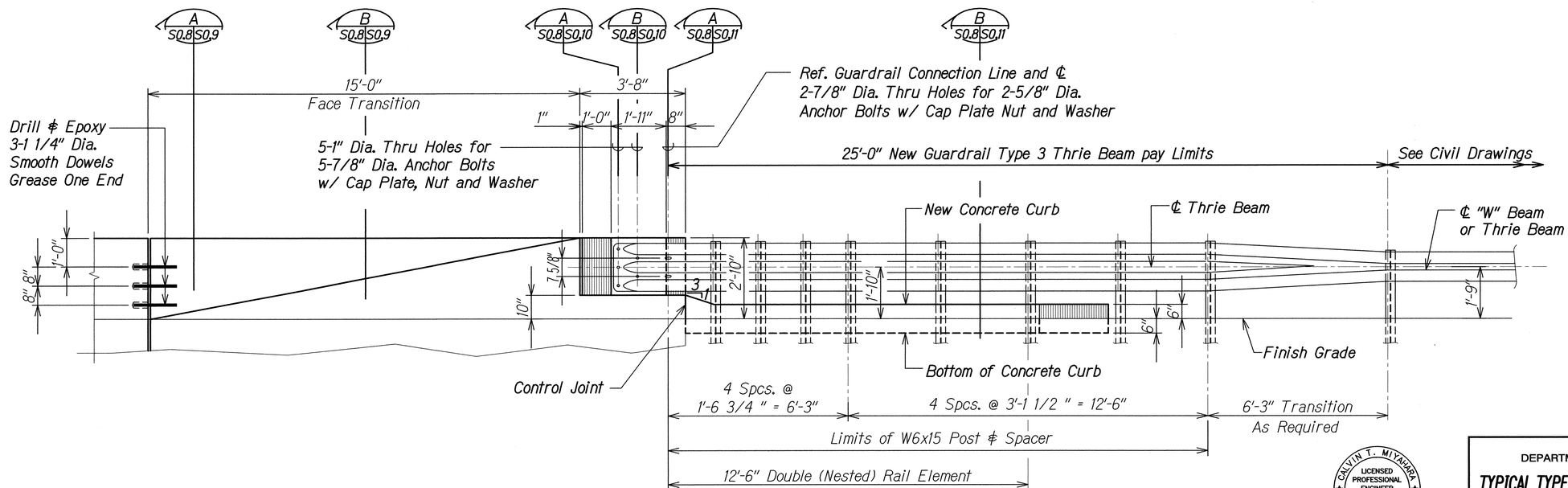
ORIGINAL PLANS
SURVEY PLOTTED BY ____ DATE
DRAWN BY ____
TRACED BY ____
NOTE BOOK DESIGNED BY ____
QUANTITIES BY ____
No. ____ CHECKED BY ____

DRAWING NAME: Z:\00 ONGOING\12-032-H1 GRAIL & SHLDR MDL ST TO PUNCHBOWL WOC\01 CADD\03-XX-16\H1C-MP-S0006 RETAING WALL SECT-SK1.DWG PLOT TIME: 03-25-16, 1:05 PM)

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 112 | 354 |




PLAN (A) S0.8 | S0.8
Scale: 1/2" = 1'-0"




ELEVATION (B) S0.8 | S0.8
Scale: 1/2" = 1'-0"

ORIGINAL PLAN
NOTE BOOK No.
SHEET PLOTTED BY DATE
DRAWN BY
TRACED BY
DESIGNED BY
QUANTITIES BY
CHECKED BY

DRAWING NAME: Z:\00 ONGOING\12-032-H1 GRAIL & SHLDR MDL ST TO PUNCHBOWL WOC\01 CAD\03-XX-16\H1G-MP-S0008 TYP END POST JERSEY.DWG PLOT TIME: 03-25-16, 2:05 PM)

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LICENSED PROFESSIONAL ENGINEER
NO. 8133-S
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DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

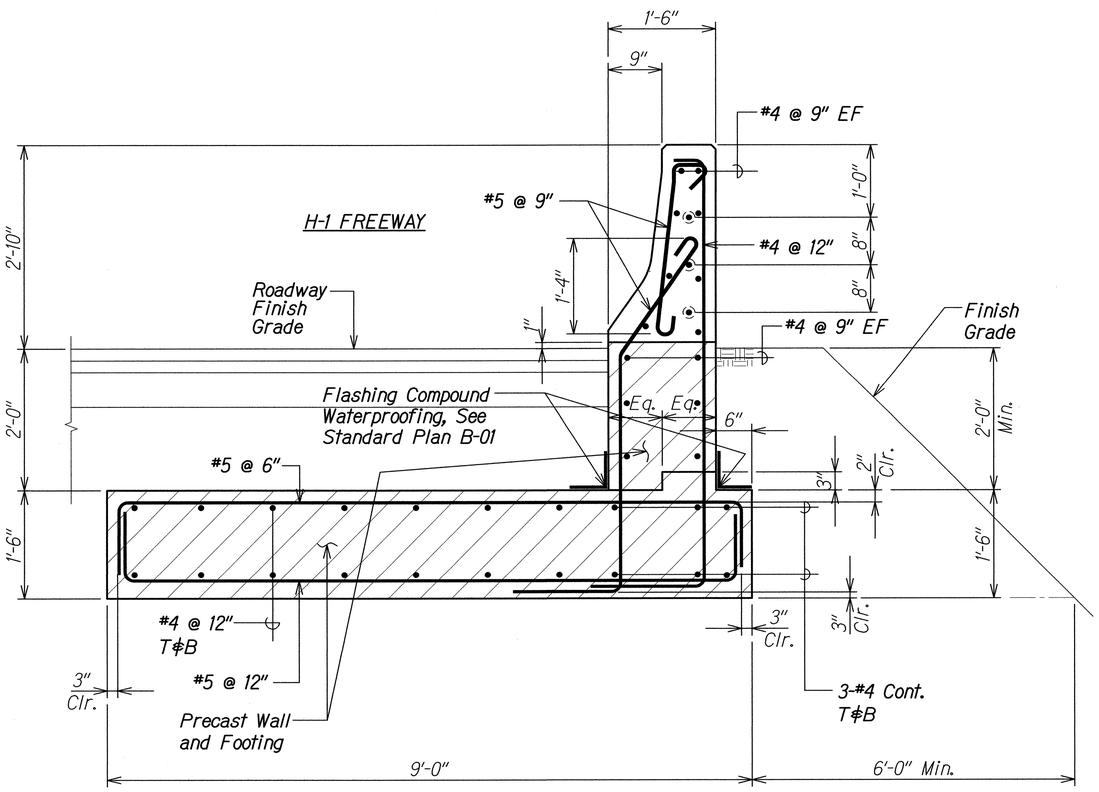
# TYPICAL TYPE 1 END POST AT JERSEY FACE
## PLAN AND ELEVATION

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-H1-1(242)

Scale: As Noted Date: Mar. 2016

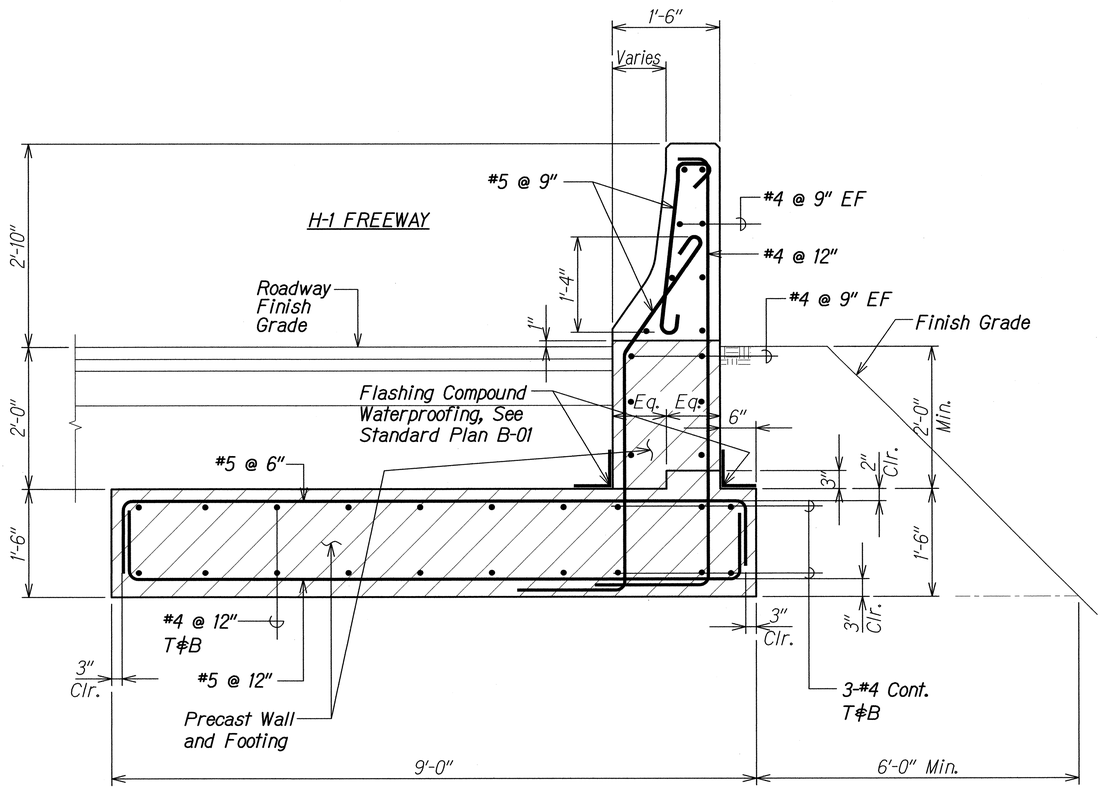
SHEET No. S0.8 OF 21 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 113 | 354 |




SECTION A
Scale: 1" = 1'-0"
S0.8 | S0.9

*Note:*
*After leveling, 5000 psi non-shrink grout shall be placed under footing to fill all voids.*




SECTION B
Scale: 1" = 1'-0"
S0.8 | S0.9

ORIGINAL PLAN
NOTE BOOK No.

SURVEY PLOTTED BY DATE
DRAWN BY
TRACED BY
DESIGNED BY
QUANTITIES BY
CHECKED BY

DRAWING NAME: Z:\OO CNO\CNO\12-032-H1 GRAL & SHLDR MDL ST TO PUNCHBOWL WO\O1 CAD\03-XX-16\H1G-MP-S0008 TYP END POST JERSEY.DWG PLOT TIME: 03-25-16, 2:05 PM)

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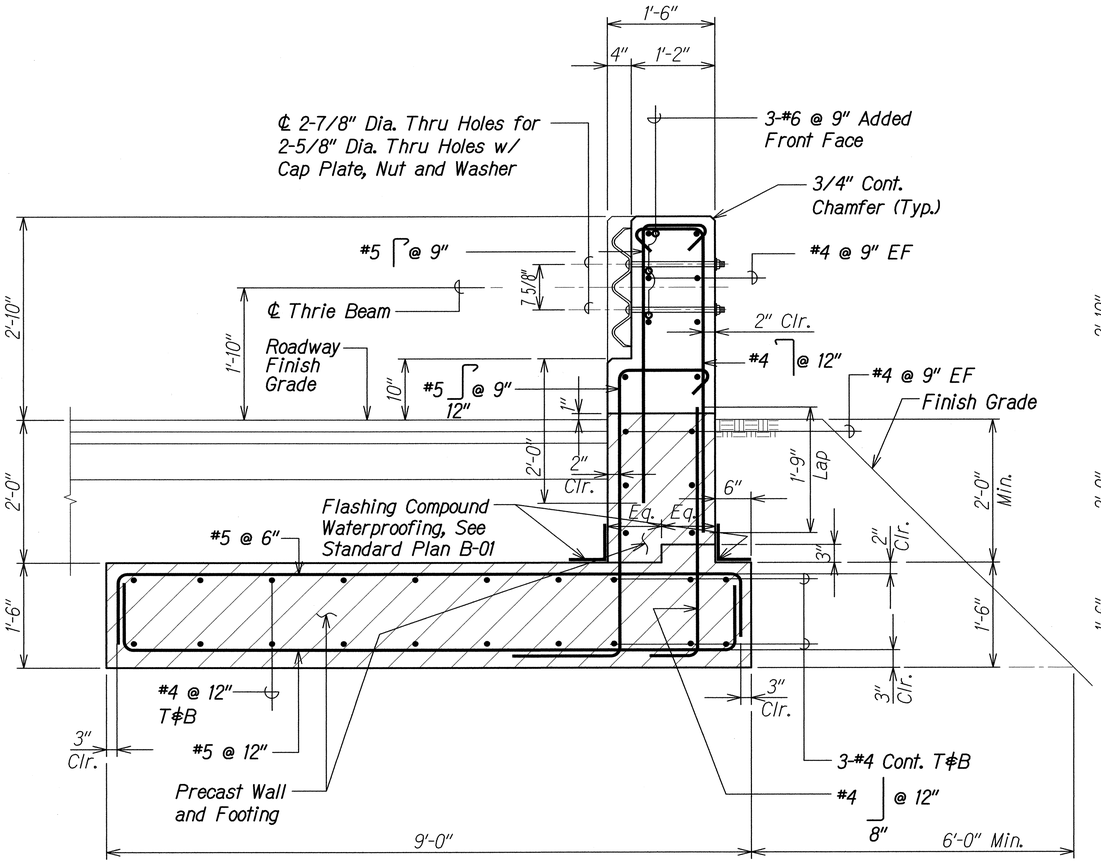
STATE OF HAWAI'I
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HIGHWAYS DIVISION

# TYPICAL TYPE 1 END POST AT JERSEY FACE
## SECTIONS
## INTERSTATE ROUTE H-1
## GUARDRAIL AND SHOULDER IMPROVEMENTS
## Middle Street to Punchbowl Off-Ramp
## Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted Date: Mar. 2016

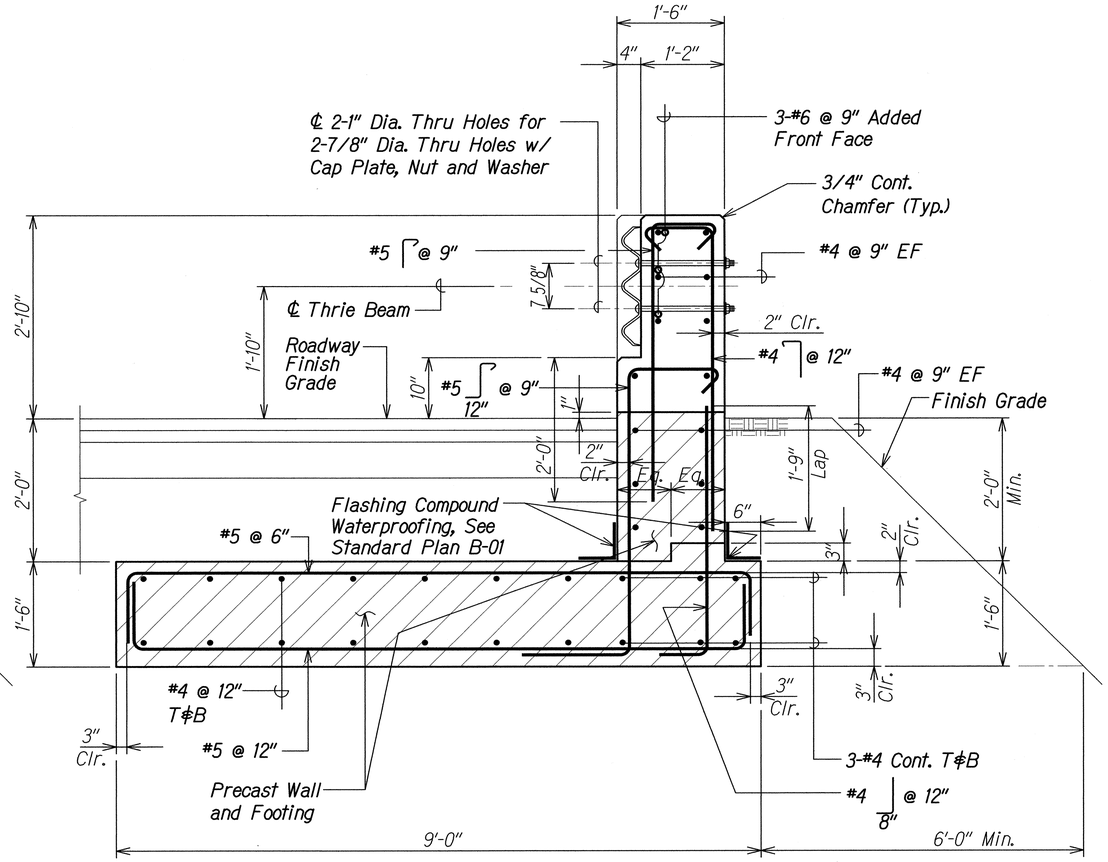
SHEET No. S0.9 OF 21 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 114 | 354 |




SECTION A
Scale: 1" = 1'-0"
S0.8 | S0.10

Note:
After leveling, 5000 psi non-shrink grout shall be placed under footing to fill all voids.




SECTION B
Scale: 1" = 1'-0"
S0.8 | S0.10

| | | |
|---|---|---|
| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
| | DRAWN BY | " |
| NOTE BOOK | TRACED BY | " |
| | DESIGNED BY | " |
| No. | QUANTITIES BY | " |
| | CHECKED BY | " |

DRAWING NAME: Z:\00 ONGOING\12-032-H1 GRAIL & SHLDR IMPL ST TO PUNCHBOWL WOC\01 CAD\03-XX-16\H1G-MP-S0008 TYP END POST JERSEY.DWG PLOT TIME: 03-25-16, 2:05 PM)

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4-30-18
SIGNATURE EXPIRATION DATE OF THE LICENSE

STATE OF HAWAI'I
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HIGHWAYS DIVISION

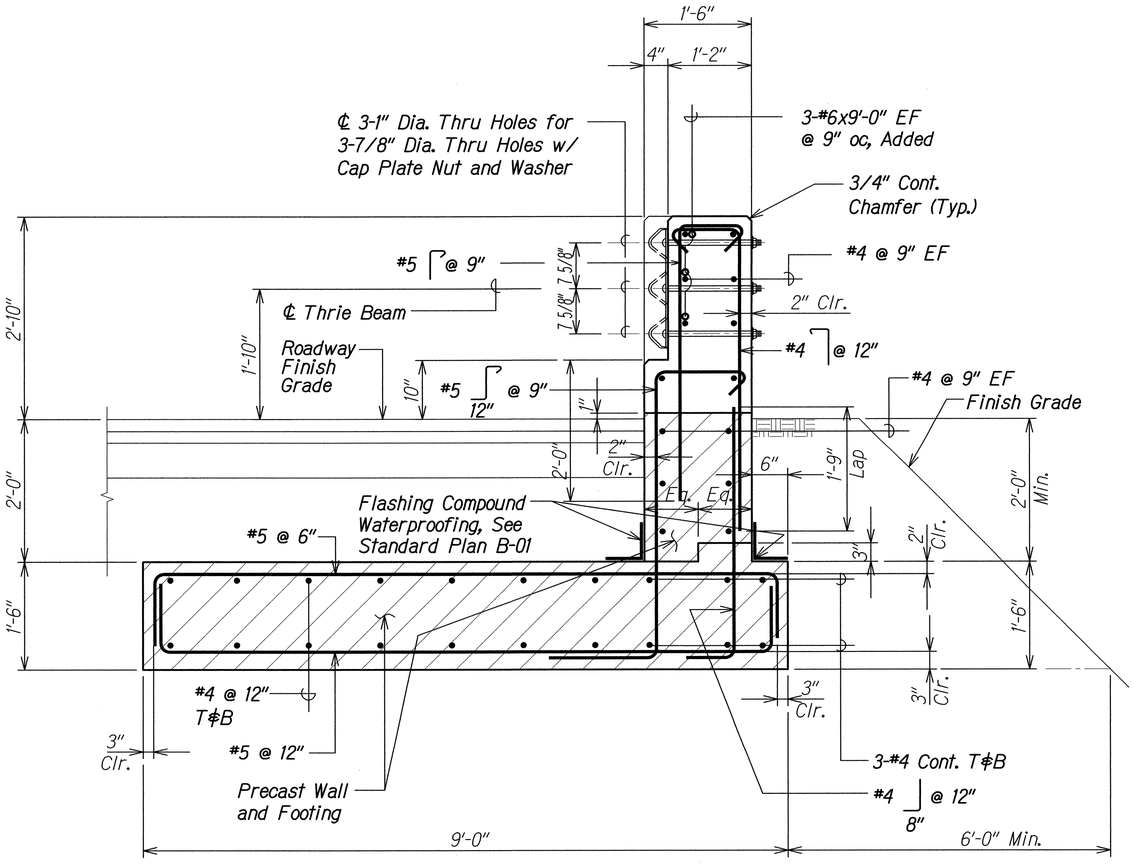
# TYPICAL TYPE 1 END POST AT JERSEY FACE
## SECTIONS

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted Date: Mar. 2016

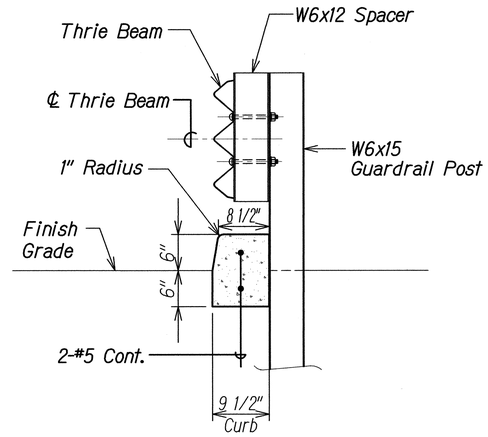
SHEET No. S0.10 OF 21 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 115 | 354 |

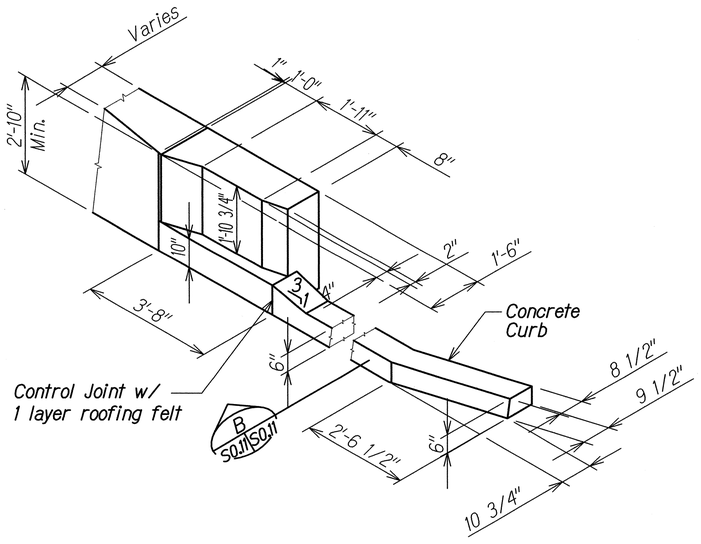



SECTION (A / S0.8 | S0.11)
Scale: 1" = 1'-0"

**Note:**
After leveling, 5000 psi non-shrink grout shall be placed under footing to fill all voids.




SECTION (B / S0.11 | S0.11)
Scale: 1" = 1'-0"




END POST DETAIL (1 / S0.11 | S0.11)
Scale: 1/2" = 1'-0"

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

DRAWING NAME: Z:\00 ONGOING\12-032-H1 GRAIL & SHLDR MDL ST TO PUNCHBOWL WOC\01 CAD\03-XX-16\H1G-MP-S0008 TYP END POST JERSEY.DWG PLOT TIME: 03-25-16, 2:05 PM)

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DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

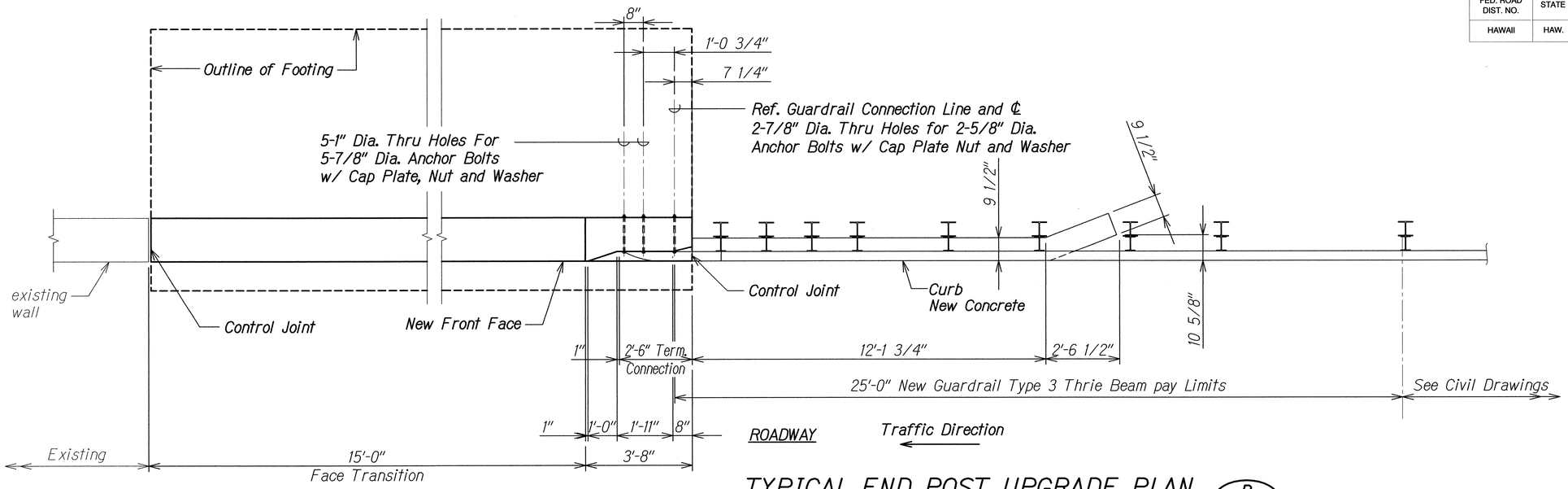
# TYPICAL TYPE 1 END POST AT JERSEY FACE
## SECTIONS AND DETAIL

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted Date: Mar. 2016

SHEET No. S0.11 OF 21 SHEETS

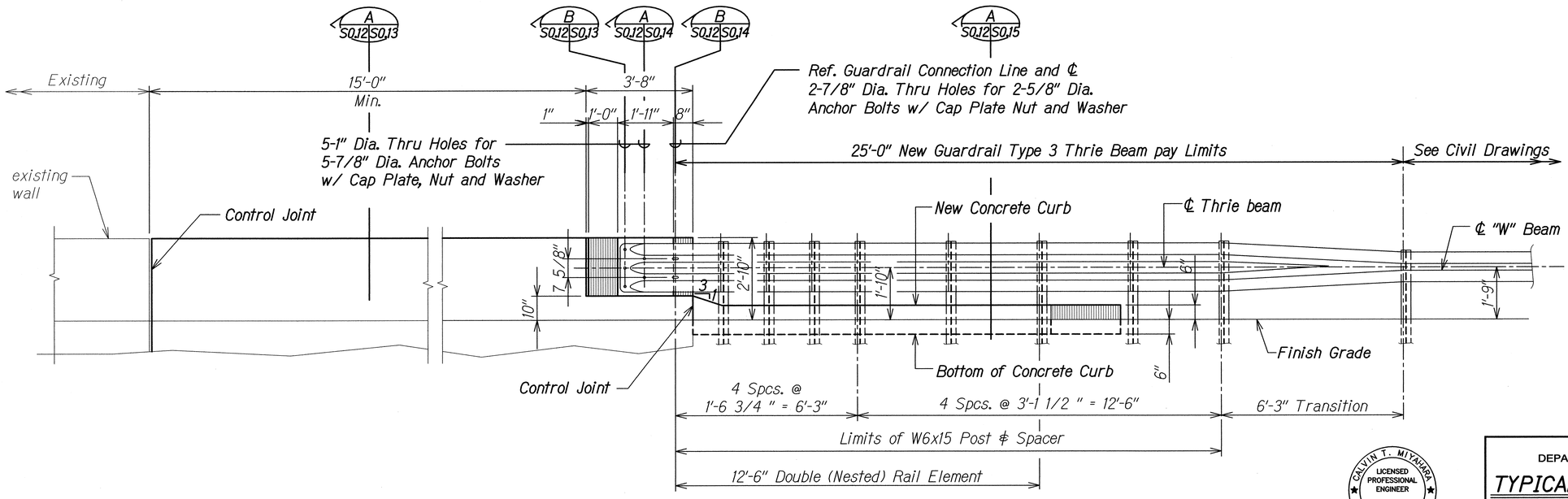
| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-H1-1(242) | 2016 | 116 | 354 |




## TYPICAL END POST UPGRADE PLAN

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

B S0.12 | S0.12




## ELEVATION

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

B S0.12 | S0.12

CALVIN T. MIYAMARA
LICENSED PROFESSIONAL ENGINEER
NO. 8133-S
HAWAII, U.S.A.

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STATE OF HAWAI'I
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

# TYPICAL TYPE II END POST PLAN AND ELEVATION

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-H1-1(242)

Scale: As Noted Date: Mar. 2016

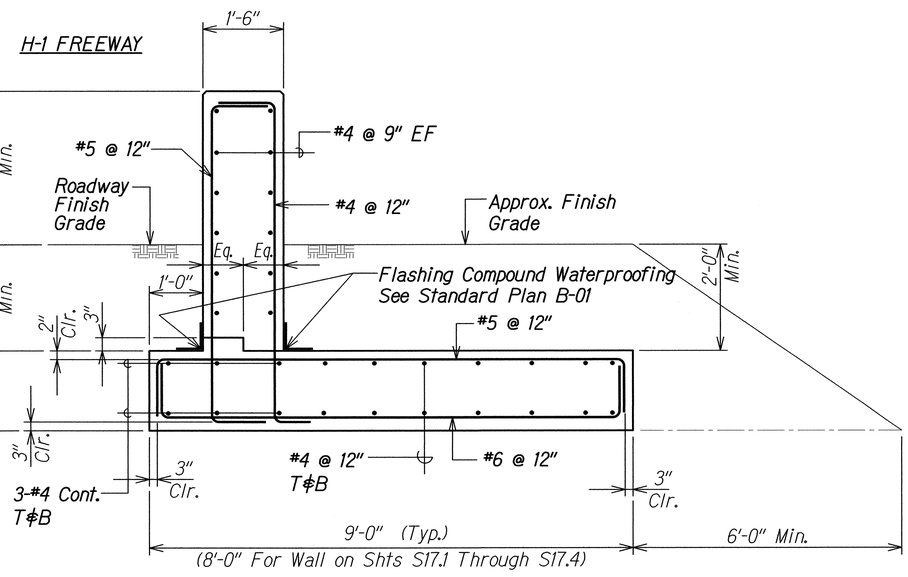
SHEET No. S0.12 OF 21 SHEETS

116

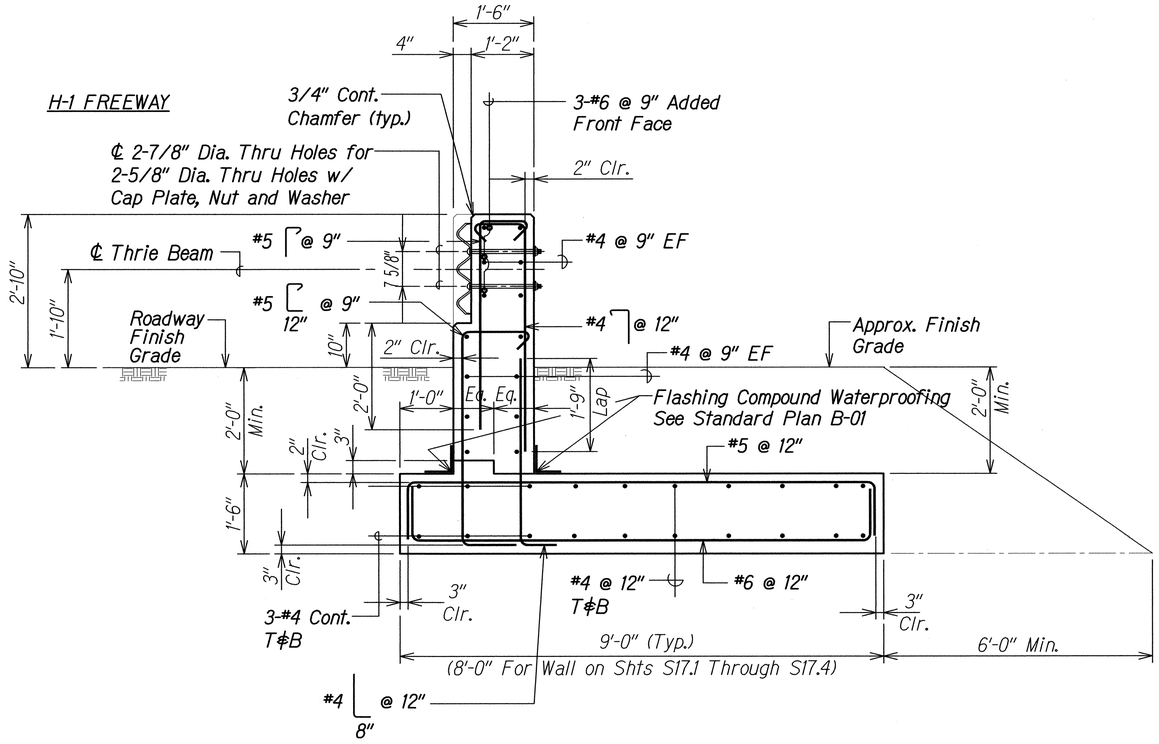
ORIGINAL PLAN | NOTE BOOK | No.
SURVEY PLOTTED BY | DATE
DRAWN BY
TRACED BY
DESIGNED BY
QUANTITIES BY
CHECKED BY

DRAWING NAME: Z:\OD ONGOING\12-032-H1 GRAL & SHLDR MDL ST TO PUNCHBOWL WO\0.01 CAD\03-XX-16\H1C-MP-S0012 TYP END POST AT OVERPASS.DWG PLOT TIME: 03-25-16, 2:06 PM

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 117 | 354 |




SECTION A
Scale: 3/4" = 1'-0" S0.12 | S0.13




SECTION B
Scale: 3/4" = 1'-0" S0.12 | S0.13

ORIGINAL PLAN
NOTE BOOK
No.

SURVEY PLOTTED BY
DRAWN BY
TRACED BY
DESIGNED BY
QUANTITIES BY
CHECKED BY
DATE

DRAWING NAME: Z:\OD ONGOING\12-032-H1 GRAIL & SHLDR IMPL ST TO PUNCHBOWL WOO\01 CAD\03-XX-16\H1G-MP-S0013 TYP END POST SECTIONS.DWG PLOT TIME: (03-25-16, 2:12 PM)

CALVIN T. MIYAHARA
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NO. 8133-S
HAWAII, U.S.A.

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4-30-18
SIGNATURE EXPIRATION DATE OF THE LICENSE

STATE OF HAWAI'I
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

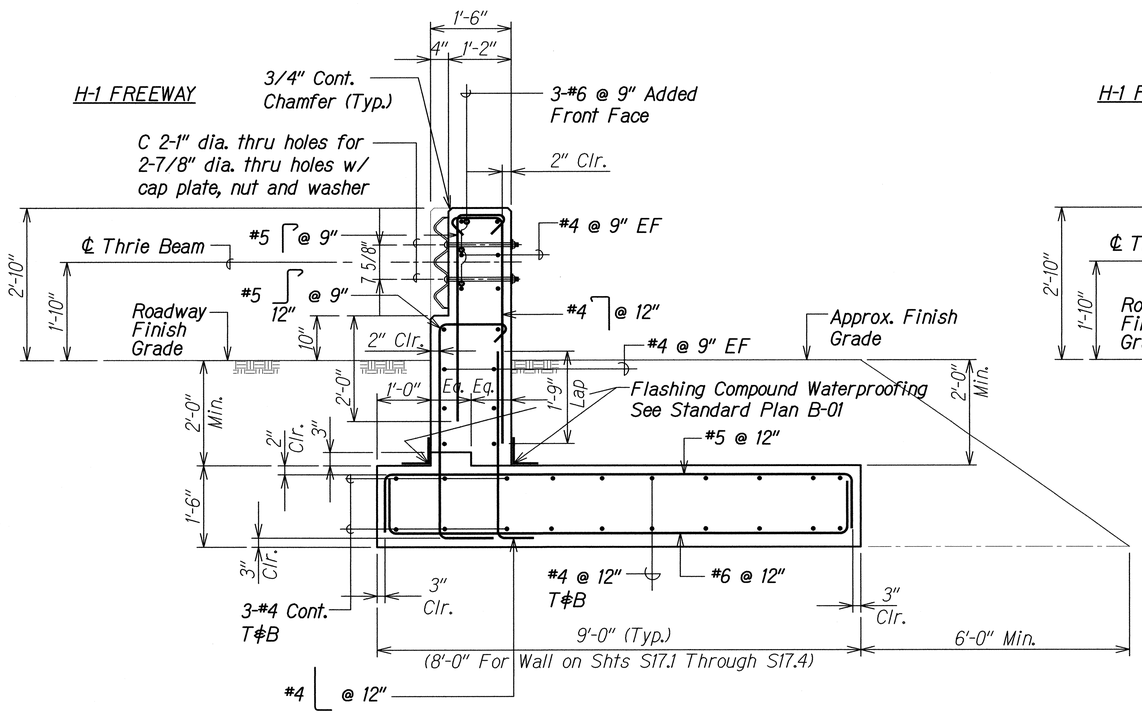
# TYPICAL TYPE II END POST SECTIONS

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted Date: Mar. 2016

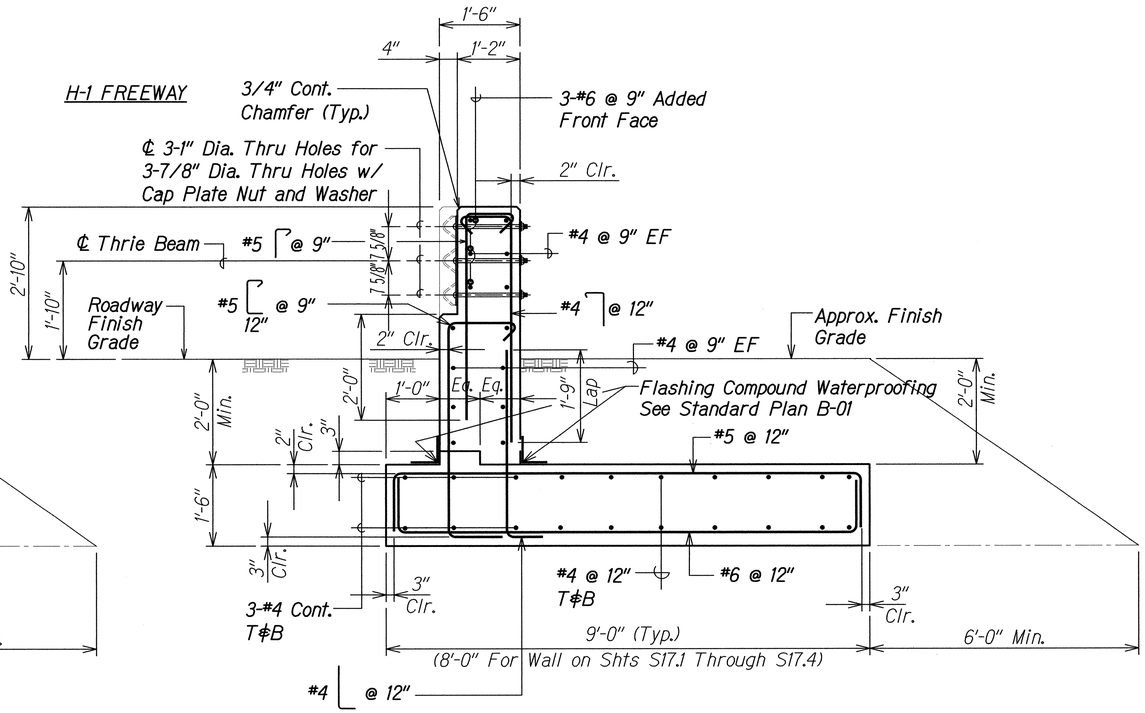
SHEET No. S0.13 OF 21 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 118 | 354 |




## SECTION A

Scale: 3/4" = 1'-0" S012 | S014




## SECTION B

Scale: 3/4" = 1'-0" S012 | S014

ORIGINAL PLAN
NOTE BOOK
No.

SURVEY PLOTTED BY
DRAWN BY
TRACED BY
DESIGNED BY
QUANTITIES BY
CHECKED BY
DATE

DRAWING NAME: Z:\00 ONGOING\12-032-H1 GRAIL & SHLDR MDL ST TO PUNCHBOWL WOC\01 CAD\03-XX-16\H1G-MP-S0013 TYP END POST SECTIONS.DWG PLOT TIME: 03-25-16, 2:12 PM)

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SIGNATURE 4-30-18 EXPIRATION DATE OF THE LICENSE

STATE OF HAWAI'I
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

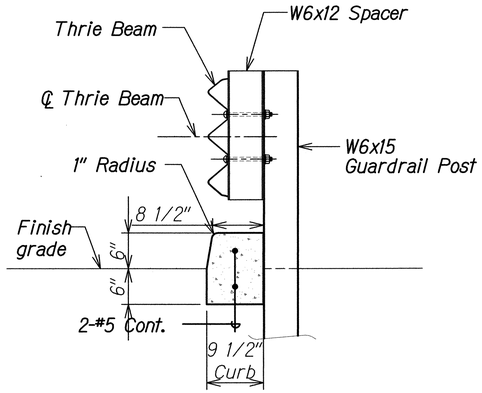
# TYPICAL TYPE II END POST SECTIONS

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

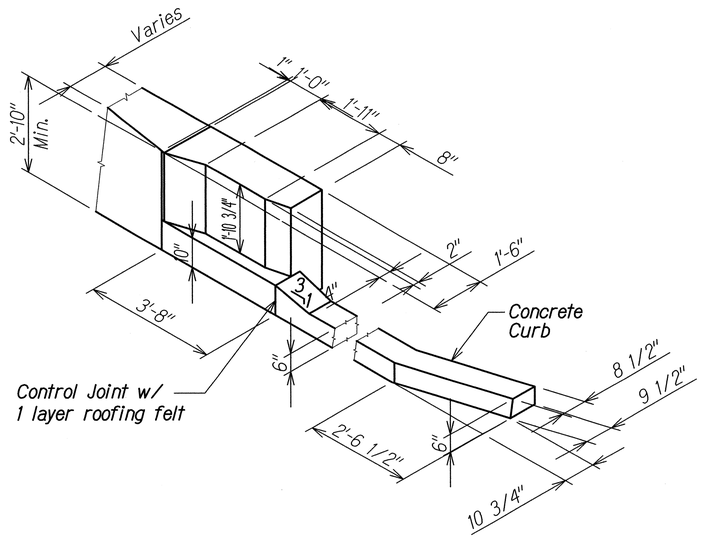
Scale: As Noted Date: Mar. 2016

SHEET No. S014 OF 21 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 119 | 354 |




## SECTION A
Scale: 1" = 1'-0"
S0.15 | S0.15




## END POST DETAIL 1
Scale: 1/2" = 1'-0"
S0.15 | S0.15

ORIGINAL PLAN
NOTE BOOK
No.

SURVEY PLOTTED BY
DRAWN BY
TRACED BY
DESIGNED BY
QUANTITIES BY
CHECKED BY
DATE

DRAWING NAME: Z:\00 ONGOING\12-032-H1 GRAIL & SHLDR MDL ST TO PUNCHBOWL WOR\01 CAD\03-XX-16\HIG-MP-S0013 TYP END POST SECTIONS.DWG PLOT TIME: 03-25-16, 2:12 PM

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DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

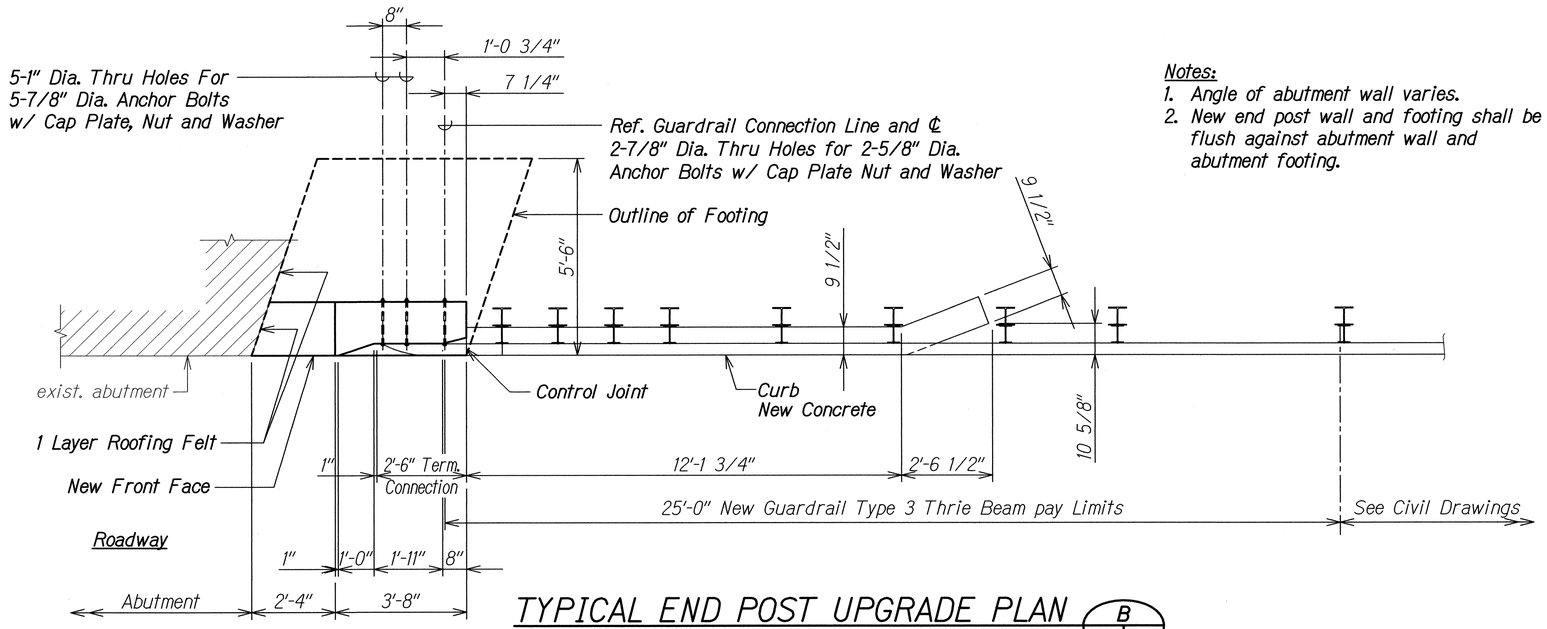
# TYPICAL TYPE II END POST SECTIONS AND DETAIL

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted Date: Mar. 2016

SHEET No. S0.15 OF 21 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 120 | 354 |

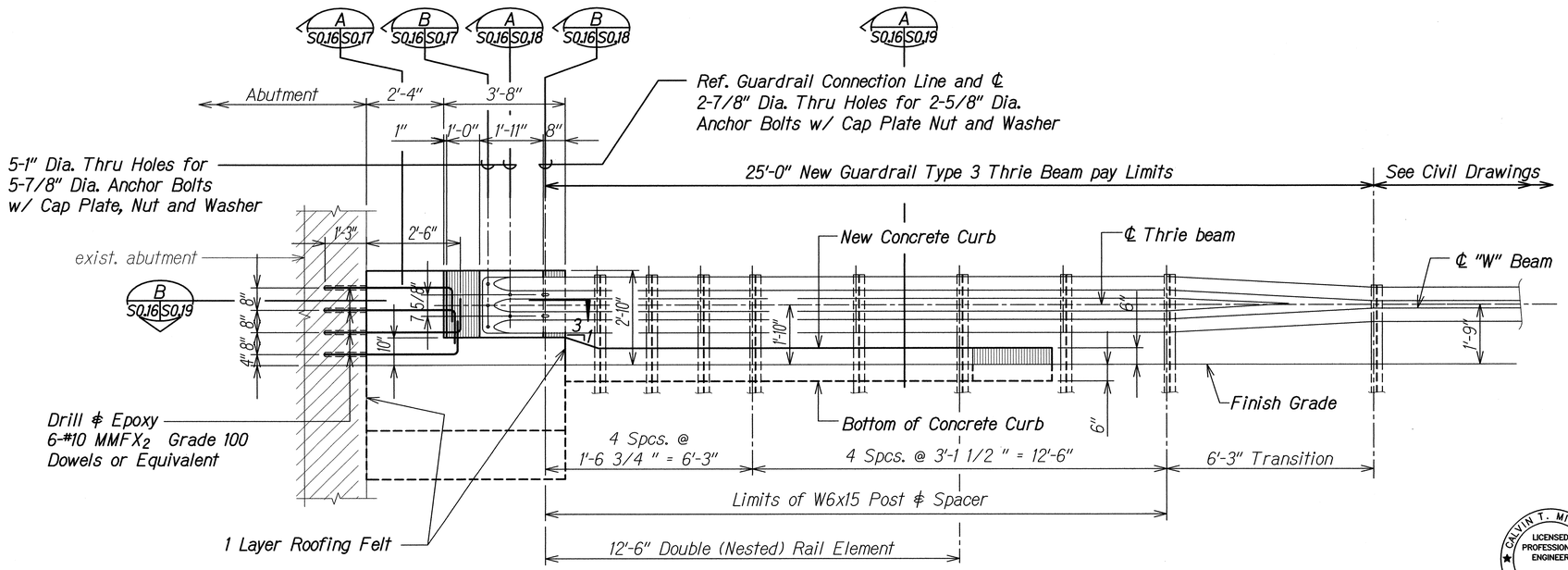



Notes:
1. Angle of abutment wall varies.
2. New end post wall and footing shall be flush against abutment wall and abutment footing.

## TYPICAL END POST UPGRADE PLAN

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

B S0.16 | S0.16




## ELEVATION

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

B S0.16 | S0.16

| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
|---|---|---|
| | DRAWN BY | |
| NOTE BOOK | TRACED BY | |
| | DESIGNED BY | |
| No. | QUANTITIES BY | |
| | CHECKED BY | |

DRAWING NAME: Z:\OD ONGOING\12-032-H1 GRAIL & SHLDR IMPL ST TO PUNCHBOWL WOC\01 CAD\03-XX-16\H1G-MP-S0016 TYP END POSTDWG PLOT TIME: 03-25-16, 2:23 PM

CALVIN T. MIYAHARA
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HIGHWAYS DIVISION

**TYPICAL TYPE III END POST AT OVERPASS STRUCTURE**

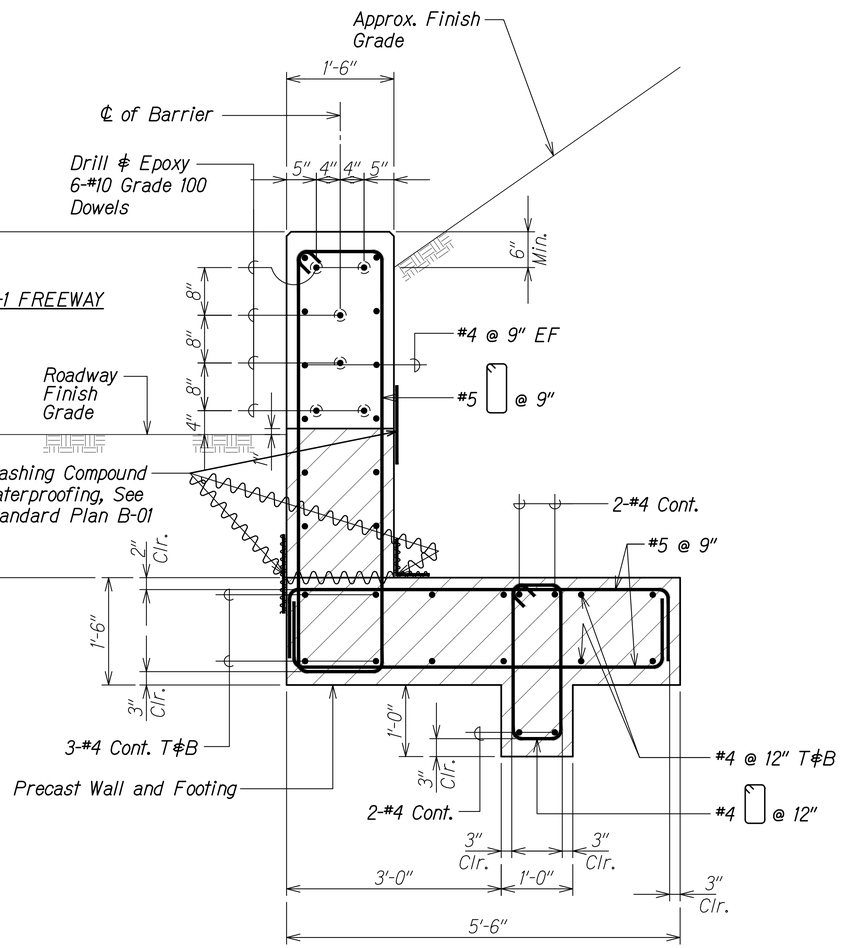
**PLAN AND ELEVATION**

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

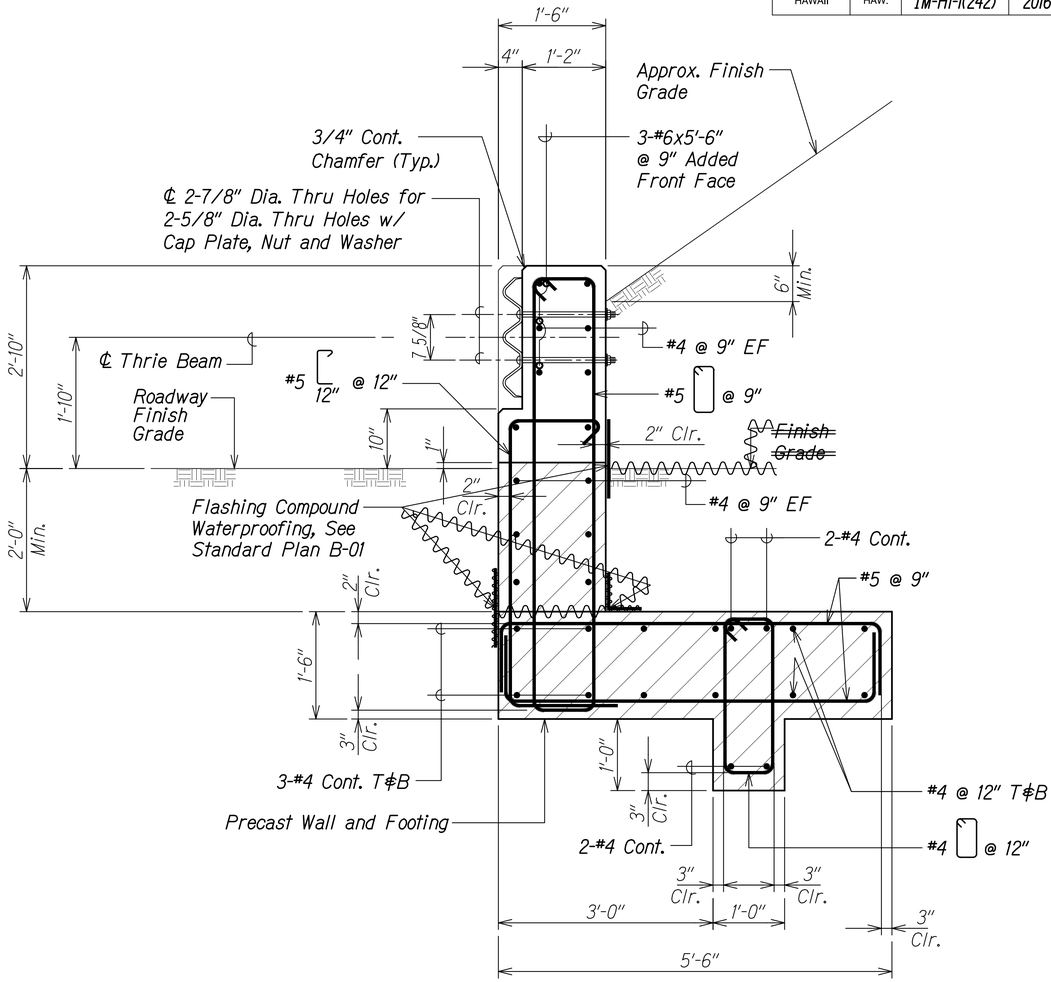
Scale: As Noted Date: Mar. 2016

SHEET No. S0.16 OF 21 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 121 | 354 |




SECTION A
Scale: 1" = 1'-0"
S0.16 | S0.17




SECTION B
Scale: 1" = 1'-0"
S0.16 | S0.17

Note:
After leveling, 5000 psi non-shrink grout shall be placed under footing to fill all voids.

| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
|---|---|---|
| NOTE BOOK | DRAWN BY | |
| No. | TRACED BY | |
| | DESIGNED BY | |
| | QUANTITIES BY | |
| | CHECKED BY | |

DRAWING NAME: Z:\OD ENGDNGN\12-0321-HI GRAIL & SHLDR MDL ST TO PBWL PD WOS TMA\01 CAD\07-22-20 ASBUILT-WP-S0017 TYP END POST SECTIONS.DWG PLOT TIME: 07-23-20, 10:38 AM

## 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 |

CALVIN T. MIYAHARA
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4-30-20
SIGNATURE EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

# TYPICAL TYPE III END POST AT OVERPASS STRUCTURE

## SECTIONS

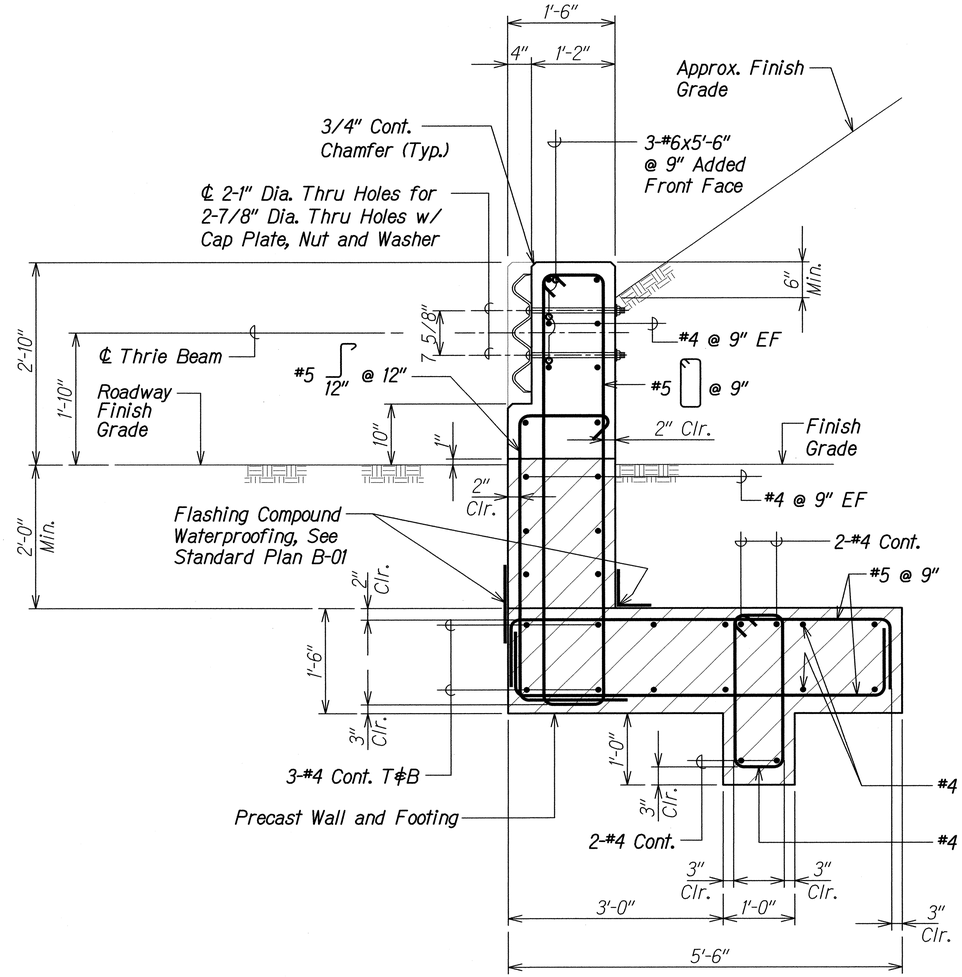
INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted Date: Mar. 2016

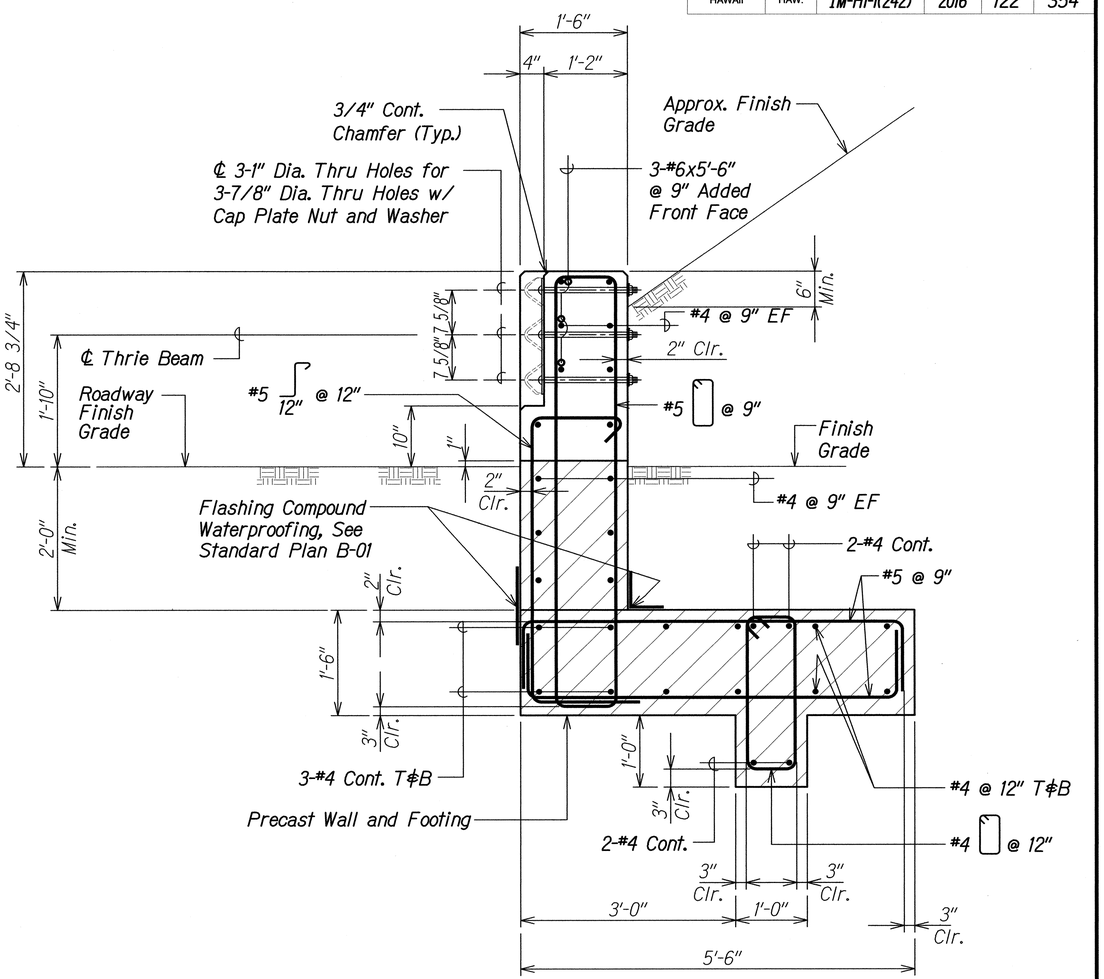
SHEET No. S0.17 OF 21 SHEETS

"AS-BUILT"

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 122 | 354 |




SECTION A
Scale: 1" = 1'-0"
S0J6 | S0J8




SECTION B
Scale: 1" = 1'-0"
S0J6 | S0J8

Note:
After leveling, 5000 psi non-shrink grout shall be placed under footing to fill all voids.

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

DRAWING NAME: Z:\OO ONGOING\12-032-H1 GRAIL & SHLDR MDL ST TO PUNCHBOWL WOR\01 CAD\03-XX-16\H1G-MP-S0017 TYP END POST SECTIONS.DWG PLOT TIME: 03-25-16, 2:24 PM)

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SIGNATURE 4-30-18 EXPIRATION DATE OF THE LICENSE

STATE OF HAWAI'I
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

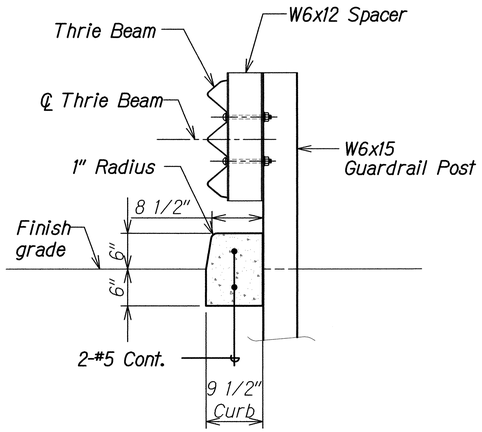
# TYPICAL TYPE III END POST AT OVERPASS STRUCTURE
## SECTIONS

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

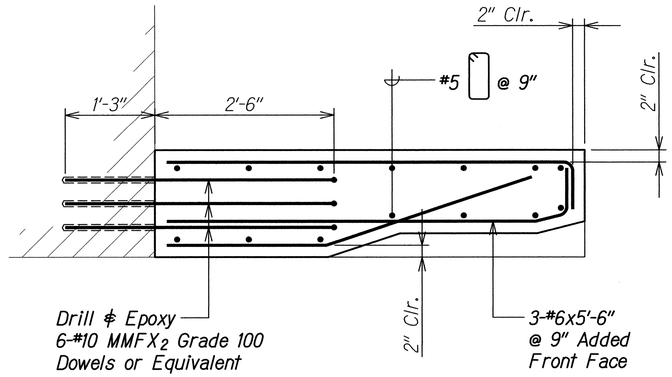
Scale: As Noted Date: Mar. 2016

SHEET No. S0J8 OF 21 SHEETS

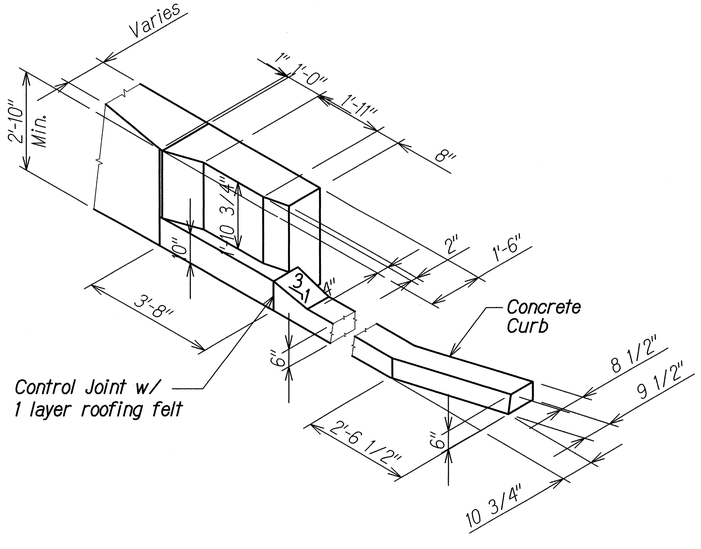
| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 123 | 354 |



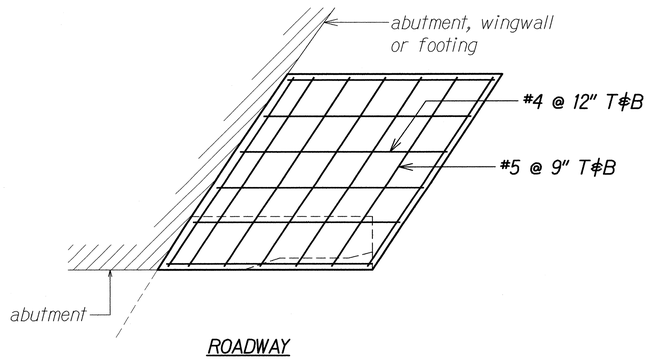

SECTION A
Scale: 1" = 1'-0"
S0.16 | S0.19




SECTION B
Scale: 1" = 1'-0"
S0.16 | S0.19

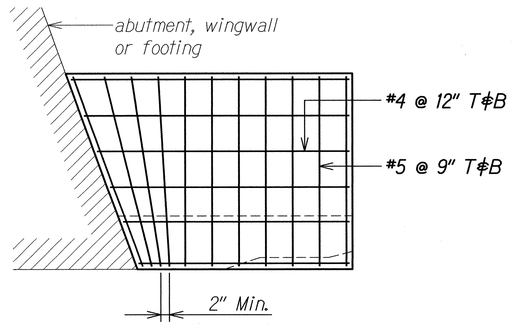



END POST DETAIL 1
Scale: 1/2" = 1'-0"
S0.19 | S0.19




ROADWAY

TYPICAL FOUNDATION PLAN C
Scale: 1/2" = 1'-0"
S0.19 | S0.19




TYPICAL FOUNDATION PLAN D
Scale: 1/2" = 1'-0"
S0.19 | S0.19

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

DRAWING NAME: Z:\00 ONGOING\12-032-HI GRAIL & SHLDR MDL ST TO PUNCHBOWL WOC\01 CAD\03-XX-16\H1G-MP-S0017 TYP END POST SECTIONS.DWG PLOT TIME:

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LICENSED PROFESSIONAL ENGINEER
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HAWAII, U.S.A.

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SIGNATURE 4-30-18 EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

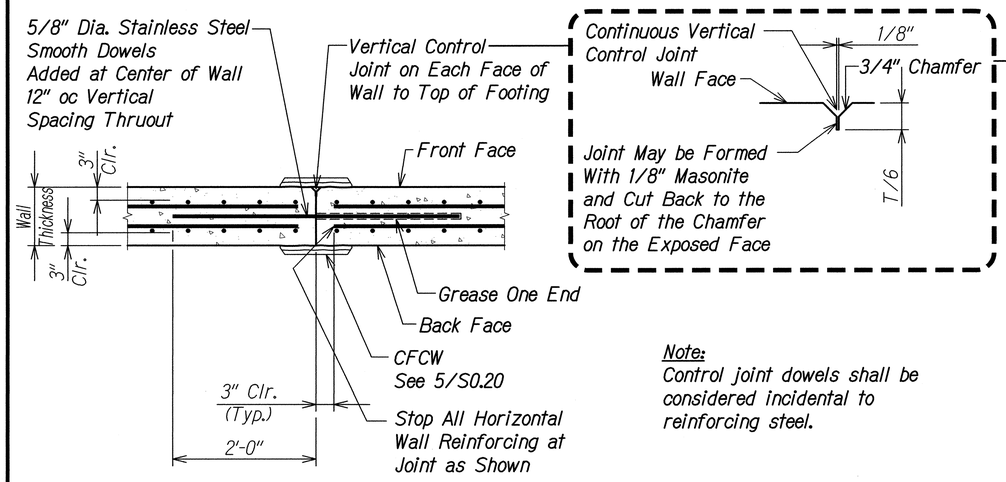
# TYPICAL TYPE III END POST AT OVERPASS STRUCTURE SECTIONS AND DETAIL

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted Date: Mar. 2016

SHEET No. S0.19 OF 21 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 124 | 354 |

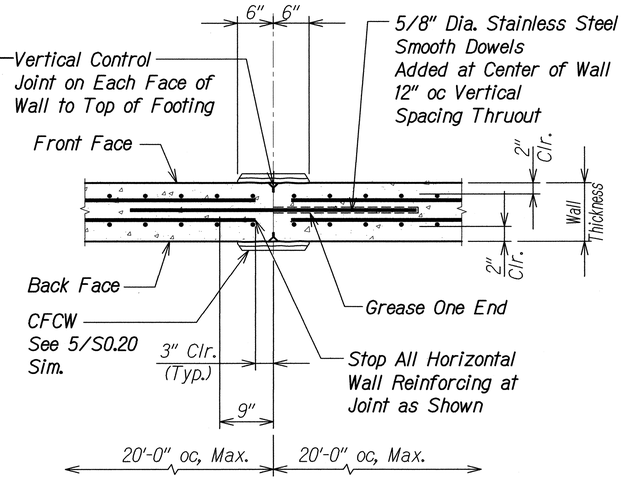



**Note:**
Control joint dowels shall be considered incidental to reinforcing steel.

## CONSTRUCTION JOINT AT CONTROL JOINT LOCATION

Scale: 1" = 1'-0"

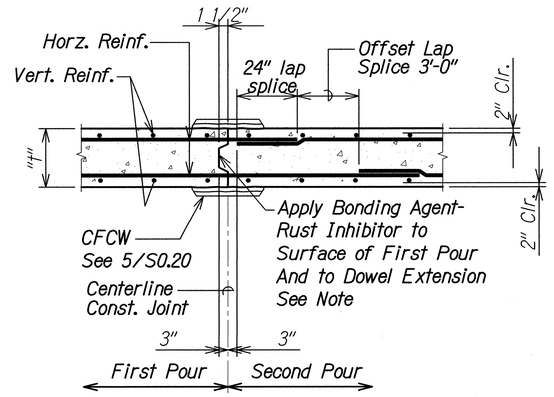
S0.20 | S0.20




## TYPICAL WALL VERTICAL CONTROL JOINT DETAIL

Scale: 1" = 1'-0"

S0.20 | S0.20

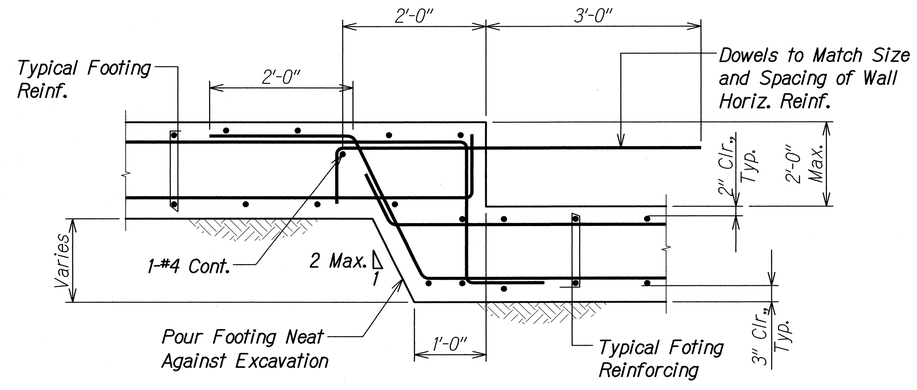



**Note:** Use 1 1/2" Deep X "t"/3 Keys.

## TYPICAL WALL VERTICAL CONSTRUCTION JOINT DETAIL

Scale: 1" = 1'-0"

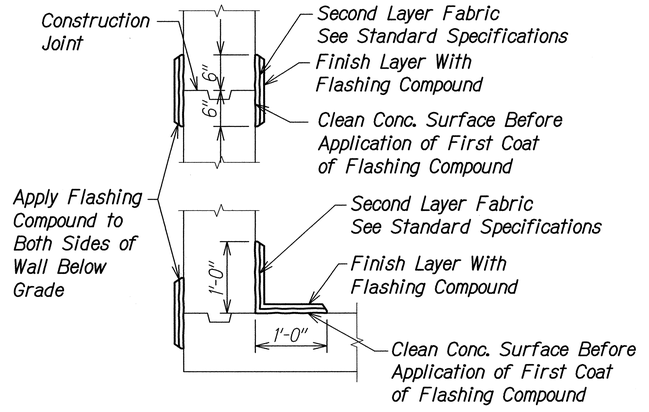
S0.20 | S0.20




## TYPICAL WALL STEP FOOTING DETAIL

Scale: 1" = 1'-0"

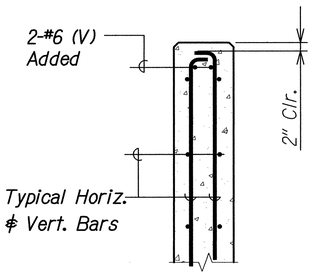
S0.20 | S0.20




## TYPICAL CONTINUOUS FLASHING COMPOUND WATERPROOFING (CFCW)

Scale: 1" = 1'-0"

S0.20 | S0.20




## CONCRETE WALL ENDS

Scale: 1" = 1'-0"

S0.20 | S0.20

| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
|---|---|---|
| NOTE BOOK | DRAWN BY | |
| No. | TRACED BY | |
| | DESIGNED BY | |
| | QUANTITIES BY | |
| | CHECKED BY | |

DRAWING NAME: Z:\OD ONGOING\12-432-H1 GRAL & SHLDR IMP\ST TO PUNCHBOWL WCX\01 CAD\03-XX-16\H1G-MP-S0020 TYP DETAILS.DWG PLOT TIME: 03-25-16, 4:43 PM

CALVIN T. MIYAHARA LICENSED PROFESSIONAL ENGINEER NO. 8133-S HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

4-30-18
SIGNATURE EXPIRATION DATE OF THE LICENSE

STATE OF HAWAI'I
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

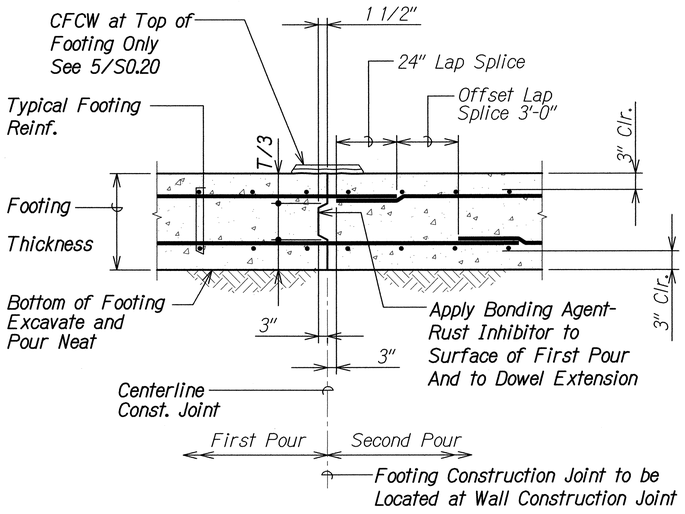
# TYPICAL DETAILS

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: Noted Date: Mar. 2016

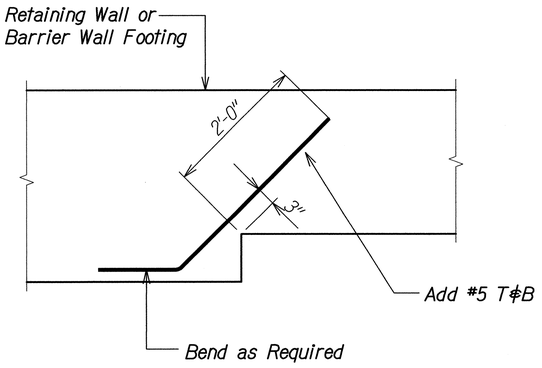
SHEET No. S0.20 OF 21 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 125 | 354 |



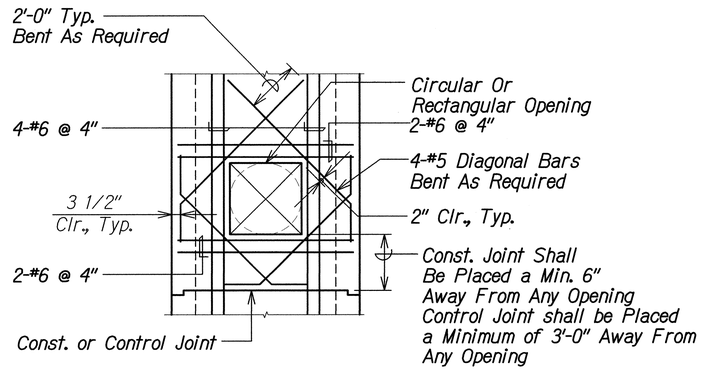

## TYPICAL FOOTING CONSTRUCTION JOINT DETAIL (1 S0.21 | S0.21)

Scale: 1" = 1'-0"



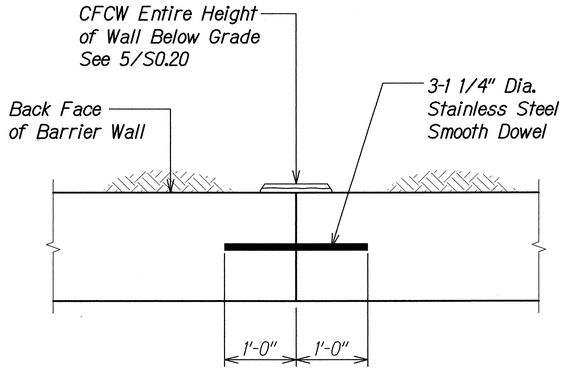

## TYPICAL FOOTING CORNER PLAN DETAIL (2 S0.21 | S0.21)

Scale: 1" = 1'-0"

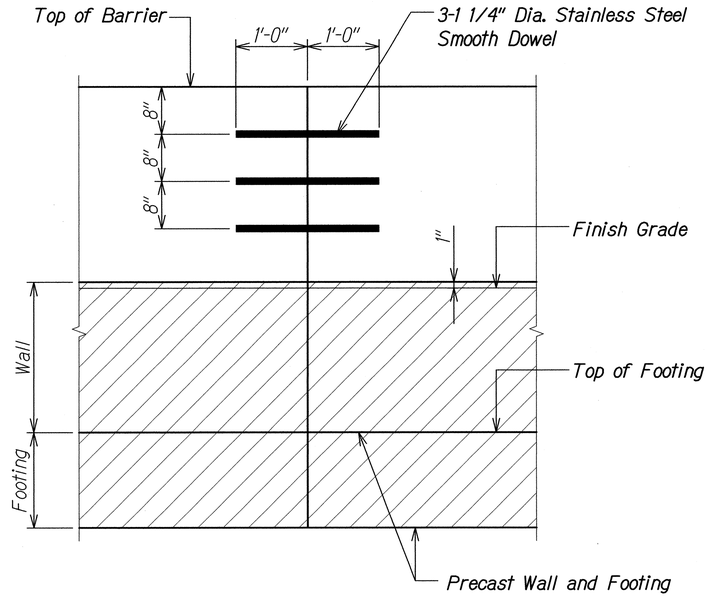



## ADDED REINFORCING FOR OPENING (3 S0.21 | S0.21)

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



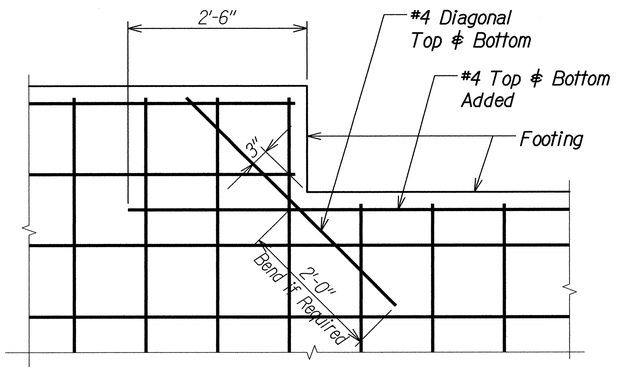

PLAN




ELEVATION

## TYPICAL BARRIER WALL CONSTRUCTION JOINT FOR PRECAST WALL AND FOOTING DETAIL (4 S0.21 | S0.21)

Scale: 1" = 1'-0"




## TYPICAL FOOTING CORNER (5 S0.21 | S0.21)

Scale: 1" = 1'-0"

| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
|---|---|---|
| | DRAWN BY | |
| | TRACED BY | |
| NOTE BOOK | DESIGNED BY | |
| No. | QUANTITIES BY | |
| | CHECKED BY | |

DRAWING NAME: Z:\OD ONGOING\12-032-H1 GRAL & SHLDR IMPR MDL ST TO PUNCHBOWL WOO\01 CAD\03-XX-16\H1C-IMP-S0020 TYP DETAILS.DWG PLOT TIME: 03-25-16, 4:43 PM

CALVIN T. MIYAMARA LICENSED PROFESSIONAL ENGINEER NO. 8133-S HAWAII, U.S.A.

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4-30-18
SIGNATURE EXPIRATION DATE OF THE LICENSE

STATE OF HAWAI'I
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

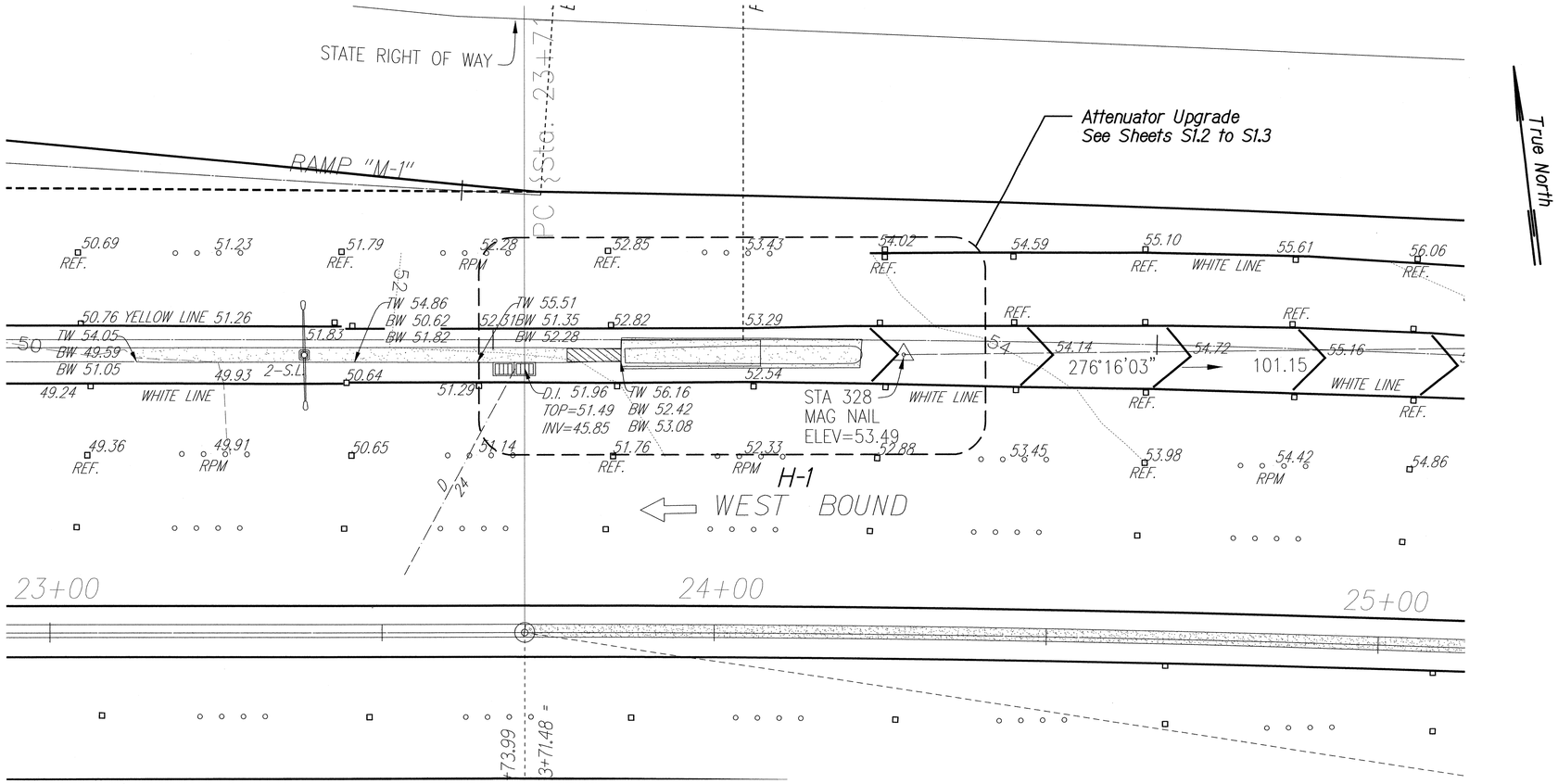
# TYPICAL DETAILS

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: Noted Date: Mar. 2016

SHEET No. S0.21 OF 21 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 126 | 354 |




## LAYOUT PLAN

Scale: 1" = 10'-0"

A S1.1 | S1.1

| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
|---|---|---|
| | DRAWN BY | |
| NOTE BOOK | TRACED BY | |
| No. | DESIGNED BY | |
| | QUANTITIES BY | |
| | CHECKED BY | |

DRAWING NAME: Z:\00 ONGOING\12-032-H1 GRAIL & SHLDR MDL ST TO PUNCHBOWL WOO\01 CADD\03-XX-16\H1G-MP-S0101 STA.24+07 WB.DWG PLOT TIME: 03-25-16, 2:14 PM

CALVIN T. MIYAHARA
LICENSED PROFESSIONAL ENGINEER
NO. 8133-S
HAWAII, U.S.A.

