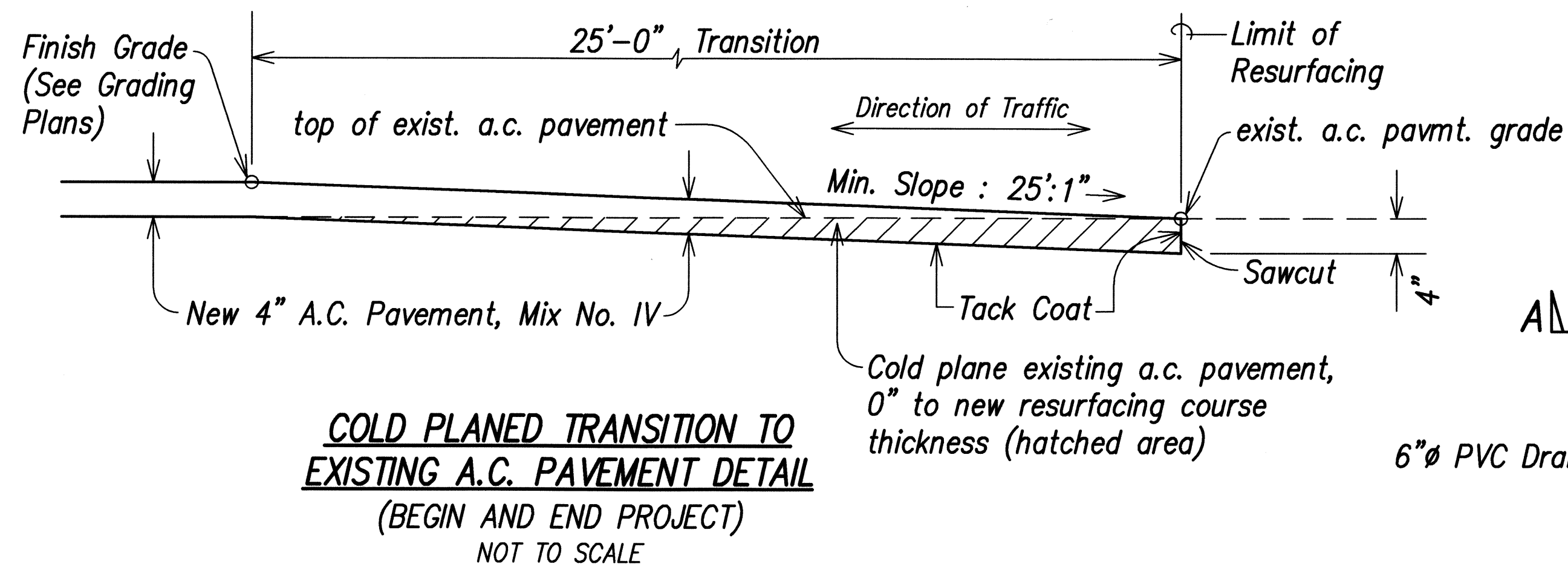
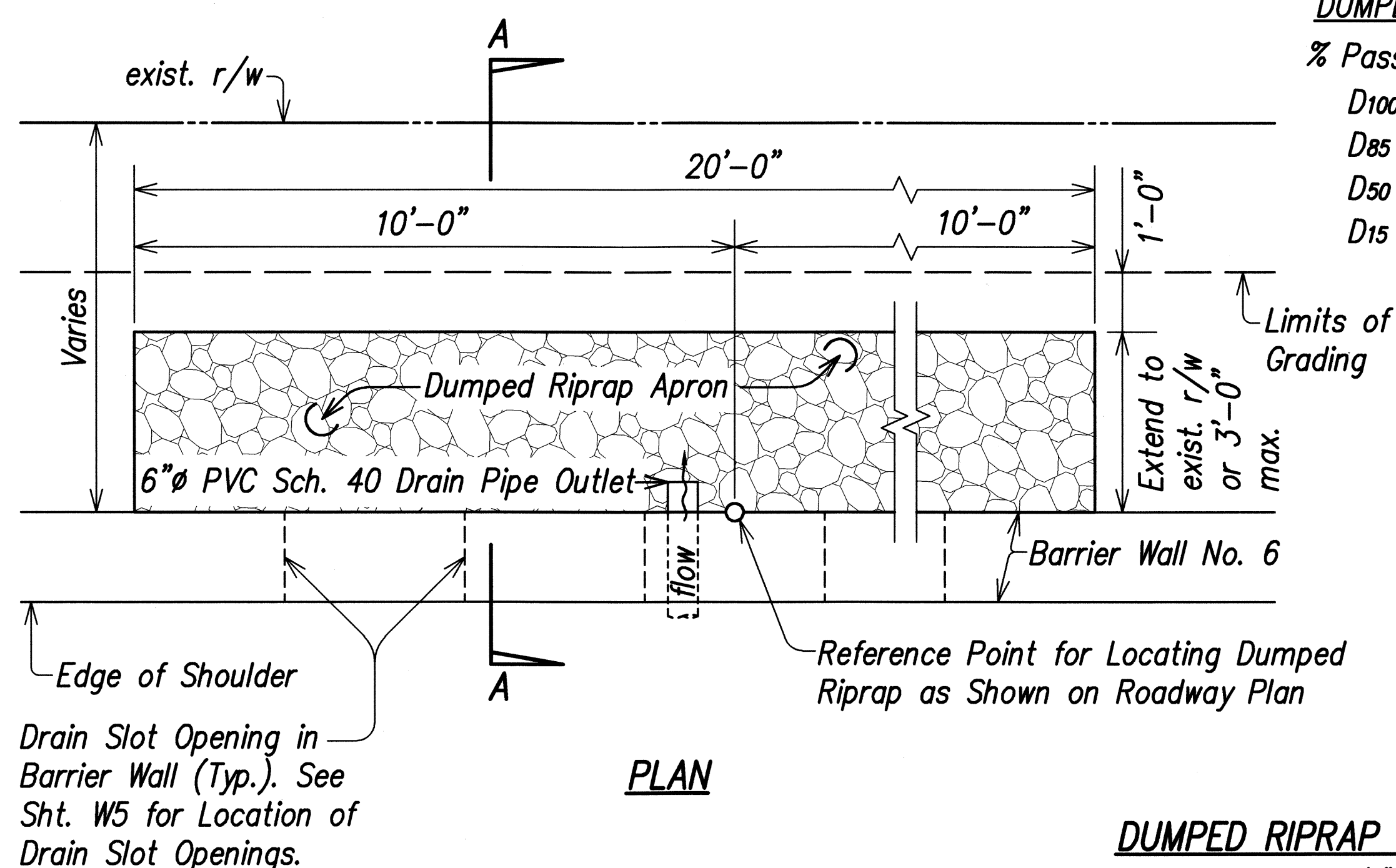
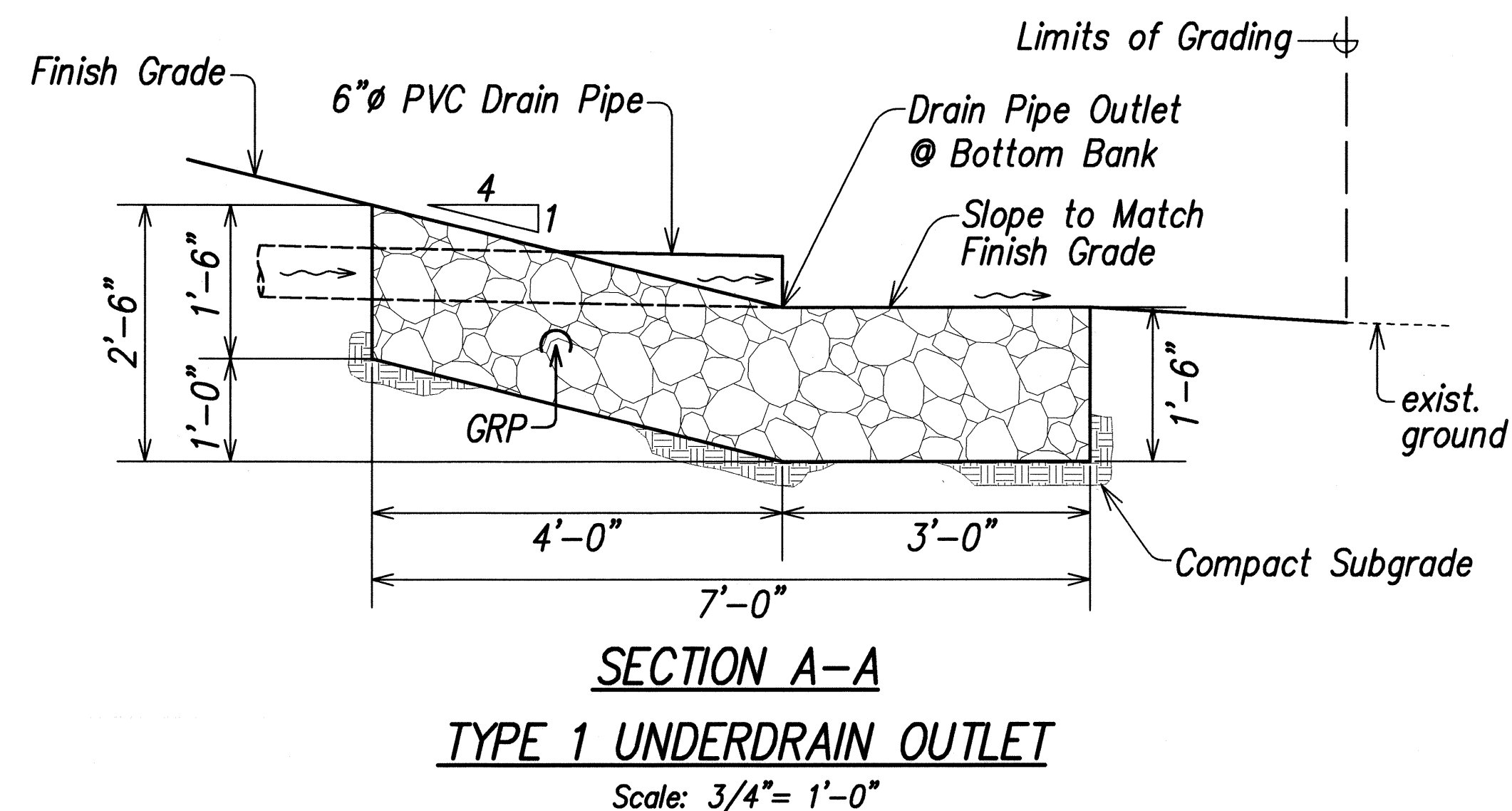
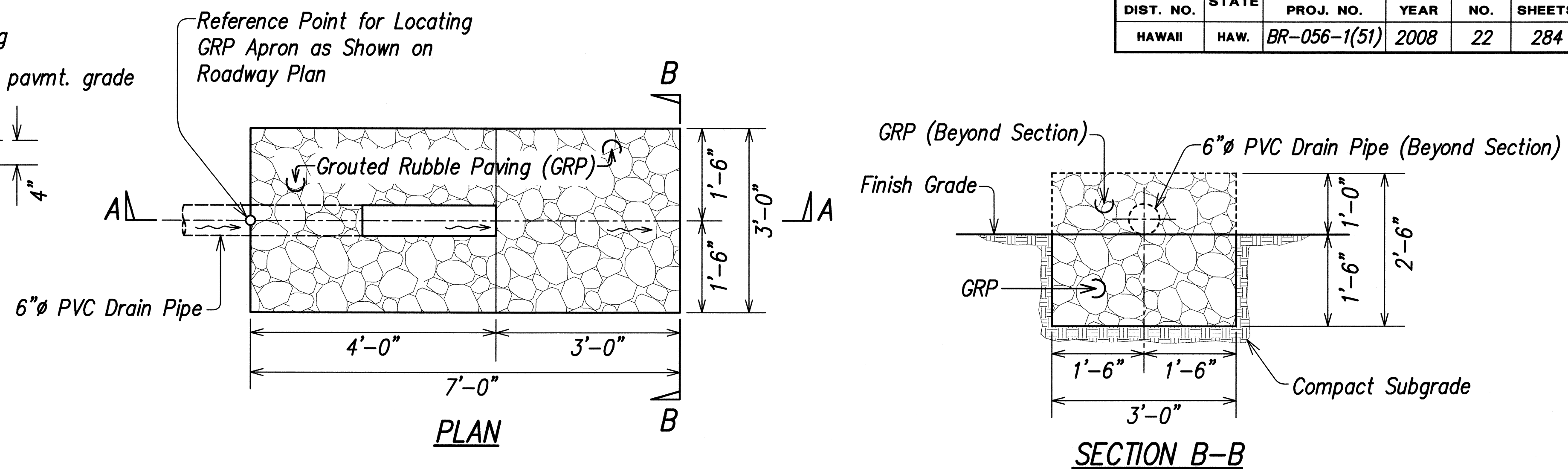


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	BR-056-1(51)	2008	22	284

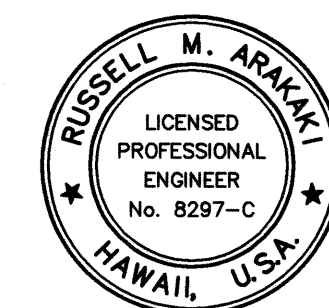
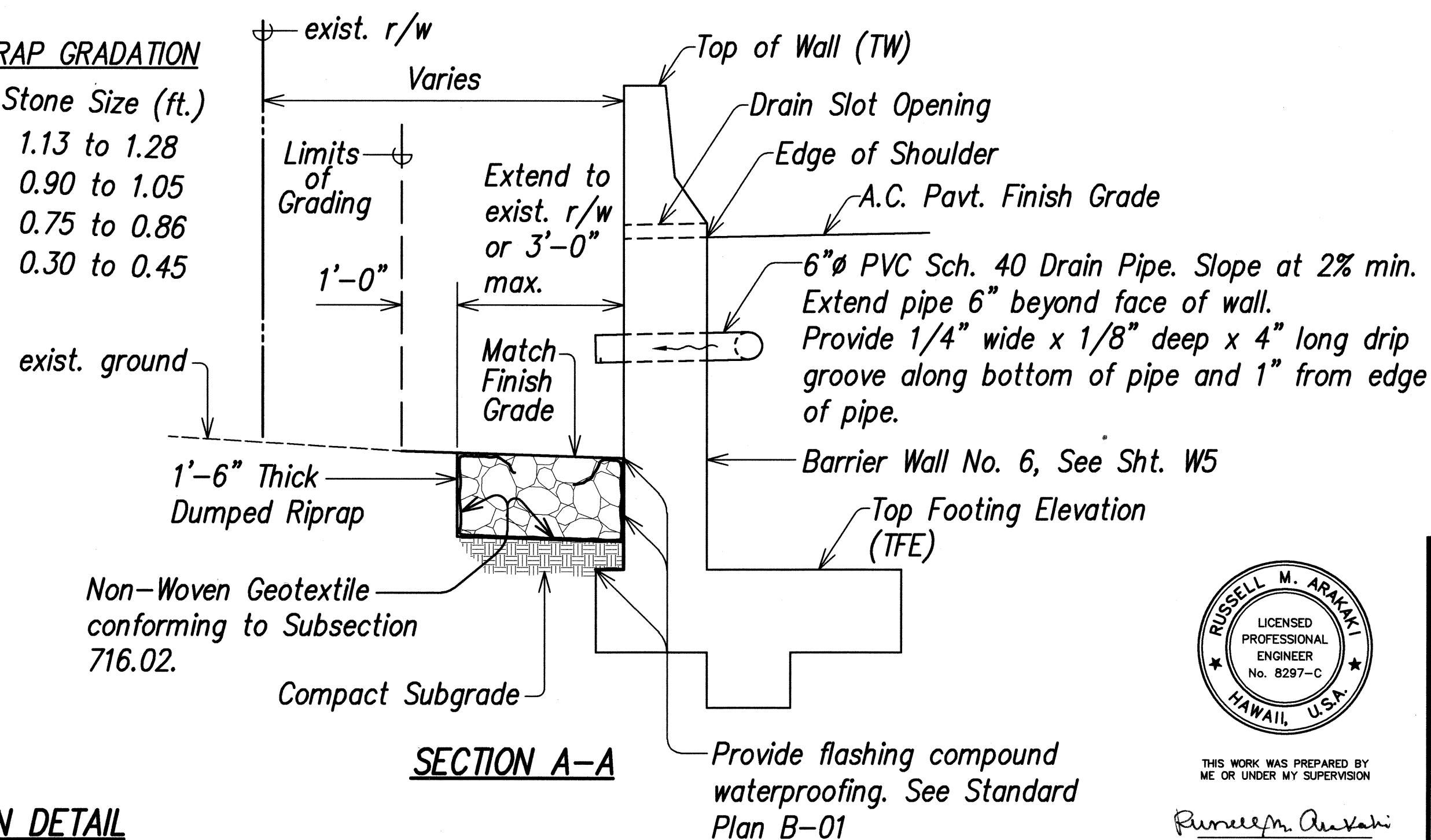


Cold Planing Notes:

1. All saw cutting work for cold planing shall be considered incidental to Cold Planing and will not be paid for separately.
2. The exact locations and limits of areas to be cold planed shall be determined by the Engineer.
3. Exposure of existing aggregate base is expected when cold planing deeper than 4-inches. The Contractor shall pave over exposed existing aggregate base with glassphalt concrete base at the end of each day. The Contractor shall compact the existing aggregate base in accordance with Section 304 - Aggregate Base Course and apply tack coat in accordance with Section 407 - Tack Coat, prior to laying the new glassphalt concrete base. This work shall be considered incidental to the new Glassphalt Concrete Base and will not be paid for separately.
4. The vertical pavement drop-off shall not exceed 3-inches. If a vertical pavement drop-off exists at the end of each day's cold planning and paving, the Contractor shall provide a wedge with a 48:1 minimum transition taper for transverse drop-off and no steeper than 6:1 for longitudinal drop-off, as accepted by the Engineer. All transition tapers shall be removed before the next layer of pavement is installed. This work shall be considered incidental to Cold Planing.



DUMPED RIPRAP GRADATION	
% Passing	Stone Size (ft.)
D100	1.13 to 1.28
D85	0.90 to 1.05
D50	0.75 to 0.86
D15	0.30 to 0.45



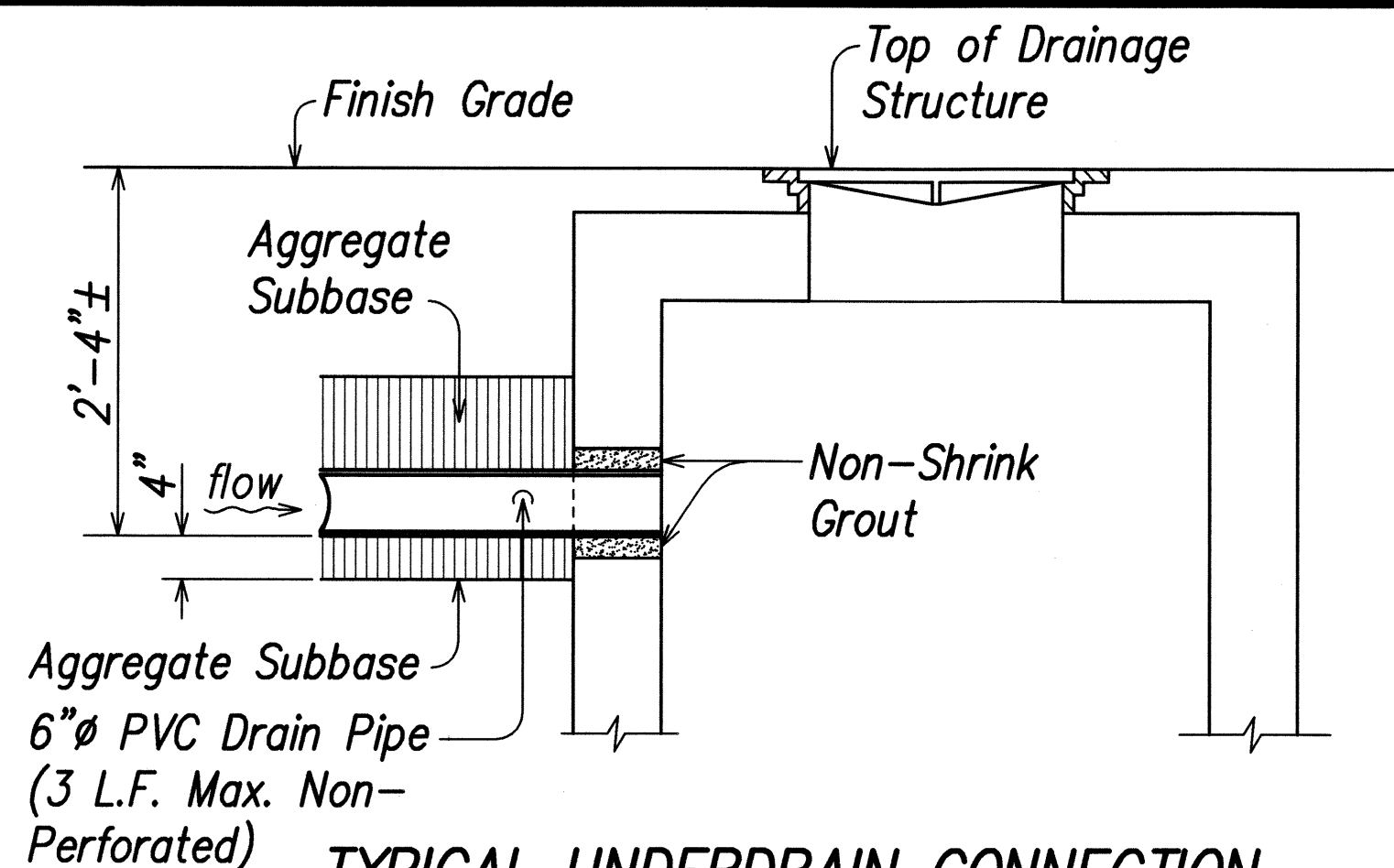
THIS WORK WAS PREPARED BY
ME OR UNDER MY SUPERVISION
Russell M. Araki
Professional Engineer
License Expires 4-30-10

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

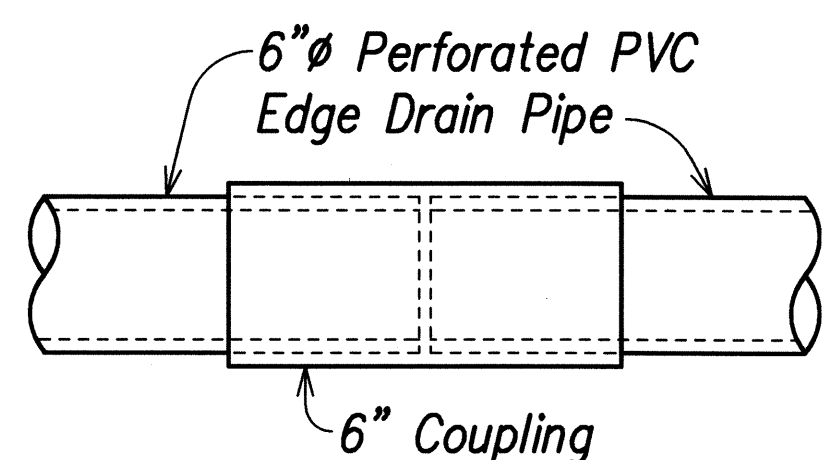
ROADWAY DETAILS

KUHIU HIGHWAY, SHORT TERM IMPROVEMENTS
Wailua Cane Haul Bridge Widening
Fed. Aid Project No. BR-056-1(51)
Scale: As Noted Date: MAY 2008
SHEET No. RD1 OF RD5 SHEETS

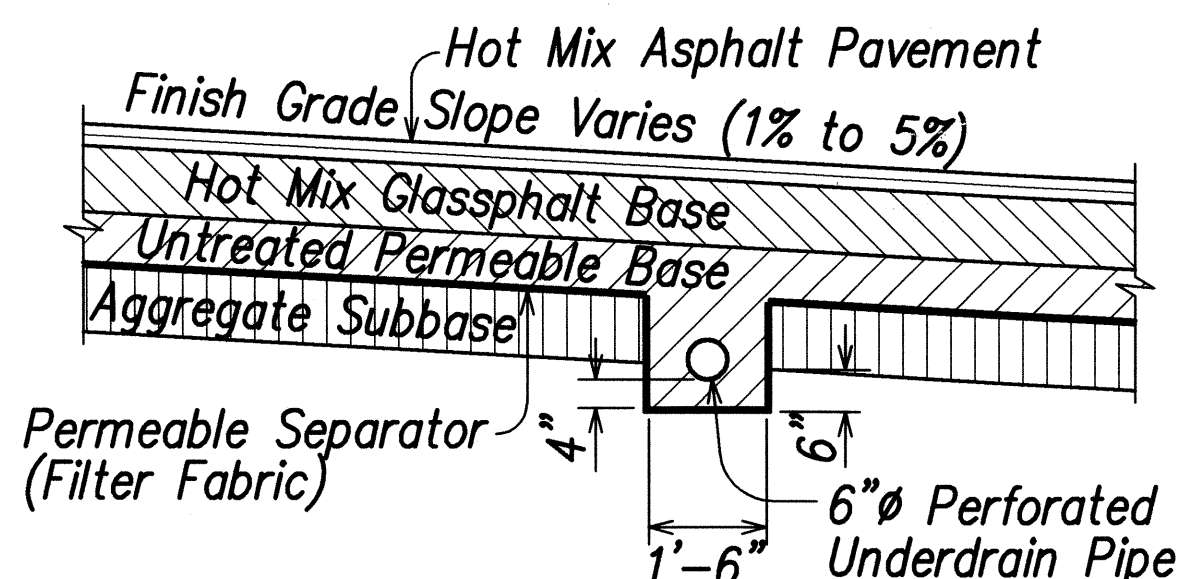
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	BR-056-1(51)	2008	23	284



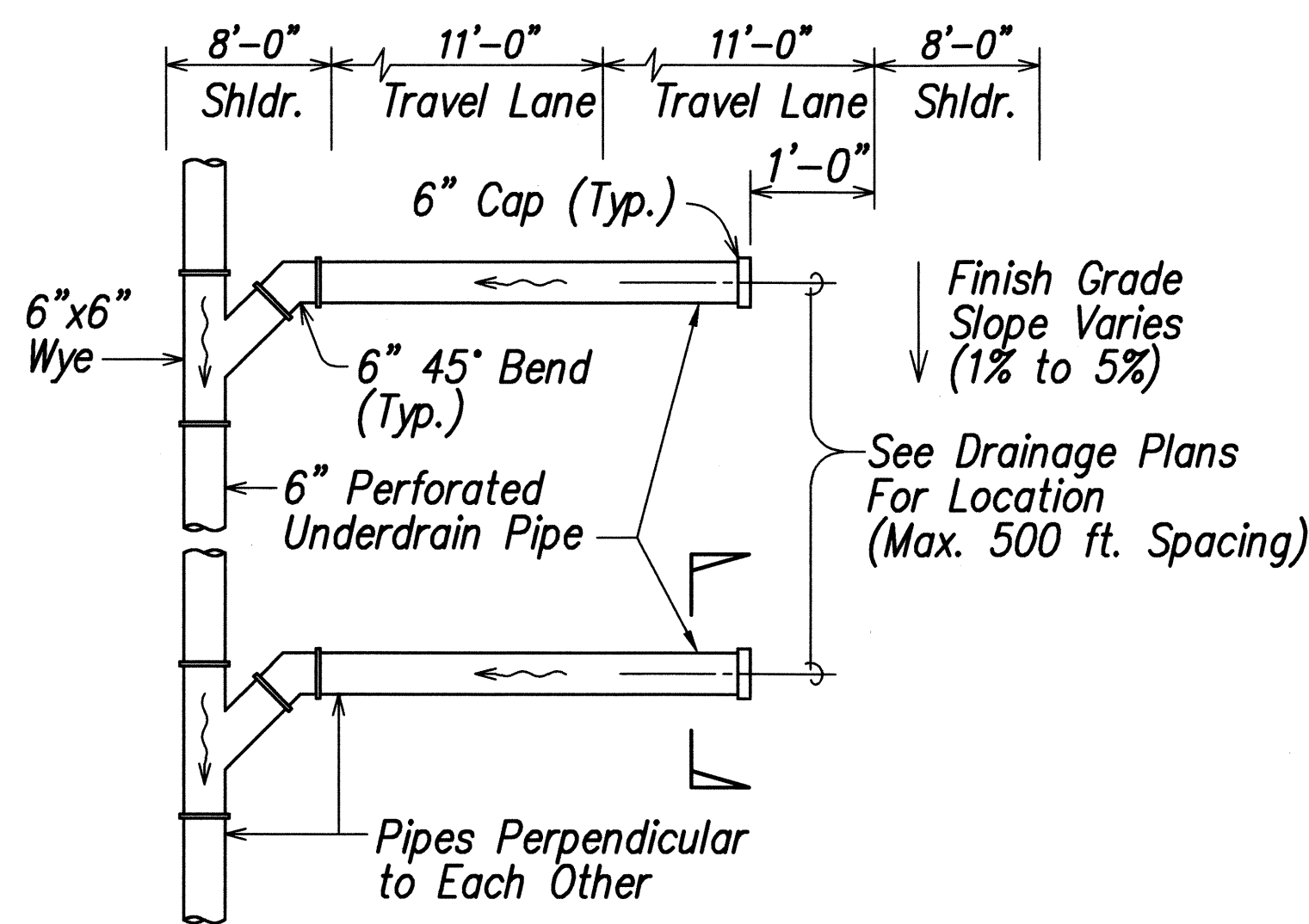
TYPICAL UNDERDRAIN CONNECTION TO DRAINAGE STRUCTURE
Scale: 3/4" = 1'-0"



