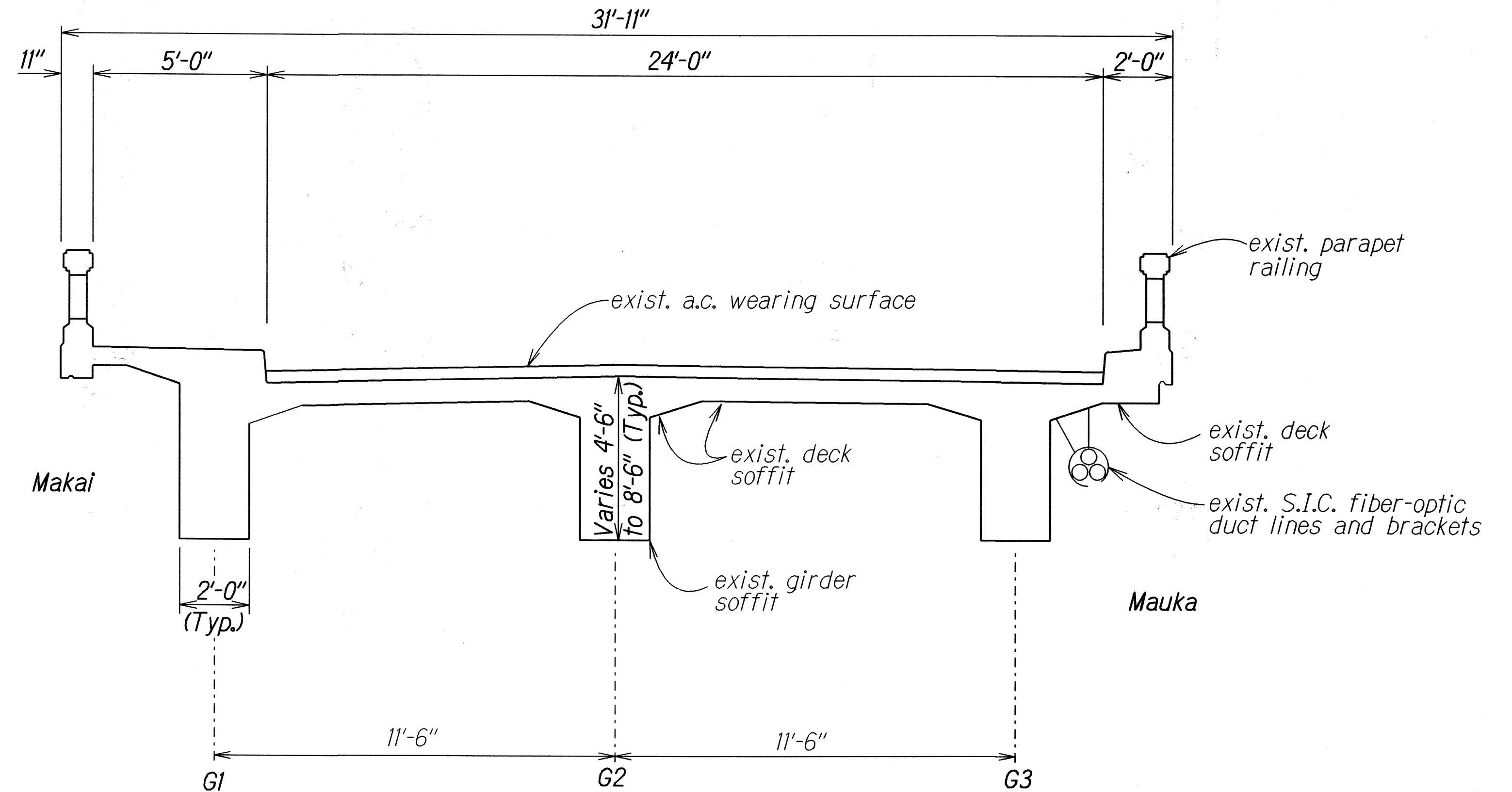


FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	50C-02-07M	2008	8	14



TYPICAL BRIDGE DECK SECTION - LOOKING TOWARD WAIMEA

Scale: $\frac{3}{8}''=1'$

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
DRAWSN. BY	PLACED BY	4/2008
DESIGNED BY	QUANTITIES BY	
NOTE BOOK	KEL	
CHECKED BY		

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TYPICAL BRIDGE DECK SECTION
KAUMUALII HIGHWAY
Spall Repairs at Wahiawa Stream Bridge
Project No. 50C-02-07M

Scale: $\frac{3}{8}''=1'-0''$ Date: April 2008

SHEET No. 1 OF 1 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	50C-02-07M	2008	9	13