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4-30-18
SIGNATURE EXPIRATION DATE OF THE LICENSE

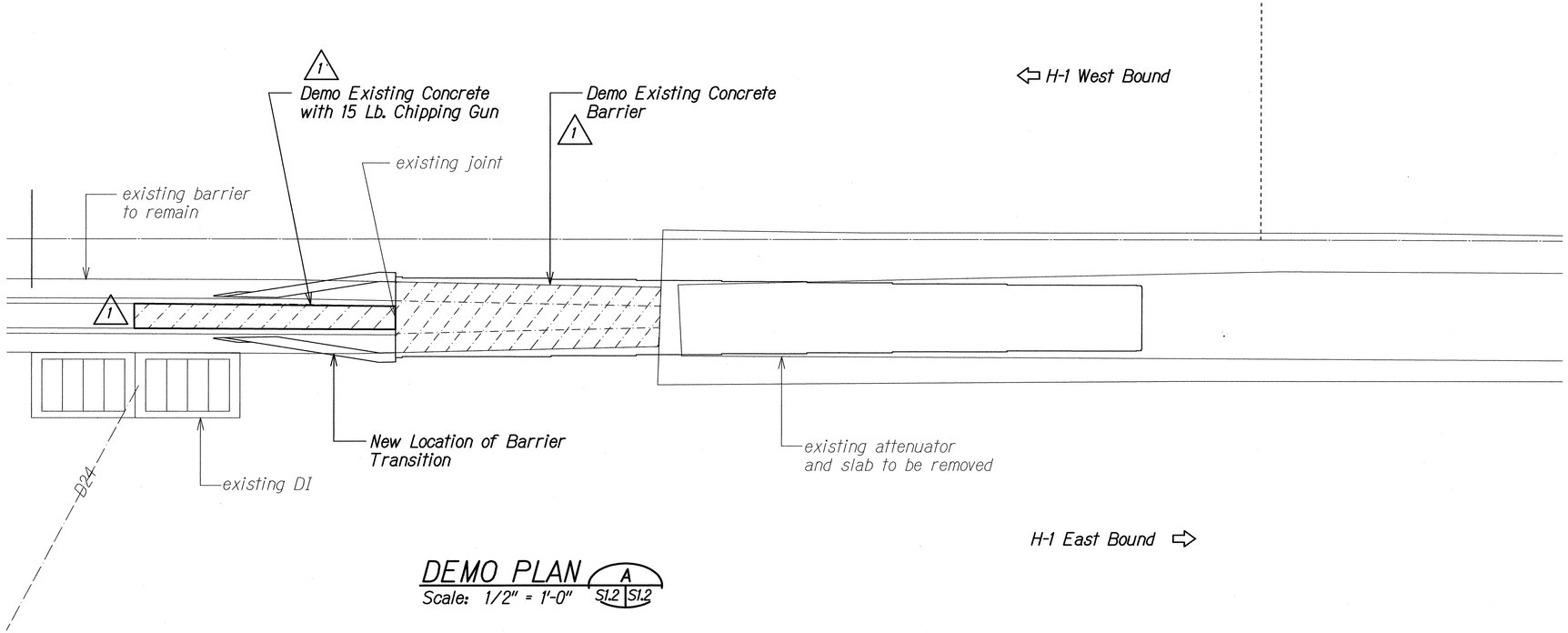
STATE OF HAWAI'I
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

# H201 EXIT AT STA. 24+07± WB
## LAYOUT PLAN
INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

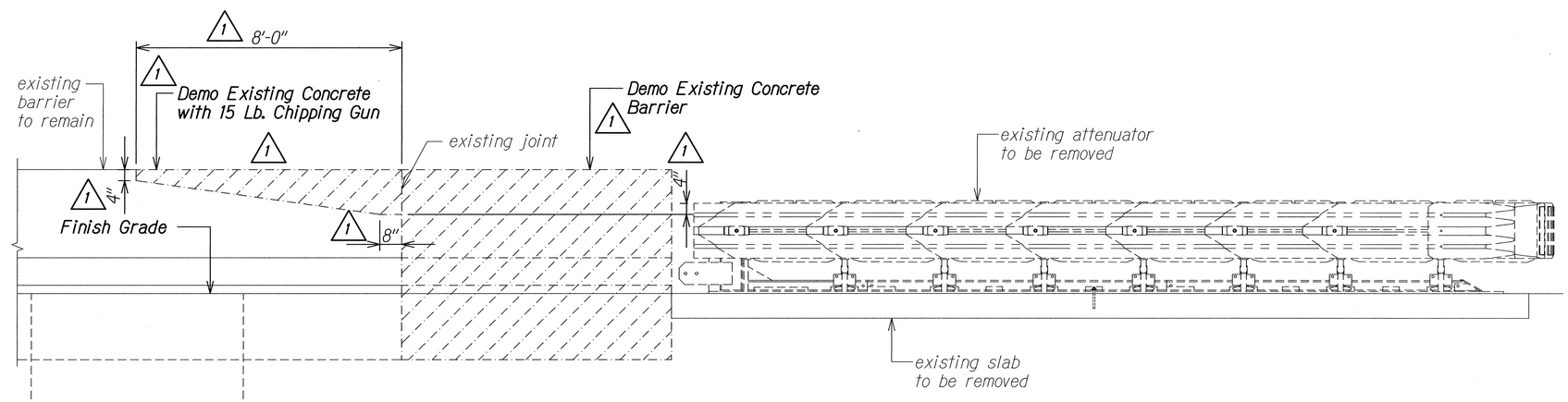
Scale: As Noted Date: Mar. 2016

SHEET No. S1.1 OF 3 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | ADD. 127 | 354 |




## DEMO PLAN (A)
Scale: 1/2" = 1'-0" S1.2 | S1.2




1 **Note:**
Cut off existing reinforcing, that is to remain, 2" clear from finish concrete surface.

## ELEVATION (B)
Scale: 1/2" = 1'-0" S1.2 | S1.2

| SURVEY PLOTTED BY | DATE |
|---|---|
| DRAWN BY | |
| TRACED BY | |
| DESIGNED BY | |
| QUANTITIES BY | |
| CHECKED BY | |

ORIGINAL PLAN | NOTE BOOK No.

| 1 | r5/25/16 | EXTENDED CONC. BARRIER DEMOLITION |
|---|---|---|
| | DATE | REVISION |

CALVIN T. MIYAHARA LICENSED PROFESSIONAL ENGINEER NO. 8133-S HAWAII, U.S.A.

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SIGNATURE 4-30-18 EXPIRATION DATE OF THE LICENSE

STATE OF HAWAI'I
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

# H201 EXIT AT STA. 24+07± WB
# DEMO PLAN AND ELEVATION
INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

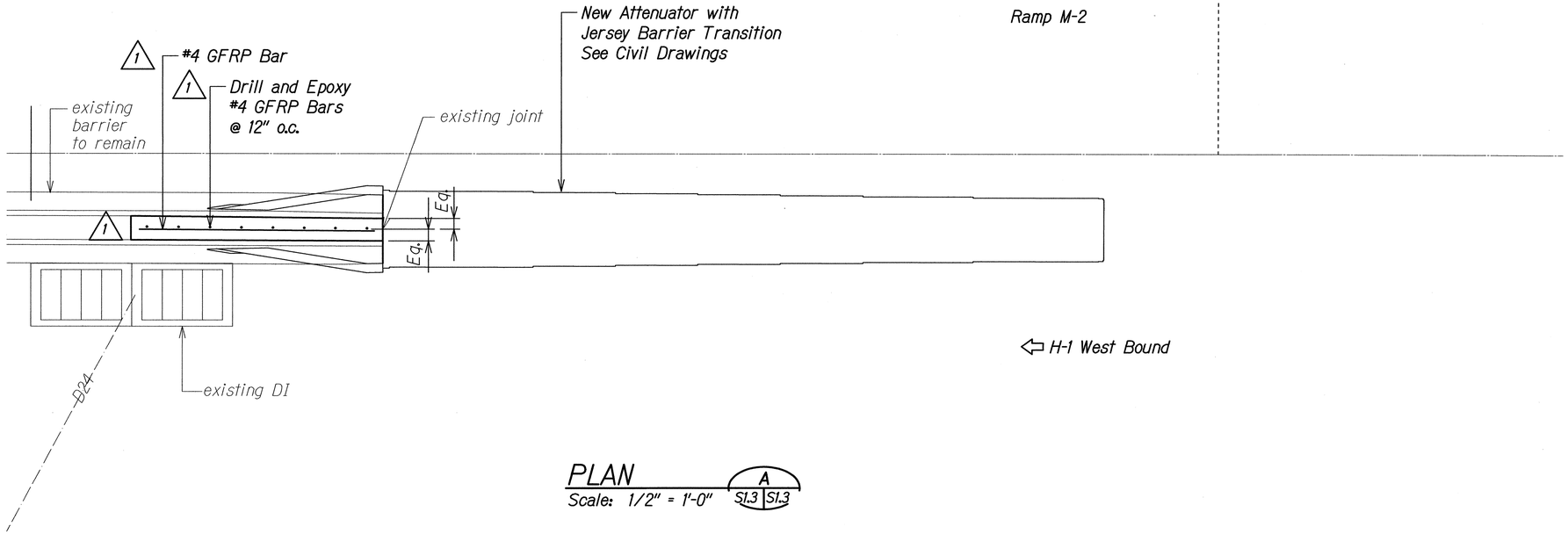
Scale: As Noted Date: Mar. 2016

SHEET No. S1.2 OF 3 SHEETS

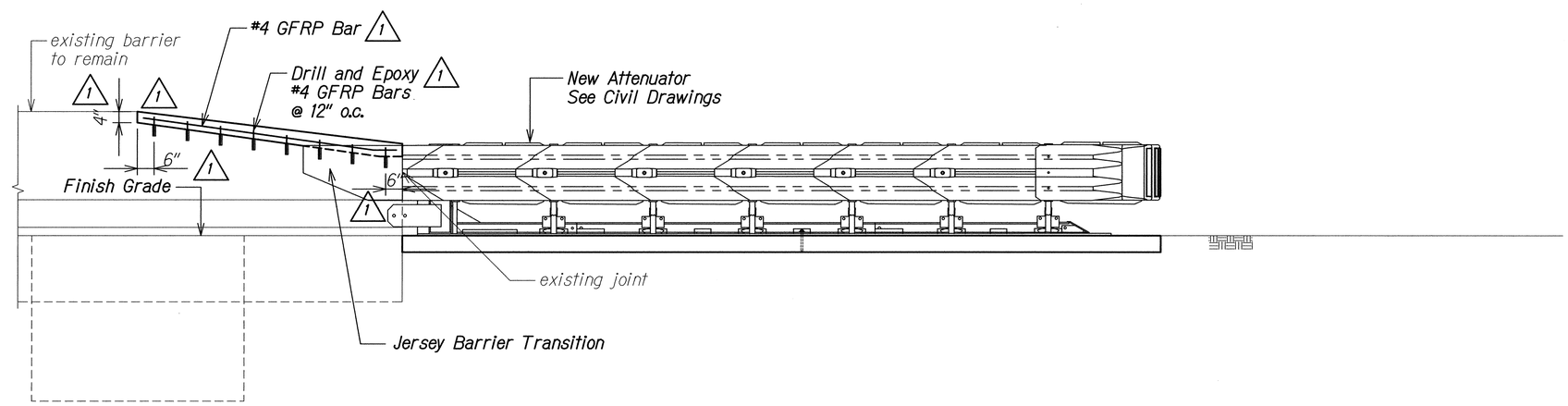
ADD. 127

DRAWING NAME: Z:\JOB ONGOING\12-032-H1 ORAL & SHLDR IMPR. MDL ST TO PUNCHBOWL WDC\01 CAD\05-31-06 DELTA ADD\HIG-MP-S0102 STA 24+07 WB DEMO DELTA.DWG PLOT TIME: 06-01-16, 8:57 AM

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | ADD. 128 | 354 |




PLAN
Scale: 1/2" = 1'-0"
A S1.3 S1.3




ELEVATION
Scale: 1/2" = 1'-0"
B S1.3 S1.3

| | DATE | REVISION |
|---|---|---|
| 1 | r5/25/16 | EXTENDED CONC. BARRIER MODIFICATION |

CALVIN T. MIYAHARA
LICENSED PROFESSIONAL ENGINEER
NO. 8133-S
HAWAII, U.S.A.

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SIGNATURE 4-30-18 EXPIRATION DATE OF THE LICENSE

STATE OF HAWAI'I
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

# H201 EXIT AT STA. 24+07± WB
## PLAN AND ELEVATION
INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted Date: Mar. 2016

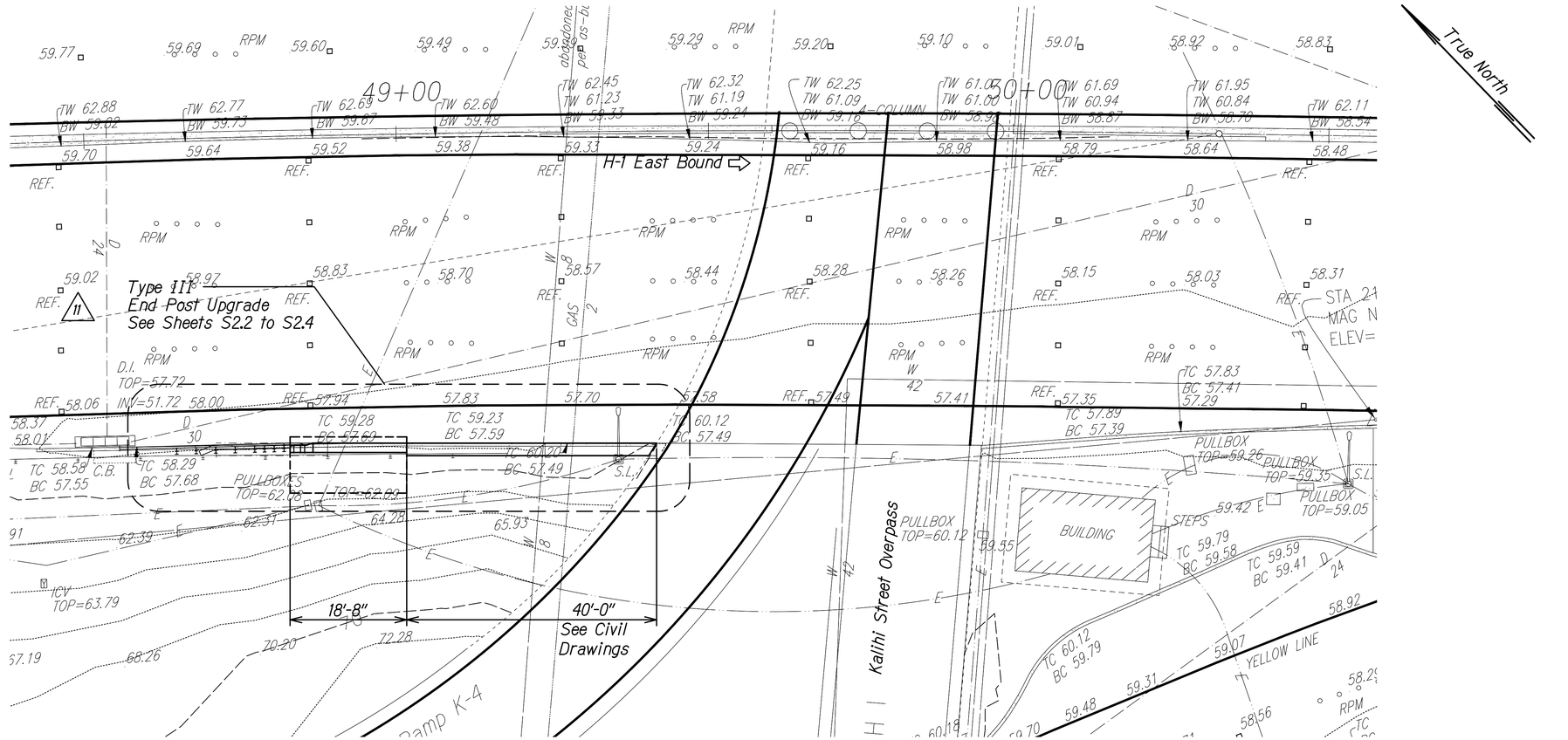
SHEET No. S1.3 OF 3 SHEETS

ADD. 128

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

DRAWING NAME: Z:\GD ONGOING\12-032-H1 GRAL & SHLDR MDL ST TO PUNCHBOWL WDC\01 CAD\05-31-06 DELTA ADD\HIG-MP-S0103 STA 24+07 WB PLAN DELTA1.DWG PLOT TIME: 06-01-16, 8:58 AM

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | C.O. 129 | 354 |




## LAYOUT PLAN

Scale: 1" = 10'-0"

A S2.1 | S2.1

| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
|---|---|---|
| NOTE BOOK | DRAWN BY | |
| No. | TRACED BY | |
| | DESIGNED BY | |
| | QUANTITIES BY | |
| | CHECKED BY | |

DRAWING NAME: Z:\JOB ONGOING\12-032.1-H1 ORAL & SHLDR MDL ST TO PBBL PD WDC TM\01 CAD\07-22-20 ASB\HIG-MP-S0201 STA.49+35 EB CO DELTA1.DWG PLOT TIME: 07-23-20, 10:45 AM)

### 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 |

CALVIN T. MIYAMARA
LICENSED PROFESSIONAL ENGINEER
NO. 8133-S
HAWAII, U.S.A.

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4-30-20
SIGNATURE EXPIRATION DATE OF THE LICENSE

| DATE | REVISION |
|---|---|
| 9/5/18 | 11 RFI 020E - Revised Site Layout |

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**KALIHI INTERCHANGE AT STA. 49+35± EB**

**LAYOUT PLAN**

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

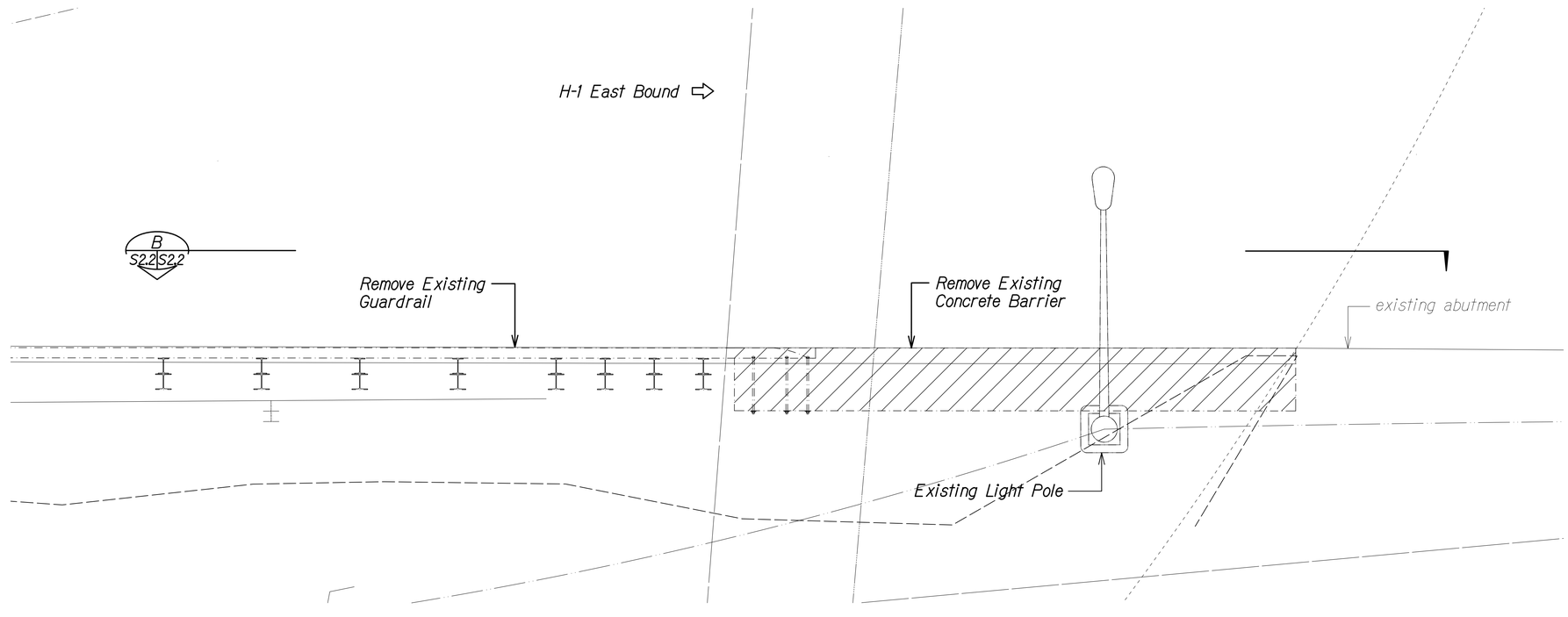
Scale: As Noted Date: Mar. 2016

SHEET No. S2.1 OF 3 SHEETS

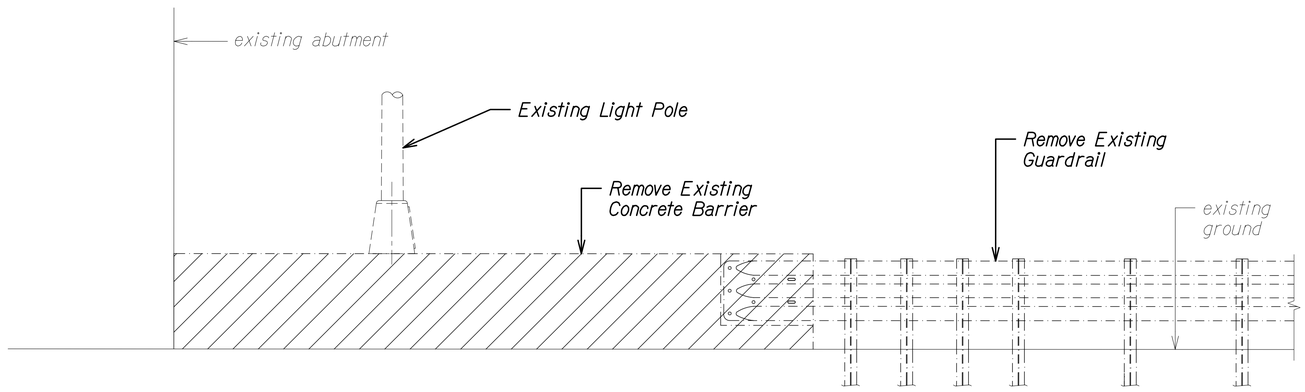
"AS-BUILT"

C.O. 129

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 130 | 354 |




DEMO PLAN (A S2.2 | S2.2)
Scale: 1/2" = 1'-0"




ELEVATION (B S2.2 | S2.2)
Scale: 1/2" = 1'-0"

Note:
Light pole shall be supported during construction/excavation activities.

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 |

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

DRAWING NAME: Z:\OD DNGING\12-0321-HI GRAL & SHLDR MDL ST TO PBWL PD WOC NA\01 CAD\07-27-20 ASB DWG\HIG-MP-S2022 STA 49+35 EB DEMO.DWG PLOT TIME: 07-27-20, 1:02 PM

CALVIN T. MIYAHARA
LICENSED PROFESSIONAL ENGINEER
NO. 8133-S
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

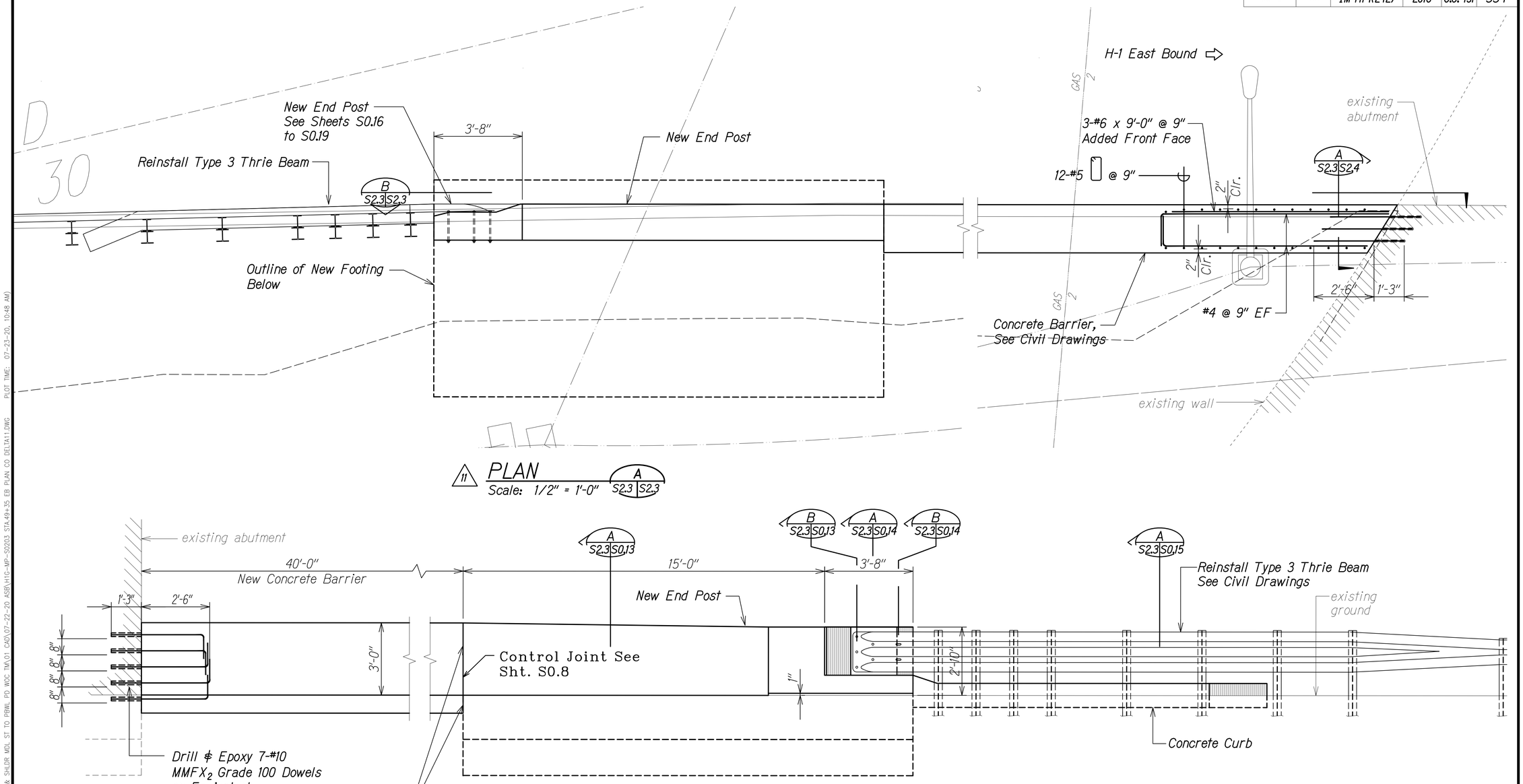
4-30-20
SIGNATURE EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
KALIHI INTERCHANGE AT STA. 49+35± EB
DEMO PLAN AND ELEVATION
INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)
Scale: As Noted Date: Mar. 2016

SHEET No. S2.2 OF 3 SHEETS

"AS-BUILT"

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | C.O. 131 | 354 |




## 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 |

| ORIGINAL PLAN | SURVEY PLOTTED BY |
|---|---|
| NOTE BOOK | DRAWN BY |
| No. | TRACED BY |
| | DESIGNED BY |
| | QUANTITIES BY |
| | CHECKED BY |
| | DATE |

| DATE | REVISION |
|---|---|
| 9/5/18 | 11 RFI 020E - Revised Plan & Elev. |

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CALVIN T. MIYAHARA LICENSED PROFESSIONAL ENGINEER NO. 8133-S HAWAII, U.S.A.

SIGNATURE 4-30-20 EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

# KALIHI INTERCHANGE AT STA. 49+35± EB

## PLAN AND ELEVATION

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted Date: Mar. 2016

SHEET No. S2.3 OF 3 SHEETS

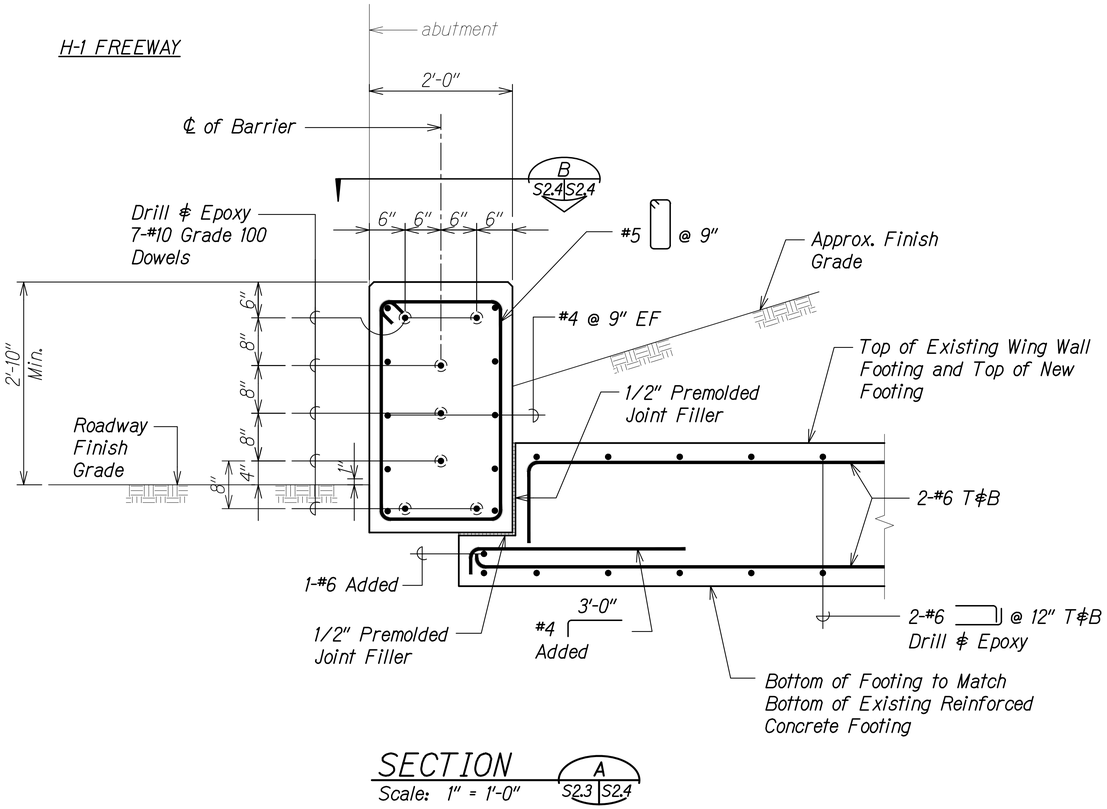
"AS-BUILT"

C.O. 131

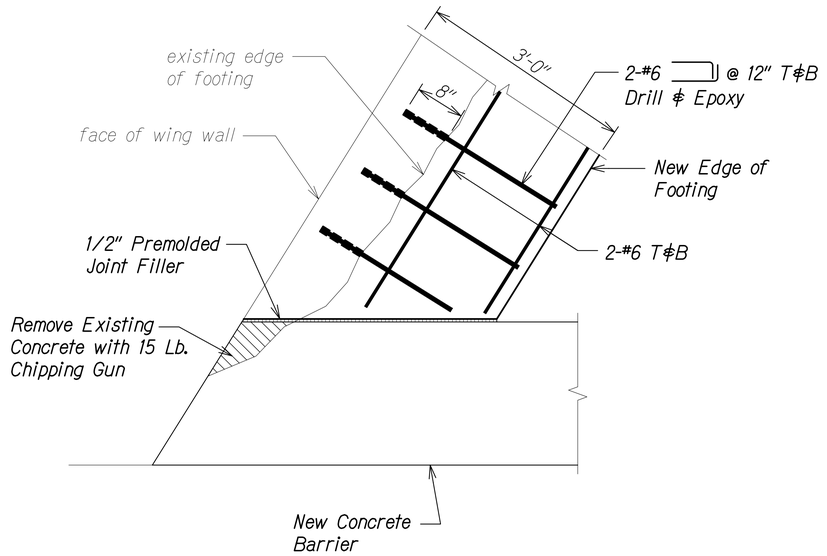
DRAWING NAME: Z:\OD ONGOING\12-032-1-H1 GR&L & SHLDR MDL ST TO PBWL PD WDC TM\01 CAD\07-22-20 ASBUILT\G-MP-S0203 STA 49+35 EB PLAN CO DELTA11.DWG PLOT TIME: 07-23-20, 10:48 AM

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | C.O. 131S-1 | 354 |

## H-1 FREEWAY




SECTION A (S2.3 | S2.4)
Scale: 1" = 1'-0"




SECTION B (S2.4 | S2.4)
Scale: 1" = 1'-0"

Notes:

1. Remove all loose and unsound concrete.
2. Rebar shall be placed in the reinforced concrete footing.
3. All existing rebar shall remain and shall be cleaned.
4. Existing concrete surface shall be roughened and cleaned.

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 |

CALVIN T. MIYAHARA
LICENSED PROFESSIONAL ENGINEER
NO. 8133-S
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

4-30-20
SIGNATURE EXPIRATION DATE OF THE LICENSE

| DATE | REVISION |
|---|---|
| 9/5/18 | 11 RFI 020E - New Sheet |

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**KALIHI INTERCHANGE AT STA. 49+35± EB**

**SECTION**

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted Date: Mar. 2016

SHEET No. S2.4 OF 21 SHEETS

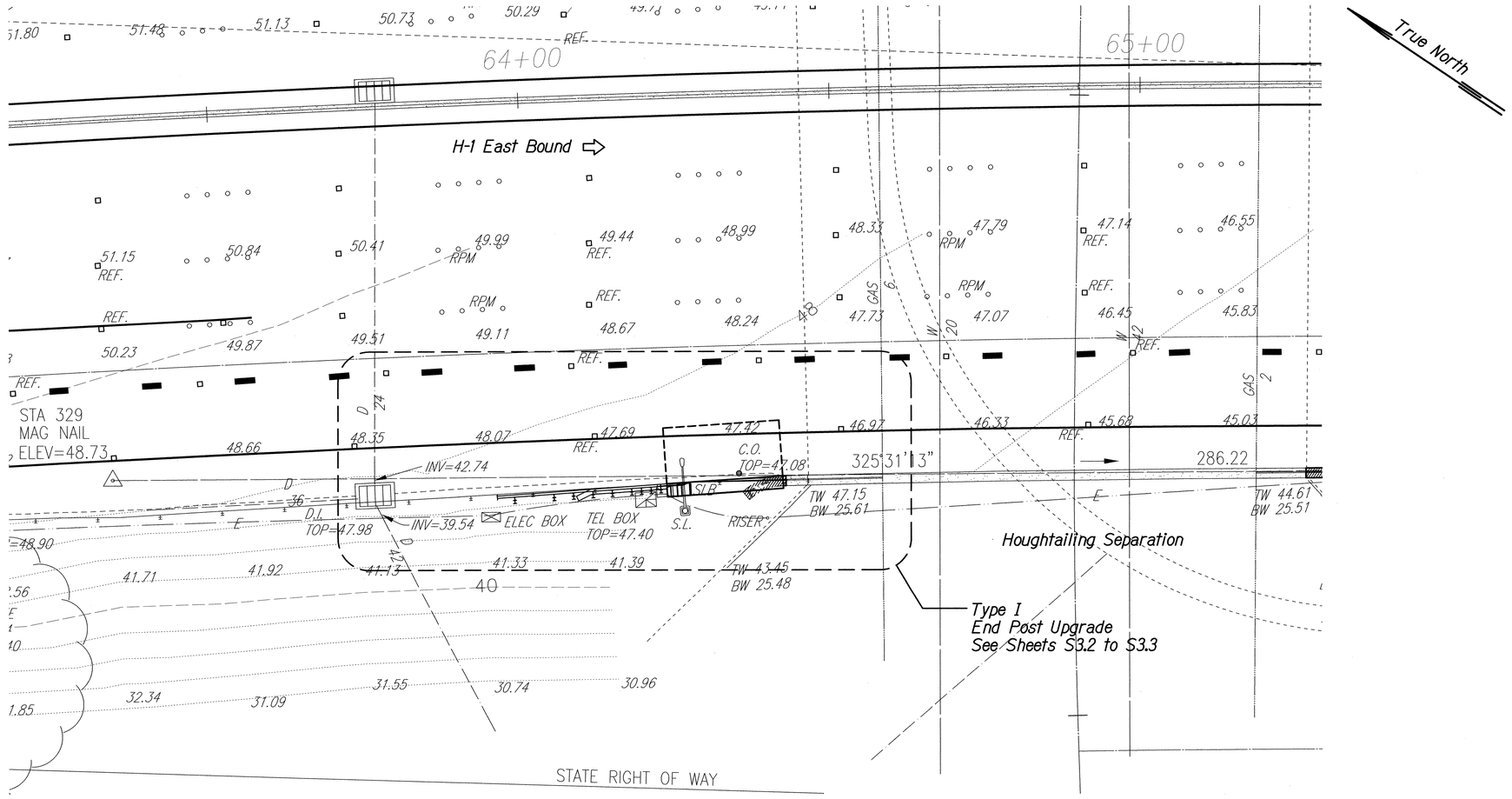
ORIGINAL PLAN
NOTE BOOK No.
SURVEY PLOTTED BY DATE
DRAWN BY
TRACED BY
DESIGNED BY
QUANTITIES BY
CHECKED BY

DRAWING NAME: Z:\OD ONGOING\12-032_I-H1 GRAIL & SHLDR MDL ST TO PBWL PD WOC TM\01 CAD\07-22-20 ASB\HIG-MP-S0204 STA 49-35 SECT CO DELTA11.DWG PLOT TIME: 07-23-20, 4:06 PM

"AS-BUILT"

11 C.O. 131S-1

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 132 | 354 |




## LAYOUT PLAN

Scale: 1" = 10'-0"

A S3.1 | S3.1

| | |
|---|---|
| ORIGINAL PLAN | SURVEY PLOTTED BY _____ DATE |
| | DRAWN BY " " " " |
| NOTE BOOK | TRACED BY " " " " |
| | DESIGNED BY " " " " |
| No. | QUANTITIES BY " " " " |
| | CHECKED BY " " " " |

DRAWING NAME: Z:\...\00_ONGOING\12-032-H1 GRAL & SHLDR MDL ST TO PUNCHBOWL WOC\01 CAD\03-XX-16\H1C-MP-S0301 STA.64+22 EB.DWG PLOT TIME: 03-25-16, 2:31 PM

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

CALVIN T. MIYAHIRA
LICENSED PROFESSIONAL ENGINEER
NO. 8133-S
HAWAII, U.S.A.

4-30-18
SIGNATURE EXPIRATION DATE OF THE LICENSE

STATE OF HAWAI'I
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

# HOUGHTAILING SEPARATION AT STA. 64+22± EB

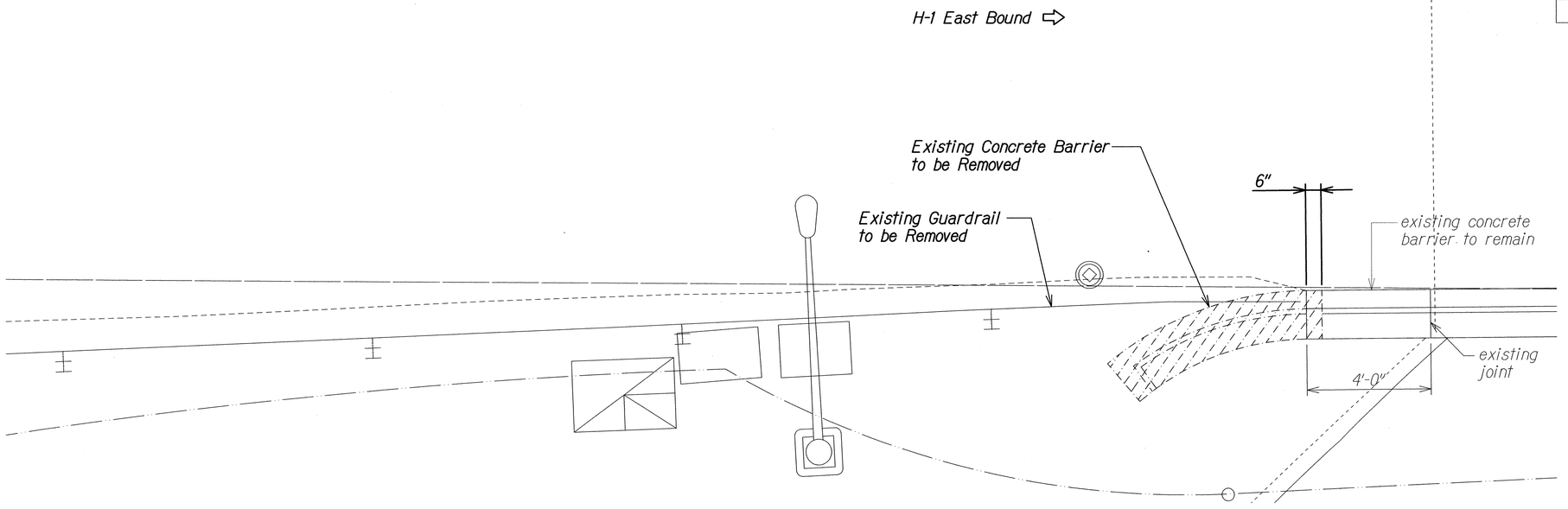
## LAYOUT PLAN

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

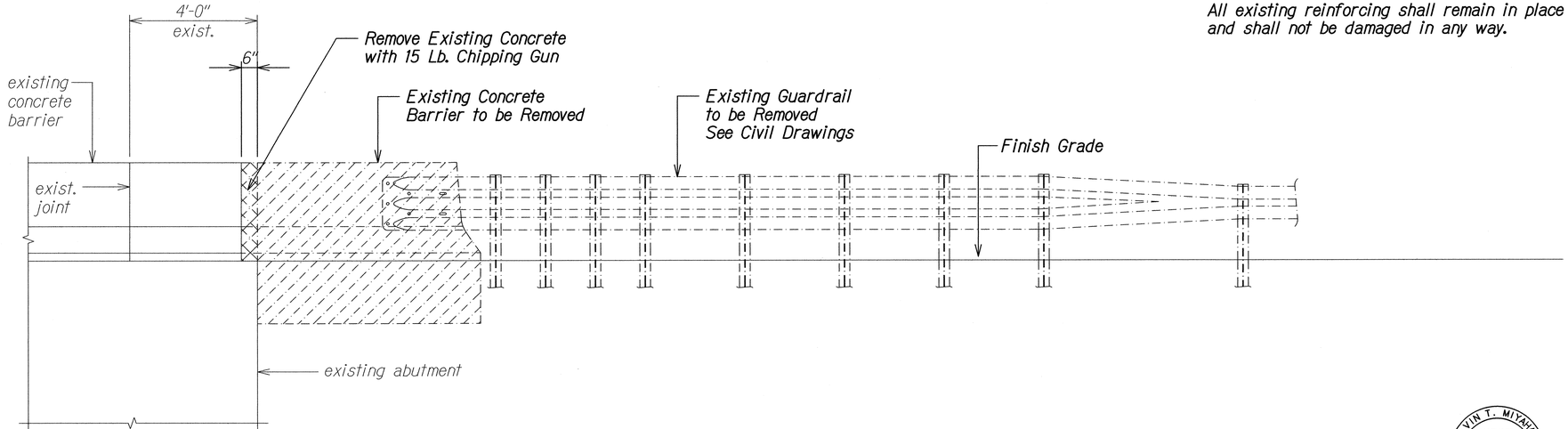
Scale: As Noted Date: Mar. 2016

SHEET No. S3.1 OF 3 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 133 | 354 |




DEMO PLAN (A) S3.2 | S3.2
Scale: 1/2" = 1'-0"




ELEVATION (B) S3.2 | S3.2
Scale: 1/2" = 1'-0"

**Note:**
All existing reinforcing shall remain in place and shall not be damaged in any way.

| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
|---|---|---|
| NOTE BOOK | DRAWN BY | |
| No. | TRACED BY | |
| | DESIGNED BY | |
| | QUANTITIES BY | |
| | CHECKED BY | |

DRAWING NAME: Z:\OO ONGOING\12-032-H1 GRAIL & SHLDR MDL ST TO PUNCHBOWL WOC\01 CAD\03-XX-16\H1G-MP-S0302 STA 64+22 EB DEMO.DWG PLOT TIME: 03-25-16, 2:32 PM)

CALVIN T. MIYAHARA LICENSED PROFESSIONAL ENGINEER NO. 8133-S HAWAII, U.S.A.

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4-30-18
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STATE OF HAWAI'I
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

# HOUGHTAILING SEPARATION AT STA. 64+22± EB

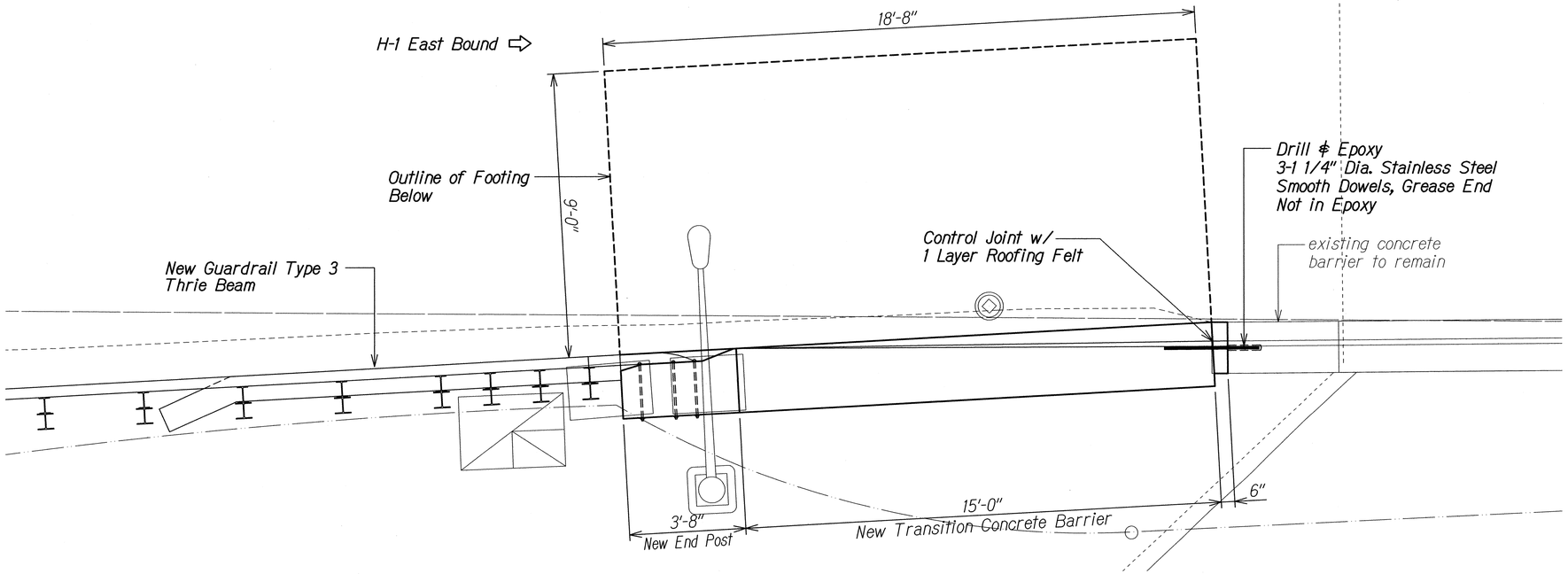
## DEMO PLAN AND ELEVATION

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

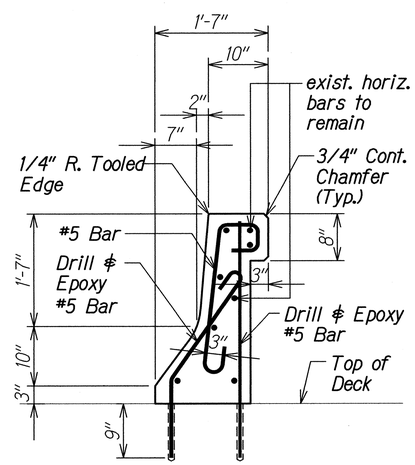
Scale: As Noted Date: Mar. 2016

SHEET No. S3.2 OF 3 SHEETS

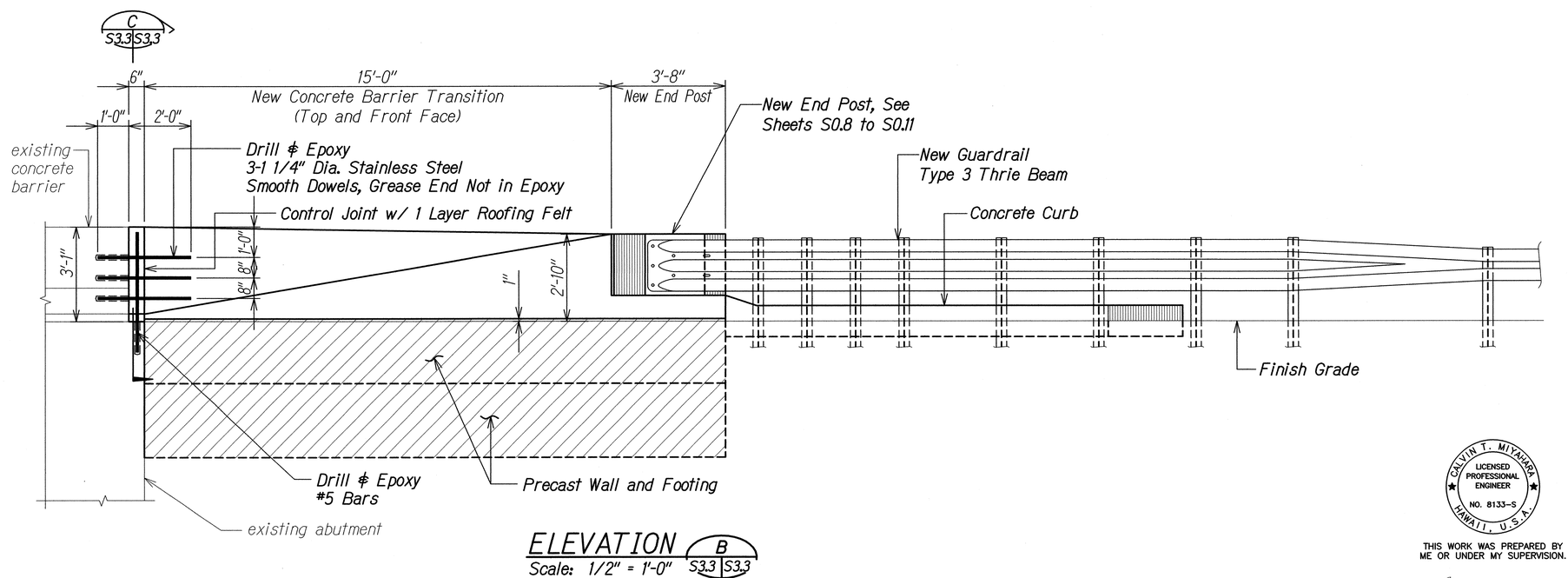
| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 134 | 354 |




PLAN
Scale: 1/2" = 1'-0"
A S3.3 S3.3




SECTION
Scale: 1" = 1'-0"
C S3.3 S3.3




ELEVATION
Scale: 1/2" = 1'-0"
B S3.3 S3.3

| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
|---|---|---|
| | DRAWN BY | |
| | TRACED BY | |
| NOTE BOOK | DESIGNED BY | |
| | QUANTITIES BY | |
| No. | CHECKED BY | |

DRAWING NAME: Z:\OD ONGOING\12-032-H1 GRAIL & SHLDR IMPL ST TO PUNCHBOWL WOO\01 CAD\03-XX-16\H1C-MP-S0303 STA.64+22 EB PLAN.DWG PLOT TIME: 03-25-16, 2:34 PM)

CALVIN T. MIYAHARA
LICENSED PROFESSIONAL ENGINEER
NO. 8133-S
HAWAII, U.S.A.

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4-30-18
SIGNATURE / EXPIRATION DATE OF THE LICENSE

STATE OF HAWAI'I
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**HOUGHTAILING SEPARATION AT STA. 64+22± EB**

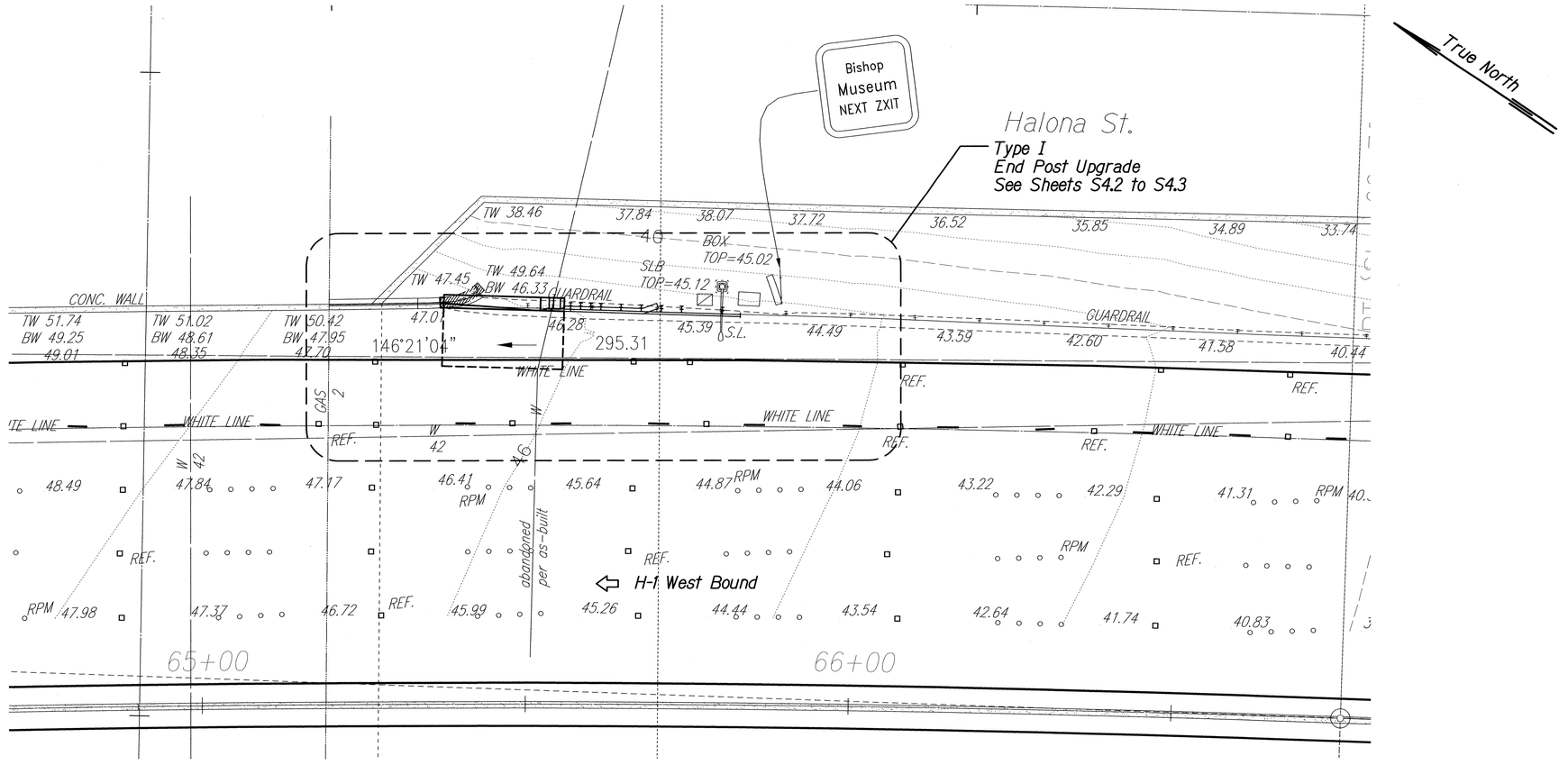
**PLAN AND ELEVATION**

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted Date: Mar. 2016

SHEET No. S3.3 OF 3 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 135 | 354 |




## LAYOUT PLAN

Scale: 1" = 10'-0"

A S4.1 | S4.1

| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
|---|---|---|
| | DRAWN BY | |
| NOTE BOOK | TRACED BY | |
| | DESIGNED BY | |
| No. | QUANTITIES BY | |
| | CHECKED BY | |

DRAWING NAME: Z:\OO ONGOING\12-032-H1 GRAIL & SHLDR MDL ST TO PUNCHBOWL WO\CO\01 CAD\03-XX-16\H1G-MP-S0401 STA.65+59 WB.DWG PLOT TIME: 03-25-16, 2:38 PM

CALVIN T. MIYAHARA
LICENSED PROFESSIONAL ENGINEER
NO. 8133-S
HAWAII, U.S.A.

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SIGNATURE 4-30-18 EXPIRATION DATE OF THE LICENSE

STATE OF HAWAI'I
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**HOUGHTAILING SEPARATION AT STA. 65+59± WB**

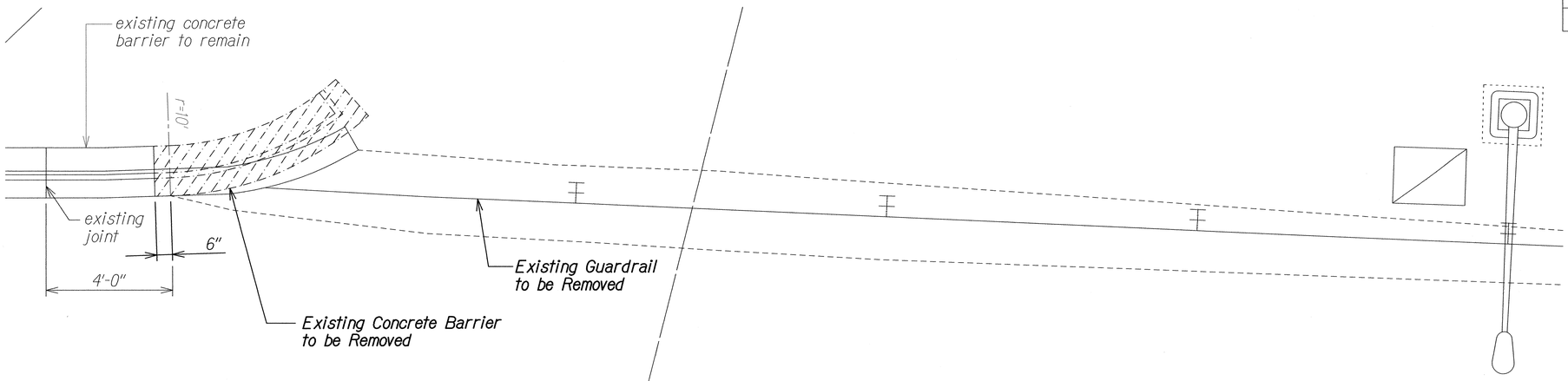
**LAYOUT PLAN**

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted Date: Mar. 2016

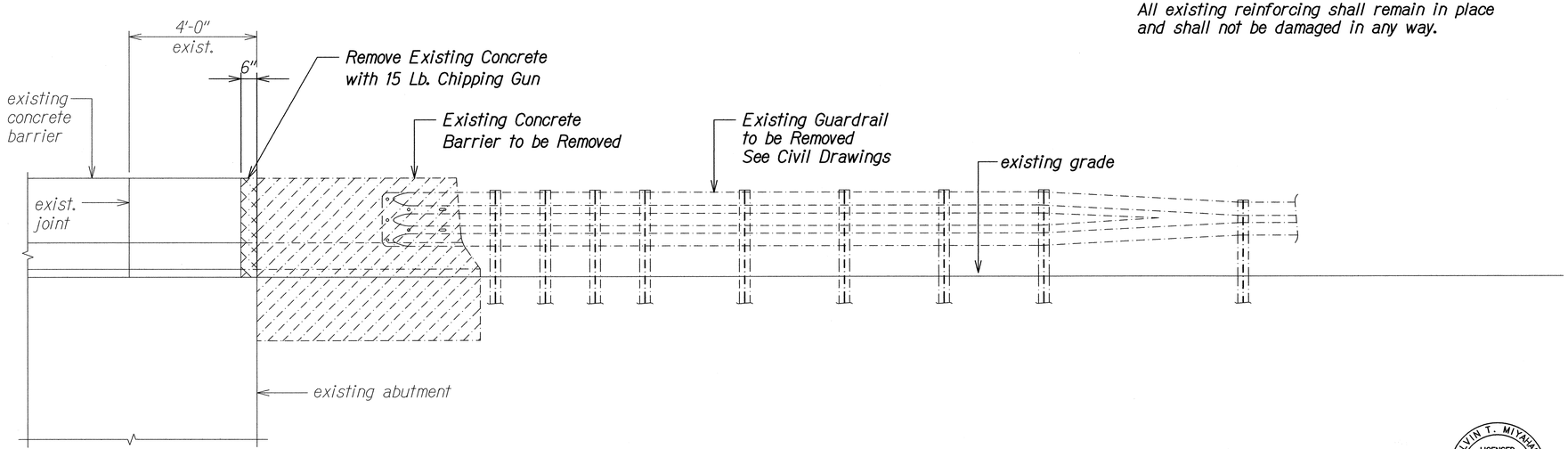
SHEET No. S4.1 OF 3 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 136 | 354 |




DEMO PLAN (A) S4.2 | S4.2
Scale: 1/2" = 1'-0"

**Note:**
All existing reinforcing shall remain in place and shall not be damaged in any way.




ELEVATION (B) S4.2 | S4.2
Scale: 1/2" = 1'-0"

| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
|---|---|---|
| | DRAWN BY | |
| NOTE BOOK | TRACED BY | |
| | DESIGNED BY | |
| No. | QUANTITIES BY | |
| | CHECKED BY | |

DRAWING NAME: Z:\OO ONGOING\12-032-H1 GRAIL & SHLDR MDL ST TO PUNCHBOWL WOC\01 CAD\03-XX-16\H1G-MP-S0402 STA.65+59 WB DEMO.DWG PLOT TIME: 03-25-16, 2:39 PM)

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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**HOUGHTAILING SEPARATION AT STA. 65+59± WB**

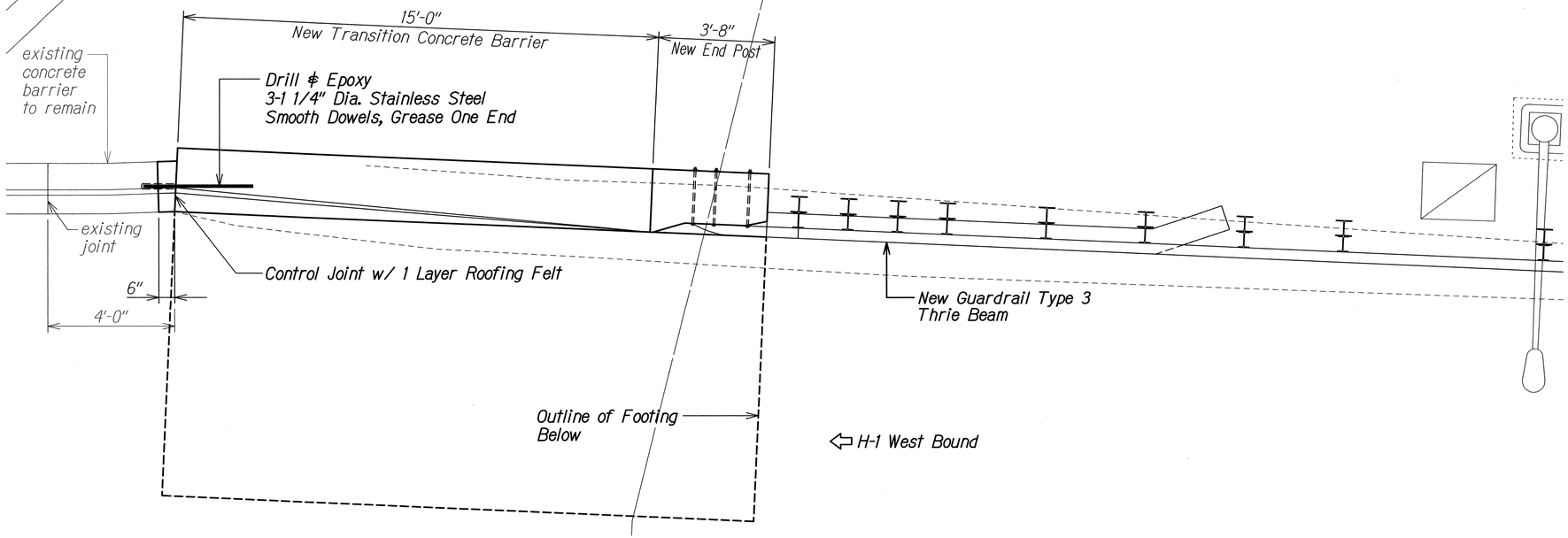
**DEMO PLAN AND ELEVATION**

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

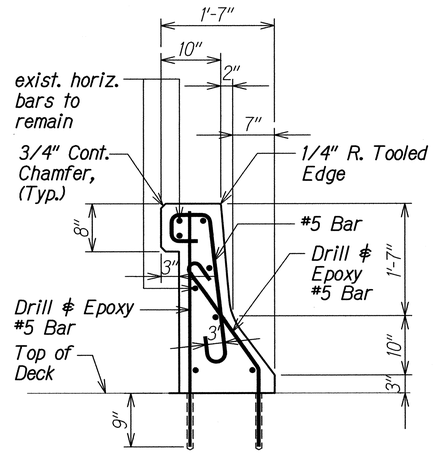
Scale: As Noted Date: Mar. 2016

SHEET No. S4.2 OF 3 SHEETS

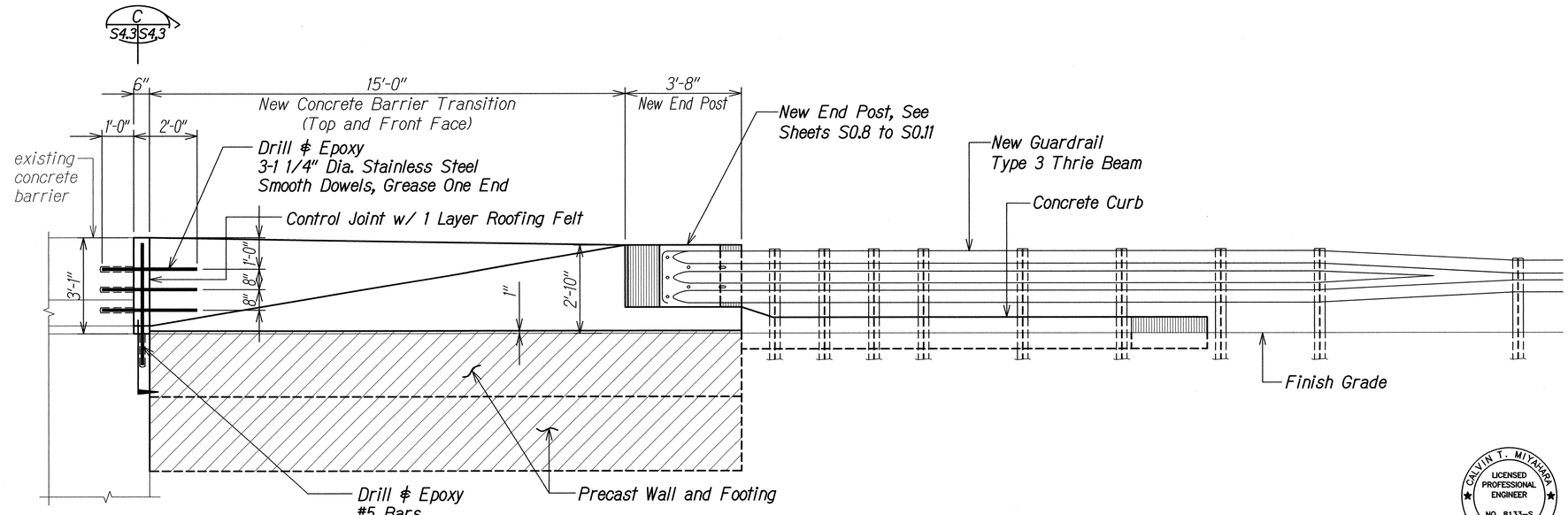
| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 137 | 354 |




PLAN (A S4.3 | S4.3)
Scale: 1/2" = 1'-0"




SECTION (C S4.3 | S4.3)
Scale: 1/2" = 1'-0"




ELEVATION (B S4.3 | S4.3)
Scale: 1/2" = 1'-0"

| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
|---|---|---|
| | DRAWN BY | |
| NOTE BOOK | TRACED BY | |
| | DESIGNED BY | |
| No. | QUANTITIES BY | |
| | CHECKED BY | |

DRAWING NAME: Z:\OO_ONGOING\12-032-H1 GRAIL & SHLDR IMPR MDL ST TO PUNCHBOWL WO\CAD\03-XX-16\H1G-MP-S0403 STA.65+59 WB PLAN.DWG PLOT TIME: 03-25-16, 2:41 PM)

CALVIN T. MIYAMARA
LICENSED PROFESSIONAL ENGINEER
NO. 8133-S
HAWAII, U.S.A.

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4-30-18
SIGNATURE EXPIRATION DATE OF THE LICENSE

STATE OF HAWAI'I
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

# HOUGHTAILING SEPARATION AT STA. 65+59± WB

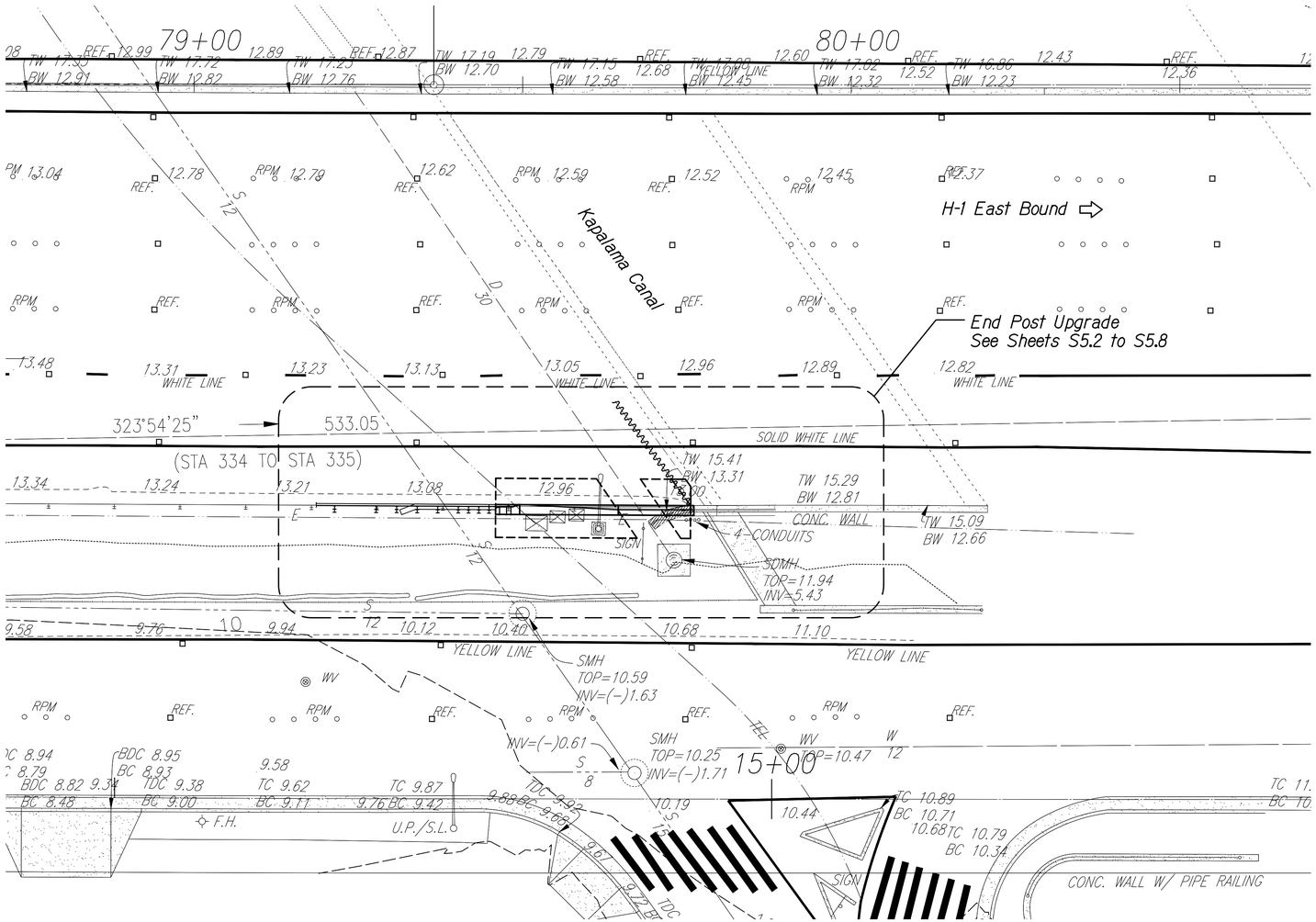
## PLAN AND ELEVATION

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted Date: Mar. 2016

SHEET No. S4.3 OF 3 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 138 | 354 |




LAYOUT PLAN (A) S5.1 | S5.1
Scale: 1" = 10'-0"

## 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 |

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

DRAWING NAME: Z:\OD ENGDNGN\12-0321-H1 GRAL & SHLDR MDL ST TO PBWL PD WOS TMK\01 CAD\07-22-20 ASBUILT-MP-SS651 STA.79+46 EB.DWG PLOT TIME: 07-23-20, 2:20 PM

CALVIN T. MIYAHARA
LICENSED PROFESSIONAL ENGINEER
NO. 8133-S
HAWAII, U.S.A.

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4-30-20
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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

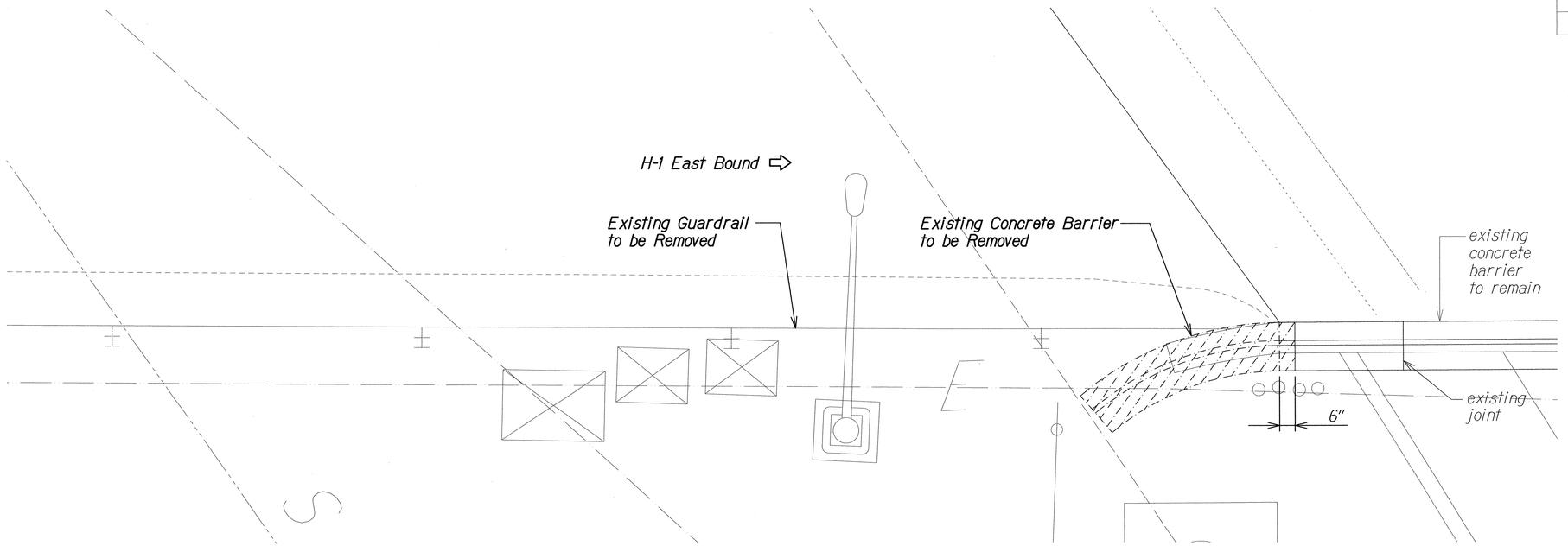
# KAPALAMA CANAL AT STA. 79+46± EB
## LAYOUT PLAN
INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted Date: Mar. 2016

SHEET No. S5.1 OF 8 SHEETS

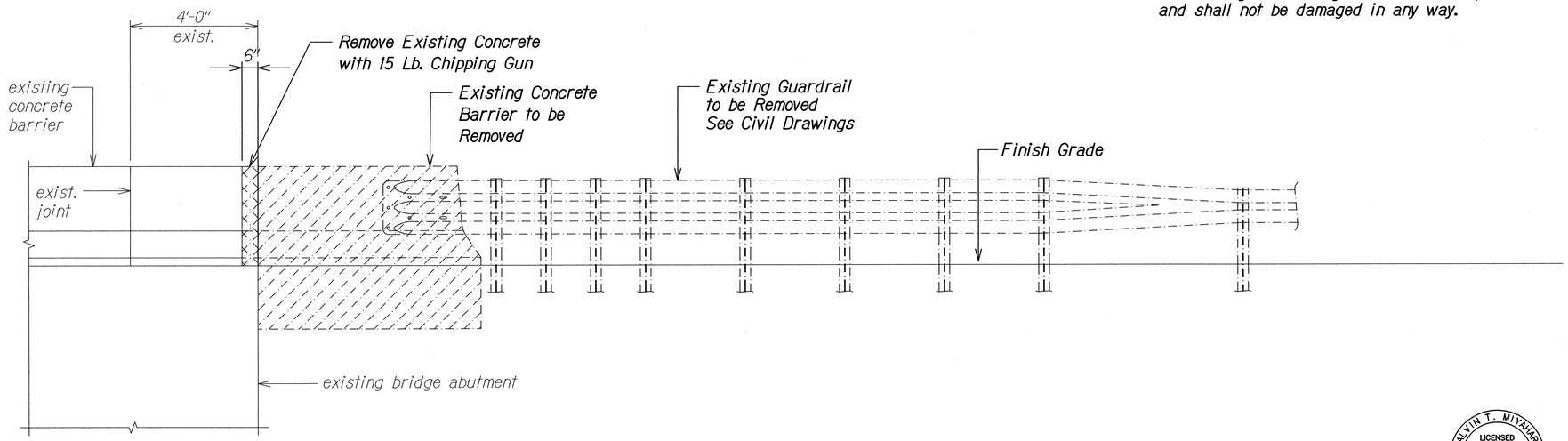
"AS-BUILT"

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 139 | 354 |




DEMO PLAN (A) S5.2 | S5.2
Scale: 1/2" = 1'-0"

**Note:**
All existing reinforcing shall remain in place and shall not be damaged in any way.




ELEVATION (B) S5.2 | S5.2
Scale: 1/2" = 1'-0"

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

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4-30-18
SIGNATURE EXPIRATION DATE OF THE LICENSE

STATE OF HAWAI'I
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

# KAPALAMA CANAL AT STA. 79+46± EB
## DEMO PLAN AND ELEVATION
### INTERSTATE ROUTE H-1
### GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

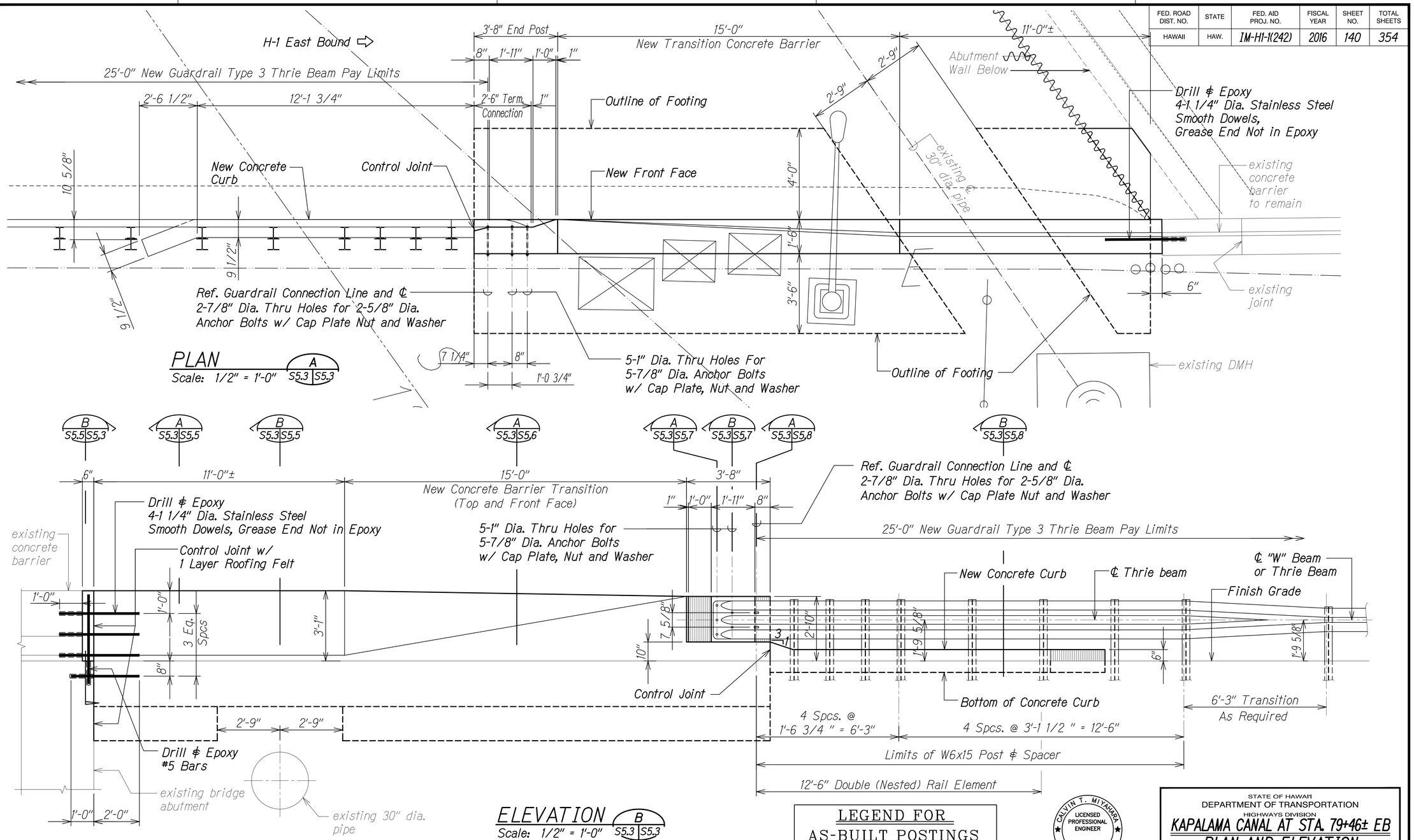
Scale: As Noted Date: Mar. 2016

SHEET No. S5.2 OF 8 SHEETS



PLOT TIME: 03-25-16, 3:17 PM)
DRAWING NAME: Z:\00 ONGOING\12-032-H1 GRAIL & SHLDR IMPR STP TO PUNCHBOWL WOC\01 CAD\03-XX-16\H1C-MP-S0502 STA 79+46 EB DEMO.DWG

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 140 | 354 |




| | |
|---|---|
| ORIGINAL PLAN | SURVEY PLOTTED BY |
| NOTE BOOK | DRAWN BY |
| No. | TRACED BY |
| | DESIGNED BY |
| | QUANTITIES BY |
| | CHECKED BY |
| | DATE |

## LEGEND FOR AS-BUILT POSTINGS

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|---|---|
| ~~^^^^~~ | Squiggly line for as-built deletion |
| ~~100.00~~ | Double line for as-built deletion |
| Roadway | Text for as-built posting |

CALVIN T. MIYAMARA
LICENSED PROFESSIONAL ENGINEER
NO. 8133-S
HAWAII, U.S.A.

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4-30-20
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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

# KAPALAMA CANAL AT STA. 79+46± EB
## PLAN AND ELEVATION
### INTERSTATE ROUTE H-1
### GUARDRAIL AND SHOULDER IMPROVEMENTS
### Middle Street to Punchbowl Off-Ramp
### Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted Date: Mar. 2016

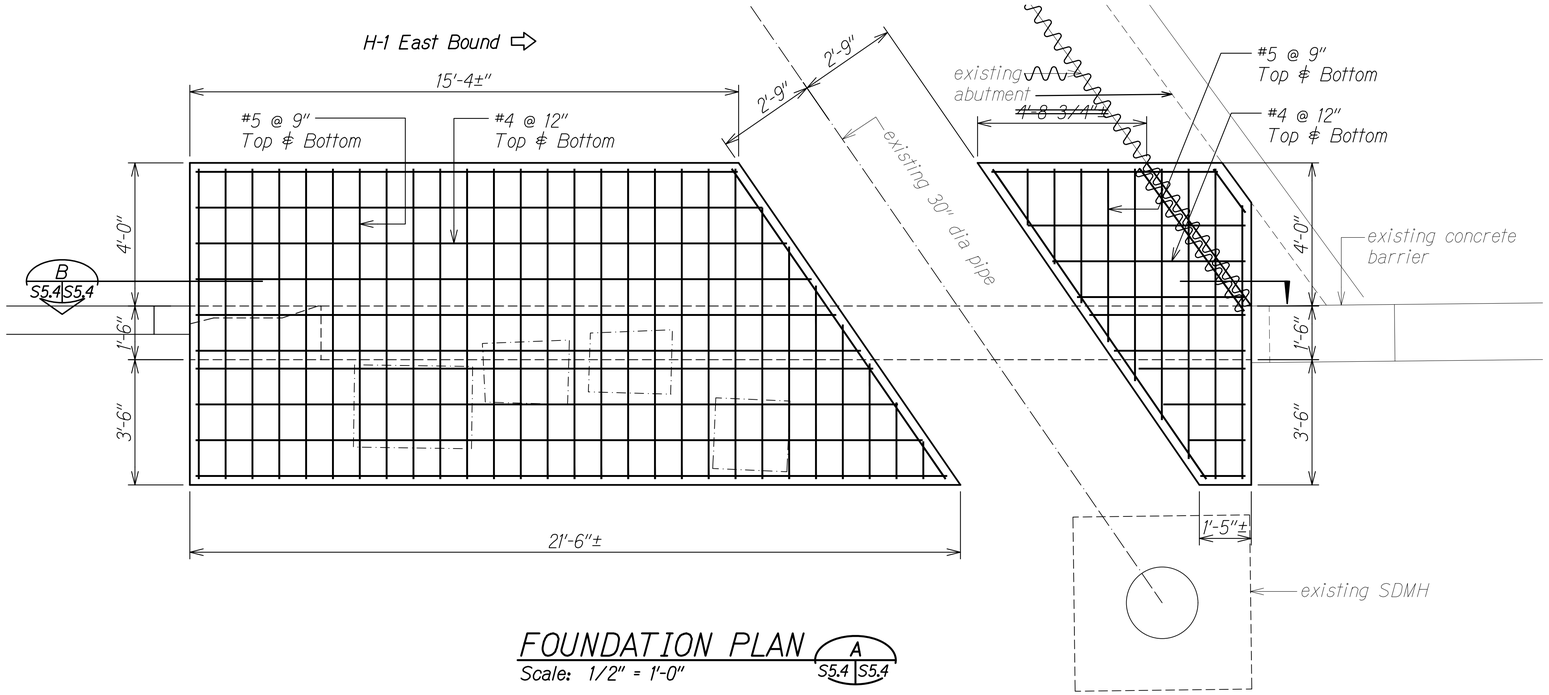
SHEET No. S5.3 OF 8 SHEETS

"AS-BUILT"

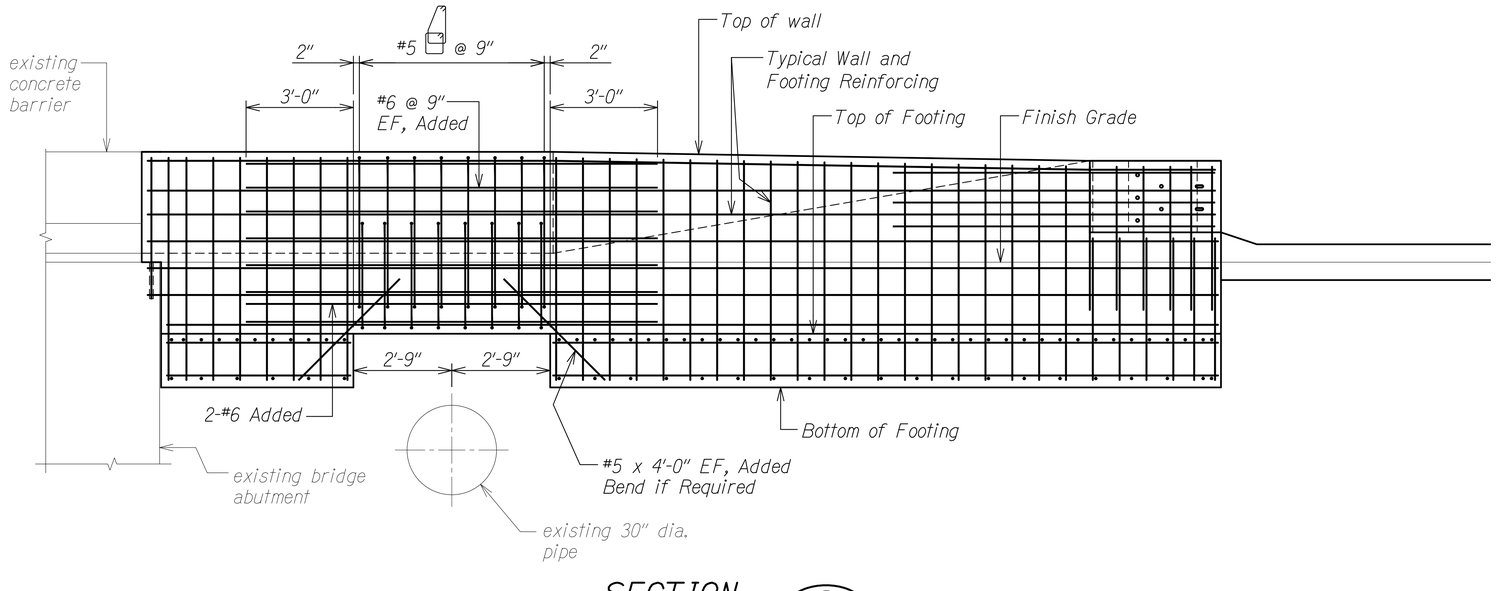


PLOT TIME: 07-23-20, 2:22 PM
DRAWING NAME: Z:\JOB ONGOING\12-6321-1-HI GRAL & SHLDR IMPL ST TO PBWL PD WOC TW\01 CAD\07-22-20 ASBUILT\16-MP-03503 STA.79+46 EB PLAN.DWG

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 141 | 354 |




FOUNDATION PLAN A S5.4 S5.4
Scale: 1/2" = 1'-0"




SECTION B S5.4 S5.4
Scale: 1/2" = 1'-0"

| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
|---|---|---|
| NOTE BOOK | DRAWN BY | |
| No. | TRACED BY | |
| | DESIGNED BY | |
| | QUANTITIES BY | |
| | CHECKED BY | |

DRAWING NAME: Z:\OD ONGOING\12-032\1-H1 GRAL & SHLDR MDL ST TO PBWL PD WOC TM\01 CAD\07-22-20 ASB\H1G-MP-50604 STA 79+46 EB FOUND.DWG PLOT TIME: 07-23-20, 2:22 PM

## LEGEND FOR AS-BUILT POSTINGS

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|---|---|
| ~~~~ | Squiggly line for as-built deletion |
| ~~100.00~~ | Double line for as-built deletion |
| Roadway | Text for as-built posting |

CALVIN T. MIYAMARA LICENSED PROFESSIONAL ENGINEER NO. 8133-S HAWAII, U.S.A.