UNDERDRAIN PIPE CONNECTION DETAIL
Not to Scale

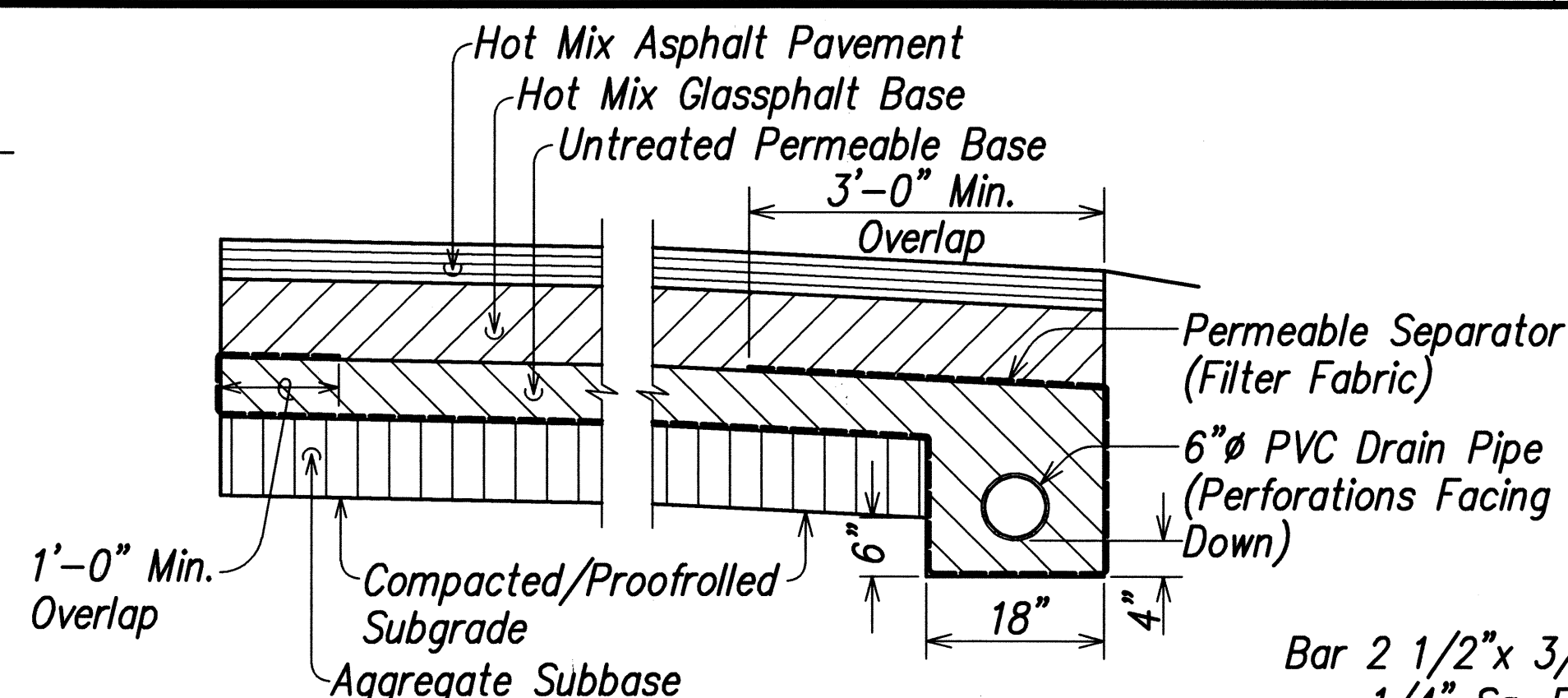


LONGITUDINAL SECTION



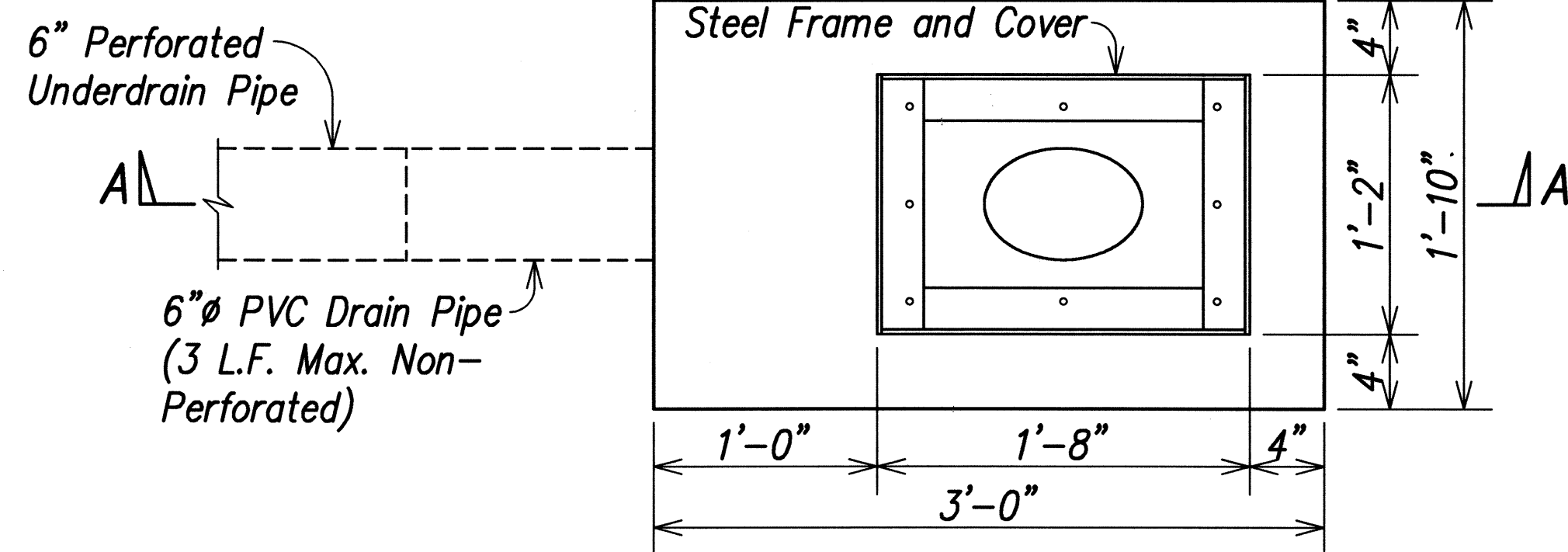
PLAN

TYPICAL LONGITUDINAL AND TRANSVERSE UNDERDRAIN
Not To Scale

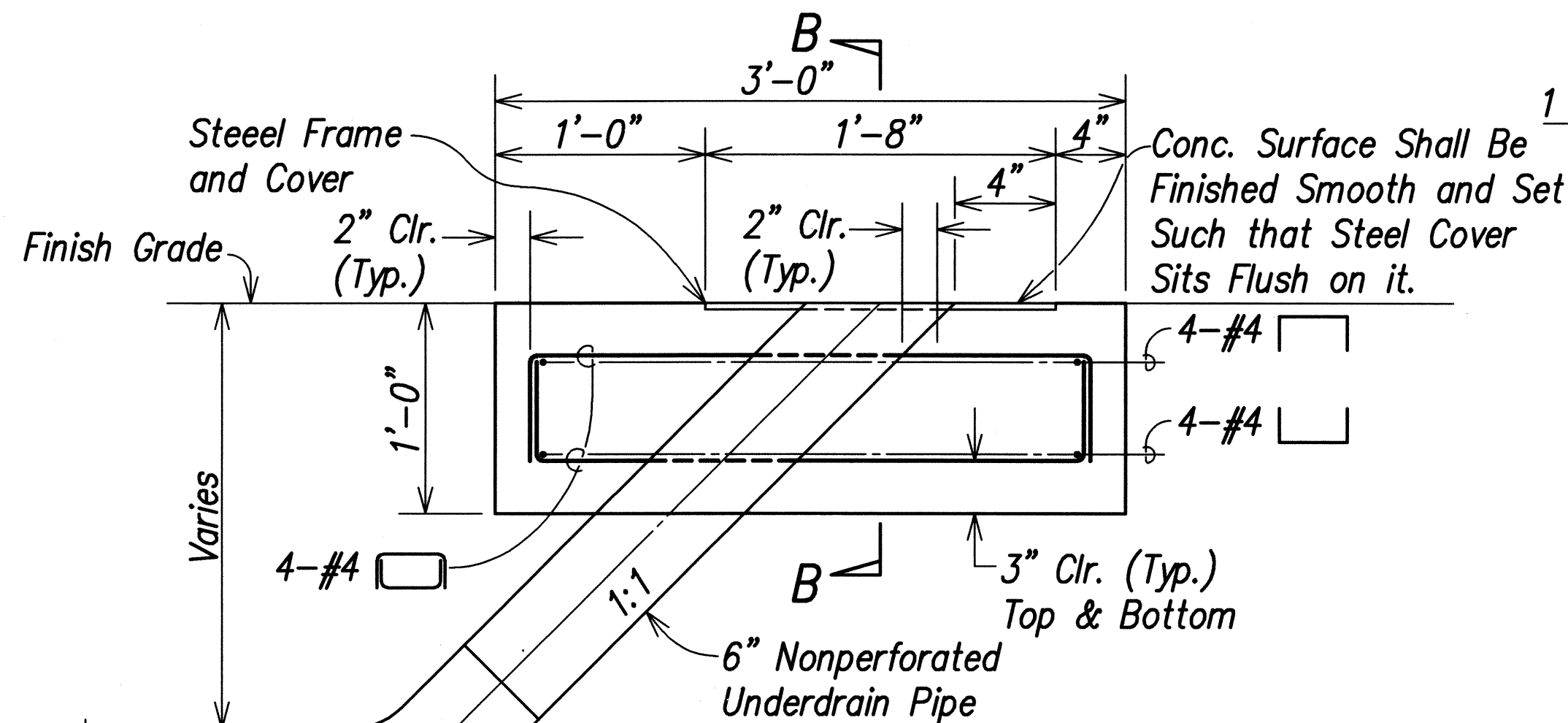


TYPICAL PERFORATED UNDERDRAIN DETAIL

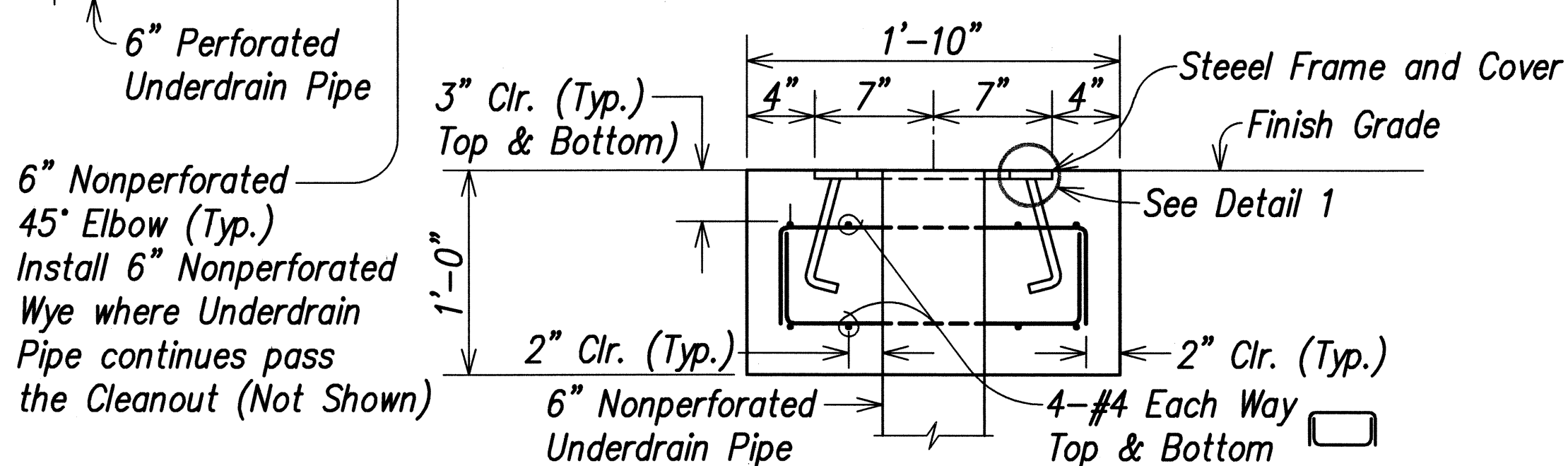
Scale: 3/4" = 1'-0"



PLAN

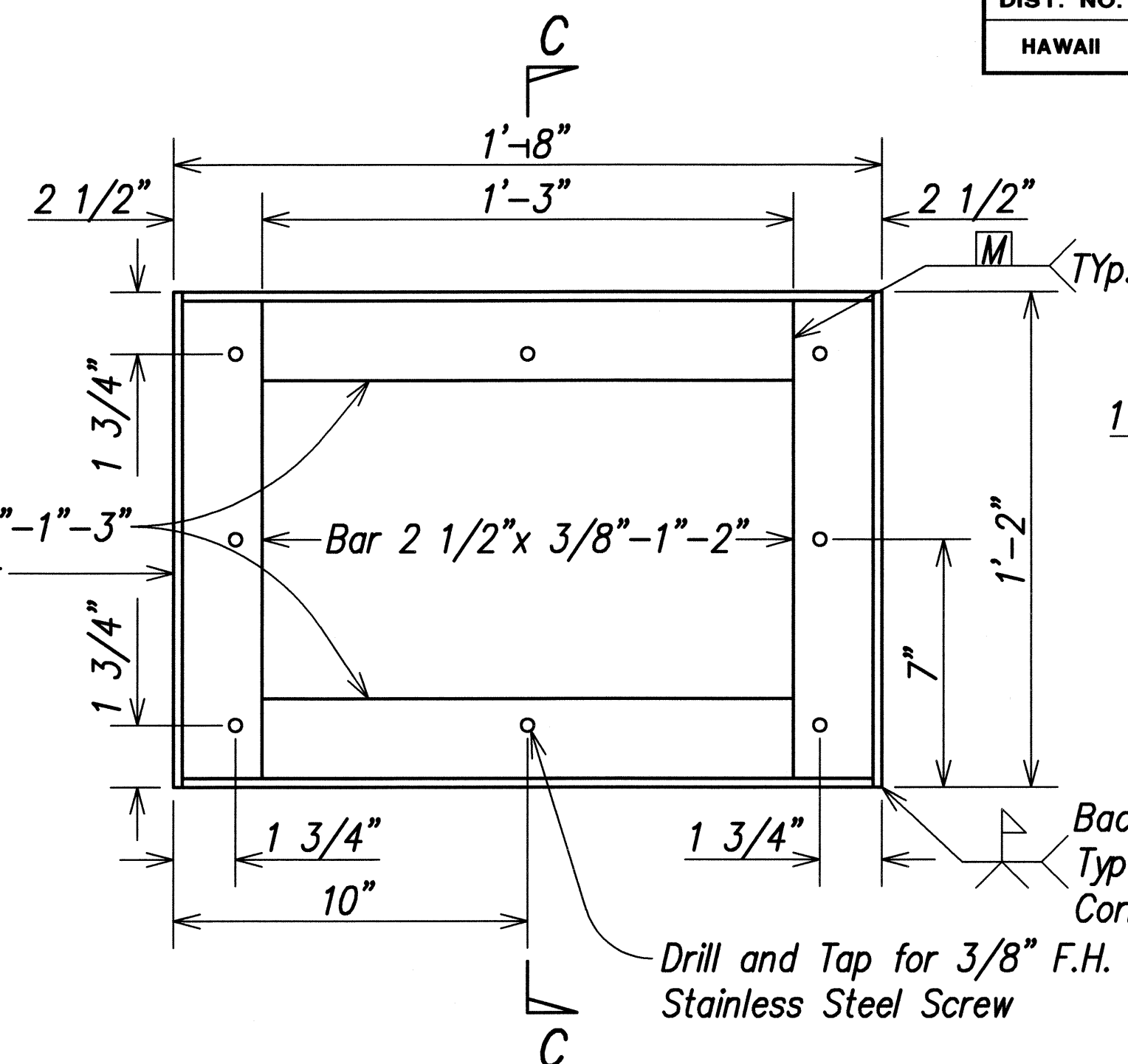


SECTION A-A

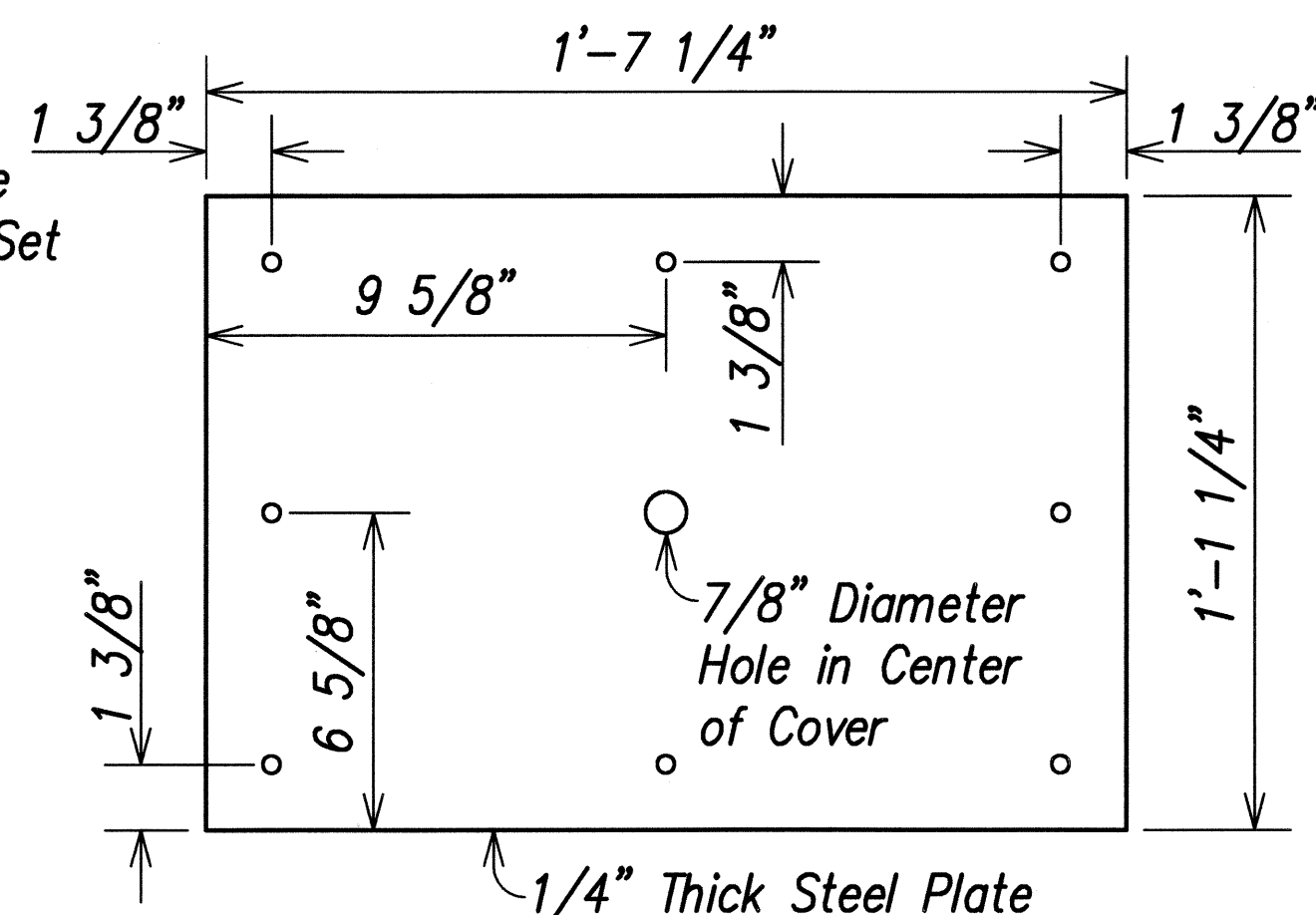


SECTION B-B

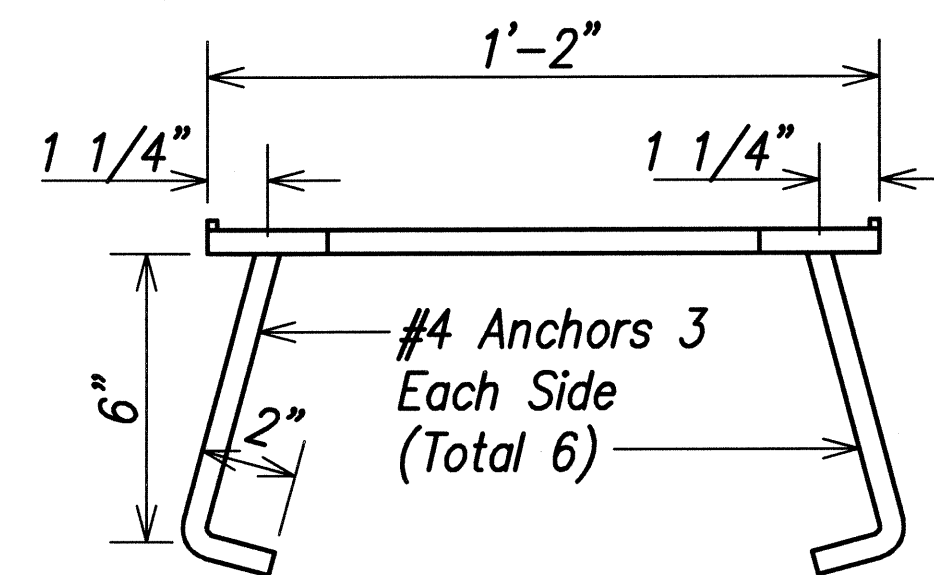
DETAILS OF CLEANOUT
Scale: 1 1/2" = 1'-0"



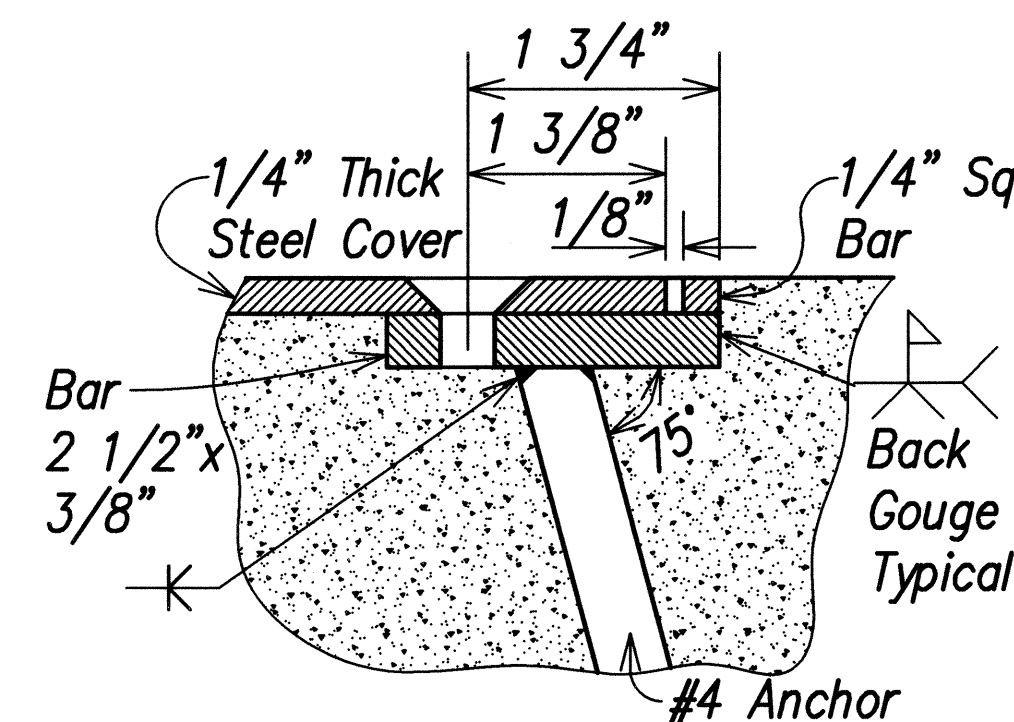
PLAN VIEW OF FRAME
Scale: 3" = 1'-0"



PLAN VIEW OF COVER
Scale: 3" = 1'-0"



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

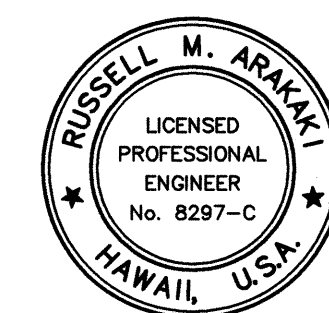


DETAIL 1

Not to Scale

Notes:
1. All Steel Parts shall be Zinc Coated after Fabrication.
2. Steel Plate shall have "Non-Slip" Surface.