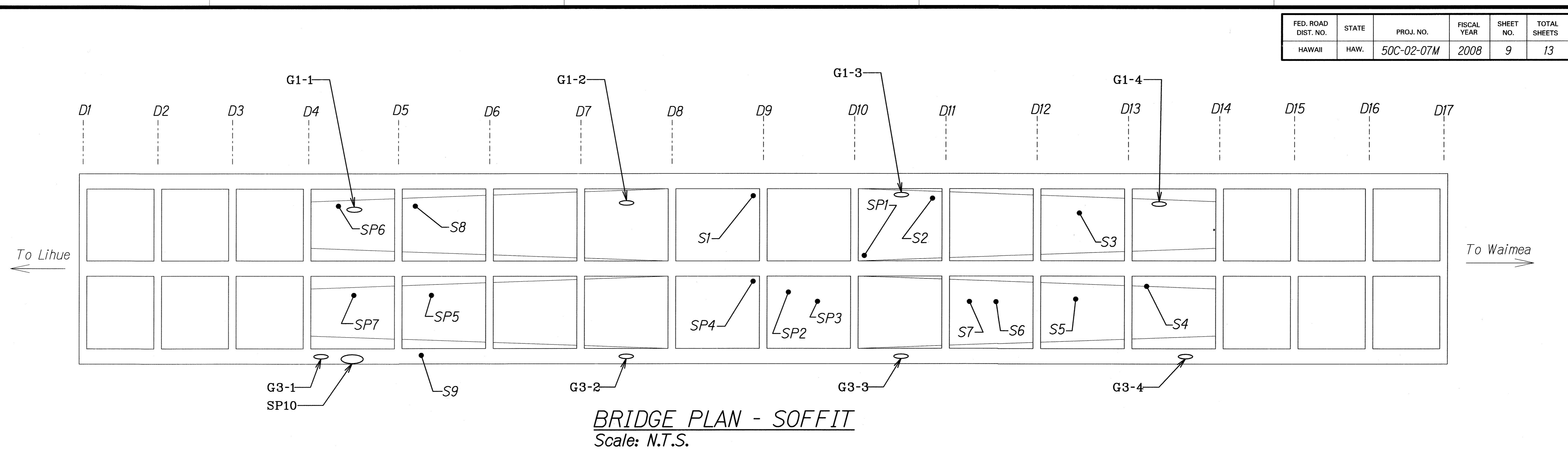


TABLE "A"			
Spall No.	Spall Size (ft x ft)	Area (sf)	Location / Remarks
S1	1.5 x 2.0	3.0	between G1 and G2, and D8 and D9
S2	2.0 x 4.0	8.0	between G1 and G2, and D10 and D11, exposed rebars
S3	1.5 x 12.0	18.0	between G1 and G2, and D12 and D13
S4	3.0 x 4.0	12.0	between G2 and G3, and D13 and D14, exposed stirrup
S5	3.0 x 4.0	12.0	between G2 and G3, and D12 and D13
S6	2.0 x 4.0	8.0	between G2 and G3, and D11 and D12
S7	1.5 x 2.0	3.0	between G2 and G3, and D11 and D12
S8	1.5 x 3.0	4.5	between G1 and G2, and D5 and D6
S9	2.0 x 5.0	10.0	G3 deck overhang between D5 and D6, exposed rebars
SP1	1.5 x 2.0	3.0	between G1 and G2, and D10 and D11
SP2	3.0 x 7.0	21.0	between G2 and G3, and D9 and D10
SP3	1.5 x 6.0	9.0	between G2 and G3, and D9 and D10
SP4	1.0 x 4.0	4.0	between G2 and G3, and D8 and D9
SP5	2.0 x 4.0	8.0	between G2 and G3, and D5 and D6
SP6	3.0 x 4.0	12.0	between G1 and G2, and D4 and D5
SP7	2.0 x 2.0	4.0	between G1 and G2, and D4 and D5
Total Area 139.5 sf			