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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

# KAPALAMA CANAL AT STA. 79+46± EB
# FOUNDATION PLAN AND SECTION

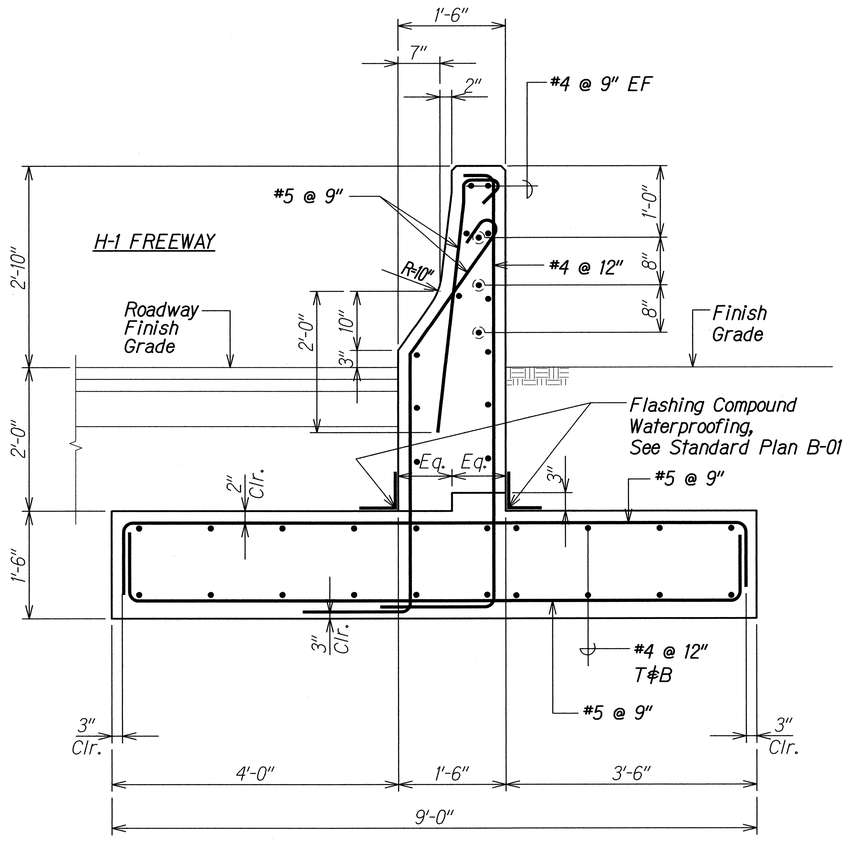
INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted Date: Mar. 2016

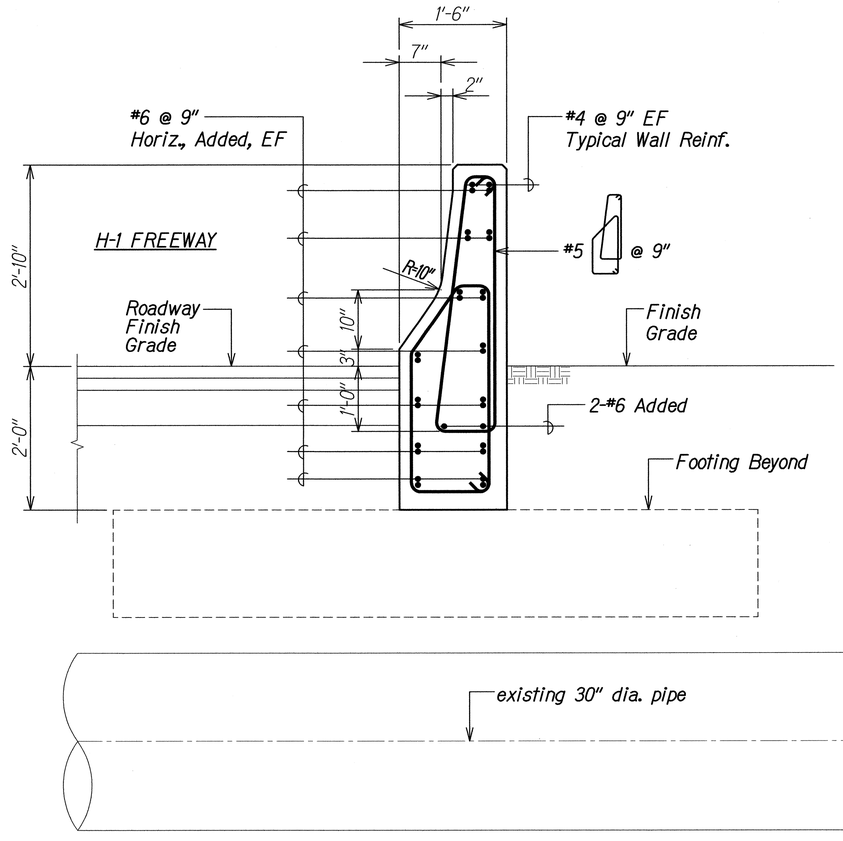
SHEET No. S5.4 OF 8 SHEETS

"AS-BUILT"

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 142 | 354 |




SECTION A
Scale: 1" = 1'-0"
S5.3 | S5.5




SECTION B
Scale: 1" = 1'-0"
S5.3 | S5.5

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

DRAWING NAME: Z:\GO ONGOING\12-032-H1 GRAL & SHLDR MDL ST TO PUNCHBOWL WO\C\01 CAD\03-XX-16\H1G-MP-50505 STA.79+46 EB DET.DWG PLOT TIME: 03-25-16, 3:18 PM

CALVIN T. MIYAHARA
LICENSED PROFESSIONAL ENGINEER
NO. 8133-S
HAWAII, U.S.A.

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SIGNATURE — 4-30-18 EXPIRATION DATE OF THE LICENSE

STATE OF HAWAI'I
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

# KAPALAMA CANAL AT STA. 79+46± EB

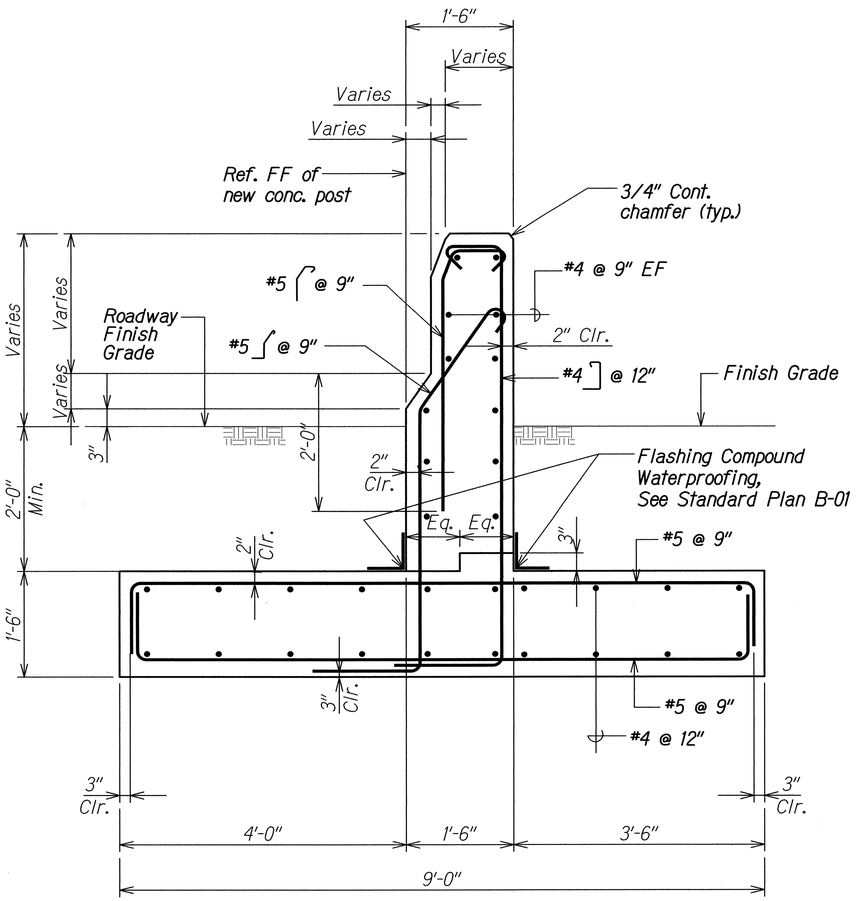
## SECTIONS

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

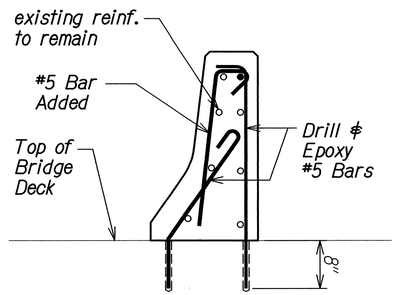
Scale: As Noted — Date: Mar. 2016

SHEET No. S5.5 OF 8 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 143 | 354 |




SECTION A
Scale: 1" = 1'-0"
S5.3 | S5.6




SECTION B
Scale: 1/2 = 1'-0"
S5.3 | S5.6

| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
|---|---|---|
| | DRAWN BY | |
| NOTE BOOK | TRACED BY | |
| | DESIGNED BY | |
| No. | QUANTITIES BY | |
| | CHECKED BY | |

DRAWING NAME: Z:\OD ONGOING\12-032-H1 GRAIL & SHLDR MDL ST TO PUNCHBOWL WOC\01 CAD\03-XX-16\H1G-MP-50505 STA 79+46 EB DET.DWG PLOT TIME: 03-25-16, 3:19 PM)

CALVIN T. MIYAHARA
LICENSED PROFESSIONAL ENGINEER
NO. 8133-S
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

4-30-18
SIGNATURE EXPIRATION DATE OF THE LICENSE

STATE OF HAWAI'I
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

# KAPALAMA CANAL AT STA. 79+46± EB

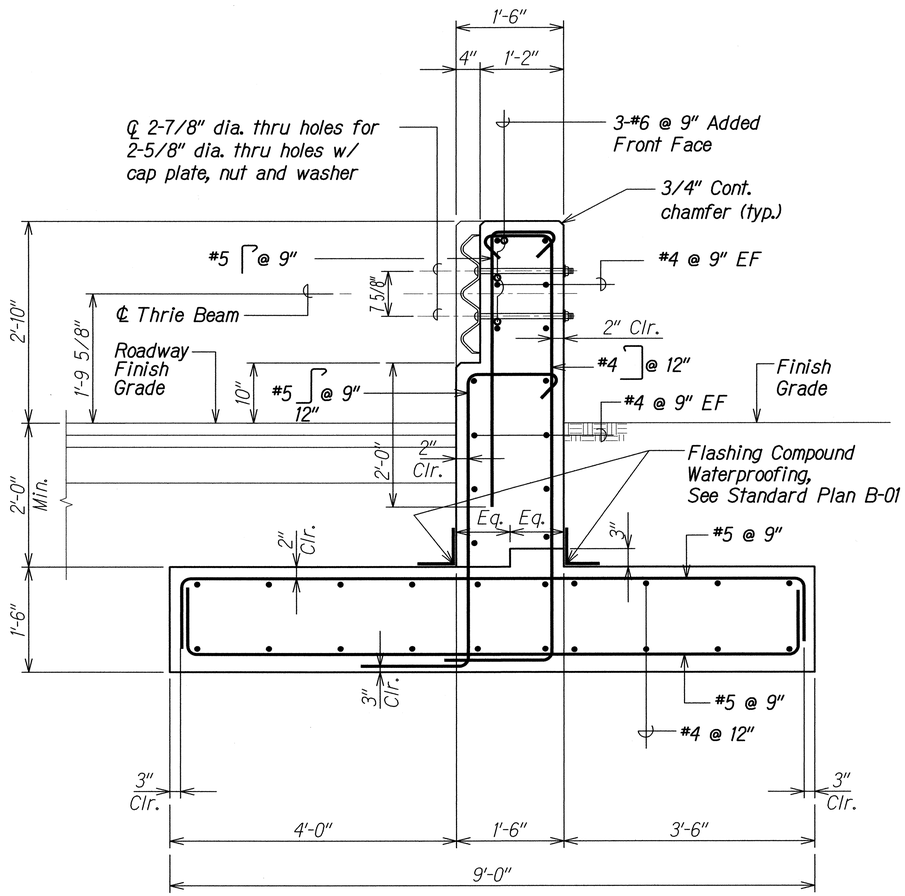
## SECTIONS

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

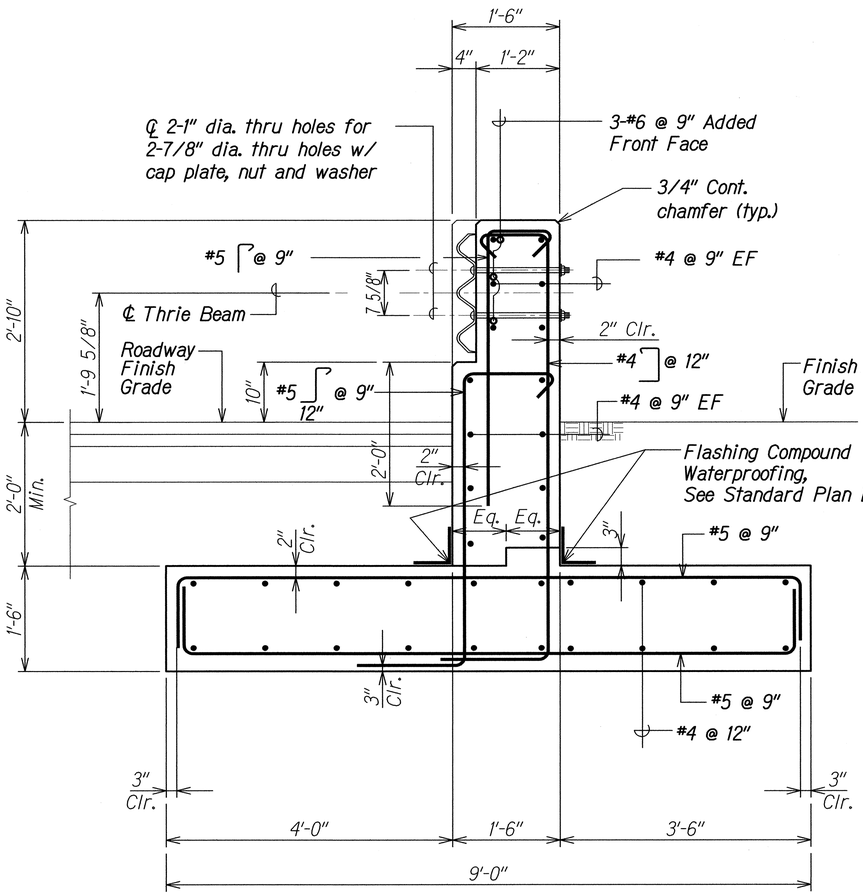
Scale: As Noted Date: Mar. 2016

SHEET No. S5.6 OF 8 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 144 | 354 |




SECTION A
Scale: 1" = 1'-0"
S5.3 | S5.7




SECTION B
Scale: 1" = 1'-0"
S5.3 | S5.7

| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
|---|---|---|
| | DRAWN BY | |
| NOTE BOOK | TRACED BY | |
| | DESIGNED BY | |
| No. | QUANTITIES BY | |
| | CHECKED BY | |

DRAWING NAME: Z:\OD ONGOING\12-032-H1 GRAIL & SHLDR MDL ST TO PUNCHBOWL WOC\01 CAD\03-XX-16\H1C-MP-50505 STA 79+46 EB DET.DWG PLOT TIME: 03-25-16, 3:19 PM)

CALVIN T. MIYAHARA
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HAWAII, U.S.A.

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4-30-18
SIGNATURE EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

# KAPALAMA CANAL AT STA. 79+46± EB

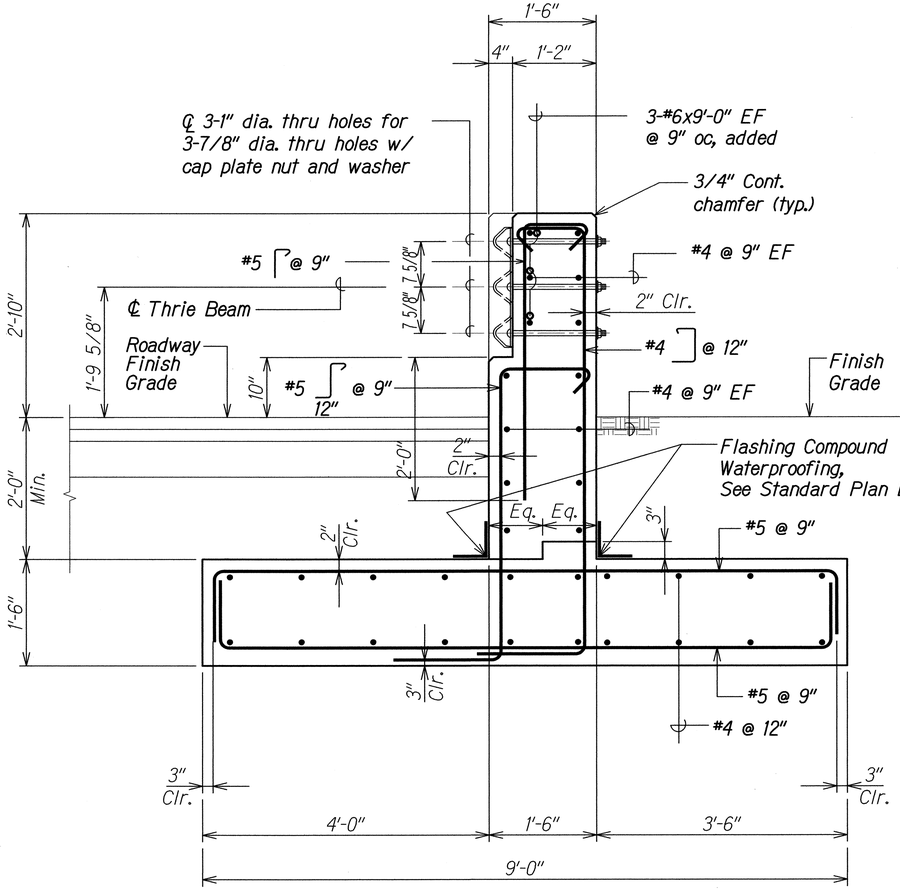
## SECTIONS

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-H1-1(242)

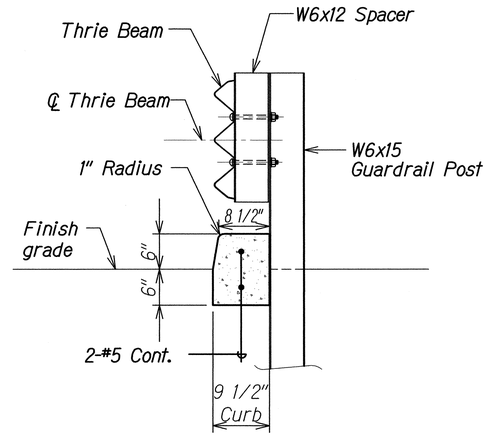
Scale: As Noted Date: Mar. 2016

SHEET No. S5.7 OF 8 SHEETS

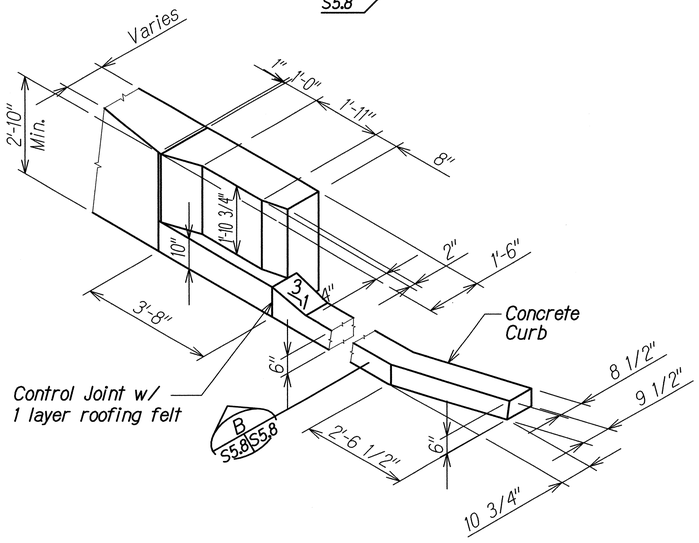
| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 145 | 354 |




SECTION A
Scale: 1" = 1'-0"
S5.3 | S5.8




SECTION B
Scale: 1" = 1'-0"
S5.3 | S5.8
S5.8




END POST DETAIL 1
Scale: 1/2" = 1'-0"
S5.8 | S5.8

| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
|---|---|---|
| NOTE BOOK | DRAWN BY | " |
| No. | TRACED BY | " |
| | DESIGNED BY | " |
| | QUANTITIES BY | " |
| | CHECKED BY | " |

DRAWING NAME: Z:\00 ONGOING\12-032-H1 GRAL & SHLDR MDL ST TO PUNCHBOWL WOO\01 CAD\03-XX-16\H1G-MP-50505 STA 79+46 EB DET.DWG PLOT TIME: 03-25-16, 3:19 PM)

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

CALVIN T. MIYAMARA LICENSED PROFESSIONAL ENGINEER NO. 8133-S HAWAII, U.S.A.

SIGNATURE 4-30-18 EXPIRATION DATE OF THE LICENSE

STATE OF HAWAI'I
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

# KAPALAMA CANAL AT STA. 79+46± EB

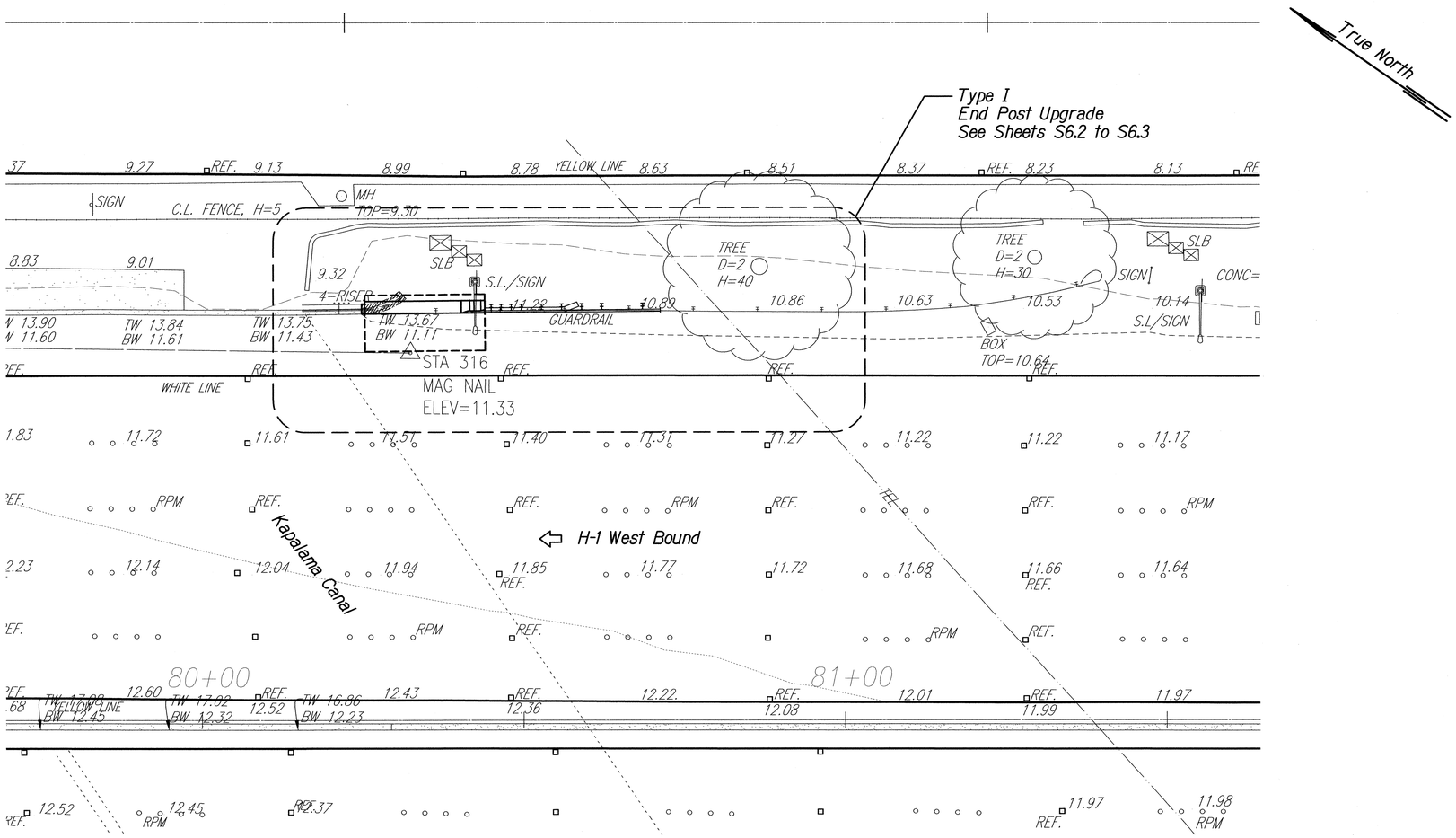
## SECTIONS AND DETAIL

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted Date: Mar. 2016

SHEET No. S5.8 OF 8 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 146 | 354 |




LAYOUT PLAN (A) S6.1 | S6.1
Scale: 1" = 10'-0"

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

DRAWING NAME: Z:\OO_ONGOING\12-032-H1 GRAIL & SHLDR MDL ST TO PUNCHBOWL WOC\01 CAD\03-XX-16\H1G-MP-S0601 STA 80+45 WB.DWG PLOT TIME: 03-25-16, 2:47 PM)

CALVIN T. MIYAHARA
LICENSED PROFESSIONAL ENGINEER
NO. 8133-S
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

4-30-18
SIGNATURE — EXPIRATION DATE OF THE LICENSE

STATE OF HAWAI'I
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

# KAPALAMA CANAL AT STA. 80+45± WB

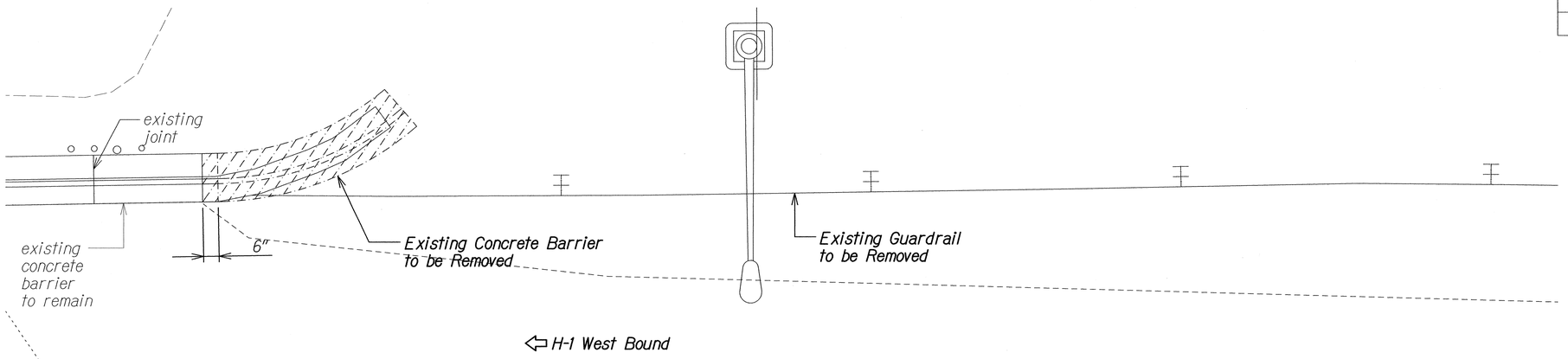
## LAYOUT PLAN

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted Date: Mar. 2016

SHEET No. S6.1 OF 3 SHEETS

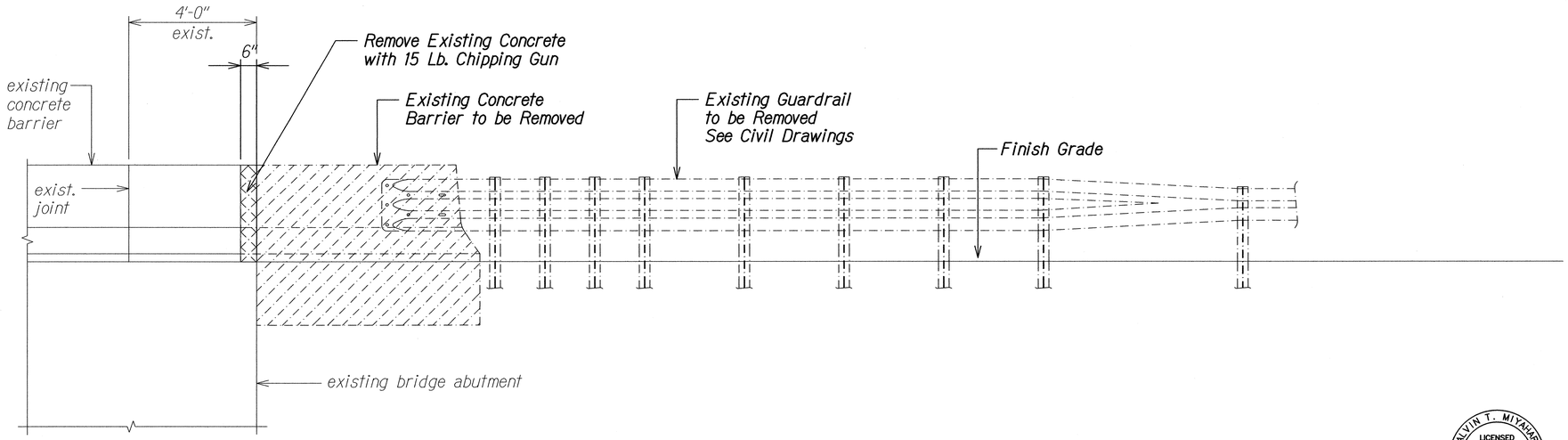
| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 147 | 354 |




## DEMO PLAN (A)

Scale: 1/2" = 1'-0" S6.2 | S6.2

**Note:**
All existing reinforcing shall remain in place and shall not be damaged in any way.




## ELEVATION (B)

Scale: 1/2" = 1'-0" S6.2 | S6.2

| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
|---|---|---|
| | DRAWN BY | |
| NOTE BOOK | TRACED BY | |
| | DESIGNED BY | |
| No. | QUANTITIES BY | |
| | CHECKED BY | |

DRAWING NAME: Z:\OD ONGOING\12-032-H1 GRAIL & SHLDR IMPL ST TO PUNCHBOWL WO\CU1 CAD\03-XX-16\H1G-MP-S0602 STA.80+45 WB DEMO.DWG PLOT TIME: 03-25-16, 2:50 PM)

CALVIN T. MIYAHARA LICENSED PROFESSIONAL ENGINEER NO. 8133-S HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

4-30-18
SIGNATURE EXPIRATION DATE OF THE LICENSE

STATE OF HAWAI'I
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

# KAPALAMA CANAL AT STA. 80+45± WB

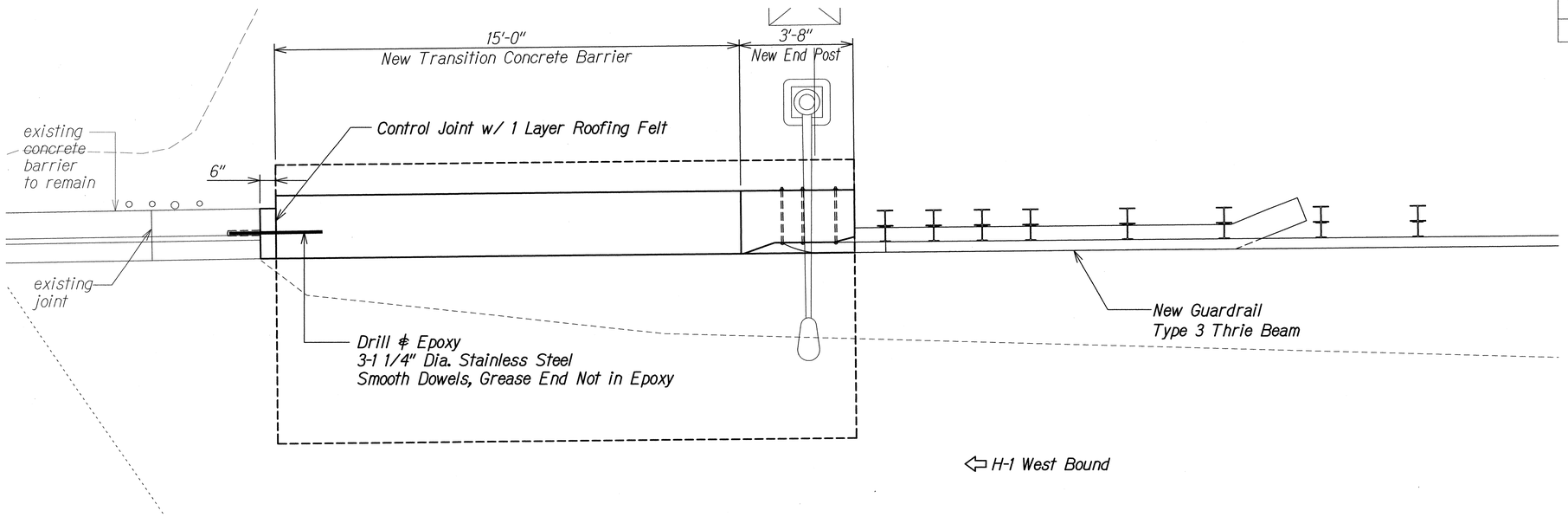
## DEMO PLAN AND ELEVATION

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

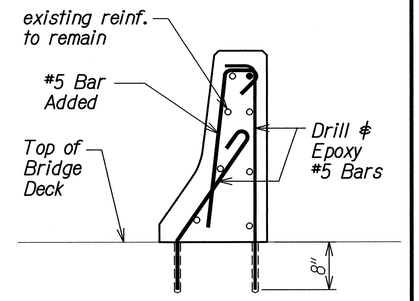
Scale: As Noted Date: Mar. 2016

SHEET No. S6.2 OF 3 SHEETS

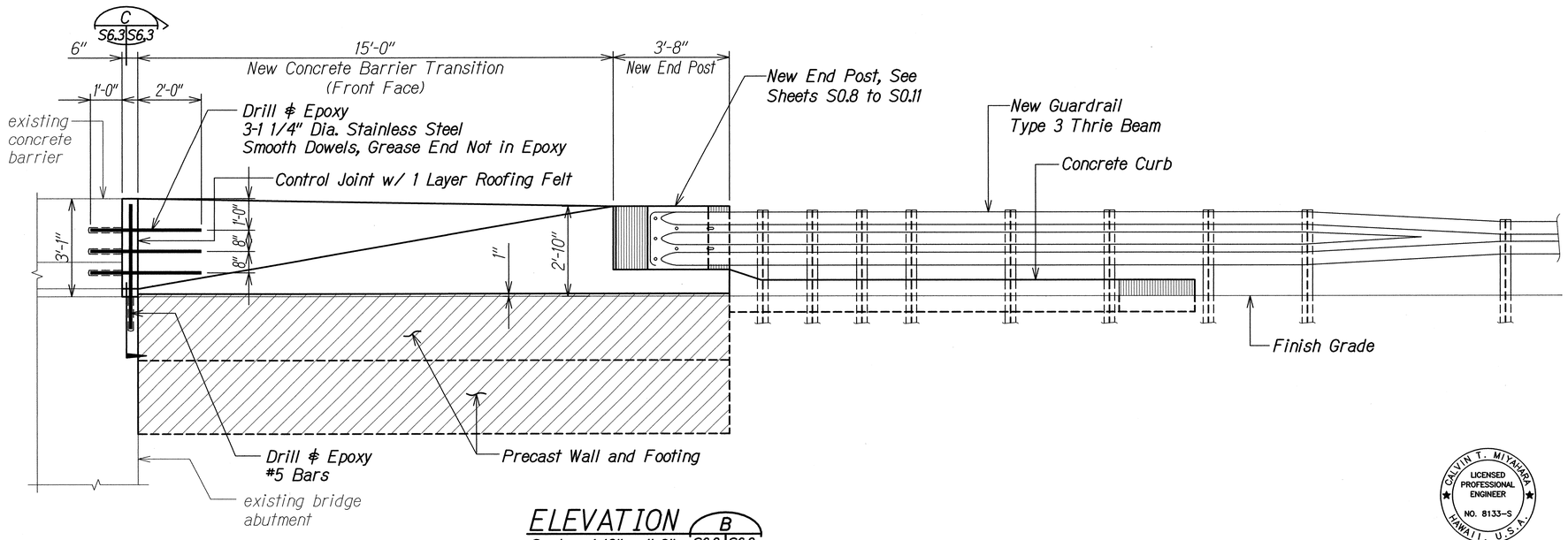
| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 148 | 354 |




PLAN
Scale: 1/2" = 1'-0" (A S6.3 | S6.3)




SECTION
Scale: 1/2" = 1'-0" (C S6.3 | S6.3)




ELEVATION
Scale: 1/2" = 1'-0" (B S6.3 | S6.3)

| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
|---|---|---|
| | DRAWN BY | |
| NOTE BOOK | TRACED BY | |
| No. | DESIGNED BY | |
| | QUANTITIES BY | |
| | CHECKED BY | |

PLOT TIME: 03-25-16, 2:52 PM)
DRAWING NAME: Z:\OD ONGOING\12-032-H1 GRAIL & SHLDR MDL ST TO PUNCHBOWL WOO\01 CAD\03-XX-16\H1C-MP-S0603 STA.80+45 WB PLAN.DWG

CALVIN T. MIYAMARA
LICENSED PROFESSIONAL ENGINEER
NO. 8133-S
HAWAII, U.S.A.

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4-30-18
SIGNATURE — EXPIRATION DATE OF THE LICENSE

STATE OF HAWAI'I
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

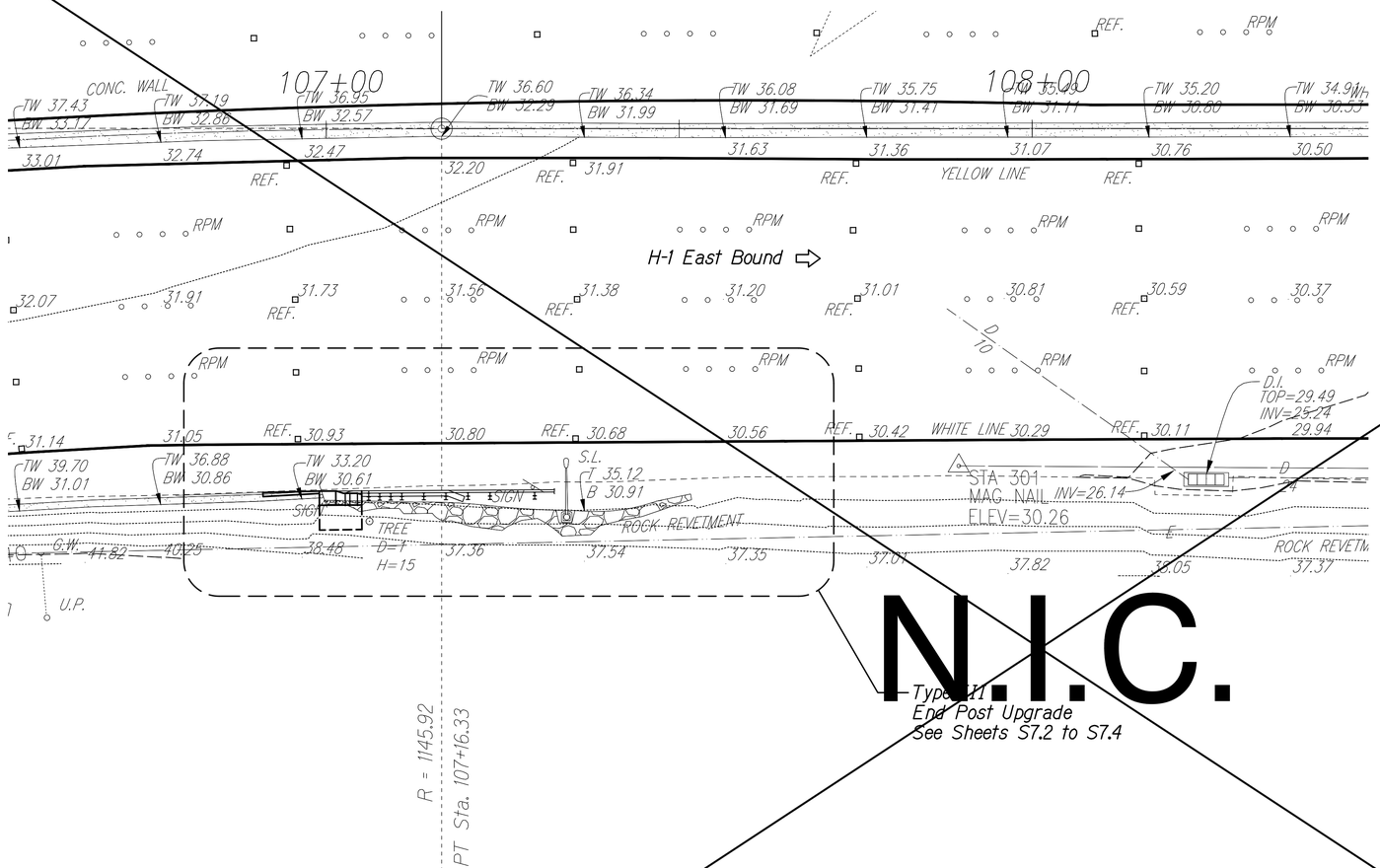
# KAPALAMA CANAL AT STA. 80+45± WB
# PLAN, ELEVATION AND SECTION
## INTERSTATE ROUTE H-1
## GUARDRAIL AND SHOULDER IMPROVEMENTS
## Middle Street to Punchbowl Off-Ramp
## Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted — Date: Mar. 2016

SHEET No. S6.3 OF 3 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | C.O. 149 | 354 |

4




# N.I.C.

## LAYOUT PLAN

Scale: 1" = 10'-0"

A S7.1 | S7.1

| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
|---|---|---|
| NOTE BOOK | DRAWN BY | |
| No. | TRACED BY | |
| | DESIGNED BY | |
| | QUANTITIES BY | |
| | CHECKED BY | |

DRAWING NAME: Z:\OD DNCDWG\12-032.1-H1 GRAIL & SHLDR MDL ST TO PBNL PD WDC TMY01 CAD\07-22-20 ASB\H1G-MP-S0701 STA 106+94 EB DELTA4-NIC.DWG PLOT TIME: 07-23-20, 2:28 PM

### 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 |

CALVIN T. MIYAMARA
LICENSED PROFESSIONAL ENGINEER
NO. 8133-S
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

SIGNATURE — 4-30-20 EXPIRATION DATE OF THE LICENSE

| DATE | REVISION |
|---|---|
| r8/15/17 | 4 SHEET DELETED |

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**LILIHA STREET OVERPASS AT STA. 106+94± EB**

**LAYOUT PLAN**

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted Date: Mar. 2016

SHEET No. S7.1 OF 4 SHEETS

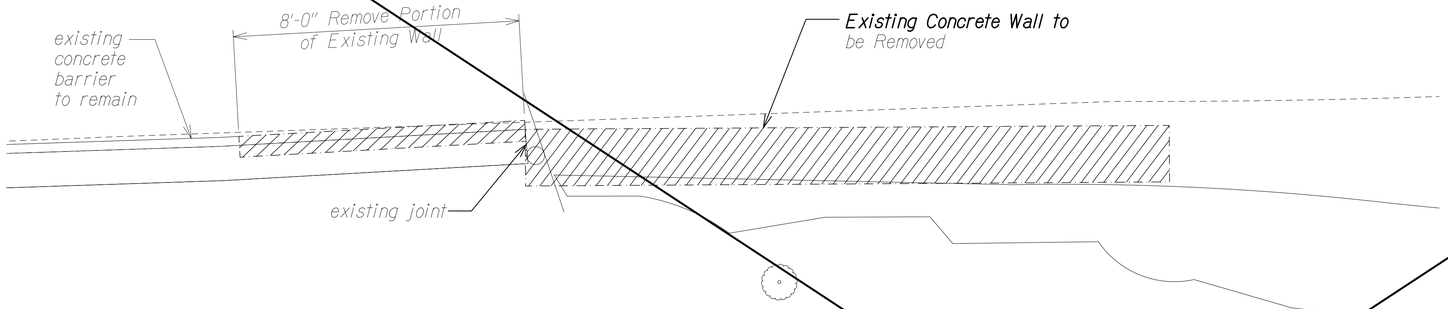
"AS-BUILT"

C.O. 149

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | C.O. 150 | 354 |

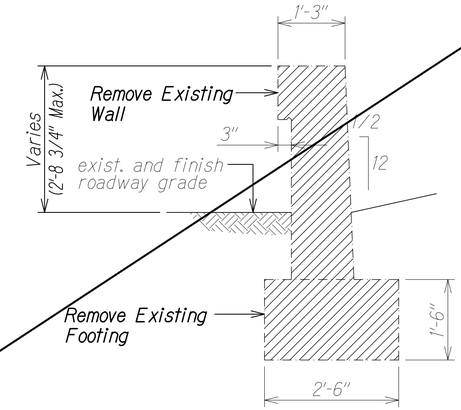
4

H-1 East Bound

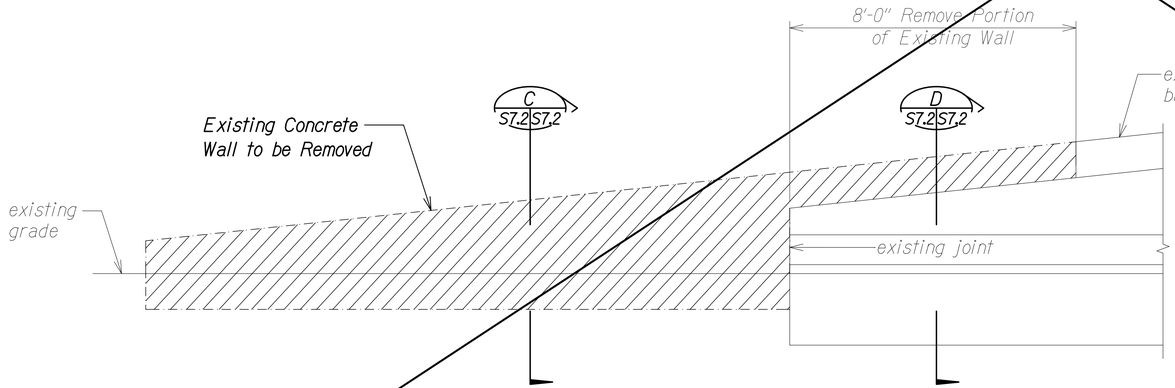



DEMO PLAN (A) S7.2 | S7.2
Scale: 1/2" = 1'-0"

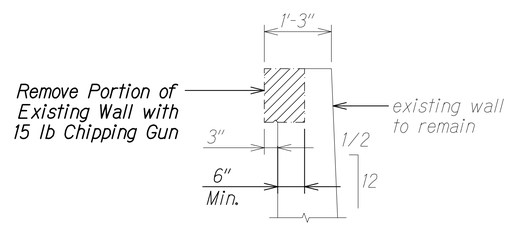
N.I.C.




SECTION (C) S7.2 | S7.2
Scale: 3/4" = 1'-0"




ELEVATION (B) S7.2 | S7.2
Scale: 1/2" = 1'-0"




SECTION (D) S7.2 | S7.2
Scale: 3/4" = 1'-0"

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 |

CALVIN T. MIYAHARA LICENSED PROFESSIONAL ENGINEER NO. 8133-S HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

4-30-20
SIGNATURE — EXPIRATION DATE OF THE LICENSE

| DATE | REVISION |
|---|---|
| r8/15/17 | 4 SHEET DELETED |

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

# LILIHA STREET OVERPASS AT STA. 106+94± EB

## DEMO PLAN AND ELEVATION

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted Date: Mar. 2016

SHEET No. S7.2 OF 4 SHEETS

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

DRAWING NAME: Z:\OD ONGOING\12-0321-1-H1 GRAL & SHLDR IMPL ST TO PBWL PD WOC TA\01 CAD\07-22-20 ASB\H1G-MP-50702 STA.106+94 EB DEMO DELTA4-NC.DWG PLOT TIME: 07-23-20, 2:29 PM)

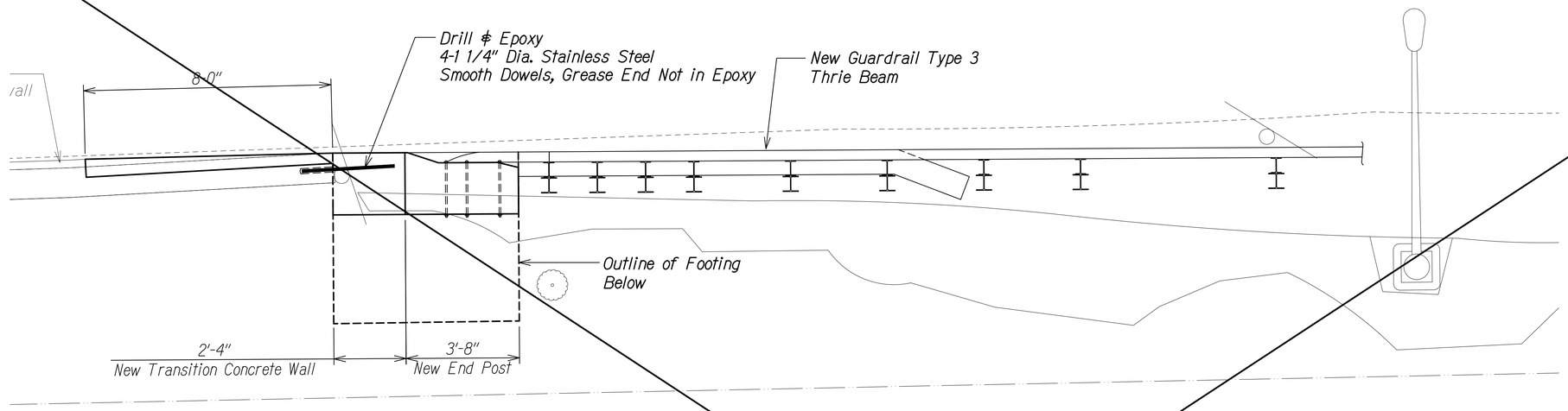
"AS-BUILT"

C.O. 150

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | C.O. 151 | 354 |

4

H-1 East Bound




PLAN (A S7.3 | S7.3)
Scale: 1/2" = 1'-0"

B S7.3|S0.18 Sim. | A S7.3|S0.18 | B S7.3|S0.17 Sim. | A S7.3|S0.17 Sim. | B S7.3|S7.4 Sim. | C S7.3|S7.4

N.I.C.

A S7.3|S0.19

Ref. Guardrail Connection Line and ℄
2-7/8" Dia. Thru Holes for 2-5/8" Dia.
Anchor Bolts w/ Cap Plate Nut and Washer

3'-8" | 2'-4 1/16"

New Transition Concrete Barrier

5-1" Dia. Thru Holes for
5-7/8" Dia. Anchor Bolts
w/ Cap Plate, Nut and Washer

Drill & Epoxy
4-1 1/4" Dia. Stainless Steel
Smooth Dowels, Grease End
Not in Epoxy

existing concrete
wall to remain

See Civil Drawings

25'-0" New Guardrail Type 3 Thrie Beam pay Limits

Top of Barrier to Match
Existing Top of Wall

℄ Thrie Beam

Concrete Curb

℄ "W" Beam

#3 FRP Bars

2-#3 FRP Cont.

3 Eq. Spc.

1'-9 5/8"

Finish Grade

6"

6"

Bottom of Concrete Curb

6'-3" Transition

4 Spcs. @ 3'-1 1/2 " = 12'-6"

4 Spcs. @
1'-6 3/4 " = 6'-3"

Limits of W6x15 Post & Spacer

12'-6" Double (Nested) Rail Element

1 Layer Roofing Felt

2'-0" | 1'-0"

ELEVATION (B S7.3 | S7.3)
Scale: 1/2" = 1'-0"

## 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 |

*Notes:*

1. The new end post and barrier is cast in place not precast.
2. Stainless steel dowels are used instead of MMFX$_2$ dowels.

| DATE | REVISION |
|---|---|
| r8/15/17 | 4 SHEET DELETED |

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

CALVIN T. MIYAMARA LICENSED PROFESSIONAL ENGINEER NO. 8133-S HAWAII, U.S.A.

SIGNATURE — 4-30-20 EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

# LILIHA STREET OVERPASS AT STA. 106+94± EB

## PLAN AND ELEVATION

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted — Date: Mar. 2016

SHEET No. S7.3 OF 4 SHEETS

ORIGINAL PLAN | NOTE BOOK No. ____

SURVEY PLOTTED BY
DRAWN BY
TRACED BY
DESIGNED BY
QUANTITIES BY
CHECKED BY
DATE

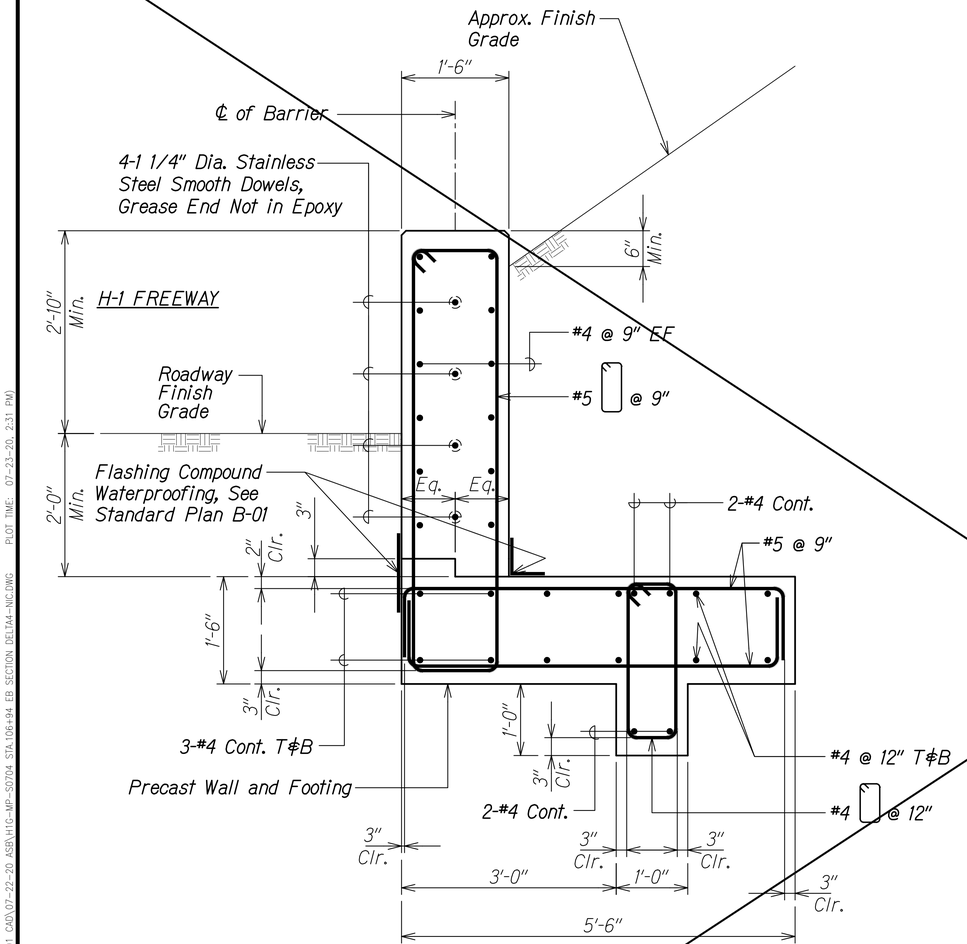
DRAWING NAME: Z:\OD ONGOING\12-032\1-H1 GRAIL & SHLDR MDL ST TO PBWL PD WOC TM\01 DAD\07-22-20 ASB\H1G-MP-50703 STA 106+94 EB PLAN DETAIL-NIC.DWG PLOT TIME: 07-23-20, 2:30 PM)

"AS-BUILT"

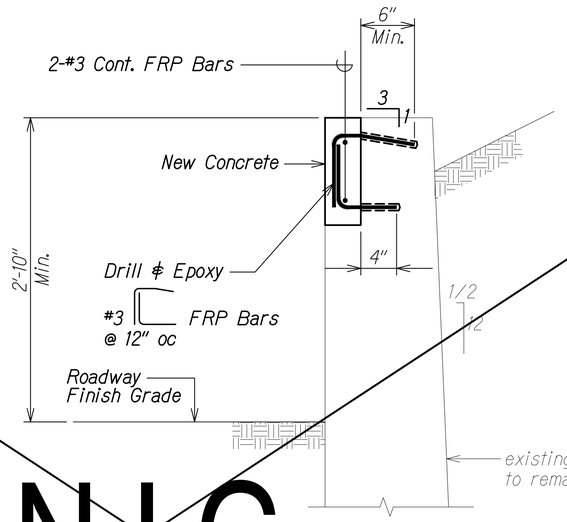
C.O. 151

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | C.O. 152 | 354 |

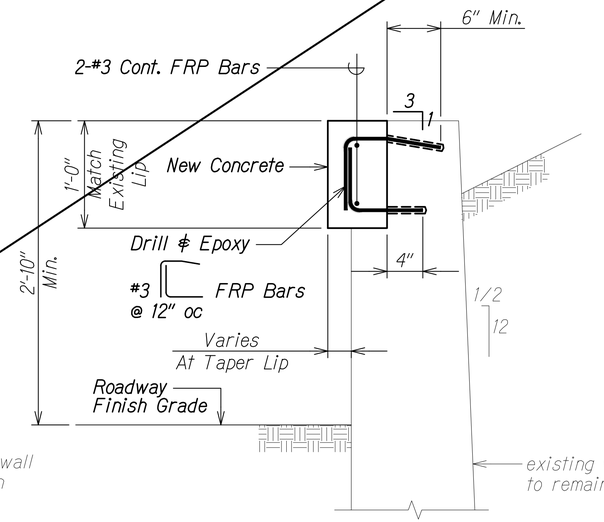
4




SECTION A
Scale: 1" = 1'-0"
S7.3 | S7.4




SECTION B
Scale: 1 1/2" = 1'-0"
S7.3 | S7.4




SECTION C
Scale: 1 1/2" = 1'-0"
S7.3 | S7.4

# N.I.C.

## 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 |

CALVIN T. MIYAMARA
LICENSED PROFESSIONAL ENGINEER
NO. 8133-S
HAWAII, U.S.A.

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4-30-20
SIGNATURE EXPIRATION DATE OF THE LICENSE

| DATE | REVISION |
|---|---|
| r8/15/17 | 4 SHEET DELETED |

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

# LILIHA STREET OVERPASS AT STA. 106+94± EB

## SECTIONS

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted Date: Mar. 2016

SHEET No. S7.4 OF 4 SHEETS

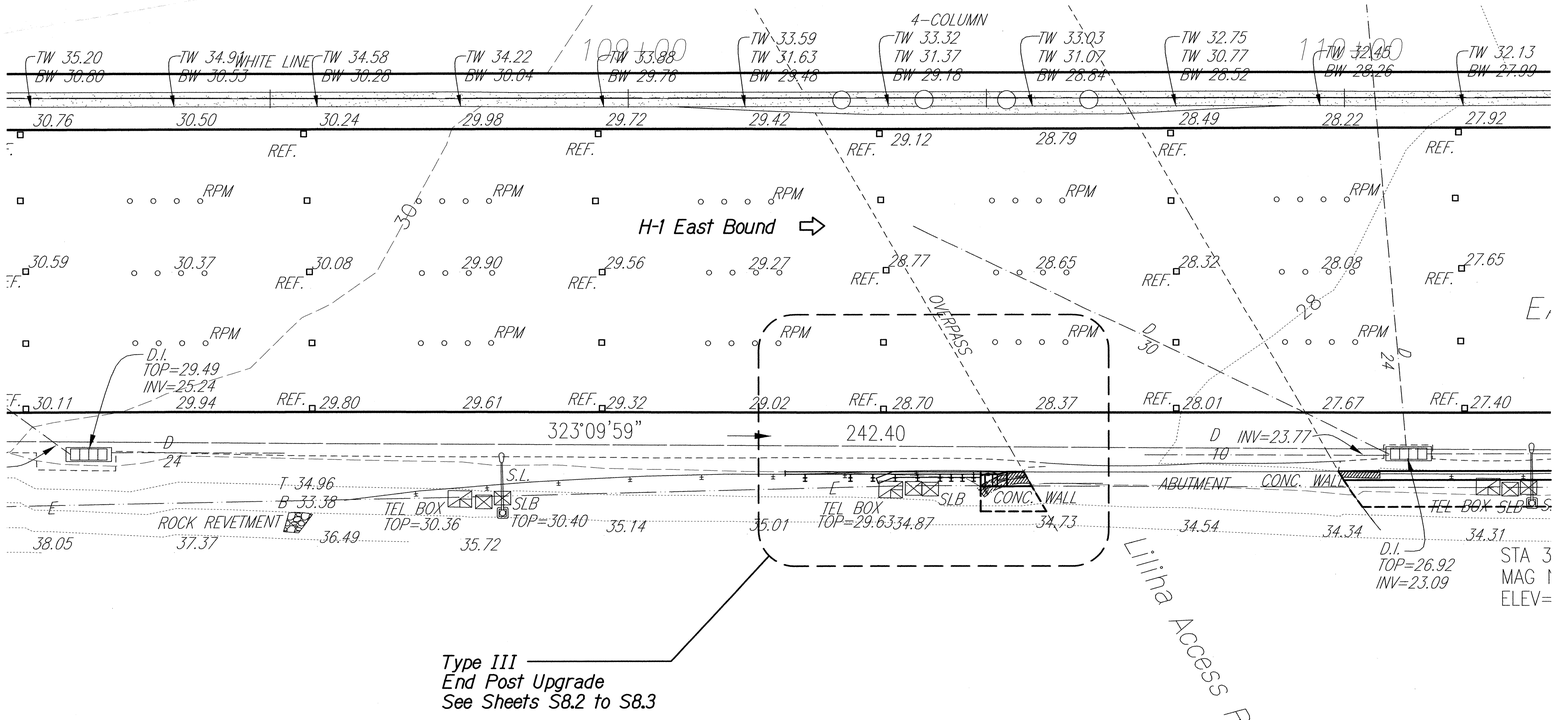
ORIGINAL PLAN
NOTE BOOK No.
SURVEY PLOTTED BY
DRAWN BY
TRACED BY
DESIGNED BY
QUANTITIES BY
CHECKED BY
DATE

DRAWING NAME: Z:\OD ONGOING\12-032\1-H1 GRAIL & SHLDR IMPL ST TO PBWL PD WDC TMK\01 CAD\07-22-20 ASR\H1G-MP-S0704 STA 106+94 EB SECTION DELTA1-NIC.DWG PLOT TIME: 07-23-20, 2:31 PM)

"AS-BUILT"

C.O. 152

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 153 | 354 |




Type III
End Post Upgrade
See Sheets S8.2 to S8.3

## LAYOUT PLAN

Scale: 1" = 10'-0"

A
S8.1 | S8.1

| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
|---|---|---|
| NOTE BOOK | DRAWN BY | |
| | TRACED BY | |
| | DESIGNED BY | |
| No. | QUANTITIES BY | |
| | CHECKED BY | |

DRAWING NAME: Z:\00 ONGOING\12-032-H1 GRAIL & SHLDR IMPV, ST TO PUNCHBOWL WOO\01 CAD\03-XX-16\H1C-MP-S0801 STA 109+49 EB.DWG PLOT TIME: 03-25-16, 3:04 PM

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CALVIN T. MIYAHARA
LICENSED PROFESSIONAL ENGINEER
NO. 8133-S
HAWAII, U.S.A.

4-30-18
SIGNATURE EXPIRATION DATE OF THE LICENSE

STATE OF HAWAI'I
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

# LILIHA STREET OVERPASS AT STA. 109+49± EB

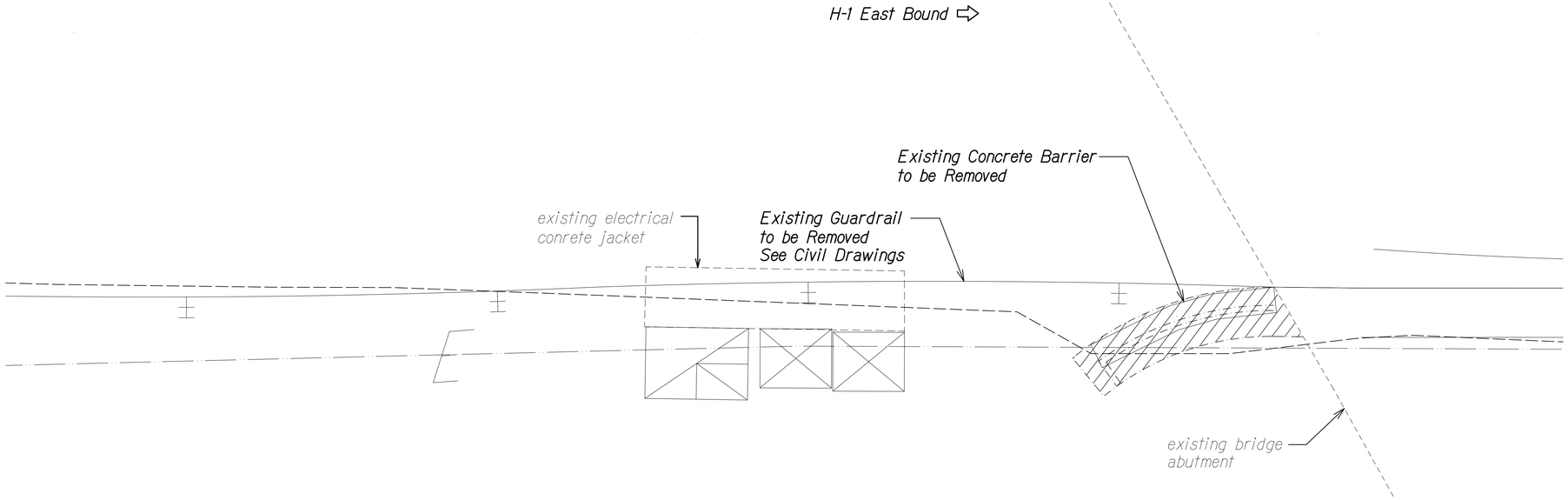
## LAYOUT PLAN

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

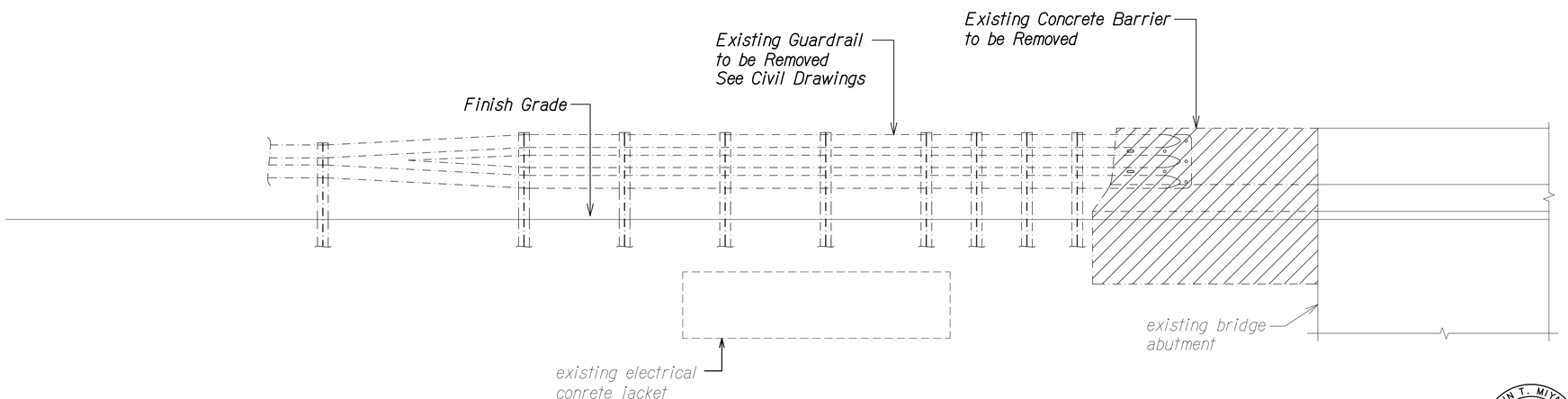
Scale: As Noted Date: Mar. 2016

SHEET No. S8.1 OF 3 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 154 | 354 |




DEMO PLAN (A) S8.2 | S8.2
Scale: 1/2" = 1'-0"




ELEVATION (B) S8.2 | S8.2
Scale: 1/2" = 1'-0"

| 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 |

CALVIN T. MIYAMASA
LICENSED PROFESSIONAL ENGINEER
NO. 8133-S
HAWAII, U.S.A.

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4-30-20
SIGNATURE EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

# LILIHA STREET OVERPASS AT STA. 109+49± EB

## DEMO PLAN AND ELEVATION

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted Date: Mar. 2016

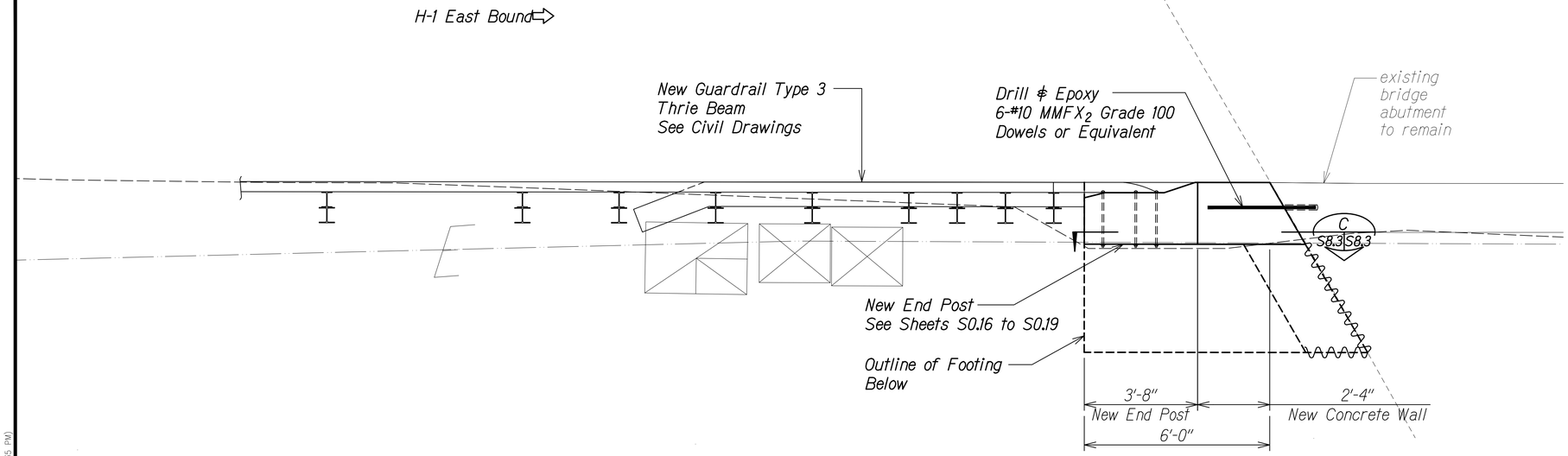
SHEET No. S8.2 OF 3 SHEETS

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

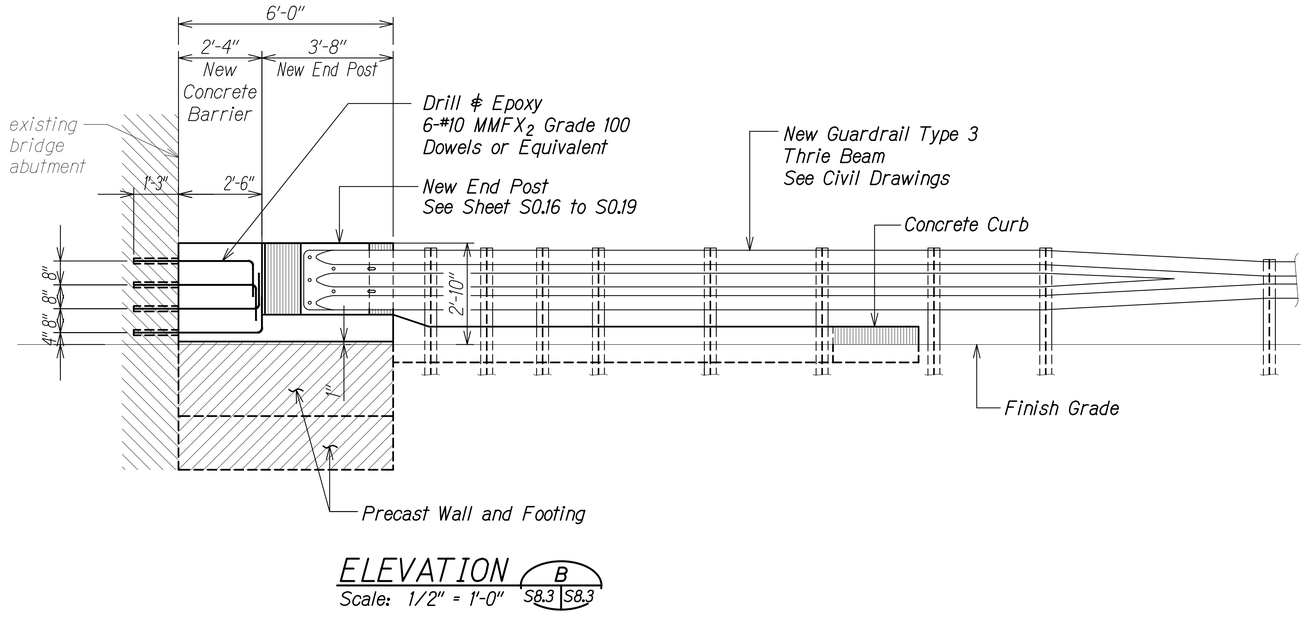
DRAWING NAME: Z:\OD ONGOING\12-032-1-H1 GR&L & SHLDR MDL ST TO PBWL PD WOC TM\01 CAD\07-27-20 ASB DWG\H1G-MP-S0892 STA 109+49 EB DEMO.DWG PLOT TIME: 07-27-20, 3:59 PM

"AS-BUILT"

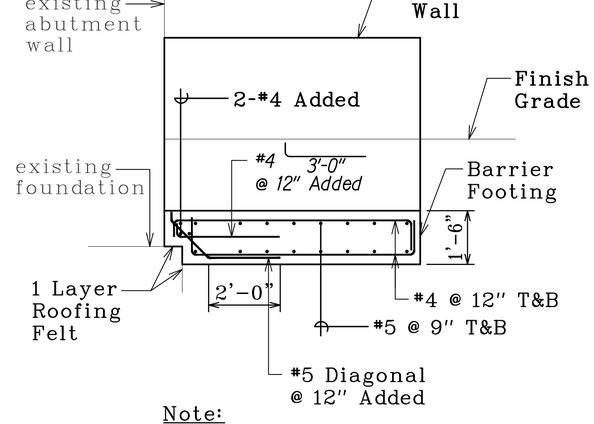
| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 155 | 354 |




PLAN
Scale: 1/2" = 1'-0" A S8.3 S8.3




ELEVATION
Scale: 1/2" = 1'-0" B S8.3 S8.3




Note:
Roughen and Clean all existing concrete surfaces where new concrete is poured against it.

SECTION
Scale: 1/2" = 1'-0" C S8.3 S8.3

## 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 |

| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
|---|---|---|
| NOTE BOOK | DRAWN BY | |
| No. | TRACED BY | |
| | DESIGNED BY | |
| | QUANTITIES BY | |
| | CHECKED BY | |

DRAWING NAME: Z:\OD ONGOING\12-032-1-H1 GRAL & SHLDR MDL ST TO PBWL PD WOS TM\01 CAD\07-22-20 ASB\H1G-MP-S0693 STA 109+49 EB PLAN.DWG PLOT TIME: 07-23-20, 2:35 PM)

CALVIN T. MIYAMARA
LICENSED PROFESSIONAL ENGINEER
NO. 8133-S
HAWAII, U.S.A.

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4-30-20
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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

# LILIHA STREET OVERPASS AT STA. 109+49± EB

## PLAN AND ELEVATION

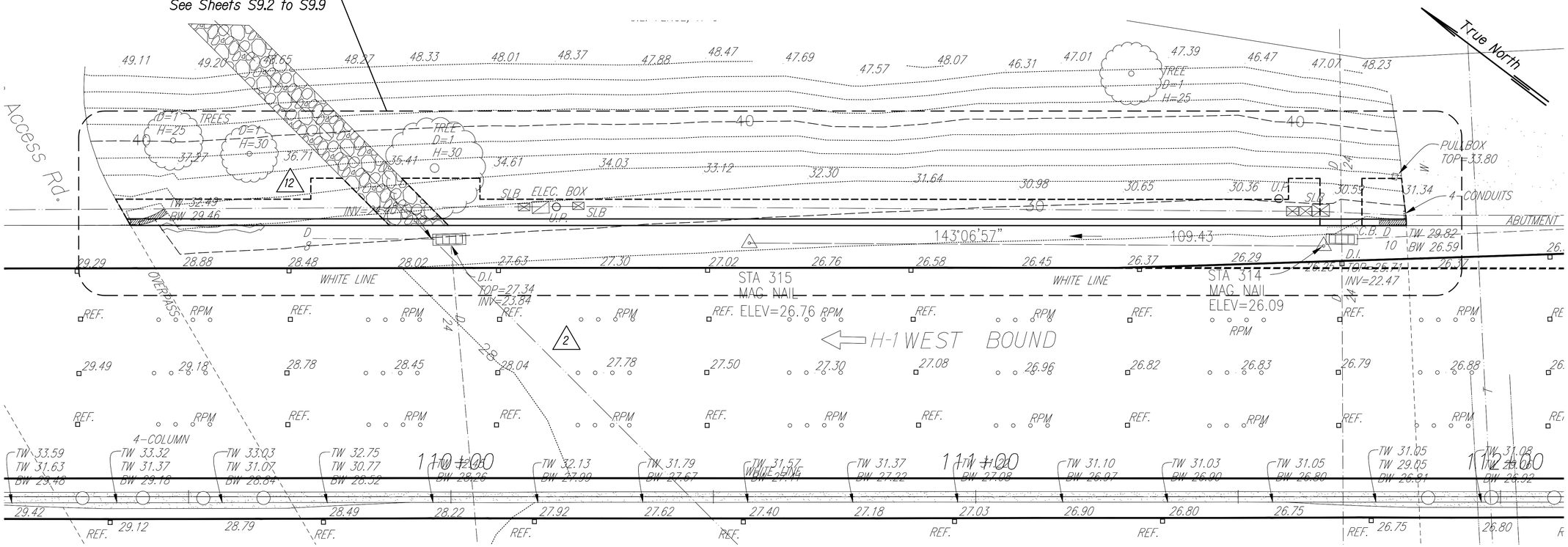
INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted Date: Mar. 2016

SHEET No. S8.3 OF 3 SHEETS

"AS-BUILT"

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | C.O. 156 | 354 |




## LAYOUT PLAN

Scale: 1" = 10'-0"

A S9.1 | S9.1

### 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 |

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CALVIN T. MIYAMARA
LICENSED PROFESSIONAL ENGINEER
NO. 8133-S
HAWAII, U.S.A.

4-30-20
SIGNATURE EXPIRATION DATE OF THE LICENSE

| DATE | REVISION |
|---|---|
| 6/5/19 | 12 C.O. - Revised Wall Footing |
| 12/15/16 | 2 Revised Exist. Elec. Line |

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**LILIHA STREET OVERPASS AT STA109+39± TO STA111+82± WB**

**LAYOUT PLAN**

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted Date: Mar. 2016

SHEET No. S9.1 OF 9 SHEETS

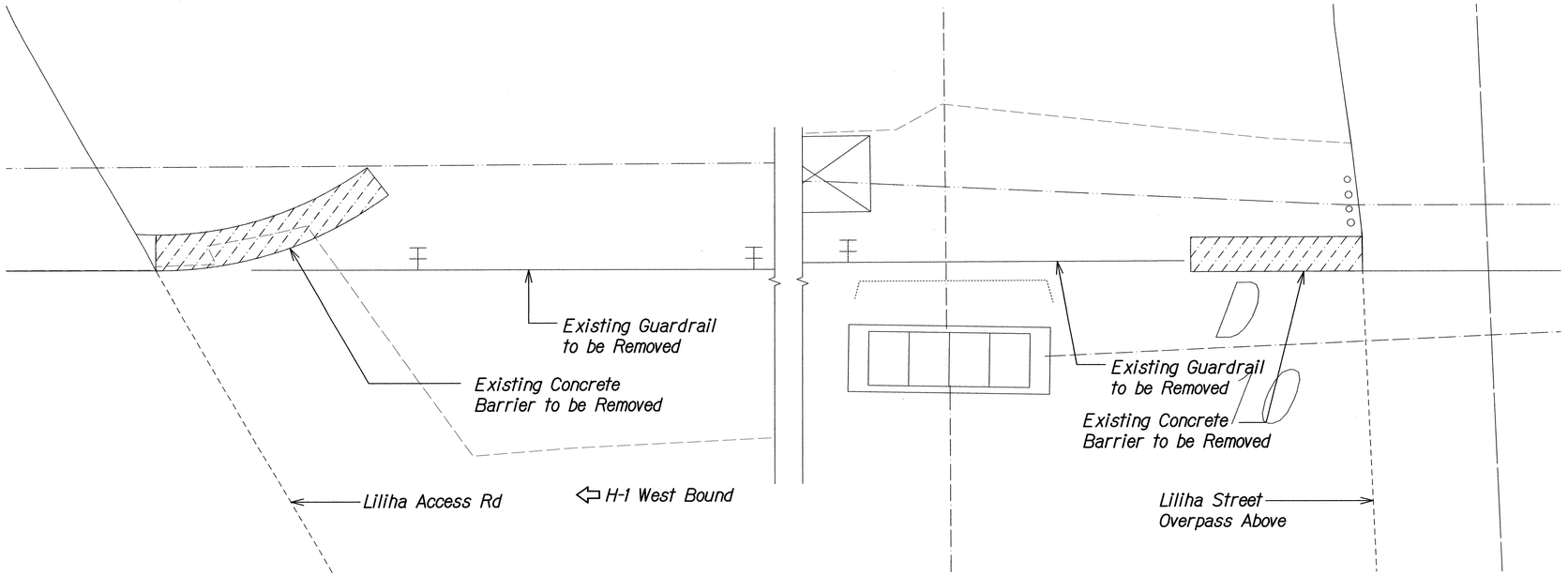
ORIGINAL PLAN | NOTE BOOK No. | SURVEY PLOTTED BY | DRAWN BY | TRACED BY | DESIGNED BY | QUANTITIES BY | CHECKED BY | DATE

DRAWING NAME: Z:\OD ONGOING\12-032;1-H1 GRNL & SHLDR MDL ST TO PBWL PD WOC TMO\01 CAD\07-22-20 ASB\H1G-MP-S0901 STA 109+39 TO STA 111+82 WB RETWALL DETAILS.DWG PLOT TIME: 07-23-20, 2:37 PM

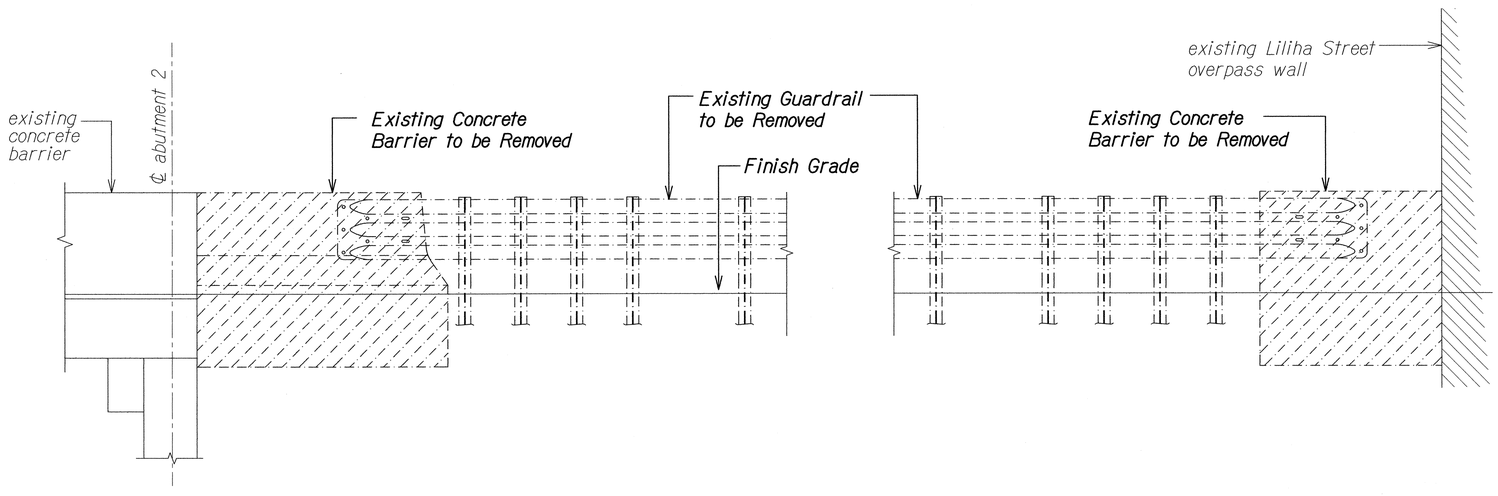
"AS-BUILT"

C.O. 156

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-H1-1(242) | 2016 | 157 | 354 |




DEMO PLAN (A) S9.2 | S9.2
Scale: 1/2" = 1'-0"




ELEVATION (B) S9.2 | S9.2
Scale: 1/2" = 1'-0"

| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
|---|---|---|
| NOTE BOOK | DRAWN BY | |
| No. | PLOTTED BY | |
| | DESIGNED BY | |
| | QUANTITIES BY | |
| | CHECKED BY | |

DRAWING NAME: 7\00 ONGOING\12-032-H1 GRAL & SHLDR MDL ST TO PUNCHBOWL WOO\01 CAD\03-XX-16\H1C-MP-S0902 STA.109+39 TO STA.111+82 WB DEMO.DWG PLOT TIME: 03-25-16, 1:41 PM)

CALVIN T. MIYAMARA
LICENSED PROFESSIONAL ENGINEER
NO. 8133-S
HAWAII, U.S.A.