DETAILS OF STEEL FRAME AND COVER FOR CLEANOUT



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Parks, Inc.
dba PARK ENGINEERING
LICENSE EXPIRES 4-30-10

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY DETAILS

KUHO HIGHWAY, SHORT TERM IMPROVEMENTS

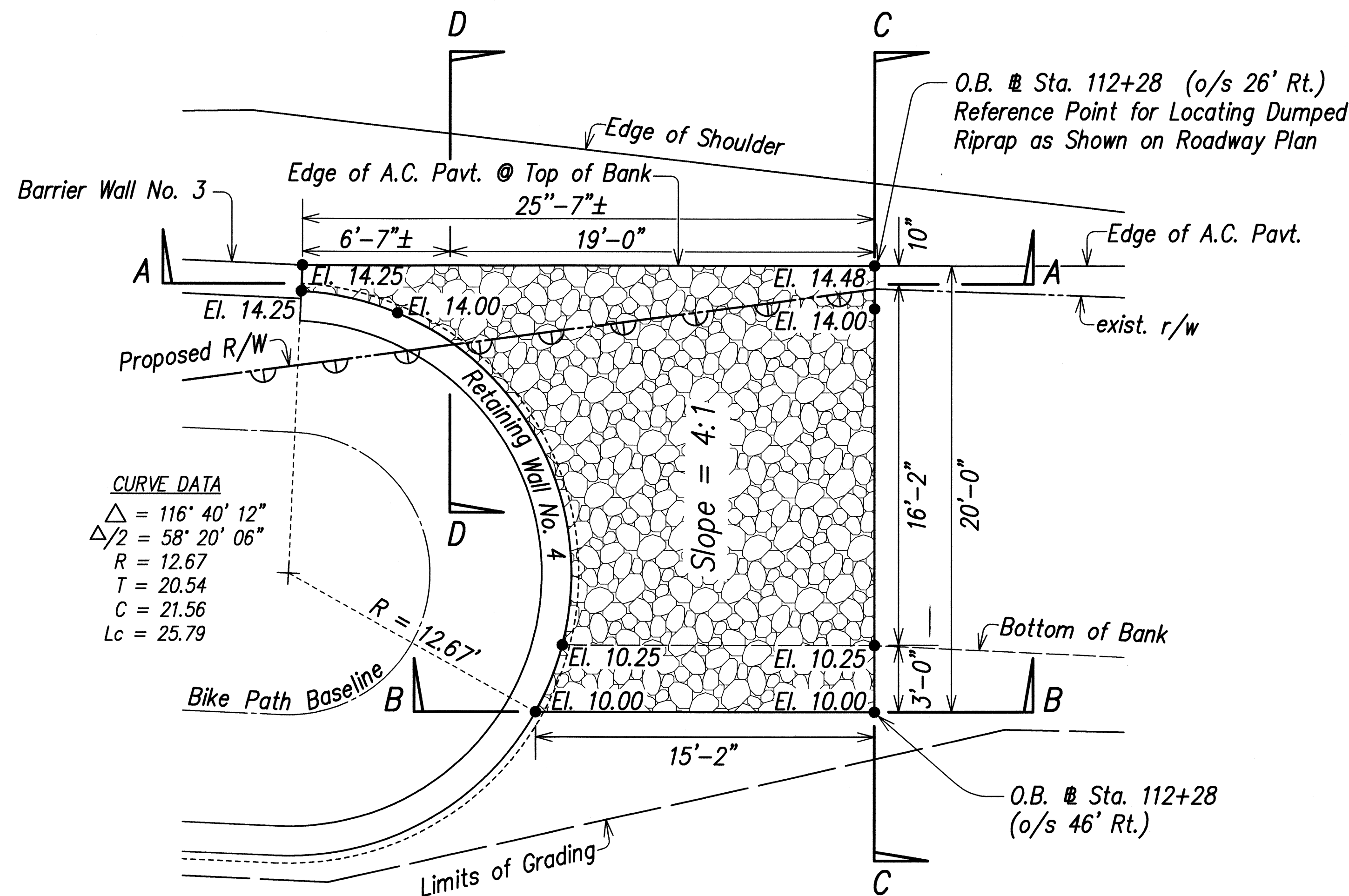
Wailua Cane Haul Bridge Widening

Fed. Aid Project No. BR-056-1(51)

Scale: As Noted Date: MAY 2008

SHEET No. RD2 OF RD5 SHEETS

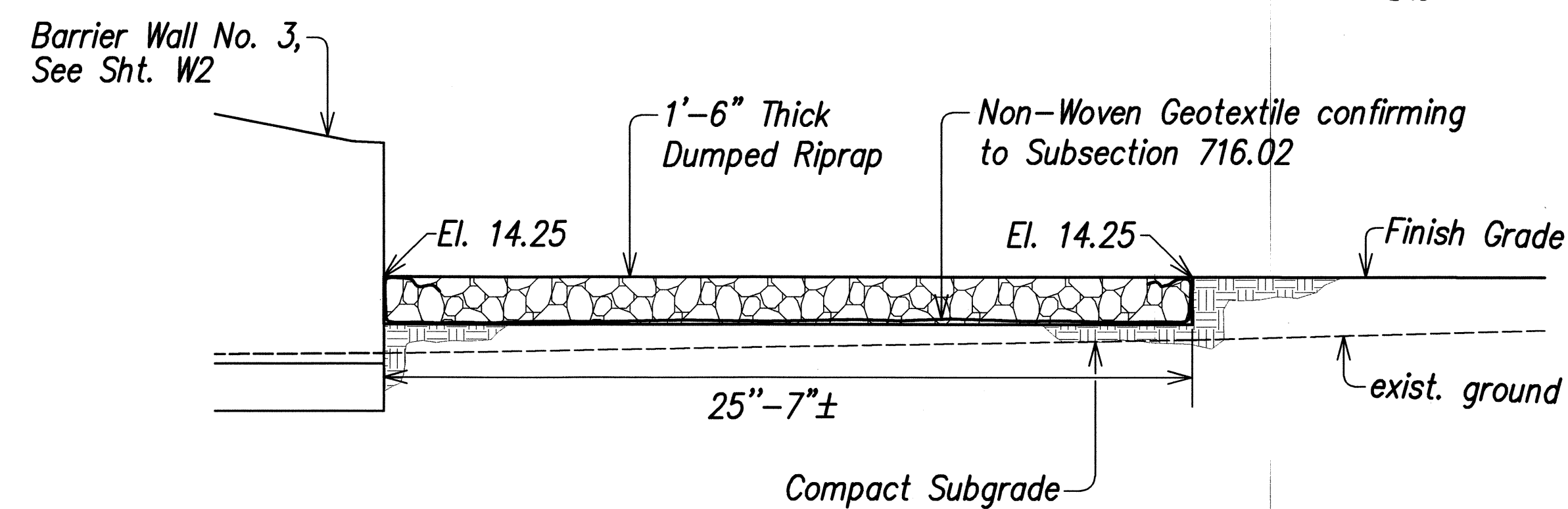
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	BR-056-1(51)	2008	24	284



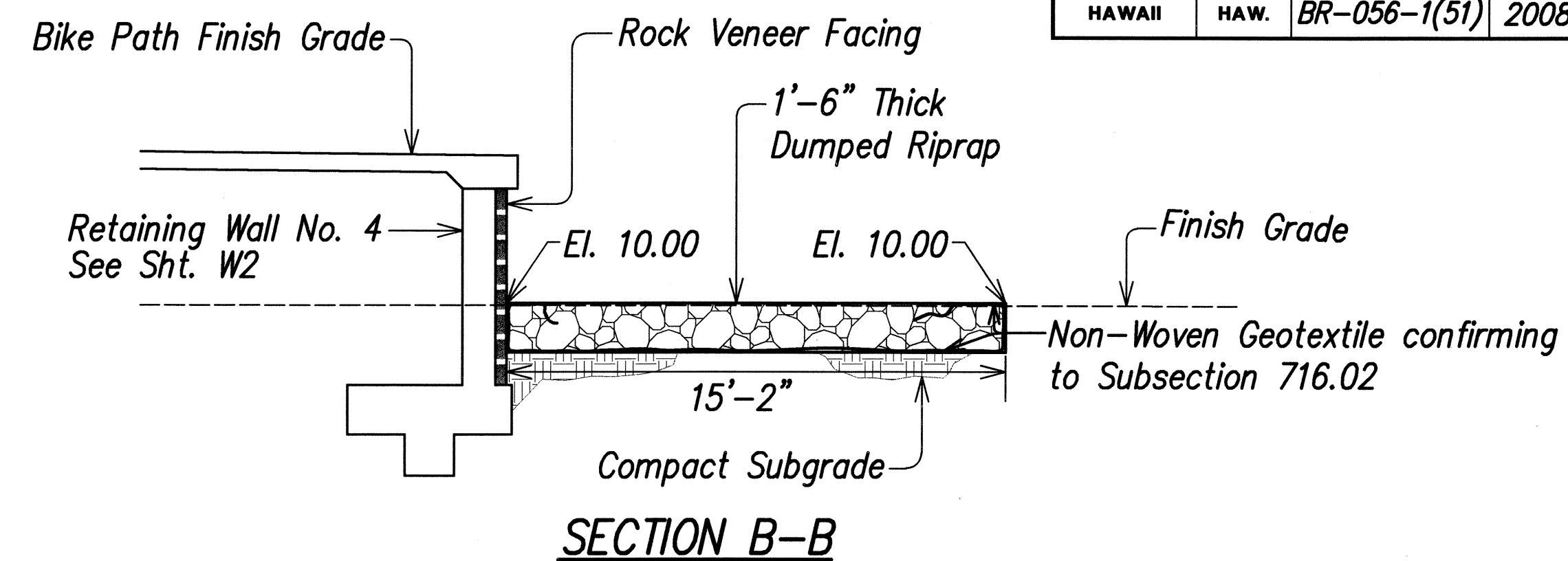
PLAN

DUMPED RIPRAP GRADATION

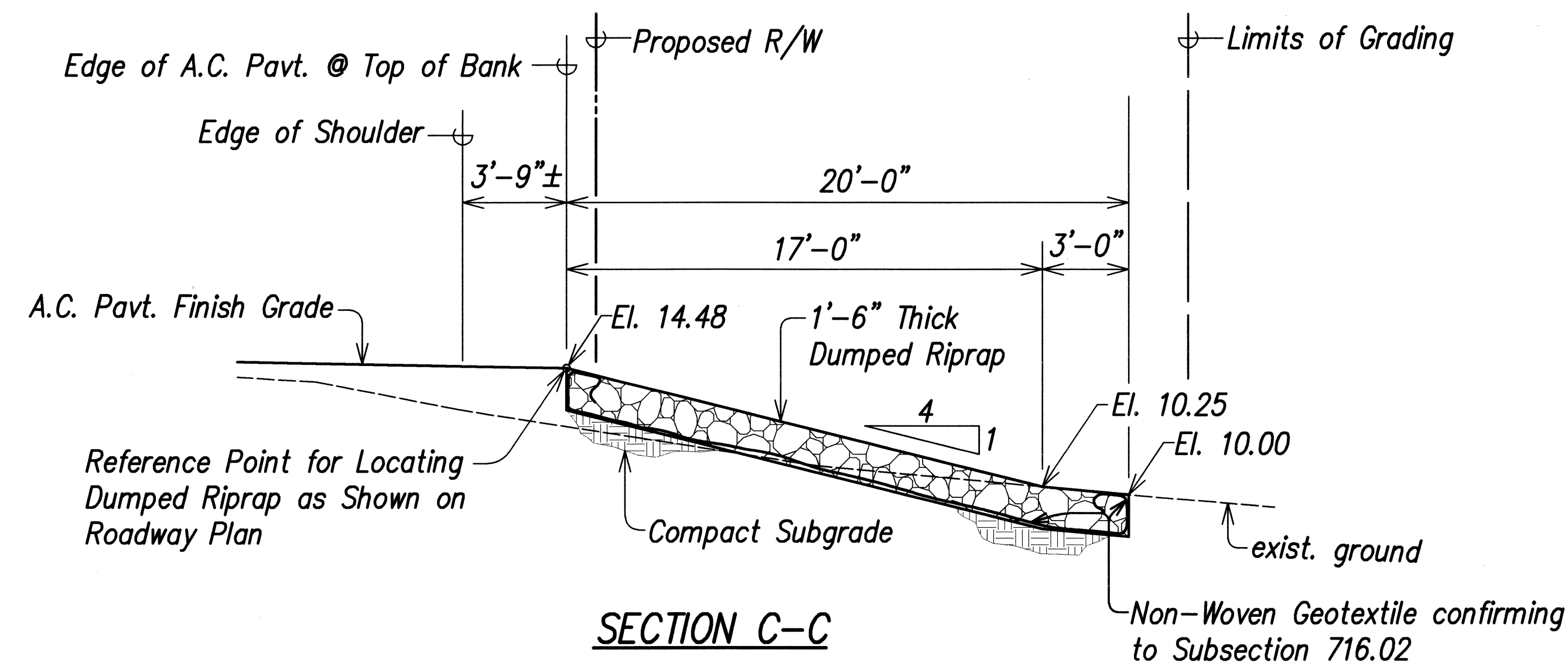
% Passing	Stone Size (ft.)
D ₁₀₀	1.13 to 1.28
D ₈₅	0.90 to 1.05
D ₅₀	0.75 to 0.86
D ₁₅	0.30 to 0.45



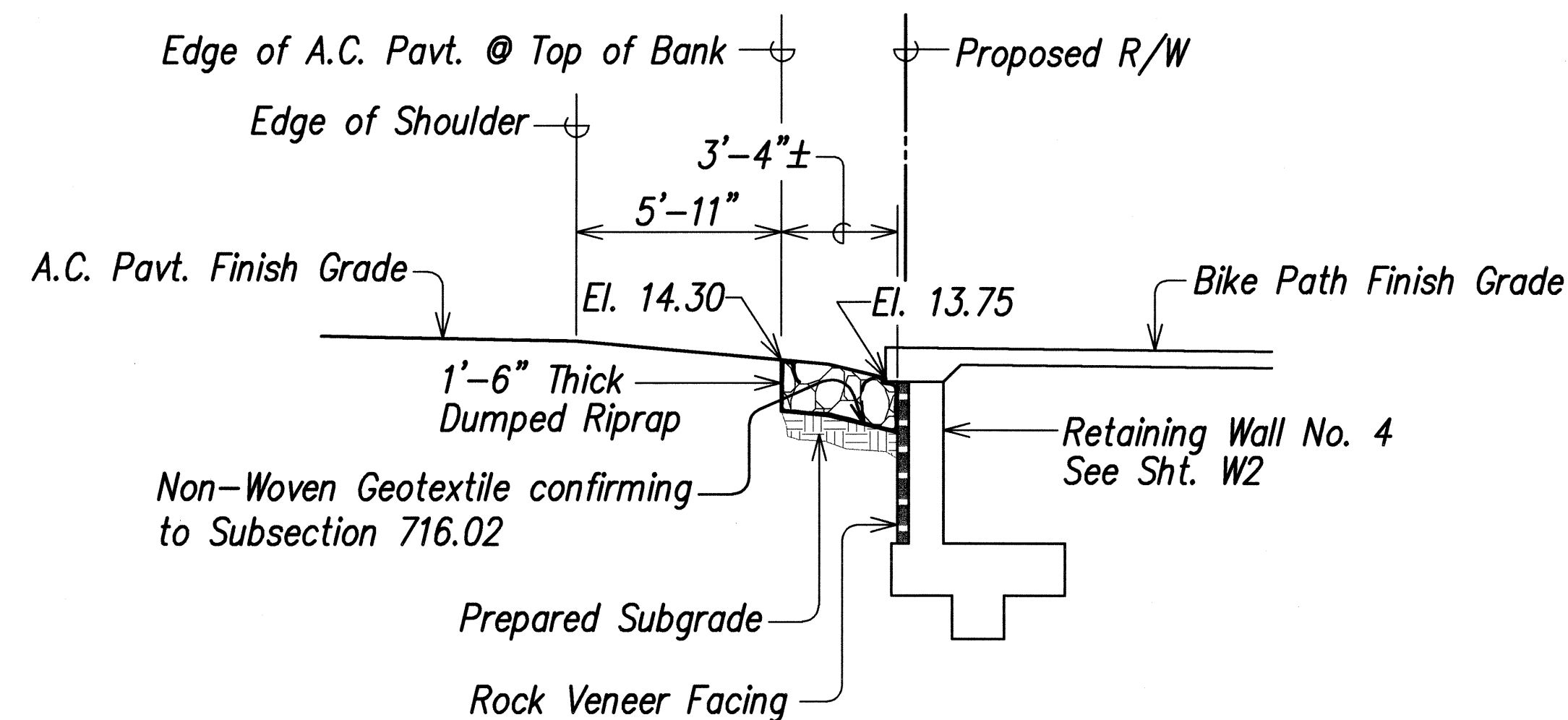
SECTION A-A



SECTION B-B



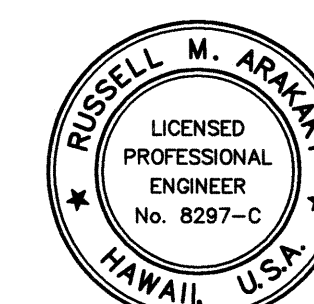
SECTION C-C



SECTION D-D

DUMPED RIPRAP DETAIL (@ O.B. Sta. 112+28)

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



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Russell M. Aramaki
 P.E., Inc.
 dba PARK ENGINEERING
 LICENSE EXPIRES 4-30-10

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

ROADWAY DETAILS

KUHIO HIGHWAY, SHORT TERM IMPROVEMENTS

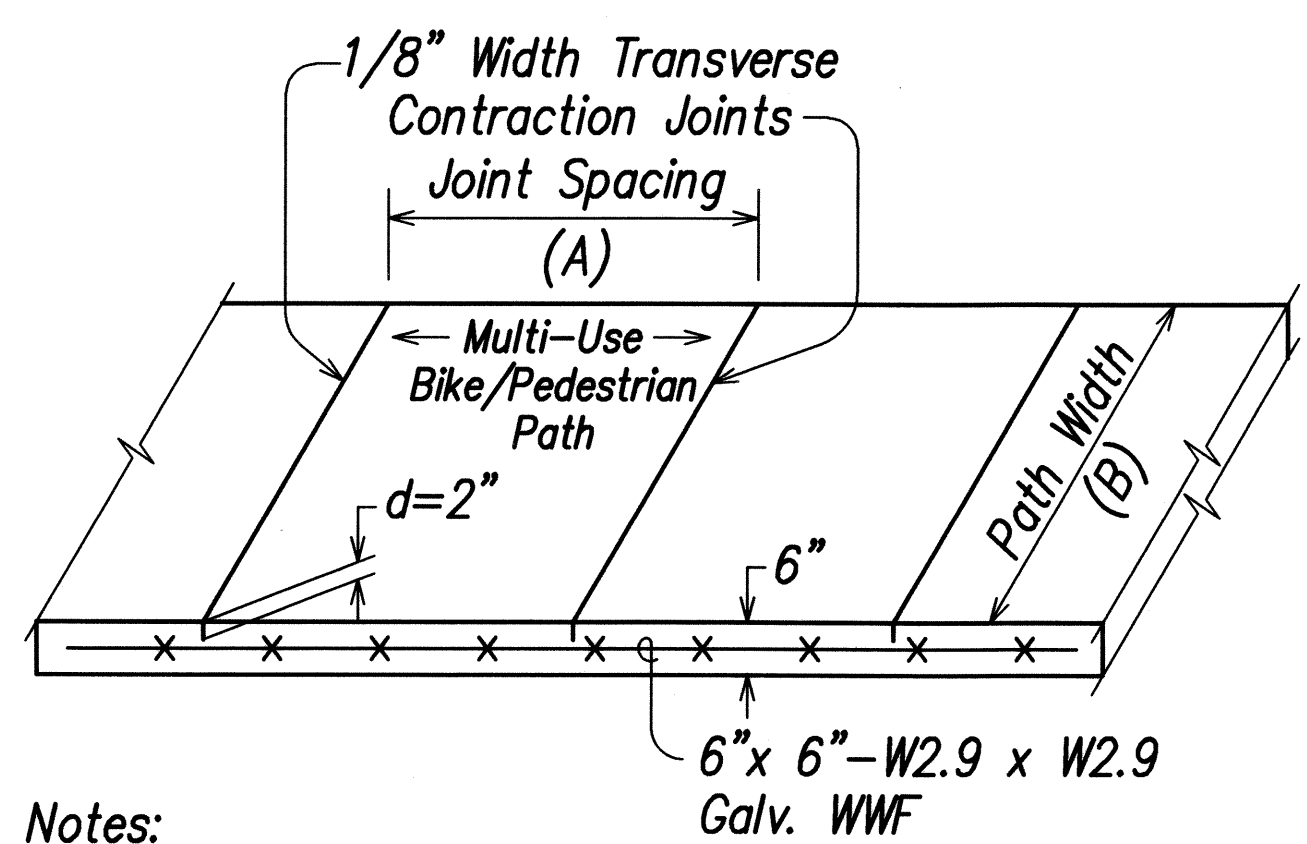
Wailua Cane Haul Bridge Widening

Fed. Aid Project No. BR-056-1(51)

Scale: As Noted Date: MAY 2008

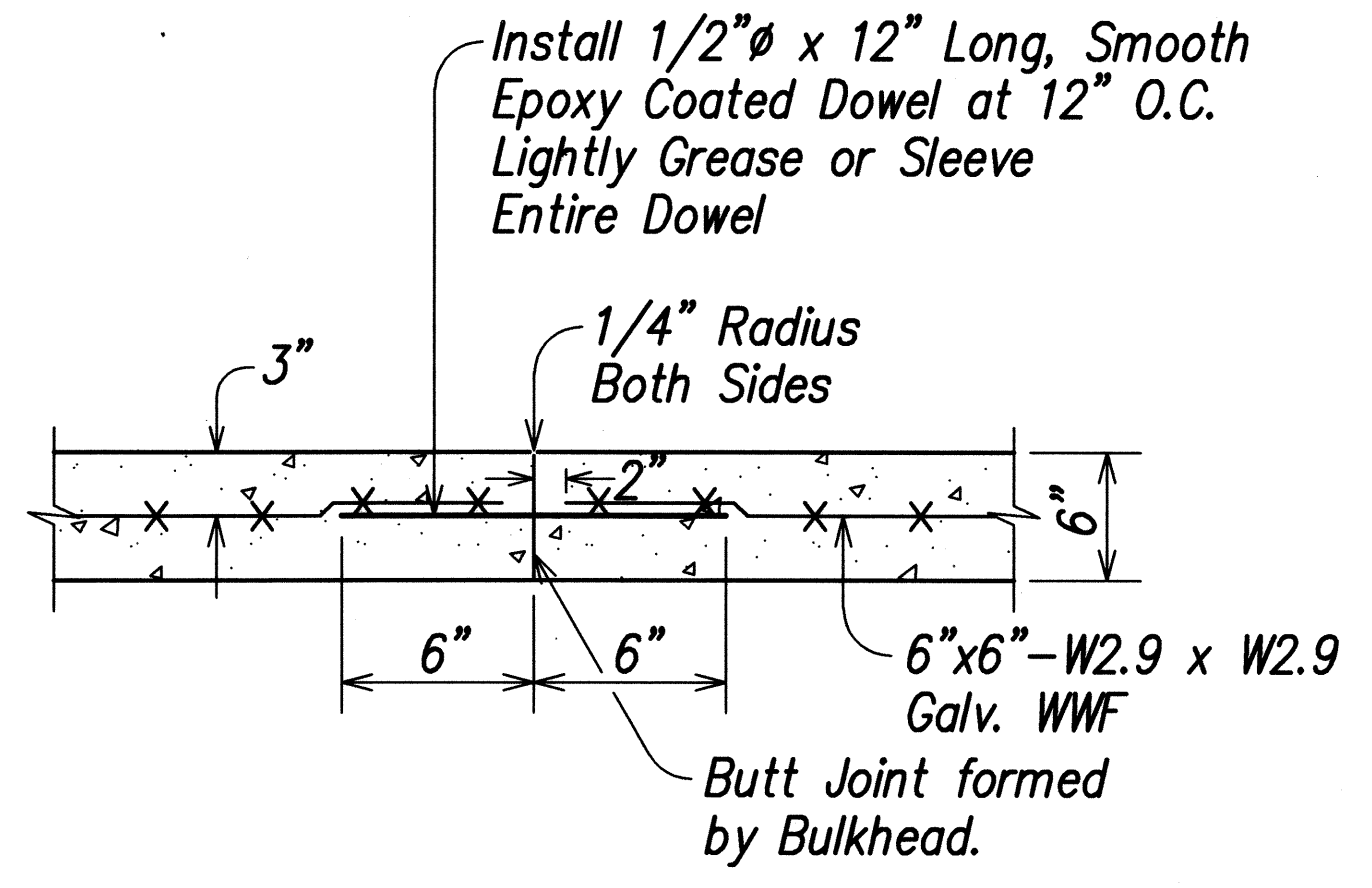
SHEET No. RD3 OF RD5 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	BR-056-1(51)	2008	25	284

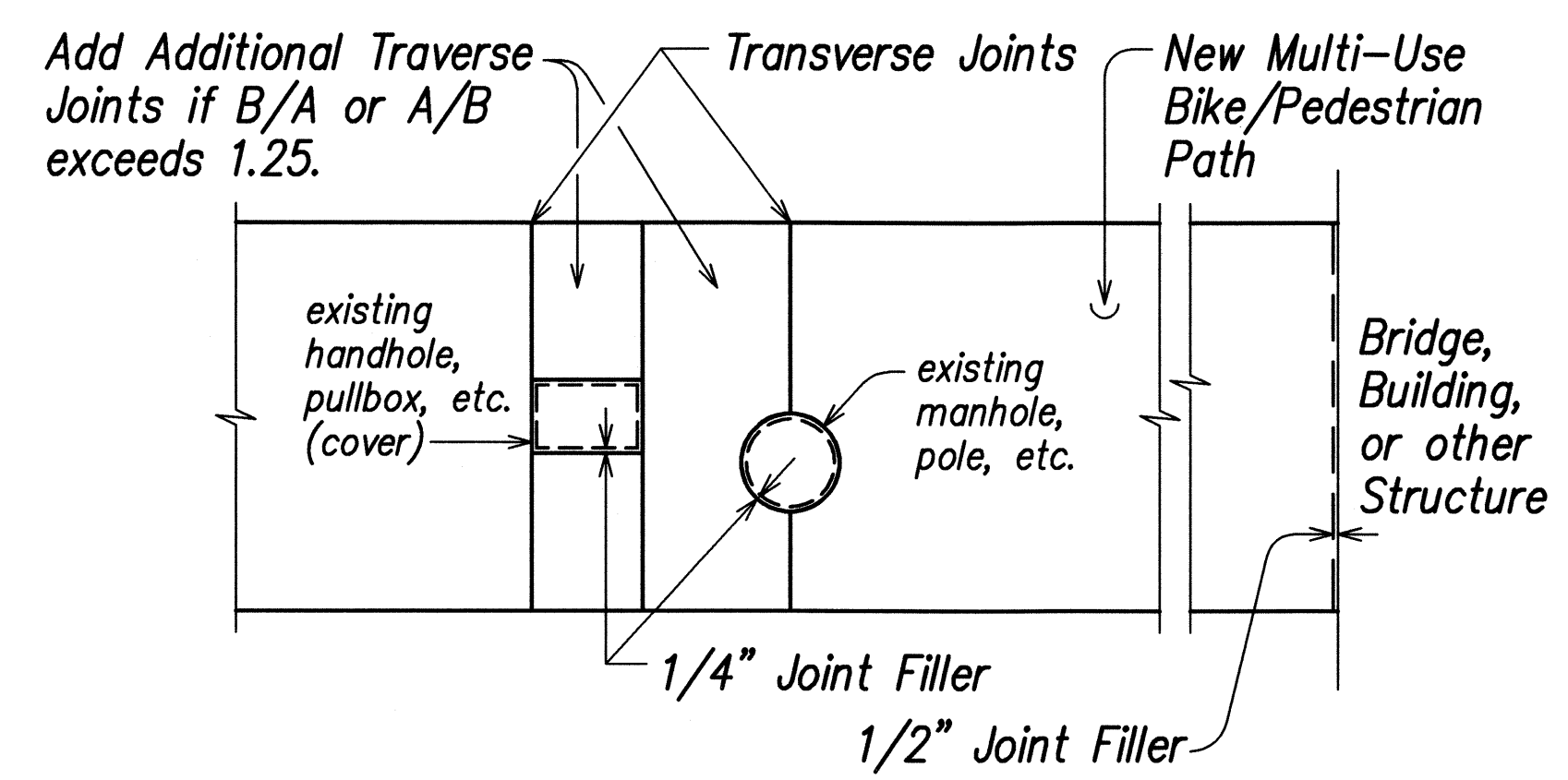


- Notes:**
1. Joint dimension ratios (B/A or A/B) < 1.25
 2. Joints shall be perpendicular to baseline of path.