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4-30-18
SIGNATURE EXPIRATION DATE OF THE LICENSE

STATE OF HAWAI'I
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

LILIHA STREET OVERPASS AT STA.109+39± TO STA.111+82± WB

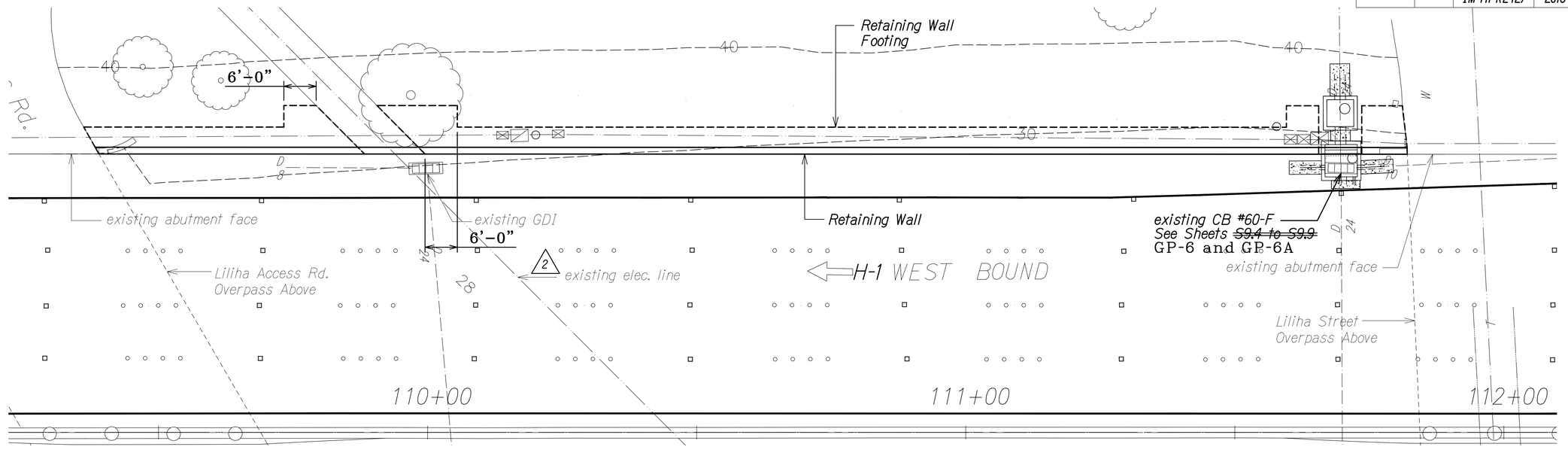
# DEMO PLAN AND ELEVATION

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-H1-1(242)

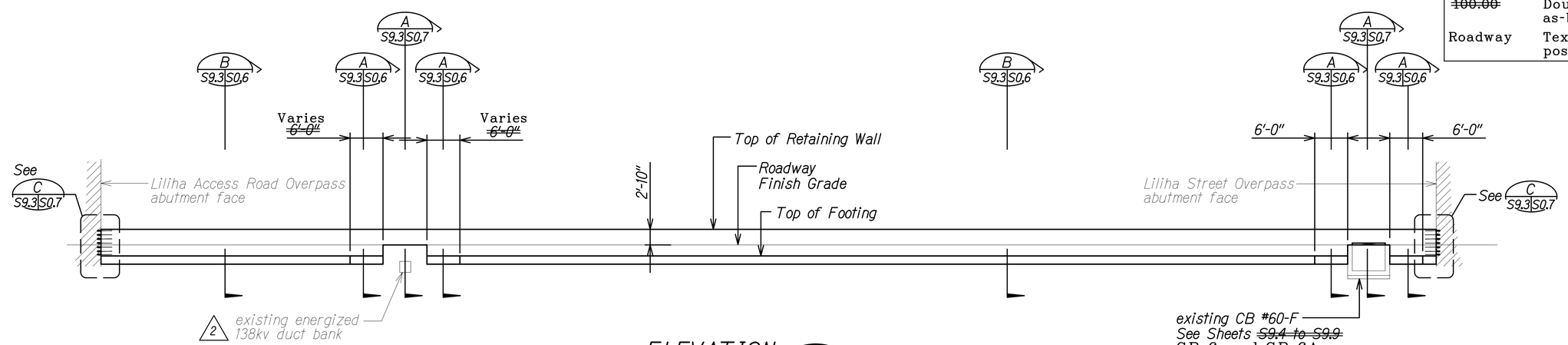
Scale: As Noted Date: Mar. 2016

SHEET No. S9.2 OF 9 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | C.O. 158 | 354 |




PLAN
Scale: 1" = 10'-0"




ELEVATION
Scale: 1" = 10'-0"

## 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 |

| DATE | REVISION |
|---|---|
| 6/5/19 | 12 C.O. - Revised Wall Footing |
| 12/15/16 | 2 Revised Exist. Elec. Line |

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CALVIN T. MIYAHARA LICENSED PROFESSIONAL ENGINEER NO. 8133-S HAWAII, U.S.A.

4-30-20
SIGNATURE EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**LILIHA STREET OVERPASS AT STA.109+39± TO STA.111+82± WB**

**PLAN AND ELEVATION**

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted Date: Mar. 2016

SHEET No. S9.3 OF 9 SHEETS

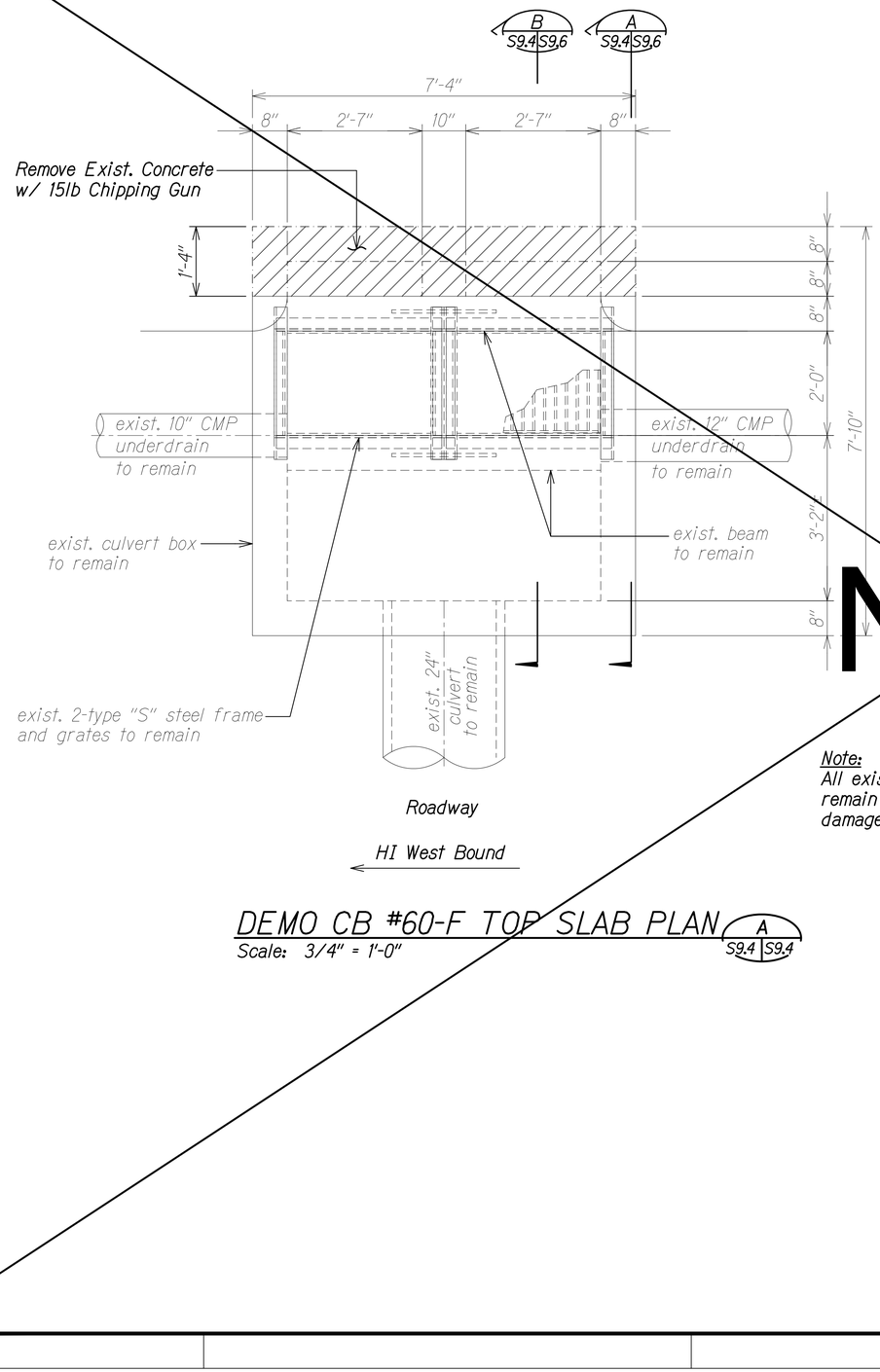
| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
|---|---|---|
| | DRAWN BY | |
| NOTE BOOK | TRACED BY | |
| No. | DESIGNED BY | |
| | QUANTITIES BY | |
| | CHECKED BY | |

PLOT TIME: 07-23-20, 2:39 PM)
DRAWING NAME: Z:\OD ONGOING\12-0321-1-HI GRAIL & SHLDR IMPL ST TO PBWL PD WOC NW.01 CAD\07-22-20 ASBUILT-MP-S9903 STA.109+39 TO STA.111+82 WB PLAN DELTA2.DWG

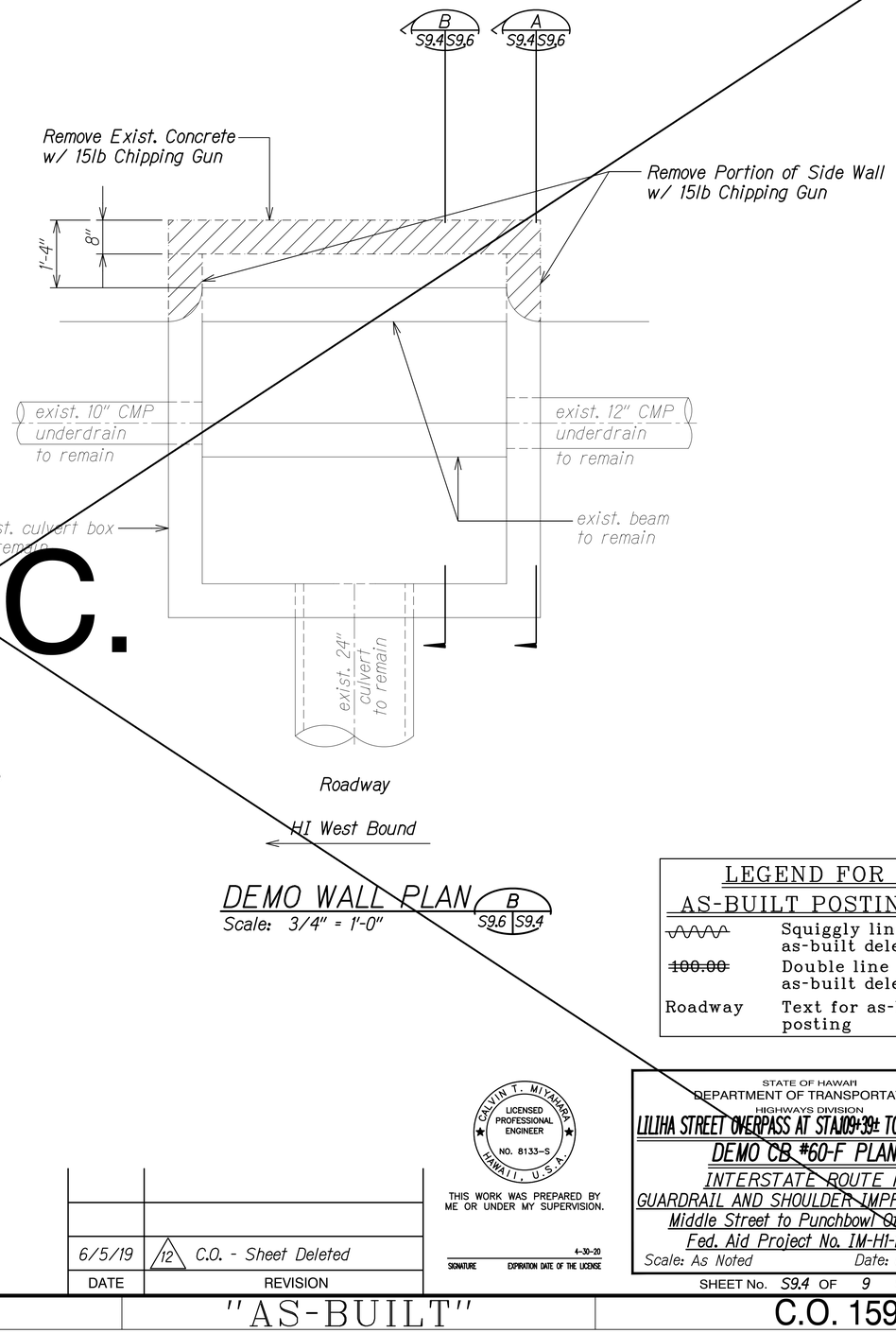
"AS-BUILT"

C.O. 158

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | C.O. 159 | 354 |




DEMO CB #60-F TOP SLAB PLAN (A S9.4 | S9.4)
Scale: 3/4" = 1'-0"




DEMO WALL PLAN (B S9.6 | S9.4)
Scale: 3/4" = 1'-0"

N.I.C.

*Note:*
*All existing culverts shall remain in place and not be damaged in anyway.*

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 |

| | |
|---|---|
| 6/5/19 | /12 C.O. - Sheet Deleted |
| DATE | REVISION |

CALVIN T. MIYAHARA LICENSED PROFESSIONAL ENGINEER NO. 8133-S HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

4-30-20
SIGNATURE EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
LILIHA STREET OVERPASS AT STA.109+39± TO STA.111+82± WB
DEMO CB #60-F PLANS
INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)
Scale: As Noted Date: Mar. 2016
SHEET No. S9.4 OF 9 SHEETS

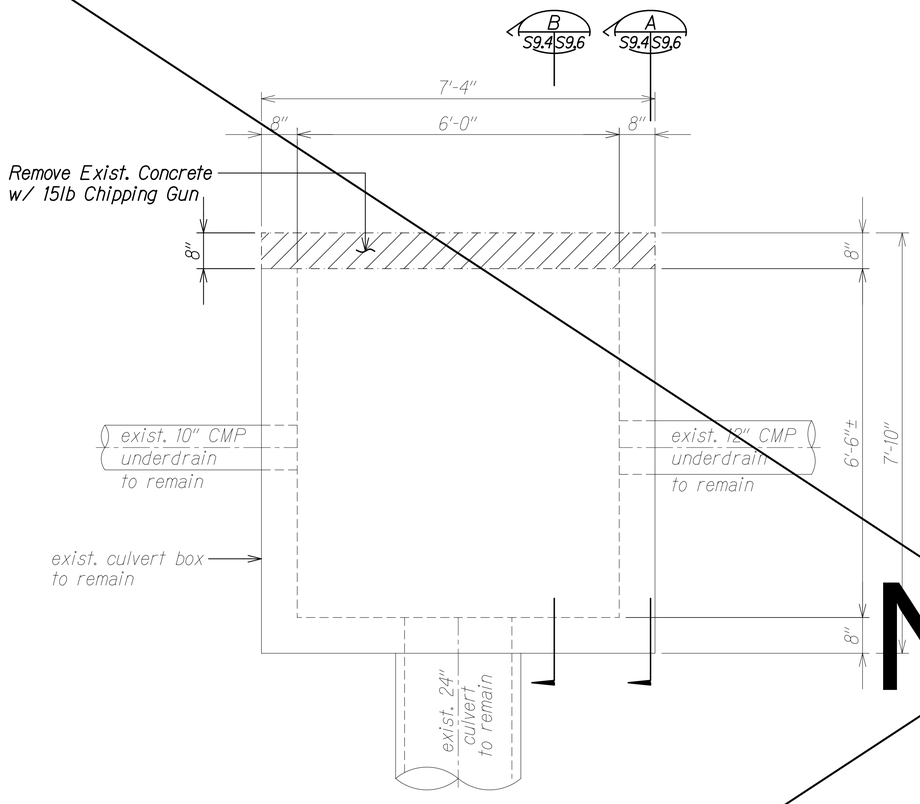
ORIGINAL PLAN | NOTE BOOK | No.
SURVEY PLOTTED BY
DRAWN BY
TRACED BY
DESIGNED BY
QUANTITIES BY
CHECKED BY
DATE

DRAWING NAME: Z:\OD ONGOING\12-0321-1-H1 GRAL & SHLDR MDL ST TO PBWL PD WOC TAX.01 C4D\07-22-20 ASB\V16-MP-59604 STA.109+39 TO STA.111+82 WB DEMO BOX.DWG PLOT TIME: 07-23-20, 2:39 PM

"AS-BUILT"

C.O. 159

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | C.O. 160 | 354 |




N.I.C.

## DEMO BOTTOM SLAB PLAN

A
S9.6 | S9.5

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

| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
|---|---|---|
| NOTE BOOK | DRAWN BY | |
| No. | TRACED BY | |
| | DESIGNED BY | |
| | QUANTITIES BY | |
| | CHECKED BY | |

DRAWING NAME: Z:\OD ONGOING\12-0321-1-H1 GRAL & SHLDR IMPL ST TO PBWL PD WOC TM\01 CAD\07-22-20 ASB\H1G-MP-50904 STA.109+39 TO STA.111+82 WB DEMO BOX.DWG PLOT TIME: 07-23-20, 2:40 PM

| DATE | REVISION |
|---|---|
| 6/5/19 | /12 C.O. - Sheet Deleted |

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 |

CALVIN T. MIYAHARA
LICENSED PROFESSIONAL ENGINEER
NO. 8133-S
HAWAII, U.S.A.

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SIGNATURE 4-30-20 EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

LILIHA STREET OVERPASS AT STA.109+39± TO STA.111+82± WB

DEMO CB #60-F PLAN

INTERSTATE ROUTE H-1

GUARDRAIL AND SHOULDER IMPROVEMENTS

Middle Street to Punchbowl Off-Ramp

Fed. Aid Project No. IM-HI-1(242)

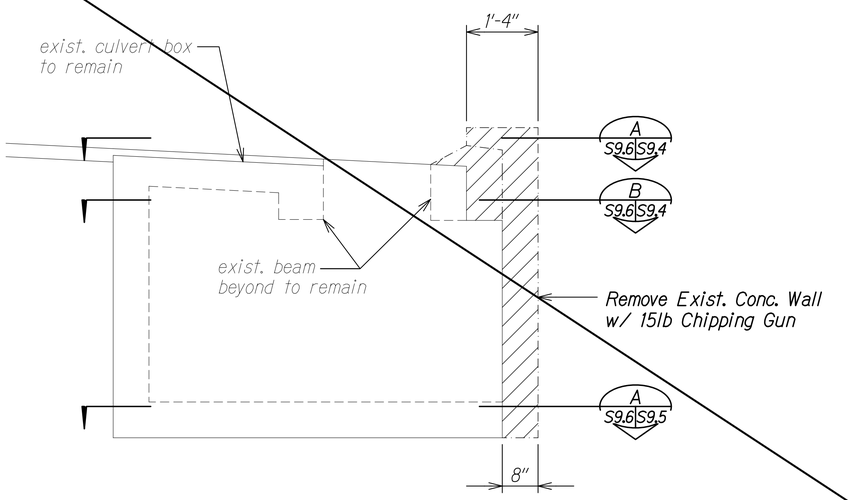
Scale: As Noted Date: Mar. 2016

SHEET No. S9.5 OF 9 SHEETS

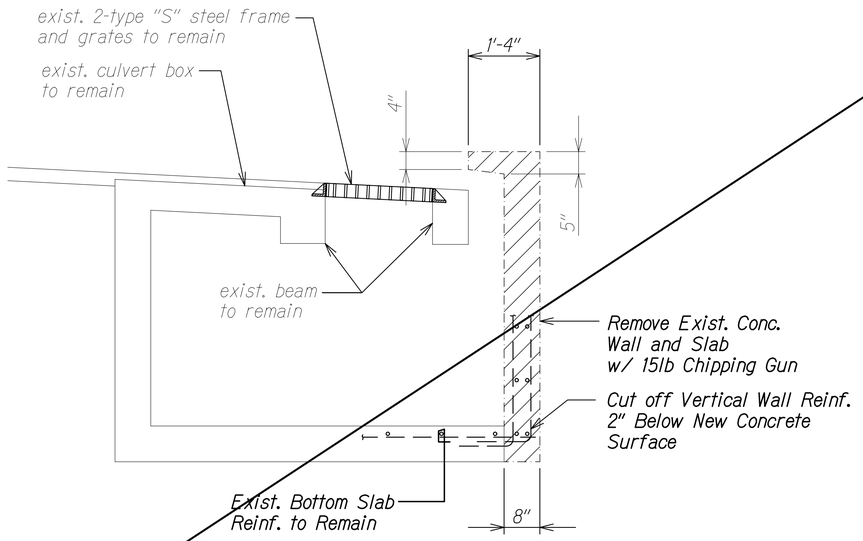
"AS-BUILT"

C.O. 160

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | C.O. 161 | 354 |




SECTION A S9.4 S9.6
Scale: 3/4" = 1'-0"




SECTION B S9.4 S9.6
Scale: 3/4" = 1'-0"

# N.I.C.

| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
|---|---|---|
| NOTE BOOK | DRAWN BY | |
| No. | TRACED BY | |
| | DESIGNED BY | |
| | QUANTITIES BY | |
| | CHECKED BY | |

DRAWING NAME: Z:\OD ONGOING\12-032.1-H1 ORAL & SHLDR MDL ST TO PBWL PD WDC TM\01 CAD\07-22-20 ASB\H1G-MP-S9B04 STA 109+39 TO STA 111+82 WB DEMO BOX.DWG PLOT TIME: 07-23-20, 2:40 PM

| DATE | REVISION |
|---|---|
| 6/5/19 | 12 C.O. - Sheet Deleted |

CALVIN T. MIYAHARA LICENSED PROFESSIONAL ENGINEER NO. 8133-S HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

4-30-20
SIGNATURE EXPIRATION DATE OF THE LICENSE

## 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 |

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

LILIHA STREET OVERPASS AT STA109+39± TO STA111+82± WB

DEMO CB #60-F SECTIONS

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

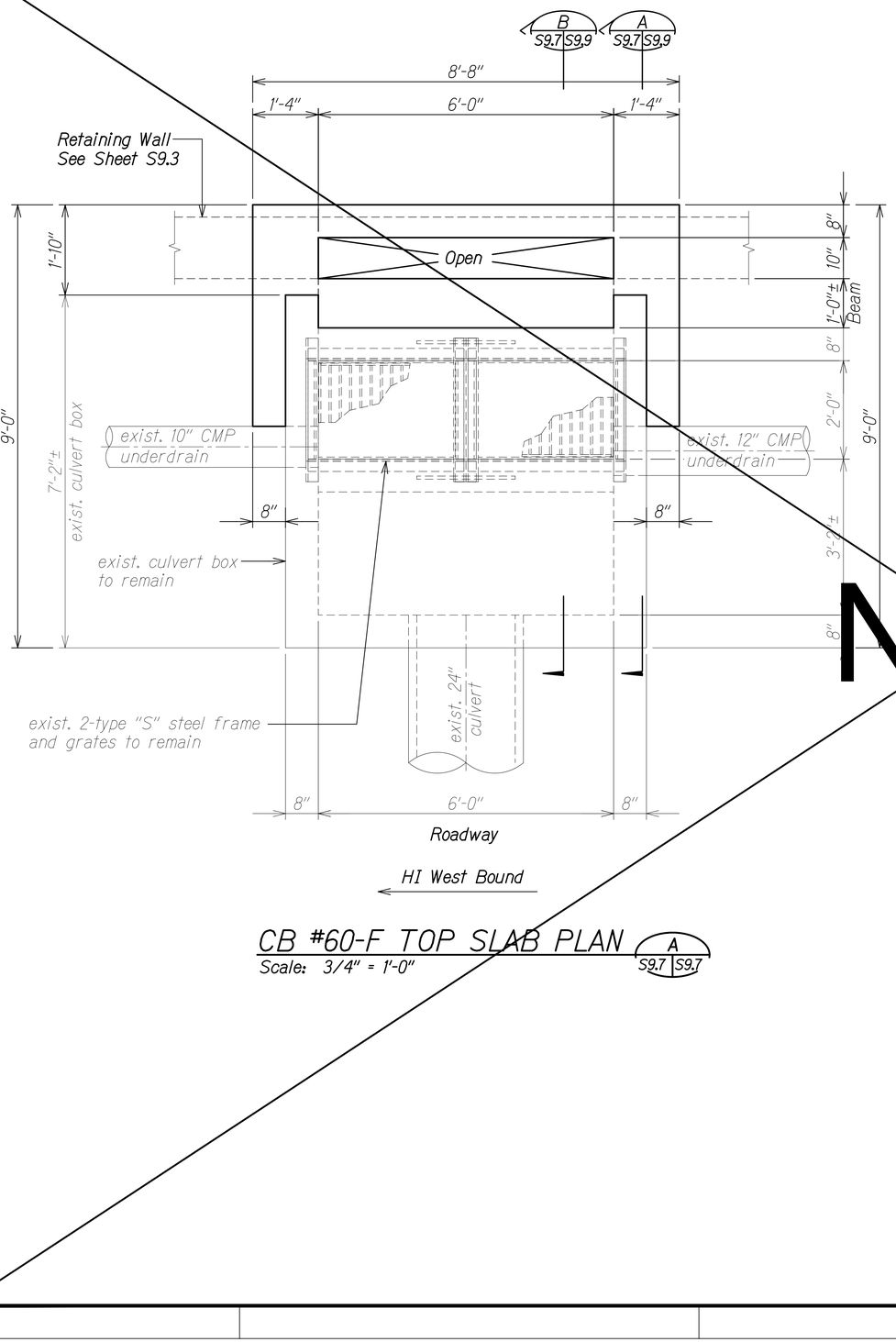
Scale: As Noted Date: Mar. 2016

SHEET No. S9.6 OF 9 SHEETS

"AS-BUILT"

C.O. 161

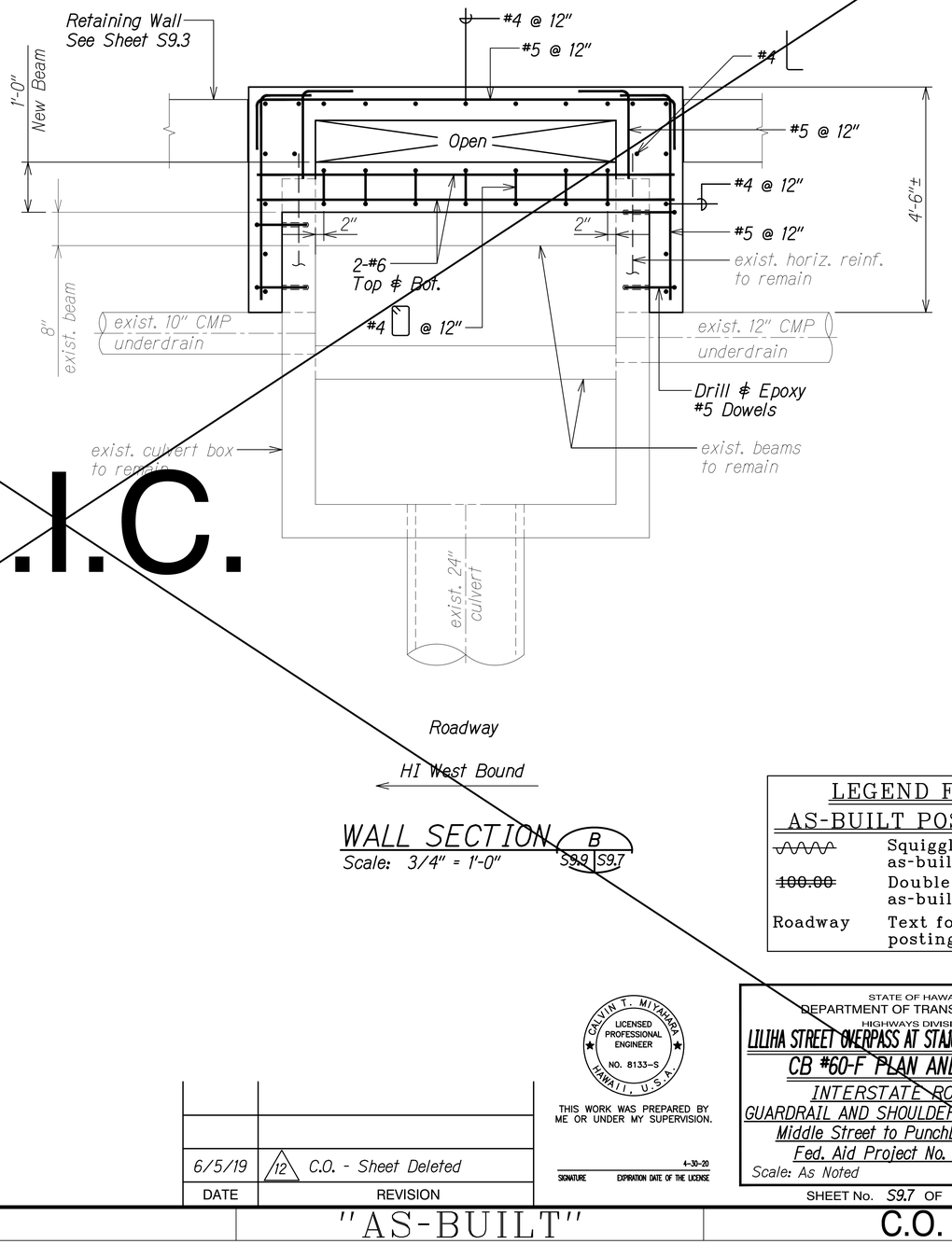
| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | C.O. 162 | 354 |




## CB #60-F TOP SLAB PLAN

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

A S9.7 | S9.7




## WALL SECTION

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

B S9.9 | S9.7

N.I.C.

| 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 |

| DATE | REVISION |
|---|---|
| 6/5/19 | /12 C.O. - Sheet Deleted |

CALVIN T. MIYAHARA
LICENSED PROFESSIONAL ENGINEER
NO. 8133-S
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

4-30-20
SIGNATURE EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

LILIHA STREET OVERPASS AT STA.109+39 TO STA.111+82± WB

CB #60-F PLAN AND SECTION

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted Date: Mar. 2016

SHEET No. S9.7 OF 9 SHEETS

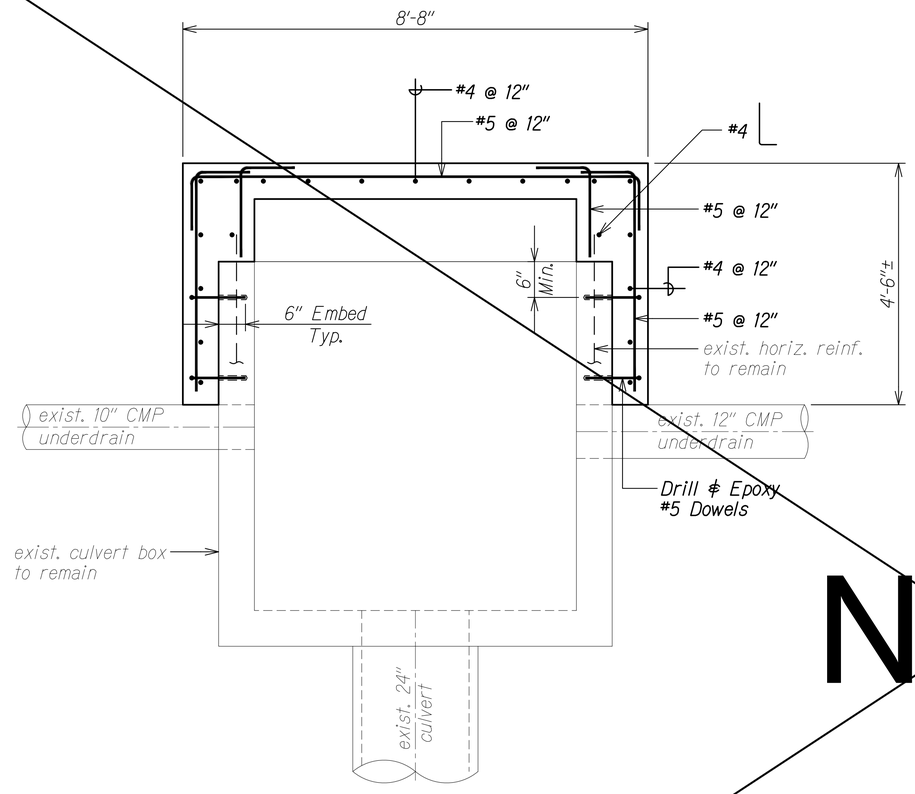
ORIGINAL PLAN | NOTE BOOK No. | SURVEY PLOTTED BY | DRAWN BY | TRACED BY | DESIGNED BY | QUANTITIES BY | CHECKED BY | DATE

DRAWING NAME: Z:\OD ONGOING\12-032\1-H1 GRAIL & SHLDR MDL ST TO PBWL PD WOC TM\01 CAD\07-22-20 ASBUILT\G-MP-S7907 STA.109+39 TO STA.111+82 WB PLAN.DWG PLOT TIME: 07-23-20, 2:41 PM

"AS-BUILT"

C.O. 162

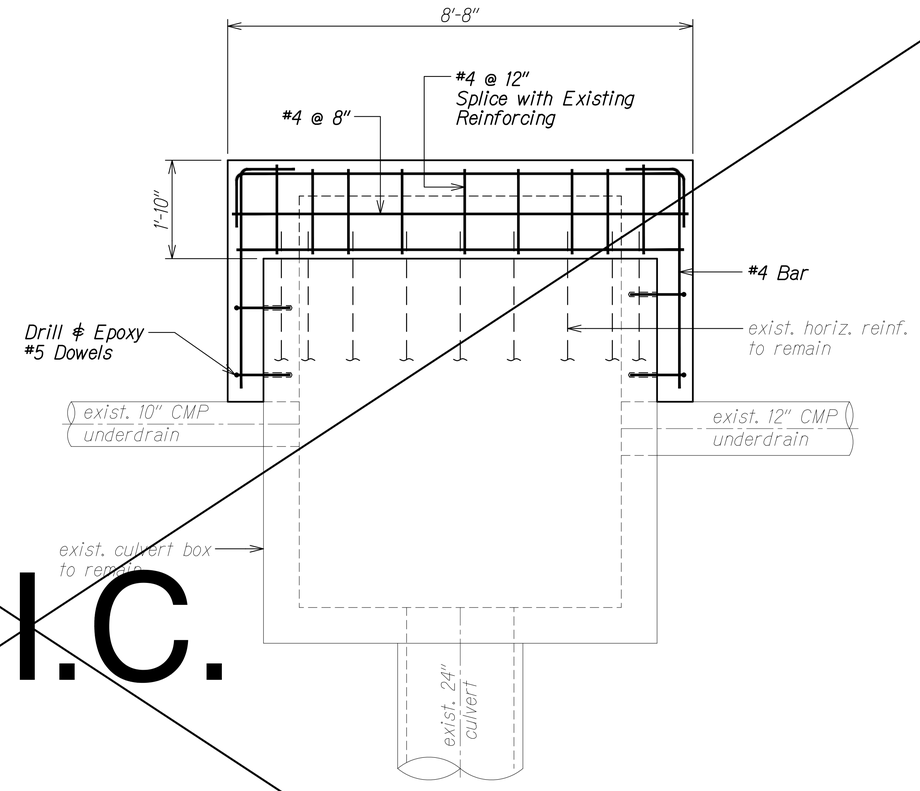
| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | C.O. 163 | 354 |




## WALL REINFORCING SECTION

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

A S9.9 | S9.8




## BOTTOM SLAB REINFORCING SECTION

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

B S9.9 | S9.8

# N.I.C.

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 |

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

| DATE | REVISION |
|---|---|
| 6/5/19 | 12 C.O. - Sheet Deleted |

CALVIN T. MIYAMURA LICENSED PROFESSIONAL ENGINEER NO. 8133-S HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

4-30-20
SIGNATURE EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

LILIHA STREET OVERPASS AT STA.109+39 TO STA.111+82± WB
CB #68-F SECTIONS
INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted Date: Mar. 2016

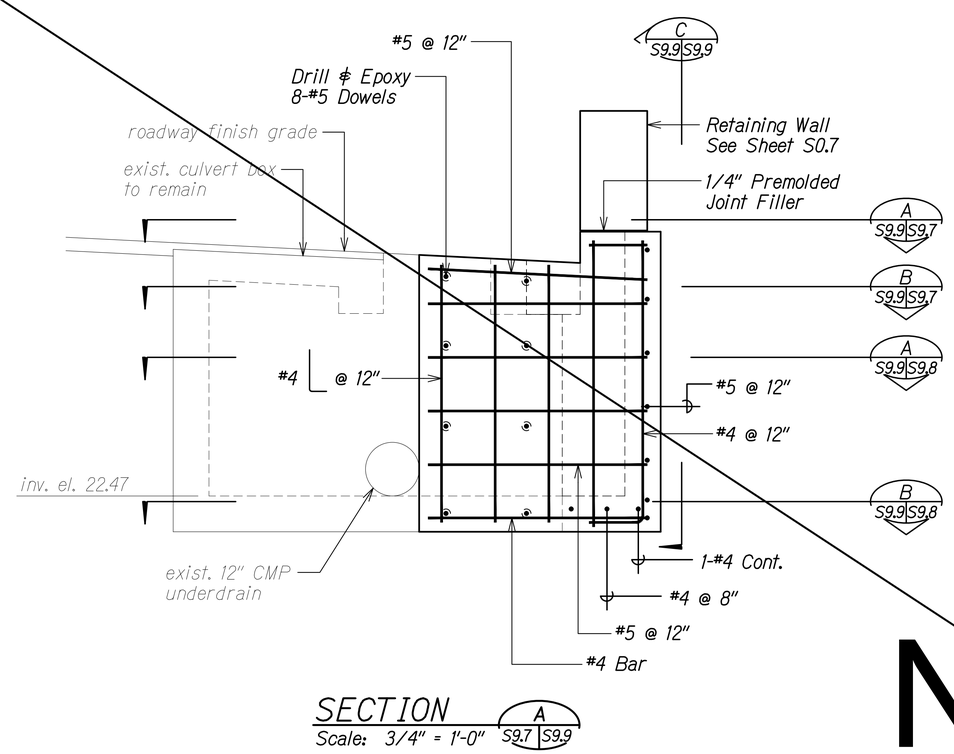
SHEET No. S9.8 OF 9 SHEETS

"AS-BUILT"

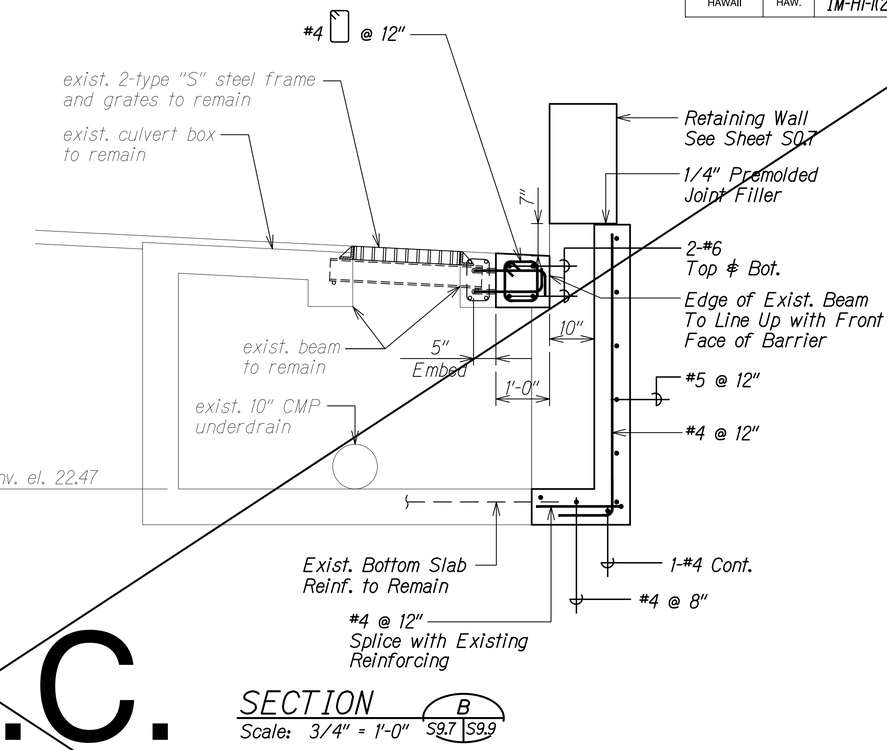
C.O. 163

DRAWING NAME: Z:\OD ONGOING\12-0321-1-H1 GRAL & SHLDR IMPL ST TO PBWL PD WDC TW\01 CAD\07-22-20 ASBUILT\16-MP-S9907 STA.109+39 TO STA.111+82 WB PLAN.DWG PLOT TIME: 07-23-20, 2:41 PM

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | C.O. 164 | 354 |

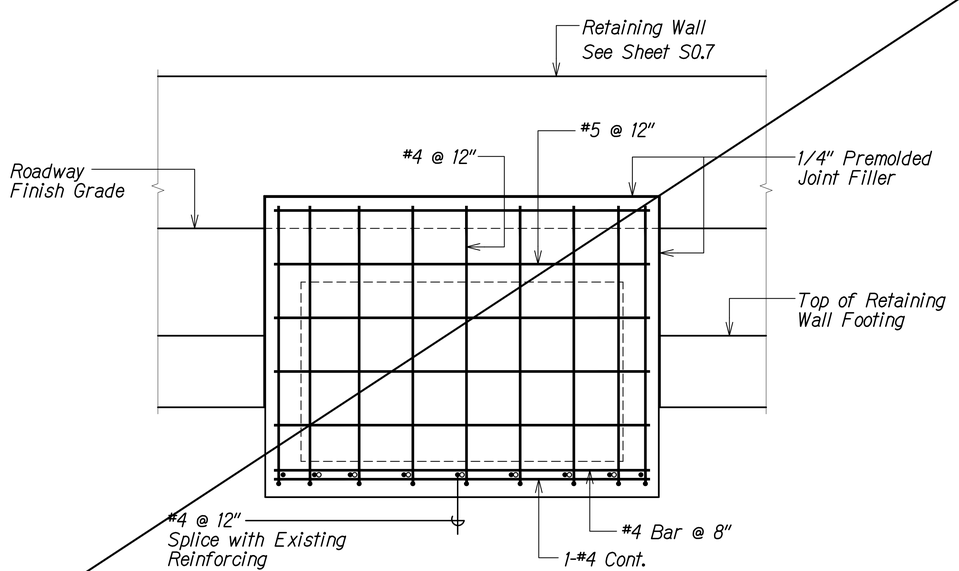



SECTION A
Scale: 3/4" = 1'-0" S9.7 S9.9




SECTION B
Scale: 3/4" = 1'-0" S9.7 S9.9

N.I.C.




SECTION C
Scale: 3/4" = 1'-0" S9.9 S9.9

| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
|---|---|---|
| NOTE BOOK | DRAWN BY | |
| No. | TRACED BY | |
| | DESIGNED BY | |
| | QUANTITIES BY | |
| | CHECKED BY | |

DRAWING NAME: Z:\OD DNGN\OA\12-032-1-H1 GRAL & SHLDR IMPL ST TO PBWL PD WOS TM\01 CAD\07-22-20 ASBUILT\G-MP-S9907 STA 109+39 TO STA 111+82 WB PLAN.DWG PLOT TIME: 07-23-20, 2:42 PM

| DATE | REVISION |
|---|---|
| 6/5/19 | 12 C.O. - Sheet Deleted |

CALVIN T. MIYAHARA LICENSED PROFESSIONAL ENGINEER NO. 8133-S HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

SIGNATURE 4-30-20 EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

LILIHA STREET OVERPASS AT STA109+39 TO STA111+82± WB
CB #60-F SECTIONS
INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted Date: Mar. 2016

SHEET No. S9.9 OF 9 SHEETS

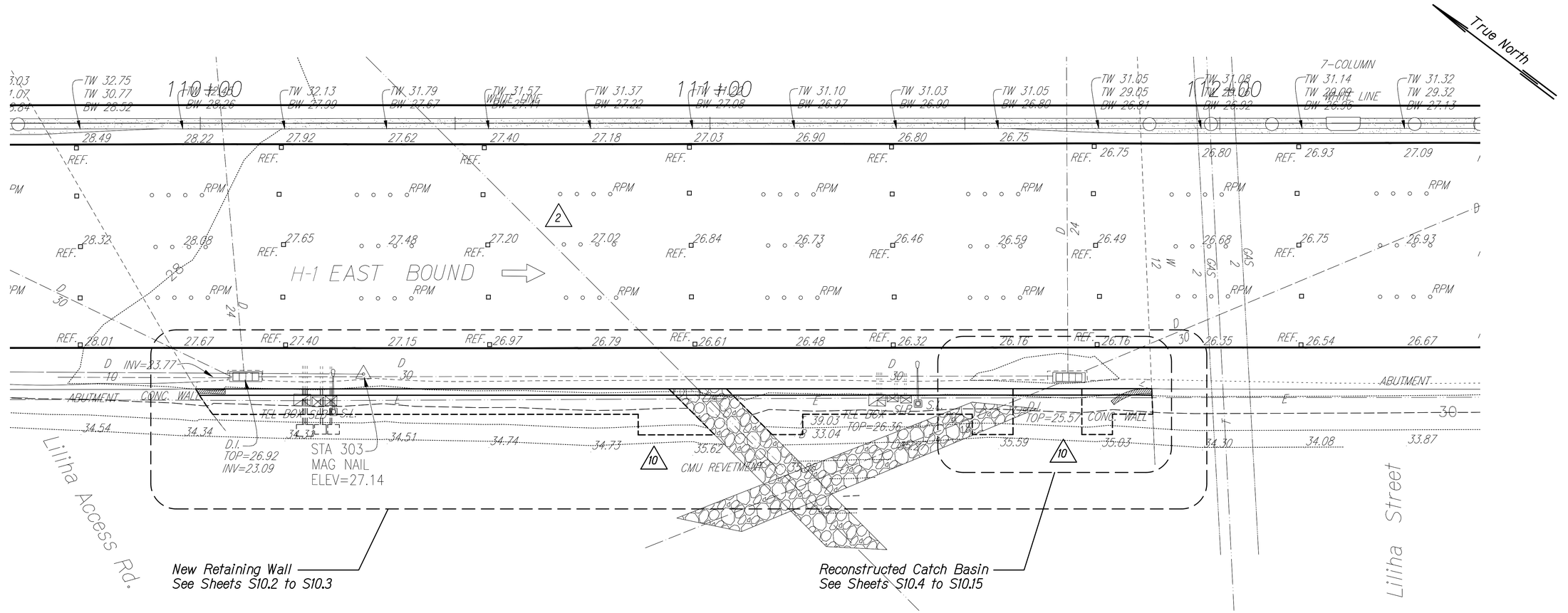
## LEGEND FOR AS-BUILT POSTINGS

| | |
|---|---|
| ~~~~ | Squiggly line for as-built deletion |
| ~~100.00~~ | Double line for as-built deletion |
| Roadway | Text for as-built posting |

"AS-BUILT"

C.O. 164

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | C.O. 165 | 354 |




## LAYOUT PLAN

Scale: 1" = 10'-0"

A S10.1 | S10.1

| SURVEY PLOTTED BY | DATE |
|---|---|
| DRAWN BY | |
| TRACED BY | |
| DESIGNED BY | |
| QUANTITIES BY | |
| CHECKED BY | |

ORIGINAL PLAN

NOTE BOOK No.

DRAWING NAME: Z:\OD ONGOING\12-0321-H1 GRAL & SHLDR MDL ST TO PBWL PD WOC TMK\01 CAD\07-22-20 ASBUILT-MP-S1001 STA 109+99 TO STA. 111+87 EB RETWALL DELTA.DWG PLOT TIME: 07-23-20, 2:43 PM)

## 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 |

CALVIN T. MIYAHARA
LICENSED PROFESSIONAL ENGINEER
NO. 8133-S
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

4-30-20
SIGNATURE EXPIRATION DATE OF THE LICENSE

| DATE | REVISION |
|---|---|
| 11-28-18 | 10 Revised Wall Footing & Reconstructed Catch Basin |
| 12/15/16 | 2 Revised Exist. Elec. Line |

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**LILIHA STREET OVERPASS AT STA.109+99 TO STA. 111+87± EB**

**LAYOUT PLAN**

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

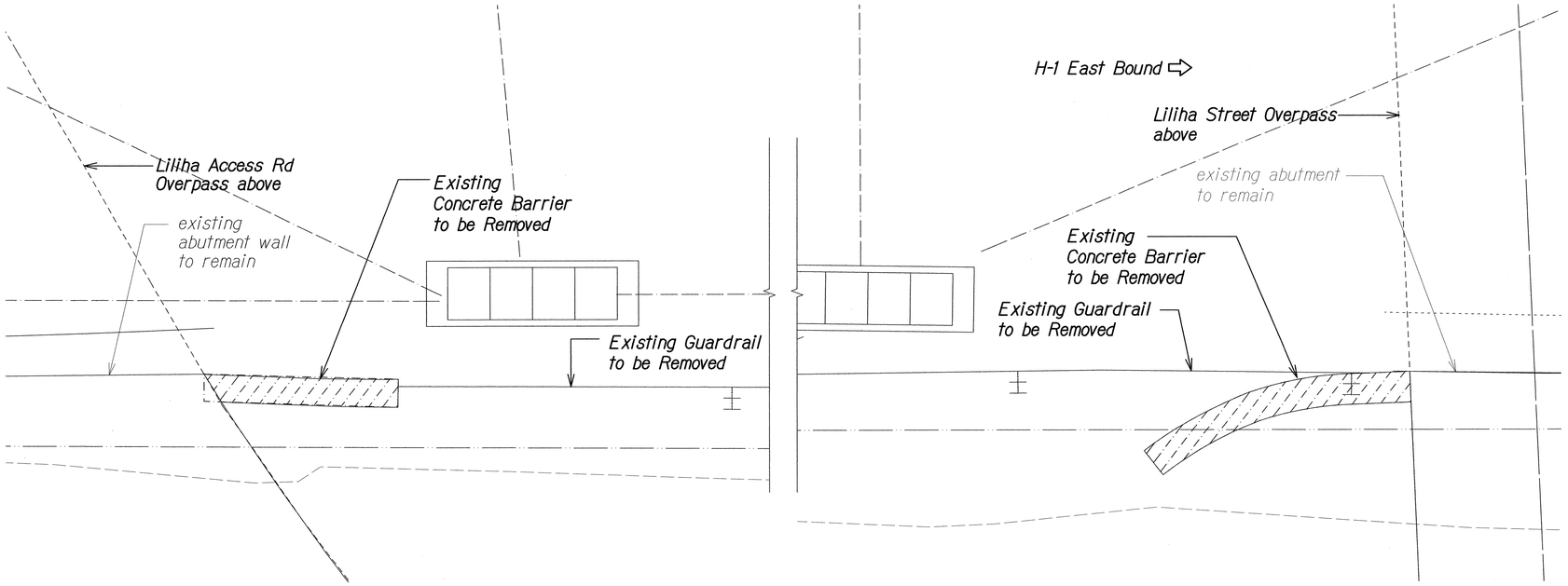
Scale: As Noted Date: Mar. 2016

SHEET No. S10.1 OF 8 SHEETS

"AS-BUILT"

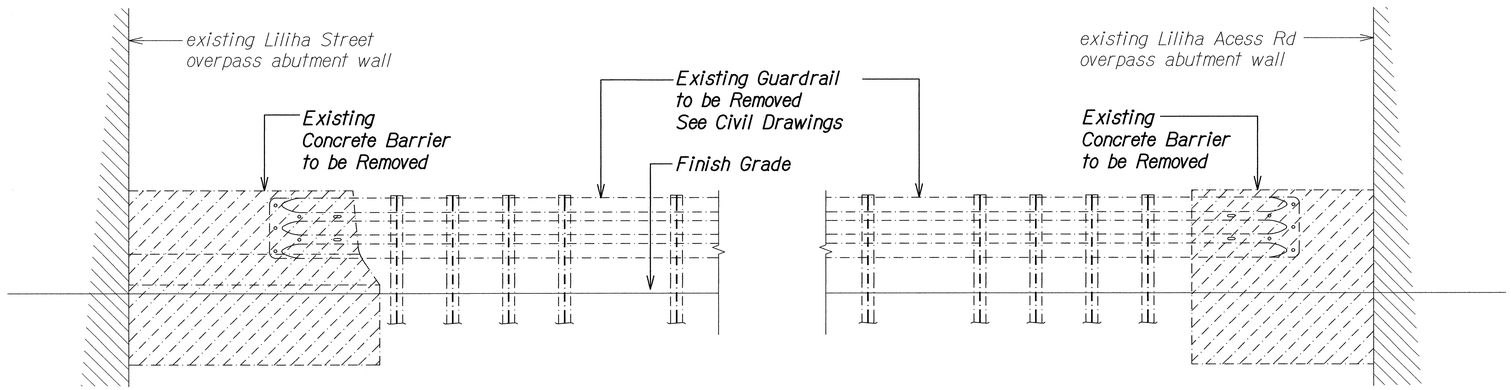
C.O. 165

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 166 | 354 |




## DEMO PLAN (A) S10.2 | S10.2

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




## ELEVATION (B) S10.2 | S10.2

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

| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
|---|---|---|
| NOTE BOOK | DRAWN BY | |
| No. | TRACED BY | |
| | DESIGNED BY | |
| | QUANTITIES BY | |
| | CHECKED BY | |

DRAWING NAME: Z:\OD ONGOING\12-032-H1 ORAL & SHLDR MDL ST TO PUNCHBOWL WOO\01 CAD\03-XX-16\H1G-MP-S1002 STA 109+99 TO STA 111+87 EB DEMO.DWG PLOT TIME: 03-25-16, 1:59 PM)

CALVIN T. MIYAMURA LICENSED PROFESSIONAL ENGINEER NO. 8133-S HAWAII, U.S.A.

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4-30-18
SIGNATURE EXPIRATION DATE OF THE LICENSE

STATE OF HAWAI'I
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**LILIHA STREET OVERPASS AT STA.109+99 TO STA. 111+87± EB**

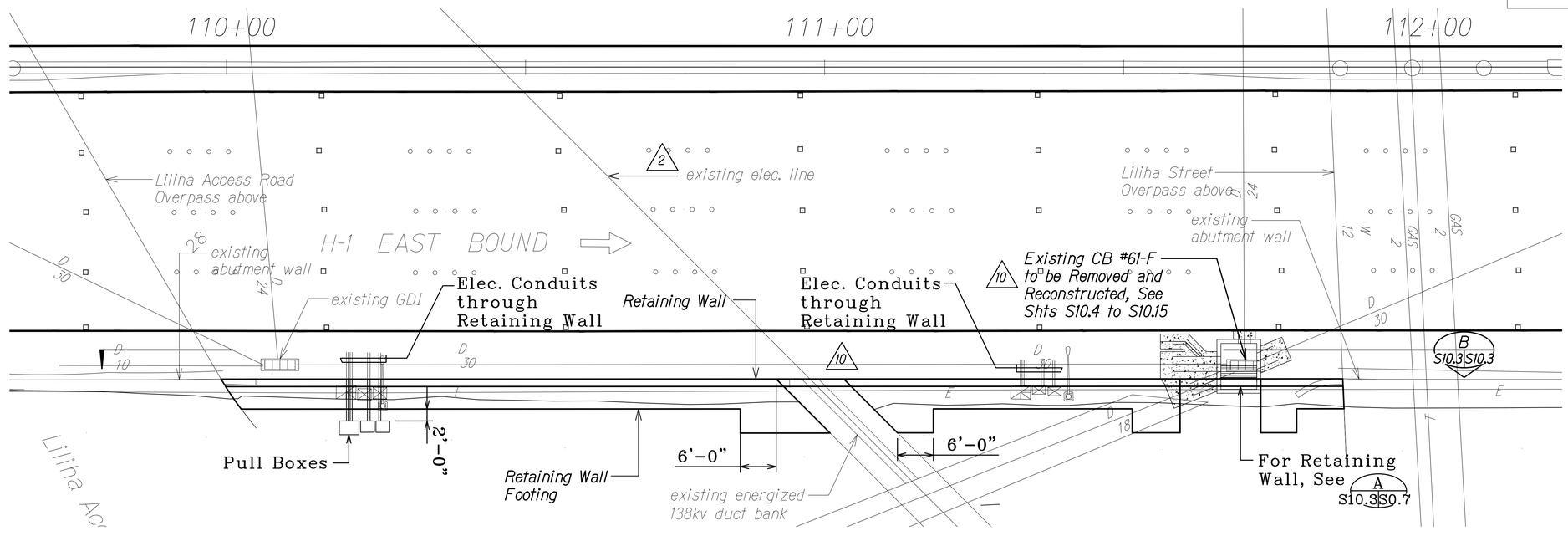
**DEMO PLAN AND ELEVATION**

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

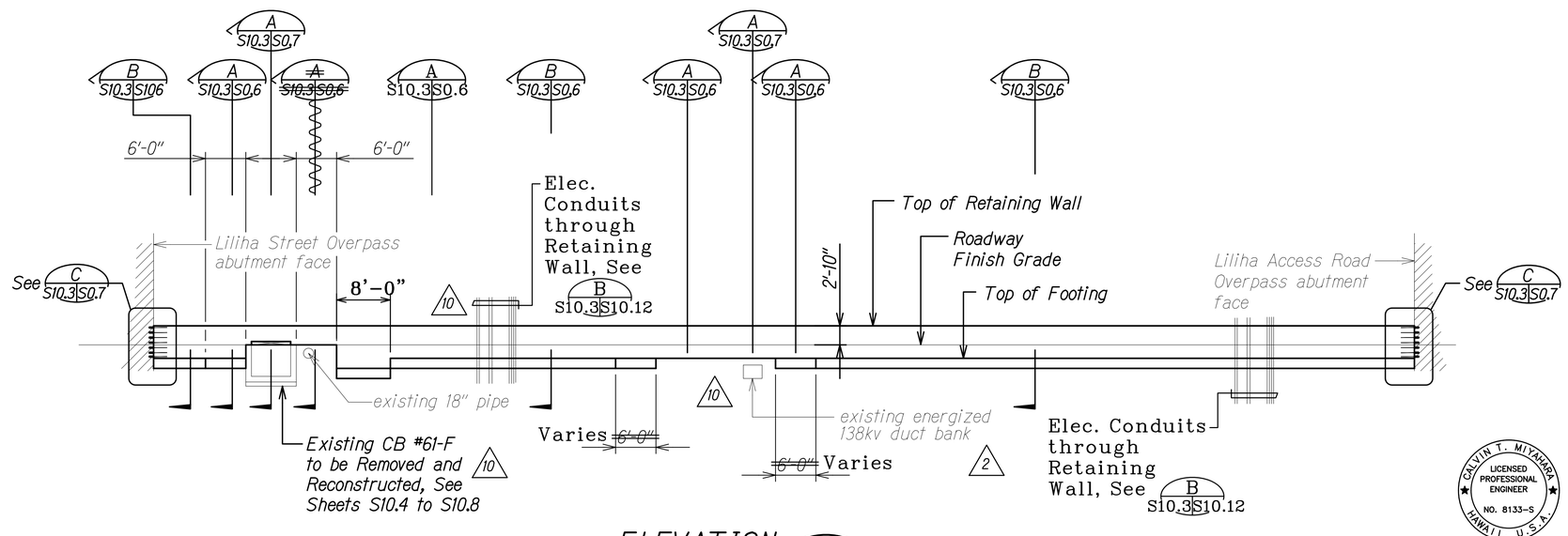
Scale: As Noted Date: Mar. 2016

SHEET No. S10.2 OF 8 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | C.O. 167 | 354 |




PLAN Scale: 1" = 10'-0" (A S10.3 | S10.3)




ELEVATION Scale: 1" = 10'-0" (B S10.3 | S10.3)

## LEGEND FOR AS-BUILT POSTINGS

| | |
|---|---|
| ~~squiggly~~ | Squiggly line for as-built deletion |
| ~~100.00~~ | Double line for as-built deletion |
| Roadway | Text for as-built posting |

| DATE | REVISION |
|---|---|
| 11/28/18 | 10 Revised Retaining Wall & Reconstructed Catch Basin |
| 12/15/16 | 2 Revised Exist. Elec. Line |

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**LILIHA STREET OVERPASS AT STA109+99 TO STA. 111+87± EB**

**PLAN AND ELEVATION**

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted Date: Mar. 2016

SHEET No. S10.3 OF 8 SHEETS

CALVIN T. MIYAMARA — LICENSED PROFESSIONAL ENGINEER — NO. 8133-S — HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

4-30-20
SIGNATURE EXPIRATION DATE OF THE LICENSE

ORIGINAL PLAN | NOTE BOOK No. ____

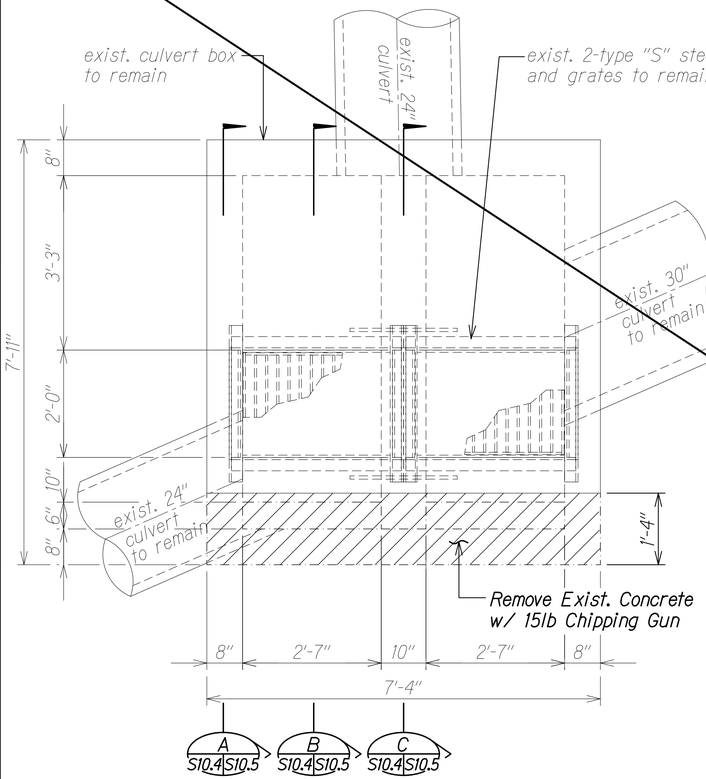
SURVEY PLOTTED BY
DRAWN BY
TRACED BY
DESIGNED BY
QUANTITIES BY
CHECKED BY
DATE

DRAWING NAME: Z:\JOB ONGOING\12-0321-1-HI GRAL & SHLDR IMPL ST TO PBWL PD WOC TM\01 C4D\07-22-20 ASB\V16-MP-51603 STA.109+99 TO STA. 111+87 EB PLAN DELTA2 RF022.DWG PLOT TIME: 07-23-20, 2:45 PM

"AS-BUILT"

C.O. 167

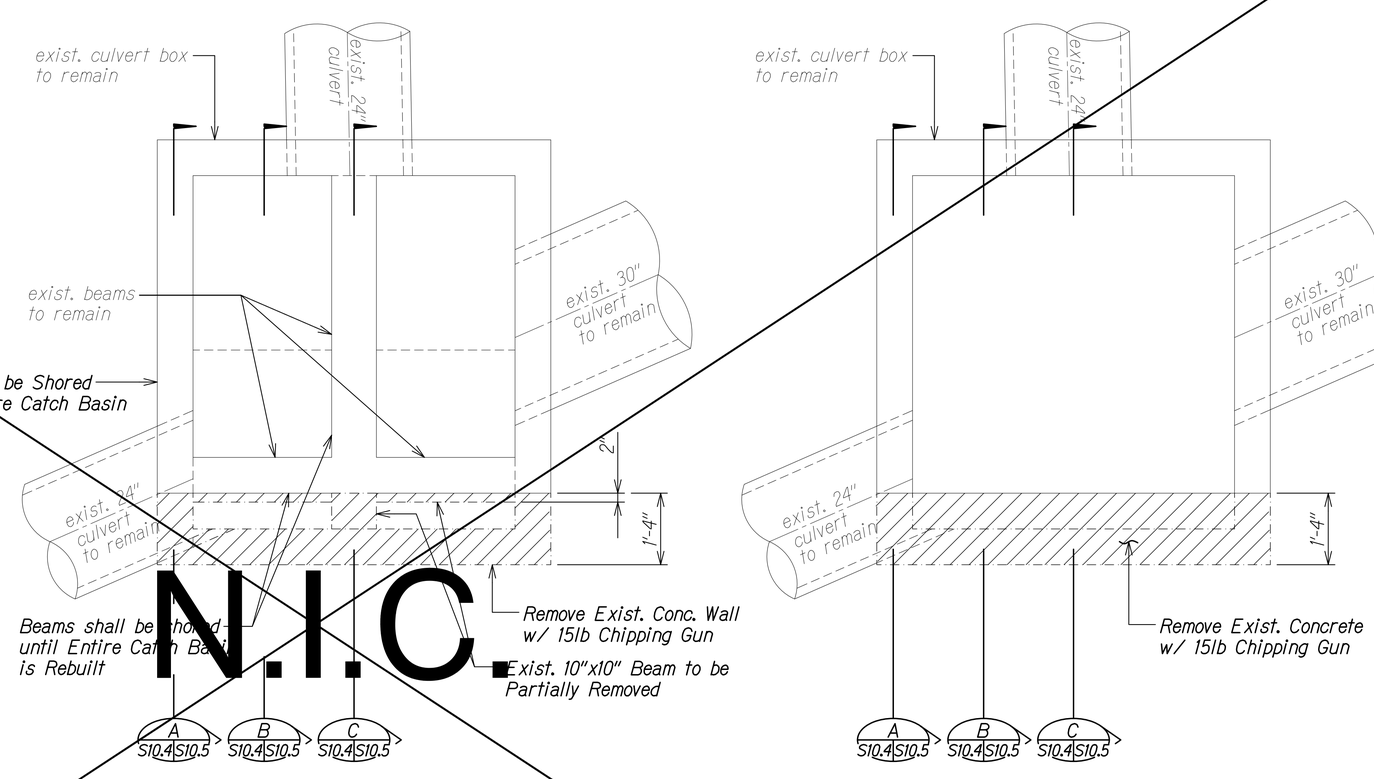
| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | C.O. 168 | 354 |




## DEMO CB #61-F TOP SLAB PLAN

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

A S10.4 S10.4




N.I.C.

## SECTION AT BEAM AND WALL

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

B S10.4 S10.4




## SECTION AT BOTTOM SLAB

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

C S10.4 S10.4

*Notes:*

1. All existing culverts shall remain in place and not be damaged in anyway.
2. Shoring shall not be removed until all new concrete has reached its 28 day strength.

| 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 |

CALVIN T. MIYAMARA LICENSED PROFESSIONAL ENGINEER NO. 8133-S HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

4-30-20
SIGNATURE EXPIRATION DATE OF THE LICENSE

| DATE | REVISION |
|---|---|
| 11/28/18 | 10 Deleted Sheet |

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

LILIHA STREET OVERPASS AT STA 109+99 TO STA. 111+87± EB

DEMO CB #61-F PLAN & SECTIONS

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted Date: Mar. 2016

SHEET No. S10.4 OF 8 SHEETS

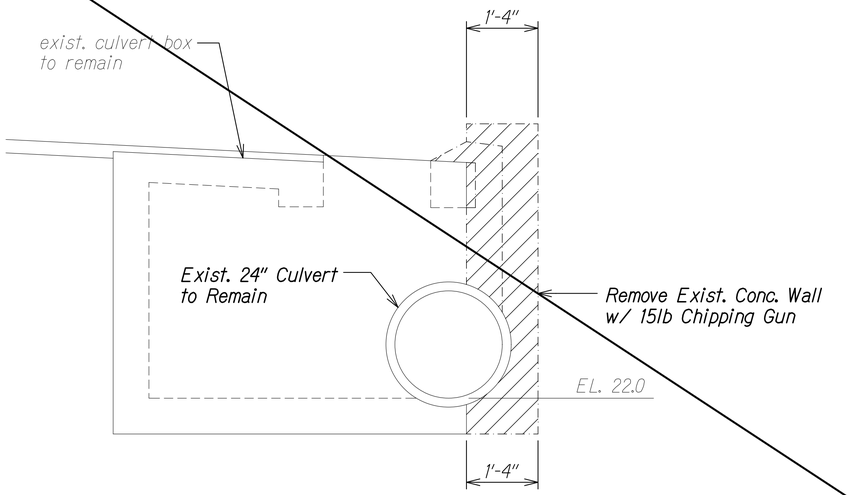
ORIGINAL PLAN
NOTE BOOK No.
SURVEY PLOTTED BY
DRAWN BY
TRACED BY
DESIGN BY
QUANTITIES BY
CHECKED BY
DATE

DRAWING NAME: Z:\OD ONGOING\12-032_I-H1 GRAL & GHLDR MDL ST TO PBHL PD WOC TM\01 CAD\07-22-20 ASB\H1G-MP-S1004 STA 109+99 TO STA 111+87 EB DEMO BOX #1021.DWG PLOT TIME: 07-23-20, 2:46 PM)

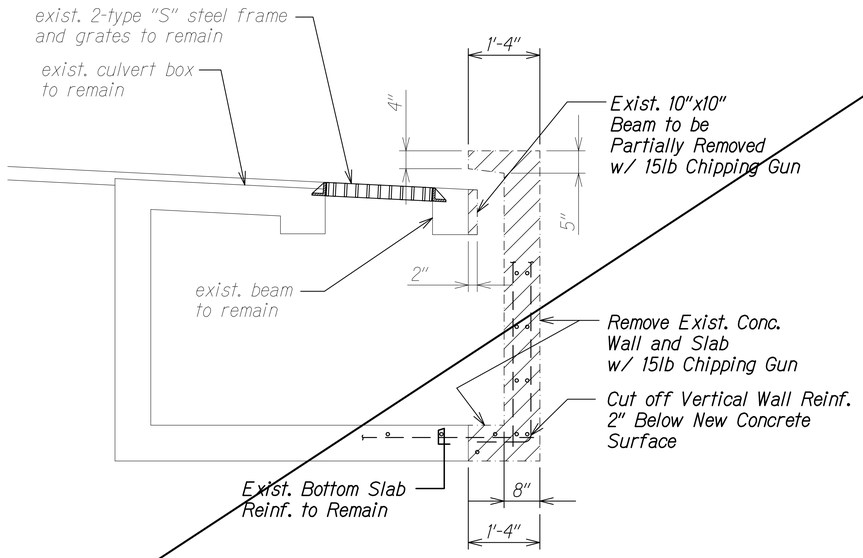
"AS-BUILT"

C.O. 168 10

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | C.O. 169 | 354 |

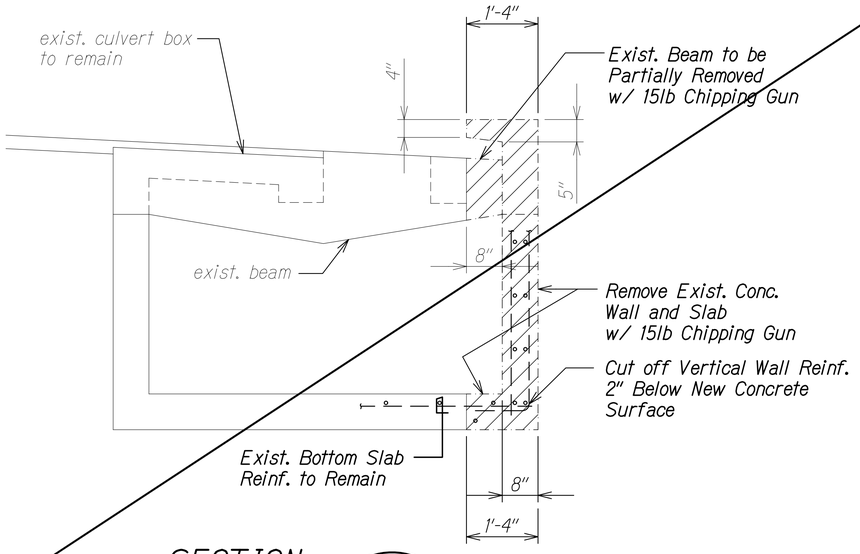



SECTION A
Scale: 3/4" = 1'-0" S10.4 | S10.5




SECTION B
Scale: 3/4" = 1'-0" S10.4 | S10.5

N.I.C.




SECTION C
Scale: 3/4" = 1'-0" S10.4 | S10.5

| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
|---|---|---|
| NOTE BOOK | DRAWN BY | |
| No. | TRACED BY | |
| | DESIGNED BY | |
| | QUANTITIES BY | |
| | CHECKED BY | |

DRAWING NAME: Z:\OD DNCONS\12-032-1-H1 GRAL & SHLDR IMPL ST TO PBWL FD WOS TM\01 CAD\07-22-20 ASB\H1G-MP-S1004 STA 109+99 TO STA. 111+87 EB DEMO BOX RF0021.DWG PLOT TIME: 07-23-20, 2:46 PM)

## 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 |

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

CALVIN T. MIYAHARA LICENSED PROFESSIONAL ENGINEER NO. 8133-S HAWAII, U.S.A.

4-30-20
SIGNATURE EXPIRATION DATE OF THE LICENSE

| DATE | REVISION |
|---|---|
| 11/28/18 | 10 Deleted Sheet |

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

# LILIHA STREET OVERPASS AT STA.109+99 TO STA. 111+87± EB

## DEMO CB #6I-F SECTIONS

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

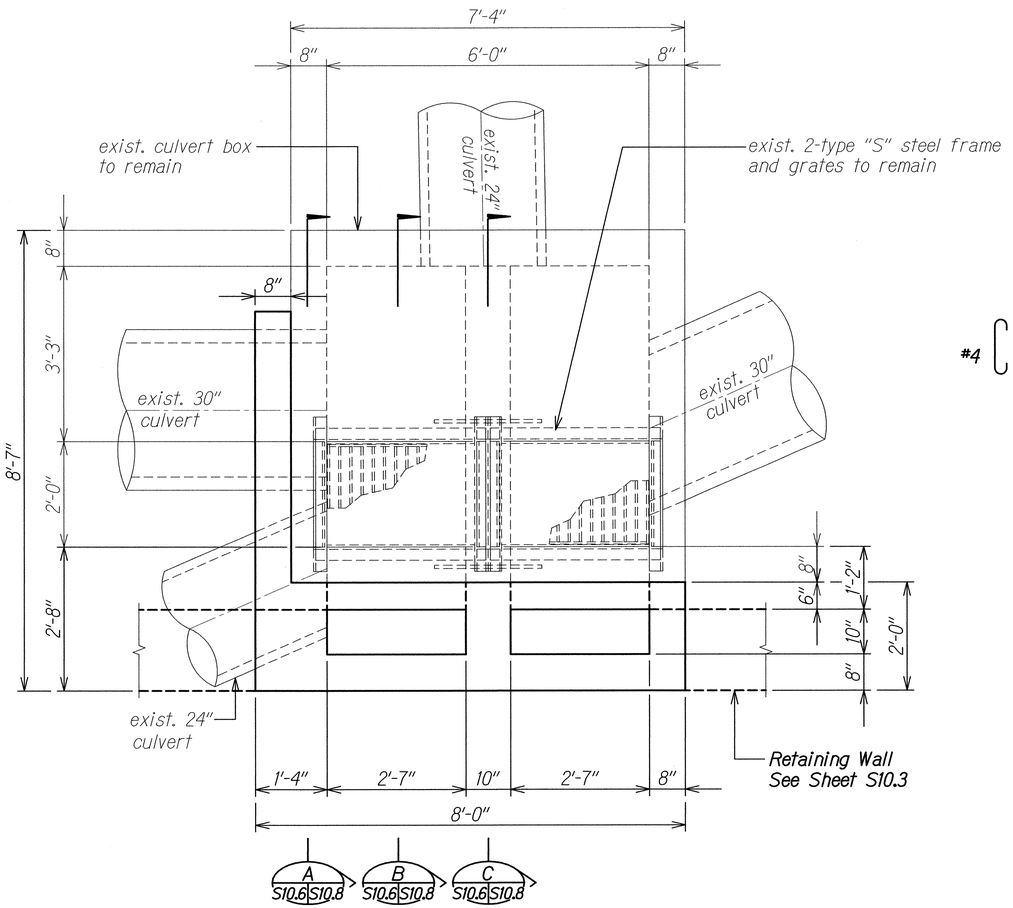
Scale: As Noted Date: Mar. 2016

SHEET No. S10.5 OF 8 SHEETS

"AS-BUILT"

C.O. 169 10

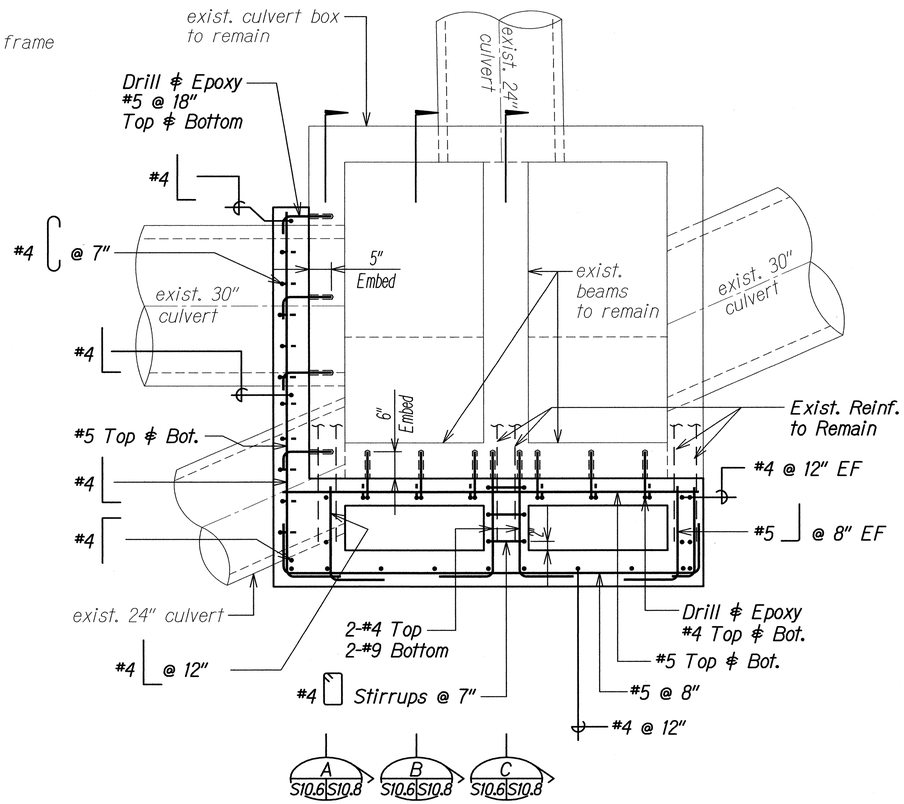
| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 170 | 354 |




## PLAN C.B. #61-F

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

A S10.6 S10.6




## SECTION AT BEAM AND WALL

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

A S10.6 S10.6

SURVEY PLOTTED BY
DRAWN BY
TRACED BY
DESIGNED BY
QUANTITIES BY
CHECKED BY
DATE

ORIGINAL PLAN
NOTE BOOK
No.

DRAWING NAME: Z:\00 ONGOING\12-032-H1 GRAL & SHLDR MDL ST TO PUNCHBOWL WCO\01 CAD\03-XX-16\H1C-NP-S1006 STA.109+99 TO STA. 111+87 EB BOX.DWG PLOT TIME: 03-25-16, 2:03 PM)

CALVIN T. MIYAMARA
LICENSED PROFESSIONAL ENGINEER
NO. 8133-S
HAWAII, U.S.A.

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4-30-18
SIGNATURE EXPIRATION DATE OF THE LICENSE

STATE OF HAWAI'I
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

# LILIHA STREET OVERPASS AT STA.109+99 TO STA. 111+87± EB

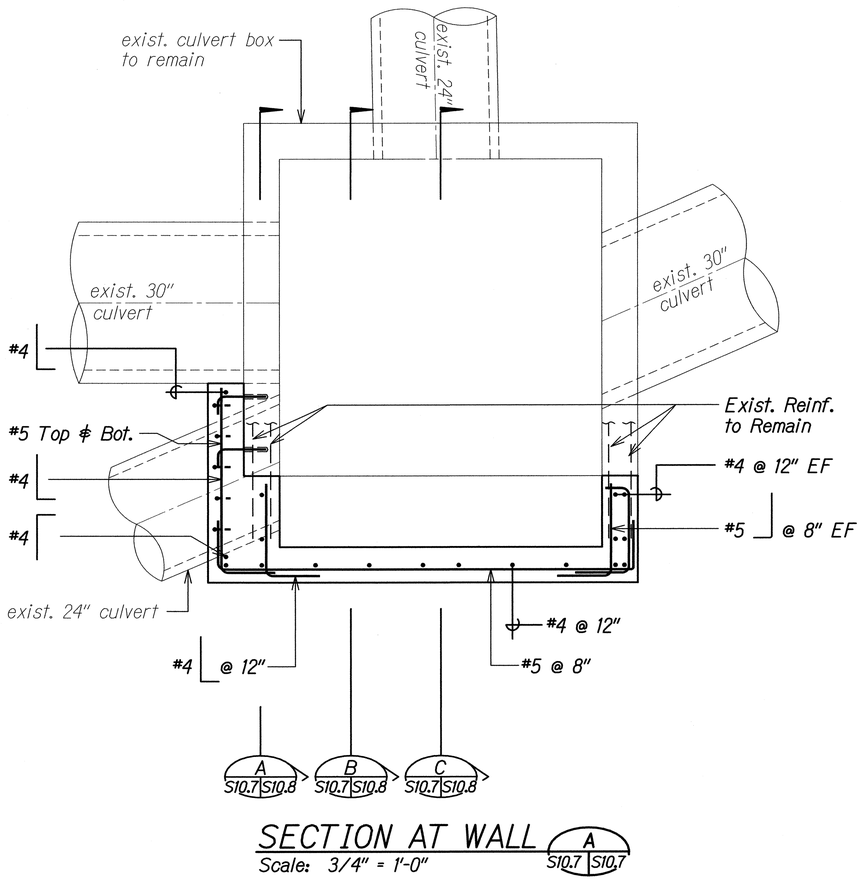
## CULVERT BOX PLAN ∉ SECTION

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted Date: Mar. 2016

SHEET No. S10.6 OF 8 SHEETS

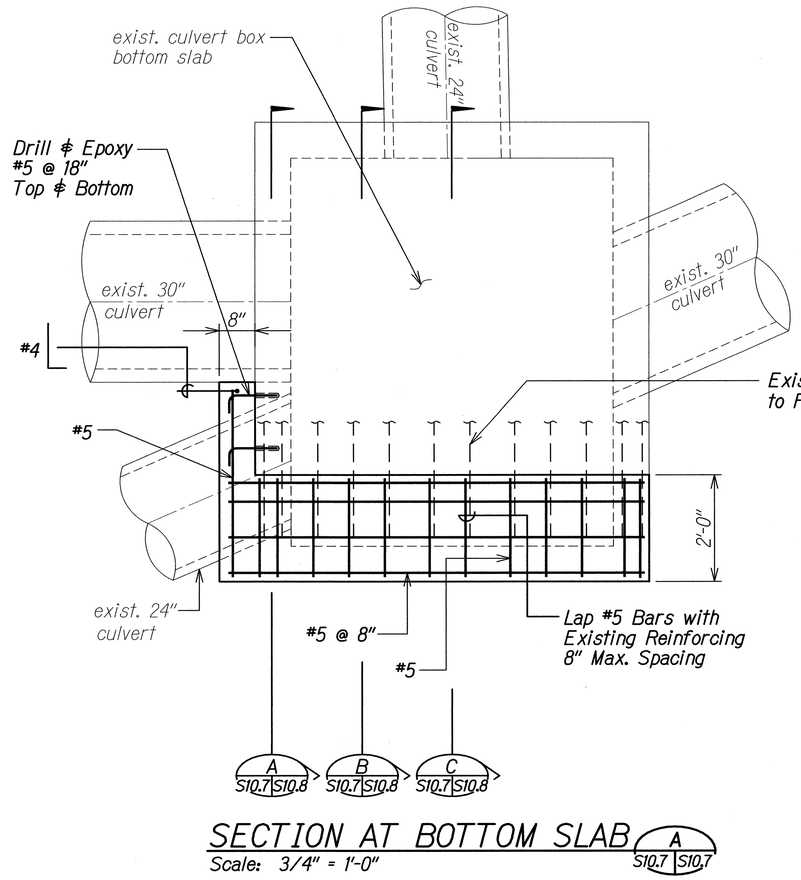
| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 171 | 354 |




## SECTION AT WALL A

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

S10.7 S10.7




## SECTION AT BOTTOM SLAB A

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

S10.7 S10.7

ORIGINAL PLAN

NOTE BOOK

No.

SURVEY PLOTTED BY DATE
DRAWN BY "
TRACED BY "
DESIGNED BY "
QUANTITIES BY "
CHECKED BY "

DRAWING NAME: Z:\00 ONGOING\12-032-HI GRAIL & SHLDR MDL ST TO PUNCHBOWL WOC\01 CAD\03-XX-16\H1C-MP-S1006 STA 109+99 TO STA. 111+87 EB BOX.DWG PLOT TIME: 03-25-16, 2:03 PM)

CALVIN T. MIYAHIRA
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NO. 8133-S
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STATE OF HAWAI'I
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

LILIHA STREET OVERPASS AT STA.109+99 TO STA. 111+87± EB

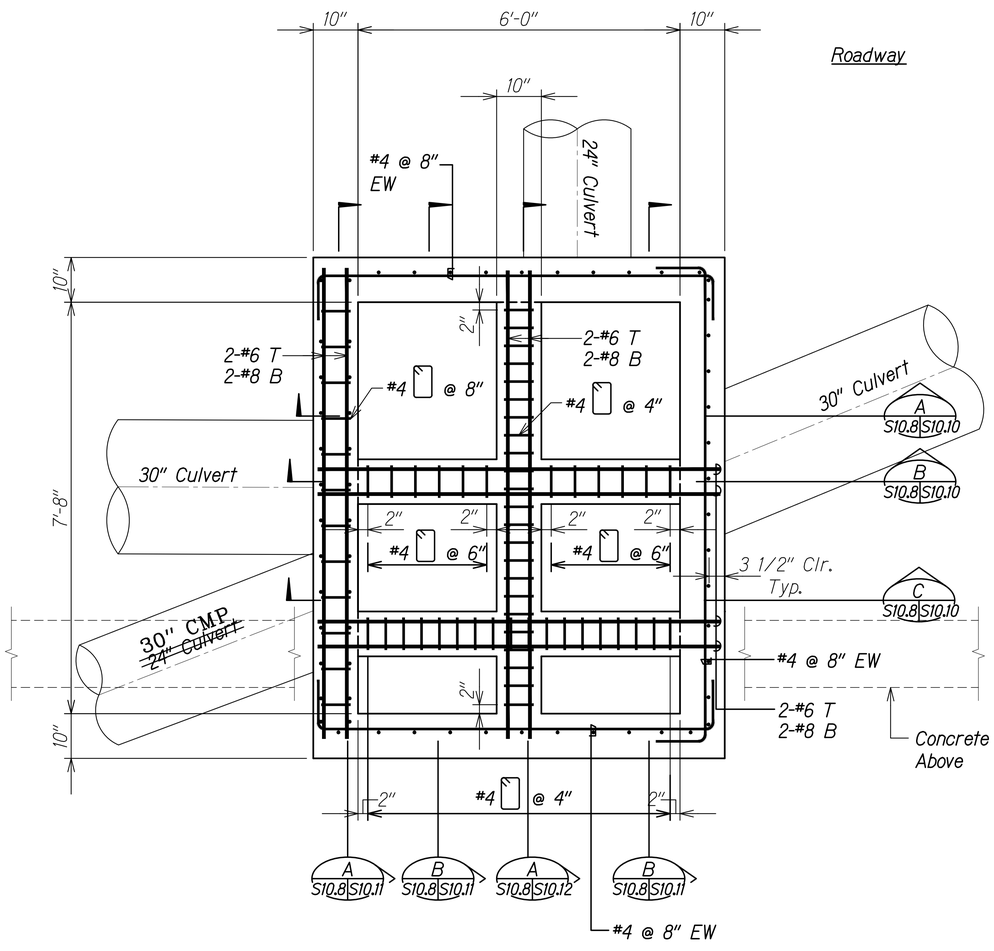
CULVERT BOX SECTIONS

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted Date: Mar. 2016

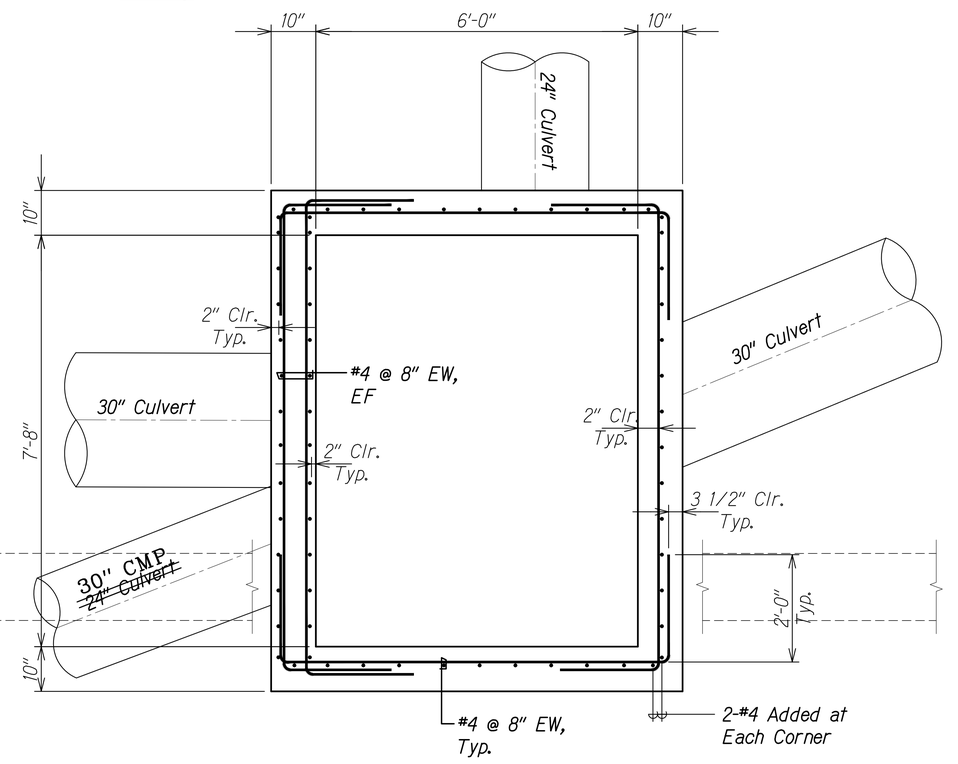
SHEET No. S10.7 OF 8 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | C.O. 172 | 354 |




## SECTION AT BEAM AND WALL A S10.8 S10.8

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




## SECTION AT WALL B S10.8 S10.8

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

NOTE:

See Sheets H-06 and H-08 of the State of Hawaii DOT Standard Plans for additional details.