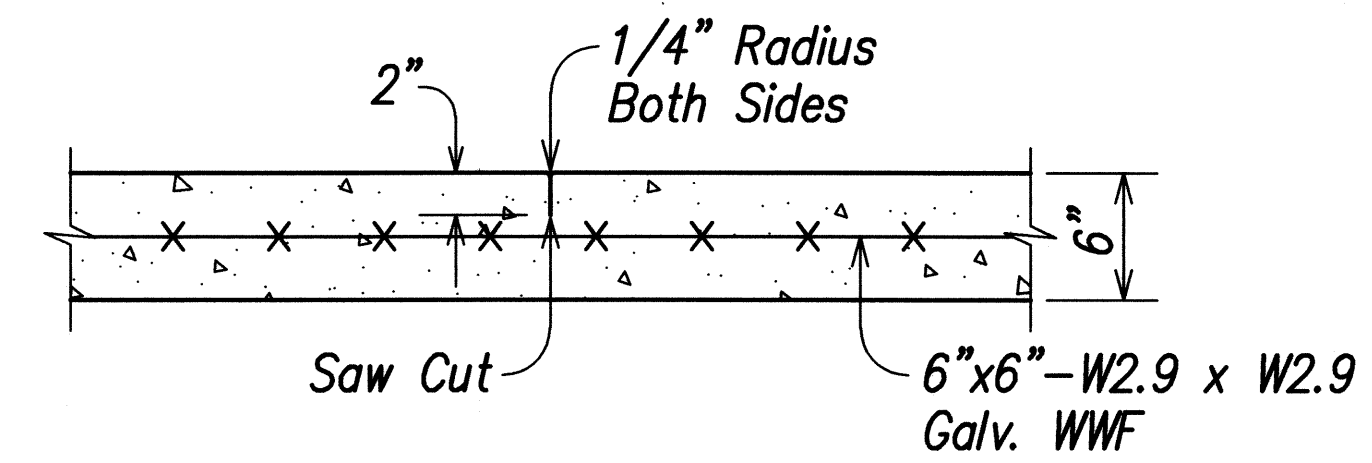
TYPICAL WEAKENED PLANE JOINT LAYOUT
Not to Scale



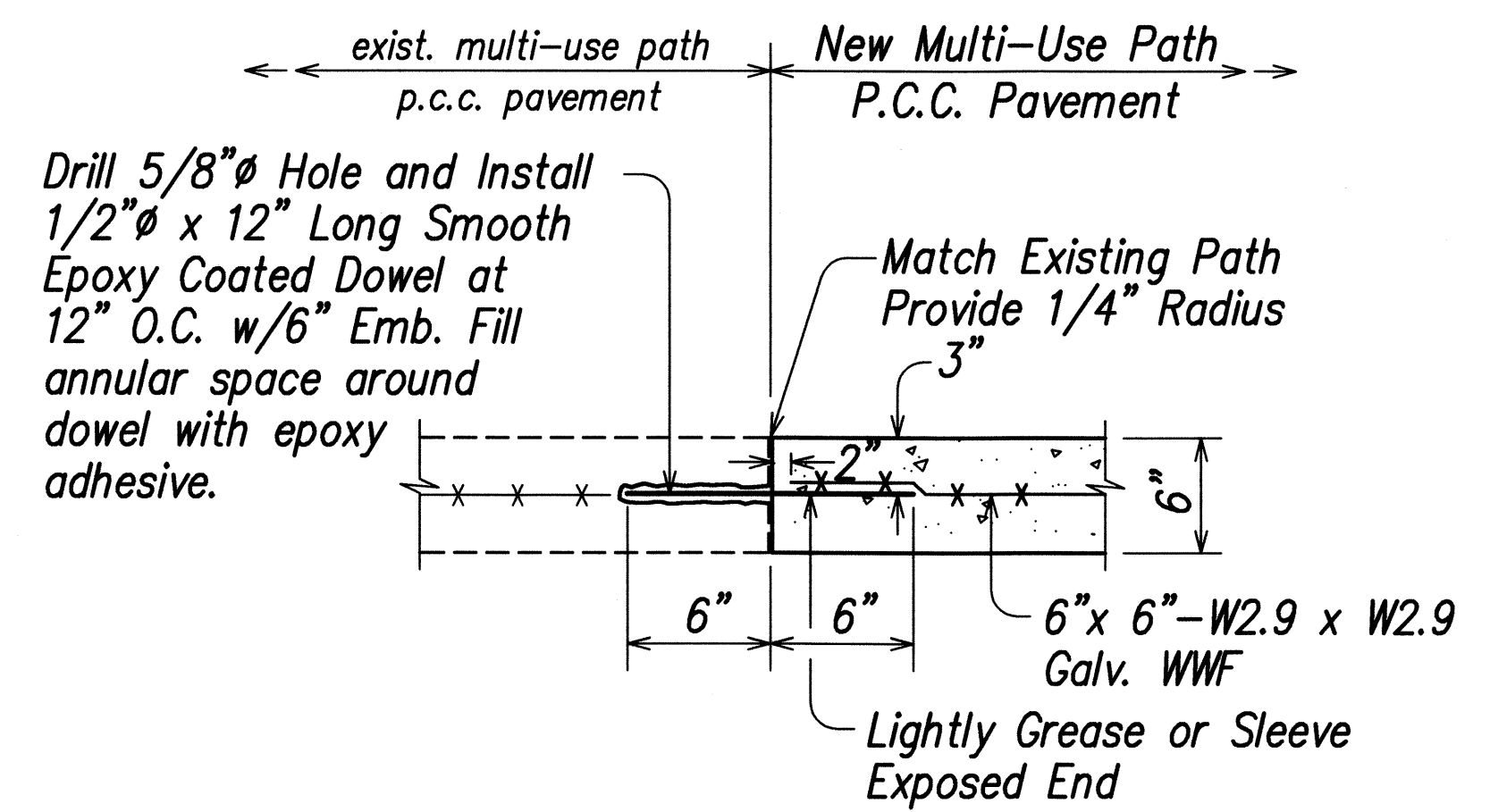
TRANSVERSE CONSTRUCTION JOINT
Not to Scale



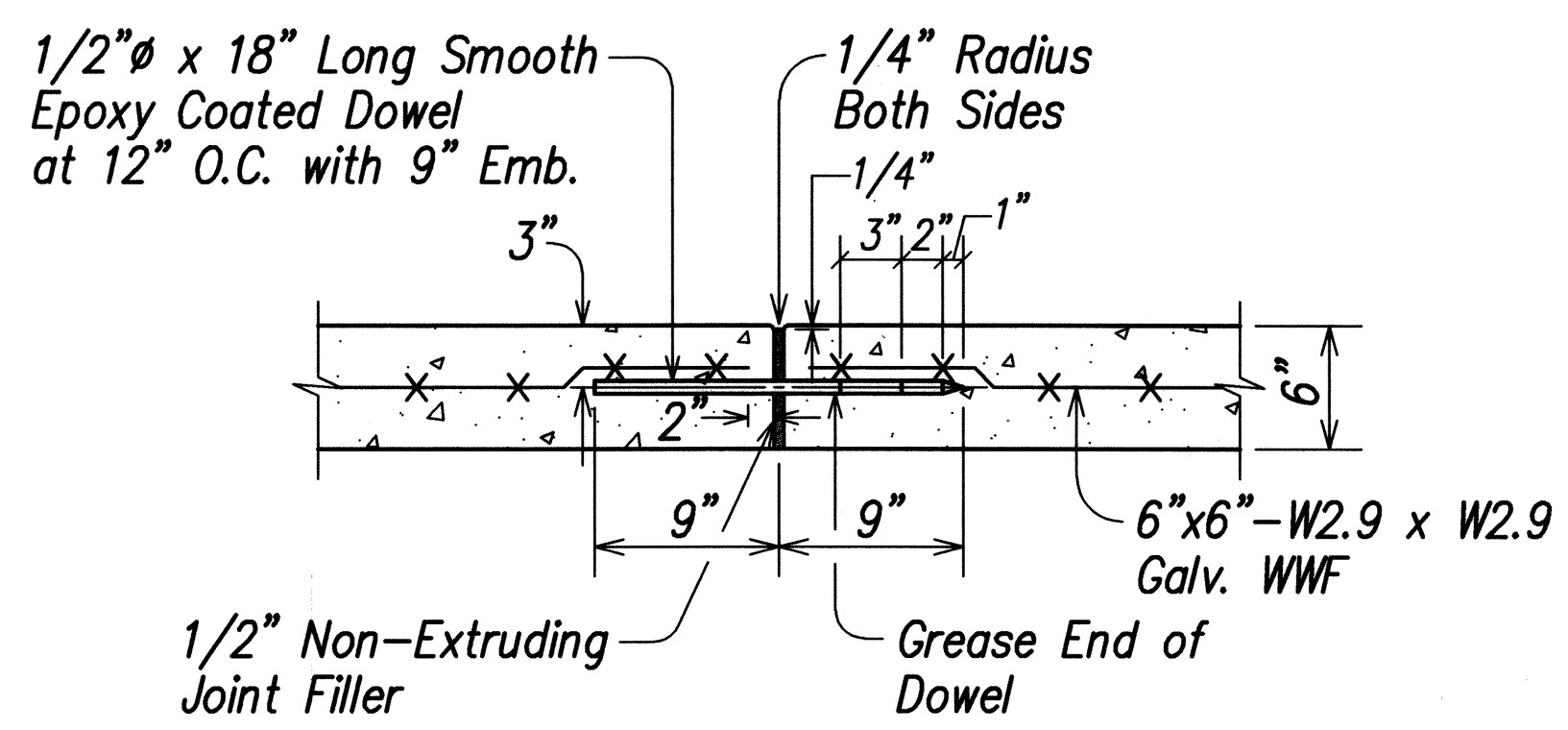
MULTI-USE PATH ISOLATION JOINT
Not to Scale



TRAVERSE CONTRACTION JOINT
Not to Scale



TRANSVERSE CONSTRUCTION JOINT AT EXISTING P.C.C. PAVEMENT
Not to Scale

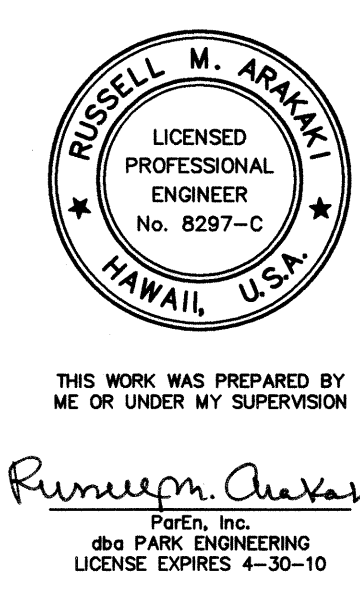


TRANSVERSE EXPANSION JOINT
Not to Scale
NOTE: Either one piece or threaded split type dowels may be used.

NOTES:

1. These bike path details are applicable for the reconstruction of the concrete bike/pedestrian path near Leho Drive as required for the relocation of the underground electric, telephone and cable television conduits. See structural drawings for details of the bike/pedestrian path for all other locations.
2. Epoxy coated dowels and deformed bars shall conform to AASHTO M284/M 284/ M-95 Grade 60.
3. Position dowels/bars parallel to the pavement surface and paving lane direction to avoid future cracks in the P.C.C. pavement.
4. See Typical Weakened Plane Joint Layout and Section 634 of the special provisions for transverse joint spacing.
5. The Contractor shall not damage the epoxy coating on the dowel and deformed bar in any way during shipment, handling or placement. Damaged epoxy coated dowels and bars shall be replaced at no cost to the State.
6. All joint construction, including drilling, epoxy coated dowels, deformed bars, grease, epoxy grout and joint filler shall be incidental to Portland Cement Concrete Bike Path at Leho Drive.
7. The entire length of bike path shall have a surface texture that complies with the Americans with Disabilities Act Accessibility Guidelines (ADAAG) Section 4.3.6.
8. Provide a broom finish surface to match the surface of the adjacent existing concrete bike/pedestrian path.
9. Gecko art stamp depression and red-tinted warning strip shall not be installed for this portion of the bike/pedestrian path.

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

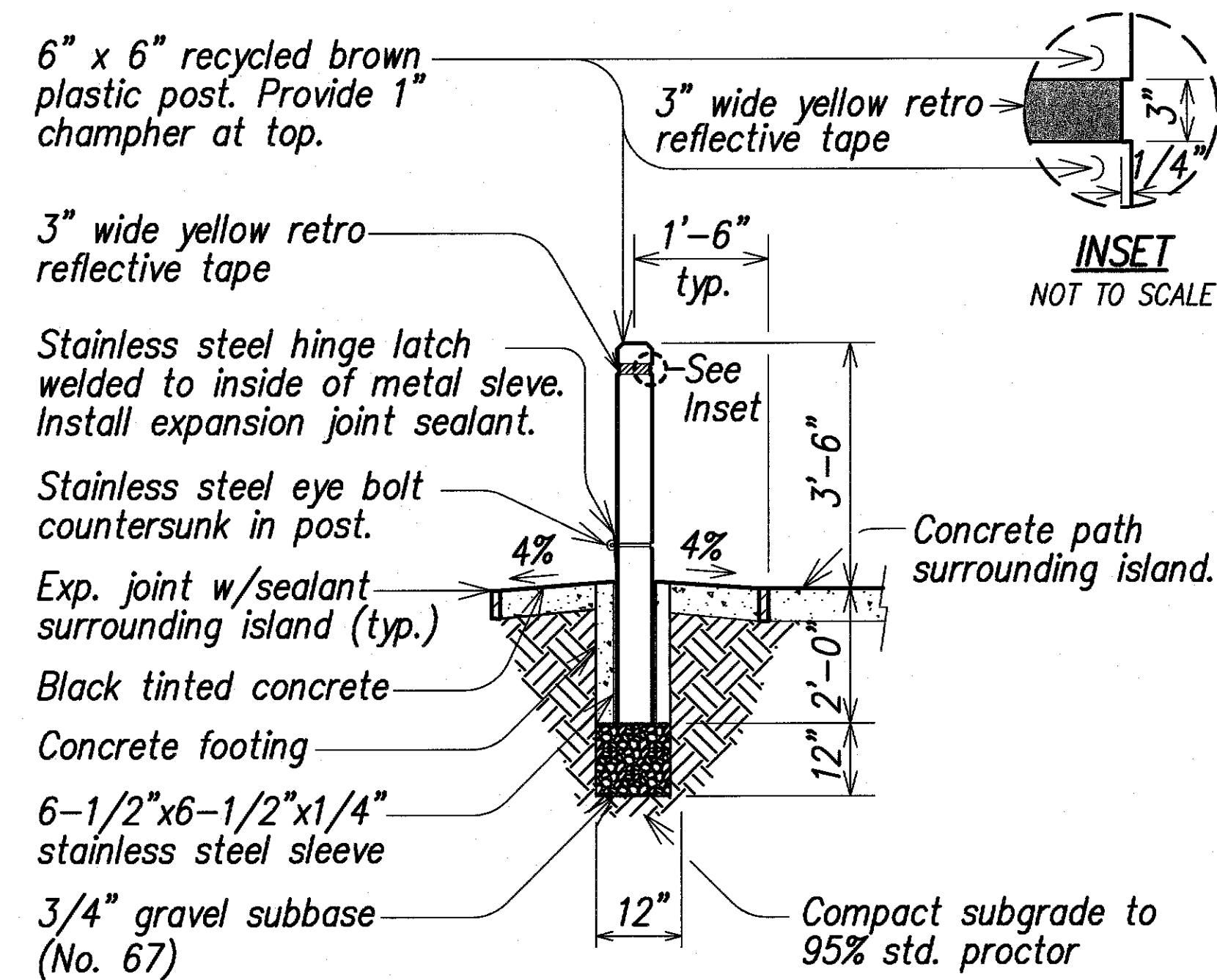


STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

BIKE PATH DETAILS

KUHIO HIGHWAY, SHORT TERM IMPROVEMENTS
Wailua Cane Haul Bridge Widening
Fed. Aid Project No. BR-056-1(51)
Scale: As Noted Date: MAY 2008
SHEET No. RD4 OF RD5 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	BR-056-1(51)	2008	26	284

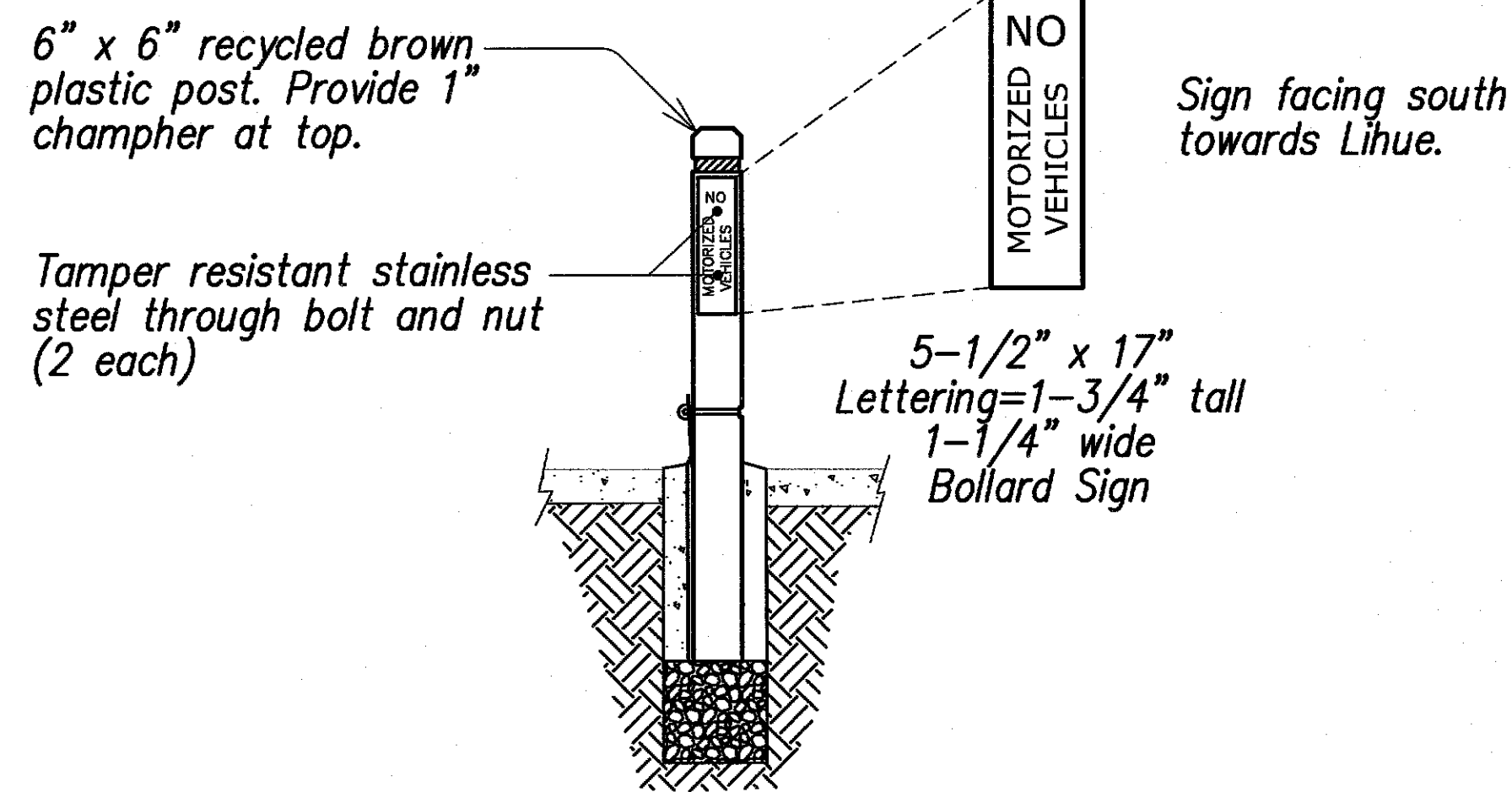


ISLAND BOLLARD INSTALLATION

TRAFFIC ACCESS CONTROL BOLLARD
NOT TO SCALE

NOTE:

Traffic Access Control Bollard, including but not limited to excavation, compaction, gravel subbase, stainless steel sleeve, concrete footing, concrete island, tinting, joint sealant post, sign, tape and accessories shall be considered incidental to the Portland Cement Concrete Bike Path.

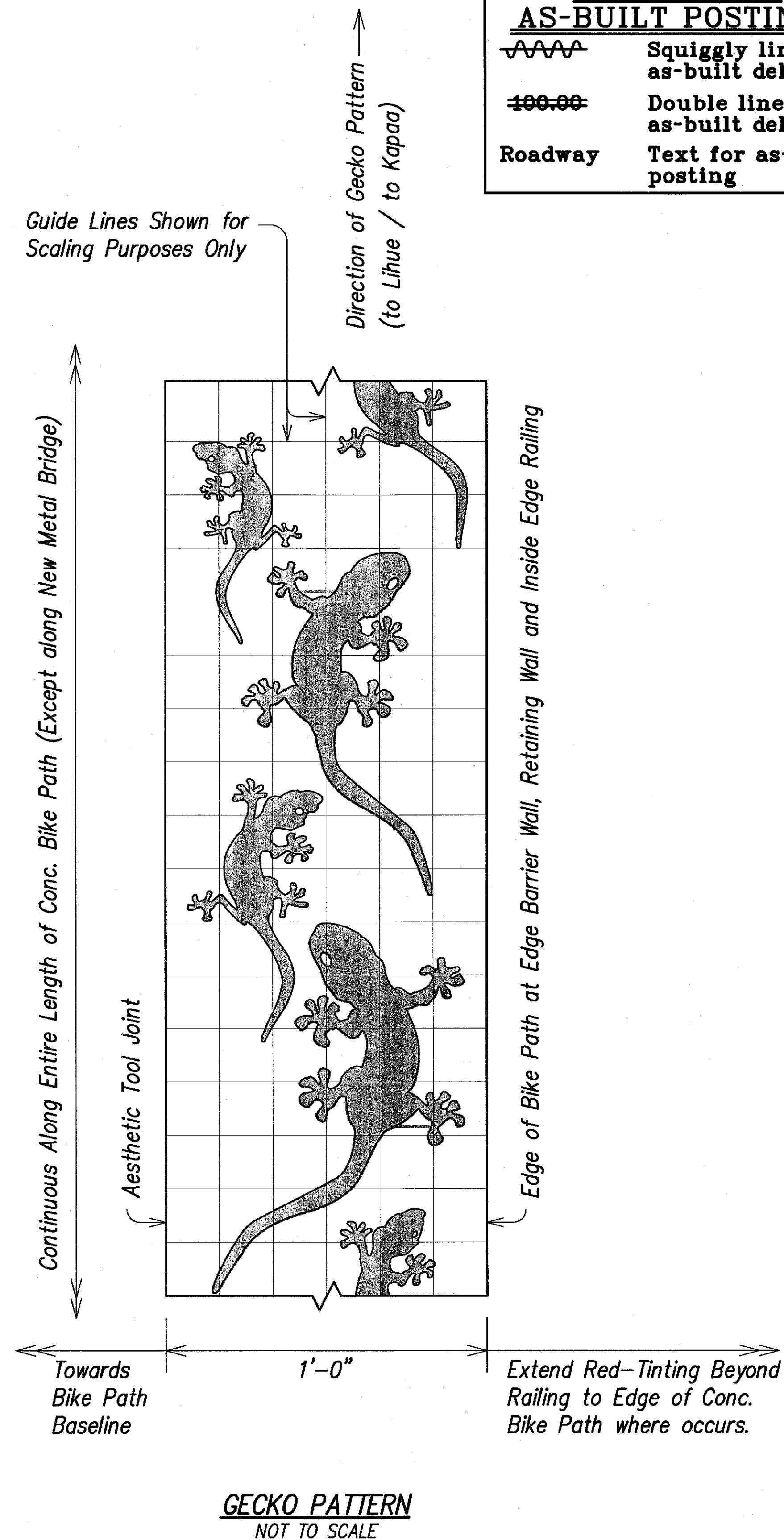


BOLLARD SIGN PLACEMENT
NOT TO SCALE

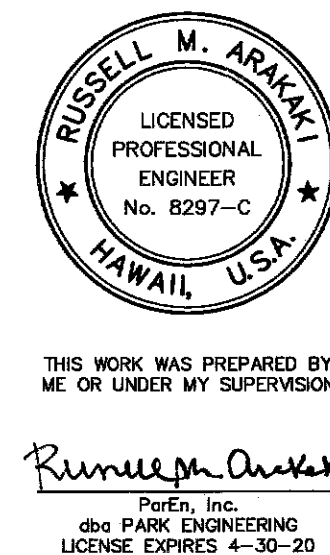
LEGEND FOR AS-BUILT POSTINGS	
	Squiggly line for as-built deletion
	Double line for as-built deletion
Roadway	Text for as-built posting

NOTES FOR RED-TINTED CONCRETE WARNING STRIP:

- TINTING COMPOUND AND PROCEDURE:**
Tinted Warning Strip shall be "Brick Red" color, Redi-Color Seal product as manufactured and distributed by the Southern Color, N.A. Inc. (1-800-297-3063), or approved equal. Redi-Color Seal shall be applied in two coats. The first coat shall be applied immediately after concrete stamping has been completed. The second coat shall be applied after the first coat has dried (usually in 1-2 hours). The method of application shall be with an airless sprayer as per the specifications of manufacturer in an evenly and uniform manner. The contractor shall take all necessary precautions to ensure that the Redi-Color Seal does not overspray and dye any area outside of the Tinted Warning Strip.
- TEST PANEL SUBMITTAL:**
Contractor shall submit a test panel, not less than four feet in length of the Tinted Warning Strip with stamp impression for review and approval prior to construction of the Tinted Warning Strip and associated path.
- GECKO STAMP:**
The Gecko art stamp depression shall not exceed 0.20 inches in depth. Two submittals are required for the Gecko Concrete Stamp. The first submittal shall be shop drawings for the Gecko Art stamp. The shop drawing shall also note how the Gecko art will not be encroached by railing support posts when applicable. Secondly, the Contractor shall prepare for review and acceptance, a test panel of the Tinted Warning Strip. A minimum 4-foot length section of the Tinted Warning Strip is required.
- AESTHETIC TOOL JOINT:**
An aesthetic tool joint shall be applied to the length of the red-tinted warning strip at a uniform depth of 0.20 inches.
- Construction of the Tinted Warning Strip and Gecko Art stamping shall be considered incidental to Item No. 634.0200, Portland Cement Concrete Bike Path.
- Install Red-Tinted Warning Strip with Gecko Pattern at:
Sta. 0+00 to Sta. 3+81.9 Path, Lt. and Rt., and
Sta. 8+91.9 to Sta. 12+80.6 (end) Path, Lt. and Rt.
13+87.58

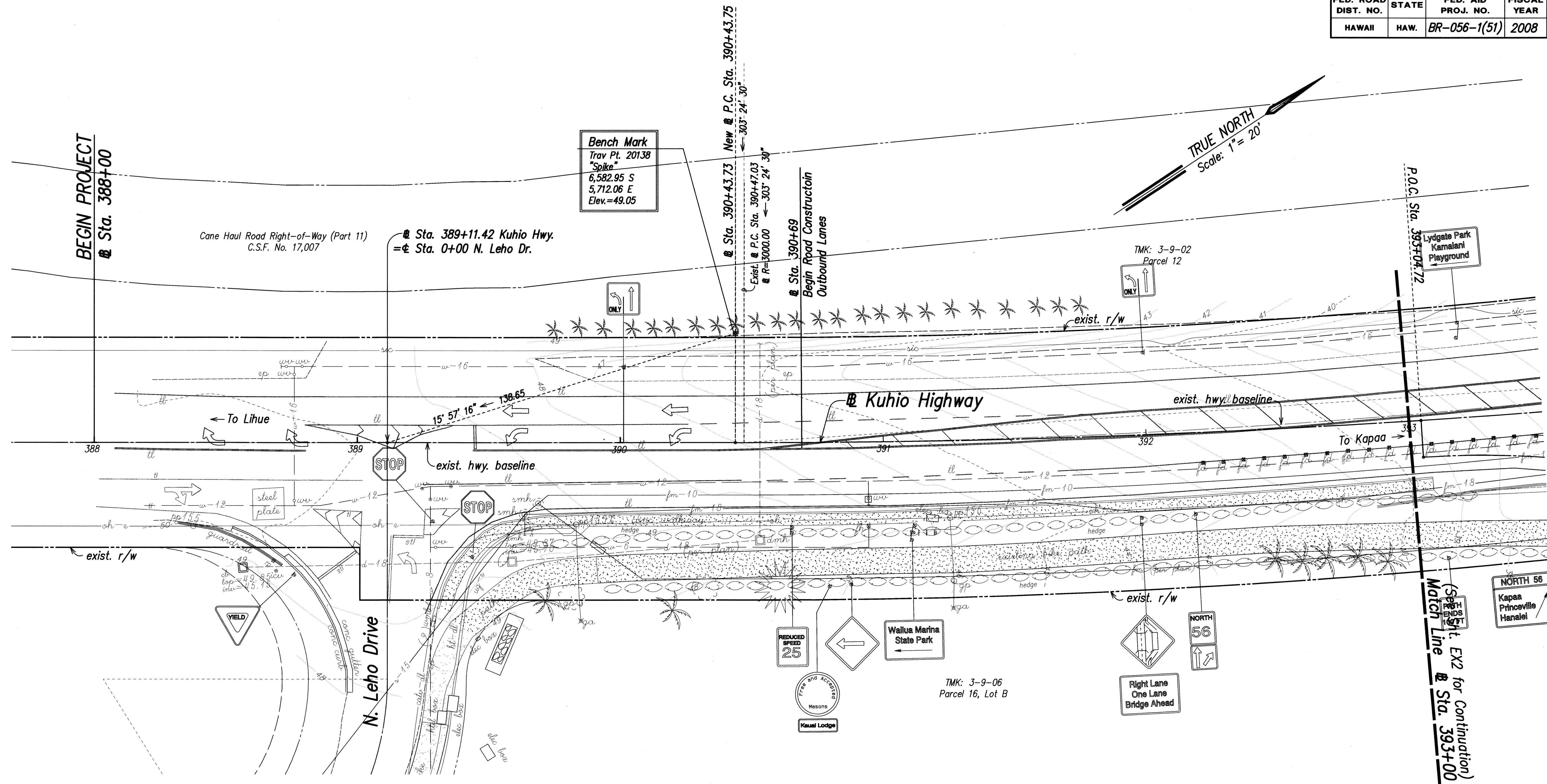


SURVEY PLOTTED BY	DATE
DRAWN BY	
TRACED BY	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
No.	



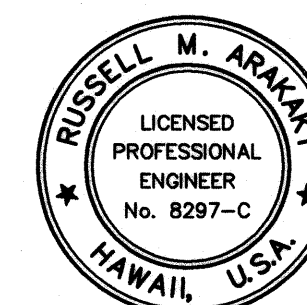
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
BIKE PATH DETAILS	
KUHIO HIGHWAY, SHORT TERM IMPROVEMENTS	
Wailua Cane Haul Bridge Widening	
Fed. Aid Project No. BR-056-1(51)	
Scale: As Noted	Date: MAY 2008
SHEET No. RD5 OF RD5 SHEETS	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	BR-056-1(51)	2008	27	284



EXISTING CONDITIONS

Scale: 1" = 20'



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P.E., Inc.
dba PARK ENGINEERING
LICENSE EXPIRES 4-30-10

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

EXISTING CONDITIONS

KUHIO HIGHWAY, SHORT TERM IMPROVEMENTS

Wailua Cane Haul Bridge Widening

Fed. Aid Project No. BR-056-1(51)

Scale: As Noted

Date: MAY 2008

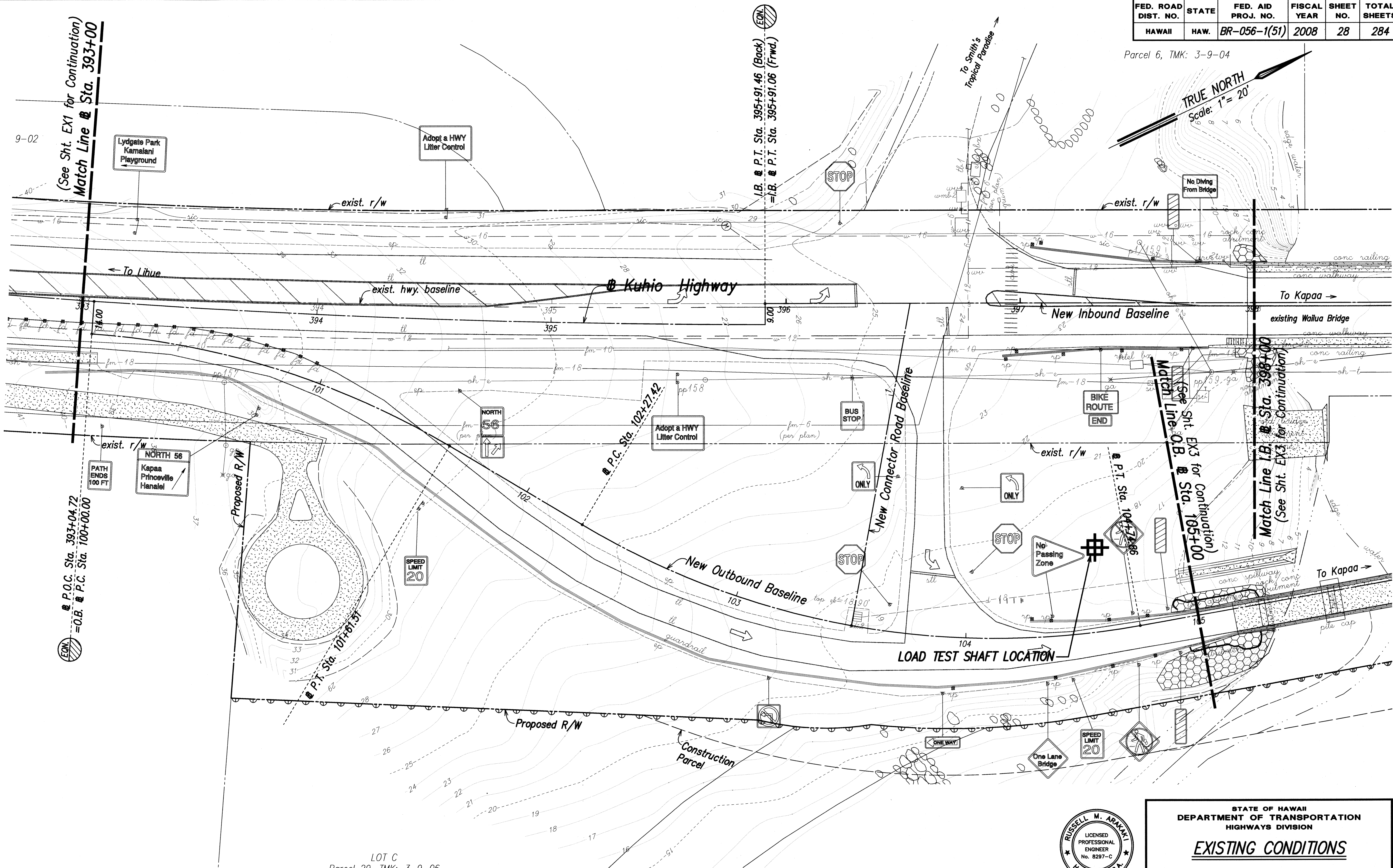
SHEET No. EX1 OF EX4 SHEETS

ORIGINAL PLAN	SURVEY PLATTED BY	DATE
NOTE BOOK	DRAWN BY	
	DESIGNED BY	
	QUANTITIES BY	
	CHECKED BY	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	BR-056-1(51)	2008	28	284

Parcel 6, TMK: 3-9-04

TRUE NORTH
Scale: 1" = 20'

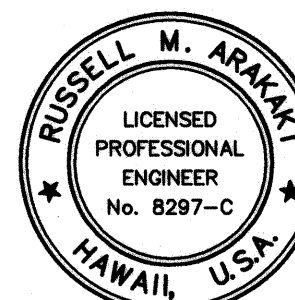


NOTE:

- Denotes No Access Permitted
- Denotes Limited Access as Noted on Plan

EXISTING CONDITIONS

Scale: 1" = 20'



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Russell M. Araki
Professional Engineer
No. 8297-C
HAWAII, U.S.A.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

EXISTING CONDITIONS

KUHIO HIGHWAY, SHORT TERM IMPROVEMENTS

Wailua Cane Haul Bridge Widening

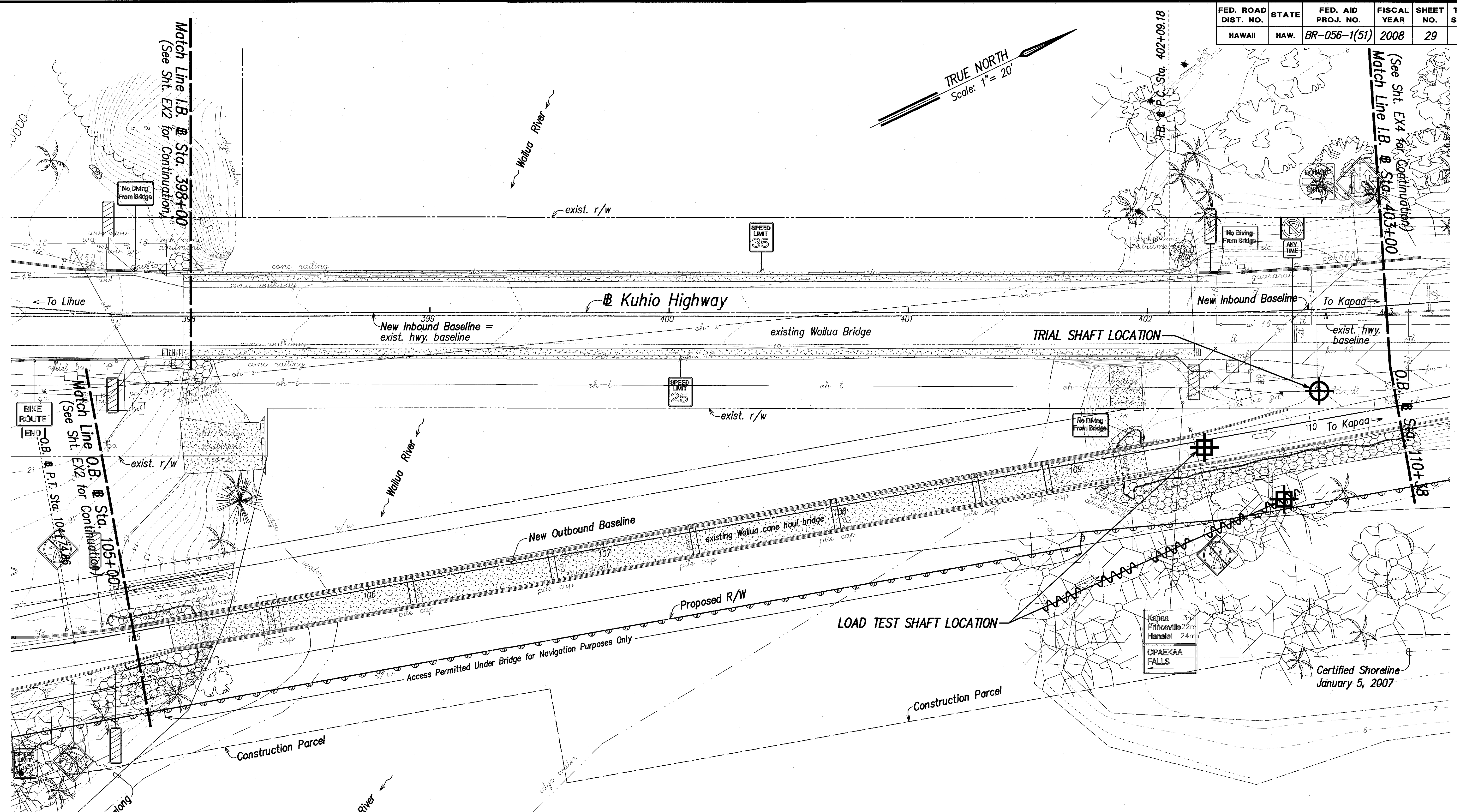
Fed. Aid Project No. BR-056-1(51)

Scale: As Noted

Date: MAY 2008

SHEET No. EX2 OF EX4 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	BR-056-1(51)	2008	29	284



DATE	_____
SURVEY PLOTTED BY	_____
DESIGNED BY	_____
NOTED BY	_____
CHECKED BY	_____
ORIGINAL PLAN	_____
NOTE BOOK	_____
No.	_____

NOTE:
 Denotes No Access Permitted
 Denotes Limited Access as Noted on Plan

NOTE:
 New Outbound Baseline is not parallel to ϕ of Existing Bridge.

EXISTING CONDITIONS
 Scale: 1" = 20'

LEGEND FOR AS-BUILT POSTINGS

Squiggly line for as-built deletion

Double line for as-built deletion

Roadway Text for as-built posting

RUSSELL M. ARAOKI
 LICENSED PROFESSIONAL ENGINEER
 No. 8297-C
 HAWAII, U.S.A.

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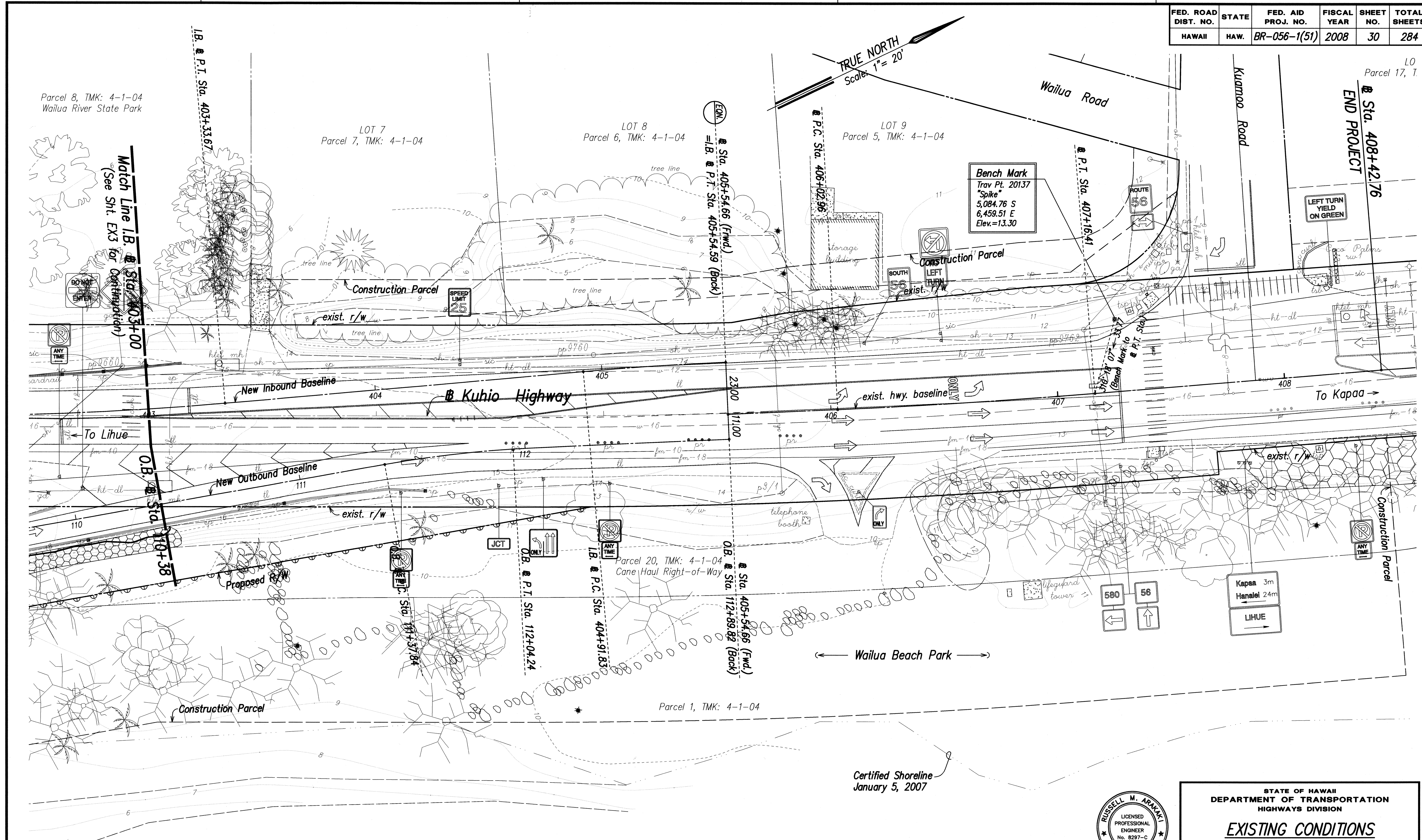
Russell M. Araoki
 ParEn, Inc.
 180 PARK ENGINEERING
 LICENSE EXPIRES 4-30-20

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

EXISTING CONDITIONS

KUHIO HIGHWAY, SHORT TERM IMPROVEMENTS
 Wailua Cane Haul Bridge Widening
 Fed. Aid Project No. BR-056-1(51)
 Scale: As Noted Date: MAY 2008
 SHEET No. EX3 OF EX4 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	BR-056-1(51)	2008	30	284



Parcel 8, TMK: 4-1-04
Wailua River State Park

LOT 7
Parcel 7, TMK: 4-1-04

LOT 8
Parcel 6, TMK: 4-1-04

LOT 9
Parcel 5, TMK: 4-1-04

LOT 10
Parcel 17, T.

Match Line I.B. @ Sta. 403+00
(See Sht. EX3 for Continuation)

Bench Mark
Trav Pt. 20137
"Spike"
5,084.76 S
6,459.51 E
Elev.=13.30

LEFT TURN
YIELD
ON GREEN

Stationing and Baseline Data:
- New Inbound Baseline: 404, 405, 406, 407, 408
- New Outbound Baseline: 110, 111, 112
- Existing Highway Baseline: 405, 406, 407, 408
- Stationing: 403+00, 404+91.83, 405+54.66 (Fwd), 405+54.66 (Back), 406+02.96, 407+16.41, 408+26.76
- Match Lines: I.B. @ Sta. 403+00, O.B. @ Sta. 408+26.76
- Directional Signs: To Lihue, To Kapaa
- Road Names: Wailua Highway, Wailua Road, Kuamoo Road
- Landmarks: Wailua Beach Park, Wailua River State Park, Construction Parcel, Storage Building, Telephone Booth, Lifeguard Tower
- Signs: Speed Limit 25, Left Turn Yield on Green, Directional Signs for Kapaa, Hanalei, Lihue
- Parcels: Parcel 1, 5, 6, 7, 8, 17, 20, 21
- Match Lines: I.B. @ Sta. 403+00, O.B. @ Sta. 408+26.76

NOTE:
- Denotes No Access Permitted
- Denotes Limited Access as Noted on Plan

EXISTING CONDITIONS

Scale: 1" = 20'

Certified Shoreline
January 5, 2007



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ME OR UNDER MY SUPERVISION
Russell M. Arakaki
P.E., Inc.
300 PARK ENGINEERING
LICENSE EXPIRES 4-30-10

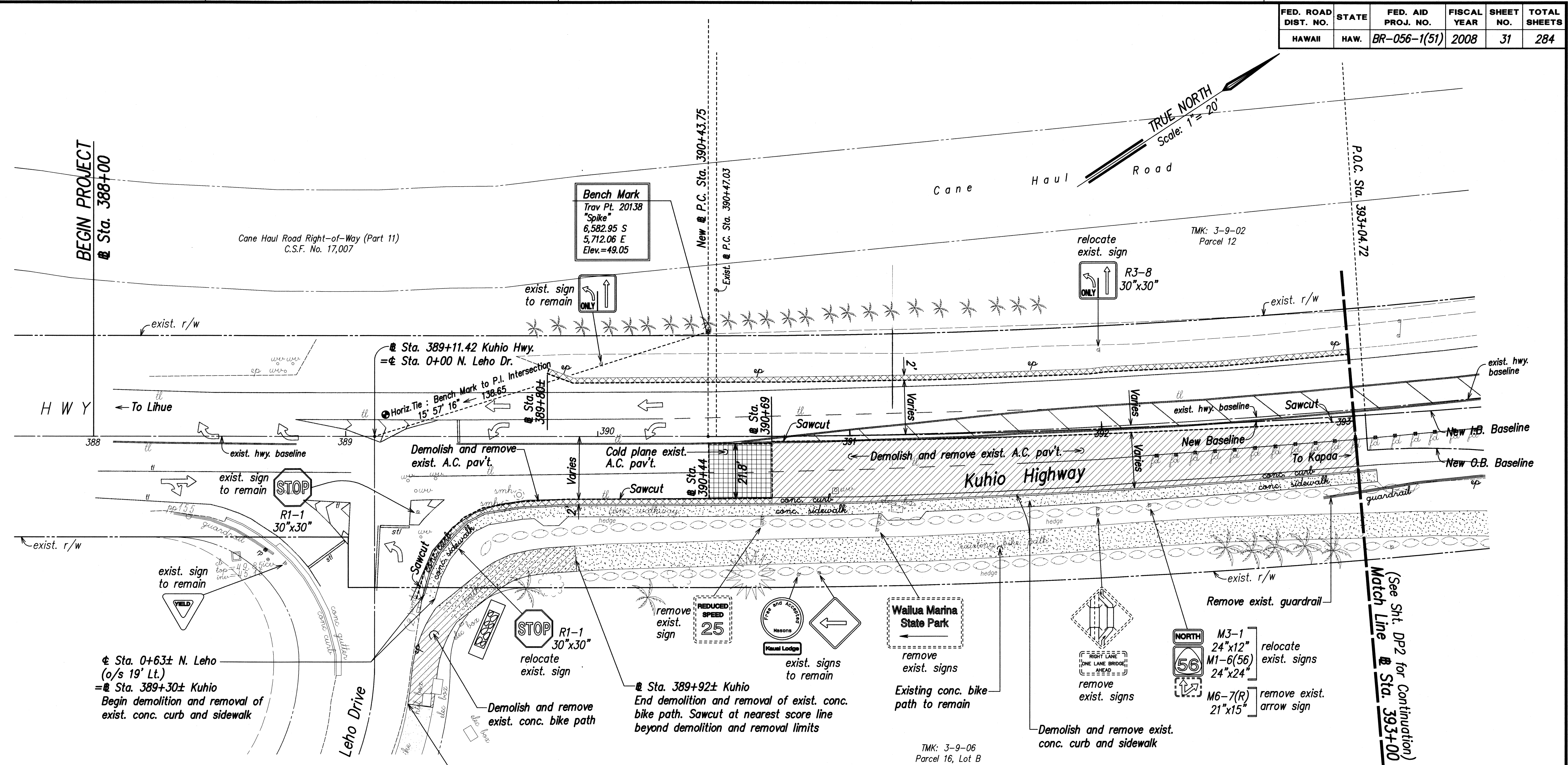
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

EXISTING CONDITIONS

KUHIO HIGHWAY, SHORT TERM IMPROVEMENTS
Wailua Cane Haul Bridge Widening
Fed. Aid Project No. BR-056-1(51)
Scale: As Noted Date: MAY 2008
SHEET No. EX4 OF EX4 SHEETS

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

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	BR-056-1(51)	2008	31	284



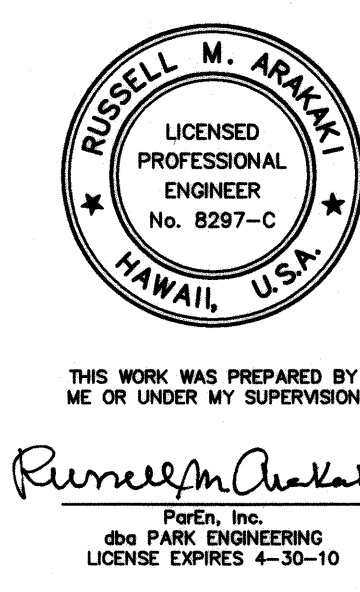
DEMOLITION PLAN
Scale: 1" = 20'

NOTE:

- 1) The demolition and removal of existing drain lines and drainage structures are shown on the Drainage Plans.
- 2) The relocation of existing electrical overhead lines, power poles and guy anchors shall be completed by KIUC and are shown on the Utility Plans.
- 3) The new permanent location for existing signs that are to be relocated, is shown on the Signing and Striping Plans.
- 4) All existing signs, posts, markers and reflectors removed but not incorporated into the New work shall be cleaned and delivered to the Hawaii Department of Transportation Kauai District Office baseyard in Puih. All unacceptable items, as determined by the Engineer, shall be disposed of by the Contractor.
- 5) For removal of existing trees, see Landscape Sheets.

- Demolish & remove existing pavement structure for new pavement structure.
- Demolish & remove existing pavement structure for shoulder reconstruction.
- Demolish & remove existing concrete bike path.
- Cold planing areas.

- Sta. 390+44 Rt. to Sta. 390+69 Rt.**
25' cold planed transition to existing a.c. pavement. Sawcut and remove existing pavement as required to provide smooth riding connection. See Detail, Sht. RD1
- Sta. 389+30 Rt. to O.B. Sta. 393+00 Rt.**
Demolish and remove exist. conc. curb and sidewalk.
- Sta. 389+25 Rt. to O.B. Sta. 389+92 Rt.**
Demolish and remove exist. conc. bike path.
- Sta. 392+86 Rt. to O.B. Sta. 393+00 Rt.**
Remove existing metal guardrail.



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DEMOLITION PLAN

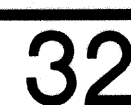
KUHIO HIGHWAY, SHORT TERM IMPROVEMENTS

Waialua Cane Haul Bridge Widening
Fed. Aid Project No. BR-056-1(51)

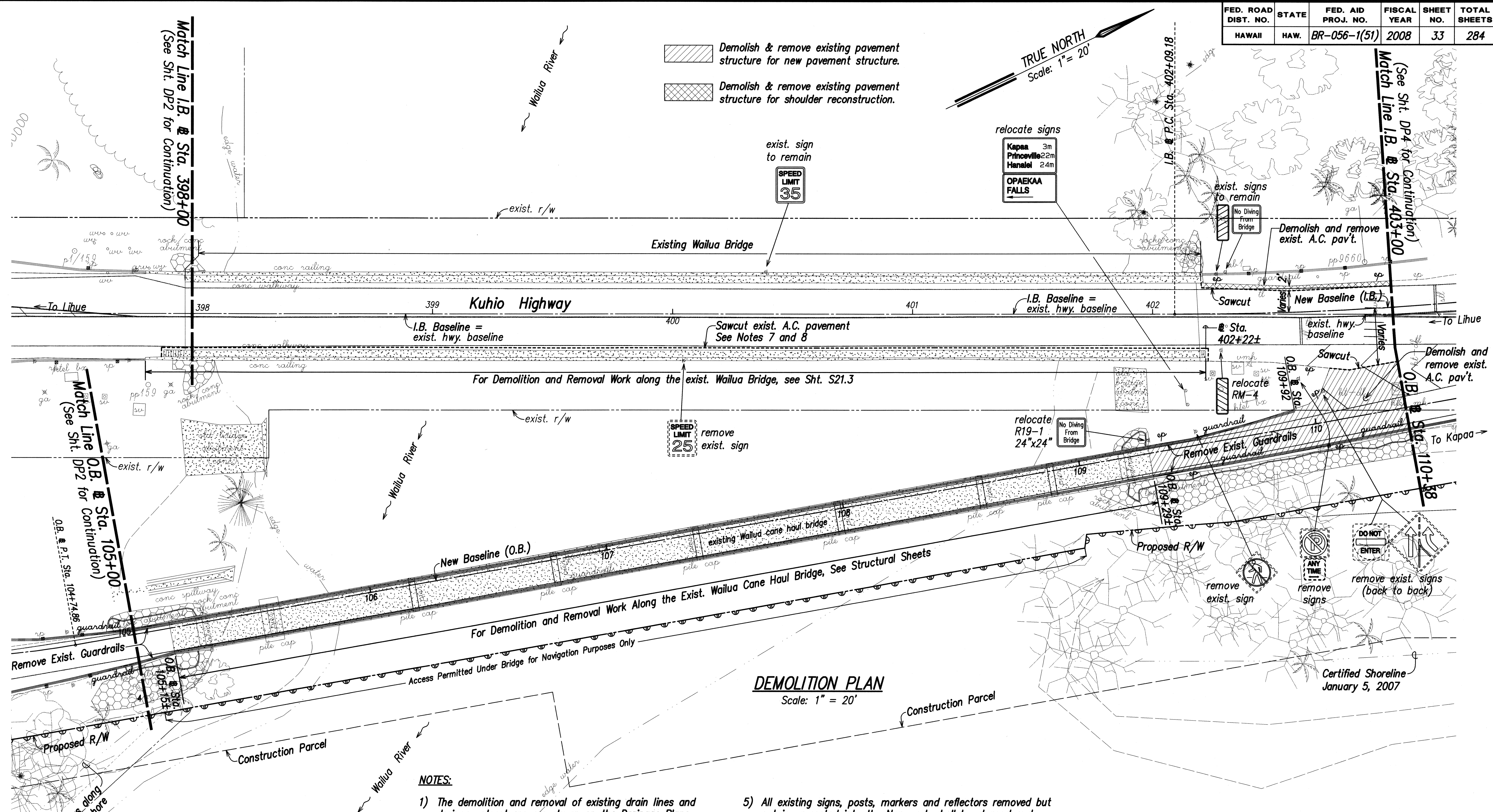
Scale: As Noted Date: MAY 2008

SHEET No. DP1 OF DP4 SHEETS

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



FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	BR-056-1(51)	2008	33	284

**DEMOLITION PLAN**

Scale: 1" = 20'

NOTES:

- 1) The demolition and removal of existing drain lines and drainage structures are shown on the Drainage Plans.
- 2) The demolition and removal of existing sewer lines, sewer valves and manholes are shown on the Sewer Plan.
- 3) The relocation of existing electrical overhead lines, power poles and guy anchors shall be completed by KIUC and are shown on the Utility Plans.
- 4) The new permanent location for existing signs that are to be relocated, is shown on the Signing and Striping Plans.
- 5) All existing signs, posts, markers and reflectors removed but not incorporated into the New work shall be cleaned and delivered to the Hawaii Department of Transportation Kauai District Office baseyard in Puhi. All unacceptable items, as determined by Engineer, shall be disposed of by Contractor.
- 6) For removal of existing trees, see Landscape Sheets
- 7) Sawcut existing A.C. pavement 6" beyond existing concrete curb and ramp prior to demolition of the existing concrete sidewalk for construction of the temporary guardrail. Remove A.C. pav't.
- 8) Sawcut existing A.C. pavement 12" beyond existing concrete curb prior to reconstruction of the sidewalk and ramp. Remove temporary A.C. pavement.

O.B. Sta. 105+00 Rt. to O.B. Sta. 105+15 Rt.
Remove existing metal guardrail.

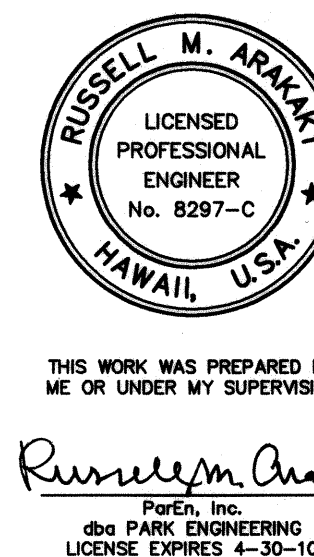
O.B. Sta. 105+00 Lt. to O.B. Sta. 105+15 Lt.
Remove existing metal guardrail.

O.B. Sta. 109+29 Rt. to O.B. Sta. 110+38 Rt.
Remove existing metal guardrail.

O.B. Sta. 109+29 Lt. to O.B. Sta. 109+92 Lt.
Remove existing metal guardrail.