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 |

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| DATE | REVISION |
|---|---|
| 08/21/19 | 13 RFI 021A Replace Sheet |

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

LILIHA STREET OVERPASS AT STA.109+99 TO STA. 111+87± EB
CATCH BASIN SECTIONS
INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted Date: Mar. 2016

SHEET No. S10.8 OF 8 SHEETS

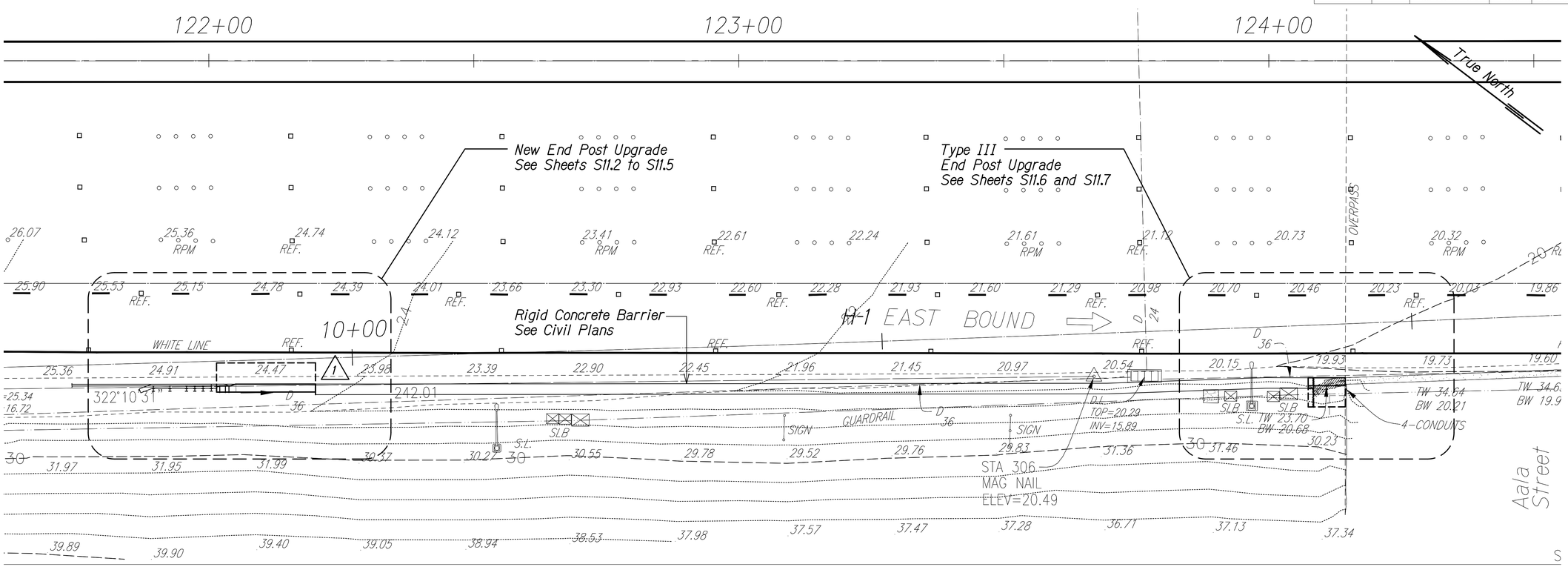
ORIGINAL PLAN | NOTE BOOK | No.
SURVEY PLOTTED BY | DRAWN BY | TRACED BY | DESIGNED BY | QUANTITIES BY | CHECKED BY | DATE

DRAWING NAME: Z:\OD DNO\NO\12-032-1-H1 GRAL & SHLDR MDL ST TO PBWL FD WOS TM\01 CAD\07-22-20 ASB\HIG-MP-S1066 STA 109+99 TO STA 111+87 EB BOX RF\021.DWG PLOT TIME: 07-23-20, 2:48 PM)

"AS-BUILT"

C.O. 172 13

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | ADD. 173 | 354 |




## LAYOUT PLAN

Scale: 1" = 10'-0"

A S11.1 | S11.1

### LEGEND FOR AS-BUILT POSTINGS

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|---|---|
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| ~~100.00~~ | Double line for as-built deletion |
| Roadway | Text for as-built posting |

| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
|---|---|---|
| NOTE BOOK | DRAWN BY | |
| No. | TRACED BY | |
| | DESIGNED BY | |
| | QUANTITIES BY | |
| | CHECKED BY | |

| | DATE | REVISION |
|---|---|---|
| 1 | r5/25/16 | REVISED END POST FOOTING LOCATION |

CALVIN T. MIYAMARA
LICENSED PROFESSIONAL ENGINEER
NO. 8133-S
HAWAII, U.S.A.

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4-30-20
SIGNATURE — EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**AALA STREET & NUUANU STREAM AT STA. 122+02± & STA. 124+08± EB**

**LAYOUT PLAN**

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted — Date: Mar. 2016

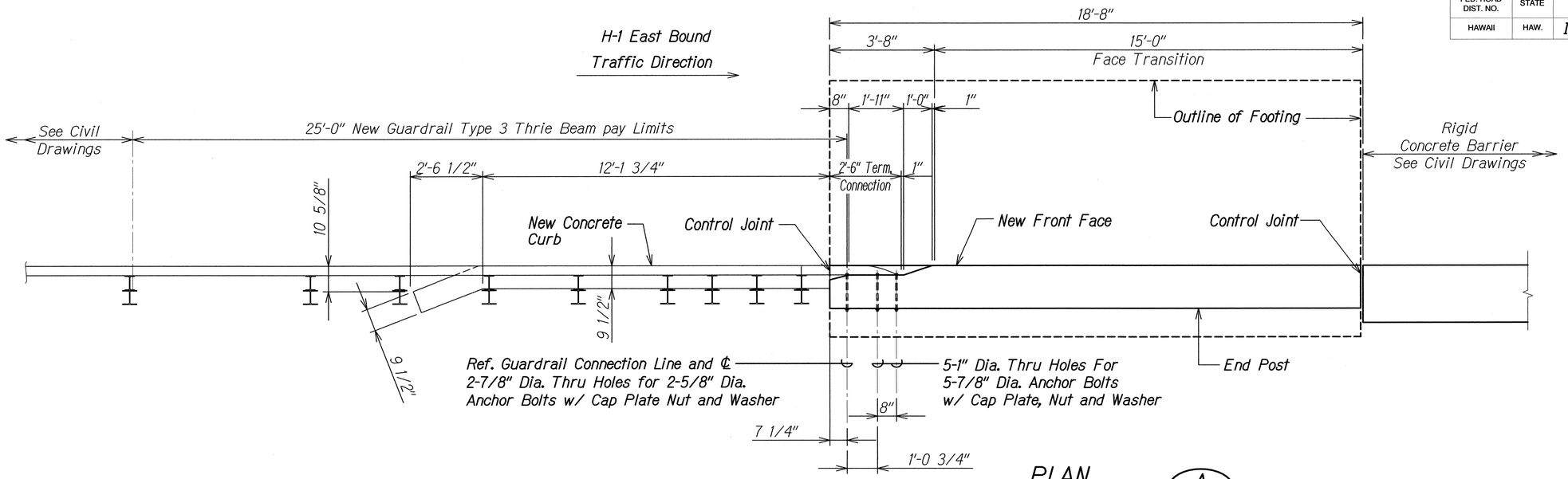
SHEET No. S11.1 OF 7 SHEETS

DRAWING NAME: Z:\OD ONCONO\12-032\1-H1 GRAIL & SHLDR MDL ST TO PBWL PD WOC TMO\1 CAD\07-22-20 ASB\H1G-MP-S1101 STA 122+02 EB DETAIL.DWG PLOT TIME: 07-23-20, 2:51 PM

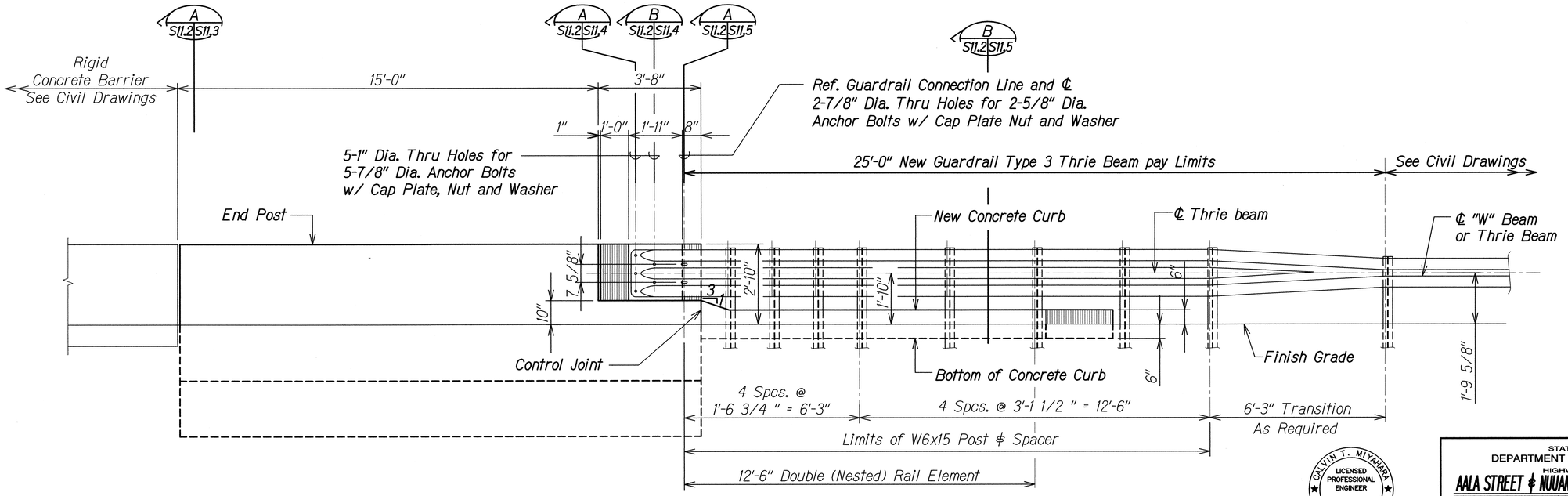
"AS-BUILT"

ADD. 173

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 174 | 354 |




PLAN
Scale: 1/2" = 1'-0" (A S11.2 | S11.2)




ELEVATION
Scale: 1/2" = 1'-0" (B S11.2 | S11.2)

ORIGINAL PLAN
NOTE BOOK
No.

SURVEY PLOTTED BY
DRAWN BY
TRACED BY
DESIGNED BY
QUANTITIES BY
CHECKED BY
DATE

DRAWING NAME: Z:\OD_ONGOING\12-032-H1 GRAL & SHLDR IMPR ST TO PUNCHBOWL WOC\01 CAD\03-XX-16\H1G-MP-S1102 STA 122+02 EB.DWG PLOT TIME: 03-25-16, 3:21 PM

CALVIN T. MIYAHARA
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NO. 8133-S
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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**AALA STREET & NUUANU STREAM AT STA. 122+02± EB**

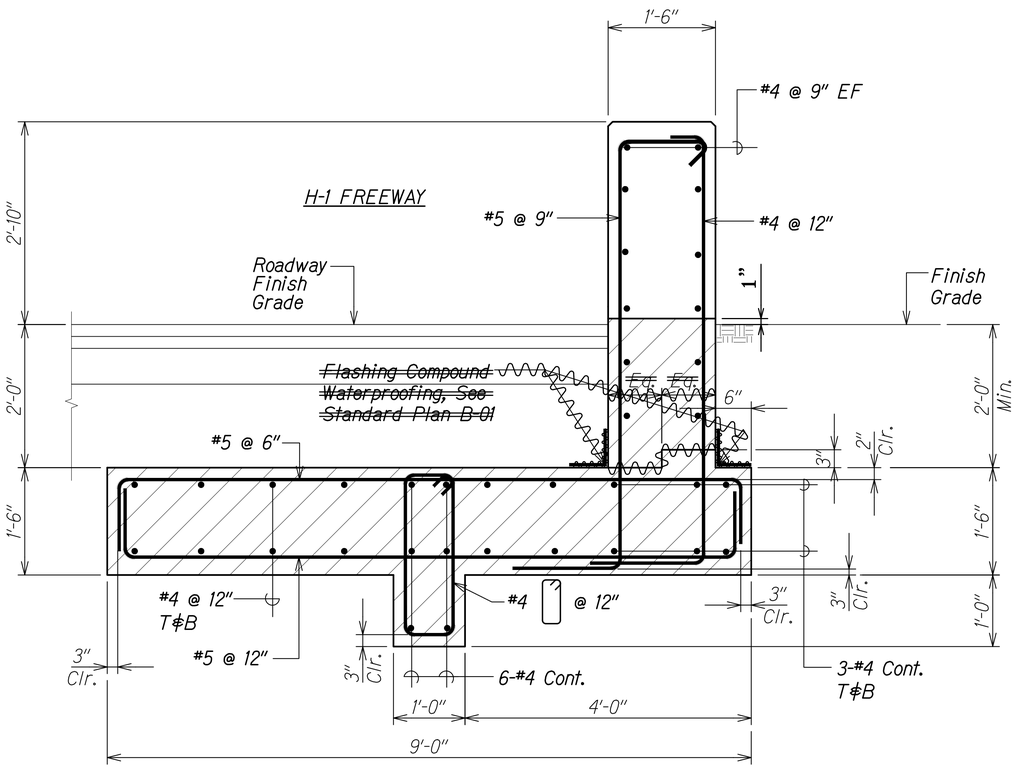
**PLAN AND ELEVATION**

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted Date: Mar. 2016

SHEET No. S11.2 OF 7 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 175 | 354 |




SECTION A
Scale: 1" = 1'-0"
S11.2 | S11.3

**Note:**
See civil plans for dowels from rigid concrete barrier to end post.

| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
|---|---|---|
| NOTE BOOK | DRAWN BY | |
| No. | TRACED BY | |
| | DESIGNED BY | |
| | QUANTITIES BY | |
| | CHECKED BY | |

DRAWING NAME: Z:\OD DNGDNCN\12-0321-H1 GRAIL & SHLDR MDL ST TO PBWL PD WDS TMX\01 CAD\07-22-20 ASBUILT-WP-S1103 STA 122+02 EB.DWG PLOT TIME: 07-23-20, 2:52 PM)

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 |

CALVIN T. MIYAHARA
LICENSED PROFESSIONAL ENGINEER
NO. 8133-S
HAWAII, U.S.A.

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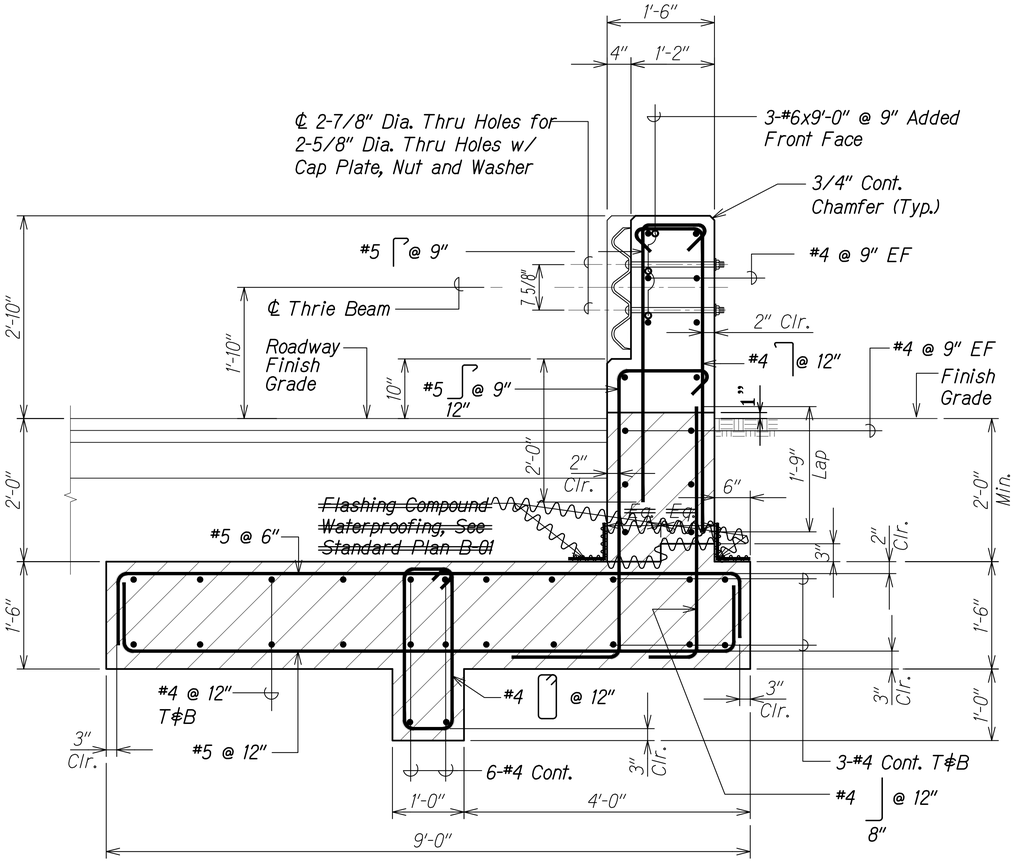
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**AALA STREET & MUUANU STREAM AT STA. 122+02± EB**
**END POST SECTION**
INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)
Scale: As Noted Date: Mar. 2016

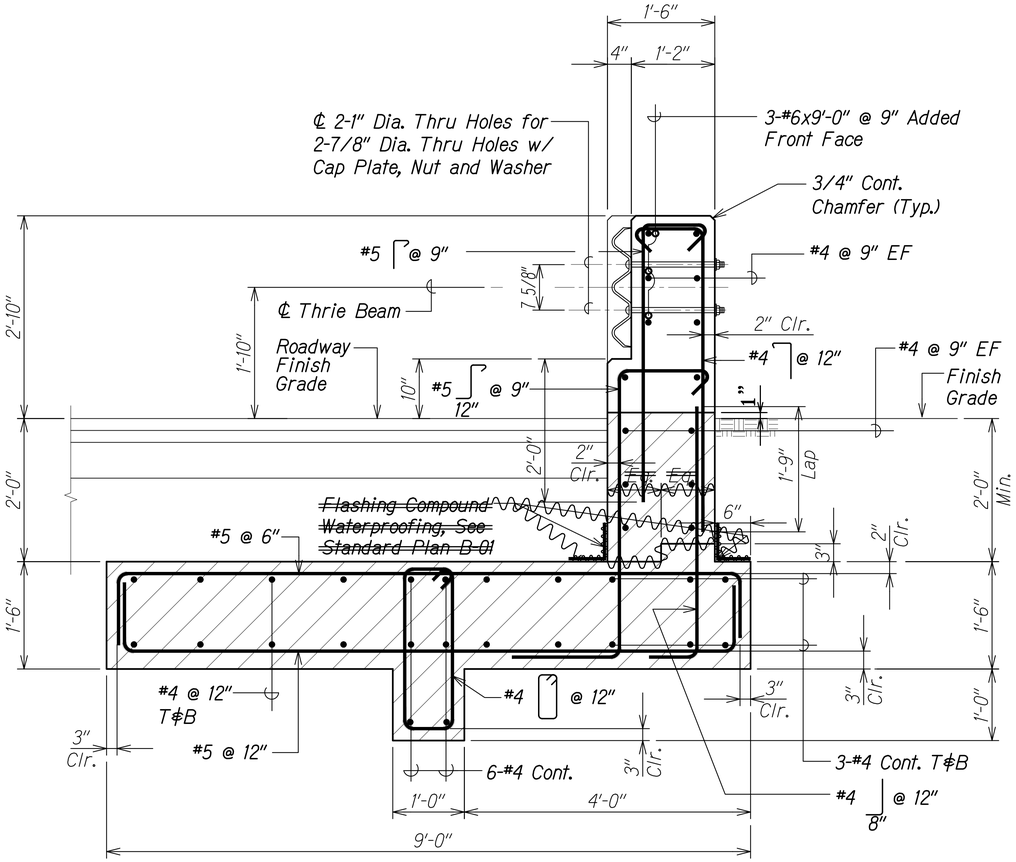
SHEET No. S11.3 OF 7 SHEETS

"AS-BUILT"

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 176 | 354 |




SECTION A
Scale: 1" = 1'-0"
S11.2 | S11.4




SECTION B
Scale: 1" = 1'-0"
S11.2 | S11.4

| | |
|---|---|
| ORIGINAL PLAN | SURVEY PLOTTED BY: DATE |
| NOTE BOOK | DRAWN BY: |
| No. | TRACED BY: |
| | DESIGNED BY: |
| | QUANTITIES BY: |
| | CHECKED BY: |

DRAWING NAME: Z:\OD ENGINEERING\12-0321-H1 GRAL & SHLDR MDL ST TO PBWL PD WDS TMA\01 CAD\07-22-20 ASBUILT-MP-S1103 STA 122-02 EB.DWG PLOT TIME: 07-23-20, 2:53 PM)

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 |

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LICENSED PROFESSIONAL ENGINEER
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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**AALA STREET & MUUANU STREAM AT STA. 122+02± EB**

**END POST SECTIONS**

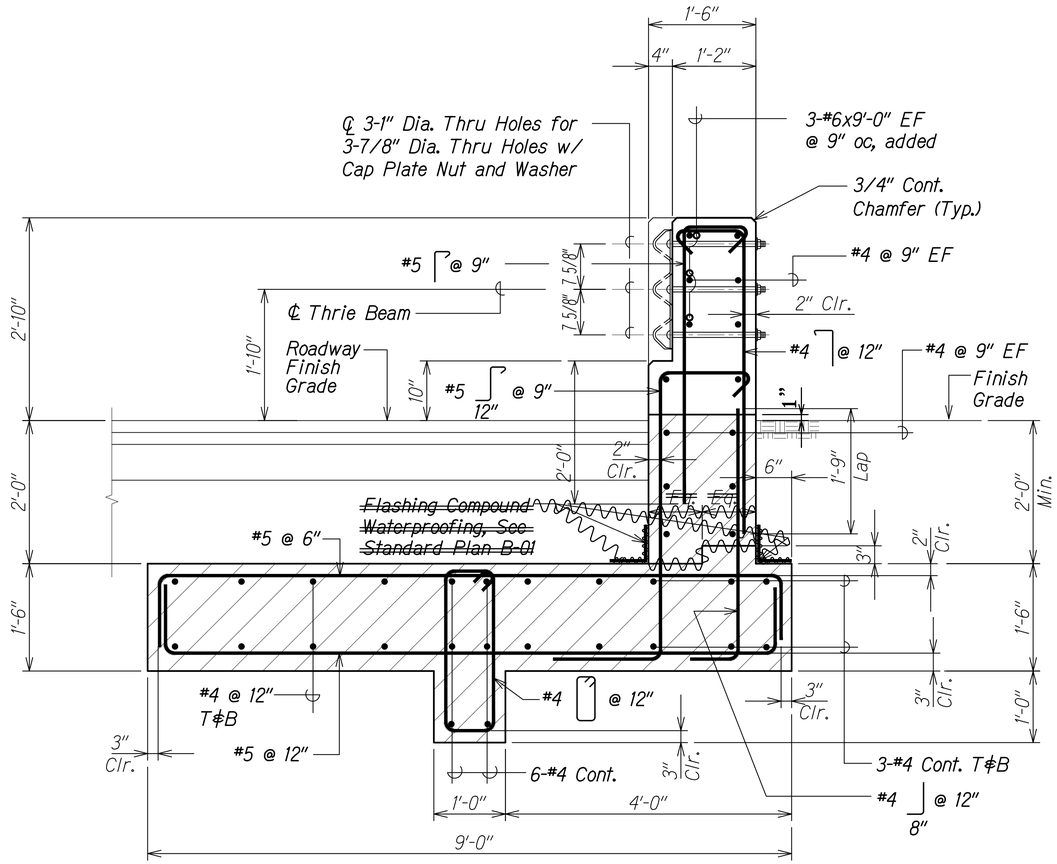
INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted Date: Mar. 2016

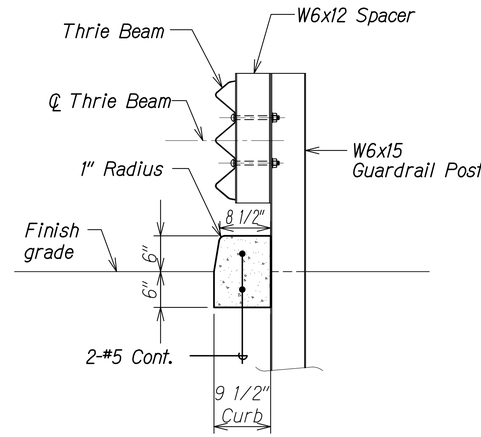
SHEET No. S11.4 OF 7 SHEETS

"AS-BUILT"

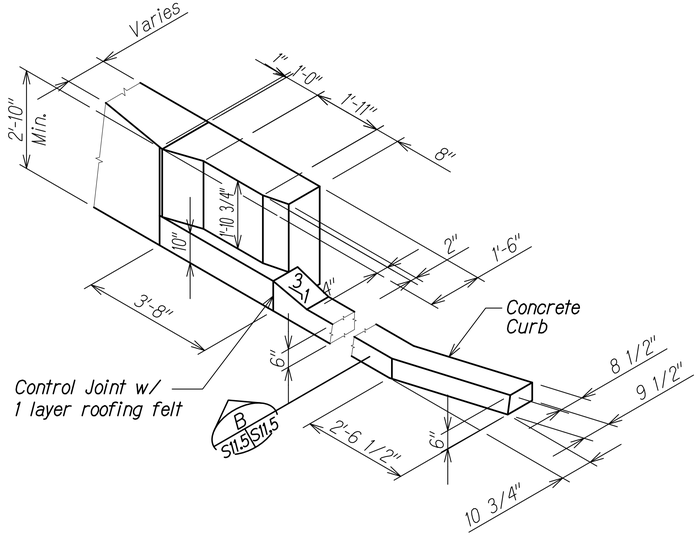
| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 177 | 354 |




SECTION A (S11.2 | S11.5)
Scale: 1" = 1'-0"




SECTION B (S11.5 | S11.5)
Scale: 1" = 1'-0"




END POST DETAIL 1 (S11.5 | S11.5)
Scale: 1/2" = 1'-0"

LEGEND FOR AS-BUILT POSTINGS

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|---|---|
| ~~~~ | Squiggly line for as-built deletion |
| ~~100.00~~ | Double line for as-built deletion |
| Roadway | Text for as-built posting |

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SIGNATURE EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**AALA STREET & NUUANU STREAM AT STA. 122+02± EB**

**END POST SECTIONS AND DETAIL**

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-H1-1(242)

Scale: As Noted Date: Mar. 2016

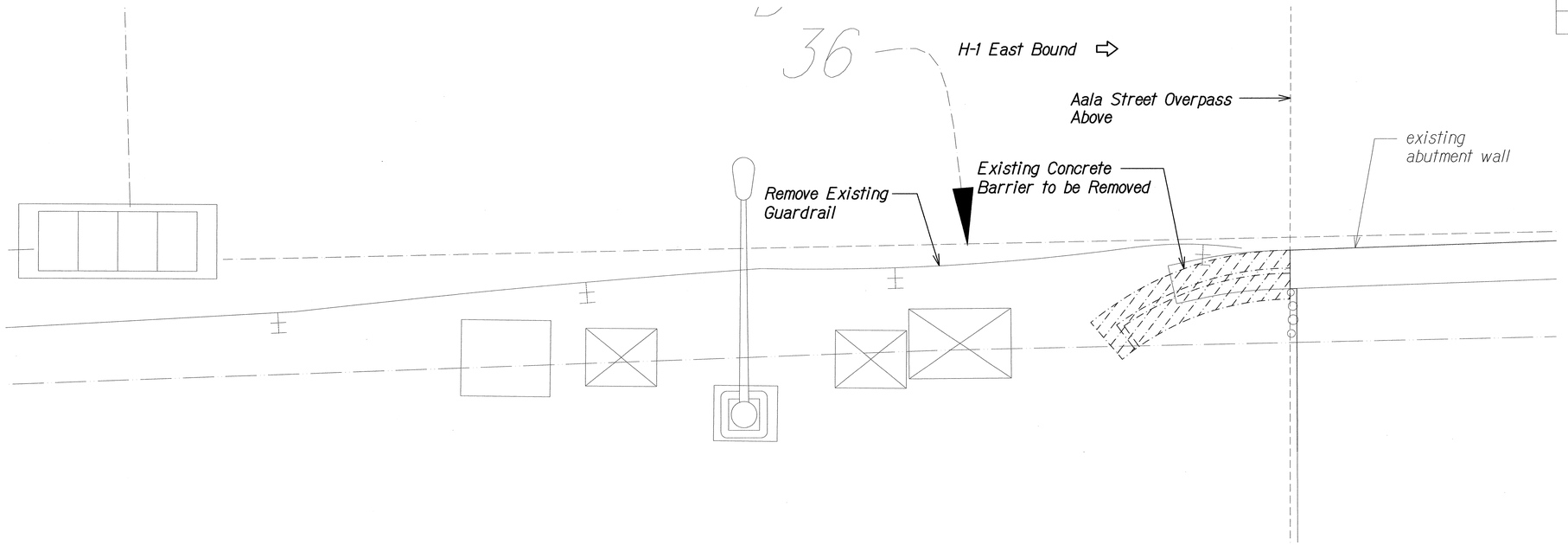
SHEET No. S11.5 OF 7 SHEETS

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

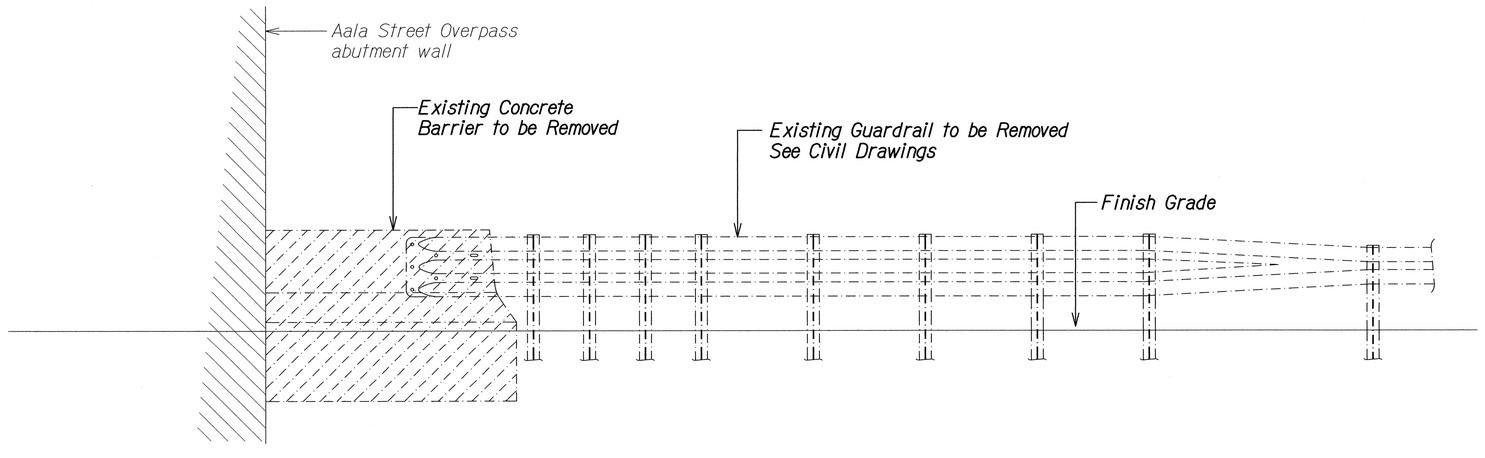
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"AS-BUILT"

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 178 | 354 |




DEMO PLAN (A) S11.6 | S11.6
Scale: 1/2" = 1'-0"




ELEVATION (B) S11.6 | S11.6
Scale: 1/2" = 1'-0"

| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
|---|---|---|
| NOTE BOOK | DRAWN BY | " |
| | TRACED BY | " |
| | DESIGNED BY | " |
| No. | QUANTITIES BY | " |
| | CHECKED BY | " |

DRAWING NAME: Z:\00 ONGOING\12-032-H1 GRAIL & SHLDR MDL ST TO PUNCHBOWL WO\CO\01 CAD\03-XX-16\H1C-MP-S1106 STA 122+02 EB DEMO.DWG PLOT TIME: 03-25-16, 3:24 PM)

CALVIN T. MIYAHARA
LICENSED PROFESSIONAL ENGINEER
NO. 8133-S
HAWAII, U.S.A.

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4-30-18
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STATE OF HAWAI'I
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

# AALA STREET & NUUANU STREAM AT STA. 124+08± EB

## DEMO PLAN AND ELEVATION

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

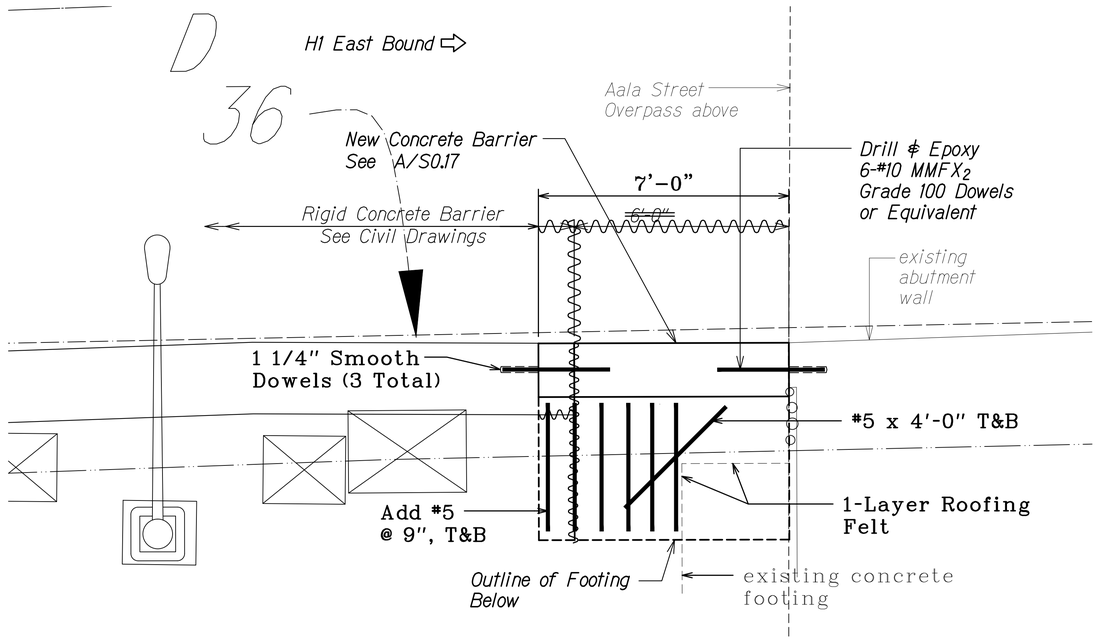
Scale: As Noted Date: Mar. 2016

SHEET No. S11.6 OF 7 SHEETS

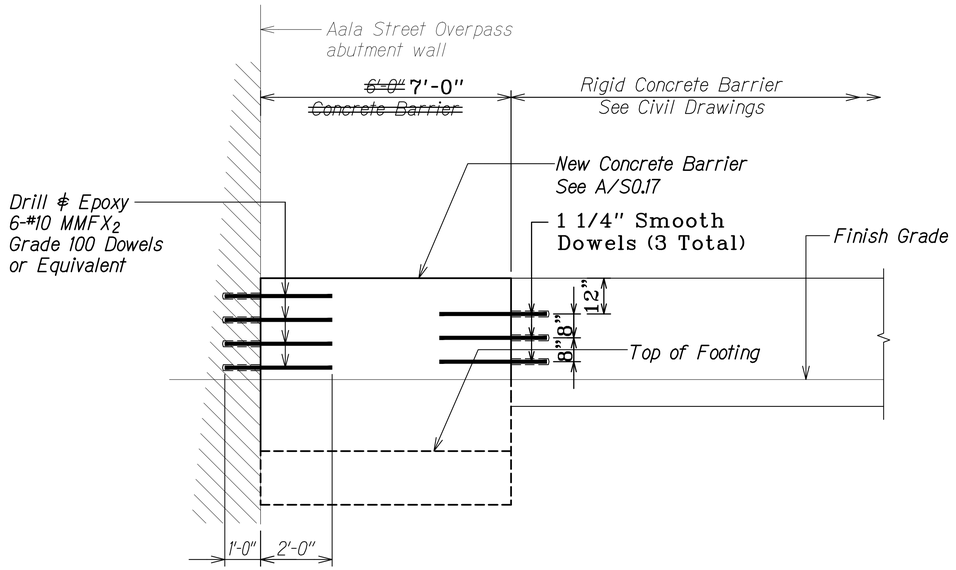
| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 179 | 354 |

D

36




PLAN
Scale: 1/2" = 1'-0"
A S11.7 S11.7




ELEVATION
Scale: 1/2" = 1'-0"
B S11.7 S11.7

| 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 |

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NO. 8133-S
HAWAII, U.S.A.

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4-30-20
SIGNATURE EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
AALA STREET & MUUANU STREAM AT STA. 124+08± EB
PLAN AND ELEVATION
INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)
Scale: As Noted Date: Mar. 2016

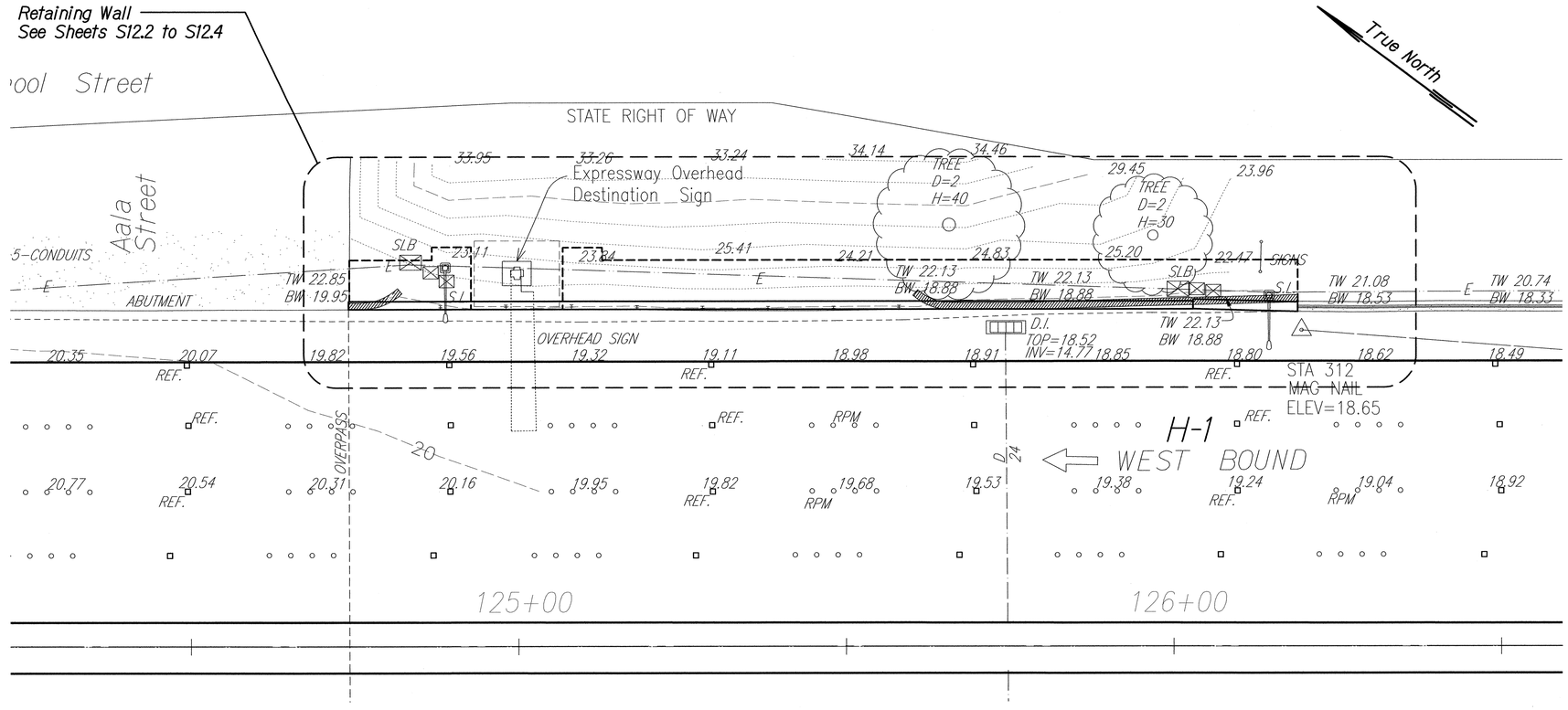
SHEET No. S11.7 OF 7 SHEETS

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

DRAWING NAME: Z:\OD ONGOING\12-0321-1-H1 GRAL & SHLDR IMPL ST TO PBWL PD WOC IM\01 CAD\07-22-20 ASBUILT\G-MP-S1107 STA 122+02 EB PLAN.DWG PLOT TIME: 07-23-20, 2:57 PM)

"AS-BUILT"

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 180 | 354 |




LAYOUT PLAN (A) S12.1 | S12.1
Scale: 1" = 10'-0"

ORIGINAL PLAN
NOTE BOOK No.

SURVEY PLOTTED BY DATE
DRAWN BY "
TRACED BY "
DESIGNED BY "
QUANTITIES BY "
CHECKED BY "

DRAWING NAME: Z:\OD ONGOING\12-032-H1 GRAL & SHLDR MDL ST TO PUNCHBOWL WOC\01 CAD\03-XX-16\H1C-MP-S1201 STA 124+74 TO STA 126+19 WB RETWALL.DW PLOT TIME: 03-25-16, 3:29 PM)

CALVIN T. MIYAHARA
LICENSED PROFESSIONAL ENGINEER
NO. 8133-S
HAWAII, U.S.A.

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4-30-18
SIGNATURE EXPIRATION DATE OF THE LICENSE

STATE OF HAWAI'I
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

# AALA STREET & MUUANU STREAM AT STA. 124+74± TO STA. 126+19± WB

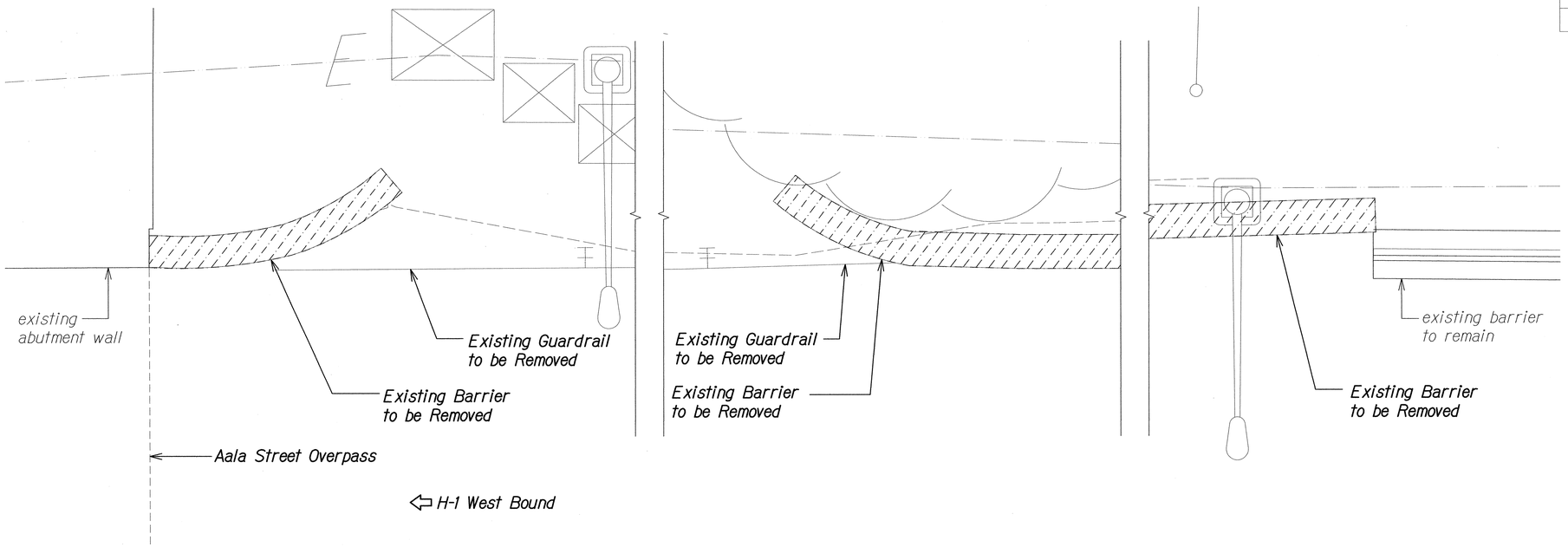
## LAYOUT PLAN

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted Date: Mar. 2016

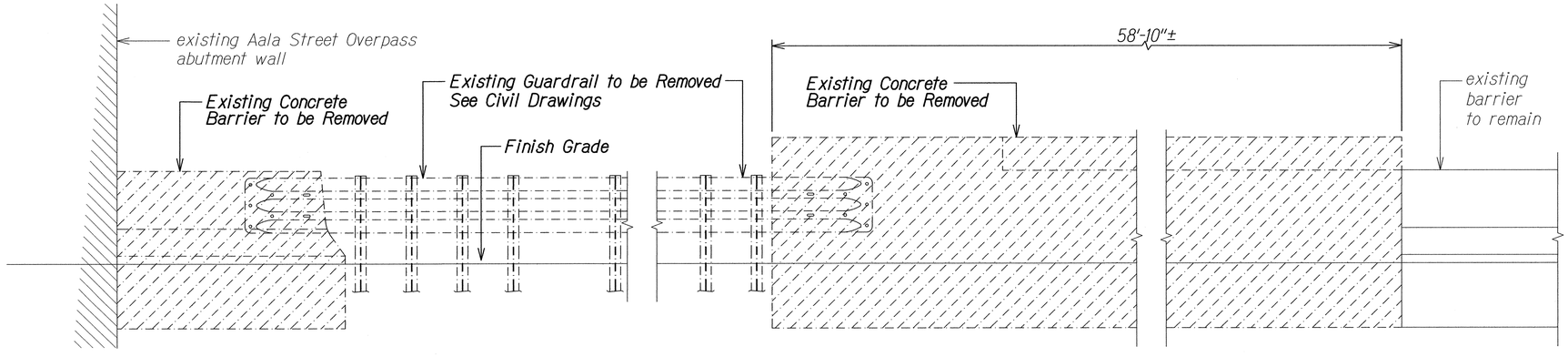
SHEET No. S12.1 OF 4 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 181 | 354 |




## DEMO PLAN (A) S12.2 | S12.2

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




## ELEVATION (B) S12.2 | S12.2

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

| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
|---|---|---|
| NOTE BOOK | DRAWN BY | |
| No. | TRACED BY | |
| | DESIGNED BY | |
| | QUANTITIES BY | |
| | CHECKED BY | |

DRAWING NAME: Z:\00 ONGOING\12-032-H1 GRAIL & SHLDR MDL ST TO PUNCHBOWL WO\C\01 CAD\03-XX-16\H1G-WP-S1202 STA.124+74 TO STA.126+19 WB DEMO.DWG PLOT TIME= 03-25-16, 3:30 PM)

CALVIN T. MIYAHARA LICENSED PROFESSIONAL ENGINEER NO. 8133-S HAWAII, U.S.A.

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SIGNATURE 4-30-18 EXPIRATION DATE OF THE LICENSE

STATE OF HAWAI'I
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**AALA STREET & NUUANU STREAM AT STA. 124+74± TO STA. 126+19± WB**

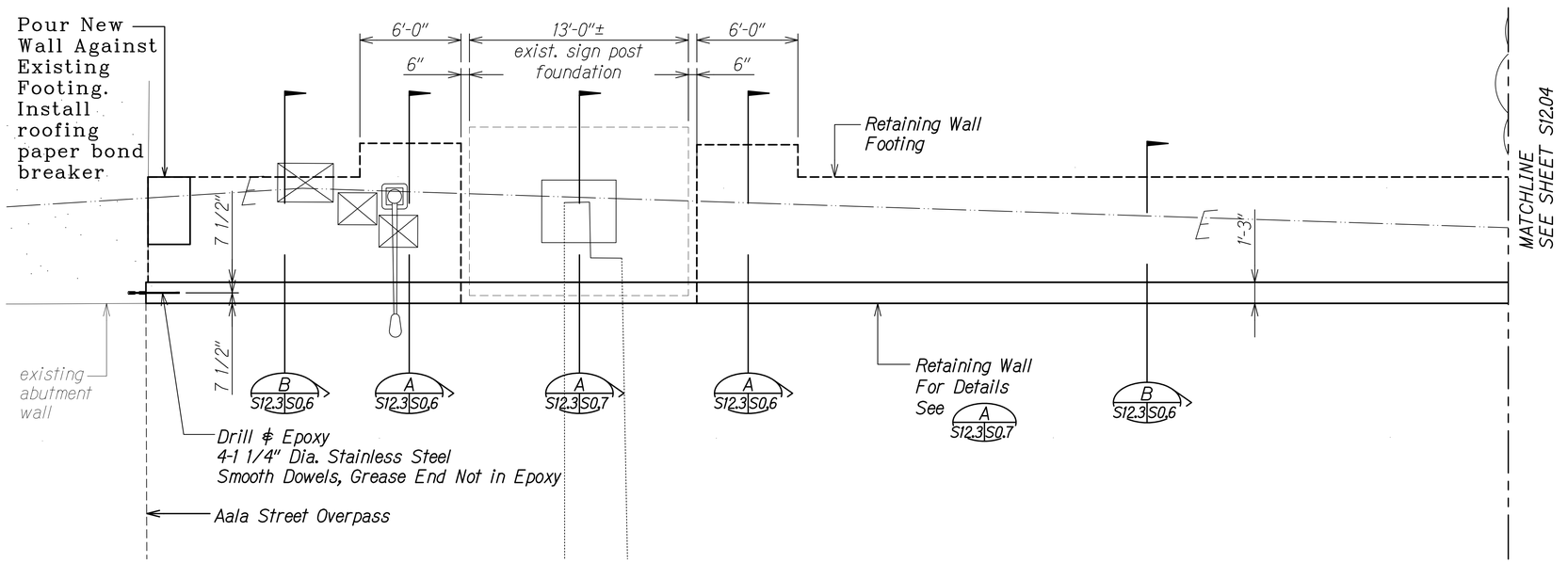
# DEMO PLAN AND ELEVATION

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

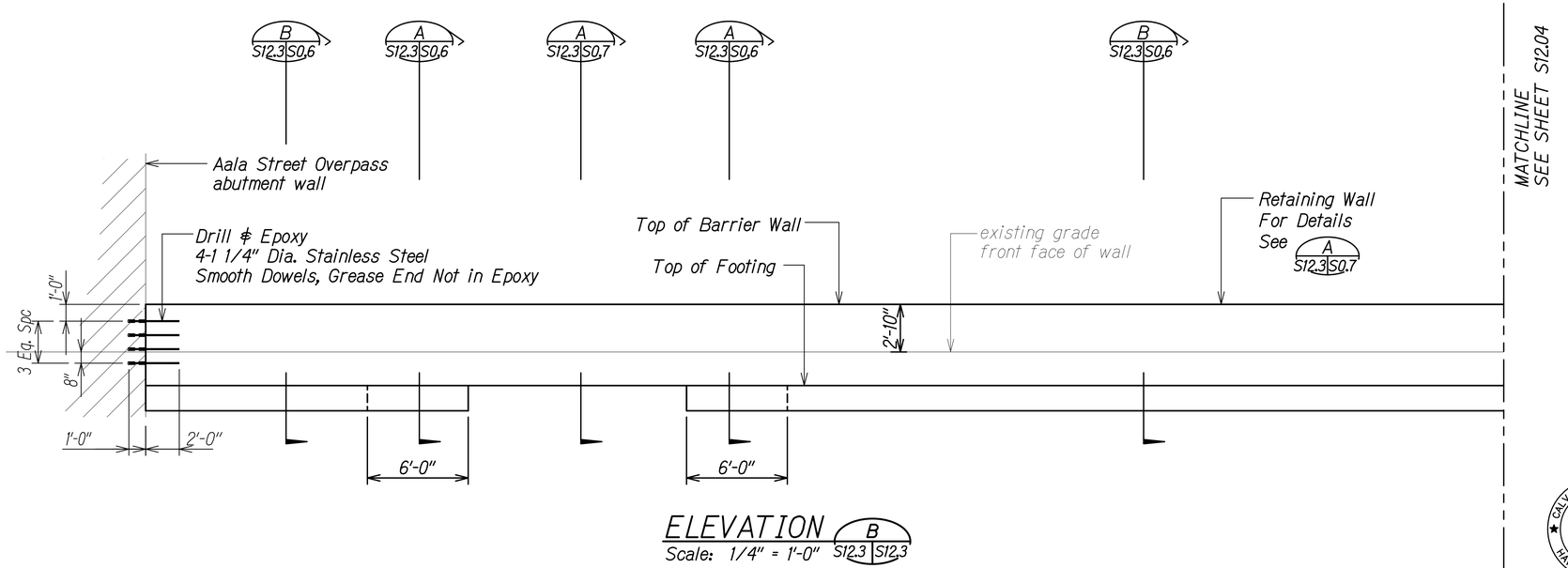
Scale: As Noted Date: Mar. 2016

SHEET No. S12.2 OF 4 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 182 | 354 |




PLAN A S12.3 | S12.3
Scale: 1/4" = 1'-0"




ELEVATION B S12.3 | S12.3
Scale: 1/4" = 1'-0"

## 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 |

CALVIN T. MIYAHARA LICENSED PROFESSIONAL ENGINEER NO. 8133-S HAWAII, U.S.A.

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4-30-20
SIGNATURE EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**AALA STREET & NUUANU STREAM AT STA. 124+74± TO STA. 126+19± WB**

## PLAN AND ELEVATION

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted Date: Mar. 2016

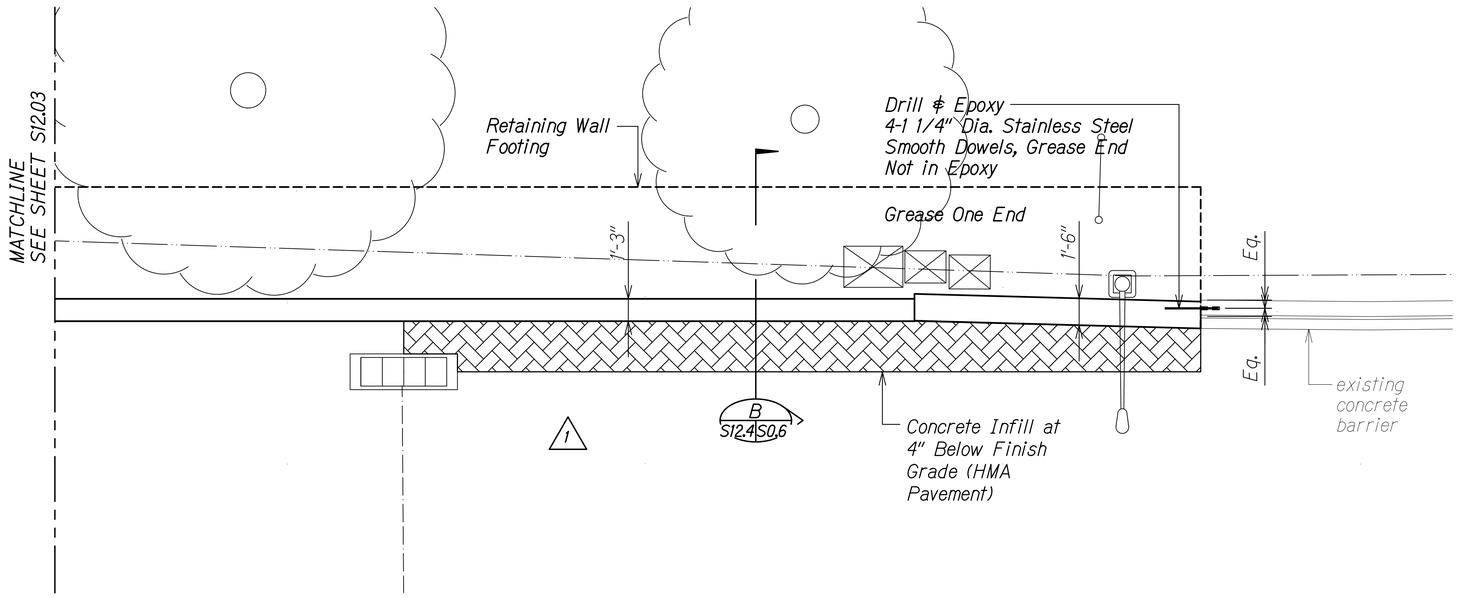
SHEET No. S12.3 OF 4 SHEETS

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

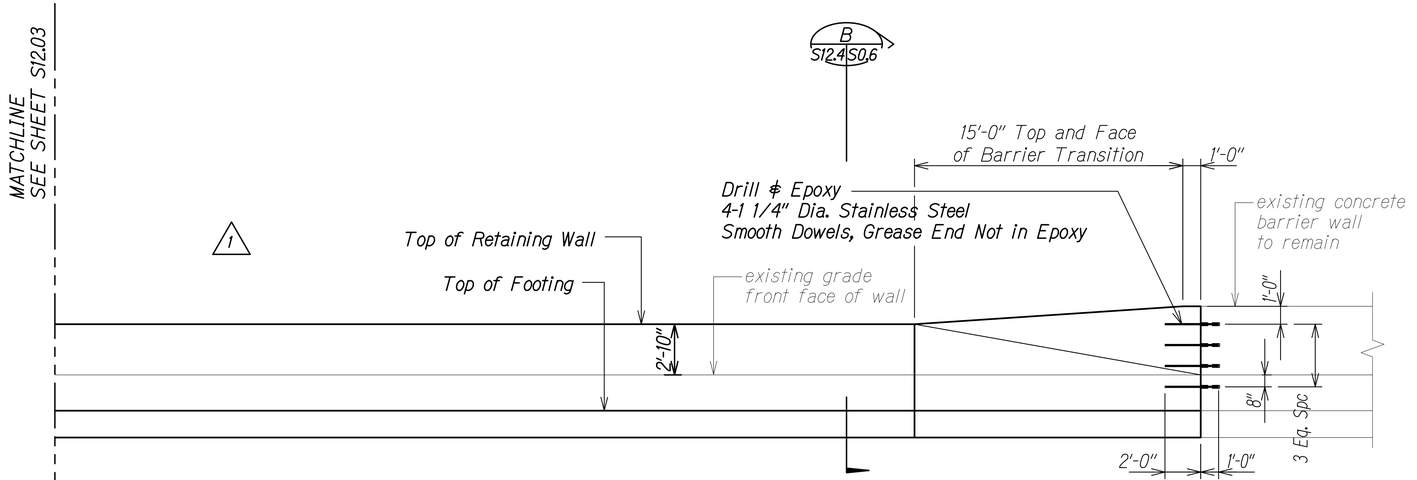
DRAWING NAME: Z:\OD ONGOING\12-032_I-H1 GRAL & SHLDR MDL ST TO PBWL PD WOC TM\01 CAD\07-22-20 ASBUILT\G-MP-S1203_STA 124+74 TO STA 126+19 WB PLAN DELTA1.DWG PLOT TIME: 07-23-20, 3:02 PM)

"AS-BUILT"

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | ADD. 183 | 354 |




PLAN
Scale: 1/4" = 1'-0"
A S12.4 | S12.4




ELEVATION
Scale: 1/4" = 1'-0"
B S12.4 | S12.4

| SURVEY PLOTTED BY | DATE |
|---|---|
| DRAWN BY | |
| TRACED BY | |
| DESIGN BY | |
| QUANTITIES BY | |
| CHECKED BY | |

ORIGINAL PLAN
NOTE BOOK
No.

DRAWING NAME: Z:\OD ONGOING\12-032 I-H1 GRAL & SHLDR MDL ST TO PBWL PD WOC TM\01 CAD\07-22-20 ASB\HIG-MIP-S1203 STA 124+74 TO STA 126+19 WB PLAN DELTA1.DWG PLOT TIME: 07-23-20, 3:02 PM)

| | | |
|---|---|---|
| 1 | r5/25/16 | REMOVED CALLOUT |
| | DATE | REVISION |

CALVIN T. MIYAMASA
LICENSED PROFESSIONAL ENGINEER
NO. 8133-S
HAWAII, U.S.A.

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4-30-20
SIGNATURE EXPIRATION DATE OF THE LICENSE

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 |

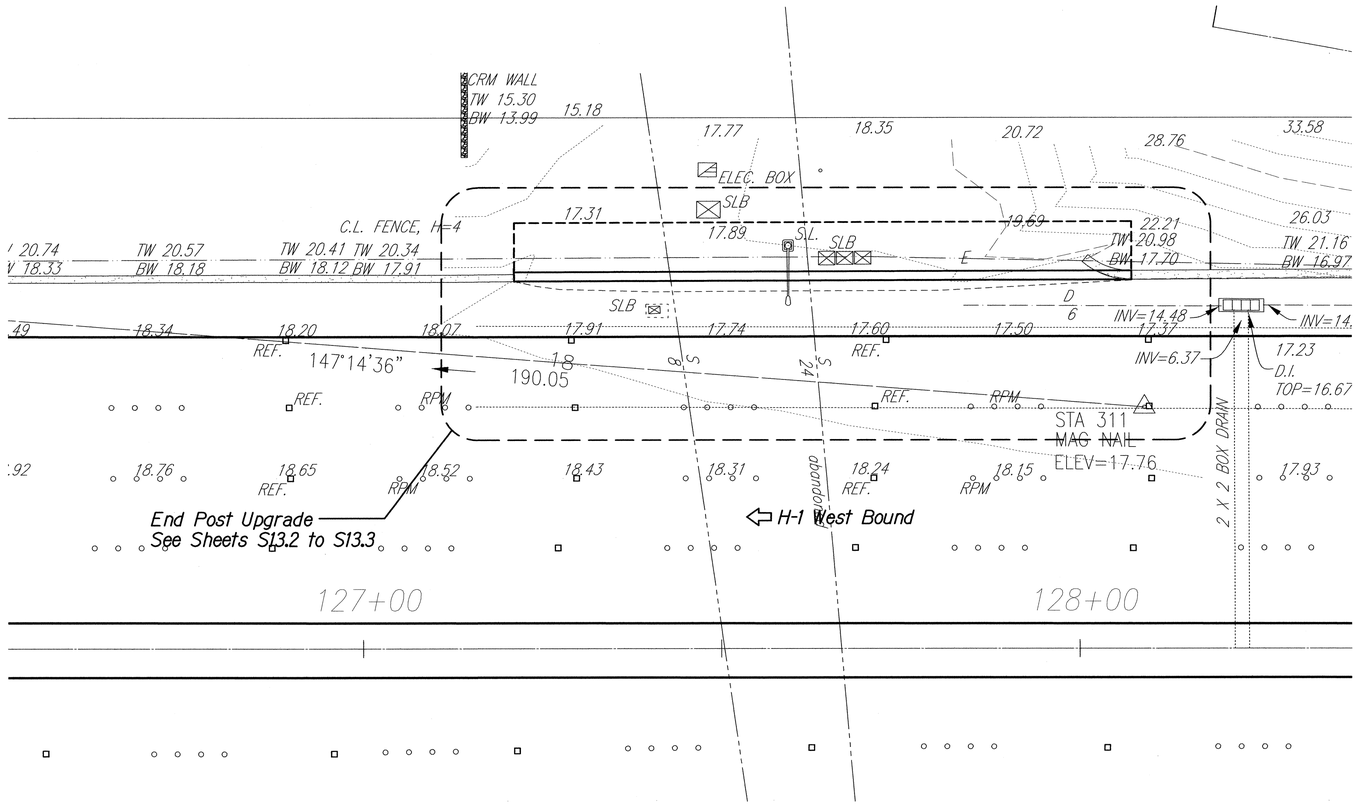
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
AALA STREET & NUUANU STREAM AT STA. 124+74± TO STA. 126+19± WB
PLAN AND ELEVATION
INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)
Scale: As Noted Date: Mar. 2016

SHEET No. S12.4 OF 4 SHEETS

"AS-BUILT"

ADD. 183

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 184 | 354 |




## LAYOUT PLAN

Scale: 1" = 10'-0"

A S13.1 | S13.1

| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
|---|---|---|
| NOTE BOOK | DRAWN BY | |
| No. | TRACED BY | |
| | DESIGNED BY | |
| | QUANTITIES BY | |
| | CHECKED BY | |

DRAWING NAME: Z:\JOB ONGOING\12-032-H1 (SAIL & SHLDR MOD. ST TO PUNCHBOWL WOC)\01 CAD\03-XX-16\HIC-MP-S1301 STA 127+21 TO STA 128+07 WB.DWG PLOT TIME: 03-25-16, 3:34 PM)

CALVIN T. MIYAHARA
LICENSED PROFESSIONAL ENGINEER
NO. 8133-S
HAWAII, U.S.A.

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4-30-18
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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**AALA STREET & MANOA STREAM AT STA. 127+21± TO STA. 128+07± WB**

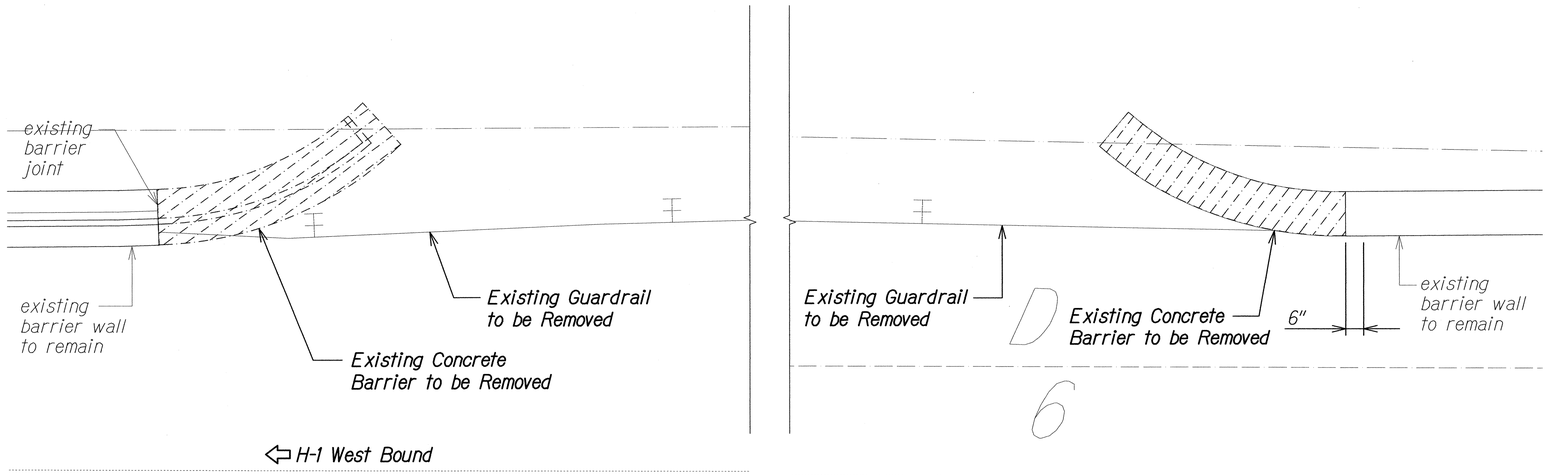
# LAYOUT PLAN

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted Date: Mar. 2016

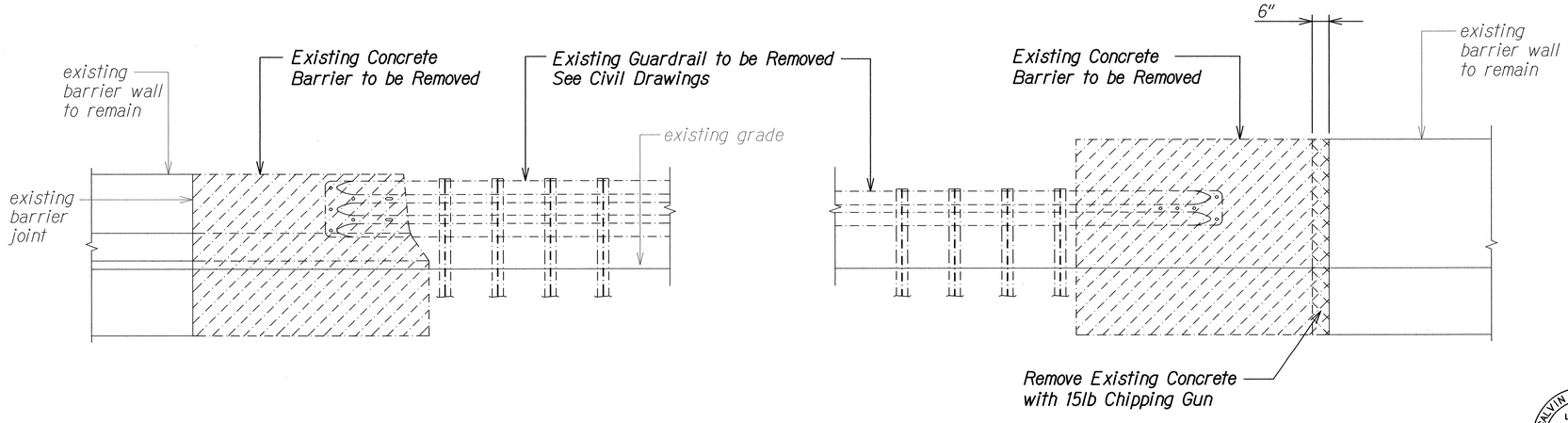
SHEET No. S13.1 OF 3 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 185 | 354 |




## DEMO PLAN (A) S13.2 | S13.2

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




## ELEVATION (B) S13.2 | S13.2

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

| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
|---|---|---|
| | DRAWN BY | |
| NOTE BOOK | TRACED BY | |
| | DESIGNED BY | |
| | QUANTITIES BY | |
| No. | CHECKED BY | |

DRAWING NAME: Z:\OO ONGOING\12-032-H1 GRAIL & SHLDR MDL ST TO PUNCHBOWL WOC\01 CAD\03-XX-16\H1G-MP-S1302 STA.127+21 TO STA.128+07 WB DEMO.DWG PLOT TIME: 03-25-16, 3:35 PM)

CALVIN T. MIYAHARA LICENSED PROFESSIONAL ENGINEER NO. 8133-S HAWAII, U.S.A.

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SIGNATURE 4-30-18 EXPIRATION DATE OF THE LICENSE

STATE OF HAWAI'I
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**AALA STREET & MUUANU STREAM AT STA. 127+21± TO STA. 128+07± WB**

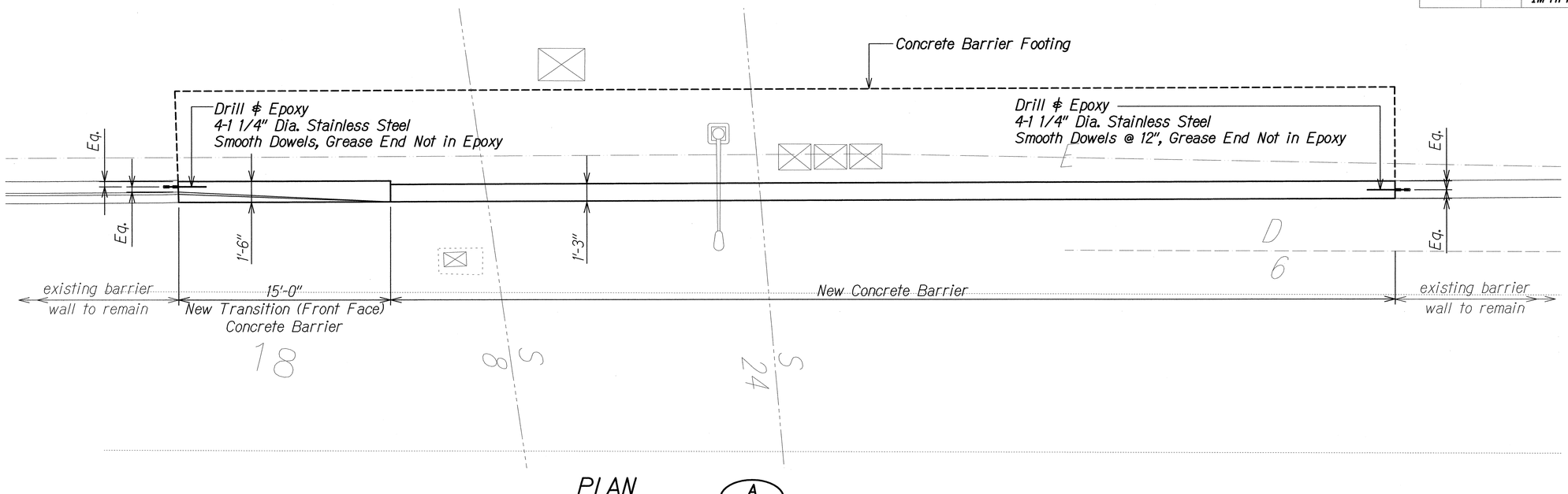
# DEMO PLAN AND ELEVATION

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

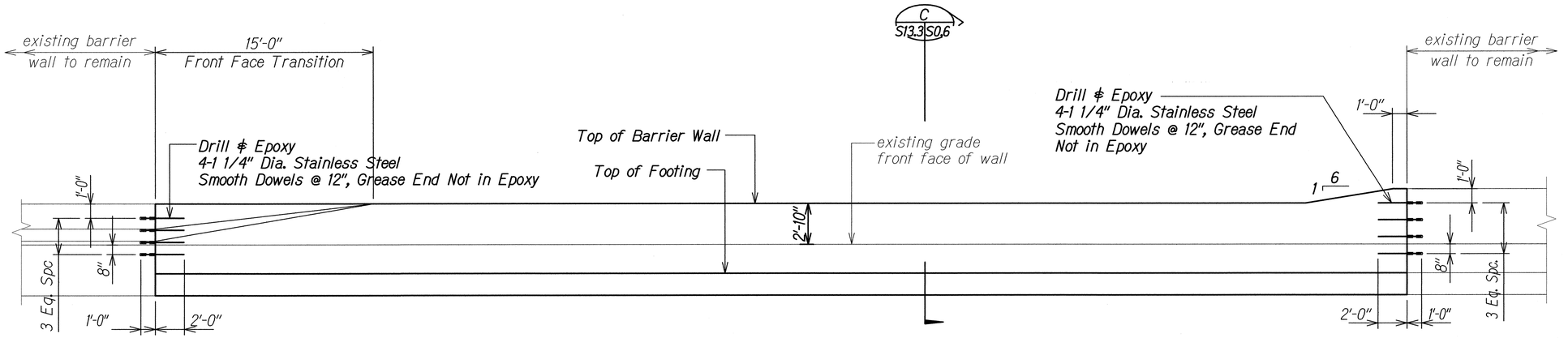
Scale: As Noted Date: Mar. 2016

SHEET No. S13.2 OF 3 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 186 | 354 |




PLAN
Scale: 1/4" = 1'-0"
A S13.3 S13.3




ELEVATION
Scale: 1/4" = 1'-0"
B S23.3 S23.3

| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
|---|---|---|
| | DRAWN BY | |
| NOTE BOOK | TRACED BY | |
| | DESIGNED BY | |
| No. | QUANTITIES BY | |
| | CHECKED BY | |

DRAWING NAME: Z:\00 ONGOING\12-032-H1 GRAIL & SHLDR MDL ST TO PUNCHBOWL WD\01 CAD\03-XX-16\H1G-MP-S1303 STA 127+21 TO STA 128+07 WB PLAN.DWG PLOT TIME: 03-25-16, 3:35 PM

CALVIN T. MIYAHARA
LICENSED PROFESSIONAL ENGINEER
NO. 8133-S
HAWAII, U.S.A.

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4-30-18
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STATE OF HAWAI'I
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

AALA STREET & NUUANU STREAM AT STA. 127+21± TO STA. 128+07± WB

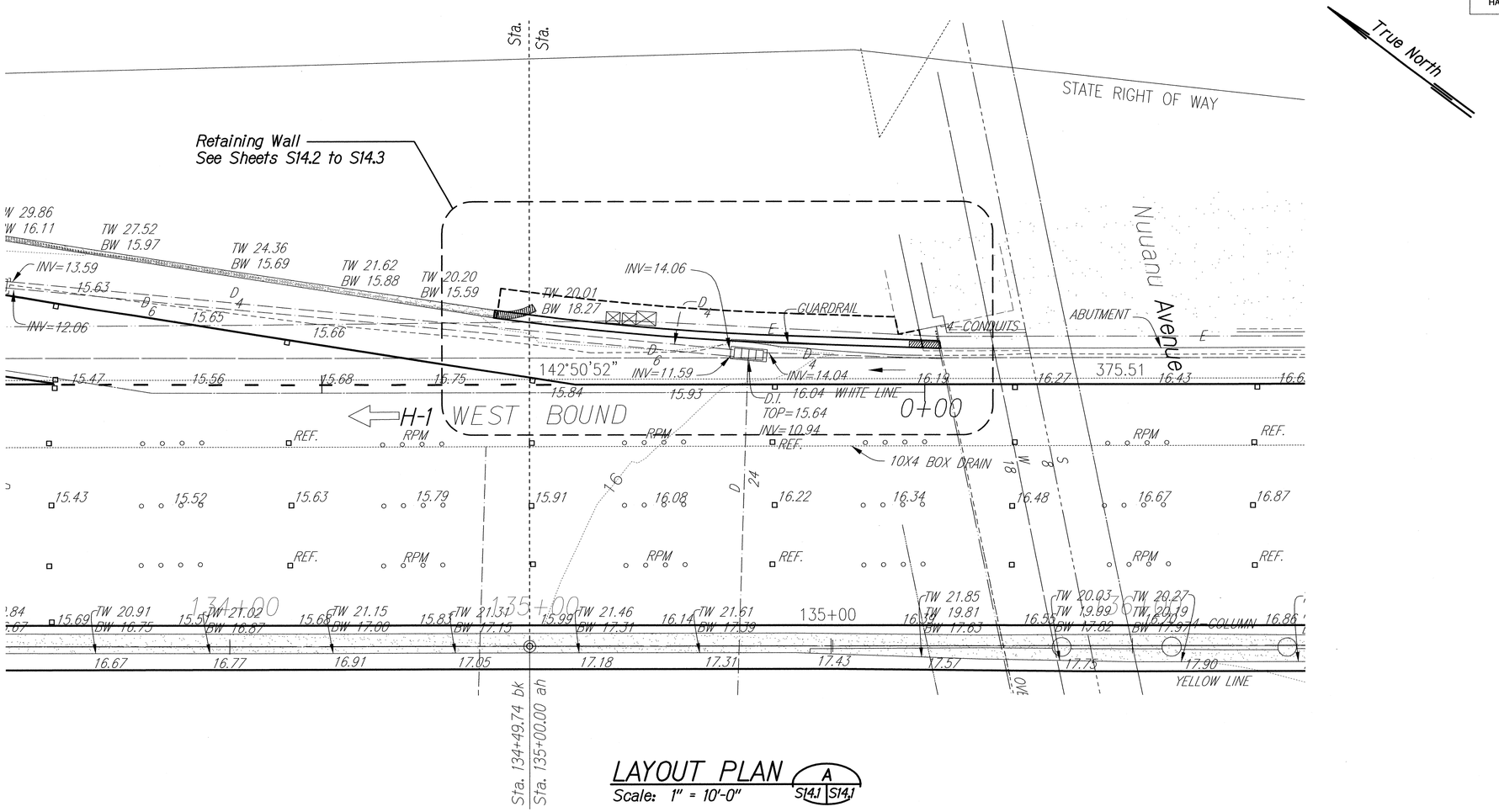
# PLAN AND ELEVATION

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted Date: Mar. 2016

SHEET No. S13.3 OF 3 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 187 | 354 |




LAYOUT PLAN (A)
Scale: 1" = 10'-0"
S14.1 | S14.1

| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
|---|---|---|
| | DRAWN BY | |
| NOTE BOOK | TRACED BY | |
| | DESIGNED BY | |
| No. | QUANTITIES BY | |
| | CHECKED BY | |

DRAWING NAME: Z:\OO ONGOING\12-032-H1 GRAL & SHLDR MDL ST TO PUNCHBOWL WOC\01 CAD\03-XX-16\H1G-MP-S1401 STA.134+44 TO STA.135+63 WB RETWALL.DWG PLOT TIME: 03-25-16, 3:39 PM

CALVIN T. MIYAHARA
LICENSED PROFESSIONAL ENGINEER
NO. 8133-S
HAWAII, U.S.A.

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STATE OF HAWAI'I
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**NUUANU AVENUE AT STA. 134+44± TO STA. 135+63± WB**

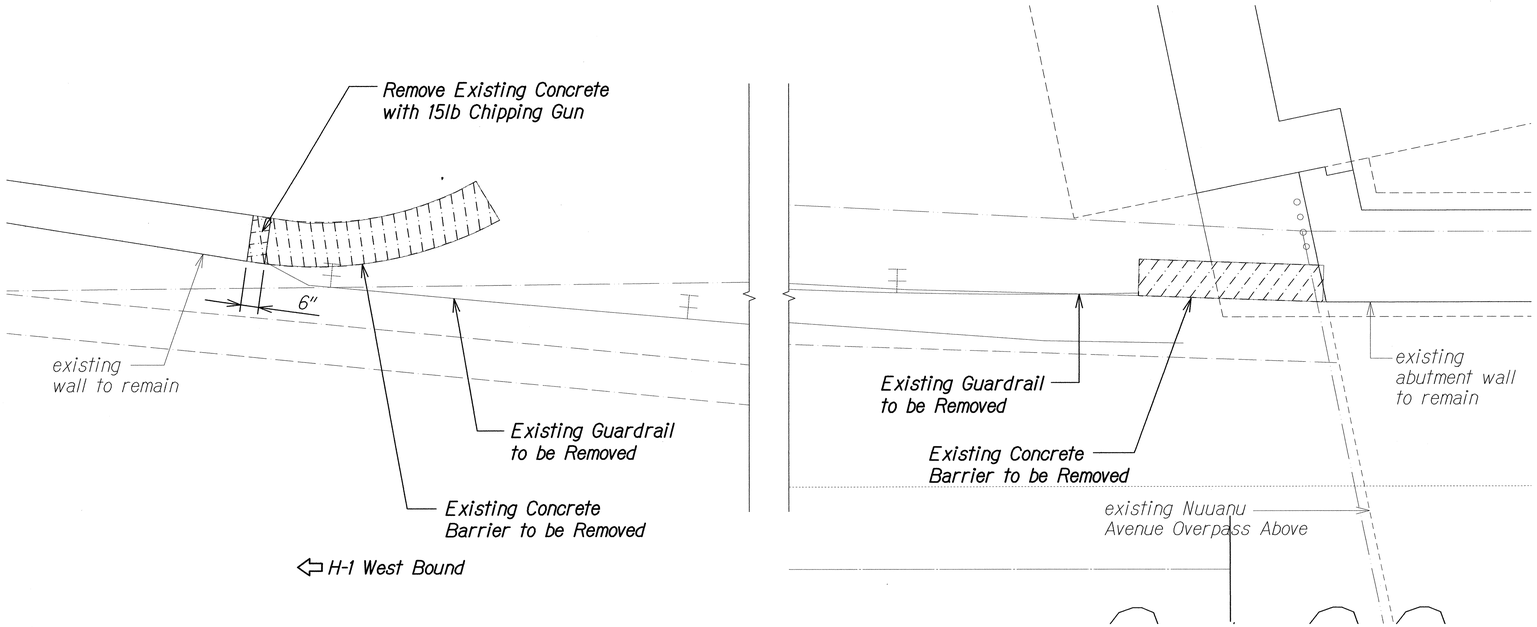
**LAYOUT PLAN**

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

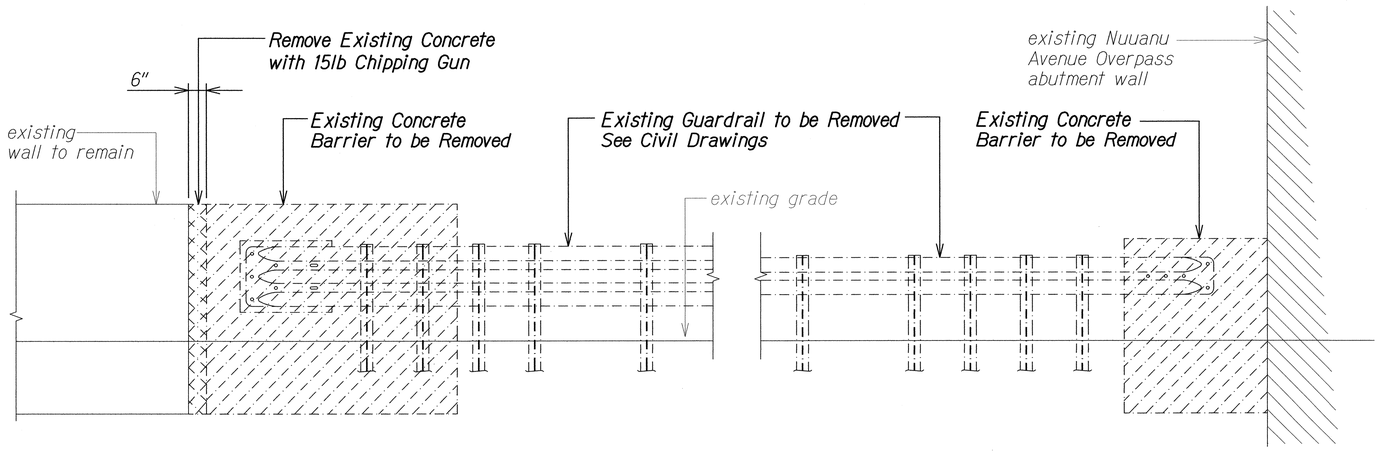
Scale: As Noted Date: Mar. 2016

SHEET No. S14.1 OF 4 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 188 | 354 |




DEMO PLAN (A) S14.2 | S14.2
Scale: 1/2" = 1'-0"




ELEVATION (B) S14.2 | S14.2
Scale: 1/2" = 1'-0"

| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
|---|---|---|
| NOTE BOOK | DRAWN BY | |
| No. | TRACED BY | |
| | DESIGNED BY | |
| | QUANTITIES BY | |
| | CHECKED BY | |

DRAWING NAME: Z:\00 ONGOING\12-032-H1 GRAIL & SHLDR MDL ST TO PUNCHBOWL WO\00_01 CAD\03-XX-16\H1G-WP-S1402 STA.134+44 TO STA.135+63 WB DEMO.DWG PLOT TIME: 03-25-16, 3:41 PM)

CALVIN T. MIYAHARA
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SIGNATURE 4-30-18 EXPIRATION DATE OF THE LICENSE

STATE OF HAWAI'I
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

# NUUANU AVENUE AT STA. 134+44± TO STA. 135+63± WB

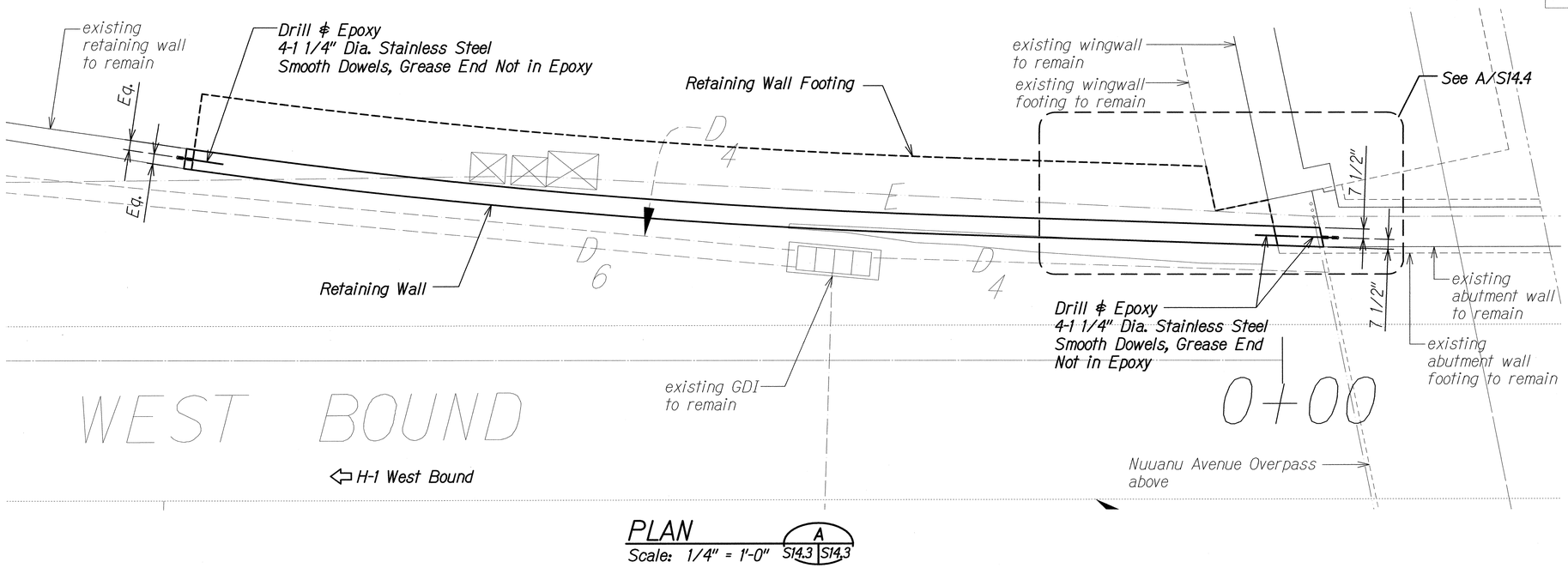
## DEMO PLAN AND ELEVATION

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

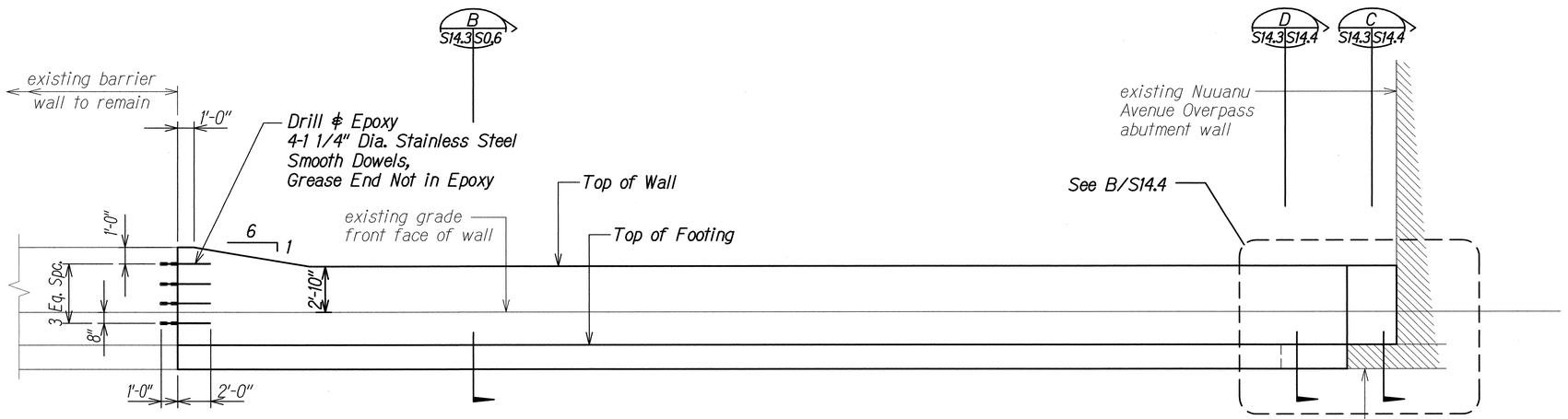
Scale: As Noted Date: Mar. 2016

SHEET No. S14.2 OF 4 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 189 | 354 |




PLAN
Scale: 1/4" = 1'-0" A S14.3 | S14.3




ELEVATION B
Scale: 1/4" = 1'-0" S14.3 | S14.3

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

DRAWING NAME: Z:\00 ONGOING\12-032-H1 GRAIL & SHLDR MDL ST TO PUNCHBOWL WOO\01 CAD\03-XX-16\H1G-MP-S1403 STA 134+44 TO STA 135+63 WB PLAN.DWG PLOT TIME: 03-25-16, 3:42 PM)

CALVIN T. MIYAHIRA
LICENSED PROFESSIONAL ENGINEER
NO. 8133-S
HAWAII, U.S.A.

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4-30-18
SIGNATURE EXPIRATION DATE OF THE LICENSE

STATE OF HAWAI'I
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

# NUUANU AVENUE AT STA. 134+44± TO STA. 135+63± WB

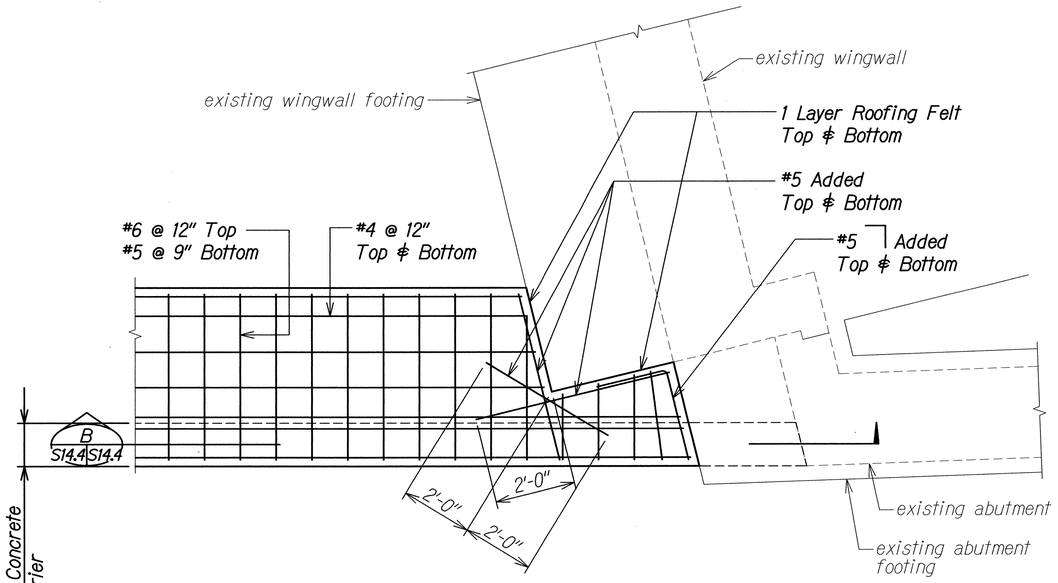
## PLAN AND ELEVATION

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted Date: Mar. 2016

SHEET No. S14.3 OF 4 SHEETS

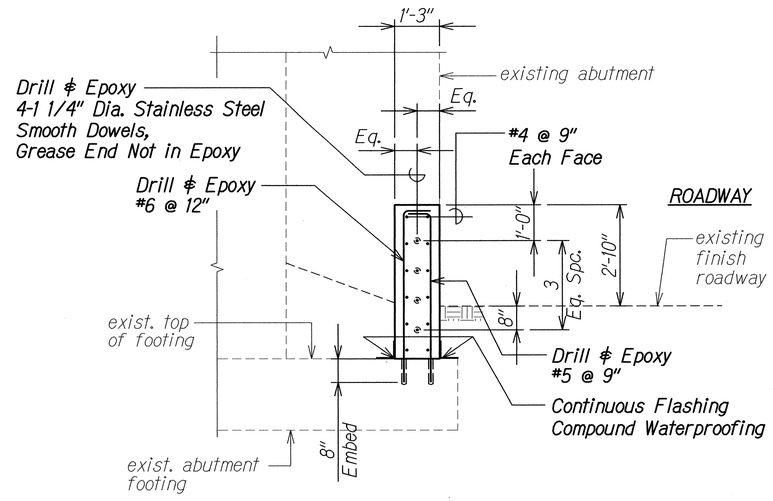
| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 190 | 354 |




## PARTIAL FOOTING REINFORCING PLAN

A S14.4 | S14.4

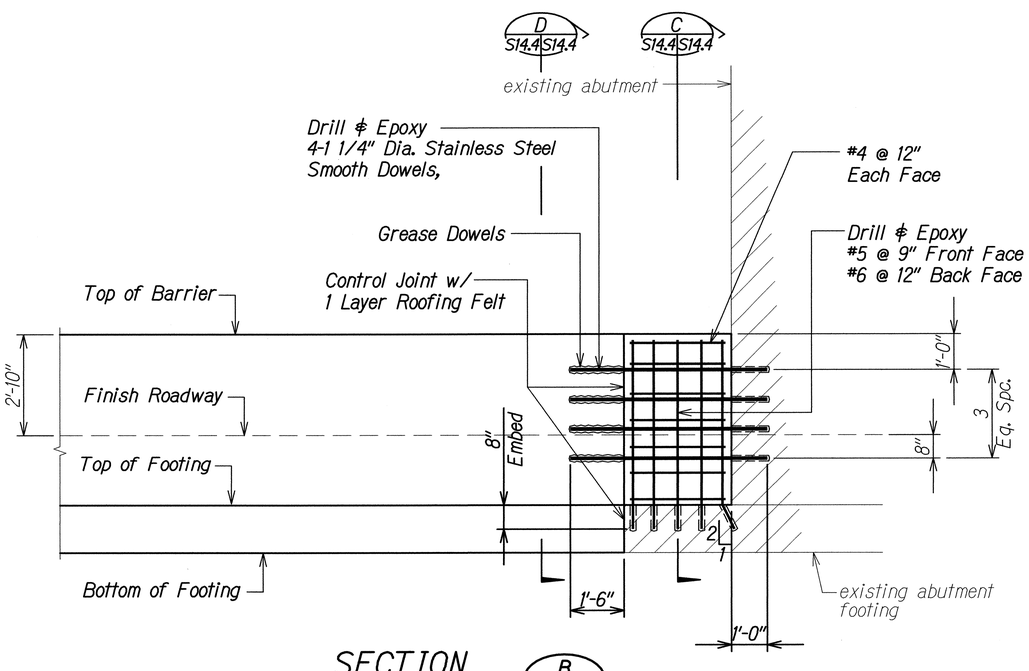
Scale: 1/2" = 1'-0"




## SECTION

C S14.3 | S14.4 S14.4

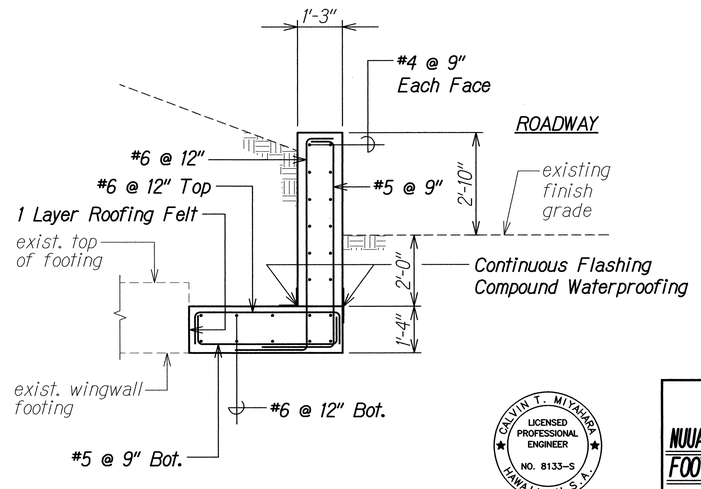
Scale: 1/2" = 1'-0"




## SECTION

B S14.4 | S14.4

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




## SECTION

D S14.3 | S14.4 S14.4

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

CALVIN T. MIYAHIRA
LICENSED PROFESSIONAL ENGINEER
NO. 8133-S
HAWAII, U.S.A.

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4-30-18
SIGNATURE EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

# NUUANU AVENUE AT STA. 134+44± TO STA. 135+63± WB

## FOOTING REINFORCING PLAN AND SECTIONS

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

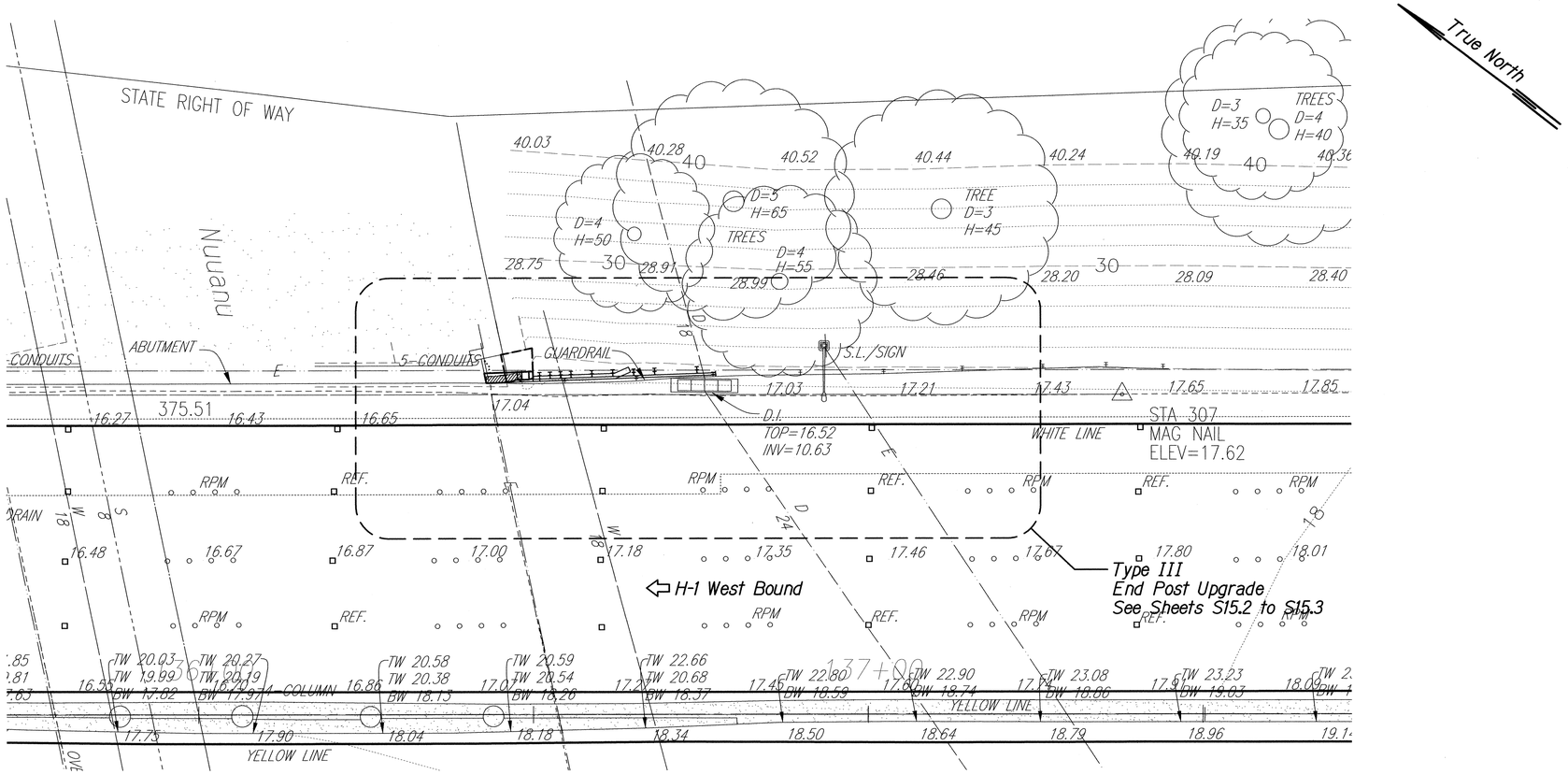
Scale: As Noted Date: Mar. 2016

SHEET No. S14.4 OF 4 SHEETS

| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
|---|---|---|
| | DRAWN BY | |
| NOTE BOOK | TRACED BY | |
| | DESIGNED BY | |
| No. | QUANTITIES BY | |
| | CHECKED BY | |

DRAWING NAME: Z:\OD_ONGOING\12-032-H1 GRAIL & SHLDR MDL ST TO PUNCHBOWL WOO\01 CAD\03-XX-16\H1C-MP-S1404 STA 134+44 TO STA 135+63 WB PLAN.DWG PLOT TIME: 03-25-16, 3:45 PM)

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 191 | 354 |




True North

## LAYOUT PLAN

Scale: 1" = 10'-0"

A S15.1 S15.1

| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
|---|---|---|
| | DRAWN BY | |
| NOTE BOOK | TRACED BY | |
| | DESIGNED BY | |
| No. | QUANTITIES BY | |
| | CHECKED BY | |

DRAWING NAME: Z:\OD_ONGOING\12-032-H1 GRAIL & SHLDR IMPL ST TO PUNCHBOWL WOC\01 CAD\03-XX-16\HIG-MP-S1501 STA 136+48 WB.DWG PLOT TIME: 03-25-16, 3:46 PM)

CALVIN T. MIYAHARA
LICENSED PROFESSIONAL ENGINEER
NO. 8133-S
HAWAII, U.S.A.

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SIGNATURE — EXPIRATION DATE OF THE LICENSE

STATE OF HAWAI'I
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

# NUUANU AVENUE AT STA. 136+48± WB

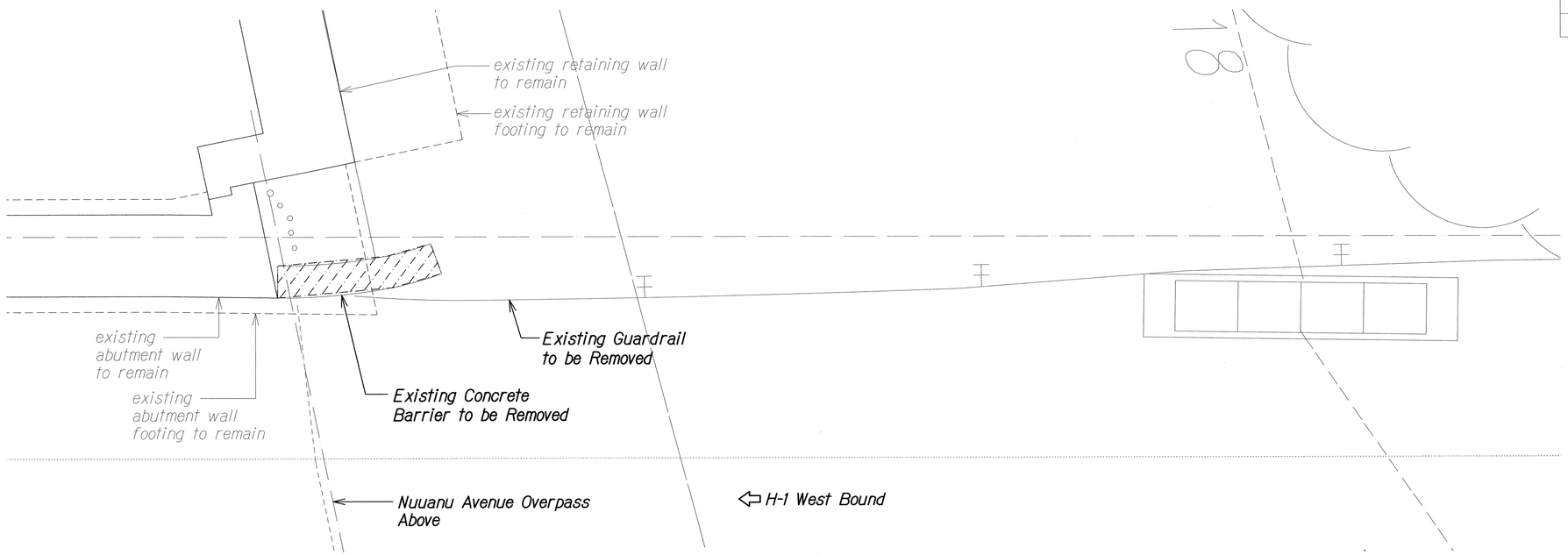
## LAYOUT PLAN

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

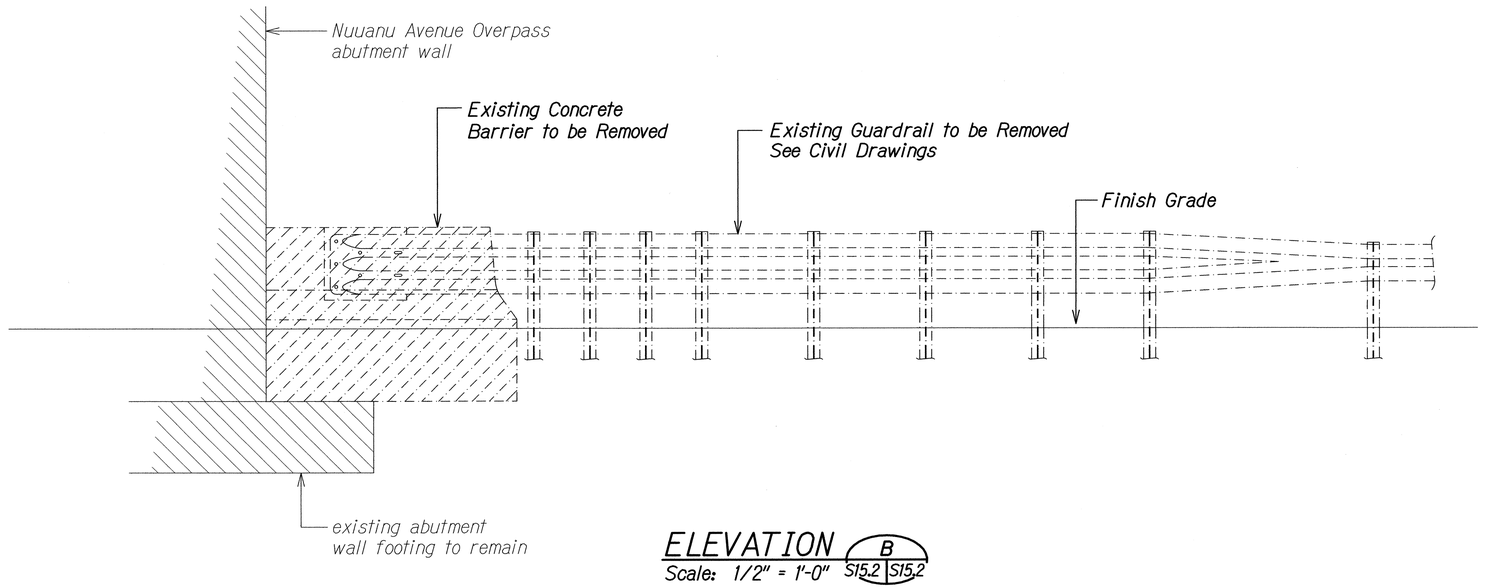
Scale: As Noted Date: Mar. 2016

SHEET No. S15.1 OF 4 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 192 | 354 |




DEMO PLAN (A) S15.2 | S15.2
Scale: 1/2" = 1'-0"




ELEVATION (B) S15.2 | S15.2
Scale: 1/2" = 1'-0"

| ORIGINAL PLAN | DATE |
|---|---|
| SURVEY PLOTTED BY | |
| DRAWN BY | |
| TRACED BY | |
| DESIGNED BY | |
| QUANTITIES BY | |
| CHECKED BY | |
| NOTE BOOK | |
| No. | |

CALVIN T. MIYAHARA LICENSED PROFESSIONAL ENGINEER NO. 8133-S HAWAII, U.S.A.

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4-30-18
SIGNATURE EXPIRATION DATE OF THE LICENSE

STATE OF HAWAI'I
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

# NUUANU AVENUE AT STA. 136+48± WB
# DEMO PLAN AND ELEVATION

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

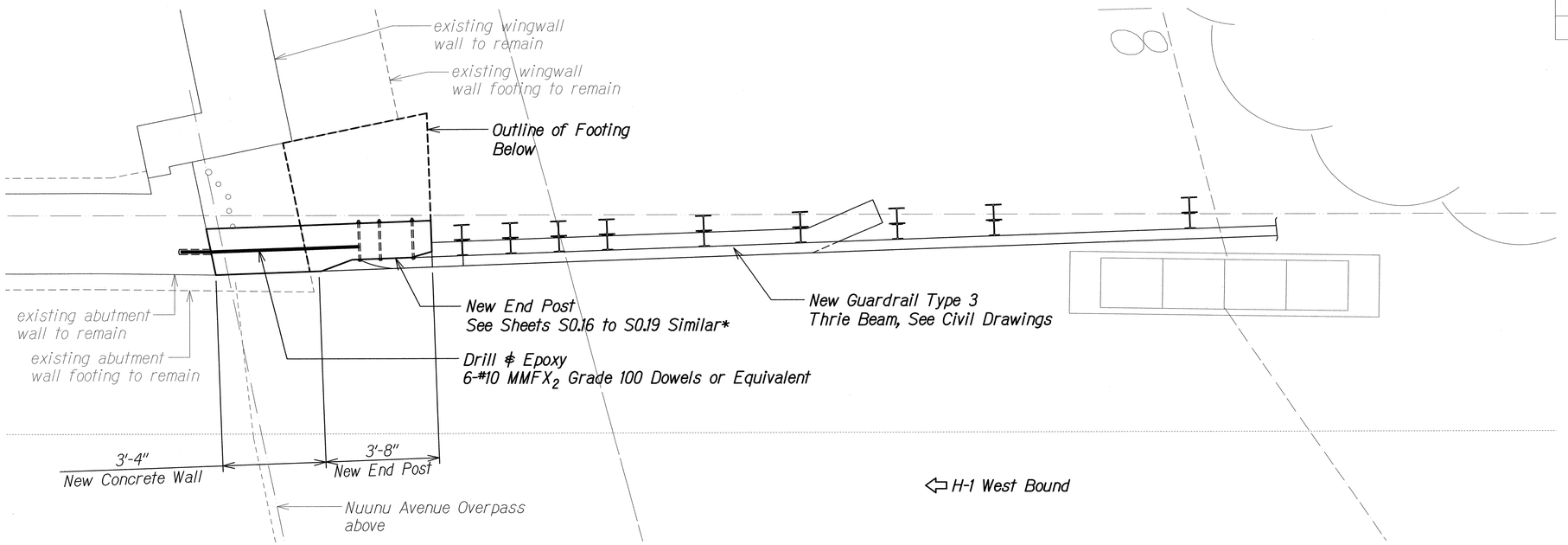
Scale: As Noted Date: Mar. 2016

SHEET No. S15.2 OF 4 SHEETS

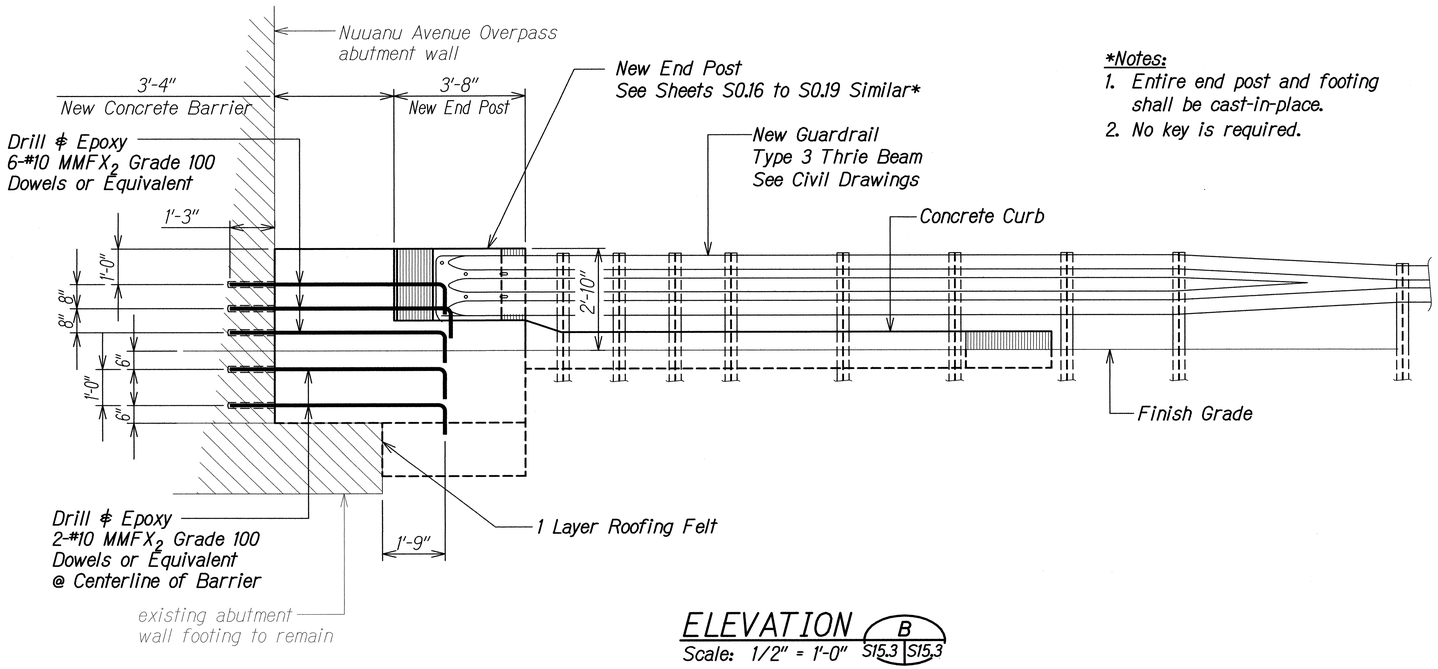


PLOT TIME: 03-25-16, 3:47 PM
DRAWING NAME: Z:\00 ONGOING\12-032-H1 GRAIL & SHLDR MDL ST TO PUNCHBOWL WOO\01 CAD\03-XX-16\H1C-MP-S1502 STA 136+48 WB DEMO.DWG

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 193 | 354 |




DEMO PLAN (A) S15.3 | S15.3
Scale: 1/2" = 1'-0"




ELEVATION (B) S15.3 | S15.3
Scale: 1/2" = 1'-0"

*Notes:
1. Entire end post and footing shall be cast-in-place.
2. No key is required.

| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
|---|---|---|
| NOTE BOOK | DRAWN BY | |
| No. | TRACED BY | |
| | DESIGNED BY | |
| | QUANTITIES BY | |
| | CHECKED BY | |

DRAWING NAME: Z:\OO ONGOING\12-032-H1 GRAIL & SHLDR MDL ST TO PUNCHBOWL WOC\01 CAD\03-XX-16\H1G-MP-S1503_STA 136+48 WB PLAN.DWG PLOT TIME: (03-25-16, 3:48 PM)

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4-30-18
SIGNATURE EXPIRATION DATE OF THE LICENSE

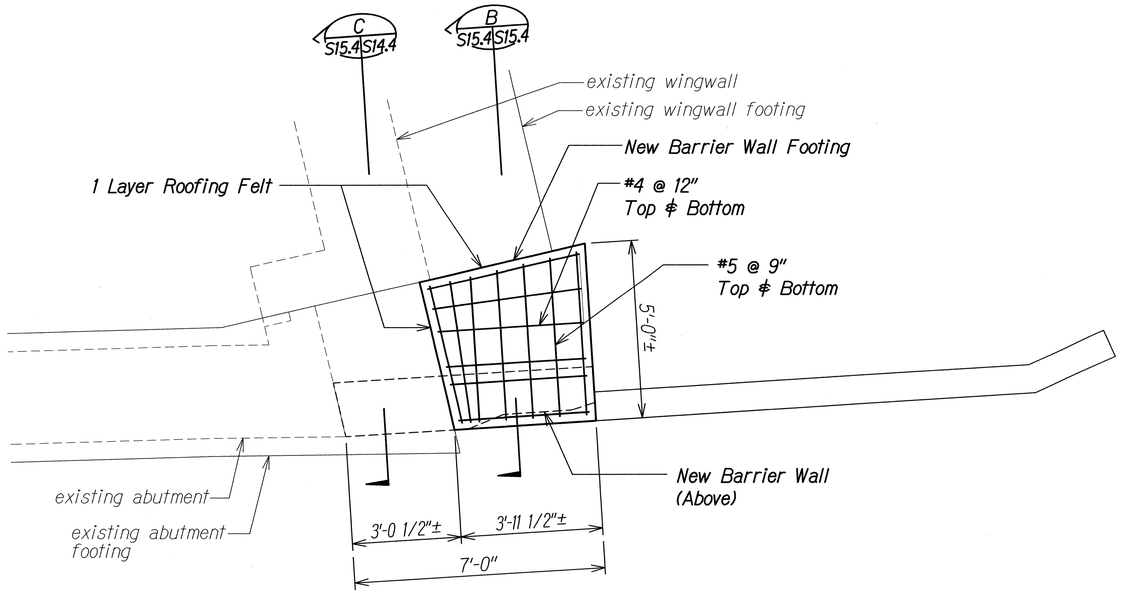
STATE OF HAWAI'I
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

# NUUANU AVENUE AT STA. 136+48± WB
## PLAN AND ELEVATION
## INTERSTATE ROUTE H-1
## GUARDRAIL AND SHOULDER IMPROVEMENTS
## Middle Street to Punchbowl Off-Ramp
## Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted Date: Mar. 2016

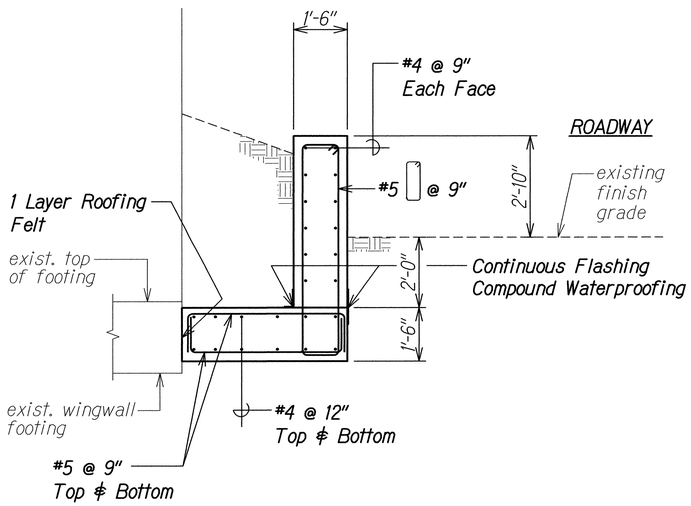
SHEET No. S15.3 OF 4 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 194 | 354 |




## FOOTING REINFORCING PLAN (A S15.4 S15.4)

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




## SECTION (B S15.4 S15.4)

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

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

DRAWING NAME: Z:\OO ONO\ONO\12-032-H1 GRAIL & SHLDR MDL ST TO PUNCHBOWL WB\01 CAD\03-XX-16\H1G-MP-S1504 STA.136+48 WB PLAN.DWG PLOT TIME: 03-25-16, 4:54 PM

CALVIN T. MIYAMARA
LICENSED PROFESSIONAL ENGINEER
NO. 8133-S
HAWAII, U.S.A.

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SIGNATURE 4-30-18 EXPIRATION DATE OF THE LICENSE

STATE OF HAWAI'I
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

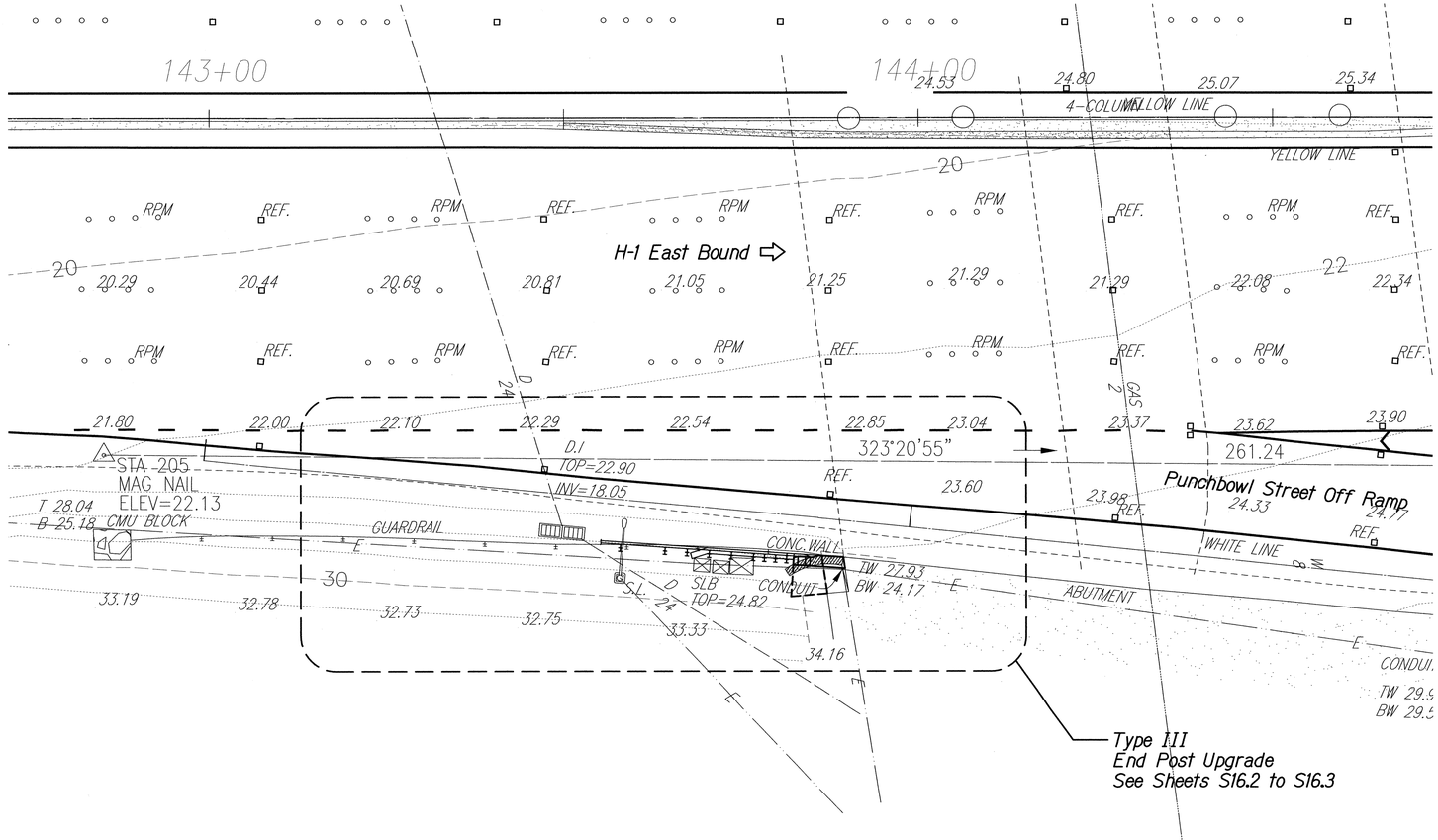
# NUUANU AVENUE AT STA. 136+48± WB
# FOOTING REINFORCING PLAN AND SECTION

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted Date: Mar. 2016

SHEET No. S15.4 OF 4 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 195 | 354 |




## LAYOUT PLAN

Scale: 1" = 10'-0"

A
S16.1 | S16.1

| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
|---|---|---|
| | DRAWN BY | " |
| NOTE BOOK | TRACED BY | " |
| | DESIGNED BY | " |
| No. | QUANTITIES BY | " |
| | CHECKED BY | " |

DRAWING NAME: Z:\OD ONGOING\12-032-H1 GRAIL & SHLDR MOD. ST TO PUNCHBOWL WOC\01 CAD\03-XX-16\H1G-MP-S1601 STA.143+83 EB.DWG PLOT TIME: 03-25-16, 3:52 PM)

CALVIN T. MIYAHIRA
LICENSED PROFESSIONAL ENGINEER
NO. 8133-S
HAWAII, U.S.A.

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SIGNATURE EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

# PALI HIGHWAY OVERPASS AT STA. 143+83± EB

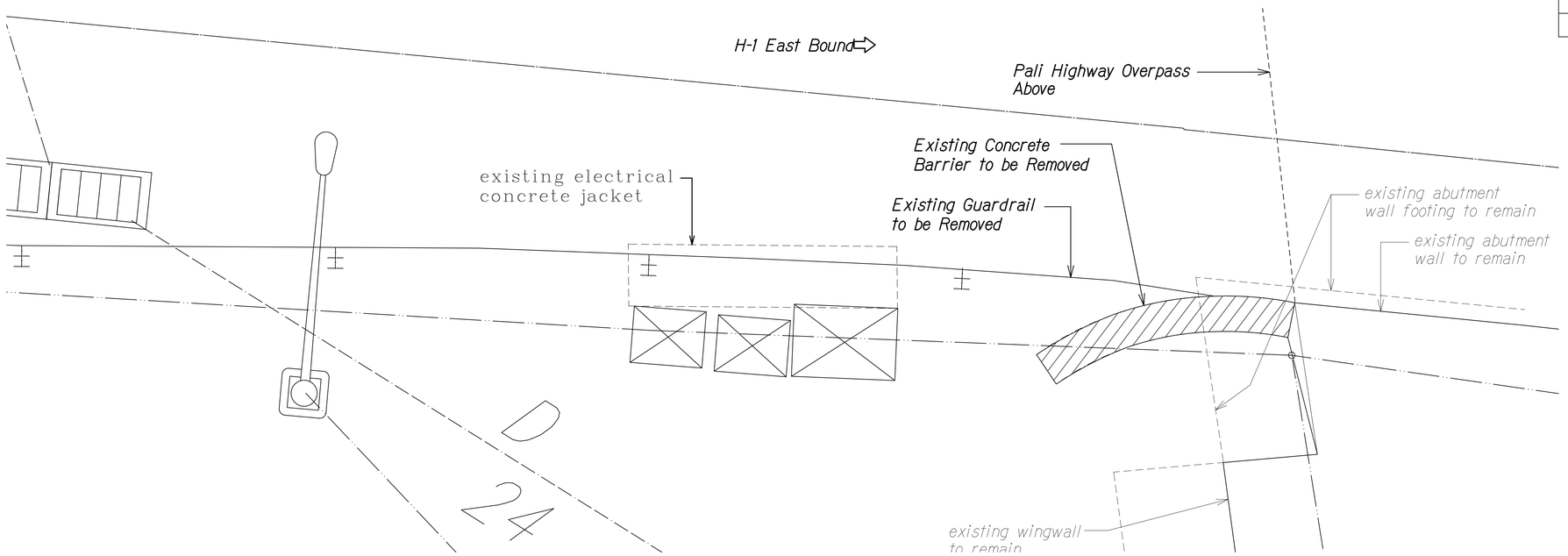
## LAYOUT PLAN

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

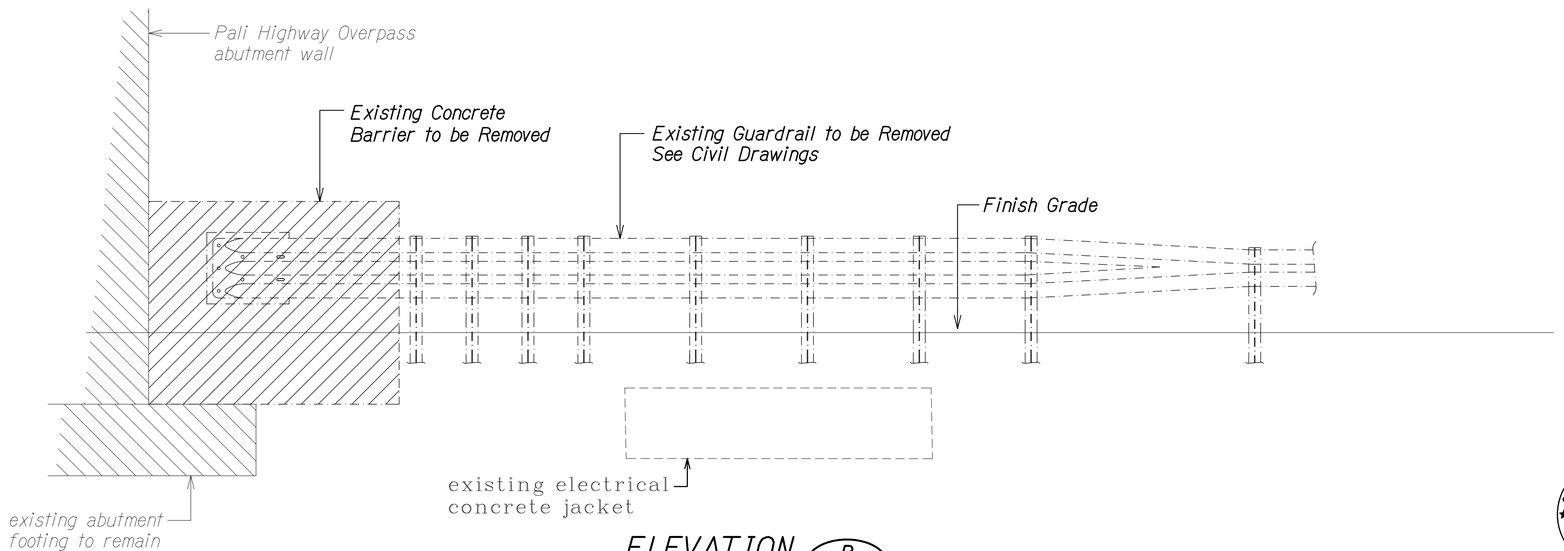
Scale: As Noted Date: Mar. 2016

SHEET No. S16.1 OF 4 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 196 | 354 |




DEMO PLAN (A) S16.2 | S16.2
Scale: 1/2" = 1'-0"




ELEVATION (B) S16.2 | S16.2
Scale: 1/2" = 1'-0"

| 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 |

CALVIN T. MIYAMASA LICENSED PROFESSIONAL ENGINEER NO. 8133-S HAWAII, U.S.A.

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SIGNATURE — 4-30-20 EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

# PALI HIGHWAY OVERPASS AT STA. 143+83± EB

## DEMO PLAN AND ELEVATION

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted Date: Mar. 2016

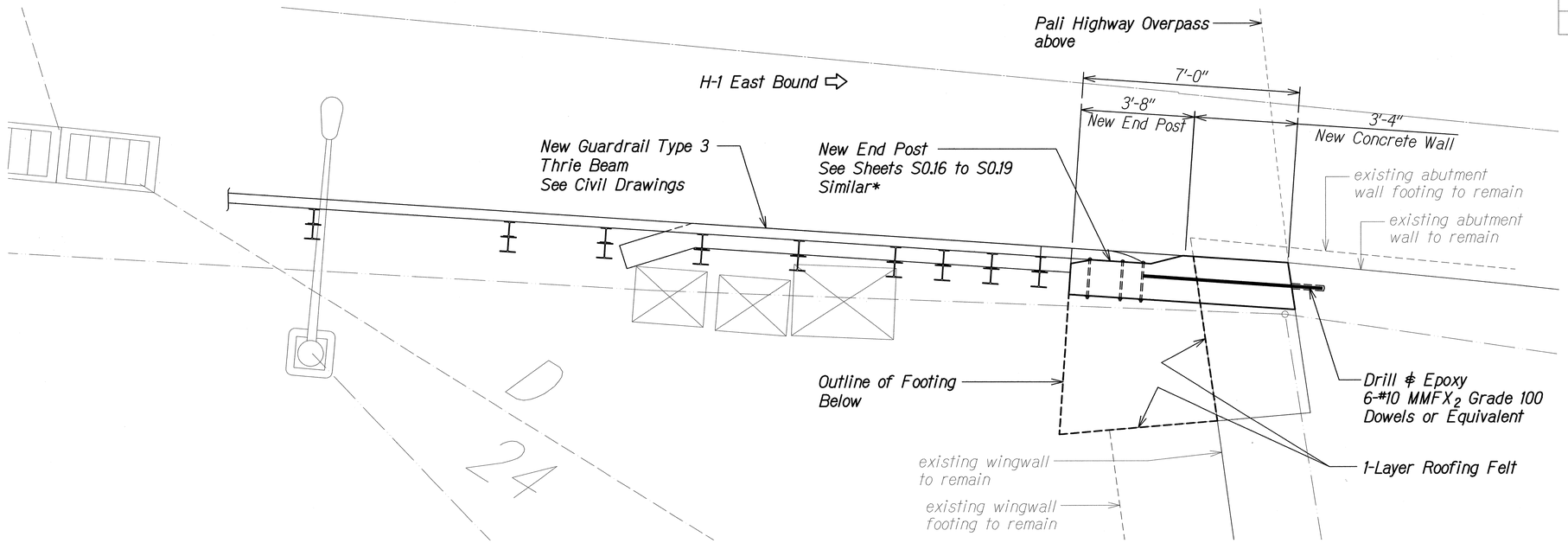
SHEET No. S16.2 OF 4 SHEETS

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

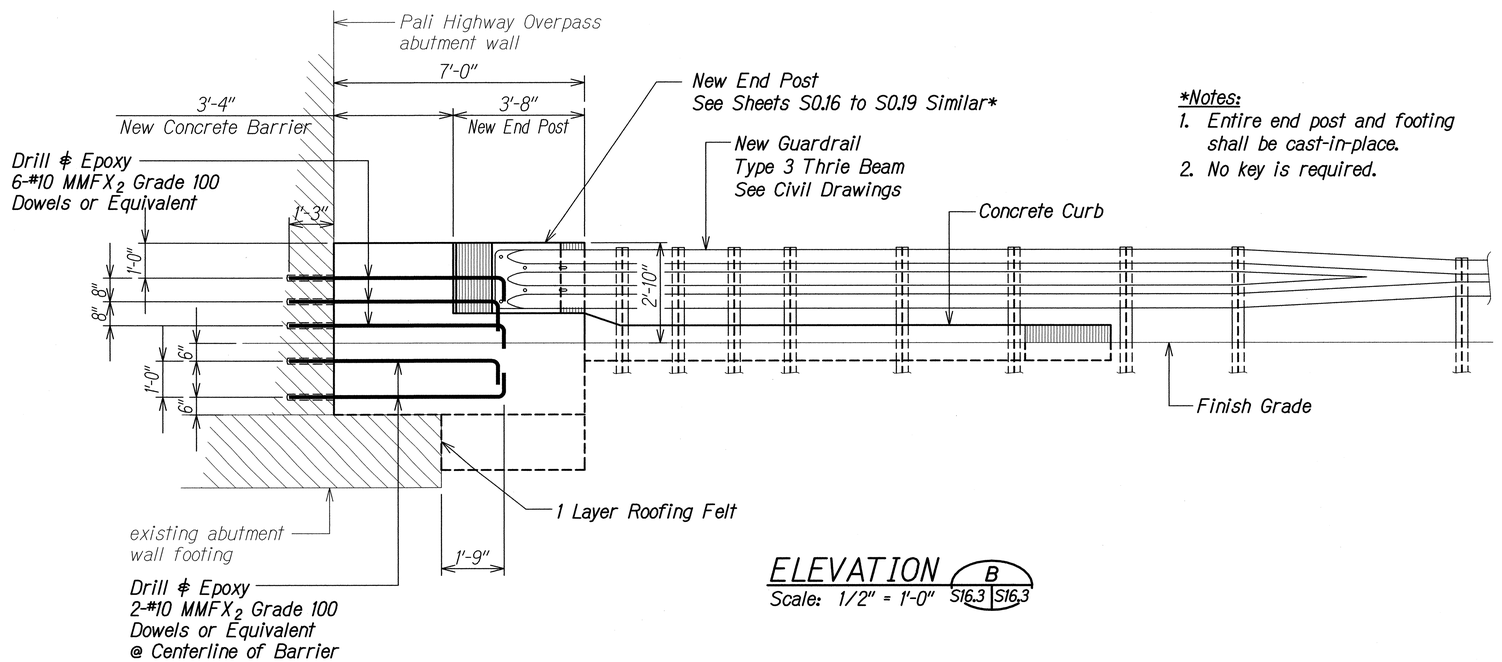
DRAWING NAME: Z:\OD ONGOING\12-032-1-H1 GR&L & SHLDR MDL ST TO PBWL PD WOC TM.01 CAD\07-27-20 ASB DWG\H1G-WP-S1602 STA 143+83 EB DEMO.DWG PLOT TIME: 07-27-20, 5:32 PM

"AS-BUILT"

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 197 | 354 |




PLAN
Scale: 1/2" = 1'-0"
A S16.3 S16.3




ELEVATION
Scale: 1/2" = 1'-0"
B S16.3 S16.3

*Notes:*
1. Entire end post and footing shall be cast-in-place.
2. No key is required.

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

DRAWING NAME: Z:\OD ONGOING\12-032-H1 GRAL & SHLDR MDL ST TO PUNCHBOWL WCO\01 CAD\03-XX-16\H1G-MP-S1603 STA 143+83 EB PLAN.DWG PLOT TIME: 03-25-16, 3:57 PM

CALVIN T. MIYAMARA LICENSED PROFESSIONAL ENGINEER NO. 8133-S HAWAII, U.S.A.

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4-30-18
SIGNATURE EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

# PALI HIGHWAY OVERPASS AT STA. 143+83± EB

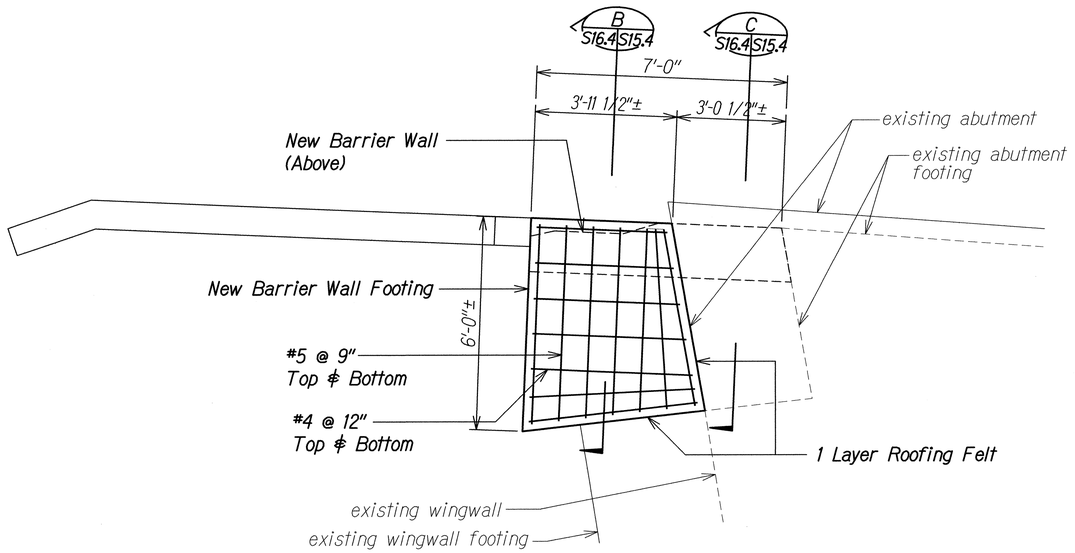
## PLAN AND ELEVATION

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted Date: Mar. 2016

SHEET No. S16.3 OF 4 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 198 | 354 |




## FOOTING REINFORCING PLAN

A
S16.4 S16.4

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

| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
|---|---|---|
| | DRAWN BY | |
| NOTE BOOK | TRACED BY | |
| No. | DESIGNED BY | |
| | QUANTITIES BY | |
| | CHECKED BY | |

DRAWING NAME: Z:\OD ONCOING\12-032-H1 GRAIL & SHLDR MDL ST TO PUNCHBOWL WOO\01 CAD\03-XX-16\H1C-MP-S1604 STA 143+83 EB.DWG PLOT TIME: 03-25-16, 3:58 PM)

CALVIN T. MIYAHARA
LICENSED PROFESSIONAL ENGINEER
NO. 8133-S
HAWAII, U.S.A.

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4-30-18
SIGNATURE EXPIRATION DATE OF THE LICENSE

STATE OF HAWAI'I
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**PALI HIGHWAY OVERPASS AT STA. 143+83± EB**

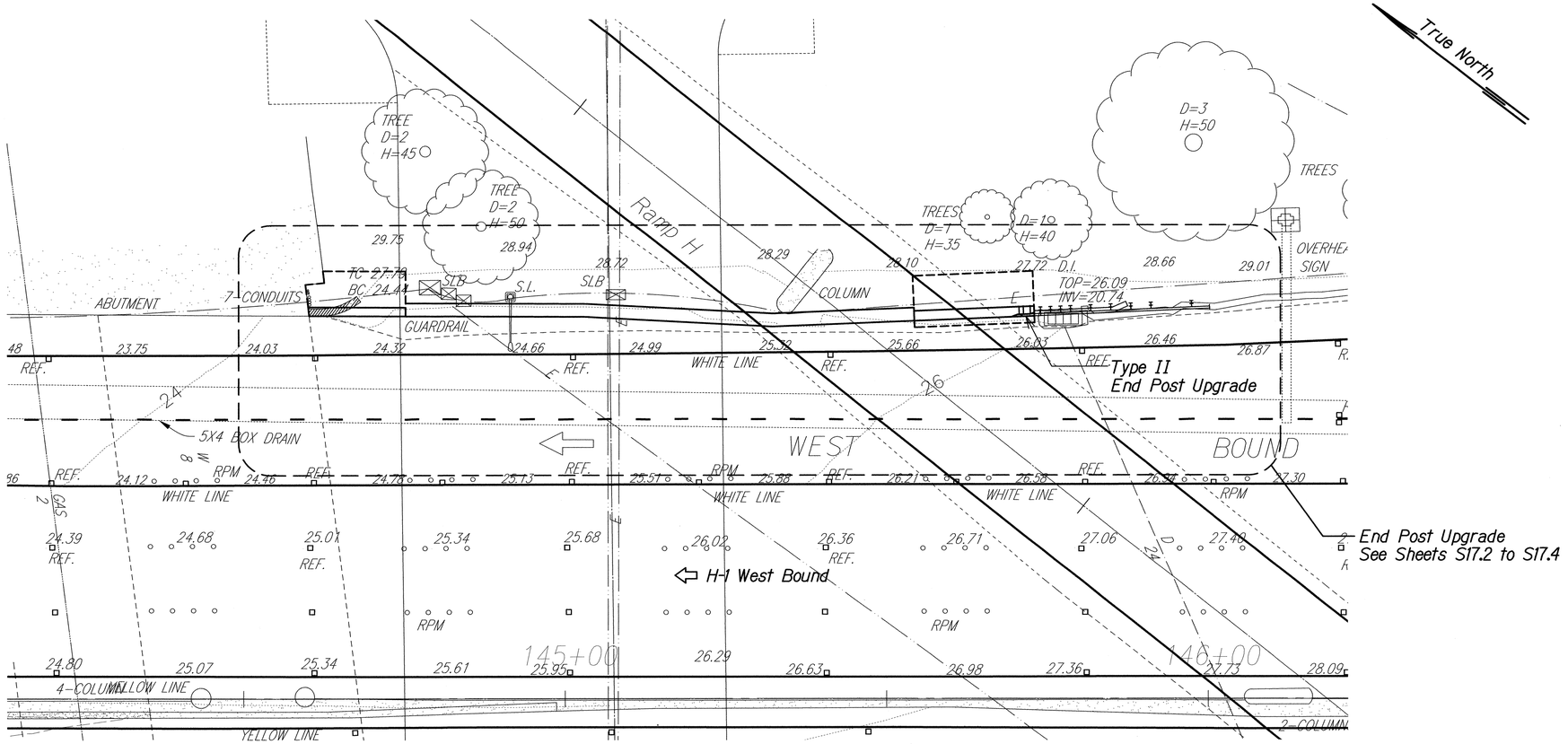
**FOOTING REINFORCING PLAN**

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted Date: Mar. 2016

SHEET No. S16.4 OF 4 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-H1-1(242) | 2016 | 199 | 354 |




## LAYOUT PLAN

Scale: 1" = 10'-0"

A S17.1 | S17.1

| | | |
|---|---|---|
| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
| | DRAWN BY | |
| NOTE BOOK | TRACED BY | |
| No. | DESIGNED BY | |
| | QUANTITIES BY | |
| | CHECKED BY | |

DRAWING NAME: Z:\OD ONDONO\12-032-H1 GRAIL & SHLDR MDL ST TO PUNCHBOWL WOO\01 CAD\03-XX-16\H1G-MP-S1701 STA.145+73 WB.DWG PLOT TIME: 03-25-16, 4:01 PM

CALVIN T. MIYAMARA LICENSED PROFESSIONAL ENGINEER NO. 8133-S HAWAII, U.S.A.

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4-30-18
SIGNATURE EXPIRATION DATE OF THE LICENSE

STATE OF HAWAI'I
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**PALI HIGHWAY OVERPASS AT STA. 145+73± WB**

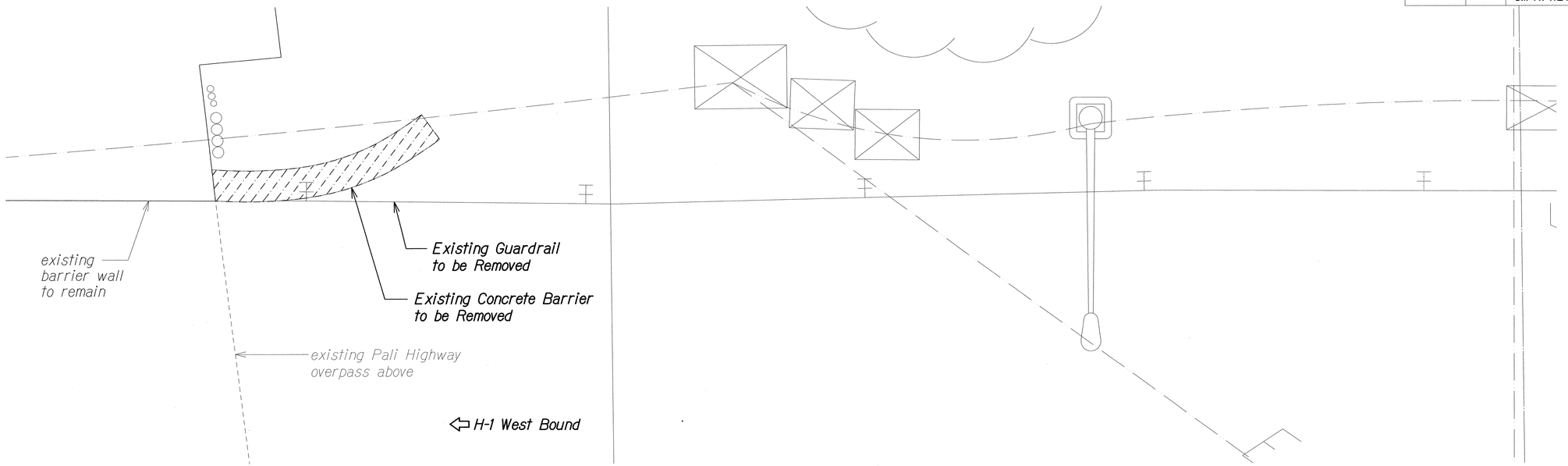
**LAYOUT PLAN**

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-H1-1(242)

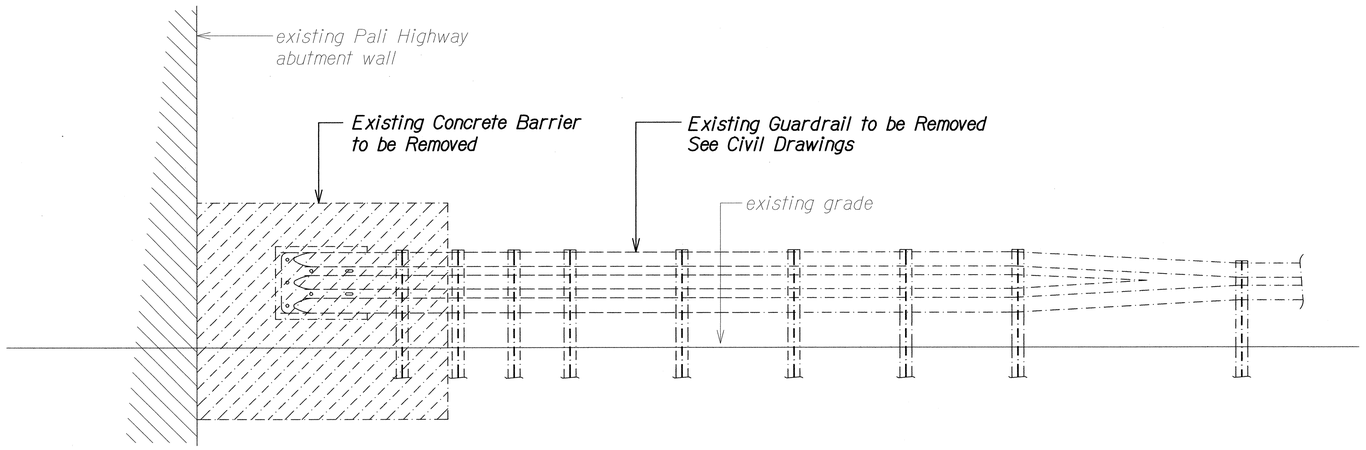
Scale: As Noted Date: Mar. 2016

SHEET No. S17.1 OF 4 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 200 | 354 |




## DEMO PLAN (A)
Scale: 1/2" = 1'-0"  S17.2 | S17.2




## ELEVATION (B)
Scale: 1/2" = 1'-0"  S17.2 | S17.2

| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
|---|---|---|
| NOTE BOOK | DRAWN BY | |
| No. | TRACED BY | |
| | DESIGNED BY | |
| | QUANTITIES BY | |
| | CHECKED BY | |

CALVIN T. MIYAHARA LICENSED PROFESSIONAL ENGINEER NO. 8133-S HAWAII, U.S.A.

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4-30-18
SIGNATURE  EXPIRATION DATE OF THE LICENSE

STATE OF HAWAI'I
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**PALI HIGHWAY OVERPASS AT STA. 145+73± WB**

**DEMO PLAN AND ELEVATION**

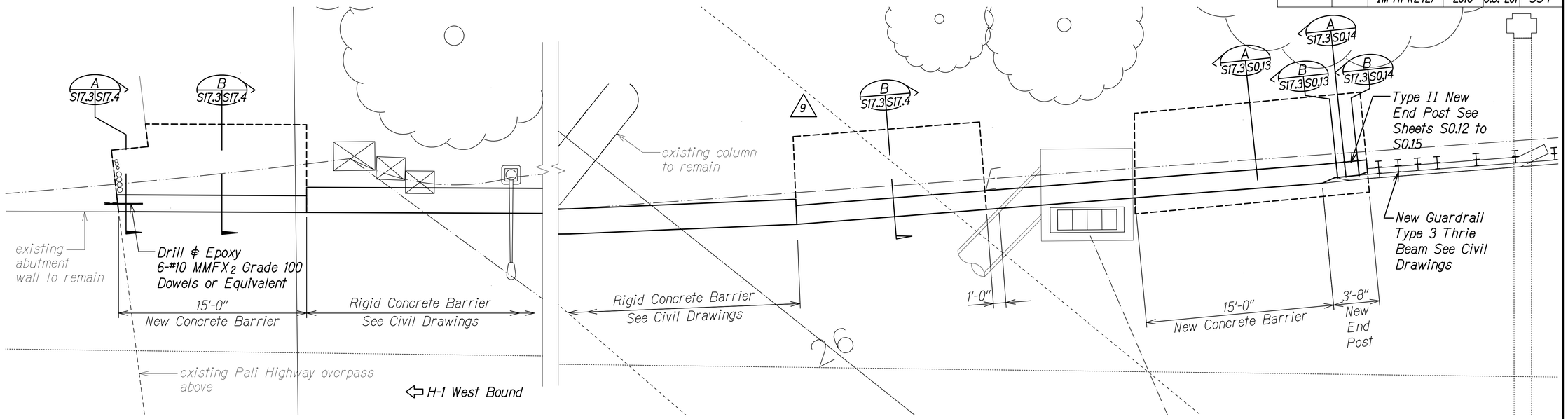
INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted  Date: Mar. 2016

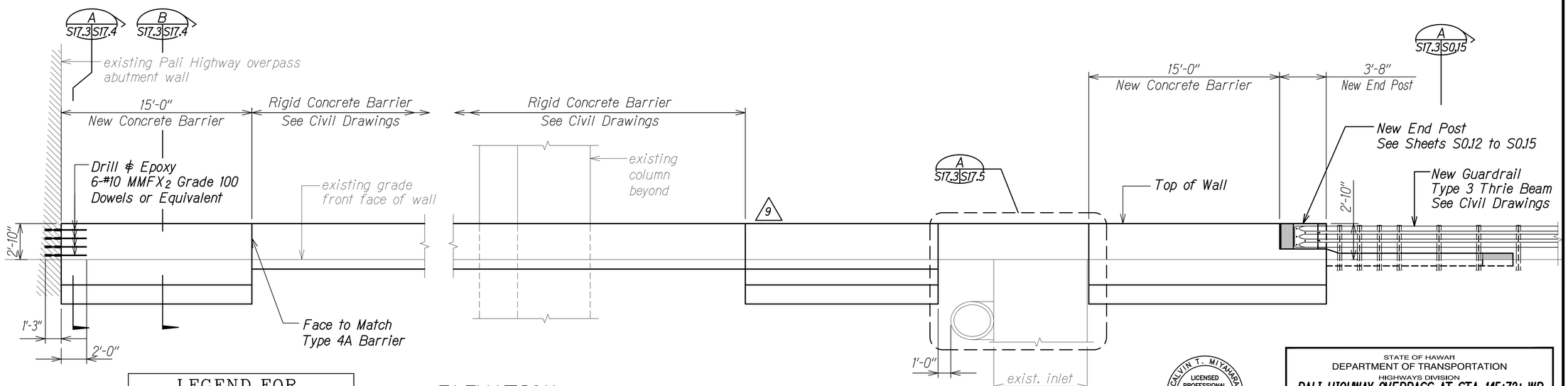
SHEET No. S17.2 OF 4 SHEETS

DRAWING NAME: Z:\OD_ONGOING\12-032-H1 ORAL & SHLDR IMPR. ST TO PUNCHBOWL WOC\01 CAD\03-XX-16\H1G-MP-S1702 STA.145+73 WB DEMO.DWG PLOT TIME: 03-25-16, 4:02 PM

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | C.O. 201 | 354 |




PLAN
Scale: 1/4" = 1'-0" (A S17.3 | S17.3)




ELEVATION
Scale: 1/4" = 1'-0" (B S17.3 | S17.3)

## 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 |

| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
|---|---|---|
| NOTE BOOK | DRAWN BY | |
| No. | TRACED BY | |
| | DESIGNED BY | |
| | QUANTITIES BY | |
| | CHECKED BY | |

| DATE | REVISION |
|---|---|
| 6/20/18 | 9 RFI 036C |

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SIGNATURE — 4-30-20 EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**PALI HIGHWAY OVERPASS AT STA. 145+73± WB**

**PLAN AND ELEVATION**

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted Date: Mar. 2016

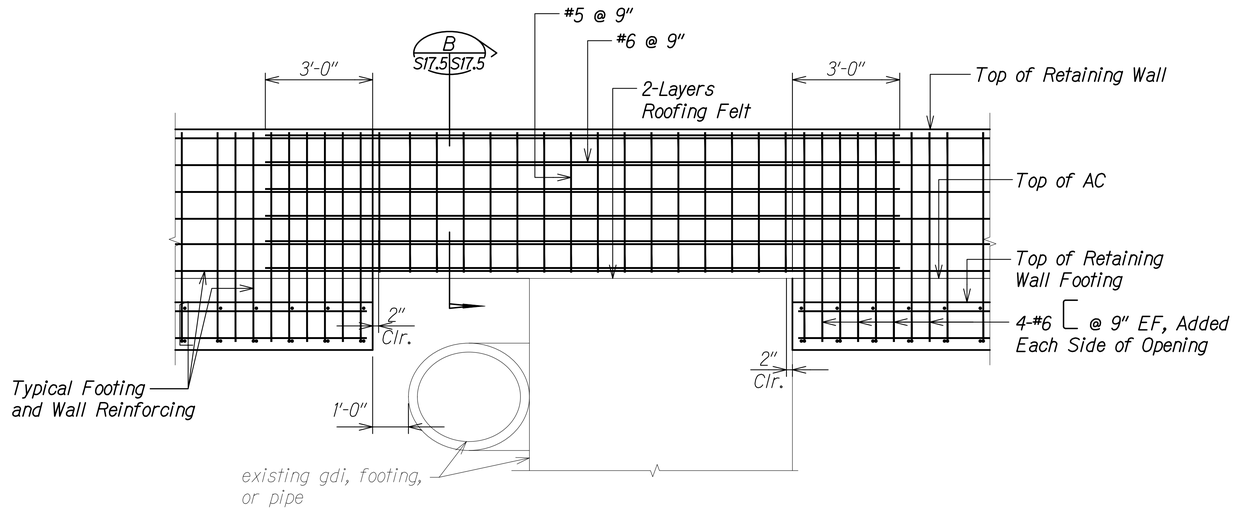
SHEET No. S17.3 OF 4 SHEETS

"AS-BUILT"

C.O. 201

DRAWING NAME: Z:\OD ONGOING\12-032\1-H1 GRAIL & SHLDR MDL ST TO PBWL PD WDC TMK\01 CAD\07-22-20 ASB\H1G-MP-S1703 STA 145+73 WB PLAN DELTA9 CO.DWG PLOT TIME: 07-23-20, 3:19 PM)

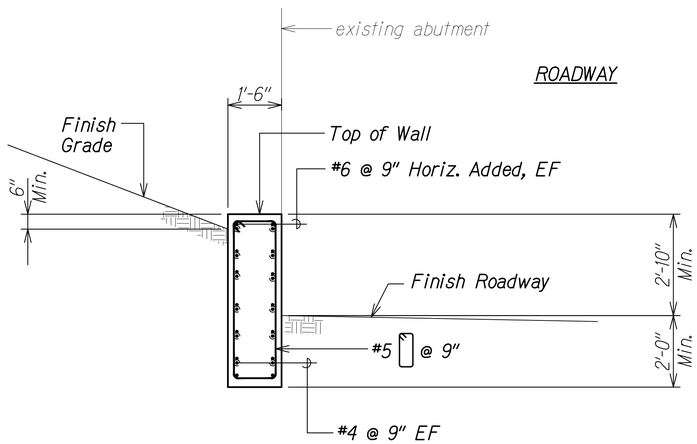
| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | C.O. 202S-1 | 354 |




## RETAINING WALL AT GDI, FOOTING , OR PIPE - SECTION A

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

S17.5 S17.5




## RETAINING WALL AT GDI - SECTION B

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

S17.5 S17.5

*Note:*
*Provide 1/4" premolded joint filler between wall or wall footing and any adjacent concrete.*

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 |

CALVIN T. MIYAMARA
LICENSED PROFESSIONAL ENGINEER
NO. 8133-S
HAWAII, U.S.A.

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SIGNATURE 4-30-20 EXPIRATION DATE OF THE LICENSE

| DATE | REVISION |
|---|---|
| 6/20/18 | 9 RFI 036C - New Sheet |

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**PALI HIGHWAY OVERPASS AT STA. 145+73± WB**

**SECTIONS**

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted Date: Mar. 2016

SHEET No. S17.5 OF 4 SHEETS

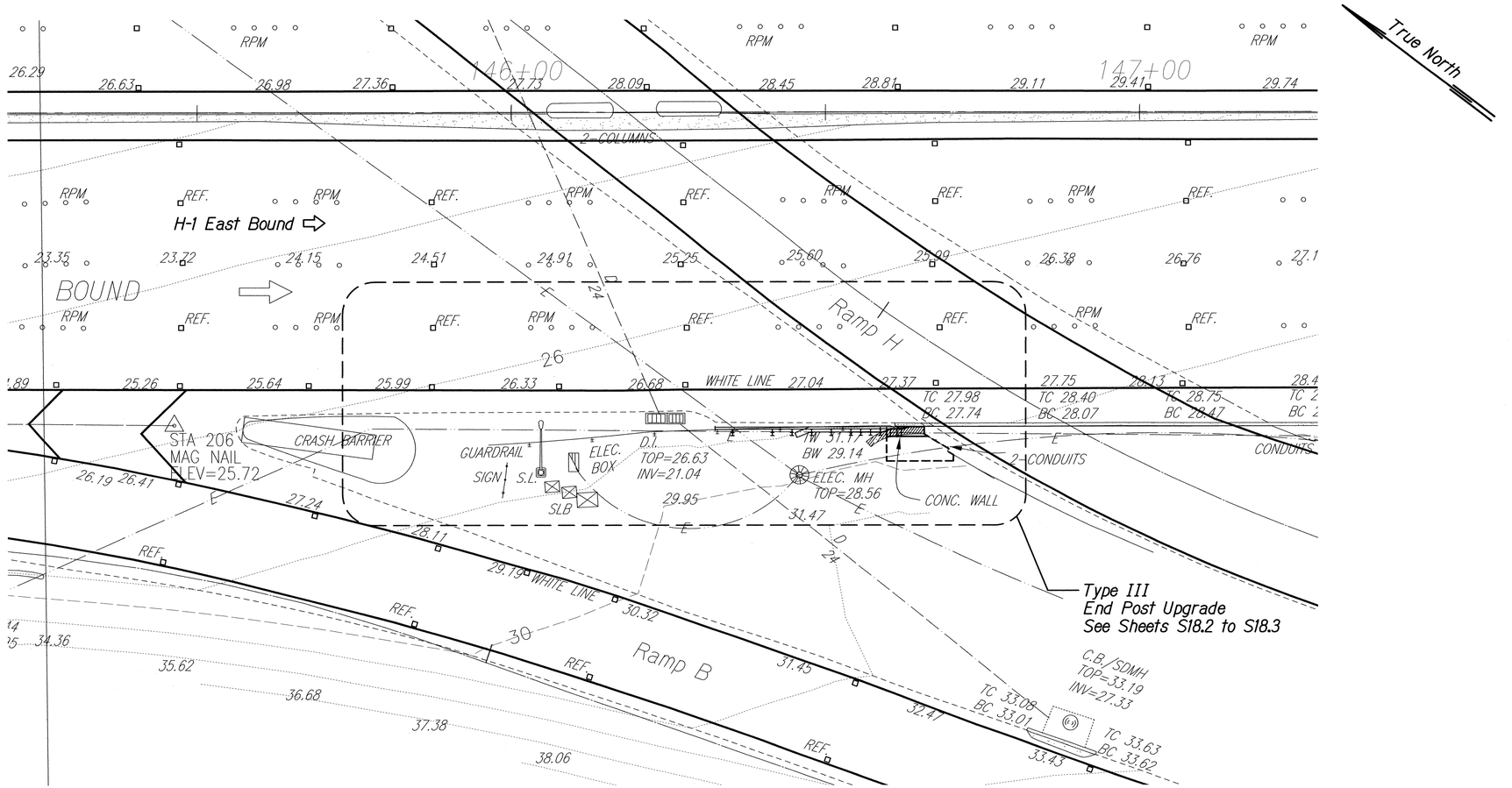
ORIGINAL PLAN | NOTE BOOK No. | SURVEY PLOTTED BY | DRAWN BY | TRACED BY | DESIGNED BY | QUANTITIES BY | CHECKED BY | DATE

DRAWING NAME: Z:\OD ONGOING\12-032\1-HI GRAL & SHLDR MDL ST TO PBWL PD WOC TMO\01 CAD\07-22-20 ASR\H1G-MP-S1704 STA.145+73 WB PLAN DETAIL C.O.DWG PLOT TIME: 07-23-20, 3:21 PM)

"AS-BUILT"

C.O. 202S-1

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 203 | 354 |




## LAYOUT PLAN

Scale: 1" = 10'-0"

A S18.1 | S18.1

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

DRAWING NAME: Z:\OD ONGOING\12-032-HI GRAL & SHLDR MDL ST TO PUNCHBOWL WCX\01 CAD\03-XX-16\H1G-MP-S1801 STA 146+60 EB.DWG PLOT TIME: 03-25-16, 4:07 PM

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NO. 8133-S
HAWAII, U.S.A.

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SIGNATURE EXPIRATION DATE OF THE LICENSE

STATE OF HAWAI'I
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**PALI HIGHWAY OVERPASS AT STA. 146+60± EB**

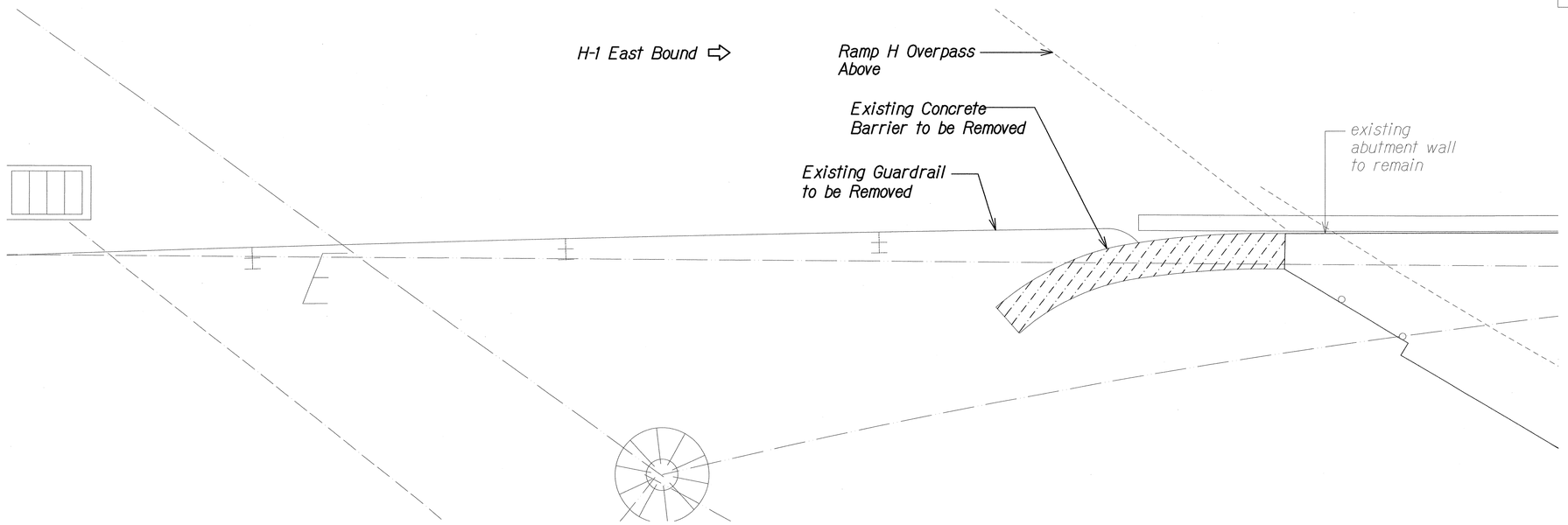
**LAYOUT PLAN**

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

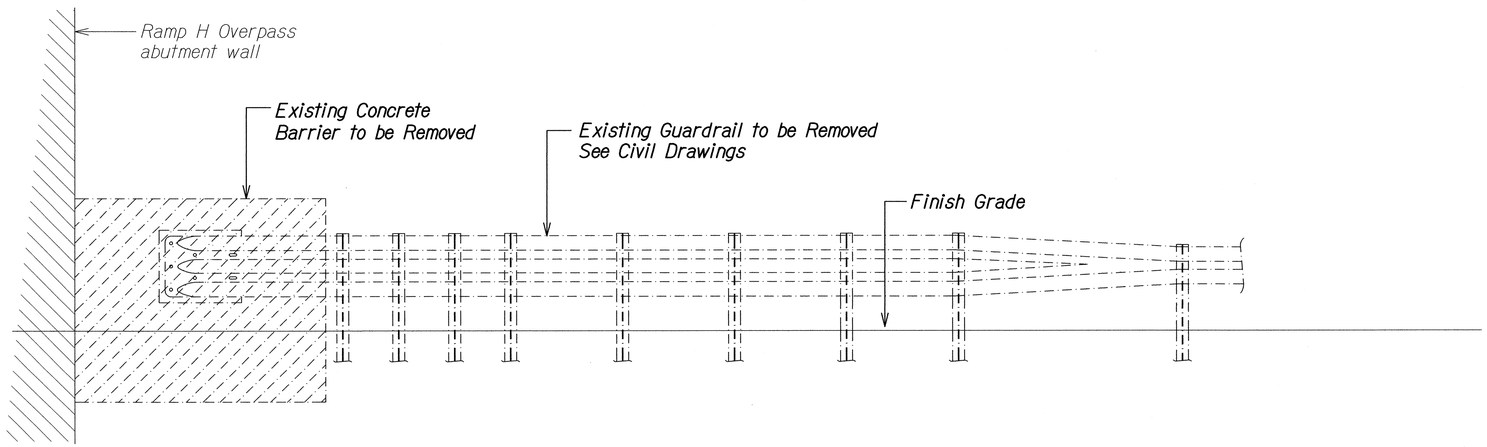
Scale: As Noted Date: Mar. 2016

SHEET No. S18.1 OF 3 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 204 | 354 |




DEMO PLAN (A) S25.2 | S25.2
Scale: 1/2" = 1'-0"




ELEVATION (B) S25.2 | S25.2
Scale: 1/2" = 1'-0"

| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
|---|---|---|
| NOTE BOOK | DRAWN BY | |
| No. | TRACED BY | |
| | DESIGNED BY | |
| | QUANTITIES BY | |
| | CHECKED BY | |

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STATE OF HAWAI'I
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

# PALI HIGHWAY OVERPASS AT STA. 146+60± EB

## DEMO PLAN AND ELEVATION

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

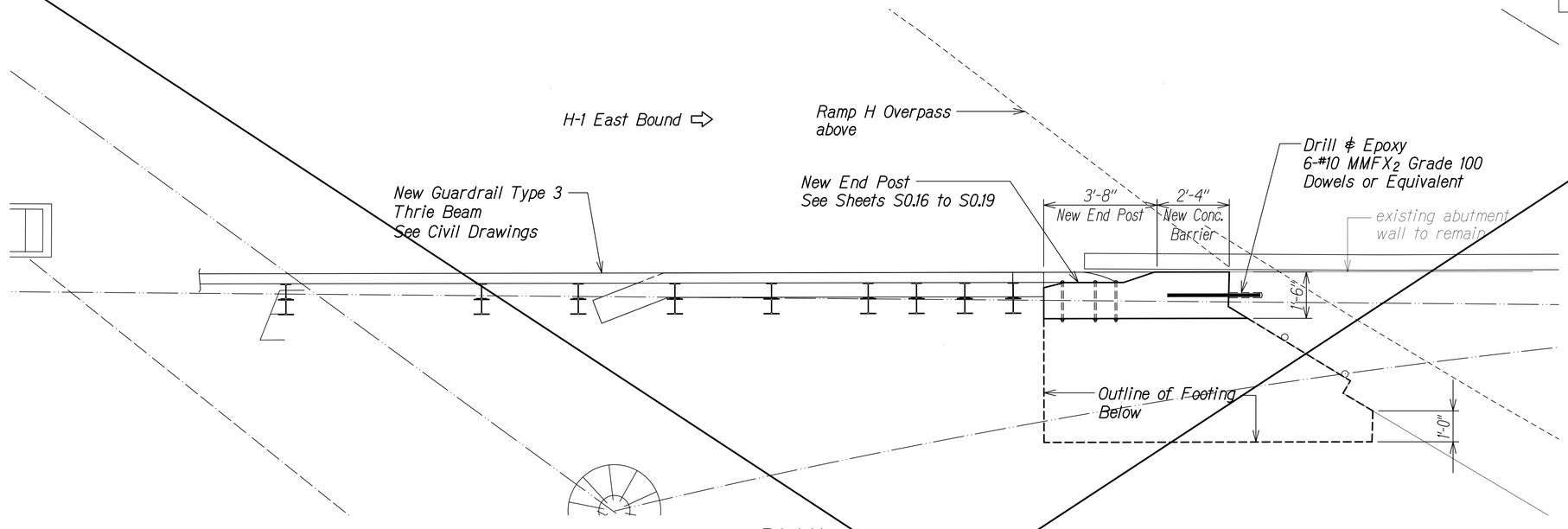
Scale: As Noted Date: Mar. 2016

SHEET No. S18.2 OF 3 SHEETS



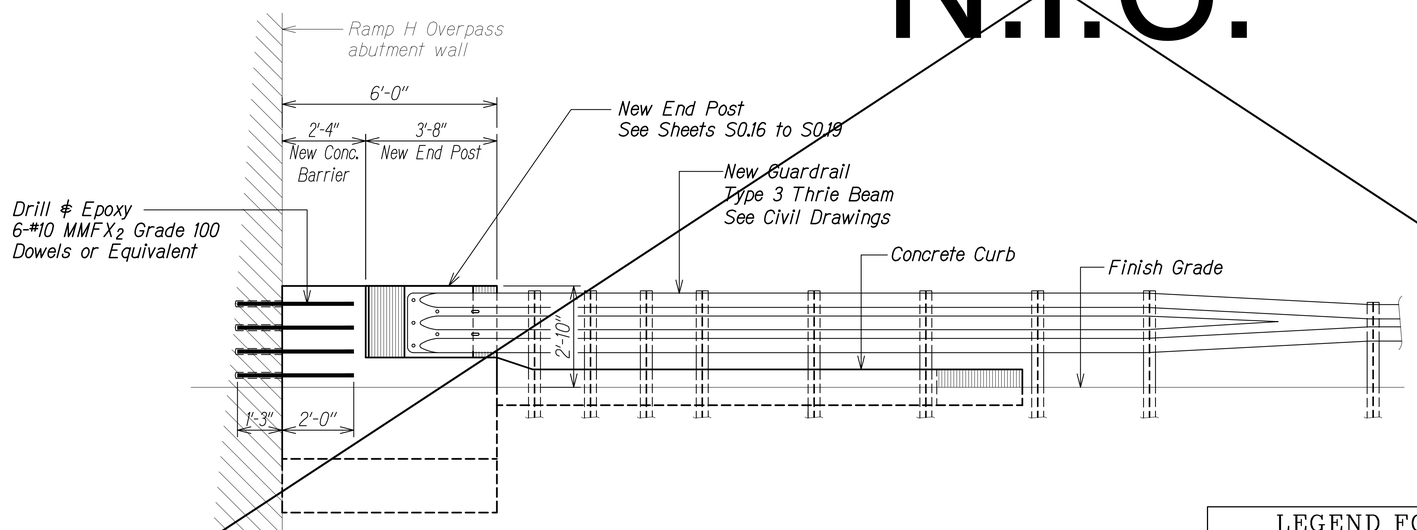
DRAWING NAME: Z:\OD ONGOING\12-032-H1 GRAIL & SHLDR IMPS, ST TO PUNCHBOWL WCS\01 CAD\03-XX-16\HIG-MP-S1802 STA 146+60 EB DEMO.DWG PLOT TIME: 03-25-16, 4:08 PM

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 205 | 354 |




PLAN
Scale: 1/2" = 1'-0"
A S18.3 S18.3

N.I.C.




ELEVATION
Scale: 1/2" = 1'-0"
B S18.3 S18.3

| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
|---|---|---|
| NOTE BOOK | DRAWN BY | |
| No. | TRACED BY | |
| | DESIGNED BY | |
| | QUANTITIES BY | |
| | CHECKED BY | |

DRAWING NAME: Z:\OD ONGOING\12-032-1-HI OPAL & SHLDR MDL ST TO PBWL PD WDC TM\01 CAD\07-22-20 ASB\HIG-MP-S1803 STA 146+60 EB PLAN.DWG PLOT TIME: 07-23-20, 3:24 PM)

## 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 |

CALVIN T. MIYAHARA
LICENSED PROFESSIONAL ENGINEER
NO. 8133-S
HAWAII, U.S.A.