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

ORIGINAL PLAN	NO.
NOTE BOOK	



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DEMOLITION PLAN

KUHIO HIGHWAY, SHORT TERM IMPROVEMENTS

Wailua Cane Haul Bridge Widening

Fed. Aid Project No. BR-056-1(51)

Scale: As Noted

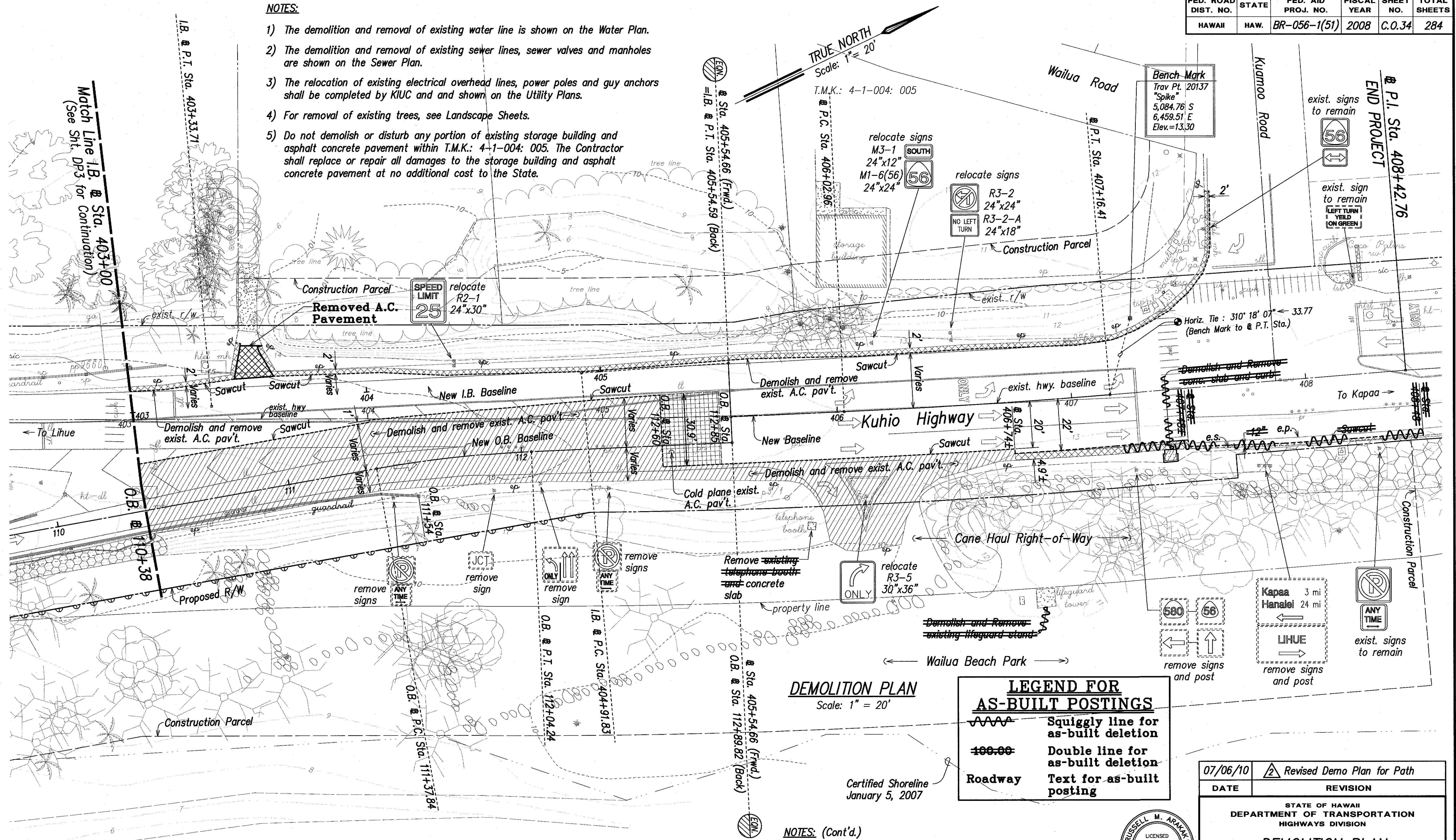
Date: MAY 2008

SHEET No. DP3 OF DP4 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	BR-056-1(51)	2008	C.O.34	284

NOTES:

- 1) The demolition and removal of existing water line is shown on the Water Plan.
- 2) The demolition and removal of existing sewer lines, sewer valves and manholes are shown on the Sewer Plan.
- 3) The relocation of existing electrical overhead lines, power poles and guy anchors shall be completed by KIUC and shown on the Utility Plans.
- 4) For removal of existing trees, see Landscape Sheets.
- 5) Do not demolish or disturb any portion of existing storage building and asphalt concrete pavement within T.M.K.: 4-1-004: 005. The Contractor shall replace or repair all damages to the storage building and asphalt concrete pavement at no additional cost to the State.



DEMOLITION PLAN
Scale: 1" = 20'

LEGEND FOR AS-BUILT POSTINGS

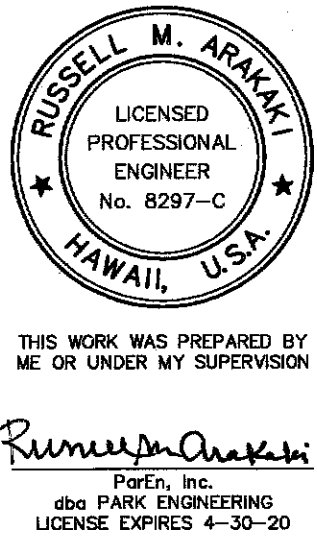
~~~~~ Squiggly line for as-built deletion

== Double line for as-built deletion

Roadway Text for as-built posting

**NOTES: (Cont'd.)**

- 6) The new permanent location for existing signs that are to be relocated, is shown on the Signing and Striping Plans.
- 7) All existing signs, posts, markers and reflectors removed but not incorporated into the New work shall be cleaned and delivered to the Hawaii Department of Transportation Kauai District Office baseyard in Puh. All unacceptable items, as determined by Engineer, shall be disposed of by Contractor.



07/06/10 Revised Demo Plan for Path

DATE REVISION

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**DEMOLITION PLAN**

KUHIO HIGHWAY, SHORT TERM IMPROVEMENTS

Wailua Cane Haul Bridge Widening

Fed. Aid Project No. BR-056-1(51)

Scale: As Noted Date: MAY 2008

SHEET No. DP4 OF DP4 SHEETS

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

O.B. @ Sta. 112+60 Rt. & Lt. to O.B. @ Sta. 112+85 Rt. & Lt.  
25' cold planed transition to existing a.c. pavement. Sawcut and remove existing pavement as required to provide smooth riding connection. See Detail, Sht. RD1

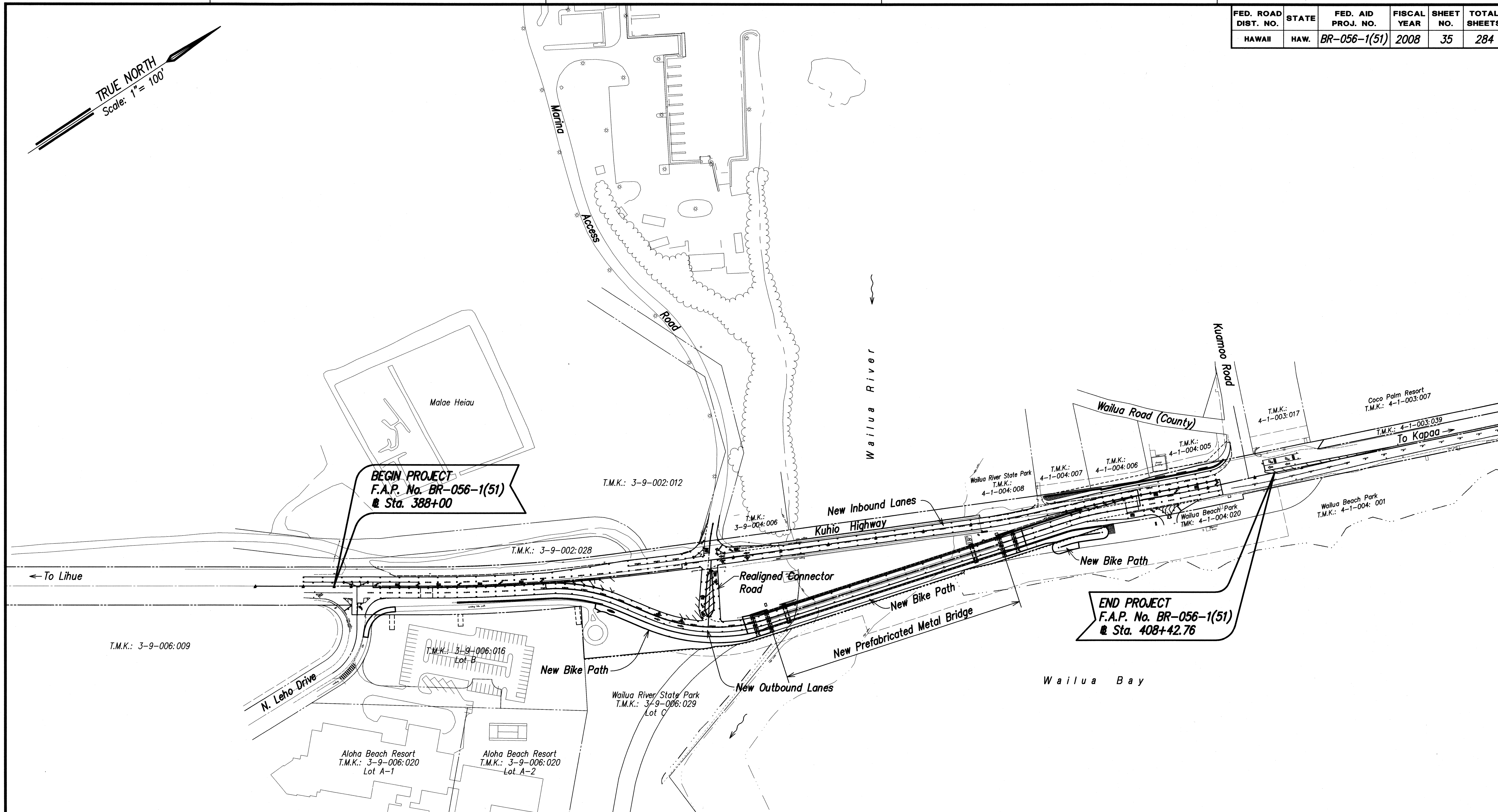
O.B. @ Sta. 110+38 Rt. to O.B. @ Sta. 111+54 Rt.  
Remove existing metal guardrail.

- Demolish & remove existing pavement structure for new pavement structure.
- Demolish & remove existing pavement structure for shoulder reconstruction.
- Cold Planing areas



| FED. ROAD<br>DIST. NO. | STATE | FED. AID<br>PROJ. NO. | FISCAL<br>YEAR | SHEET<br>NO. | TOTAL<br>SHEETS |
|------------------------|-------|-----------------------|----------------|--------------|-----------------|
| HAWAII                 | HAW.  | BR-056-1(51)          | 2008           | 35           | 284             |

TRUE NORTH  
Scale: 1" = 100'



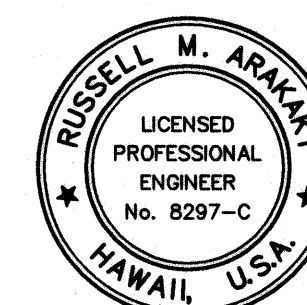
BEGIN PROJECT  
F.A.P. No. BR-056-1(51)  
Sta. 388+00

END PROJECT  
F.A.P. No. BR-056-1(51)  
Sta. 408+42.76

## GENERAL PLAN

SCALE: 1" = 100'

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



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ME OR UNDER MY SUPERVISION

*Russell M. Aramaki*  
ParEn, Inc.  
dba PARK ENGINEERING  
LICENSE EXPIRES 4-30-10

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

## GENERAL PLAN

KUHIU HIGHWAY, SHORT TERM IMPROVEMENTS

Wailua Cane Haul Bridge Widening

Fed. Aid Project No. BR-056-1(51)

Scale: As Noted

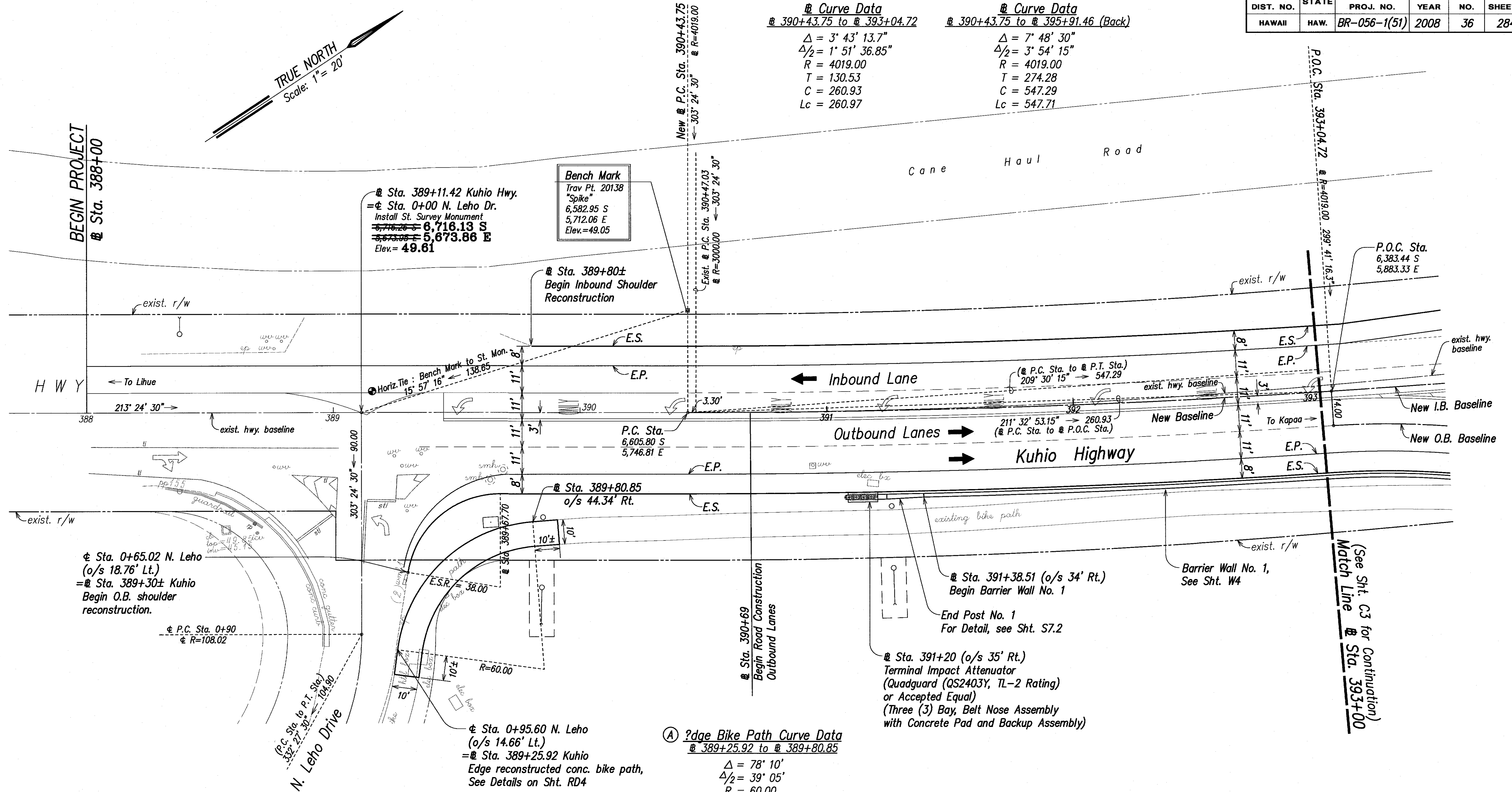
Date: MAY 2008

SHEET No. C1 OF C11 SHEETS



| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | BR-056-1(51)       | 2008        | 36        | 284          |

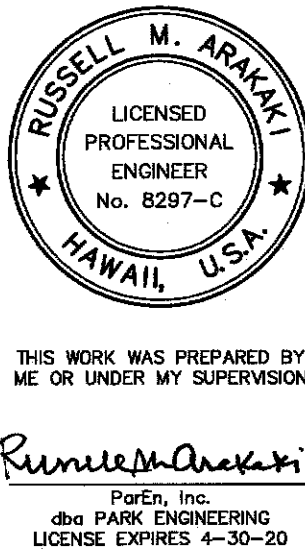
| Curve Data                       | Curve Data                        |
|----------------------------------|-----------------------------------|
| # 390+43.75 to # 393+04.72       | # 390+43.75 to # 395+91.46 (Back) |
| $\Delta = 3^\circ 43' 13.7''$    | $\Delta = 7^\circ 48' 30''$       |
| $\Delta/2 = 1^\circ 51' 36.85''$ | $\Delta/2 = 3^\circ 54' 15''$     |
| $R = 4019.00$                    | $R = 4019.00$                     |
| $T = 130.53$                     | $T = 274.28$                      |
| $C = 260.93$                     | $C = 547.29$                      |
| $Lc = 260.97$                    | $Lc = 547.71$                     |



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

**ROADWAY PLAN**  
Scale: 1" = 20'

| LEGEND FOR AS-BUILT POSTINGS |                                     |
|------------------------------|-------------------------------------|
|                              | Squiggly line for as-built deletion |
|                              | Double line for as-built deletion   |
|                              | Roadway Text for as-built posting   |



STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**ROADWAY PLAN**

KUHIO HIGHWAY, SHORT TERM IMPROVEMENTS  
Wailua Cane Haul Bridge Widening  
Fed. Aid Project No. BR-056-1(51)  
Scale: As Noted Date: MAY 2008

SHEET No. C2 OF C11 SHEETS

"AS-BUILT"



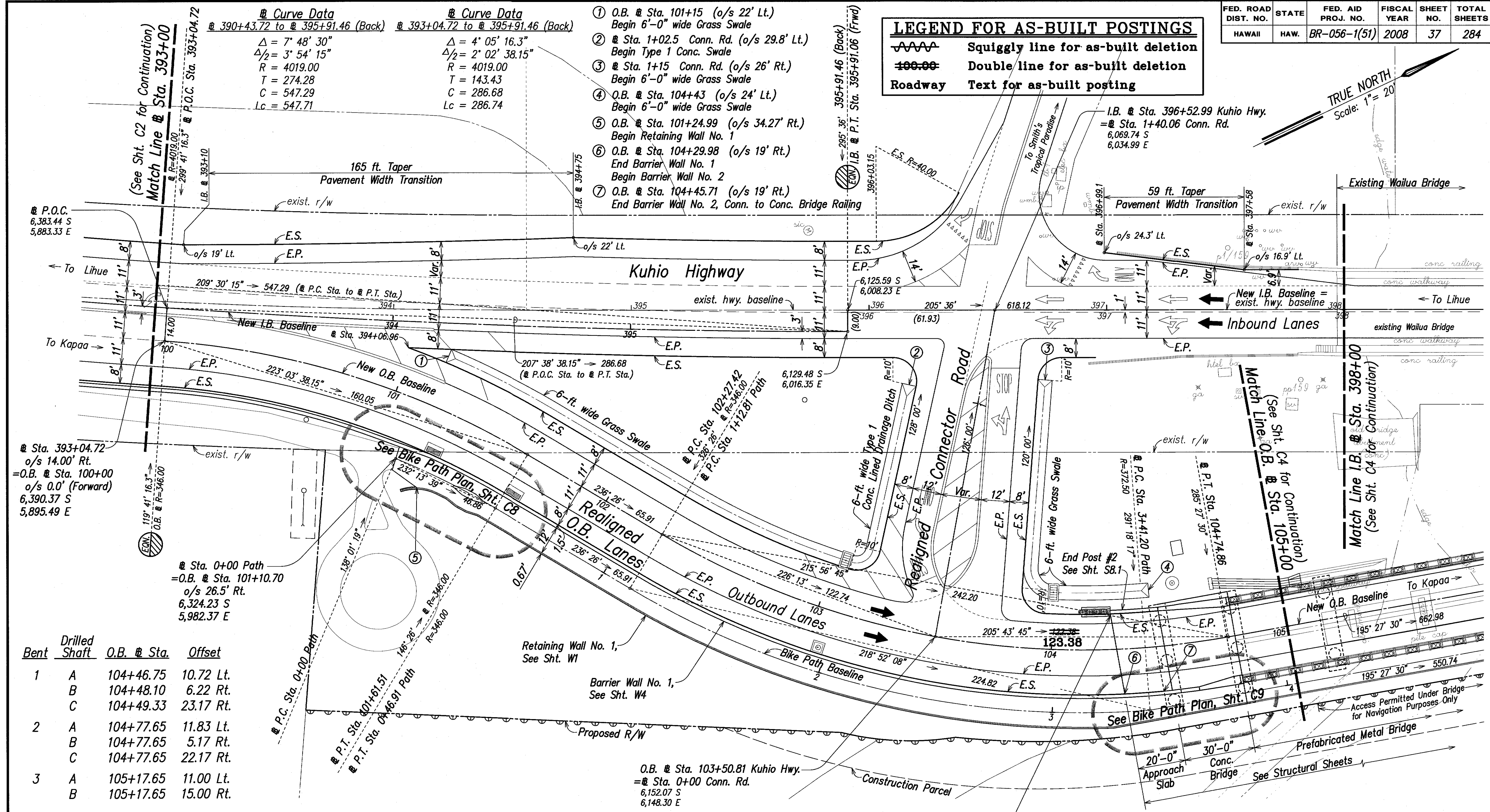
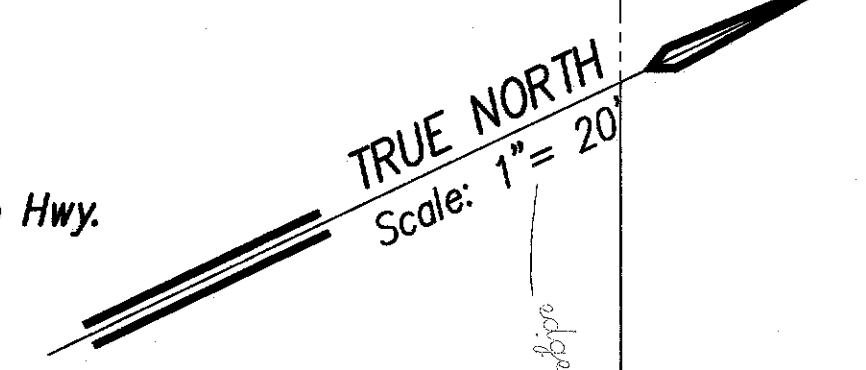
| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | BR-056-1(51)       | 2008        | 37        | 284          |

**LEGEND FOR AS-BUILT POSTINGS**

Squiggly line for as-built deletion

Double line for as-built deletion

Roadway Text for as-built posting



| Bent | Drilled Shaft | O.B. Sta. | Offset    |
|------|---------------|-----------|-----------|
| 1    | A             | 104+46.75 | 10.72 Lt. |
|      | B             | 104+48.10 | 6.22 Rt.  |
|      | C             | 104+49.33 | 23.17 Rt. |
| 2    | A             | 104+77.65 | 11.83 Lt. |
|      | B             | 104+77.65 | 5.17 Rt.  |
|      | C             | 104+77.65 | 22.17 Rt. |
| 3    | A             | 105+17.65 | 11.00 Lt. |
|      | B             | 105+17.65 | 15.00 Rt. |

**NOTE:**  
See Grading Plan GP2 for Edge of Shoulder Curve Data.

**NOTE:**  
Origin of Azimuths: "NONOU" Δ  
Coordinates referred to: "NONOU" Δ  
Denotes No Access Permitted  
Denotes Limited Access as Noted on Plan

**ROADWAY PLAN**  
Scale: 1" = 20'

**RUSSELL M. ARANKI**  
LICENSED PROFESSIONAL ENGINEER  
No. 8297-C  
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION  
RUSSELL M. ARANKI  
RUSSELL M. ARANKI & ASSOCIATES, INC.  
600 PARK ENGINEERING  
LICENSE EXPIRES 4-30-20

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**ROADWAY PLAN**

KUHIO HIGHWAY, SHORT TERM IMPROVEMENTS  
Wailua Cane Haul Bridge Widening  
Fed. Aid Project No. BR-056-1(51)  
Scale: As Noted Date: MAY 2008  
SHEET No. C3 OF C11 SHEETS

"AS-BUILT"



Curve Data

④ 402+09.18 to ④ 403+33.71

$\Delta = 5^\circ 06'$

$\Delta/2 = 2^\circ 33'$

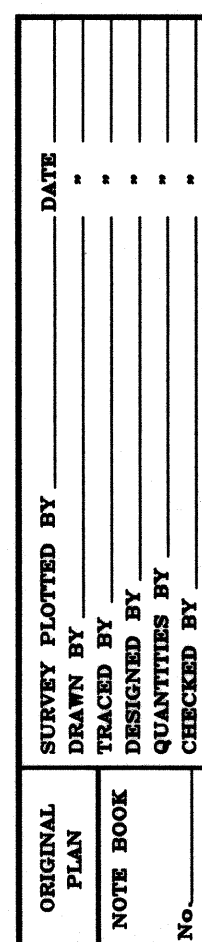
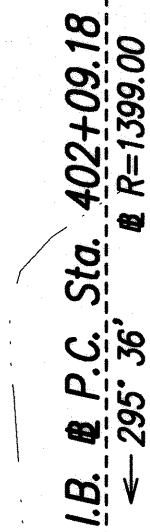
$R = 1399.00$

$T = 62.30$

$C = 124.49$

$L_c = 124.53$

- ① I.B. ￼ Sta. 402+19.6± (o/s 18.25' Rt.)  
Begin 12'-0" Concrete End Post No. 6.  
Connect to Exist Concrete End Post.  
See Detail on Structural Sht. S12.1
- ② I.B. ￼ Sta. 402+31.4± (o/s 18.37' Rt.)  
Begin 25'-0" Type 3 Thrie Beam Guardrail.  
See Detail on Sht. GR5
- ③ I.B. ￼ Sta. 402+56.1± (o/s 18.50' Rt.)  
Begin Strong Post Modified Thrie Beam Guardrail.
- ④ O.B. ￼ Sta. 110+21.15 (o/s 15' Lt.)  
Begin Barrier Wall No. 4
- ⑤ O.B. ￼ Sta. 110+21.15 (o/s 10.5' Rt.)  
End Barrier Wall No. 3



**NOTE:**  
~~R~~ and  $\phi$  of New Bridge are not parallel  
to  $\phi$  of Existing Bridge.



THIS WORK WAS PREPARED  
ME OR UNDER MY SUPERVIS

*Russell M. Anshel*  
ParEn, Inc.  
dba PARK ENGINEERING  
LICENSE EXPIRES 4-30-11

## ROADWAY PLAN

Scale: As Noted                      Date: MAY 2008

**SHEET No. C4 OF C11 SHEETS**



| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | BR-056-1(51)       | 2008        | C.O.39    | 284          |

**Curve Data**  
 402+09.18 to 403+33.71  
 $\Delta = 5^\circ 06'$   
 $\Delta/2 = 2^\circ 33'$   
 $R = 1399.00$   
 $T = 62.30$   
 $C = 124.49$   
 $L_c = 124.53$

Match Line I.B. @ Sta. 403+00  
 (See Sht. C4 for Continuation)

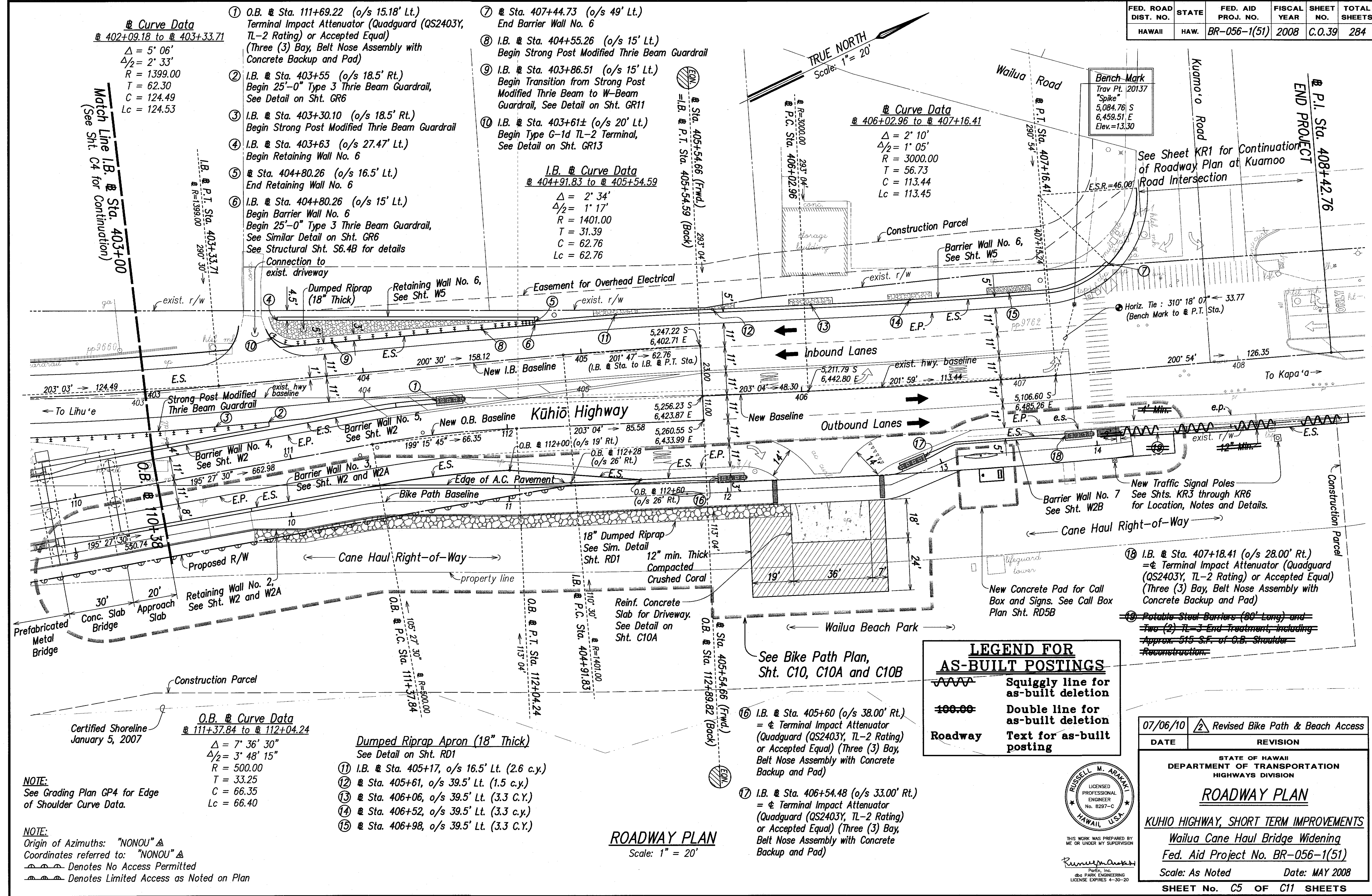
- ① O.B. @ Sta. 111+69.22 (o/s 15.18' Lt.)  
Terminal Impact Attenuator (Quadguard (QS2403Y, TL-2 Rating) or Accepted Equal)  
(Three (3) Bay, Belt Nose Assembly with Concrete Backup and Pad)
- ② I.B. @ Sta. 403+55 (o/s 18.5' Rt.)  
Begin 25'-0" Type 3 Thrie Beam Guardrail,  
See Detail on Sht. GR6
- ③ I.B. @ Sta. 403+30.10 (o/s 18.5' Rt.)  
Begin Strong Post Modified Thrie Beam Guardrail
- ④ I.B. @ Sta. 403+63 (o/s 27.47' Lt.)  
Begin Retaining Wall No. 6
- ⑤ Sta. 404+80.26 (o/s 16.5' Lt.)  
End Retaining Wall No. 6
- ⑥ I.B. @ Sta. 404+80.26 (o/s 15' Lt.)  
Begin Barrier Wall No. 6  
Begin 25'-0" Type 3 Thrie Beam Guardrail,  
See Similar Detail on Sht. GR6  
See Structural Sht. S6.4B for details
- ⑦ Sta. 407+44.73 (o/s 49' Lt.)  
End Barrier Wall No. 6
- ⑧ I.B. @ Sta. 404+55.26 (o/s 15' Lt.)  
Begin Strong Post Modified Thrie Beam Guardrail
- ⑨ I.B. @ Sta. 403+86.51 (o/s 15' Lt.)  
Begin Transition from Strong Post  
Modified Thrie Beam to W-Beam  
Guardrail, See Detail on Sht. GR11
- ⑩ I.B. @ Sta. 403+61± (o/s 20' Lt.)  
Begin Type G-1d TL-2 Terminal,  
See Detail on Sht. GR13

**I.B. Curve Data**  
 404+91.83 to 405+54.59  
 $\Delta = 2^\circ 34'$   
 $\Delta/2 = 1^\circ 17'$   
 $R = 1401.00$   
 $T = 31.39$   
 $C = 62.76$   
 $L_c = 62.76$

**Curve Data**  
 406+02.96 to 407+16.41  
 $\Delta = 2^\circ 10'$   
 $\Delta/2 = 1^\circ 05'$   
 $R = 3000.00$   
 $T = 56.73$   
 $C = 113.44$   
 $L_c = 113.45$

**Bench-Mark**  
 Trav Pt. 20137  
 "Spike"  
 5,084.76 S  
 6,459.51 E  
 Elev.=13.30

See Sheet KR1 for Continuation  
 of Roadway Plan at Kuamoo  
 Road Intersection



**O.B. Curve Data**  
 111+37.84 to 112+04.24  
 $\Delta = 7^\circ 36' 30''$   
 $\Delta/2 = 3^\circ 48' 15''$   
 $R = 500.00$   
 $T = 33.25$   
 $C = 66.35$   
 $L_c = 66.40$

- Dumped Riprap Apron (18" Thick)**  
 See Detail on Sht. RD1
- ⑪ I.B. @ Sta. 405+17, o/s 16.5' Lt. (2.6 c.y.)
  - ⑫ Sta. 405+61, o/s 39.5' Lt. (1.5 c.y.)
  - ⑬ Sta. 406+06, o/s 39.5' Lt. (3.3 C.Y.)
  - ⑭ Sta. 406+52, o/s 39.5' Lt. (3.3 c.y.)
  - ⑮ Sta. 406+98, o/s 39.5' Lt. (3.3 C.Y.)

**ROADWAY PLAN**  
 Scale: 1" = 20'

**LEGEND FOR AS-BUILT POSTINGS**