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4-30-20
SIGNATURE EXPIRATION DATE OF THE LICENSE

| DATE | REVISION |
|---|---|
| 12-7-17 | RFI 020D - Deleted Sheet |

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

# PALI HIGHWAY OVERPASS AT STA. 146+60± EB

## PLAN AND ELEVATION

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

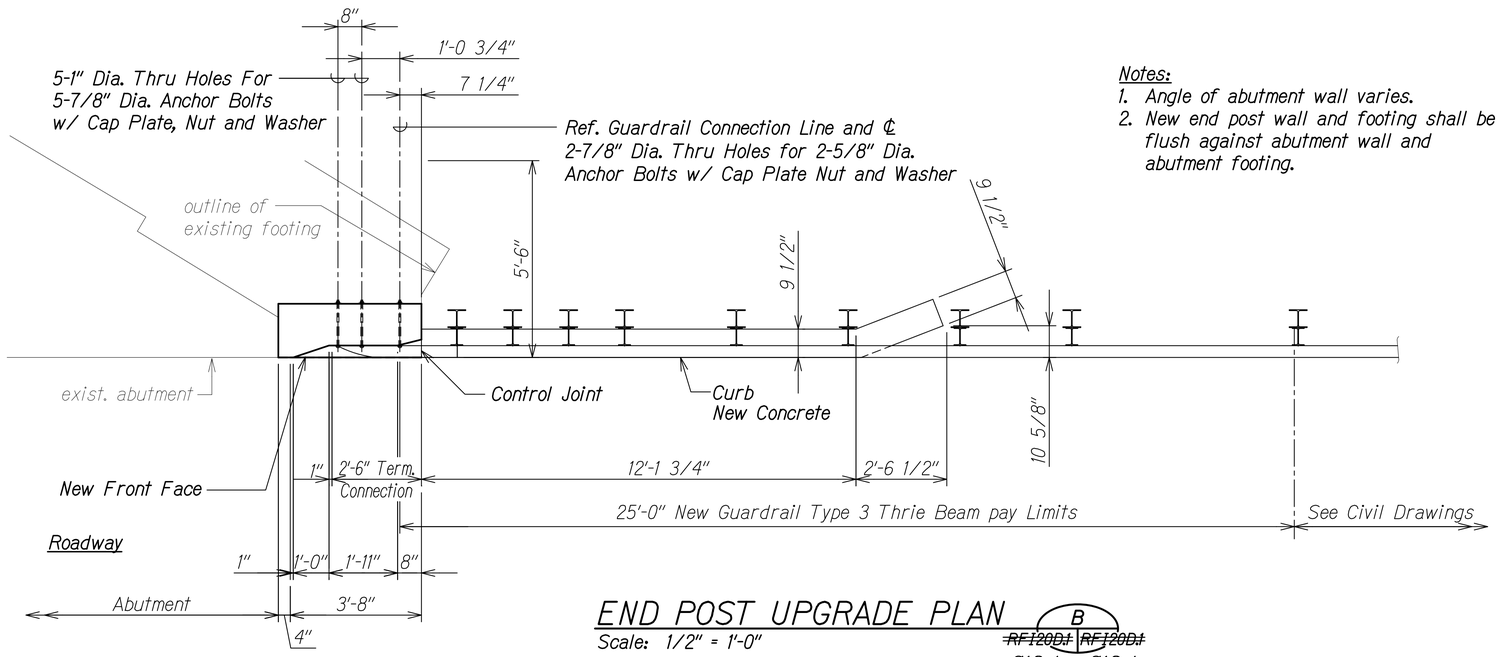
Scale: As Noted Date: Mar. 2016

SHEET No. S18.3 OF 3 SHEETS

"AS-BUILT"

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | ~~RFI 020D~~ | 354 |

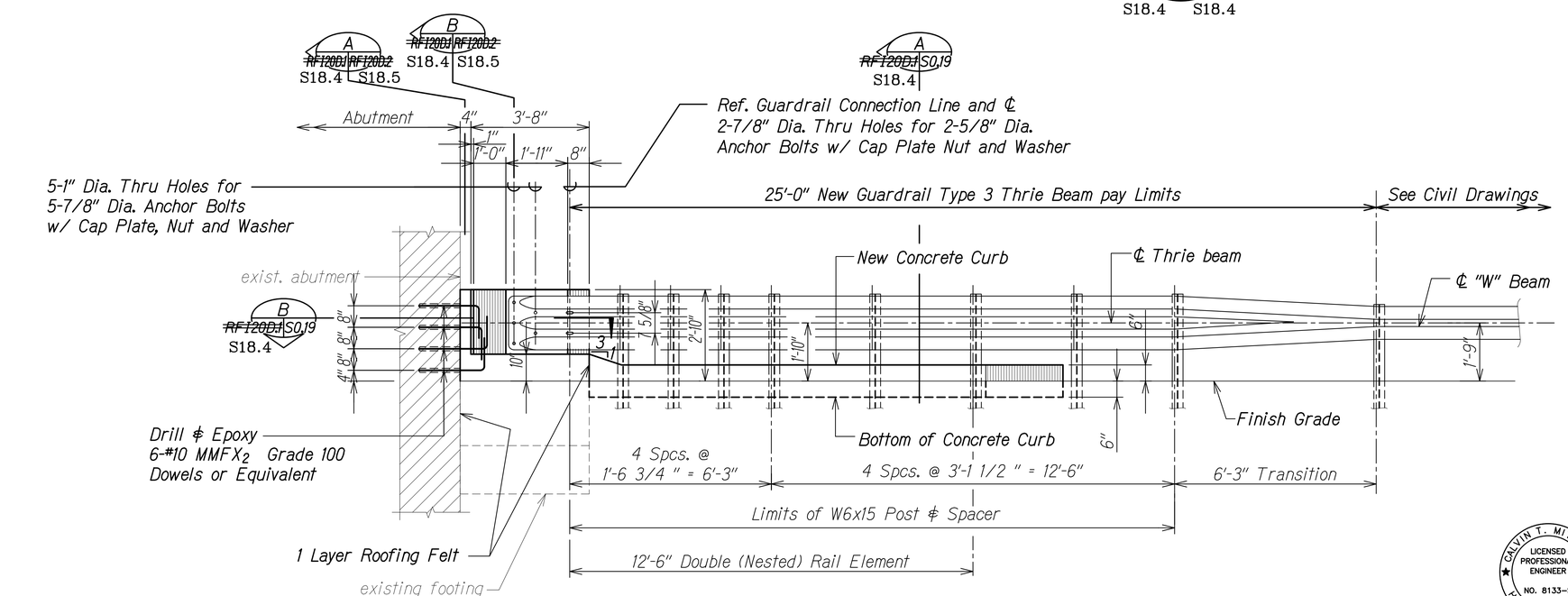
205S-1




END POST UPGRADE PLAN (B) ~~RFI20D.1~~ ~~RFI20D.1~~ S18.4 S18.4

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

Notes:
1. Angle of abutment wall varies.
2. New end post wall and footing shall be flush against abutment wall and abutment footing.




ELEVATION (B) ~~RFI20D.1~~ ~~RFI20D.1~~ S18.4 S18.4

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

LEGEND FOR AS-BUILT POSTINGS

| | |
|---|---|
| ~~squiggly~~ | Squiggly line for as-built deletion |
| ~~100.00~~ | Double line for as-built deletion |
| Roadway | Text for as-built posting |

Note: Reference Sht. S18.3

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

DRAWING NAME: P:\OD ONGOING\12-032.1-H1 GRAL & SHLDR MDL ST TO PBWL PD WOC TM\01 CAD\07-22-20 ASB\HIG-MP-S1804 RFI020D01.DWG PLOT TIME: 07-23-20, 3:25 PM

| DATE | REVISION |
|---|---|
| 12-7-17 | RFI 020D - New Sheet |

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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

RFI 020D - TYPE III END POST AT OVERPASS STRUCTURE PLAN ℄ ELEVATION

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted S18.4 Date: Mar. 2016

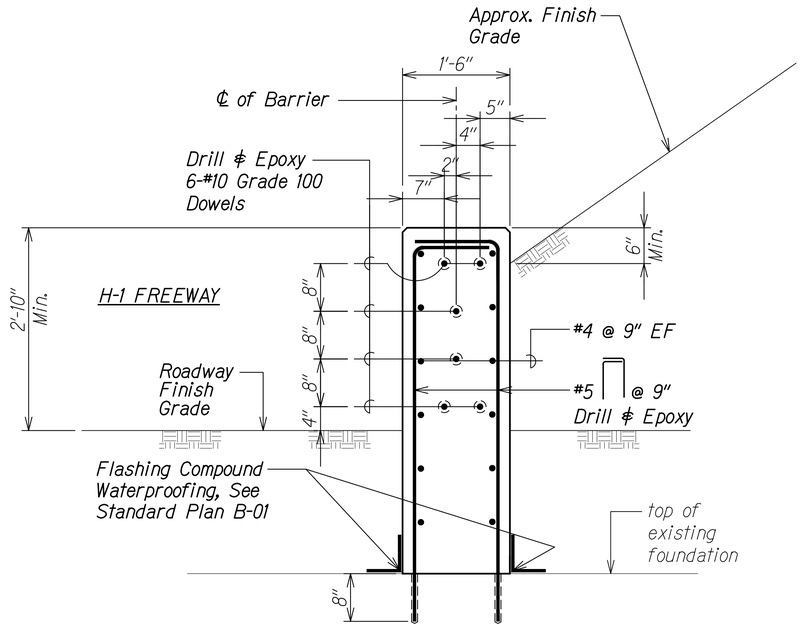
SHEET No. ~~RFI020D~~ OF 3 SHEETS

"AS-BUILT"

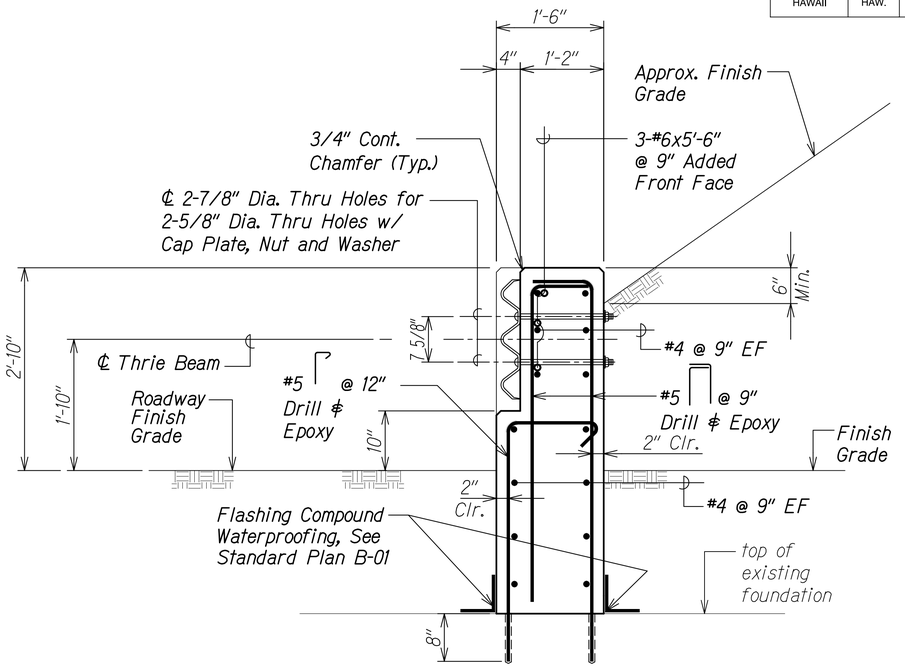
205S-1 ~~RFI 020D~~

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | ~~RFI 020D~~ | 354 |

205S-2




SECTION A
Scale: 1" = 1'-0" ~~RFI20D.1~~ ~~RFI20D.2~~
S18.4 S18.5




SECTION B
Scale: 1" = 1'-0" ~~RFI20D.1~~ ~~RFI20D.2~~
S18.4 S18.5

## 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 |

| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
|---|---|---|
| NOTE BOOK | DRAWN BY | |
| No. | TRACED BY | |
| | DESIGNED BY | |
| | QUANTITIES BY | |
| | CHECKED BY | |

DRAWING NAME: Z:\OD ONGOING\12-032.1-H1 ORAL & SHLDR MDL ST TO PBWL PD WDC TM\01 CAD\07-22-20 ASBUILT\G-MP-S1805 RFI020D02.DWG PLOT TIME: 07-23-20, 3:26 PM

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CALVIN T. MIYAHARA LICENSED PROFESSIONAL ENGINEER NO. 8133-S HAWAII, U.S.A.

4-30-20
SIGNATURE EXPIRATION DATE OF THE LICENSE

| DATE | REVISION |
|---|---|
| 12-7-17 | RFI 020D - New Sheet |

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

# TYPE III END POST AT OVERPASS STRUCTURE SECTIONS

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

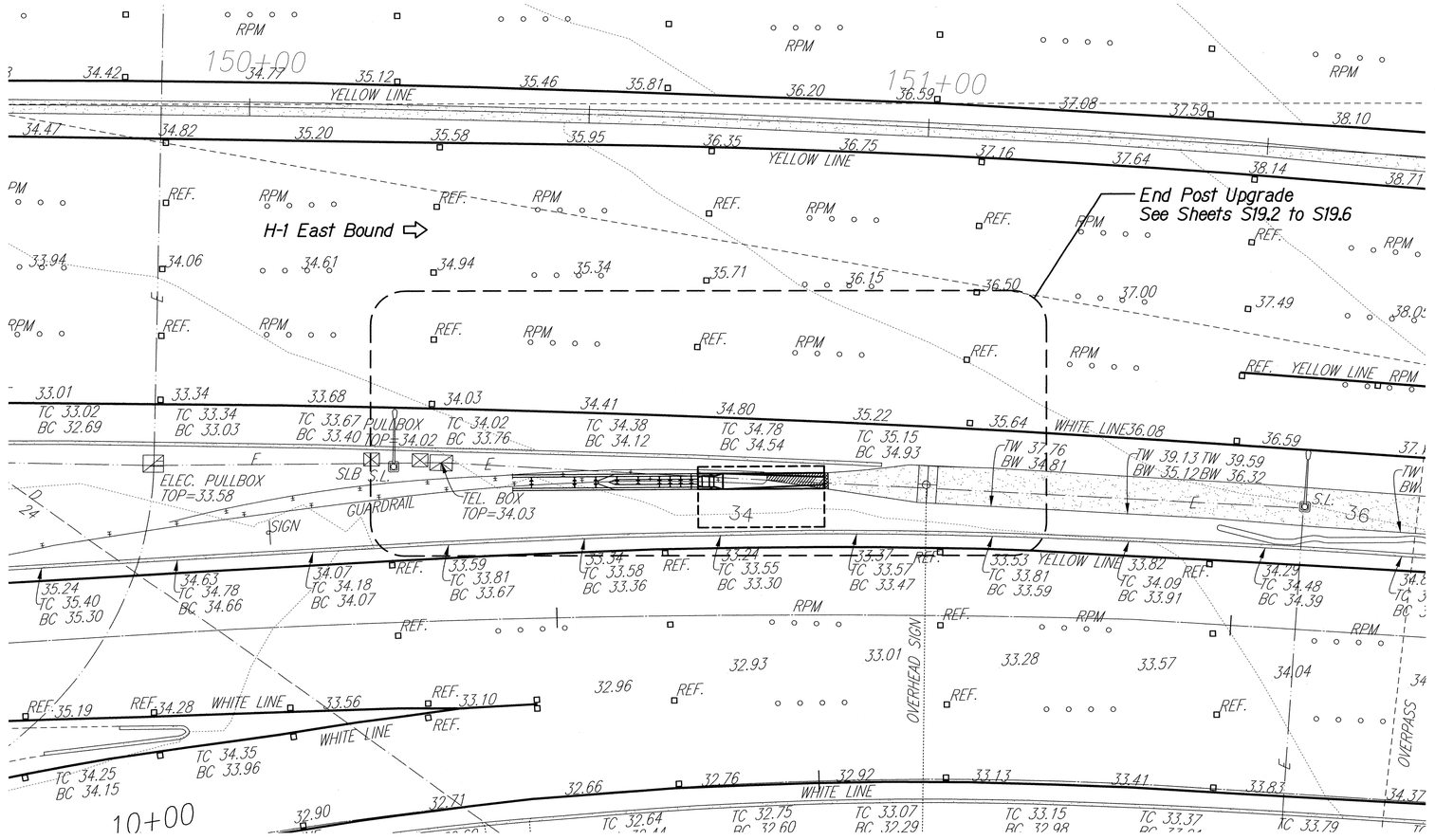
Scale: As Noted S18.5 Date: Mar. 2016

SHEET No. ~~RFI020D2~~ OF 3 SHEETS

"AS-BUILT"

205S-2 ~~RFI 020D~~

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 206 | 354 |




## LAYOUT PLAN

Scale: 1" = 10'-0"

A S19.1 | S19.1

| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
|---|---|---|
| | DRAWN BY | |
| NOTE BOOK | TRACED BY | |
| | DESIGNED BY | |
| No. | QUANTITIES BY | |
| | CHECKED BY | |

CALVIN T. MIYAHARA
LICENSED PROFESSIONAL ENGINEER
NO. 8133-S
HAWAII, U.S.A.

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4-30-18
SIGNATURE — EXPIRATION DATE OF THE LICENSE

STATE OF HAWAI'I
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

# PALI HIGHWAY OVERPASS AT STA. 150+69± EB

## LAYOUT PLAN

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

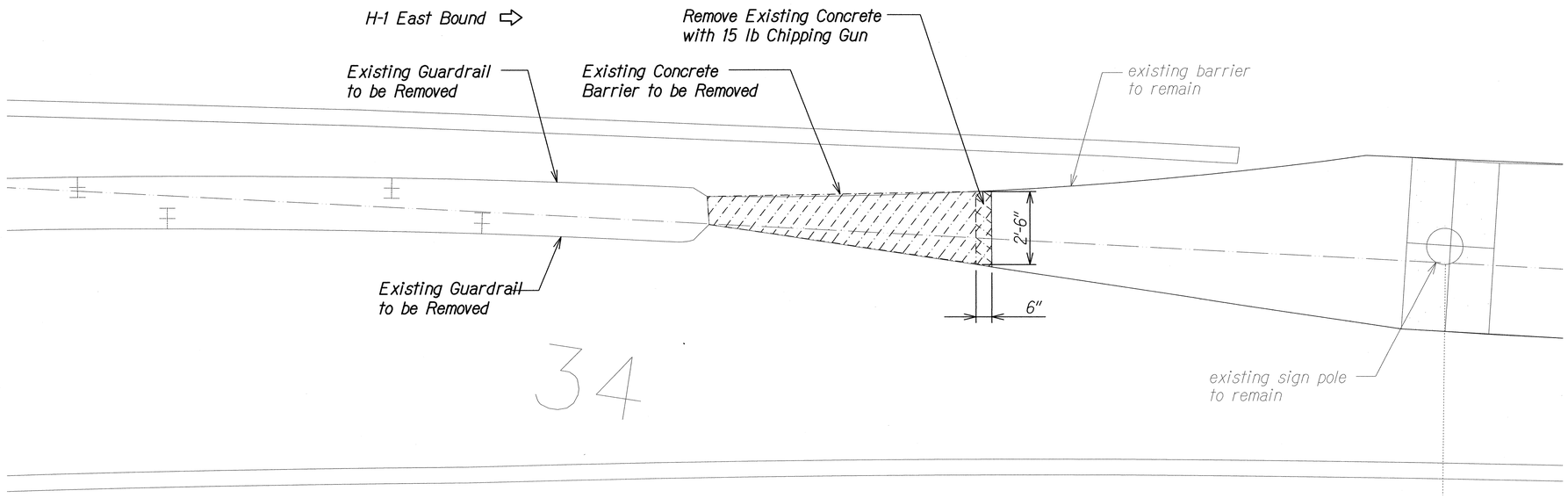
Scale: As Noted — Date: Mar. 2016

SHEET No. S19.1 OF 6 SHEETS



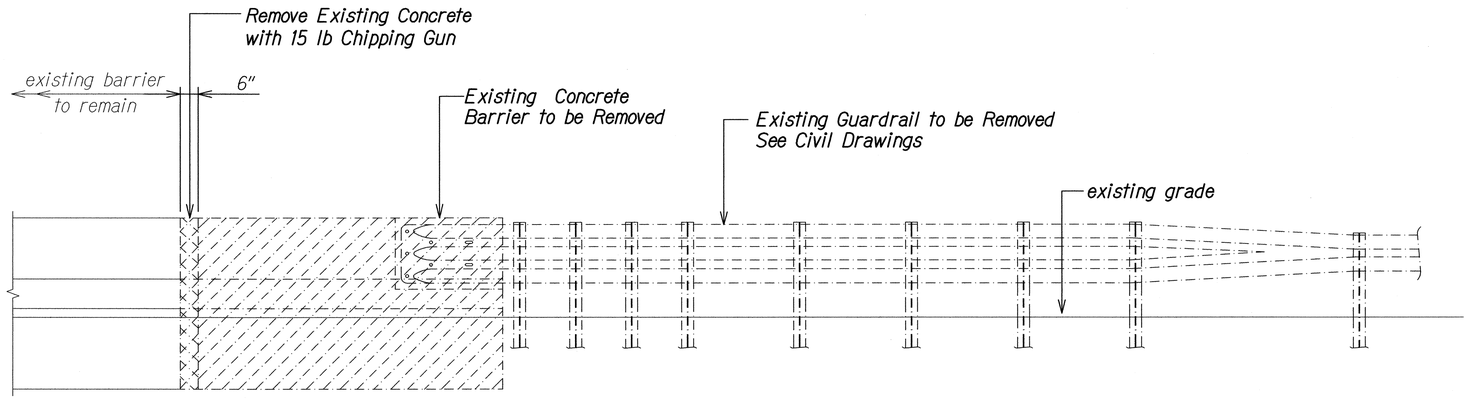
PLOT TIME: 03-25-16, 4:18 PM
DRAWING NAME: Z:\00 ON\CONO\12-032-H1 ORAL & SHLDR MDL ST TO PUNCHBOWL WOC\01 CAD\02-XX-16\H1G-MP-S1901 STA 150+69 EB.DWG

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 207 | 354 |




34

## DEMO PLAN (A)
Scale: 1/2" = 1'-0" S19.2 | S19.2




## ELEVATION (B)
Scale: 1/2" = 1'-0" S19.2 | S19.2

ORIGINAL PLAN
NOTE BOOK
No.

SURVEY PLOTTED BY
DRAWN BY
TRACED BY
DESIGNED BY
QUANTITIES BY
CHECKED BY
DATE

DRAWING NAME: Z:\OD ONCOING\12-032-HI GRAIL & SHLDR MDL ST TO PUNCHBOWL WOC\01 CAD\03-XX-16\HIG-MP-S1902 STA 150+69 EB DEMO.DWG PLOT TIME: 03-25-16, 4:20 PM

CALVIN T. MIYAHARA
LICENSED PROFESSIONAL ENGINEER
NO. 8133-S
HAWAII, U.S.A.

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4-30-18
SIGNATURE EXPIRATION DATE OF THE LICENSE

STATE OF HAWAI'I
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**PALI HIGHWAY OVERPASS AT STA. 150+69± EB**

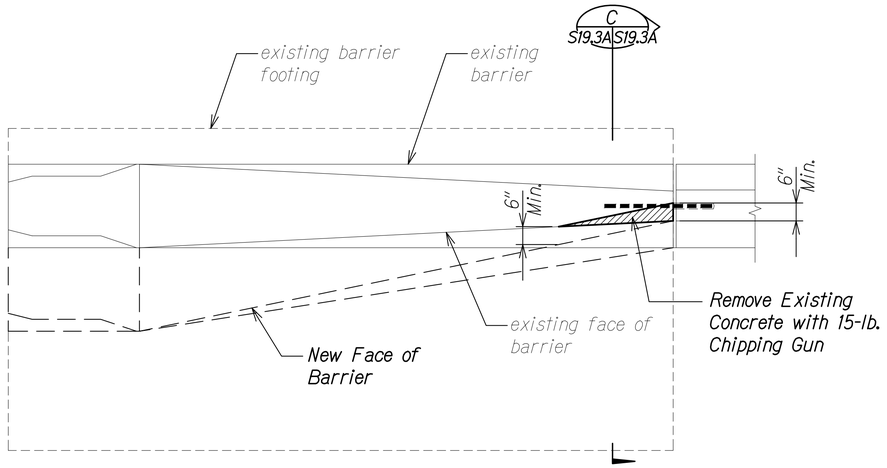
**DEMO PLAN AND ELEVATION**

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted Date: Mar. 2016

SHEET No. S19.2 OF 6 SHEETS

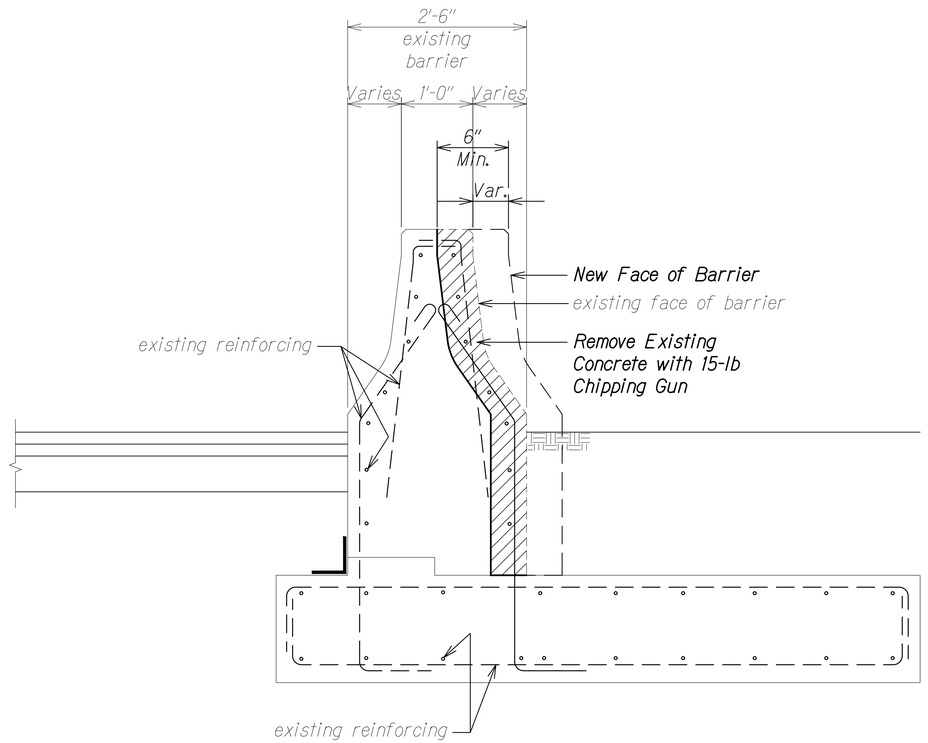
| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | C.O. 208S-1 | 354 |




## DEMOLITION PLAN - UPPER PORTION

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

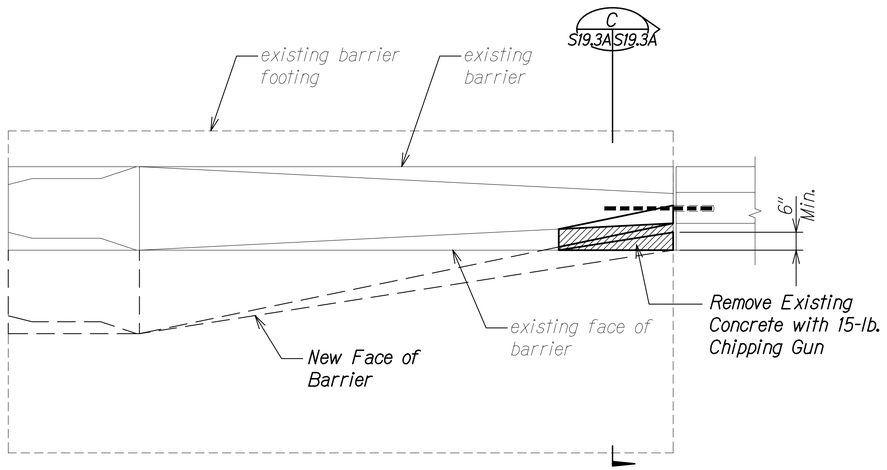
A S19.3A S19.3A




## SECTION

Scale: 1" = 1'-0"

C S19.3A S19.3A




## DEMOLITION PLAN - LOWER PORTION

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

B S19.3A S19.3A

| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
|---|---|---|
| NOTE BOOK | DRAWN BY | |
| No. | TRACED BY | |
| | DESIGNED BY | |
| | QUANTITIES BY | |
| | CHECKED BY | |

DRAWING NAME: Z:\OD ONGOING\12-0321-1H GRAL & SHLDR MDL ST TO PBWL PD WOS TMK\01 CAD\07-22-20 ASB\H1C-MP-S1903A STA 150+69 EB PLAN RFI038-CO.DWG PLOT TIME: 07-23-20, 3:29 PM

### LEGEND FOR AS-BUILT POSTINGS

| | |
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| ~~~~ | Squiggly line for as-built deletion |
| ~~100.00~~ | Double line for as-built deletion |
| Roadway | Text for as-built posting |

CALVIN T. MIYAHARA LICENSED PROFESSIONAL ENGINEER NO. 8133-S HAWAII, U.S.A.

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4-30-20
SIGNATURE EXPIRATION DATE OF THE LICENSE

| DATE | REVISION |
|---|---|
| 6/13/18 | 8 RFI 038 - New Sheet |

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**PALI HIGHWAY OVERPASS AT STA. 150+69± EB**
**END POST PLAN AND ELEVATION**
INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

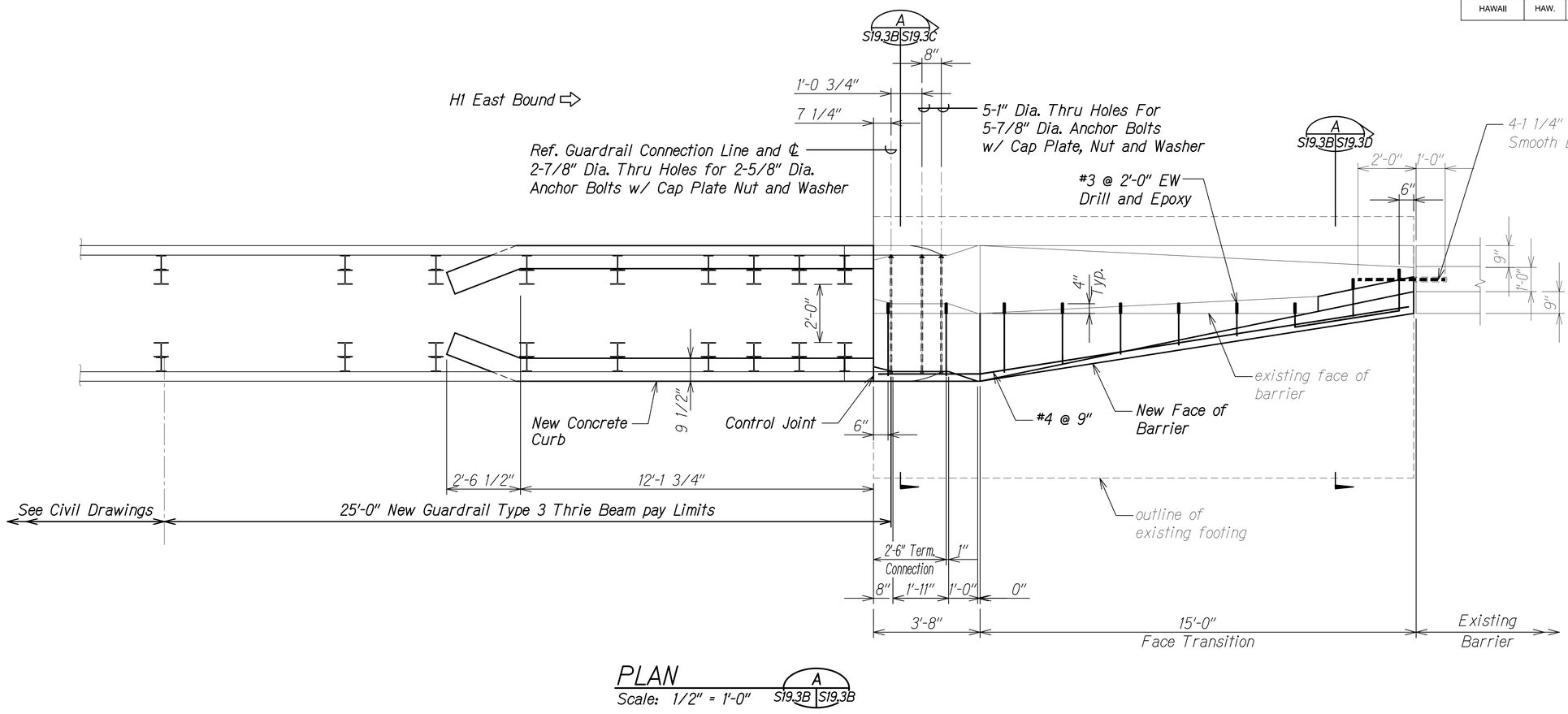
Scale: As Noted Date: Mar. 2016

SHEET No. S19.3A OF 6 SHEETS

"AS-BUILT"

C.O. 208S-1

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | C.O. 208S-2 | 354 |




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

A
S19.3B | S19.3B

## LEGEND FOR AS-BUILT POSTINGS

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|---|---|
| ~~^^^^~~ | Squiggly line for as-built deletion |
| ~~100.00~~ | Double line for as-built deletion |
| Roadway | Text for as-built posting |

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CALVIN T. MIYAHARA
LICENSED PROFESSIONAL ENGINEER
NO. 8133-S
HAWAII, U.S.A.

4-30-20
SIGNATURE EXPIRATION DATE OF THE LICENSE

| DATE | REVISION |
|---|---|
| 6/13/18 | 8 RFI 038 - New Sheet |

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**PALI HIGHWAY OVERPASS AT STA. 150+69± EB**
**END POST PLAN ~~AND ELEVATION~~**
INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted Date: Mar. 2016

SHEET No. S19.3B OF 6 SHEETS

| ORIGINAL PLAN | SURVEY PLOTTED BY |
|---|---|
| NOTE BOOK | DRAWN BY |
| No. | TRACED BY |
| | DESIGNED BY |
| | QUANTITIES BY |
| | CHECKED BY |
| | DATE |

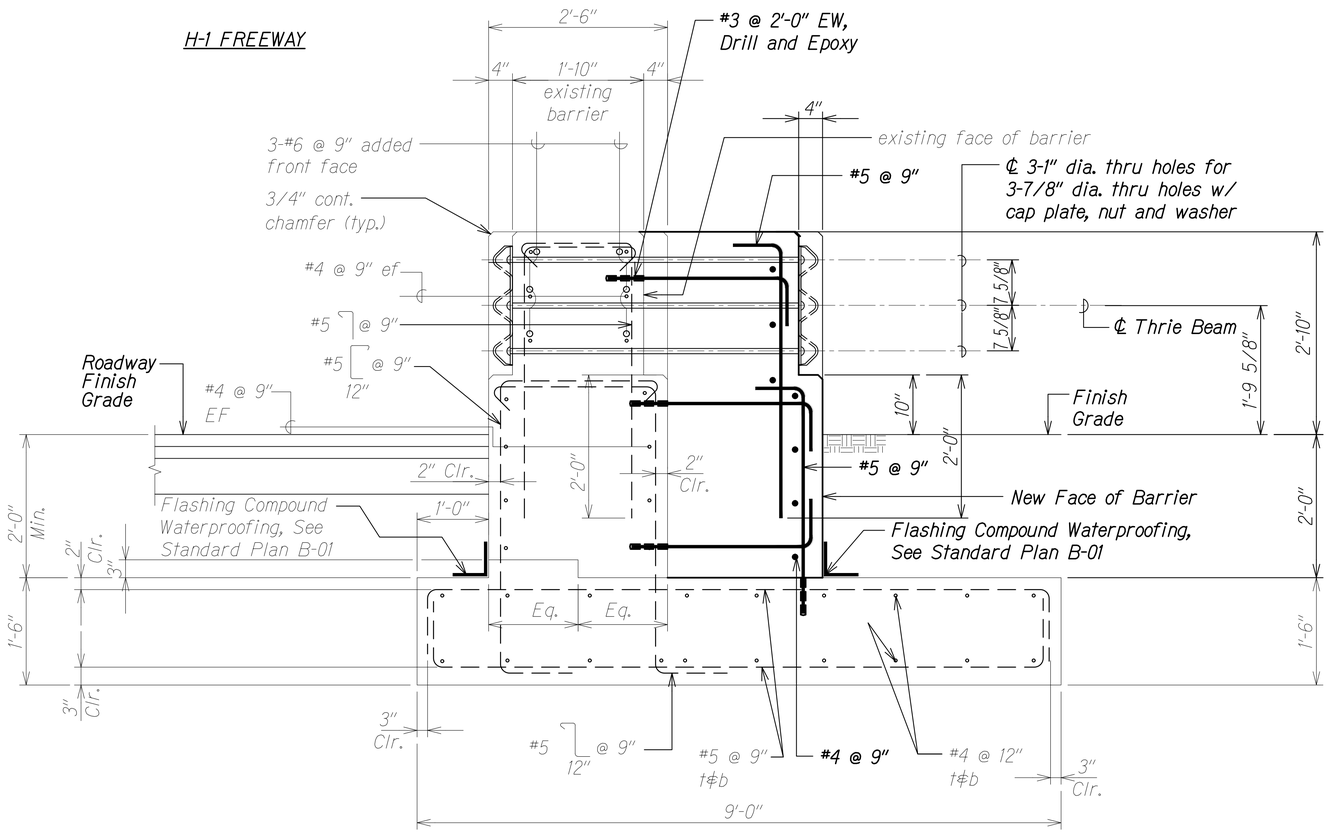
DRAWING NAME: Z:\OD ONGOING\12-0321-1-H1 GRAL & SHLDR IMPL ST TO PBWL PD WOC TM\01 CAD\07-22-20 ASBUILT-MP-S19D3L STA 150+69 EB PLAN RFI038-CO.DWG PLOT TIME: 07-23-20, 3:30 PM)

"AS-BUILT"

C.O. 208S-2

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | C.O. 208S-3 | 354 |

## H-1 FREEWAY




## SECTION A

Scale: 1" = 1'-0"

S19.3B | S19.3C

| 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 |

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4-30-20
SIGNATURE EXPIRATION DATE OF THE LICENSE

| DATE | REVISION |
|---|---|
| 6/13/18 | 8 RFI 038 - New Sheet |

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**PALI HIGHWAY OVERPASS AT STA. 150+69± EB**
**END POST ~~PLAN AND ELEVATION~~ SECTION**
INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted Date: Mar. 2016

SHEET No. S19.3C OF 6 SHEETS

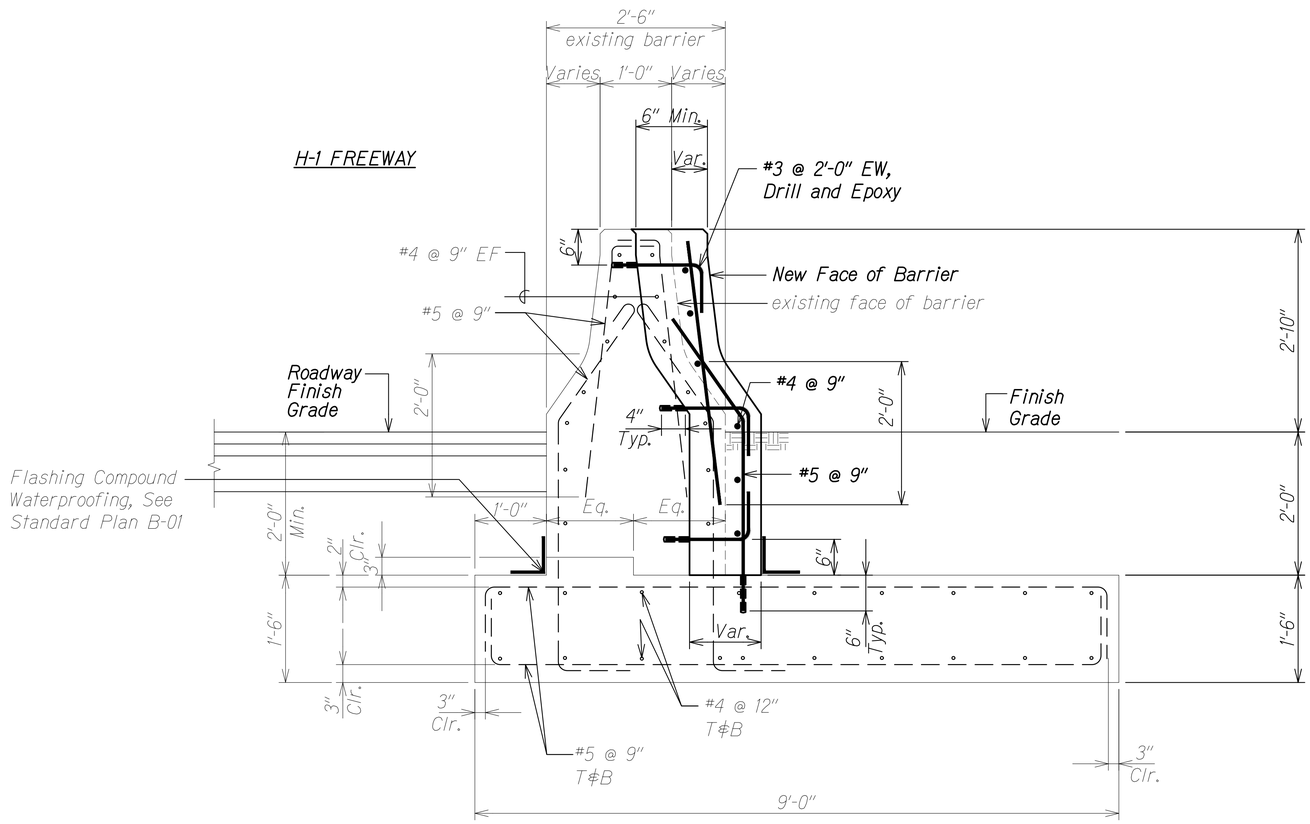
ORIGINAL PLAN | NOTE BOOK No. | SURVEY PLOTTED BY | DRAWN BY | TRACED BY | DESIGNED BY | QUANTITIES BY | CHECKED BY | DATE

DRAWING NAME: Z:\OD ENGDNGS\12-0321-H1 GRAIL & SHLDR IMDL ST TO PBWL PD WDS TMX\01 CAD\07-22-20 ASBN\H1C-MP-S1903A STA 150+69 EB PLAN.dgn PLOT TIME: 07-23-20, 3:30 PM)

"AS-BUILT"

C.O. 208S-3

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | C.O. 208S-4 | 354 |




SECTION A
Scale: 1" = 1'-0"
S19.3B | S19.3D

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 |

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CALVIN T. MIYAHARA
LICENSED PROFESSIONAL ENGINEER
NO. 8133-S
HAWAII, U.S.A.

4-30-20
SIGNATURE EXPIRATION DATE OF THE LICENSE

| DATE | REVISION |
|---|---|
| 6/13/18 | 8 RFI 038 - New Sheet |

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PALI HIGHWAY OVERPASS AT STA. 150+69± EB
END POST ~~PLAN AND ELEVATION~~ SECTION
INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted Date: Mar. 2016

SHEET No. S19.3D OF 6 SHEETS

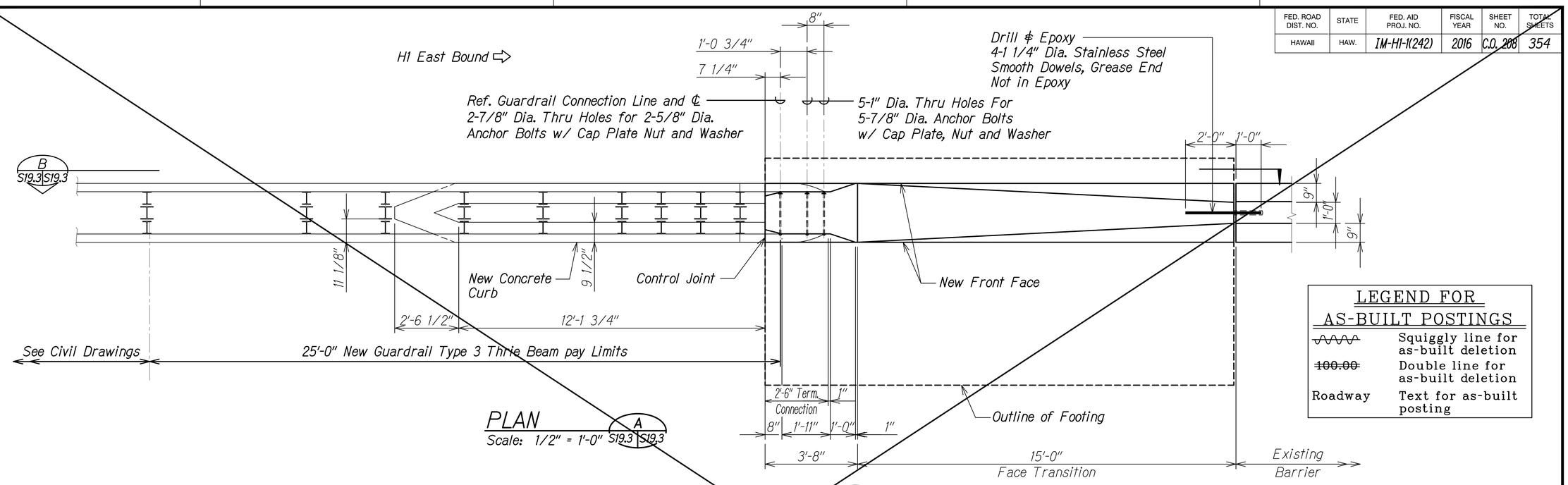
ORIGINAL PLAN
NOTE BOOK No.
SURVEY PLOTTED BY
DRAWN BY
TRACED BY
DESIGNED BY
QUANTITIES BY
CHECKED BY
DATE

DRAWING NAME: Z:\OD ENGINEERING\12-0321-1-H1 GRAL & SHLDR IMPL ST TO PBWL PD WOC FWY\01 CAD\07-22-20 ASBUILT\IG-MP-S1903A STA 150+69 EB PLAN RFI038-CO.DWG PLOT TIME: 07-23-20, 3:31 PM)

"AS-BUILT"

C.O. 208S-4

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | C.O. 208 | 354 |




| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
|---|---|---|
| | DRAWN BY | |
| NOTE BOOK | TRACED BY | |
| No. | DESIGNED BY | |
| | QUANTITIES BY | |
| | CHECKED BY | |

| DATE | REVISION |
|---|---|
| 6-3-18 | 8 RFI 038 - Deleted Sheet |

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SIGNATURE — EXPIRATION DATE OF THE LICENSE 4-30-20

CALVIN T. MIYAMARA LICENSED PROFESSIONAL ENGINEER NO. 8133-S HAWAII, U.S.A.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

# PALI HIGHWAY OVERPASS AT STA. 150+69± EB
## END POST PLAN AND ELEVATION
INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted Date: Mar. 2016

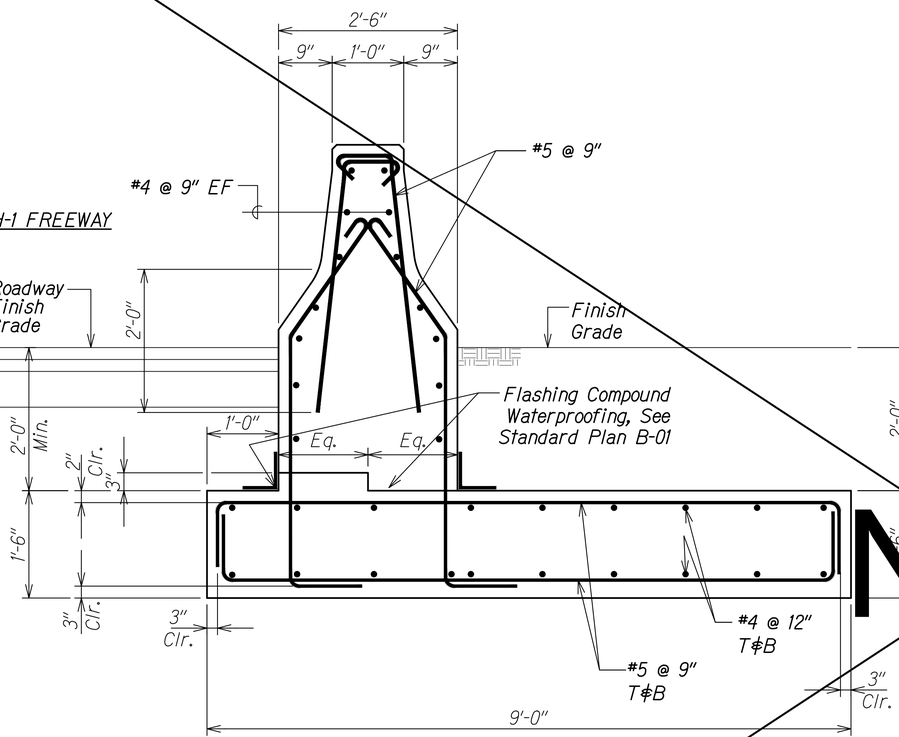
SHEET No. S19.3 OF 6 SHEETS

"AS-BUILT"

C.O. 208

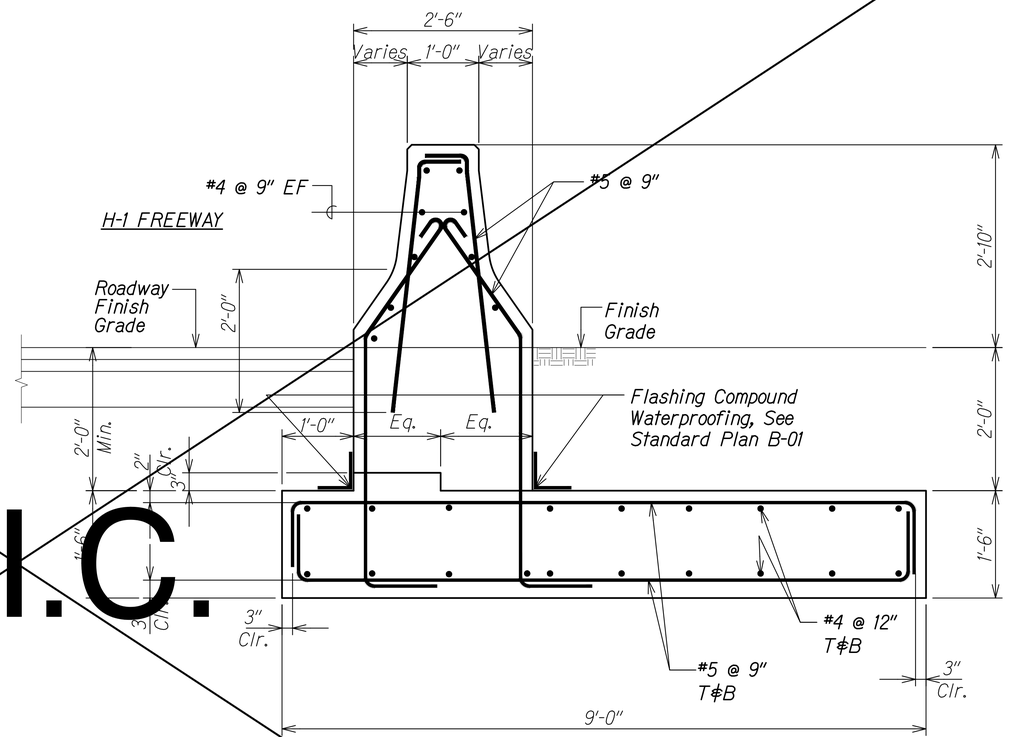
PLOT TIME: 07-23-20, 3:28 PM)
DRAWING NAME: Z:\OD ONGOING\12-032.1-H1 GRAIL & SHLDR IMPS ST TO PBRL PD WDC TM\01 CAD\07-22-20 ASBUILT\G-MP-S1903 STA 150+69 EB PLAN RFI.DWG

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | C.O. 209 | 354 |




SECTION A
Scale: 1" = 1'-0"
S19.3 | S19.4

N.I.C.




SECTION B
Scale: 1" = 1'-0"
S19.3 | S19.4

| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
|---|---|---|
| NOTE BOOK | DRAWN BY | |
| No. | TRACED BY | |
| | DESIGNED BY | |
| | QUANTITIES BY | |
| | CHECKED BY | |

DRAWING NAME: Z:\OD ONGOING\12-032_I-H1 GRAL & SHLDR IMPL PD WOC TM\01 CAD\07-22-20 ASB\HIG-MP-S1904_STA 150+69 WB RF.DWG PLOT TIME: 07-23-20, 3:35 PM

## LEGEND FOR AS-BUILT POSTINGS

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| ~~~~ | Squiggly line for as-built deletion |
| ~~100.00~~ | Double line for as-built deletion |
| Roadway | Text for as-built posting |

CALVIN T. MIYAHARA
LICENSED PROFESSIONAL ENGINEER
NO. 8133-S
HAWAII, U.S.A.

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SIGNATURE — 4-30-20 EXPIRATION DATE OF THE LICENSE

| DATE | REVISION |
|---|---|
| 6/13/18 | 8 RFI 038 - Deleted Sheet |

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

# PALI HIGHWAY OVERPASS AT STA. 150+69± EB

## END POST SECTIONS

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

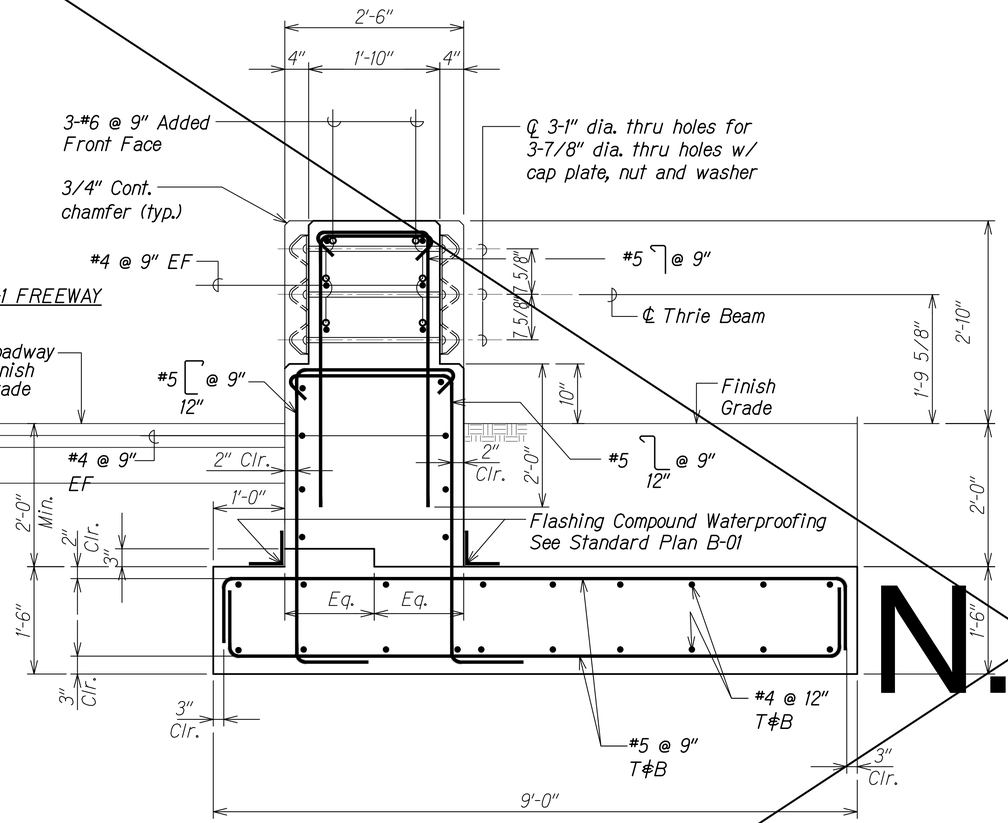
Scale: As Noted Date: Mar. 2016

SHEET No. S19.4 OF 6 SHEETS

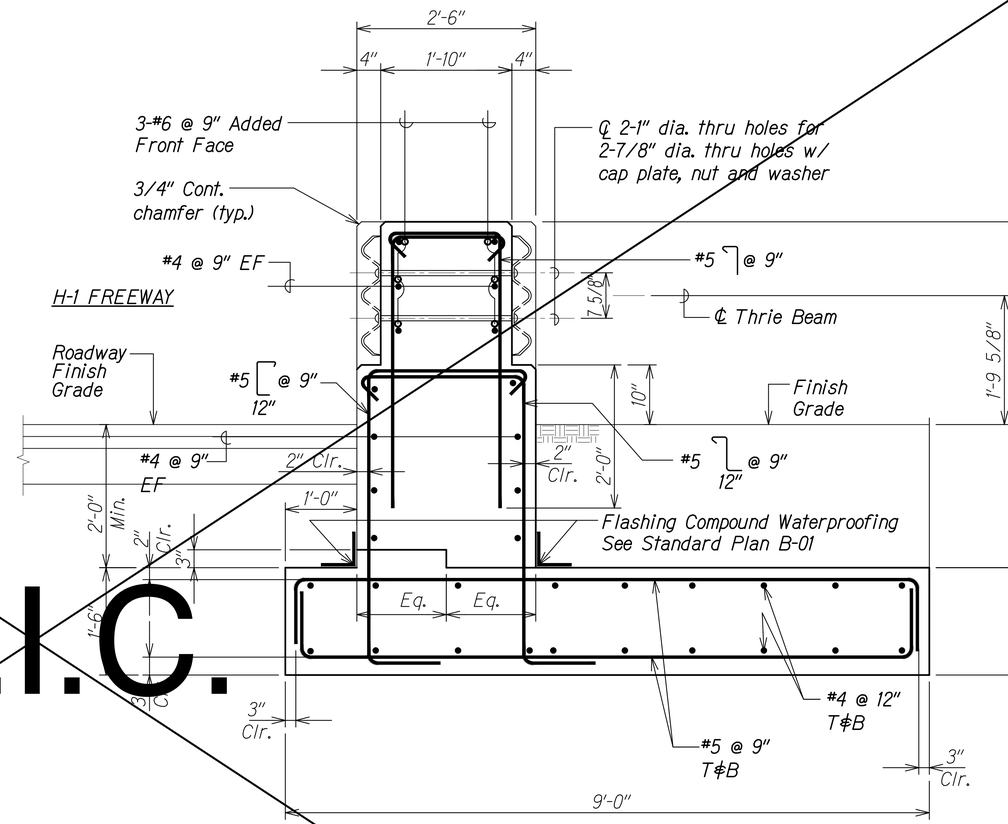
"AS-BUILT"

C.O. 209

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | C.O. 210 | 354 |




SECTION A
Scale: 1" = 1'-0"
S19.3 | S19.5




SECTION B
Scale: 1" = 1'-0"
S19.3 | S19.5

N.I.C.

LEGEND FOR AS-BUILT POSTINGS

| | |
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| ~~~~ | Squiggly line for as-built deletion |
| ~~100.00~~ | Double line for as-built deletion |
| Roadway | Text for as-built posting |

CALVIN T. MIYAHARA
LICENSED PROFESSIONAL ENGINEER
NO. 8133-S
HAWAII, U.S.A.

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SIGNATURE — 4-30-20 EXPIRATION DATE OF THE LICENSE

| DATE | REVISION |
|---|---|
| 6/13/18 | 8 RFI 038 - Deleted Sheet |

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

# PALI HIGHWAY OVERPASS AT STA. 150+69± EB

## END POST SECTIONS

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted Date: Mar. 2016

SHEET No. S19.5 OF 6 SHEETS

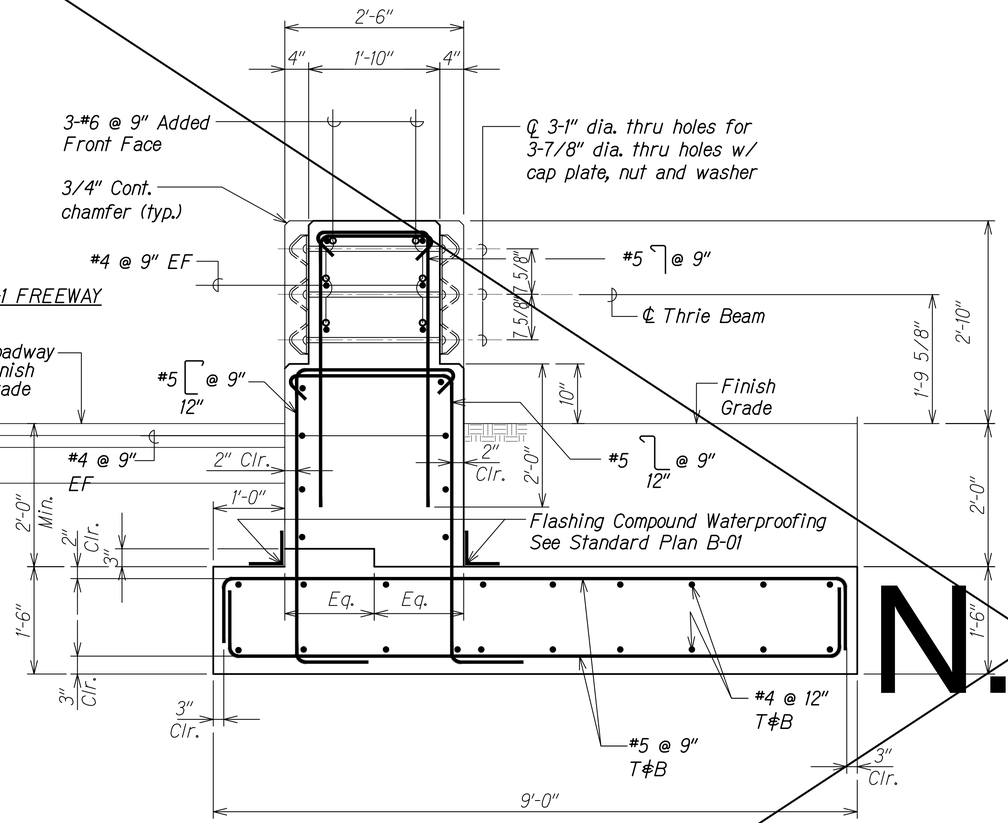
ORIGINAL PLAN
NOTE BOOK No.
SURVEY PLOTTED BY
DRAWN BY
TRACED BY
DESIGNED BY
QUANTITIES BY
CHECKED BY
DATE

DRAWING NAME: Z:\OD ONGOING\12-032_H-1 GRAL & SHLDR IMPL PD WOC TMP\01 CAD\07-22-20 ASB\HIG-MP-S1904_STA 150+69 WB RF.DWG PLOT TIME: 07-23-20, 3:32 PM

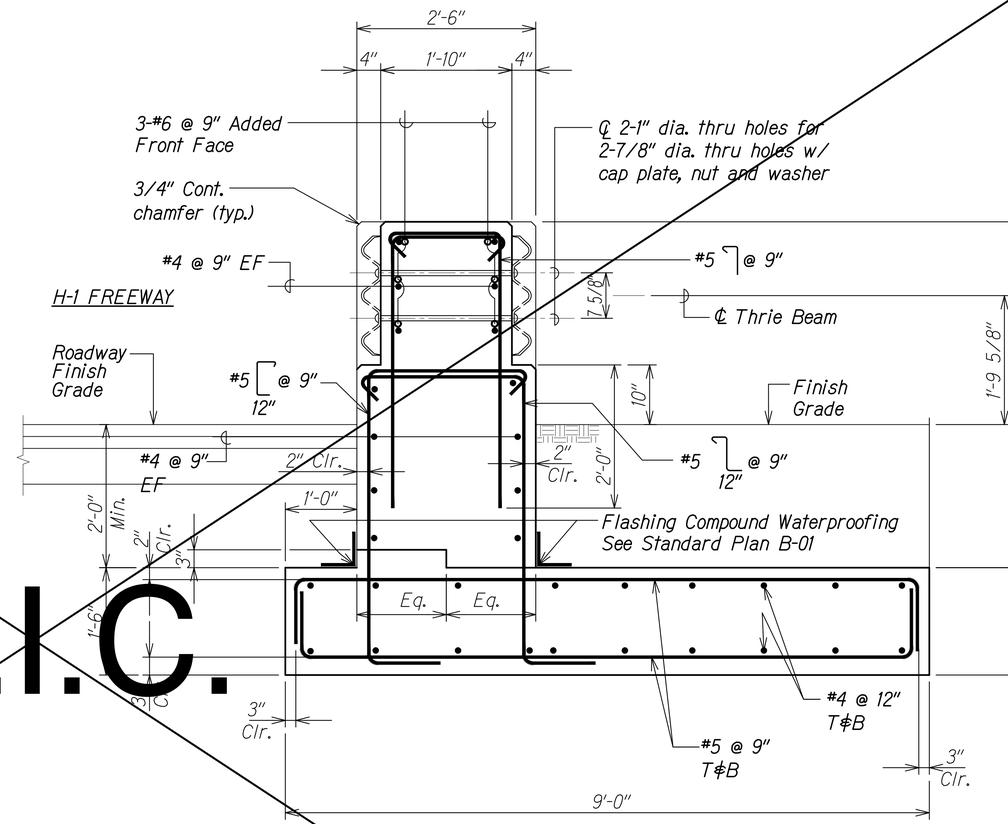
"AS-BUILT"

C.O. 210

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | C.O. 210 | 354 |




SECTION A
Scale: 1" = 1'-0"
S19.3 | S19.5




SECTION B
Scale: 1" = 1'-0"
S19.3 | S19.5

N.I.C.

LEGEND FOR AS-BUILT POSTINGS

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| ~~~~ | Squiggly line for as-built deletion |
| ~~100.00~~ | Double line for as-built deletion |
| Roadway | Text for as-built posting |

CALVIN T. MIYAHARA
LICENSED PROFESSIONAL ENGINEER
NO. 8133-S
HAWAII, U.S.A.

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SIGNATURE — 4-30-20 EXPIRATION DATE OF THE LICENSE

| DATE | REVISION |
|---|---|
| 6/13/18 | 8 RFI 038 - Deleted Sheet |

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

# PALI HIGHWAY OVERPASS AT STA. 150+69± EB

## END POST SECTIONS

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted Date: Mar. 2016

SHEET No. S19.5 OF 6 SHEETS

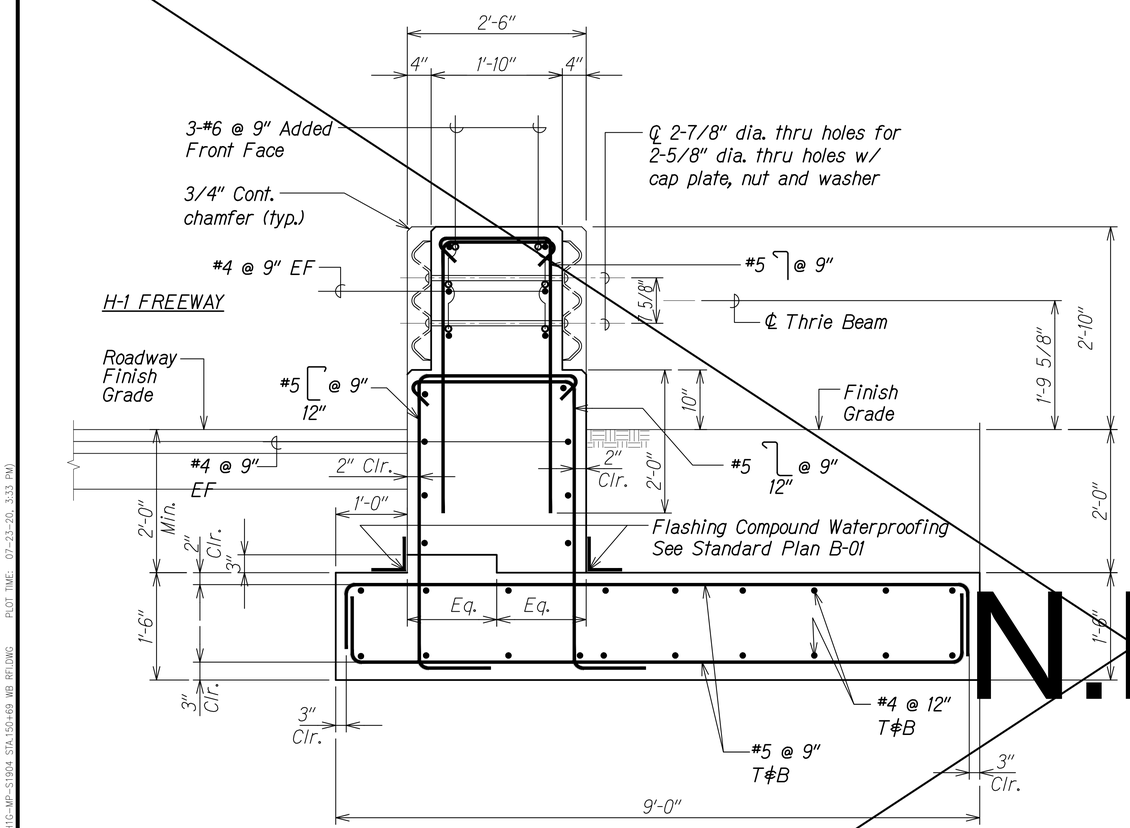
ORIGINAL PLAN
NOTE BOOK No.
SURVEY PLOTTED BY
DRAWN BY
TRACED BY
DESIGNED BY
QUANTITIES BY
CHECKED BY
DATE

DRAWING NAME: Z:\OD ONGOING\12-032_H-1 GRAL & SHLDR IMPL PD WOC TMP\01 CAD\07-22-20 ASB\HIG-MP-S1904_STA 150+69 WB RF.DWG PLOT TIME: 07-23-20, 3:32 PM

"AS-BUILT"

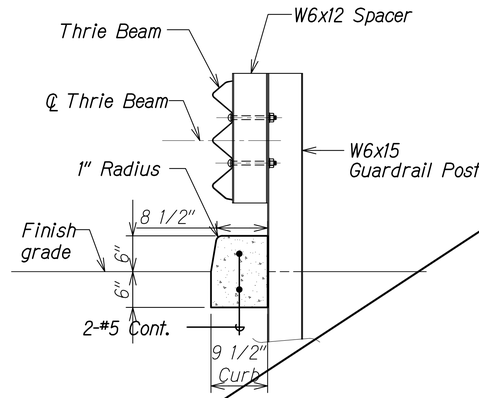
C.O. 210

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | C.O. 211 | 354 |

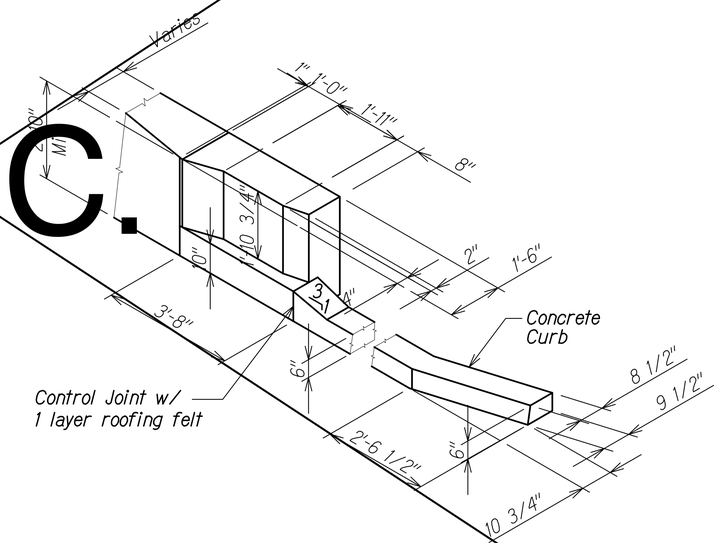



SECTION A
Scale: 1" = 1'-0"
S19.3 | S19.6

N.I.C.




SECTION B
Scale: 1" = 1'-0"
S19.3 | S19.6




END POST DETAIL 1
Scale: 1/2" = 1'-0"
S19.3 | S19.6

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 |

CALVIN T. MIYAMASA LICENSED PROFESSIONAL ENGINEER NO. 8133-S HAWAII, U.S.A.

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4-30-20
SIGNATURE EXPIRATION DATE OF THE LICENSE

| DATE | REVISION |
|---|---|
| 6/13/18 | 8 RFI 038 - Deleted Sheet |

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

# PALI HIGHWAY OVERPASS AT STA. 150+69± EB

## END POST SECTIONS AND DETAIL

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted Date: Mar. 2016

SHEET No. S19.6 OF 6 SHEETS

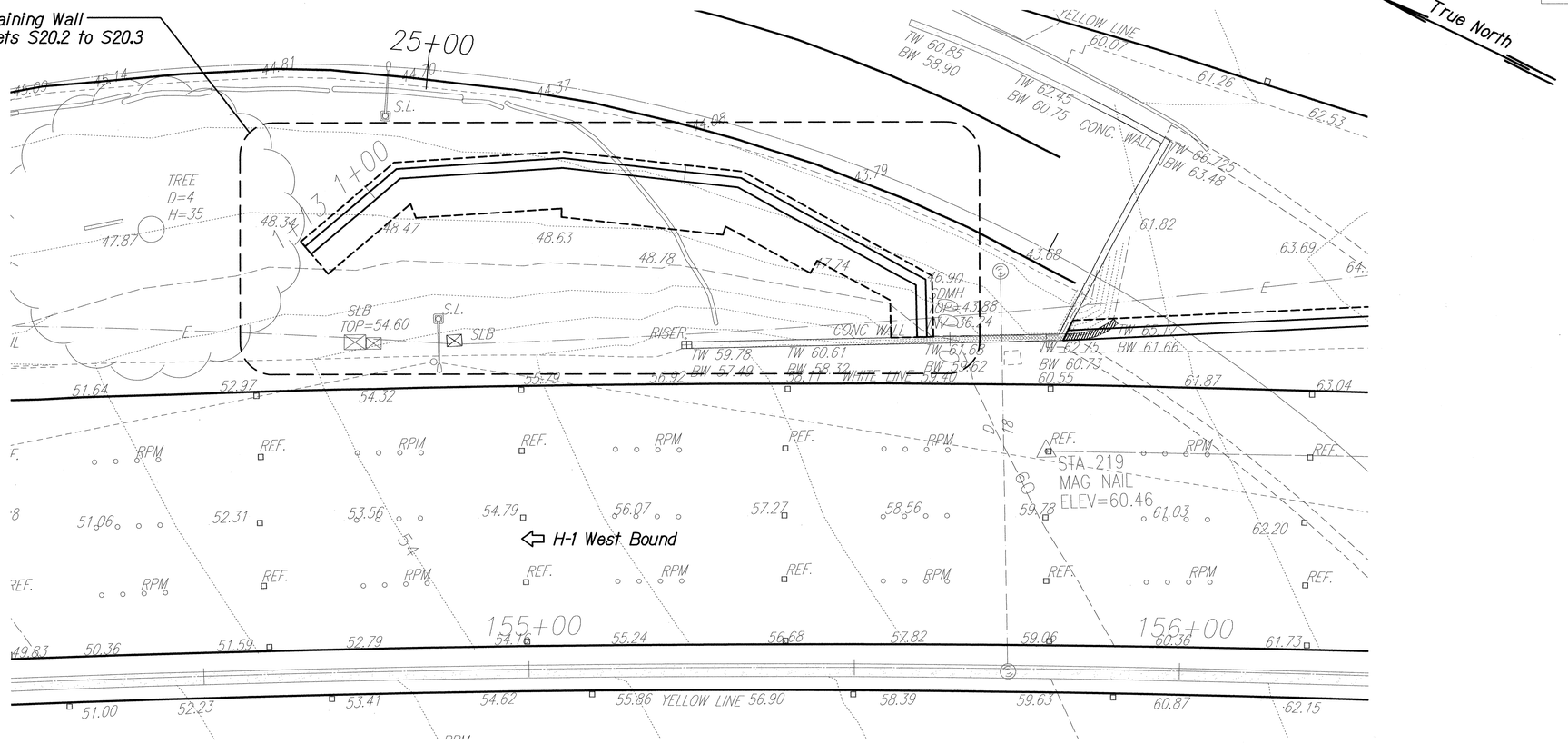
ORIGINAL PLAN | NOTE BOOK No. | SURVEY PLOTTED BY | DRAWN BY | TRACED BY | DESIGNED BY | QUANTITIES BY | CHECKED BY | DATE

BROWNING NAME: Z:\OD ONGONGA\12-032\1-H1 GRAL & SHLDR MDL ST TO PBWL PD WOC TM.01 CAD\07-22-20 ASB\H1G-MP-S1904 STA 150+69 WB RFL.DWG PLOT TIME: 07-23-20, 3:33 PM

"AS-BUILT"

C.O. 211

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 212 | 354 |




## LAYOUT PLAN

Scale: 1" = 10'-0"

A S20.1 | S20.1

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

DRAWING NAME: Z:\00 OKDOWO\12-032-H1 GRAL & SHLDR MDL ST TO PUNCHBOWL WOO\01 CAD\03-XX-16\H1G-MP-S2001 RETWALL WB.DWG PLOT TIME: 03-25-16, 11:01 AM)

CALVIN T. MIYAMARA
LICENSED PROFESSIONAL ENGINEER
NO. 8133-S
HAWAII, U.S.A.

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SIGNATURE 4-30-18 EXPIRATION DATE OF THE LICENSE

STATE OF HAWAI'I
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

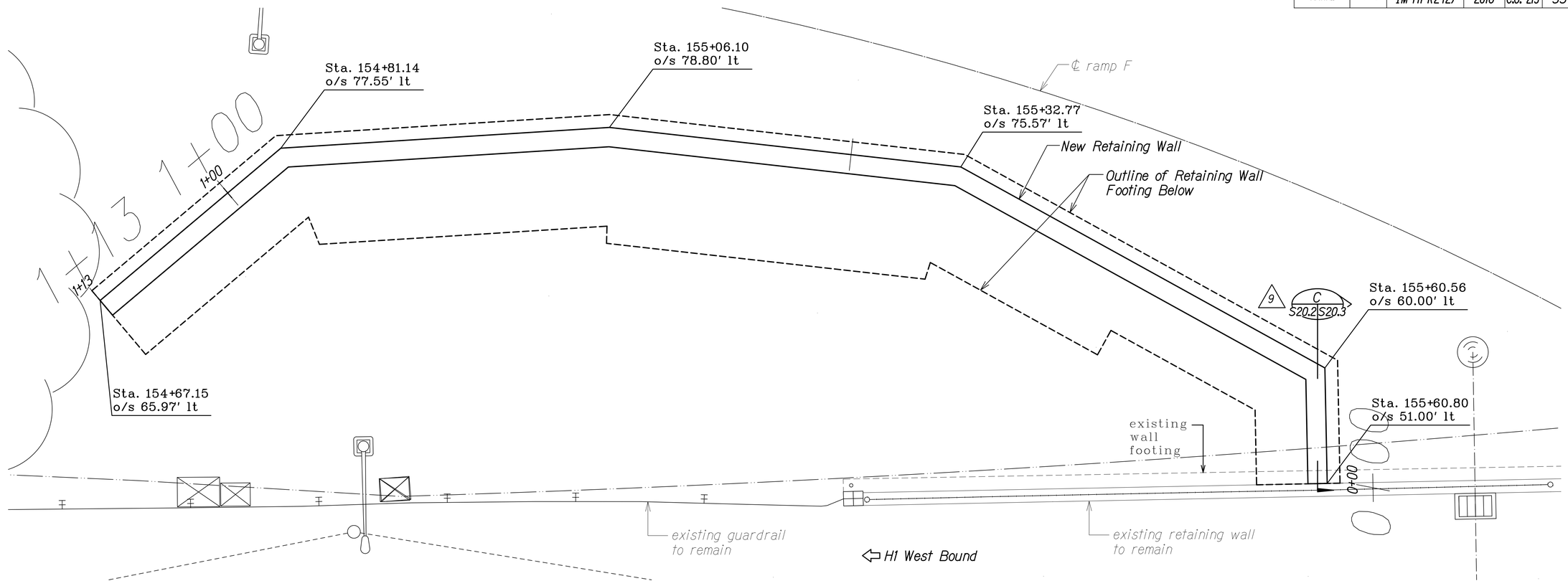
# PALI HIGHWAY OVERPASS
# RETAINING WALL LAYOUT PLAN

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted Date: Mar. 2016

SHEET No. S20.1 OF 3 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | C.O. 213 | 354 |




## RETAINING WALL PLAN (A S20.3 | S20.3)

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

| SURVEY PLOTTED BY | DATE |
|---|---|
| DRAWN BY | * * * * * |
| TRACED BY | |
| DESIGNED BY | |
| QUANTITIES BY | |
| CHECKED BY | |

ORIGINAL PLAN

NOTE BOOK

No.

DRAWING NAME: Z:\OD_ONGOING\12-032_I-H1 GRAL & SHLDR MDL ST TO PBWL PD WOC TM\01 CAD\07-27-20 ASB DWG\H1G-MP-S2002 RETWALL WB PLAN.dwg PLOT TIME: 07-27-20, 5:26 PM)

### 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 |

CALVIN T. MIYAMARA
LICENSED PROFESSIONAL ENGINEER
NO. 8133-S
HAWAII, U.S.A.

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4-30-20
SIGNATURE EXPIRATION DATE OF THE LICENSE

| DATE | REVISION |
|---|---|
| 7-25-18 | 9 RFI 020F |

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

# PALI HIGHWAY OVERPASS
# RETAINING WALL PLAN
## INTERSTATE ROUTE H-1
## GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

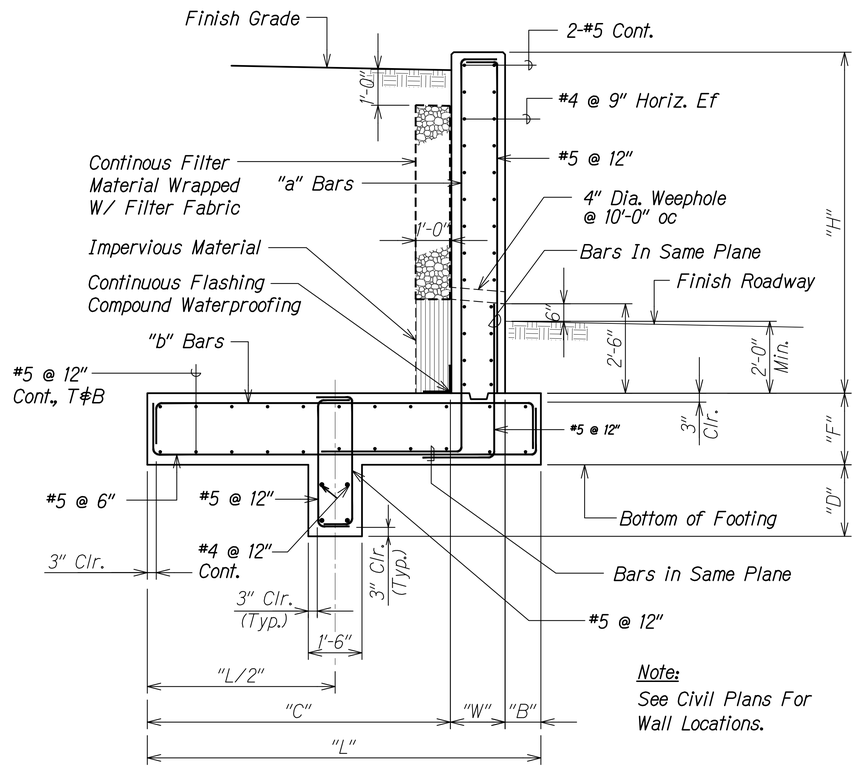
Scale: As Noted Date: Mar. 2016

SHEET No. S20.2 OF 3 SHEETS

"AS-BUILT"

C.O. 213

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | C.O. 214 | 354 |



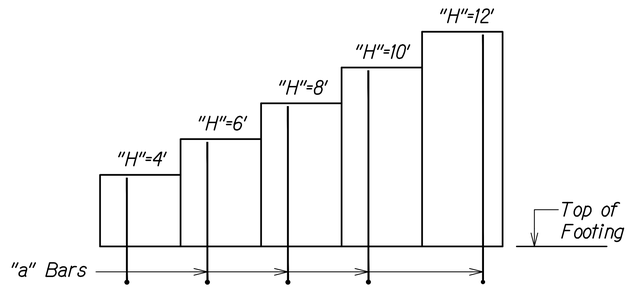

**Note:**
See Civil Plans For Wall Locations.

## RETAINING WALL SECTION

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

A S20.3 | S20.3

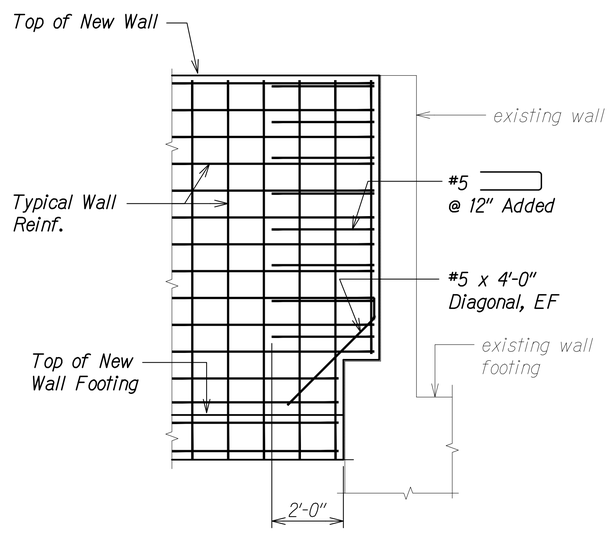
| DIMENSIONS AND REINFORCING STEEL FOR RETAINING WALL | | | | | |
|---|---|---|---|---|---|
| Stem Design Height - "H" | ≤ 4'-0" | ≤ 6'-0" | ≤ 8'-0" | ≤ 10'-0" | ≤ 12'-0" |
| Footing Width - "L" | 3'-0" | 4'-0" | 5'-0" | 6'-6" | 7'-6" |
| Toe - "B" | 1'-0" | 1'-0" | 1'-0" | 1'-0" | 1'-0" |
| Heel - "C" | 1'-0" | 2'-0" | 3'-0" | 4'-3" | 5'-3" |
| Stem Thickness (at Base) - "W" | 1'-0" | 1'-0" | 1'-0" | 1'-3" | 1'-3" |
| Footing Depth - "F" | 1'-0" | 1'-0" | 1'-3" | 1'-6" | 1'-6" |
| Key Depth - "D" | - | - | 1'-0" | 1'-6" | 1'-6" |
| "a" Bars | #5 @ 12" | #5 @ 12" | #5 @ 12" | #6 @ 12" | #6 @ 9" |
| "b" Bars | #5 @ 12" | #5 @ 12" | #5 @ 12" | #6 @ 12" | #6 @ 9" |




## VERTICAL REINFORCING STEEL ARRANGEMENT

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

B S20.3 | S20.3




## 9 RETAINING WALL SECTION AT STA. 0+00

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

C S20.3 | S20.3

### 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 |

CALVIN T. MIYAMASA LICENSED PROFESSIONAL ENGINEER NO. 8133-S HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

4-30-20
SIGNATURE EXPIRATION DATE OF THE LICENSE

| DATE | REVISION |
|---|---|
| 7-25-18 | 9 RFI 020F |

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

# PALI HIGHWAY OVERPASS
## SECTION AND DETAIL
### INTERSTATE ROUTE H-1
### GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted Date: Mar. 2016

SHEET No. S20.3 OF 3 SHEETS

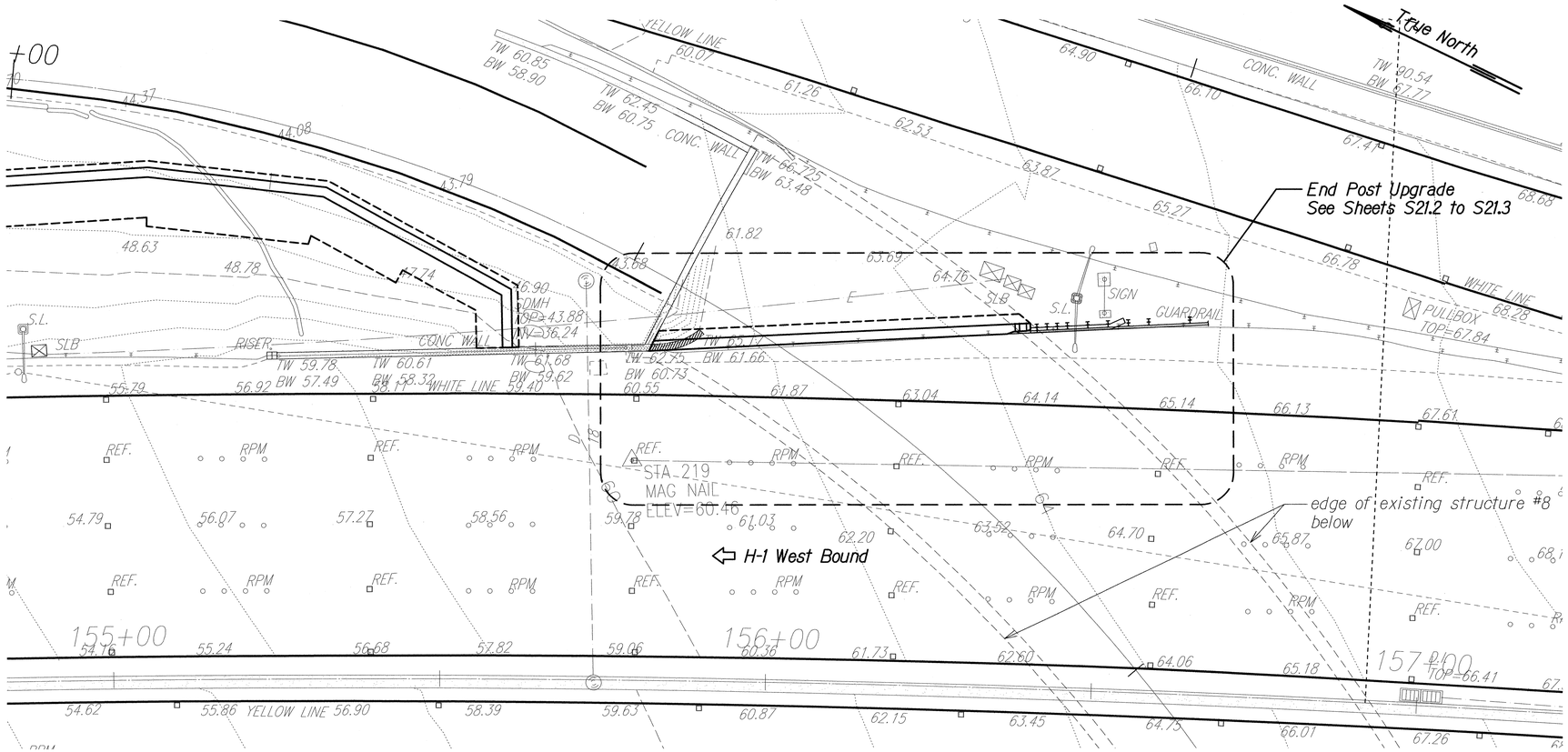
"AS-BUILT"

C.O. 214

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

DRAWING NAME: Z:\DD ONGOING\12-032-1-H1 GRAIL & SHLDR IMPL ST TO PBWL PB WDC TM\01 CAD\07-22-20 ASB\H1G-MP-S2003 RETWALL WB PLAN.DWG PLOT TIME: 07-23-20, 3:37 PM

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 215 | 354 |




## LAYOUT PLAN

Scale: 1" = 10'-0"

A
S21.1 | S21.1

ORIGINAL PLAN

| | |
|---|---|
| SURVEY PLOTTED BY | DATE |
| DRAWN BY | |
| TRACED BY | |
| DESIGNED BY | |
| QUANTITIES BY | |
| CHECKED BY | |

NOTE BOOK
No.