~~~~~ Squiggly line for as-built deletion

== Double line for as-built deletion

Text for as-built posting

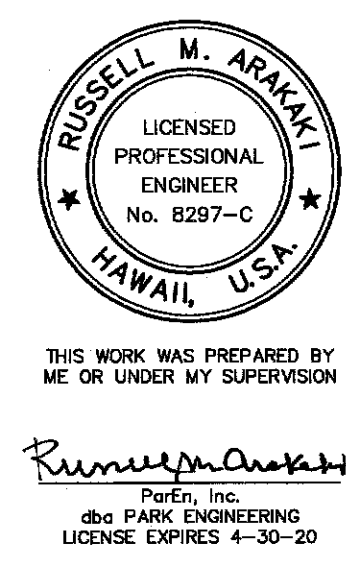
| DATE | REVISION |
|----------|------------------------------------|
| 07/06/10 | 2 Revised Bike Path & Beach Access |

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

ROADWAY PLAN

KUHIŌ HIGHWAY, SHORT TERM IMPROVEMENTS
 Wailua Cane Haul Bridge Widening
 Fed. Aid Project No. BR-056-1(51)
 Scale: As Noted Date: MAY 2008

SHEET No. C5 OF C11 SHEETS

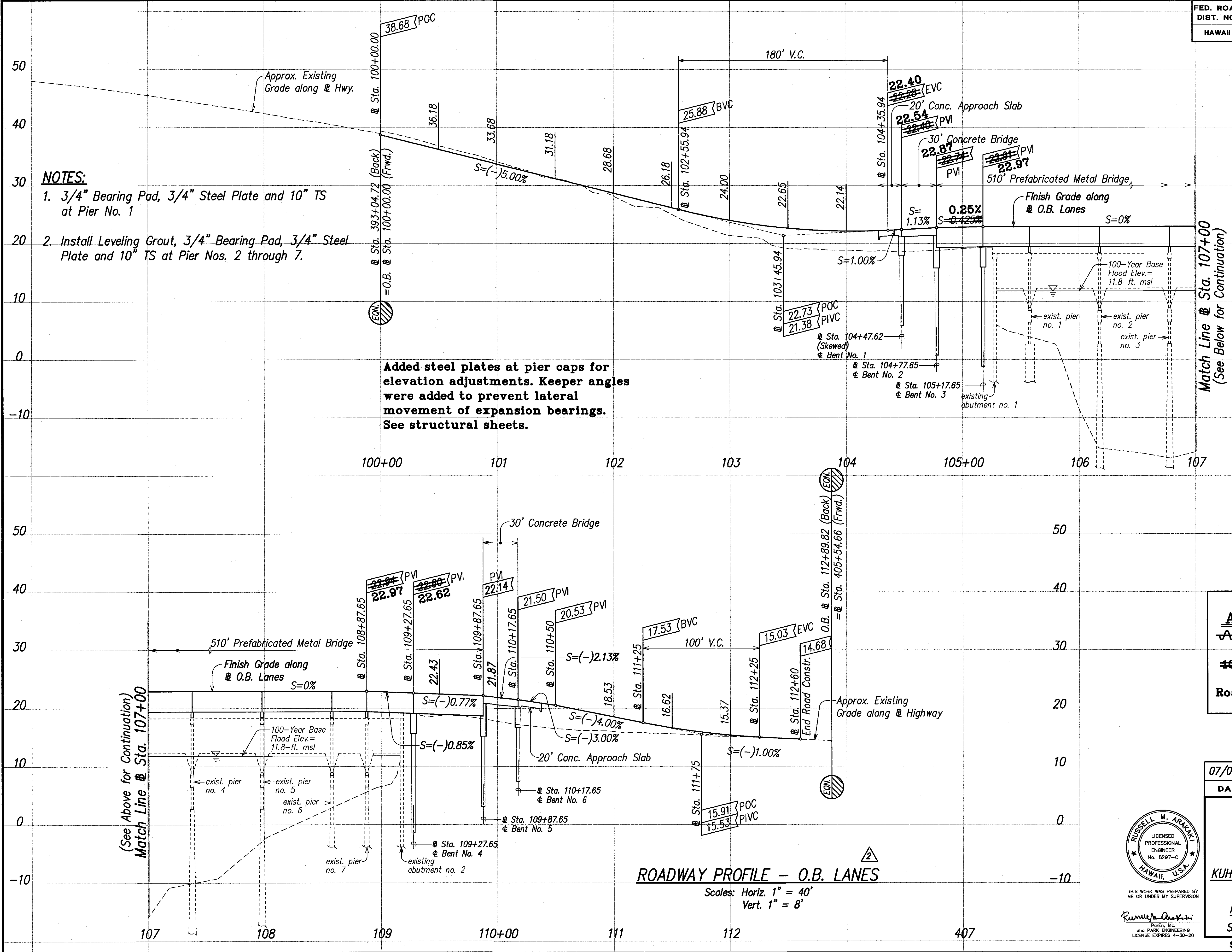


| | |
|-------------------|--|
| DATE | |
| SURVEY PLOTTED BY | |
| DRAWN BY | |
| CHECKED BY | |
| ORIGINAL PLAN | |
| NOTE BOOK | |
| QUANTITIES BY | |
| CHECKED BY | |
| NO. | |

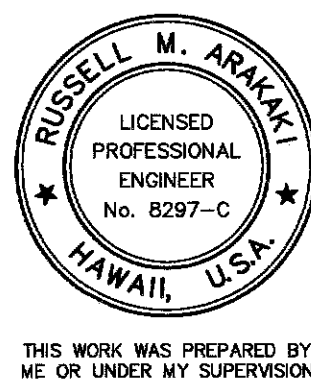
NOTE:
 See Grading Plan GP4 for Edge
 of Shoulder Curve Data.

NOTE:
 Origin of Azimuths: "NONOU" Δ
 Coordinates referred to: "NONOU" Δ
 --- Denotes No Access Permitted
 --- Denotes Limited Access as Noted on Plan

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII | HAW. | BR-056-1(51) | 2008 | C.O.40 | 284 |



| | |
|---------------|------|
| ORIGINAL PLAN | DATE |
| DRAWN BY | |
| CHECKED BY | |
| NOTED BY | |
| REVISIONS | |
| NO. | |



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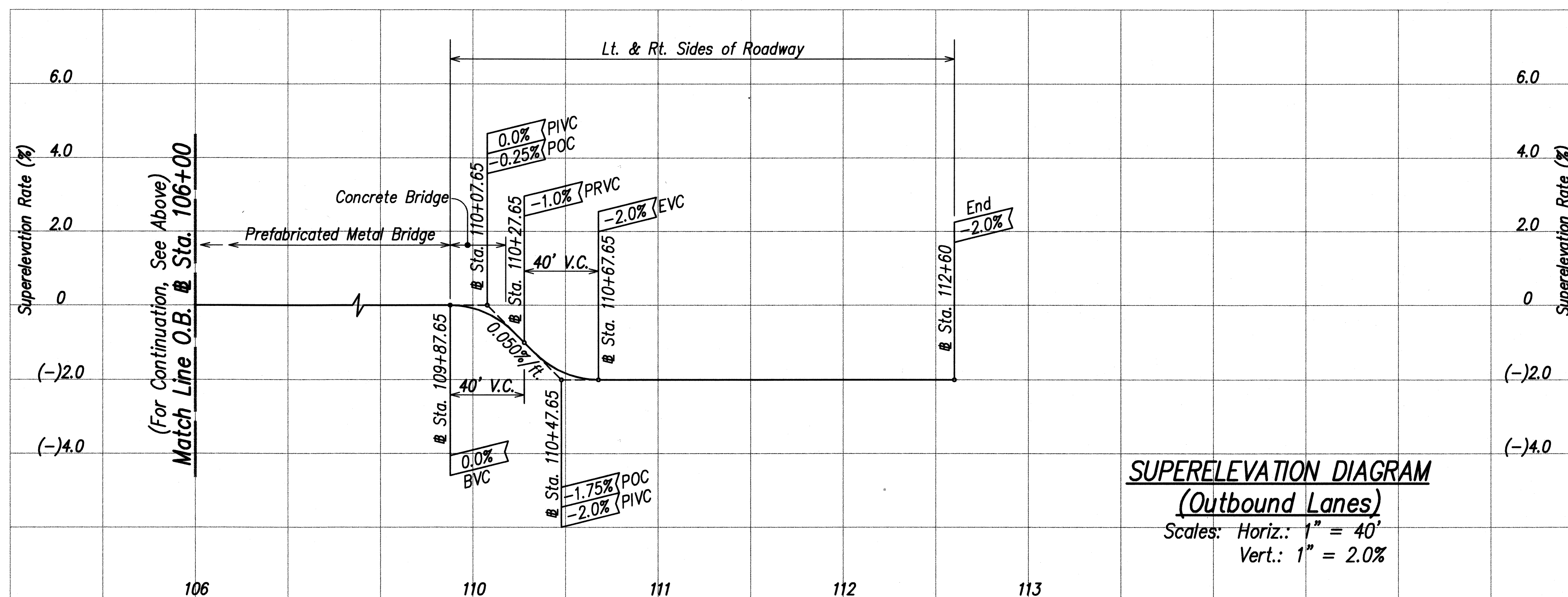
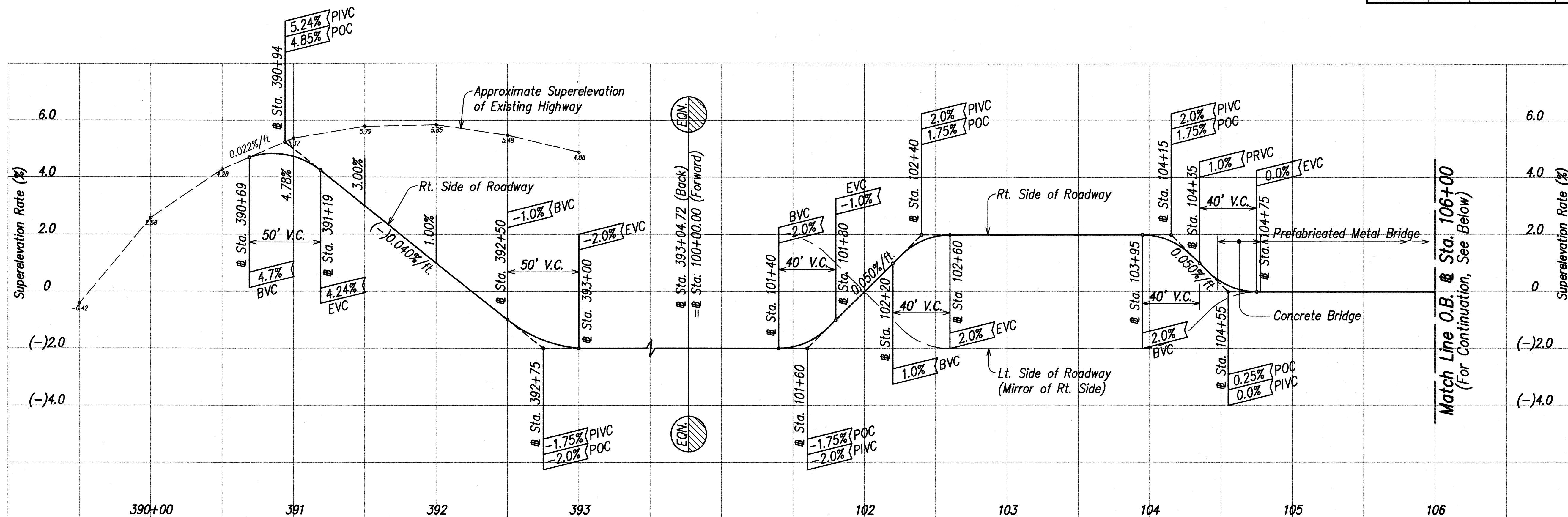
Russell M. Araki

For Engr. Inc.
480 PARK ENGINEERING
LICENSE EXPIRES 4-30-20

"AS-BUILT"

C.O. 40

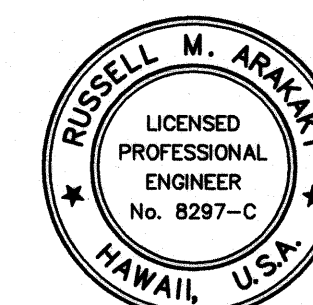
| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII | HAW. | BR-056-1(51) | 2008 | 41 | 284 |



SUPERELEVATION DIAGRAM

(Outbound Lanes)

Scales: Horiz.: 1" = 40'
Vert.: 1" = 2.0%



THIS WORK WAS PREPARED BY
ME OR UNDER MY SUPERVISION

Russell M. Araki

For En, Inc.
600 PARK ENGINEERING
LICENSE EXPIRES 4-30-10

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

SUPERELEVATION DIAGRAM

KUHIU HIGHWAY, SHORT TERM IMPROVEMENTS

Wailua Cane Haul Bridge Widening

Fed. Aid Project No. BR-056-1(51)

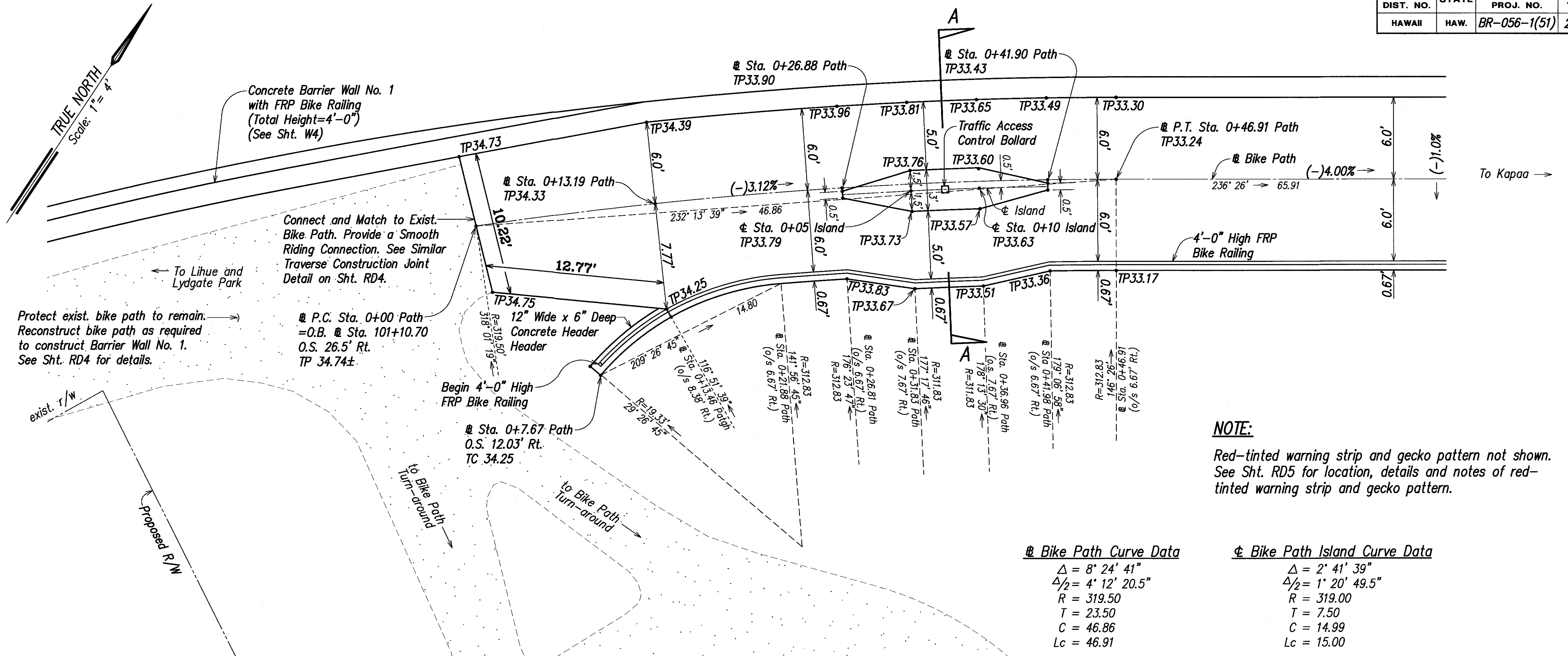
Scale: As Noted

Date: MAY 2008

SHEET No. C7 OF C11 SHEETS

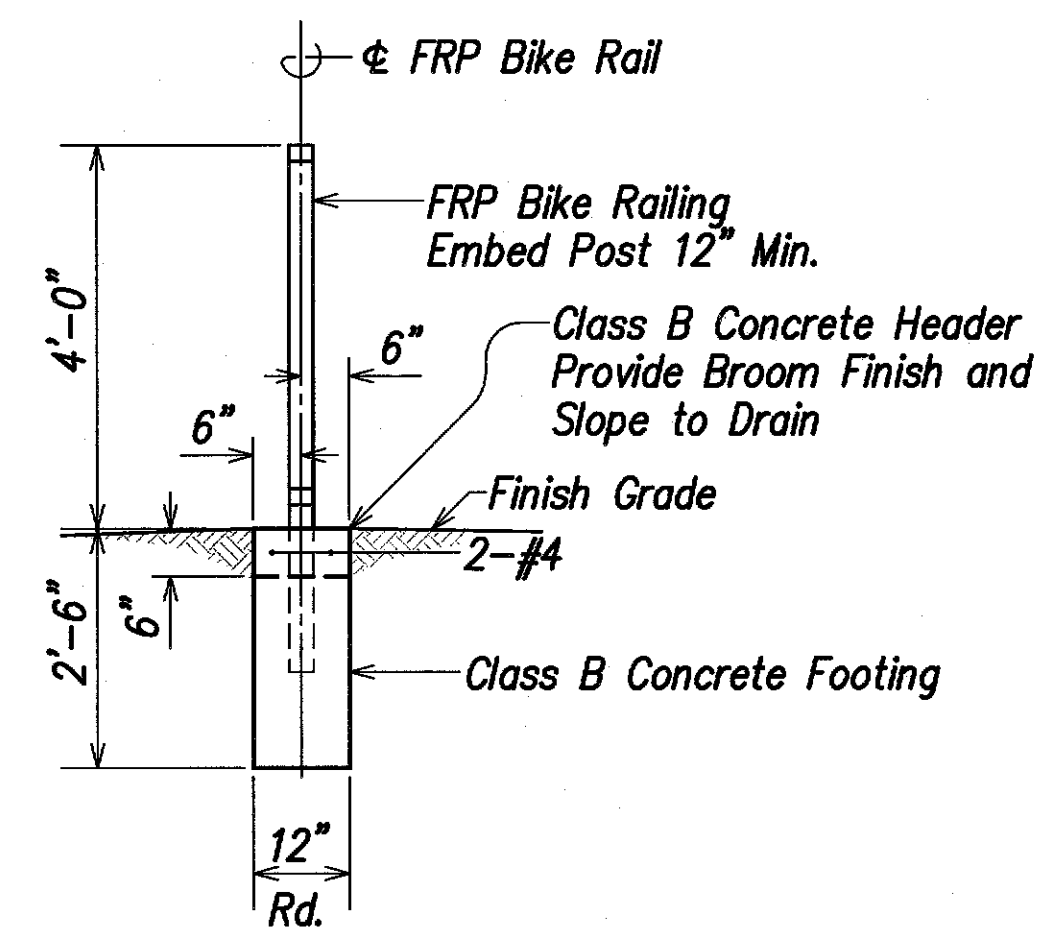
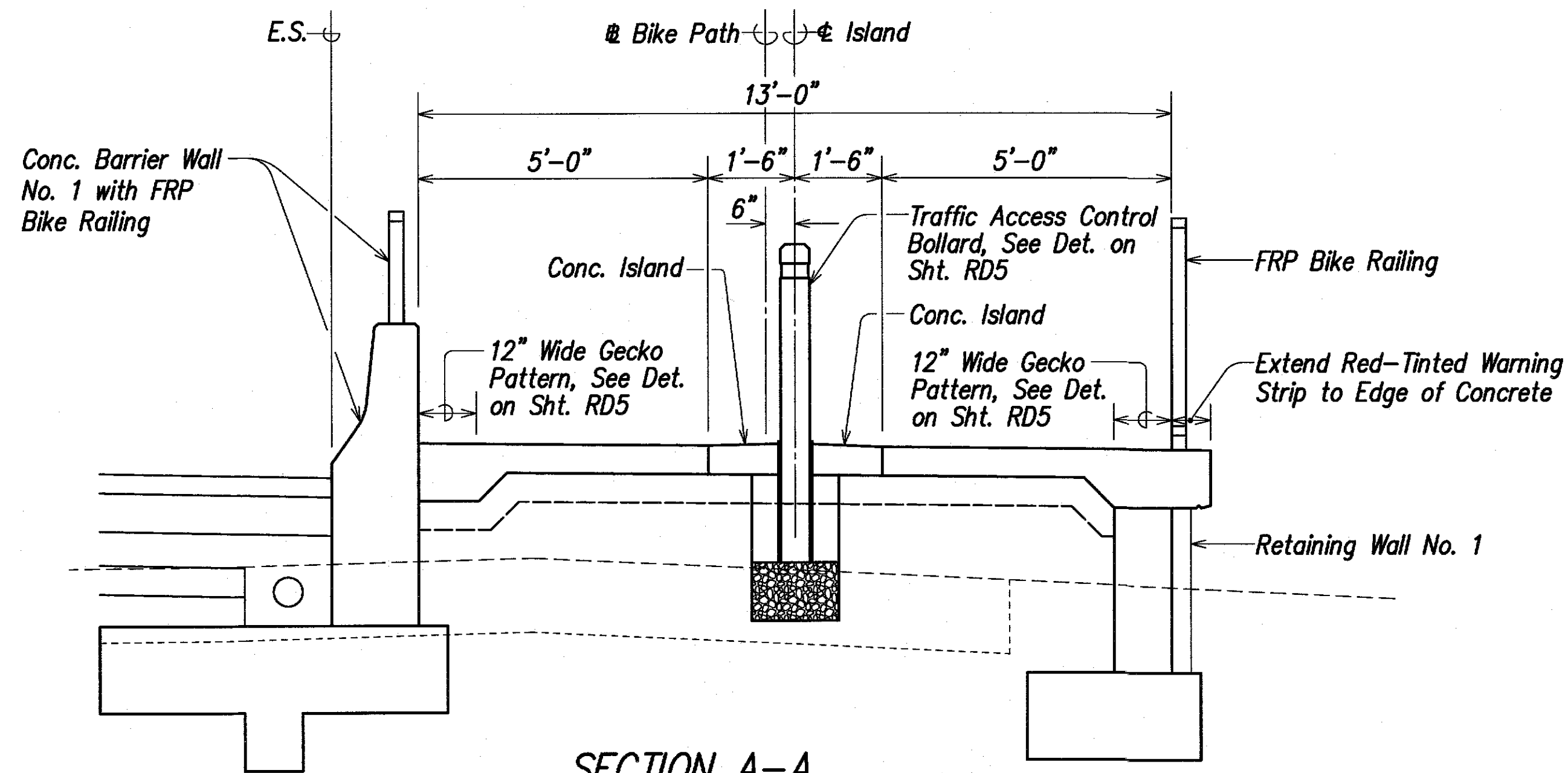
| | |
|-------------------|------|
| SURVEY PLOTTED BY | DATE |
| DRAWN BY | |
| DESIGNED BY | |
| CHECKED BY | |
| ORIGINAL PLAN | |
| NOTE BOOK | |
| No. | |

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII | HAW. | BR-056-1(51) | 2008 | 42 | 284 |



PLAN - BIKE PATH

Scale: 1" = 4'



FRP POST AND CONCRETE HEADER DETAIL

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

| LEGEND FOR AS-BUILT POSTINGS | |
|------------------------------|-------------------------------------|
| | Squiggly line for as-built deletion |
| | Double line for as-built deletion |
| | Text for as-built posting |



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Russell M. Araki
ParEn, Inc.
280 PARK ENGINEERING
LICENSE EXPIRES 4-30-20

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PLAN - BIKE PATH

KUHIO HIGHWAY, SHORT TERM IMPROVEMENTS

Wailua Cane Haul Bridge Widening

Fed. Aid Project No. BR-056-1(51)

Scale: As Noted

Date: MAY 2008

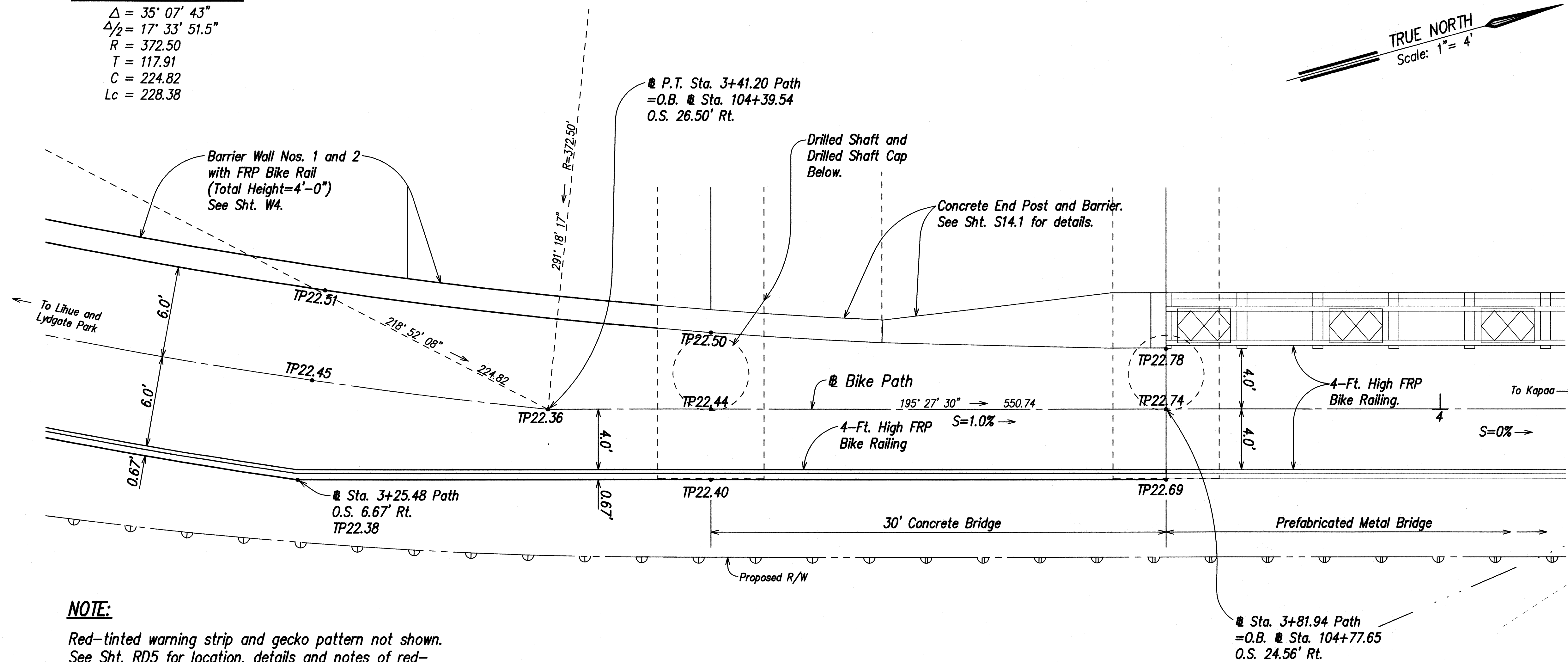
SHEET No. C8 OF C11 SHEETS

"AS-BUILT"

| FED. ROAD
DIST. NO. | STATE | FED. AID
PROJ. NO. | FISCAL
YEAR | SHEET
NO. | TOTAL
SHEETS |
|------------------------|-------|-----------------------|----------------|--------------|-----------------|
| HAWAII | HAW. | BR-056-1(51) | 2008 | 43 | 284 |

Bike Path Curve Data

$\Delta = 35^{\circ} 07' 43''$
 $\Delta/2 = 17^{\circ} 33' 51.5''$
 $R = 372.50$
 $T = 117.91$
 $C = 224.82$
 $Lc = 228.38$

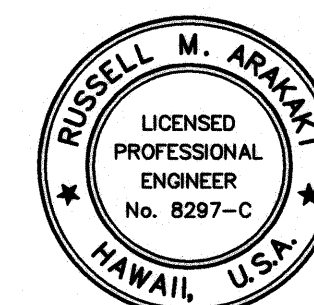
NOTE:

Red-tinted warning strip and gecko pattern not shown.
See Sht. RD5 for location, details and notes of red-tinted warning strip and gecko pattern.

PLAN - BIKE PATH

Scale: 1" = 4'

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

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For En. Inc.
dba PARK ENGINEERING
LICENSE EXPIRES 4-30-10STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISIONPLAN - BIKE PATH

KUHIO HIGHWAY, SHORT TERM IMPROVEMENTS

Wailua Cane Haul Bridge Widening

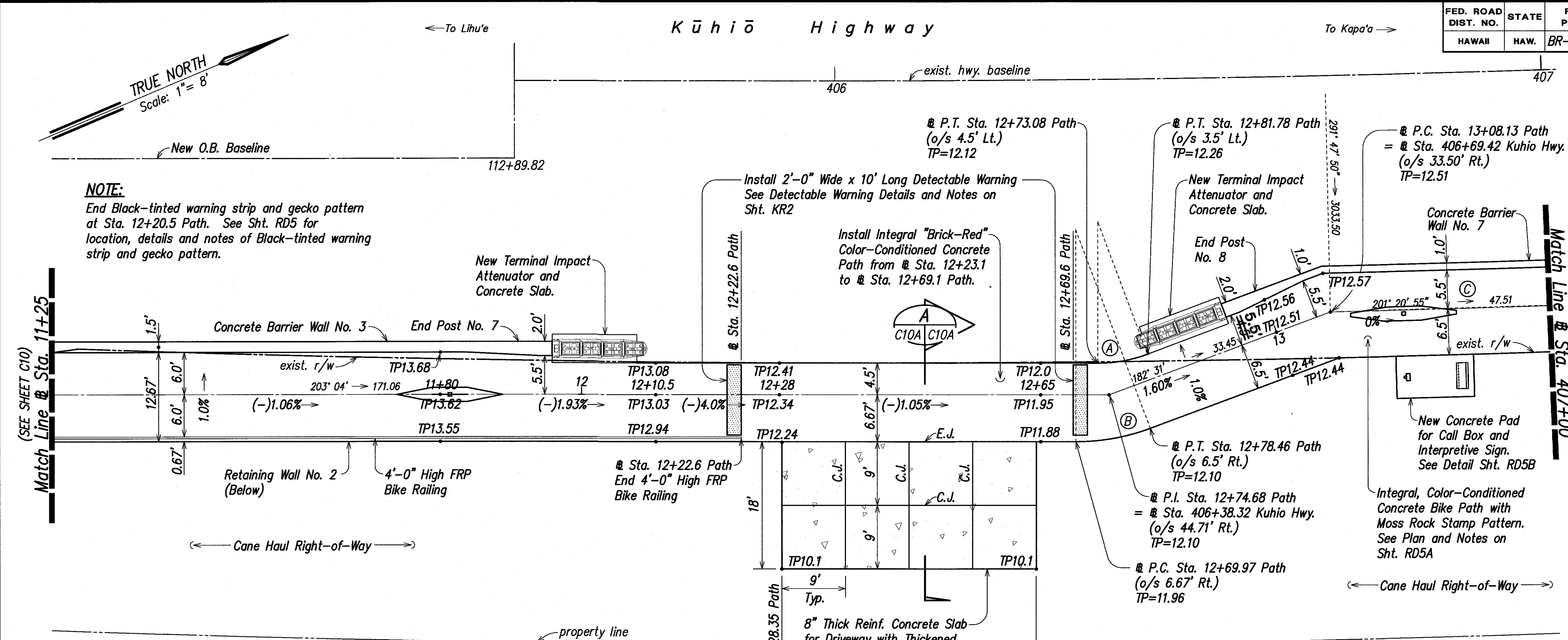
Fed. Aid Project No. BR-056-1(51)

Scale: As Noted

Date: MAY 2008

SHEET No. C9 OF C11 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-------------|--------------|
| HAWAII | HAW. | BR-056-1(51) | 2008 | C.O. 44 S-1 | 284 |



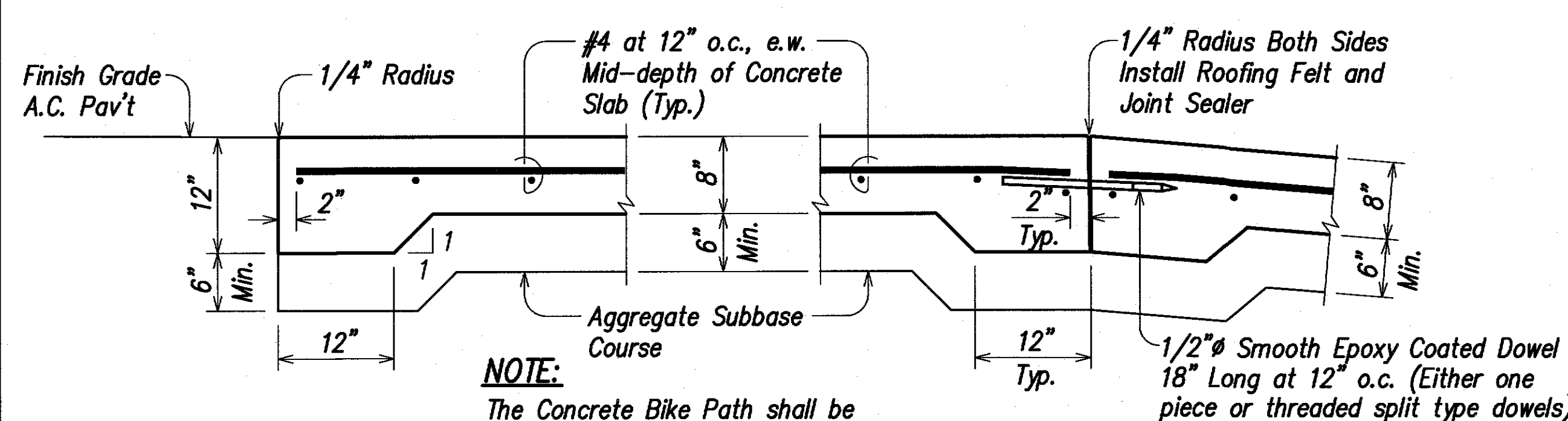
Edge of Bike Path Curve Data

① $\Delta = 20^\circ 33'$
 $\Delta/2 = 10^\circ 16' 30''$
 $R = 20.00$
 $T = 3.63$
 $C = 7.13$
 $L_c = 7.17$

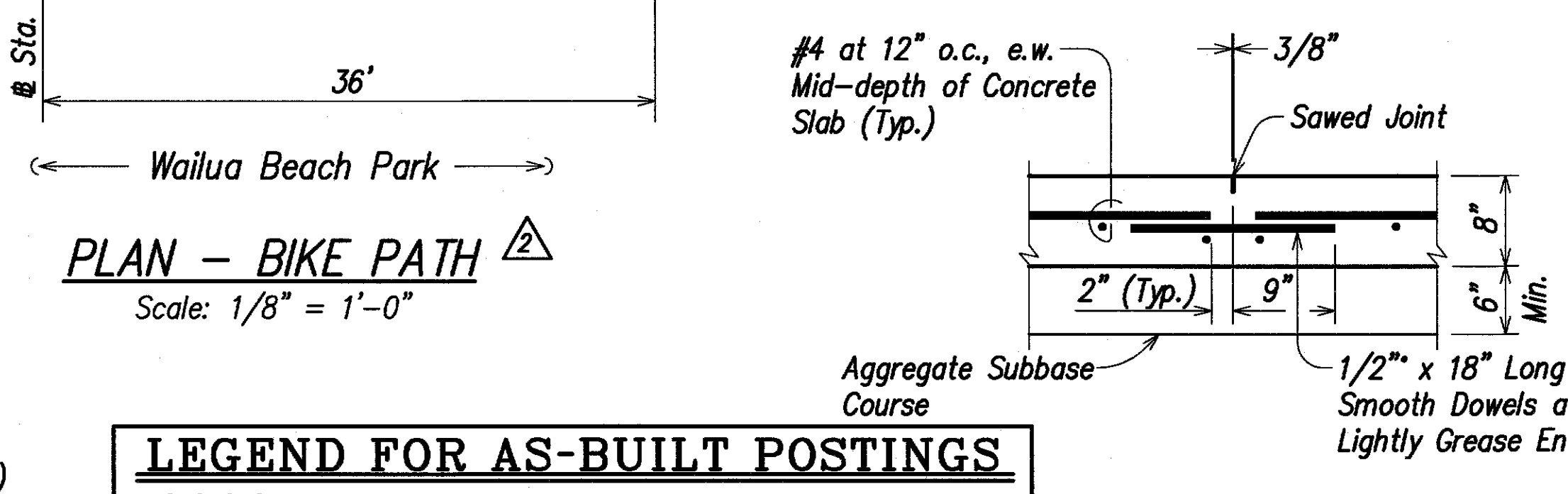
② $\Delta = 20^\circ 33'$
 $\Delta/2 = 10^\circ 16' 30''$
 $R = 30.00$
 $T = 5.44$
 $C = 10.70$
 $L_c = 10.76$

Bike Path Curve Data

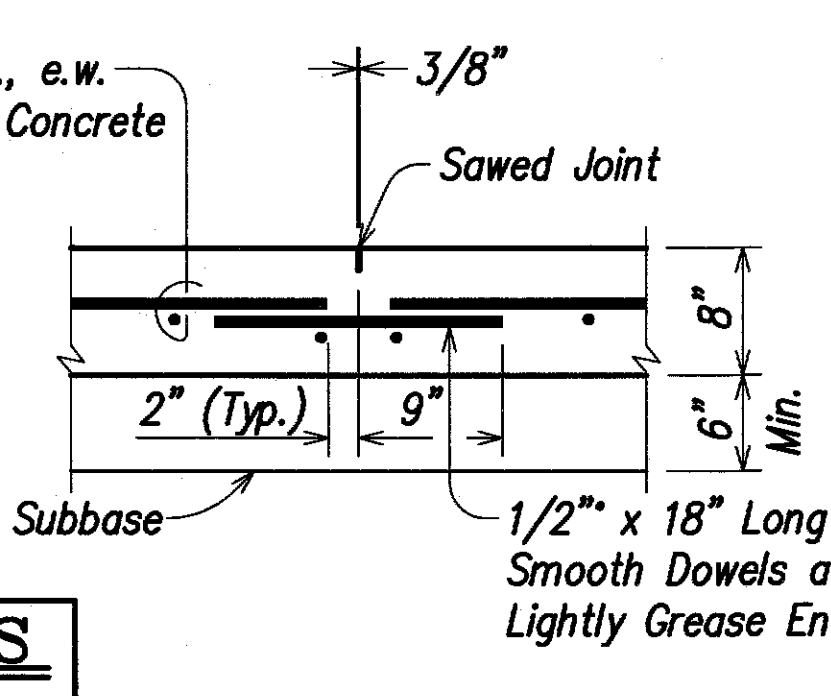
③ $\Delta = 00^\circ 53' 50''$
 $\Delta/2 = 0^\circ 26' 55''$
 $R = 3033.5$
 $T = 23.76$
 $C = 47.51$
 $L_c = 47.51$



INSET A
Not to Scale



INSET B
Not to Scale

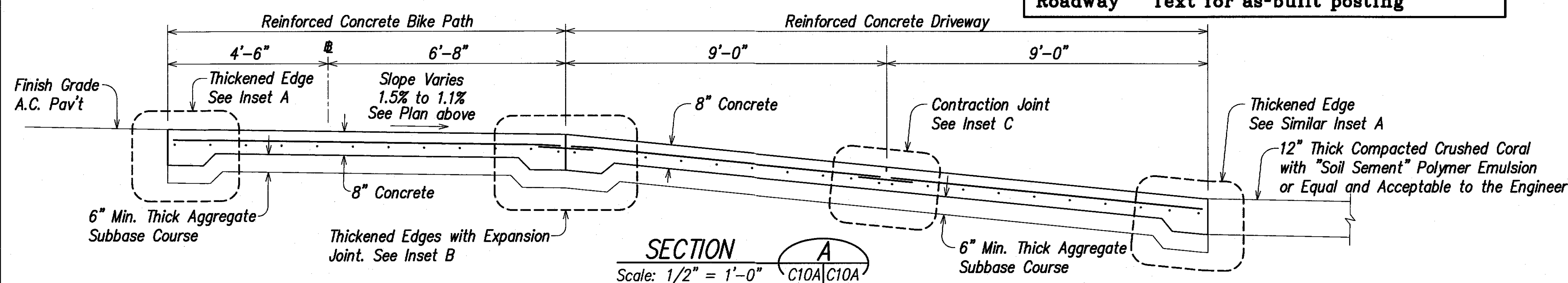


INSET C
Not to Scale

PLAN - BIKE PATH
Scale: 1/8" = 1'-0"

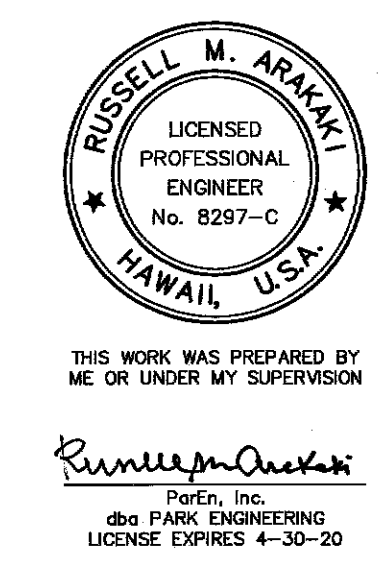
LEGEND FOR AS-BUILT POSTINGS

| | |
|--|-------------------------------------|
| | Squiggly line for as-built deletion |
| | Double line for as-built deletion |
| | Text for as-built posting |



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

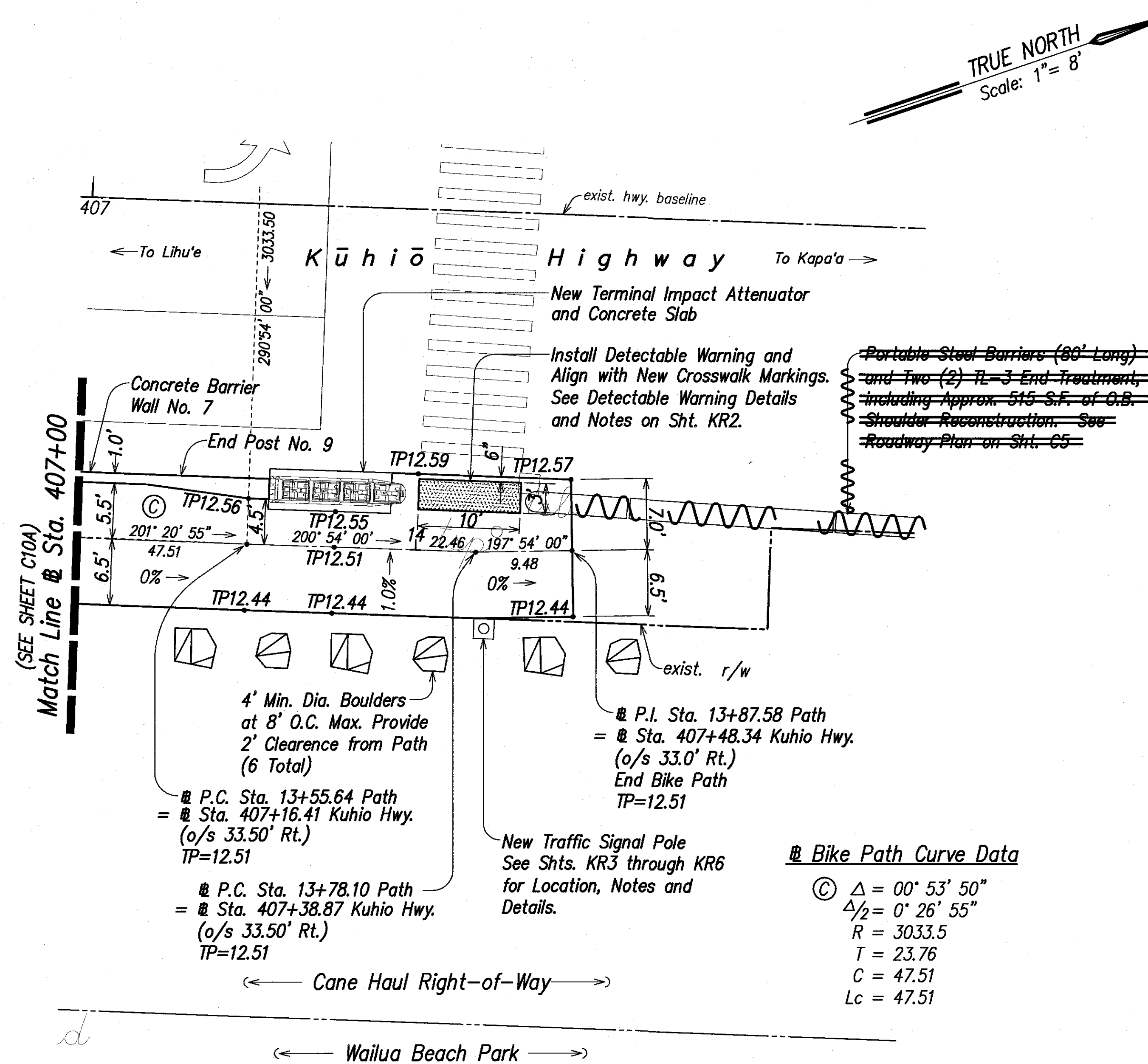
| | | |
|--|----------------|-------------------|
| 07/06/10 | 2 | Revised Bike Path |
| DATE | REVISION | |
| STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION | | |
| PLAN - BIKE PATH | | |
| KUHIO HIGHWAY, SHORT TERM IMPROVEMENTS | | |
| Wailua Cane Haul Bridge Widening | | |
| Fed. Aid Project No. BR-056-1(51) | | |
| Scale: As Noted | Date: MAY 2008 | |
| SHEET No. C10A OF C11 SHEETS | | |



"AS-BUILT"

C.O. 44 S-1

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-------------|--------------|
| HAWAII | HAW. | BR-056-1(51) | 2008 | C.O. 44 S-2 | 284 |



PLAN - BIKE PATH 2
Scale: 1/8" = 1'-0"

| LEGEND FOR AS-BUILT POSTINGS | |
|------------------------------|-------------------------------------|
| | Squiggly line for as-built deletion |
| | Double line for as-built deletion |
| Roadway | Text for as-built posting |

| | | |
|--|---|-------------------|
| 07/06/10 | 2 | Revised Bike Path |
| DATE | | REVISION |
| STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION | | |
| PLAN - BIKE PATH | | |
| KUHIO HIGHWAY, SHORT TERM IMPROVEMENTS | | |
| Wailua Cane Haul Bridge Widening | | |
| Fed. Aid Project No. BR-056-1(51) | | |
| Scale: As Noted Date: MAY 2008 | | |
| SHEET No. C10B OF C11 SHEETS | | |

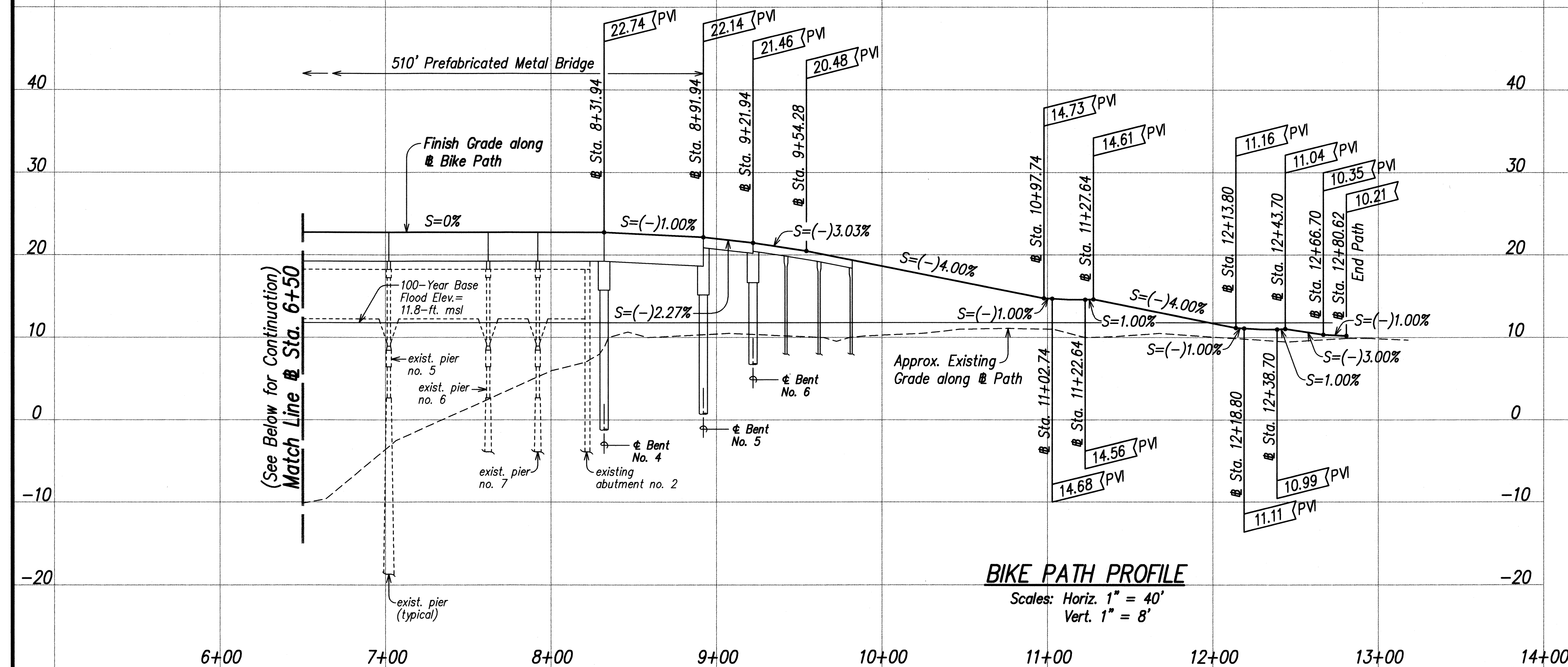
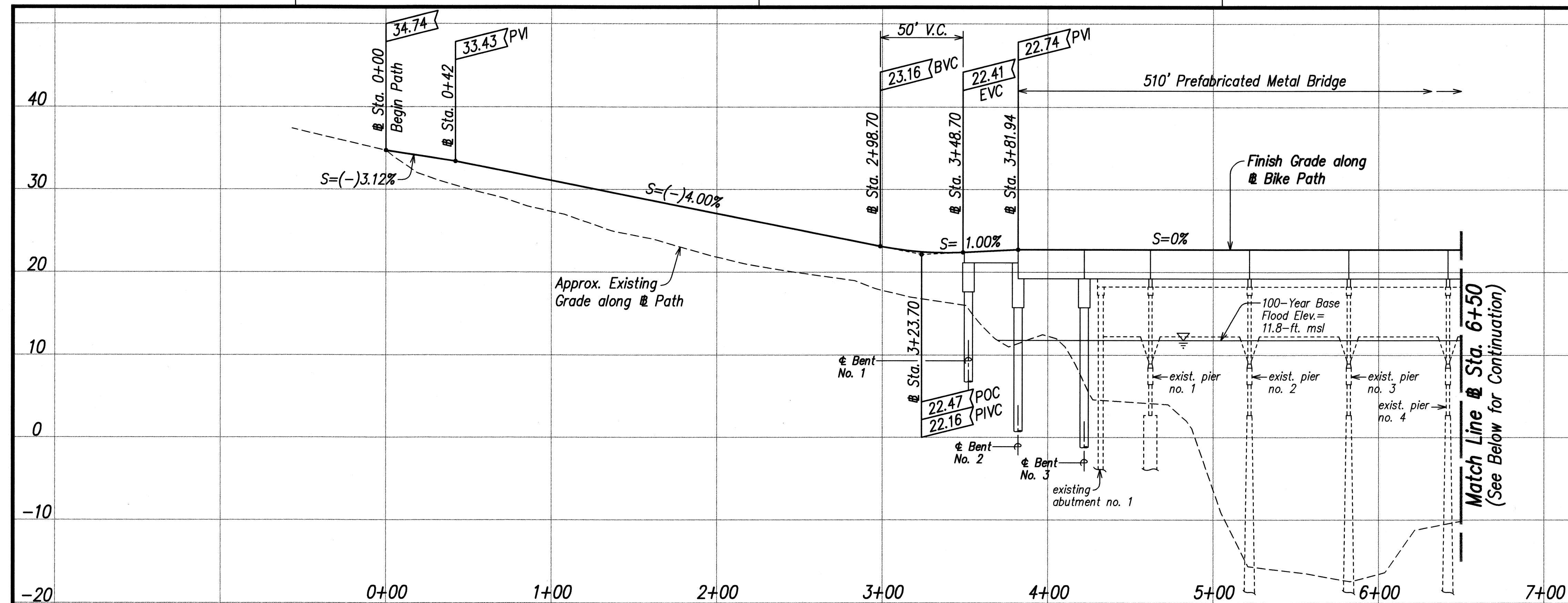
| | |
|-------------------|------|
| SURVEY PLOTTED BY | DATE |
| DESIGNED BY | |
| TRACED BY | |
| DESIGNED BY | |
| QUANTITIES BY | |
| CHECKED BY | |
| No. | |



"AS-BUILT"

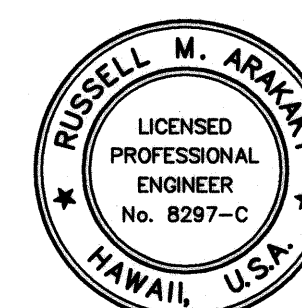
C.O. 44 S-2

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII | HAW. | BR-056-1(51) | 2008 | 45 | 284 |



BIKE PATH PROFILE

Scales: Horiz. 1" = 40'
Vert. 1" = 8'



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RUSSELL M. ARAKI
PAREN, INC.
100 PARK ENGINEERING
LICENSE EXPIRES 4-30-10

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

BIKE PATH PROFILE

KUHIO HIGHWAY, SHORT TERM IMPROVEMENTS
Wailua Cane Haul Bridge Widening
Fed. Aid Project No. BR-056-1(51)

Scale: As Noted Date: MAY 2008

SHEET No. C11 OF C11 SHEETS