DRAWING NAME: Z:\OD ONGOING\12-032-H1 GRAI & SHLDR MDL ST TO PUNCHBOWL WOC\01 CAD\03-XX-16\H1G-MP-S2101 STA 156+37 WB.DWG PLOT TIME: 03-25-16, 11:03 AM

CALVIN T. MIYAHARA
LICENSED PROFESSIONAL ENGINEER
NO. 8133-S
HAWAII, U.S.A.

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SIGNATURE 4-30-18 EXPIRATION DATE OF THE LICENSE

STATE OF HAWAI'I
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

# PALI HIGHWAY OVERPASS AT STA. 156+37± WB

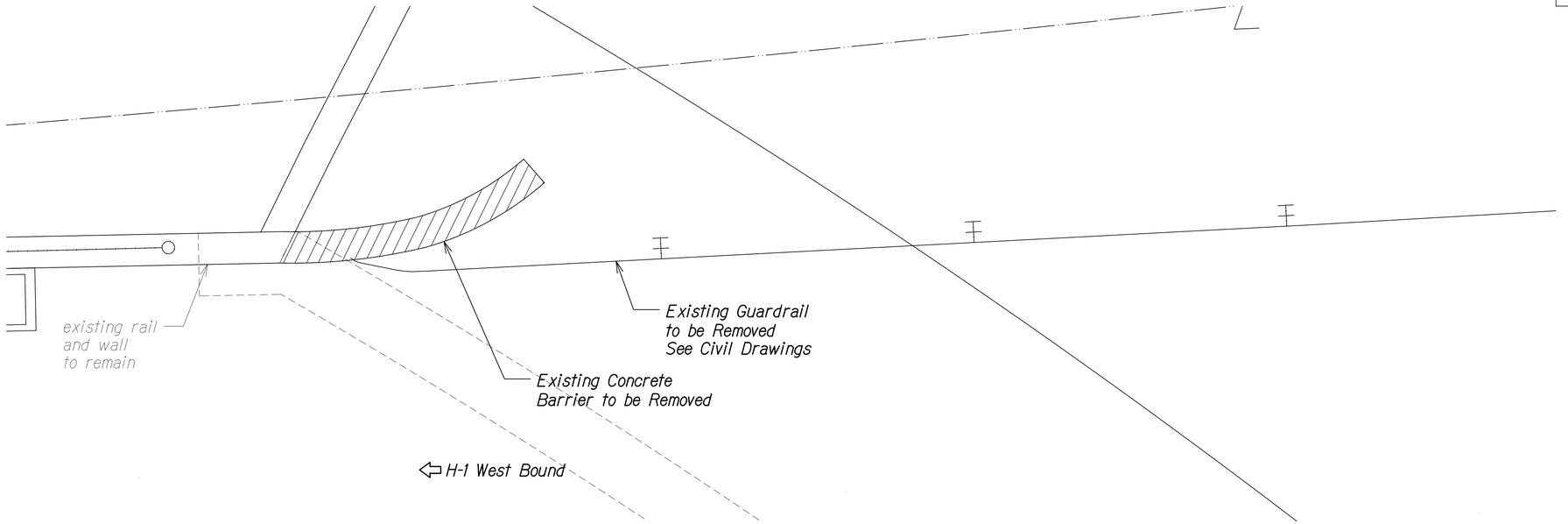
## LAYOUT PLAN

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

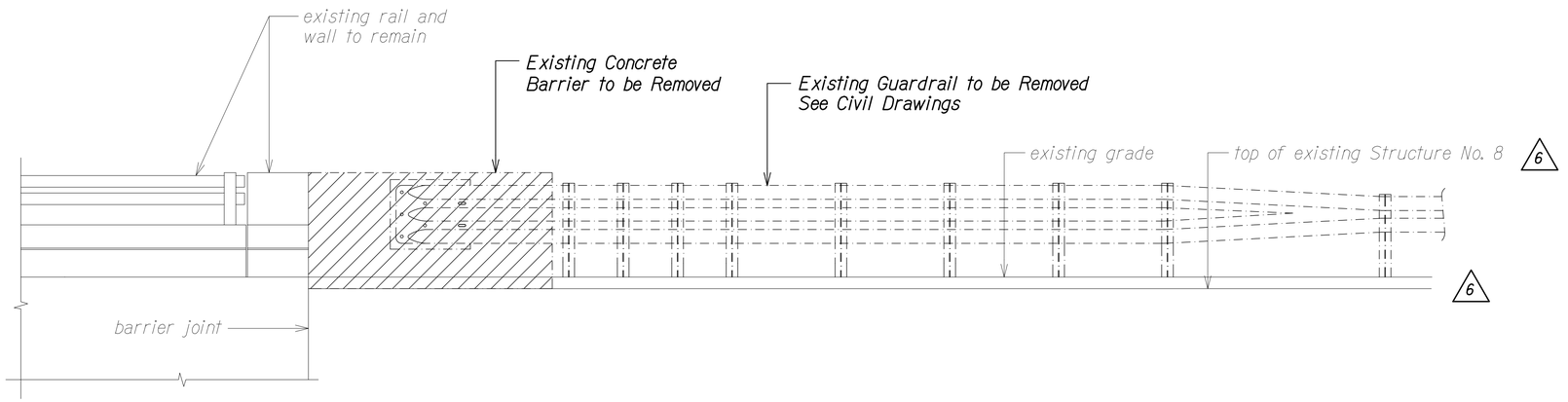
Scale: As Noted Date: Mar. 2016

SHEET No. S21.1 OF 6 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | C.O. 216 | 354 |




DEMO PLAN (A) S21.2 | S21.2
Scale: 1/2" = 1'-0"




ELEVATION (B) S21.2 | S21.2
Scale: 1/2" = 1'-0"

| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
|---|---|---|
| NOTE BOOK | DRAWN BY | |
| No. | TRACED BY | |
| | DESIGNED BY | |
| | QUANTITIES BY | |
| | CHECKED BY | |

DRAWING NAME: Z:\00 ONGOING\12-032-1-HI GRAL & SHLDR MDL ST TO PBWL PB WDC TM\01 CAD\07-22-20 ASB\HIG-MP-S2102 STA 156+37 WB DEMO RFI037.DWG PLOT TIME: 07-23-20, 3:39 PM

## 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 |




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4-30-20
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| DATE | REVISION |
|---|---|
| 3/19/18 | 6 RFI 037 - Revise existing condition |

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

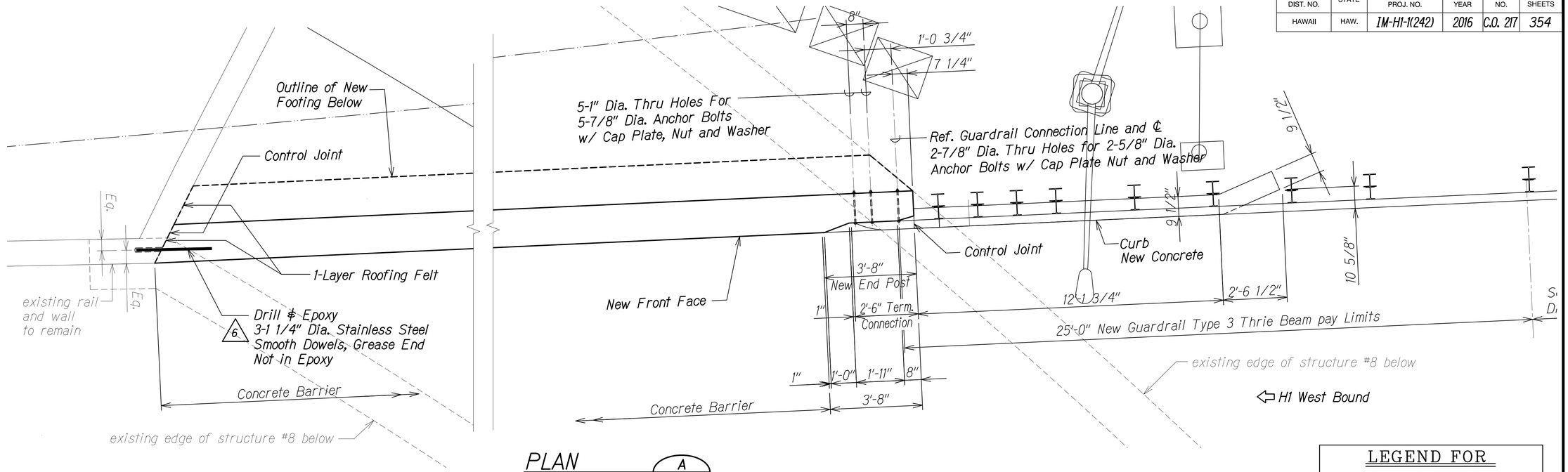
**PALI HIGHWAY OVERPASS AT STA. 156+37± WB**
**DEMO PLAN AND ELEVATION**
INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)
Scale: As Noted Date: Mar. 2016

SHEET No. S21.2 OF 6 SHEETS

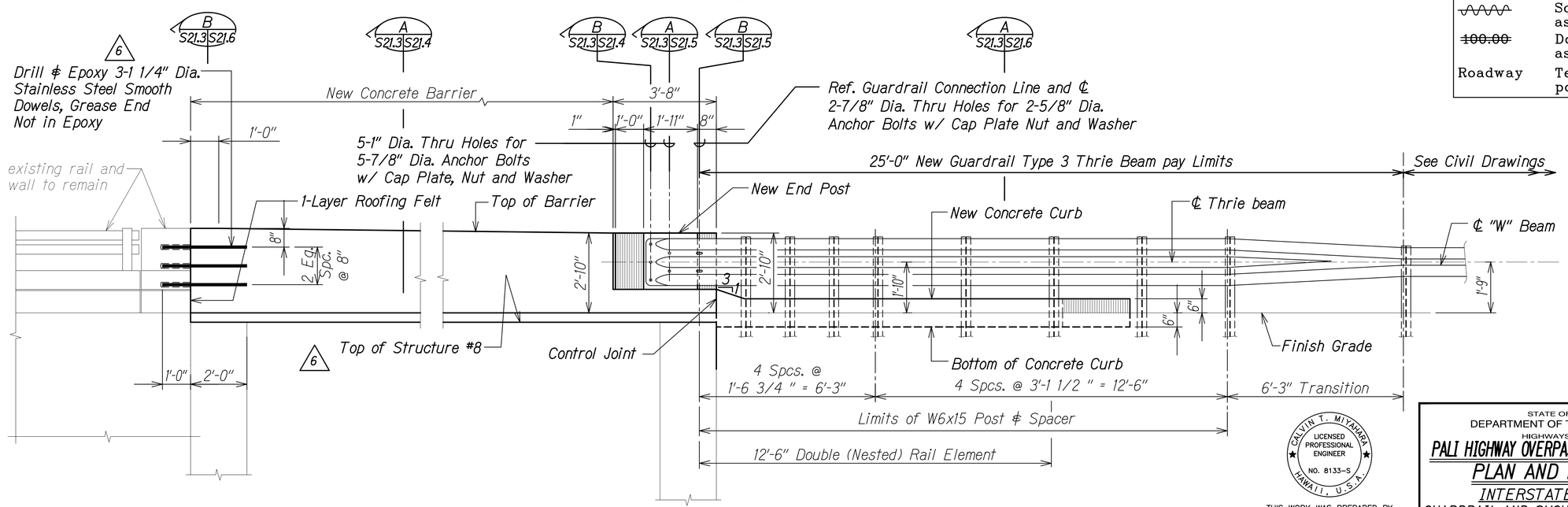
"AS-BUILT"

C.O. 216

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | C.O. 217 | 354 |




PLAN
Scale: 1/2" = 1'-0"
A S21.3 | S21.3




ELEVATION
Scale: 1/2" = 1'-0"
B S21.3 | S21.3

## LEGEND FOR AS-BUILT POSTINGS

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| ~~100.00~~ | Double line for as-built deletion |
| Roadway | Text for as-built posting |

| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
|---|---|---|
| NOTE BOOK | DRAWN BY | |
| No. | TRACED BY | |
| | DESIGNED BY | |
| | QUANTITIES BY | |
| | CHECKED BY | |

| DATE | REVISION |
|---|---|
| 3/19/18 | 6 RFI 037 - Revise existing condition and new reinforcing |

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CALVIN T. MIYAMARA LICENSED PROFESSIONAL ENGINEER NO. 8133-S HAWAII, U.S.A.

SIGNATURE — 4-30-20 EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

# PALI HIGHWAY OVERPASS AT STA. 156+37± WB

## PLAN AND ELEVATION

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-H1-1(242)

Scale: As Noted — Date: Mar. 2016

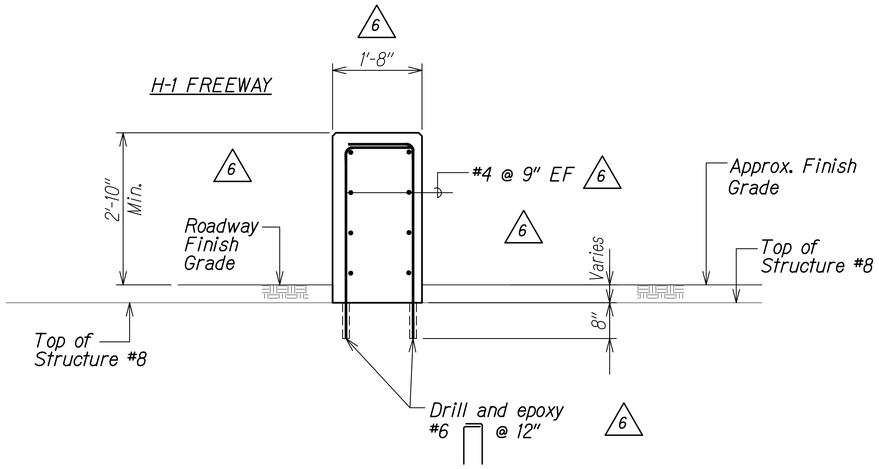
SHEET No. S21.3 OF 6 SHEETS

"AS-BUILT"

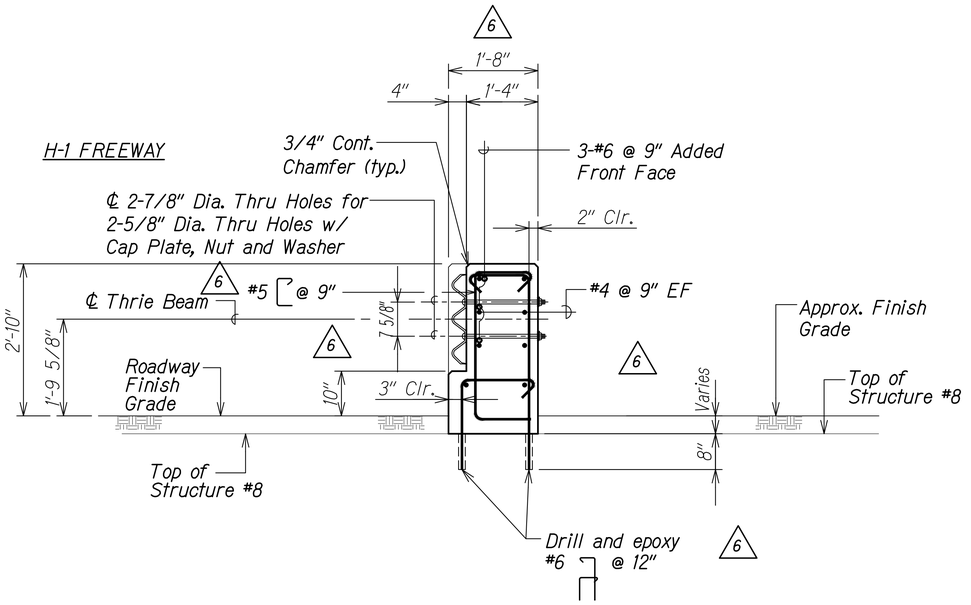
C.O. 217

DRAWING NAME: Z:\OD DNGN\G\12-032-1-H1 GRAIL & SHLDR MDL ST TO PBHL PD WOC TM\01 CAD\07-22-20 ASB\H1G-HP-S2103 STA 156+37 WB PLAN RFI037.DWG PLOT TIME: 07-23-20, 3:40 PM

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | C.O. 218 | 354 |




SECTION A
Scale: 3/4" = 1'-0" S21.3 | S21.4




SECTION B
Scale: 3/4" = 1'-0" S21.3 | S21.4

## LEGEND FOR AS-BUILT POSTINGS

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| ~~~~ | Squiggly line for as-built deletion |
| ~~100.00~~ | Double line for as-built deletion |
| Roadway | Text for as-built posting |

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CALVIN T. MIYAMARA LICENSED PROFESSIONAL ENGINEER NO. 8133-S HAWAII, U.S.A.

4-30-20
SIGNATURE EXPIRATION DATE OF THE LICENSE

| DATE | REVISION |
|---|---|
| 3/19/18 | 6 RFI 037 - Revise existing condition and new reinforcing |

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

# PALI HIGHWAY OVERPASS AT STA. 156+37± WB

## SECTIONS

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-H1-1(242)

Scale: As Noted Date: Mar. 2016

SHEET No. S21.4 OF 6 SHEETS

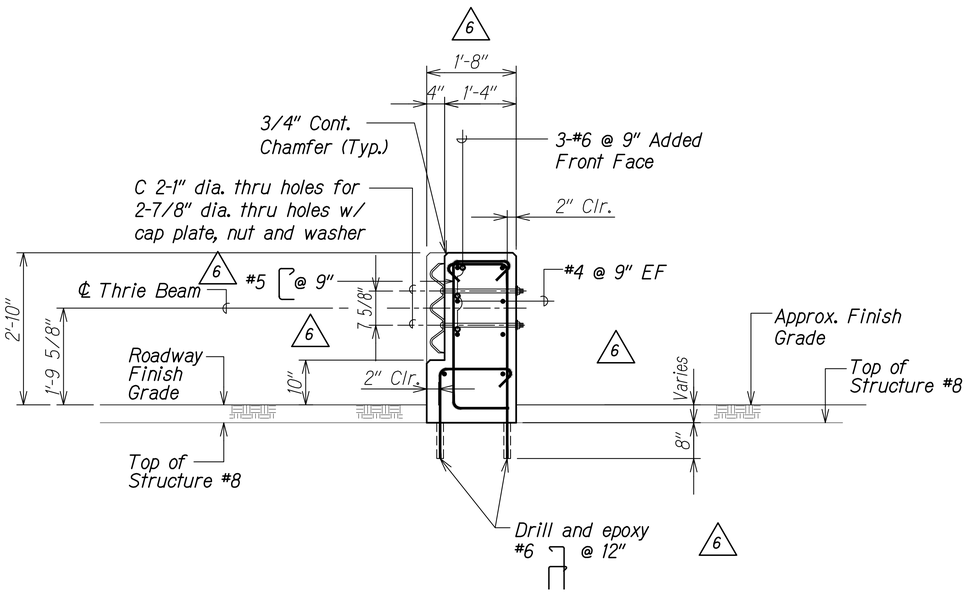
ORIGINAL PLAN
NOTE BOOK No.
SURVEY PLOTTED BY DATE
DRAWN BY
TRACED BY
DESIGNED BY
QUANTITIES BY
CHECKED BY

DRAWING NAME: Z:\OD ONGOING\12-032.1-H1 ORAL & SHLDR IMPL ST TO PBRL PD WDC TM\01 CAD\07-22-20 ASBUILT\IG-MP-S2104 STA 156+37 SECTIONS RFI037.DWG PLOT TIME: 07-23-20, 3:42 PM

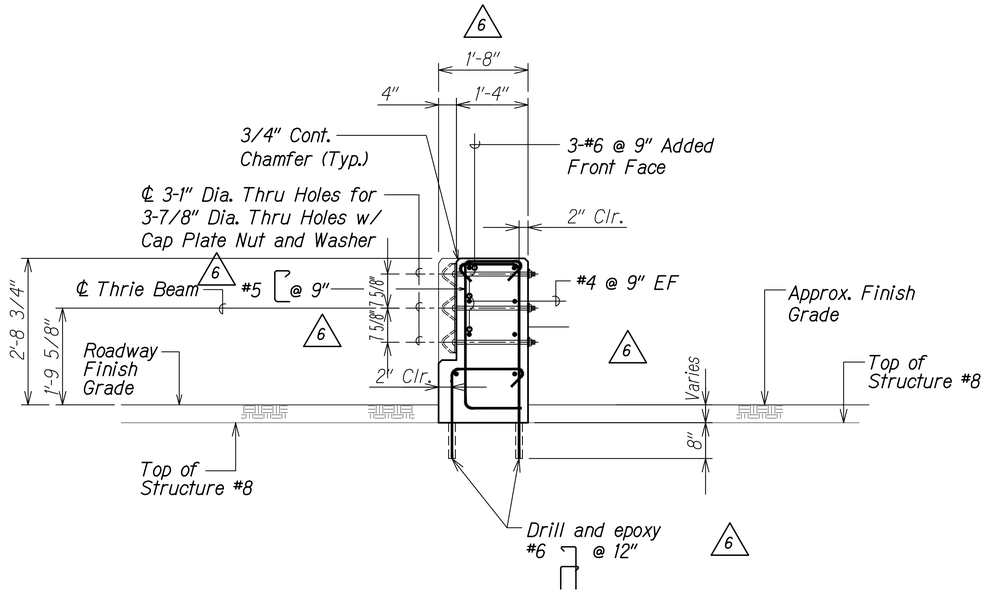
"AS-BUILT"

C.O. 218

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | C.O. 219 | 354 |




SECTION A
Scale: 3/4" = 1'-0" S21.3 | S21.5




SECTION B
Scale: 3/4" = 1'-0" S21.3 | S21.5

| | |
|---|---|
| 3/19/18 | 6 RFI 037 - Revise existing condition and new reinforcing |
| DATE | REVISION |

LEGEND FOR AS-BUILT POSTINGS

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| ~~~~ | Squiggly line for as-built deletion |
| ~~100.00~~ | Double line for as-built deletion |
| Roadway | Text for as-built posting |

CALVIN T. MIYAMARA LICENSED PROFESSIONAL ENGINEER NO. 8133-S HAWAII, U.S.A.

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4-30-20
SIGNATURE EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

# PALI HIGHWAY OVERPASS AT STA. 156+37± WB

## SECTIONS

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-H1-1(242)

Scale: As Noted Date: Mar. 2016

SHEET No. S21.5 OF 6 SHEETS

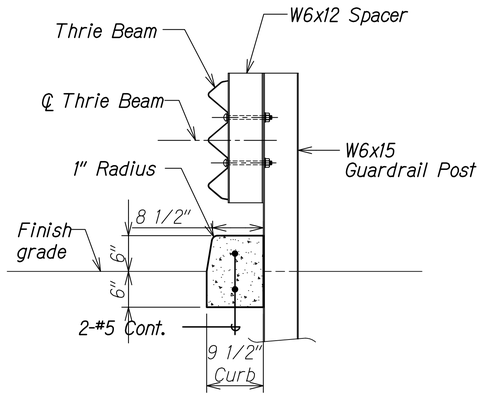
| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
|---|---|---|
| NOTE BOOK | DRAWN BY | |
| No. | TRACED BY | |
| | DESIGNED BY | |
| | QUANTITIES BY | |
| | CHECKED BY | |

DRAWING NAME: Z:\OD ONGOING\12-332.1-H1 ORAL & SHLDR MDL ST TO PBRL PD WDC TM\01 CAD\07-22-20 ASBUILT\G-MP-S2104 STA 156+37 SECTIONS RFI037.DWG PLOT TIME: 07-23-20, 3:42 PM

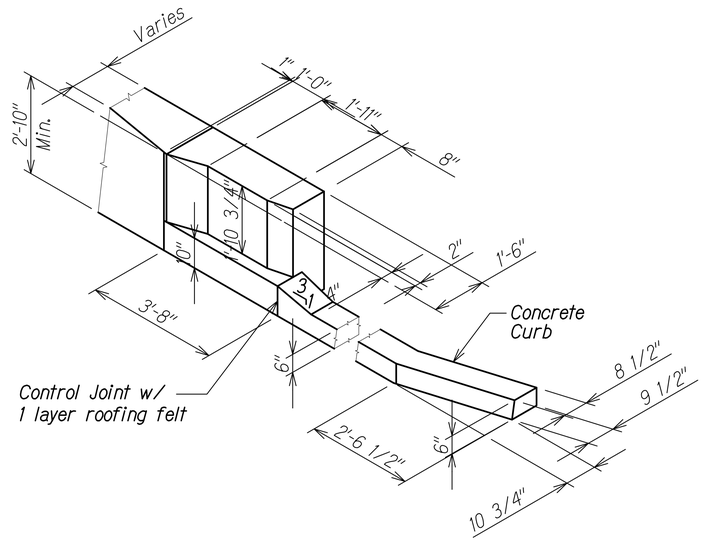
"AS-BUILT"

C.O. 219

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | C.O. 220 | 354 |

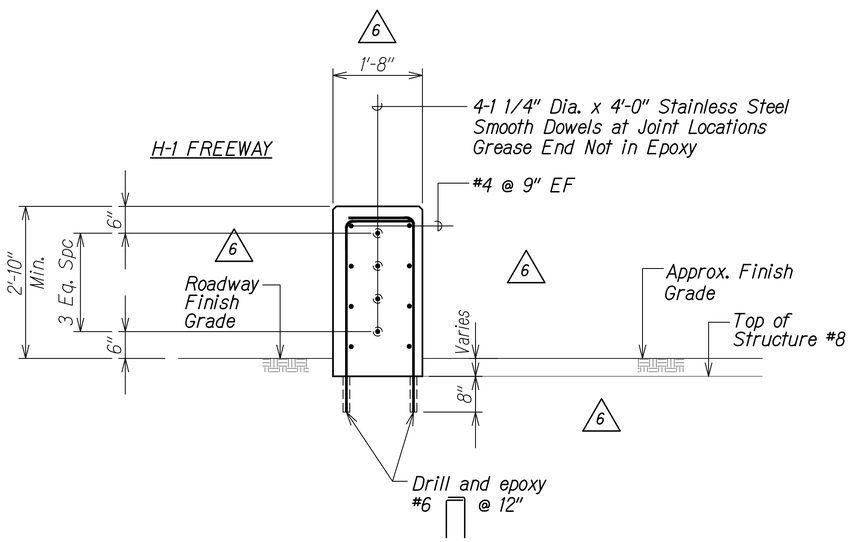



SECTION A
Scale: 1" = 1'-0"
S21.3 | S21.6

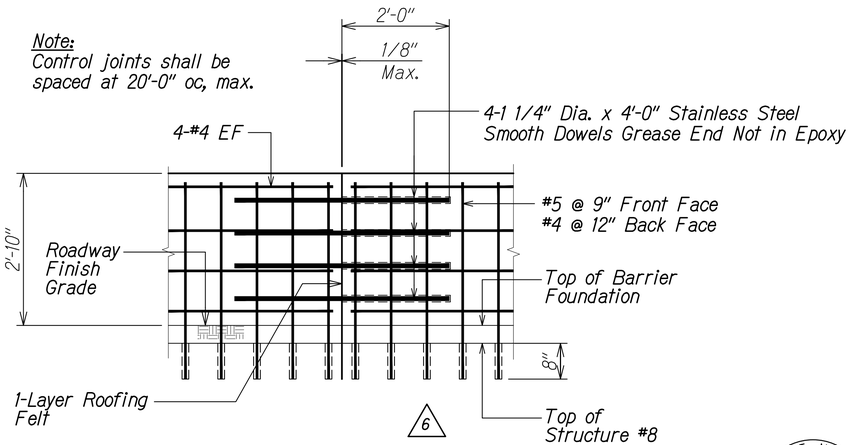



END POST DETAIL 1
Scale: 1/2" = 1'-0"
S21.6 | S21.6

H-1 FREEWAY




SECTION B
Scale: 3/4" = 1'-0"
S21.3 | S21.6




SECTION C
Scale: 3/4" = 1'-0"
S21.3 | S21.6

## 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 |

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

DRAWING NAME: Z:\OD DNGN\IM\12-032_I-H1 GRAIL & SHLDR MDL ST TO PBHL PD WOC TM\01 CAD\07-22-20 ASB\HIG-MP-S2104 STA 156+37 SECTIONS RFI037.DWG PLOT TIME: 07-23-20, 3:42 PM

| DATE | REVISION |
|---|---|
| 3/19/18 | 6 RFI 037 - Revise existing condition and new reinforcing |

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

# PALI HIGHWAY OVERPASS AT STA. 156+37± WB

## SECTION AND DETAIL

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-H1-1(242)

Scale: As Noted Date: Mar. 2016

CALVIN T. MIYAMARA
LICENSED PROFESSIONAL ENGINEER
NO. 8133-S
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

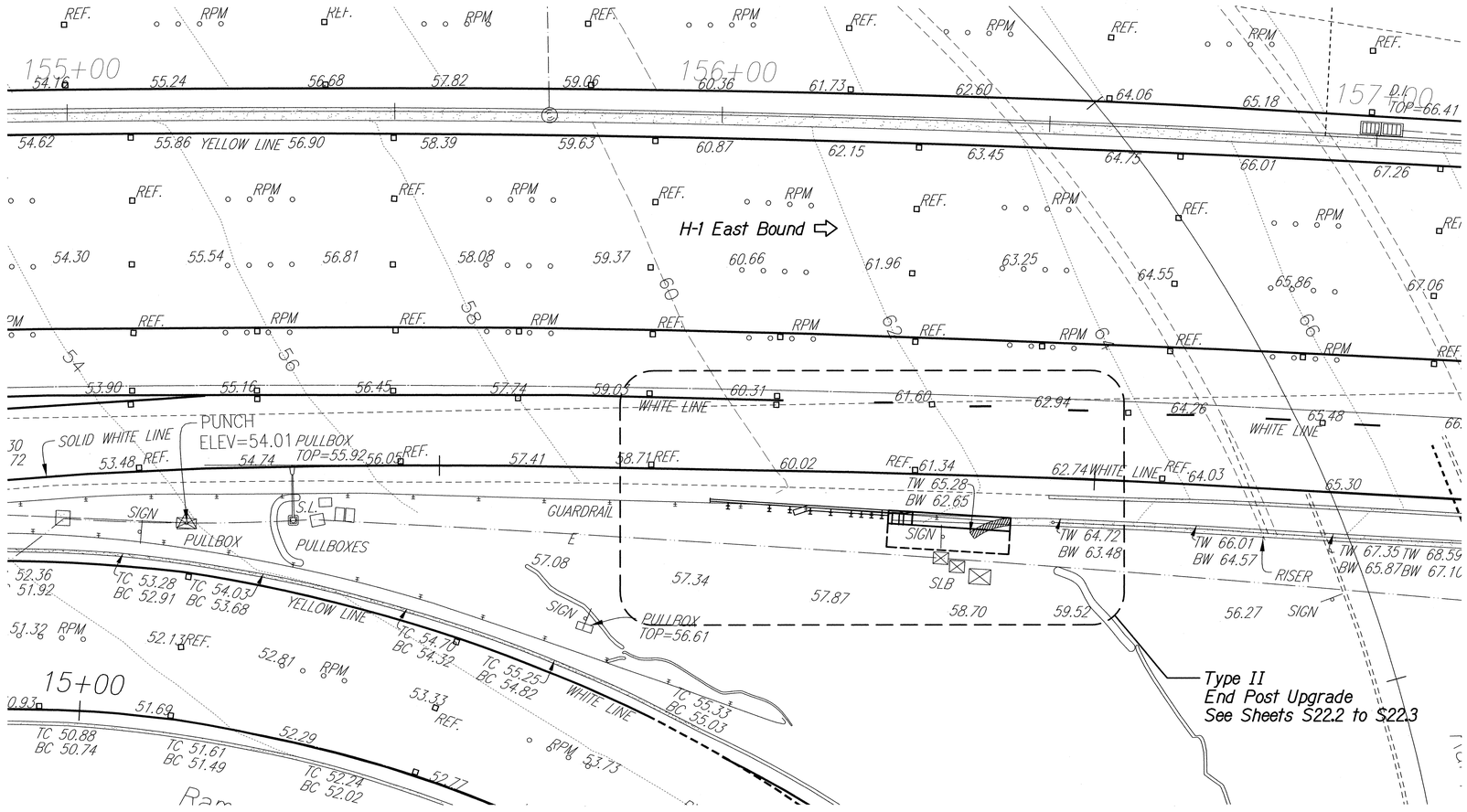
4-30-20
SIGNATURE EXPIRATION DATE OF THE LICENSE

SHEET No. S21.6 OF 6 SHEETS

"AS-BUILT"

C.O. 220

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 221 | 354 |




## LAYOUT PLAN

Scale: 1" = 10'-0"

A S22.1 | S22.1

| | |
|---|---|
| ORIGINAL PLAN | SURVEY PLOTTED BY ____ DATE ____ |
| NOTE BOOK ____ | DRAWN BY ____ |
| No. ____ | TRACED BY ____ |
| | DESIGNED BY ____ |
| | QUANTITIES BY ____ |
| | CHECKED BY ____ |

DRAWING NAME: Z:\00 ONGOING\12-032-H1 GRAL & SHLDR MDL ST TO PUNCHBOWL WOC\01 CAD\03-XX-16\H1C-MP-S2201 STA 156+27 EB.DWG PLOT TIME: 03-25-16, 4:13 PM

CALVIN T. MIYAMARA
LICENSED PROFESSIONAL ENGINEER
NO. 8133-S
HAWAII, U.S.A.

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4-30-18
SIGNATURE EXPIRATION DATE OF THE LICENSE

STATE OF HAWAI'I
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

# PALI HIGHWAY OVERPASS AT STA. 156+27± EB

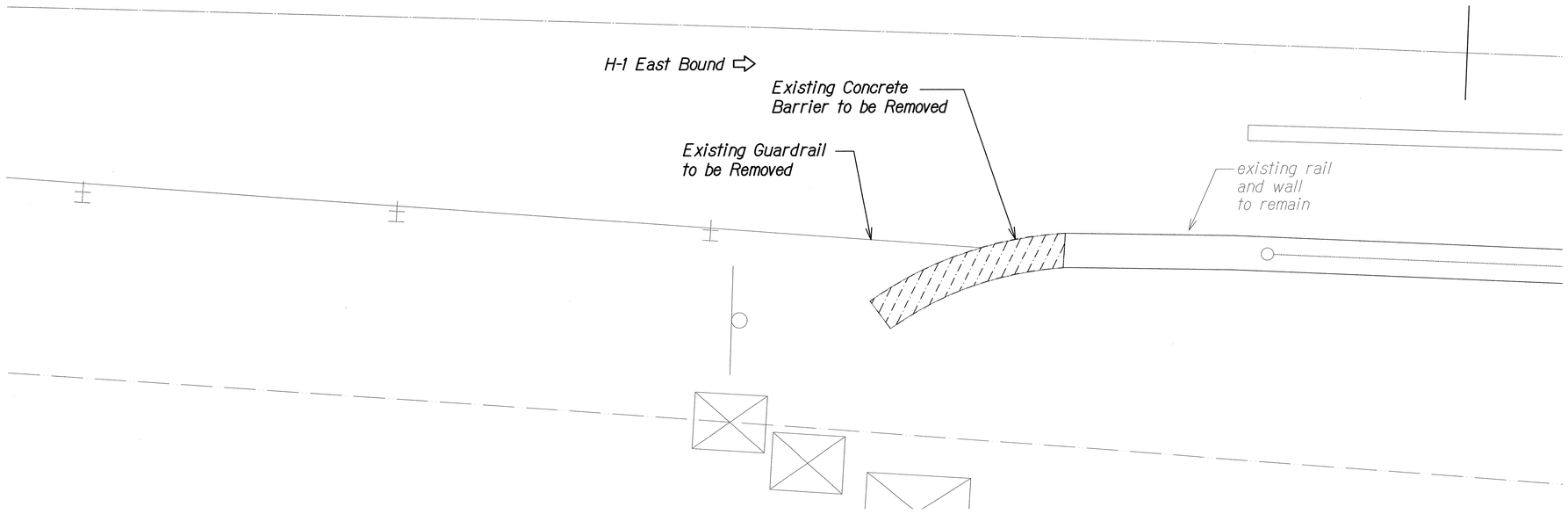
## LAYOUT PLAN

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted Date: Mar. 2016

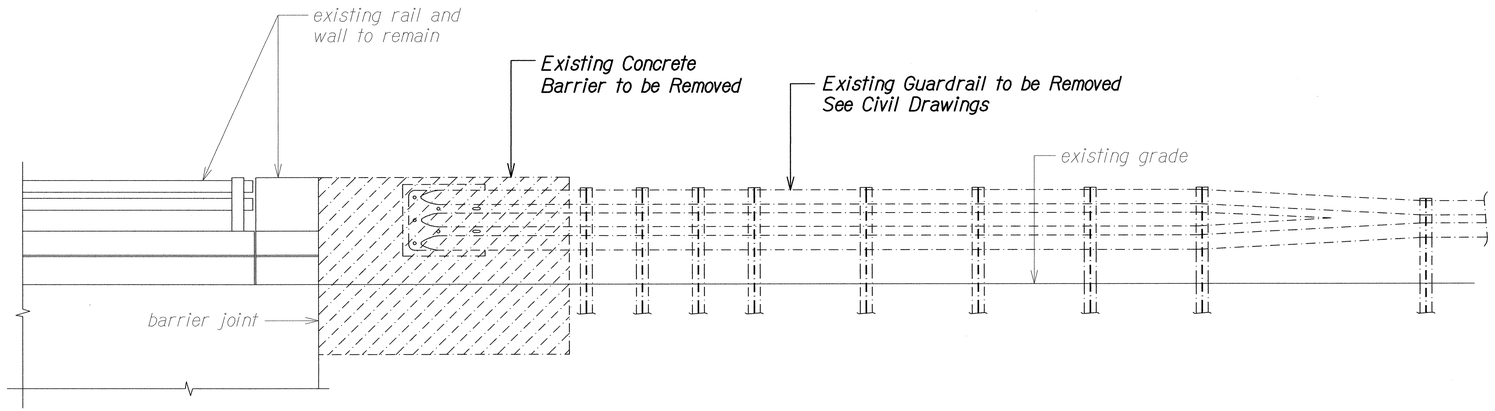
SHEET No. S22.1 OF 3 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 222 | 354 |




## DEMO PLAN (A)

Scale: 1/2" = 1'-0" S22.2 | S22.2




## ELEVATION (B)

Scale: 1/2" = 1'-0" S22.2 | S22.2

| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
|---|---|---|
| NOTE BOOK | DRAWN BY | |
| No. | TRACED BY | |
| | DESIGNED BY | |
| | QUANTITIES BY | |
| | CHECKED BY | |

DRAWING NAME: Z:\00 ONGOING\12-032-H1 GRAL & SHLDR MDL ST TO PUNCHBOWL WOC\01 CAD\03-XX-16\H1G-MP-S2203 STA 156+27 EB DEMO.DWG PLOT TIME: 03-25-16, 4:14 PM

CALVIN T. MIYAHARA LICENSED PROFESSIONAL ENGINEER NO. 8133-S HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

4-30-18
SIGNATURE EXPIRATION DATE OF THE LICENSE

STATE OF HAWAI'I
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

# PALI HIGHWAY OVERPASS AT STA. 156+27± EB

## DEMO PLAN AND ELEVATION

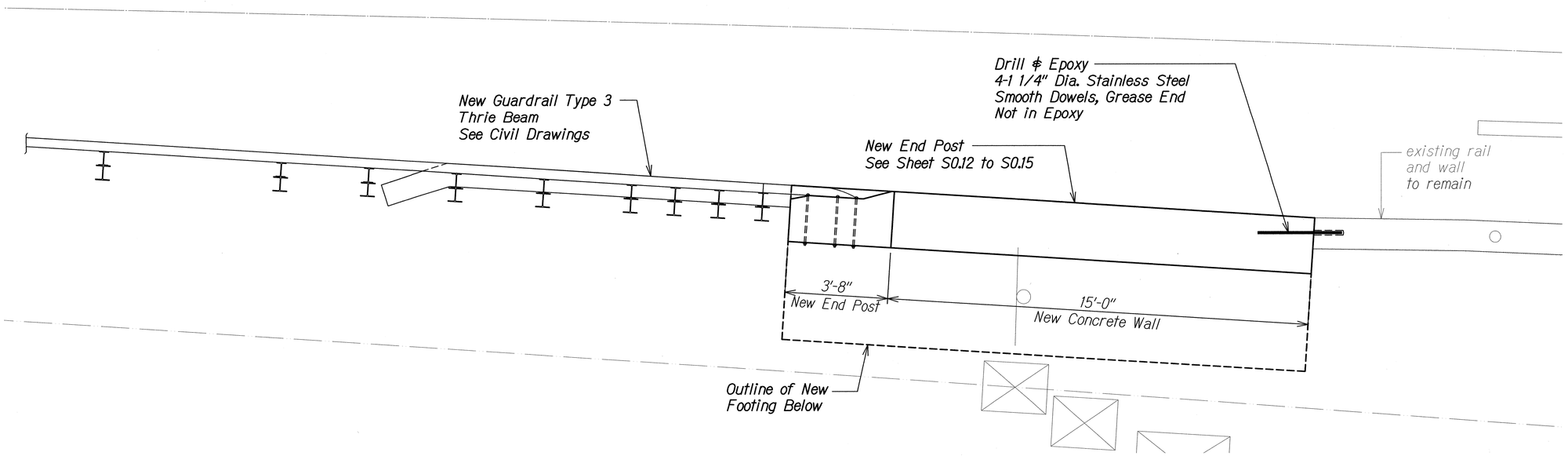
INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted Date: Mar. 2016

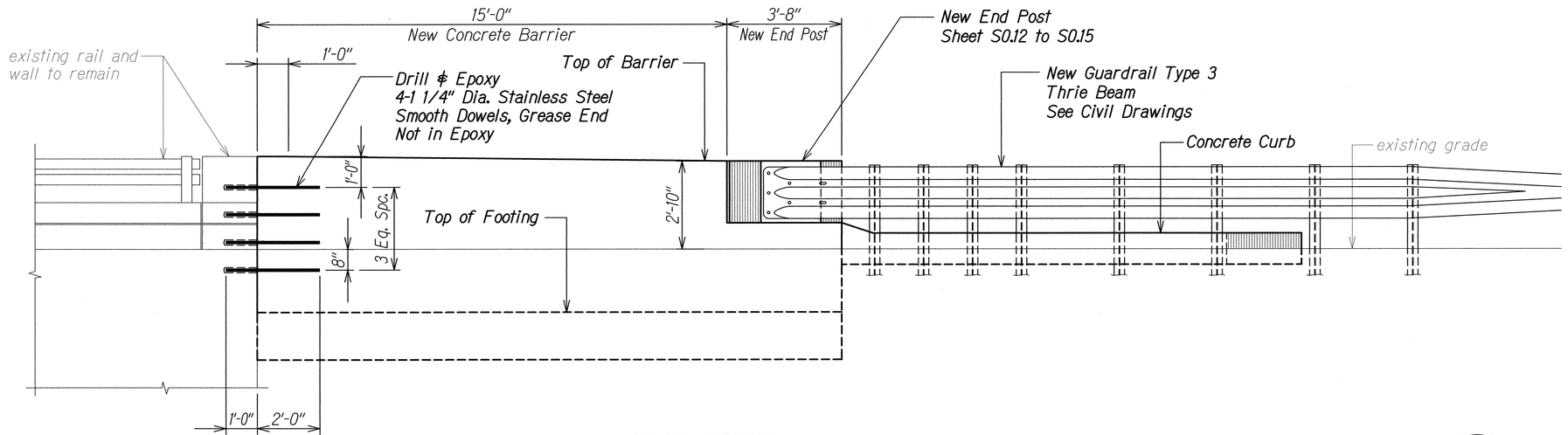
SHEET No. S22.2 OF 3 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 223 | 354 |

H-1 East Bound ⇨




PLAN
Scale: 1/2" = 1'-0" A S22.3 | S22.3




ELEVATION
Scale: 1/2" = 1'-0" B S22.3 | S22.3

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

DRAWING NAME: Z:\OD ONGOING\12-032-H1 GRAL & SHLDR MDL ST TO PUNCHBOWL MOC\01 CAD\03-XX-16\H1G-MP-S2203 STA.156+27 EB PLAN.DWG PLOT TIME: 03-25-16, 4:14 PM

CALVIN T. MIYAHARA
LICENSED PROFESSIONAL ENGINEER
NO. 8133-S
HAWAII, U.S.A.

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4-30-18
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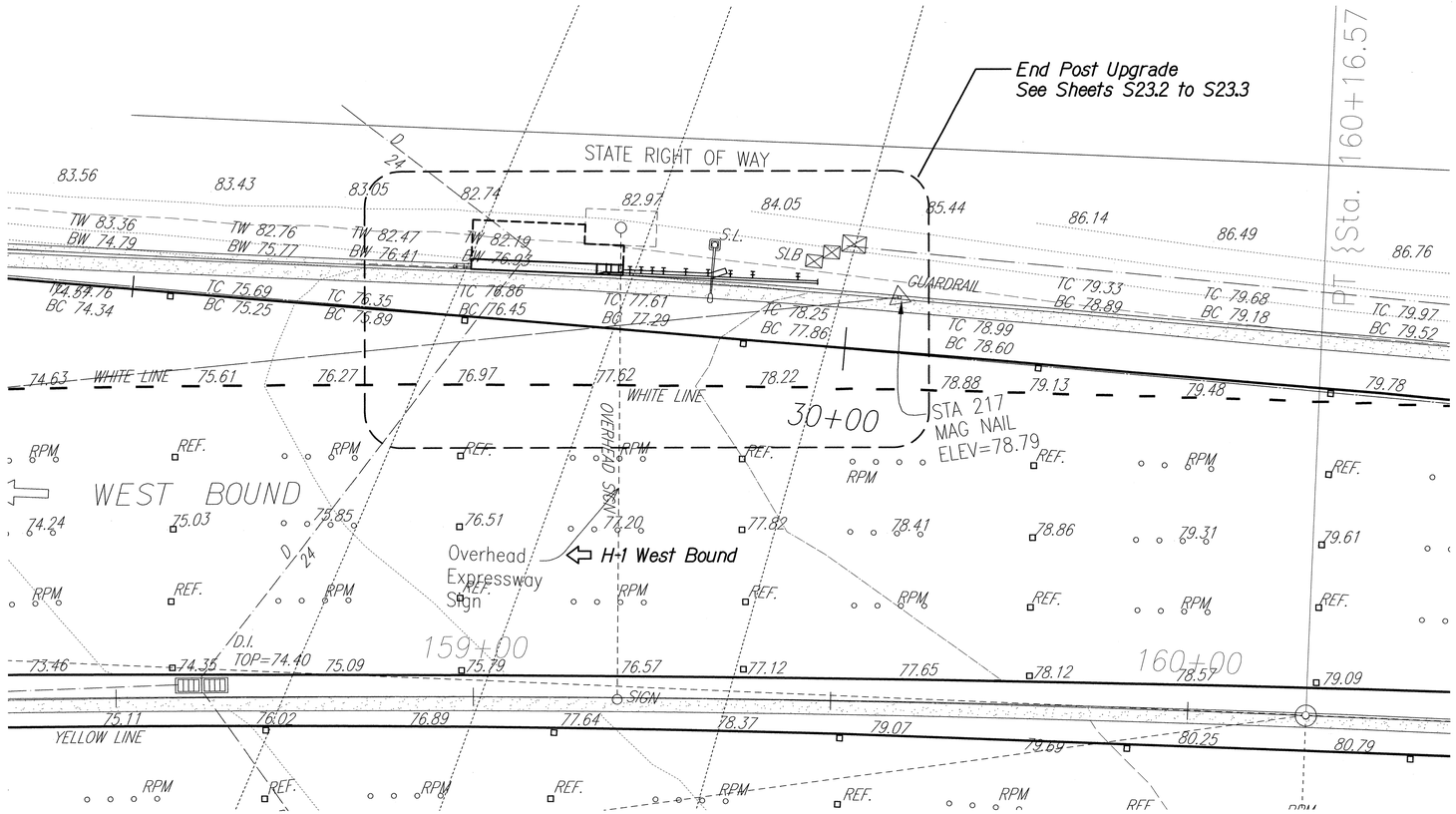
STATE OF HAWAI'I
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

# PALI HIGHWAY OVERPASS AT STA. 156+27± EB
## PLAN AND ELEVATION
INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted Date: Mar. 2016

SHEET No. S22.3 OF 3 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 224 | 354 |




## LAYOUT PLAN

Scale: 1" = 10'-0"

A S23.1 | S23.1

| | | |
|---|---|---|
| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
| | DRAWN BY | |
| NOTE BOOK | TRACED BY | |
| | DESIGNED BY | |
| No. | QUANTITIES BY | |
| | CHECKED BY | |

DRAWING NAME: Z:\OD ONGOING\12-332-H1 GRAL & SHLDR IMPL ST TO PUNCHBOWL WORK\01 CAD\03-XX-16\H1G-MP-S2301 STA.159+18 WB.DWG PLOT TIME: 03-25-16, 4:26 PM

CALVIN T. MIYAMASA
LICENSED PROFESSIONAL ENGINEER
NO. 8133-S
HAWAII, U.S.A.

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SIGNATURE — 4-30-18 EXPIRATION DATE OF THE LICENSE

STATE OF HAWAI'I
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

# PALI HIGHWAY OVERPASS AT STA. 159+18± WB

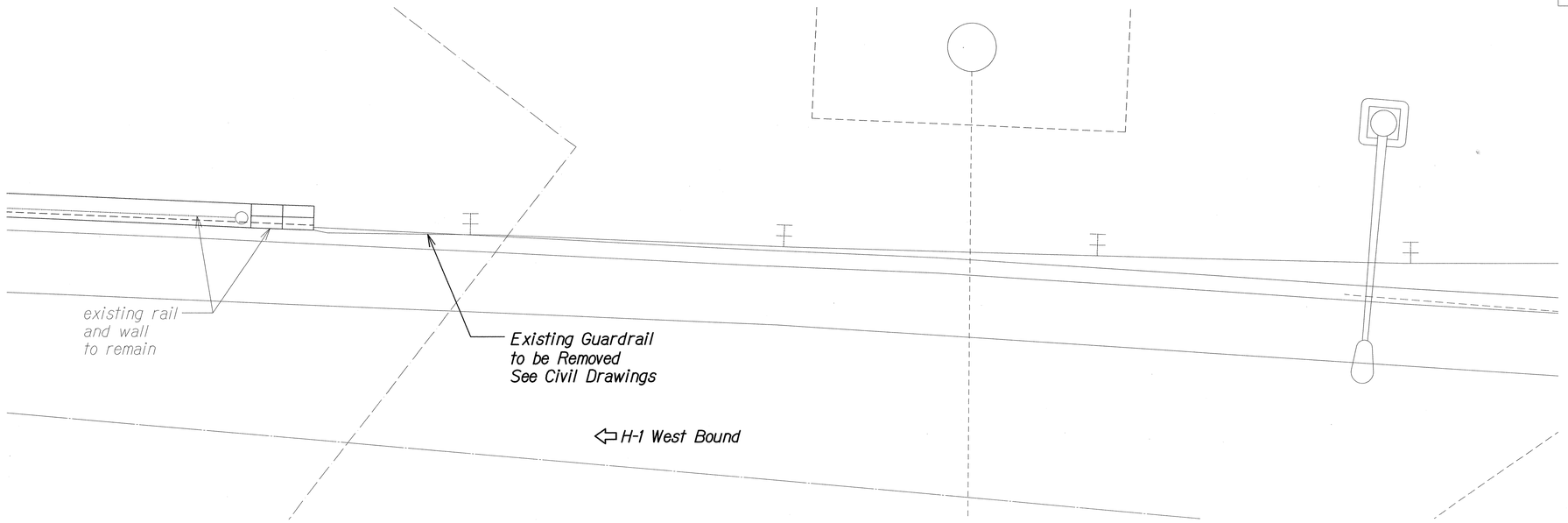
## LAYOUT PLAN

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

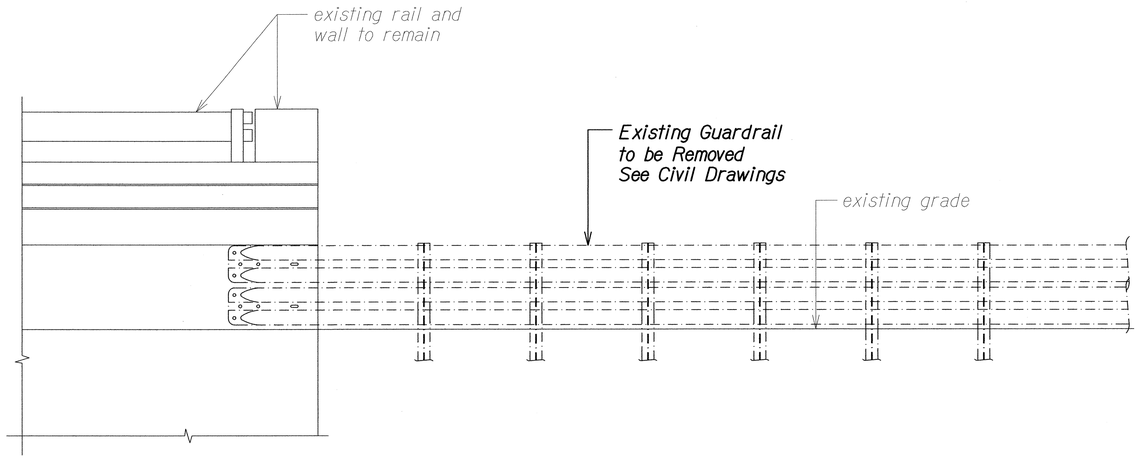
Scale: As Noted Date: Mar. 2016

SHEET No. S23.1 OF 6 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 225 | 354 |




DEMO PLAN (A)
Scale: 1/2" = 1'-0" S31.2 | S31.2




ELEVATION (B)
Scale: 1/2" = 1'-0" S23.2 | S23.2

| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
|---|---|---|
| NOTE BOOK | DRAWN BY | |
| No. | TRACED BY | |
| | DESIGNED BY | |
| | QUANTITIES BY | |
| | CHECKED BY | |

DRAWING NAME: Z:\DOT ONGOING\12-032-H1 GRAL & SHLDR MDL ST TO PUNCHBOWL WOO\01 CAD\03-XX-16\H1C_MP-S2302 STA 159+18 WB DEMO.DWG PLOT TIME: 03-25-16, 4:27 PM

CALVIN T. MIYAHARA
LICENSED PROFESSIONAL ENGINEER
NO. 8133-S
HAWAII, U.S.A.

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4-30-18
SIGNATURE EXPIRATION DATE OF THE LICENSE

STATE OF HAWAI'I
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

# PALI HIGHWAY OVERPASS AT STA. 159+18± WB

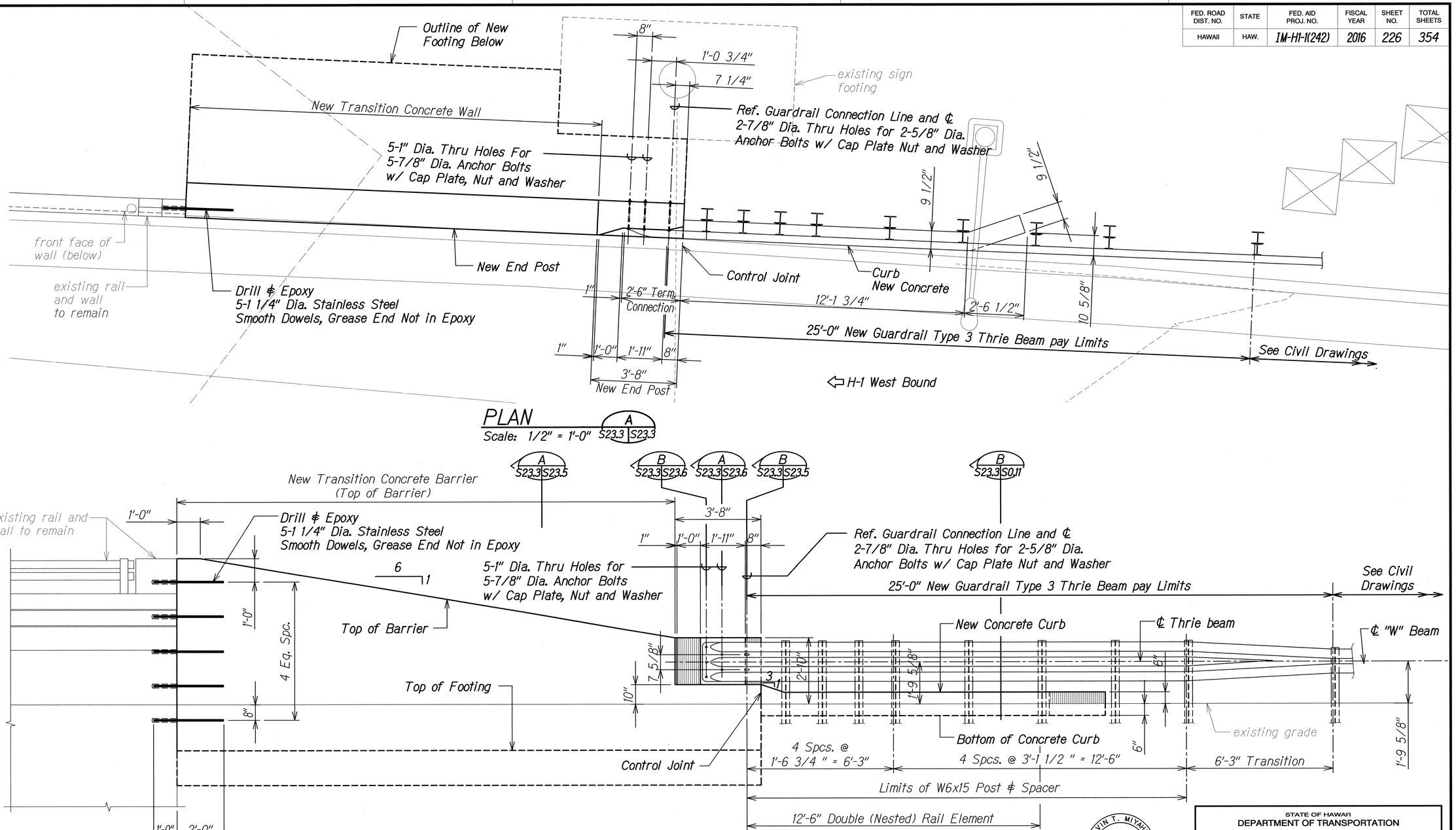
## DEMO PLAN AND ELEVATION

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted Date: Mar. 2016

SHEET No. S23.2 OF 6 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 226 | 354 |




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




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

| | | |
|---|---|---|
| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
| | DRAWN BY | |
| NOTE BOOK | TRACED BY | |
| No. | DESIGNED BY | |
| | QUANTITIES BY | |
| | CHECKED BY | |

DRAWING NAME: Z:\DO ONGOING\12-6332-H1 GRAIL & SHLDR IMPL ST TO PUNCHBOWL WOC\01 CAD\03-XX-16\H1G-MP-S2303 STA 159+18 WB PLAN.DWG PLOT TIME: 03-25-16, 4:28 PM

CALVIN T. MIYAHARA
LICENSED PROFESSIONAL ENGINEER
NO. 8133-S
HAWAII, U.S.A.

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4-30-18
SIGNATURE EXPIRATION DATE OF THE LICENSE

STATE OF HAWAI'I
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

# PALI HIGHWAY OVERPASS AT STA. 159+18± WB

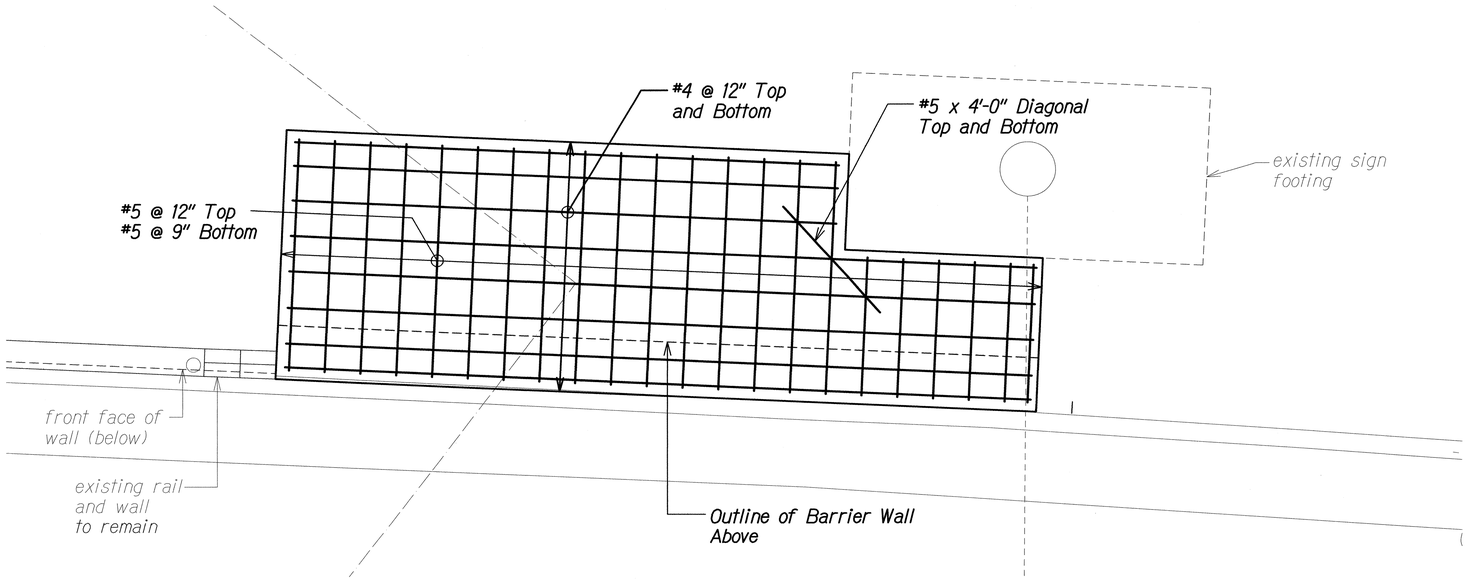
## PLAN AND ELEVATION

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted Date: Mar. 2016

SHEET No. S23.3 OF 6 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-H1-1(242) | 2016 | 227 | 354 |




## FOUNDATION PLAN (A) S23.4 | S23.4

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

| | | |
|---|---|---|
| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
| | DRAWN BY | |
| NOTE BOOK | TRACED BY | |
| | DESIGNED BY | |
| No. | QUANTITIES BY | |
| | CHECKED BY | |

DRAWING NAME: Z:\OD ONGOING\12-032-H1 GRNL & SHLDR MDL ST TO PUNCHBOWL WOC\01 CAD\03-XX-16\H1G-MP-S2334 STA.159+18 WB FDN PLAN.DWG PLOT TIME: 03-25-16, 4:29 PM

CALVIN T. MIYAHARA
LICENSED PROFESSIONAL ENGINEER
NO. 8133-S
HAWAII, U.S.A.

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4-30-18
SIGNATURE EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**PALI HIGHWAY OVERPASS AT STA. 159+18± WB**

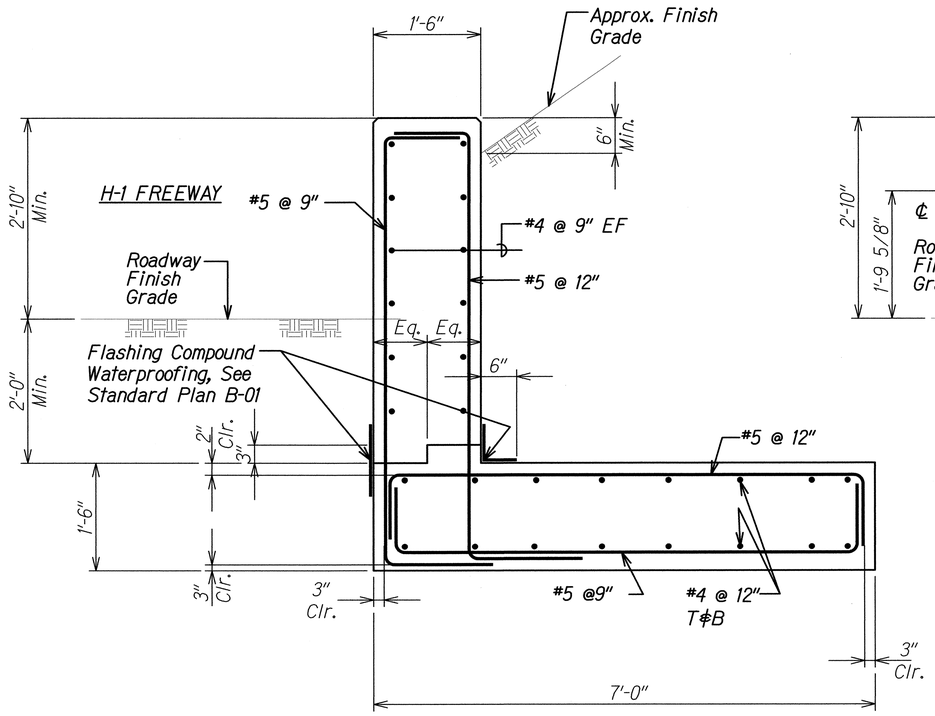
**FOUNDATION PLAN**

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-H1-1(242)

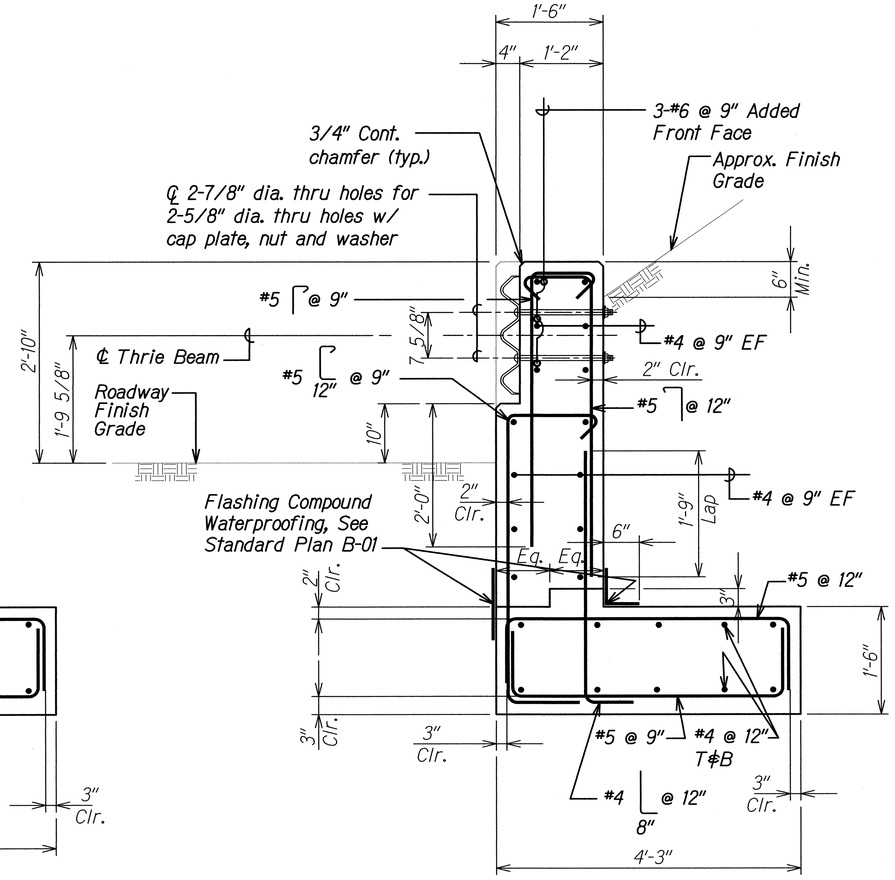
Scale: As Noted Date: Mar. 2016

SHEET No. S23.4 OF 6 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 228 | 354 |




SECTION A
Scale: 1" = 1'-0"
S23.3 | S23.5




SECTION B
Scale: 1" = 1'-0"
S23.3 | S23.5

existing sign post foundation

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

DRAWING NAME: Z:\OD ONGOING\12-032-H1 GRAL & SHLDR WDN ST TO PUNCHBOWL WOC\01 CAD\03-XX-16\H1G-MP-S2325 STA 159+18 END POST SECTIONS.DWG PLOT TIME: 03-25-16, 4:30 PM

CALVIN T. MIYAHARA LICENSED PROFESSIONAL ENGINEER NO. 8133-S HAWAII, U.S.A.

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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

# PALI HIGHWAY OVERPASS AT STA. 159+18± WB

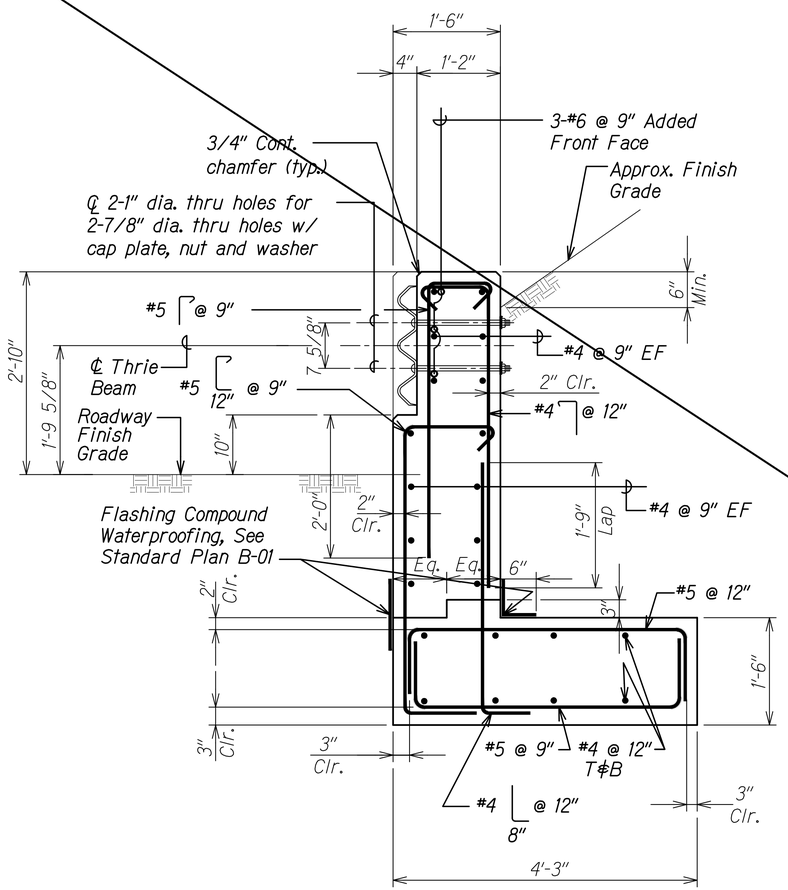
## SECTIONS

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-H1-1(242)

Scale: As Noted Date: Mar. 2016

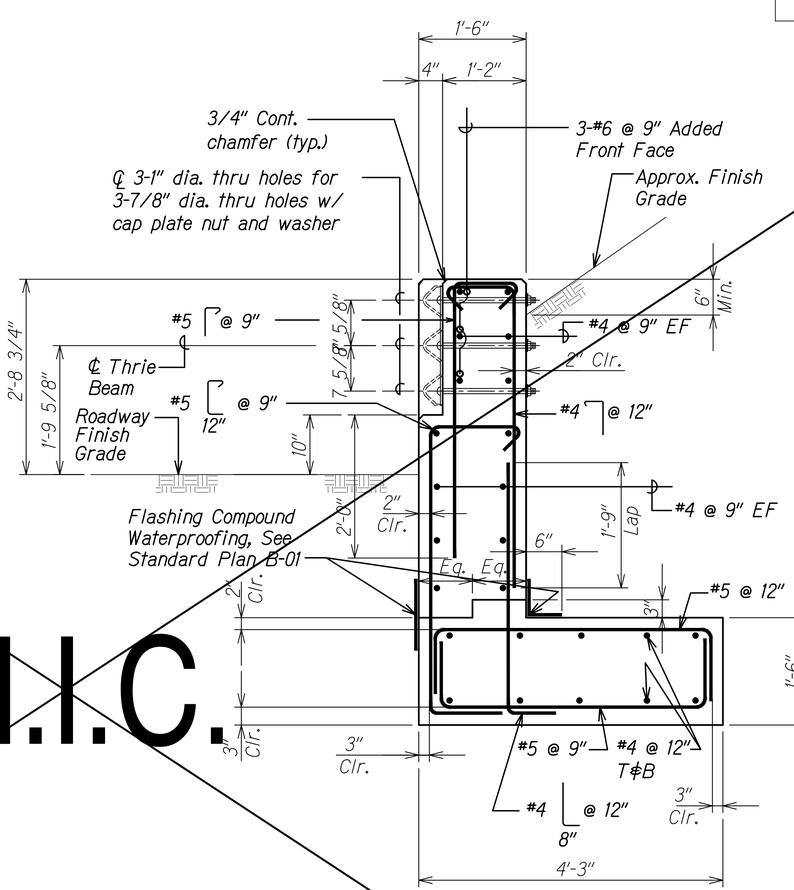
SHEET No. S23.5 OF 6 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | C.O. 229 | 354 |




SECTION A
Scale: 1" = 1'-0"
S23.3 | S23.6

existing sign post foundation




SECTION B
Scale: 1" = 1'-0"
S23.3 | S23.6

existing sign post foundation

N.I.C.

| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
|---|---|---|
| NOTE BOOK | DRAWN BY | |
| No. | TRACED BY | |
| | DESIGNED BY | |
| | QUANTITIES BY | |
| | CHECKED BY | |

DRAWING NAME: Z:\OD ONGOING\12-032_I-H1 GRAL & SHLDR IMPR TO PBWL PD WOC TM\01 CAD\07-22-20 ASB\HIG-MP-S2305_STA 159+18 END POST SEQT RF039.DWG PLOT TIME: 07-23-20, 3:51 PM

## 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 |

| DATE | REVISION |
|---|---|
| 10/16/18 | 10 RFI 039 Deleted Sheet |

CALVIN T. MIYAHARA LICENSED PROFESSIONAL ENGINEER NO. 8133-S HAWAII, U.S.A.

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SIGNATURE — 4-30-20 EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

# PALI HIGHWAY OVERPASS AT STA. 159+18± WB

## SECTIONS

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

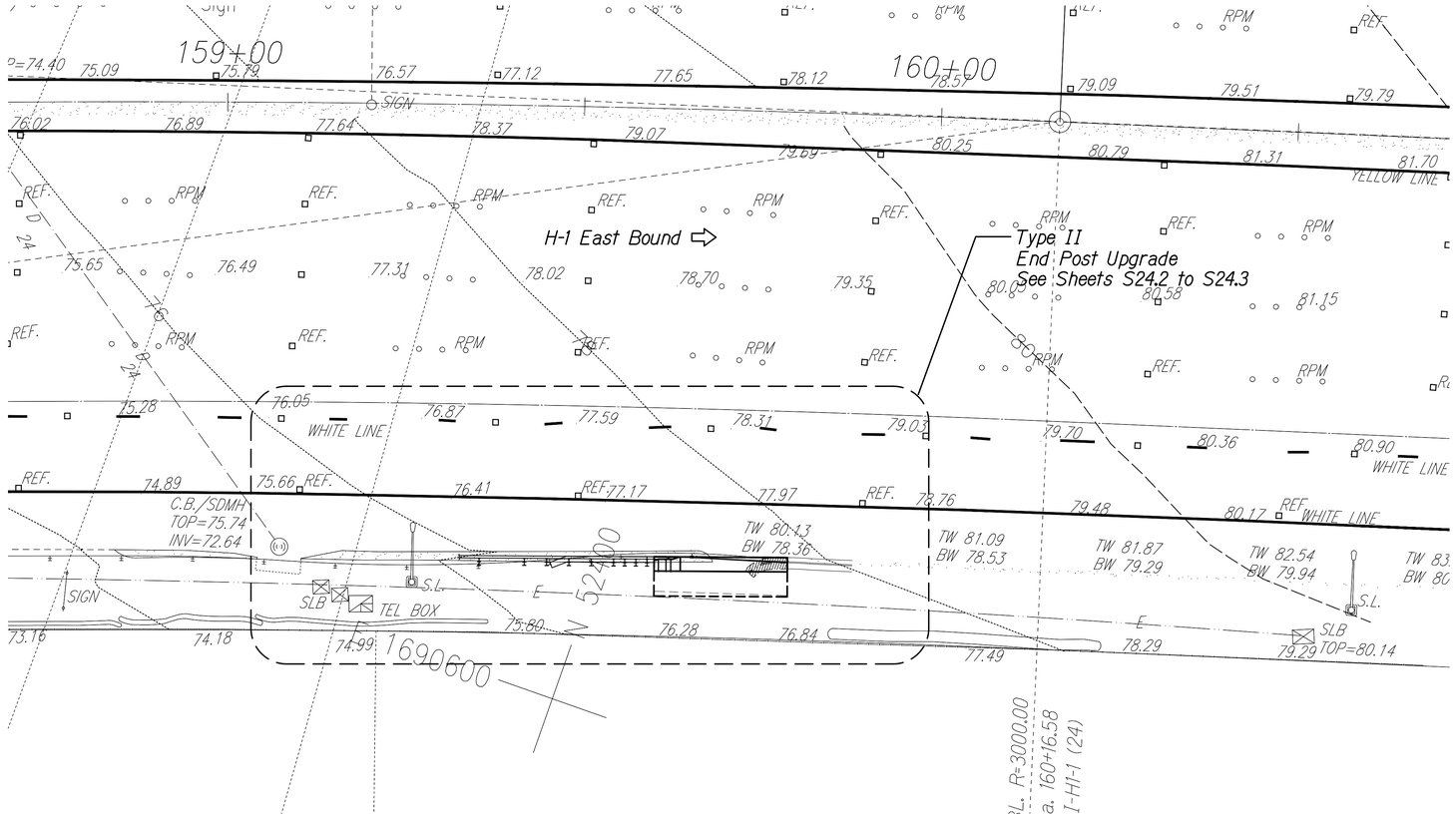
Scale: As Noted Date: Mar. 2016

SHEET No. S23.6 OF 6 SHEETS

"AS-BUILT"

C.O. 229

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 230 | 354 |




LAYOUT PLAN (A) S24.1 | S24.1
Scale: 1" = 10'-0"

| | |
|---|---|
| ORIGINAL PLAN | |
| NOTE BOOK | |
| No. | |

SURVEY PLOTTED BY ____ DATE
DRAWN BY ____
TRACED BY ____
DESIGNED BY ____
QUANTITIES BY ____
CHECKED BY ____

DRAWING NAME: Z:\OD ONGOING\12-032-1-HI GRAL & SHLDR MDL ST TO PBWL PB WOC TM\01 CAD\07-27-20 ASB DWG\HIG-MP-S2401 STA 159+88 EB.DWG PLOT TIME: 07-27-20, 3:26 PM

## 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 |

CALVIN T. MIYAMASA
LICENSED PROFESSIONAL ENGINEER
NO. 8133-S
HAWAII, U.S.A.

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4-30-20
SIGNATURE EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

# PALI HIGHWAY OVERPASS AT STA. 159+58± EB

## LAYOUT PLAN

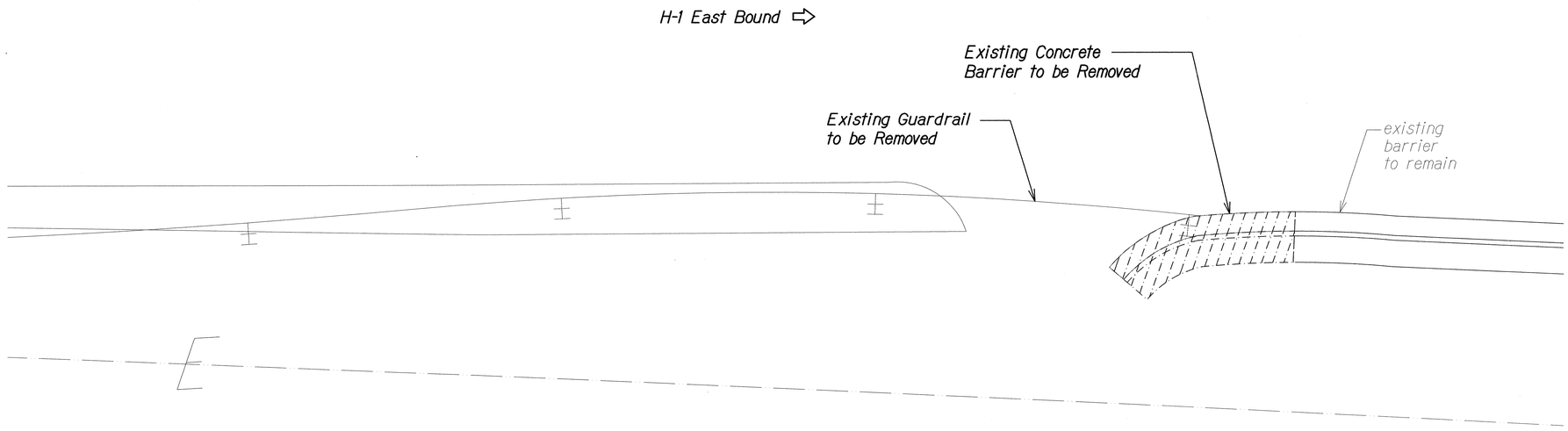
INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted Date: Mar. 2016

SHEET No. S24.1 OF 3 SHEETS

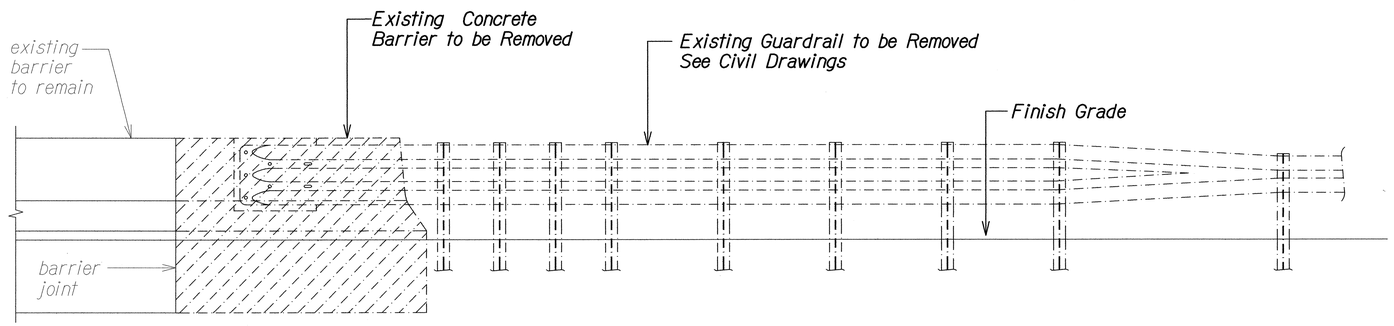
"AS-BUILT"

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 231 | 354 |




## DEMO PLAN (A)

Scale: 1/2" = 1'-0" S24.2 | S24.2




## ELEVATION (B)

Scale: 1/2" = 1'-0" S24.2 | S24.2

| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
|---|---|---|
| | DRAWN BY | |
| NOTE BOOK | TRACED BY | |
| No. | DESIGNED BY | |
| | QUANTITIES BY | |
| | CHECKED BY | |

DRAWING NAME: Z:\OD ONGOING\12-332-H1 GRAIL & SHLDR MDL ST TO PUNCHBOWL WOCS\01 CAD\03-XX-16\H1C-MP-S2402 STA.159+88 EB DEMO.DWG PLOT TIME: 03-25-16, 4:33 PM

CALVIN T. MIYAMARA
LICENSED PROFESSIONAL ENGINEER
NO. 8133-S
HAWAII, U.S.A.

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4-30-18
SIGNATURE EXPIRATION DATE OF THE LICENSE

STATE OF HAWAI'I
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**PALI HIGHWAY OVERPASS AT STA. 159+58± EB**

**DEMO PLAN AND ELEVATION**

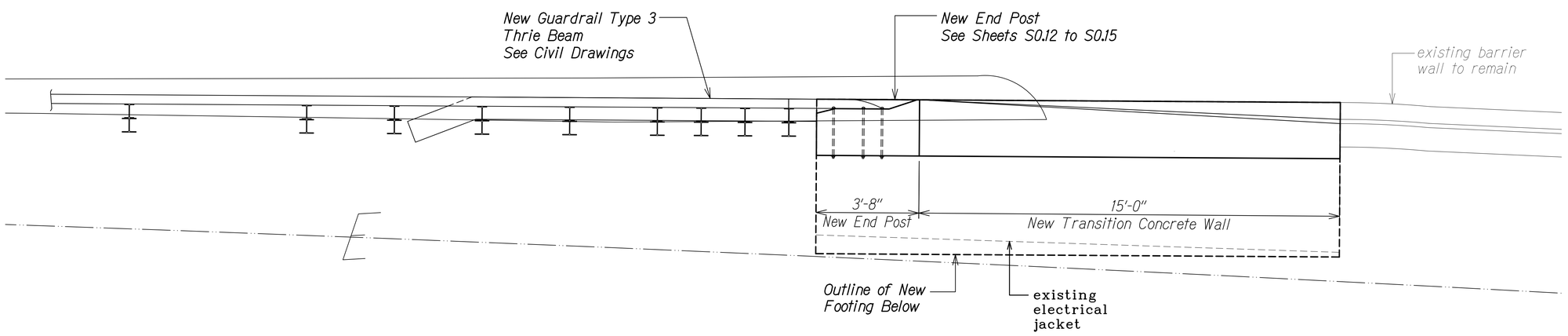
INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted Date: Mar. 2016

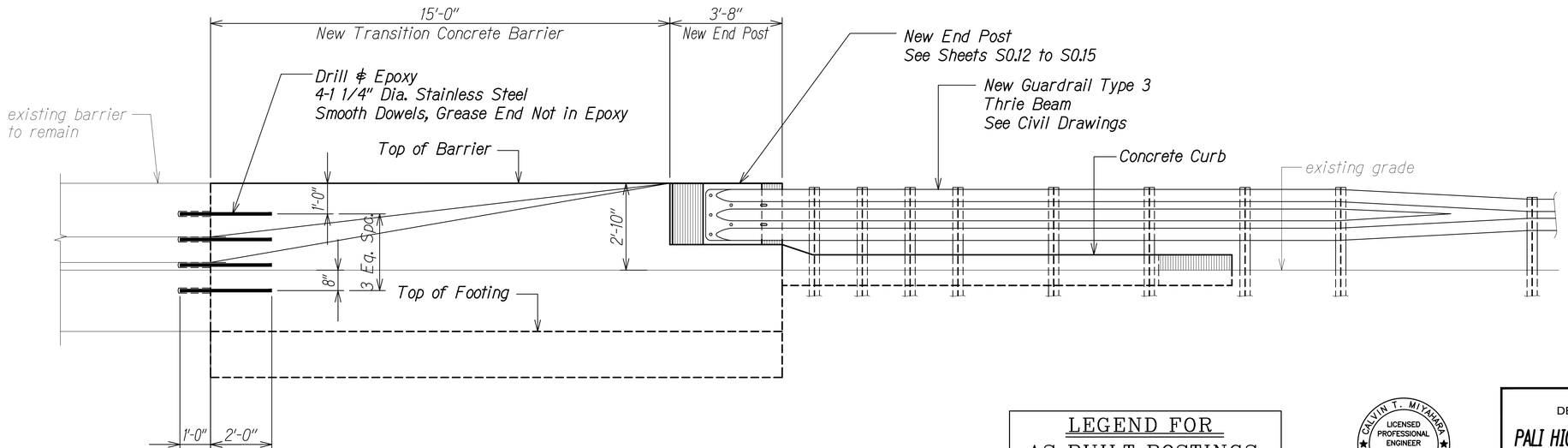
SHEET No. S24.2 OF 3 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | IM-HI-1(242) | 2016 | 232 | 354 |

H-1 East Bound ⇨




PLAN (A) S24.3 | S24.3
Scale: 1/2" = 1'-0"




ELEVATION (B) S24.3 | S24.3
Scale: 1/2" = 1'-0"

| 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 |

CALVIN T. MIYAMARA
LICENSED PROFESSIONAL ENGINEER
NO. 8133-S
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

SIGNATURE 4-30-20 EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

# PALI HIGHWAY OVERPASS AT STA. 159+58± EB

## PLAN AND ELEVATION

INTERSTATE ROUTE H-1
GUARDRAIL AND SHOULDER IMPROVEMENTS
Middle Street to Punchbowl Off-Ramp
Fed. Aid Project No. IM-HI-1(242)

Scale: As Noted Date: Mar. 2016

SHEET No. S24.3 OF 3 SHEETS

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

DRAWING NAME: Z:\OD ONGOING\12-032\1-H1 GRAIL & SHLDR IMPL ST TO PBWL PD WOC TMK\01 CAD\07-27-20 ASB DWG\H1G-MP-S2403 STA 159+88 EB PLAN.DWG PLOT TIME: 07-27-20, 3:27 PM)

"AS-BUILT"