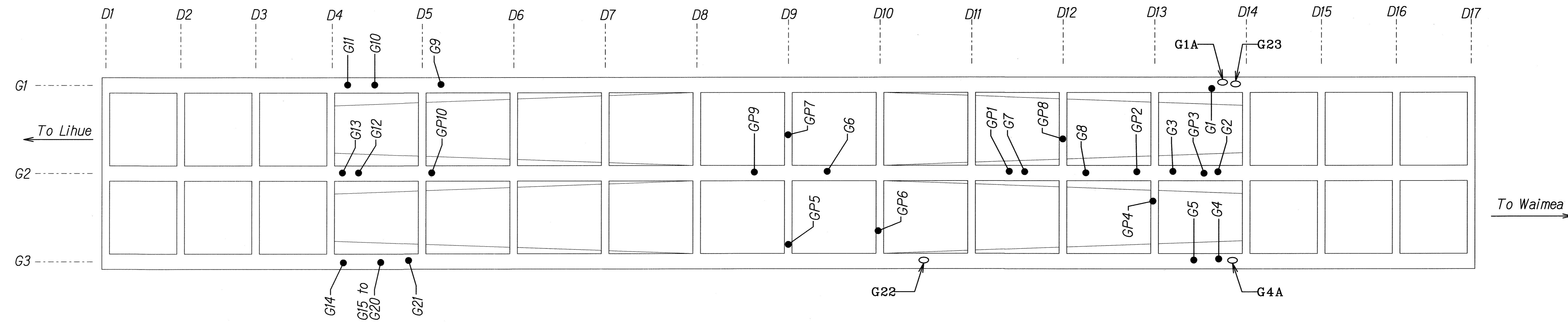
See Revised Table "A" on Sheet 11 S-1
For Drain Repairs G3-1-4 & G1-1-4
See Drain Repair Table on Sheet 15

ORIGINAL PLAN	DRAWN BY	DATE
NOTE	TRACED BY	2/28
BOOK	DESIGNED BY	
REMARKS	checked by	

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  
**UNDERSIDE OF DECK SOFFIT SPALLS**  
**KAUMUALII HIGHWAY**  
Spall Repairs at Wahiawa Stream Bridge  
Project No. 50C-02-07M  
Scale: N.T.S. Date: April 2008  
SHEET No. 1 OF 5 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	50C-02-07M	2008	10	13



**GIRDER & DIAPHRAGM SOFFIT SPALLS**  
Scale: N.T.S.

See Revised Table "B" on Sheet 11 S-1

TABLE "B"

Spall No.	Spall Size (ft x ft)	Area (sq. ft.)	Girder or Diaphragm No. / Location / Remarks
G1	2.0	6.0	G1, between D13 and D14, exposed longitudinal bars & stirrups (poor condition)
G2	2.0	4.0	G2, between D13 and D14, exposed longitudinal bars
G3	1.5	3.0	G2, between D13 and D14
G4	2.0	8.0	G3, between D13 and D14, exposed longitudinal bars & stirrups (poor condition)
G5	1.5	2.0	G3, between D13 and D14, exposed longitudinal bar
G6	1.5	2.0	G2, between D9 and D10, exposed longitudinal bars & stirrup
G7	1.5	2.0	G2, between D11 and D12, exposed rebar
G8	2.0	8.0	G2, between D12 and D13, exposed longitudinal bars & stirrup
G9	2.0	6.0	G1, between D5 and D6, exposed longitudinal bars & stirrups
G10	2.0	8.0	G1, between D4 and D5, exposed longitudinal bars & stirrups (poor condition)
G11	1.5	5.0	G1 at D4, exposed longitudinal bars & stirrups (poor condition)
G12	3.0	5.0	G1, between D4 and D5, exposed longitudinal bars & stirrups
G13	1.5	5.0	G2 at D4, exposed longitudinal bar
G14	2.0	7.0	G3 at D4, exposed longitudinal bars & stirrups
G15	2.0	5.0	G3, between D4 and D5
G16	1.5	2.0	G3, between D4 and D5, exposed longitudinal bars & stirrups
G17	1.5	2.0	G3, between D4 and D5
G18	1.5	2.0	G3, between D4 and D5
G19	1.5	2.0	G3, between D4 and D5
G20	1.5	4.0	G3, between D4 and D5
G21	1.5	2.0	G2 at D5
GP1	1.0	2.0	G2, between D11 and D12
GP2	1.5	2.0	G2, between D12 and D13
GP3	1.0	2.0	G2, between D13 and D14
GP4	1.5	2.0	D13, between G2 and G3
GP5	1.0	2.0	D9 at G3
GP6	1.5	2.0	D10, between G2 and G3
GP7	1.5	2.0	D9, between G1 and G2
GP8	1.0	2.0	D12, between G1 and G2
GP9	1.0	2.0	G2, between D8 and D9
GP10	1.5	2.0	G2 at D5
Total Area 193.5 sq. ft.			

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE 7/08
BOOK	DRAWN BY	
NOTE	TRACED BY	
K27	DESIGNED BY	
Amakawa/22/09	CHECKED BY	

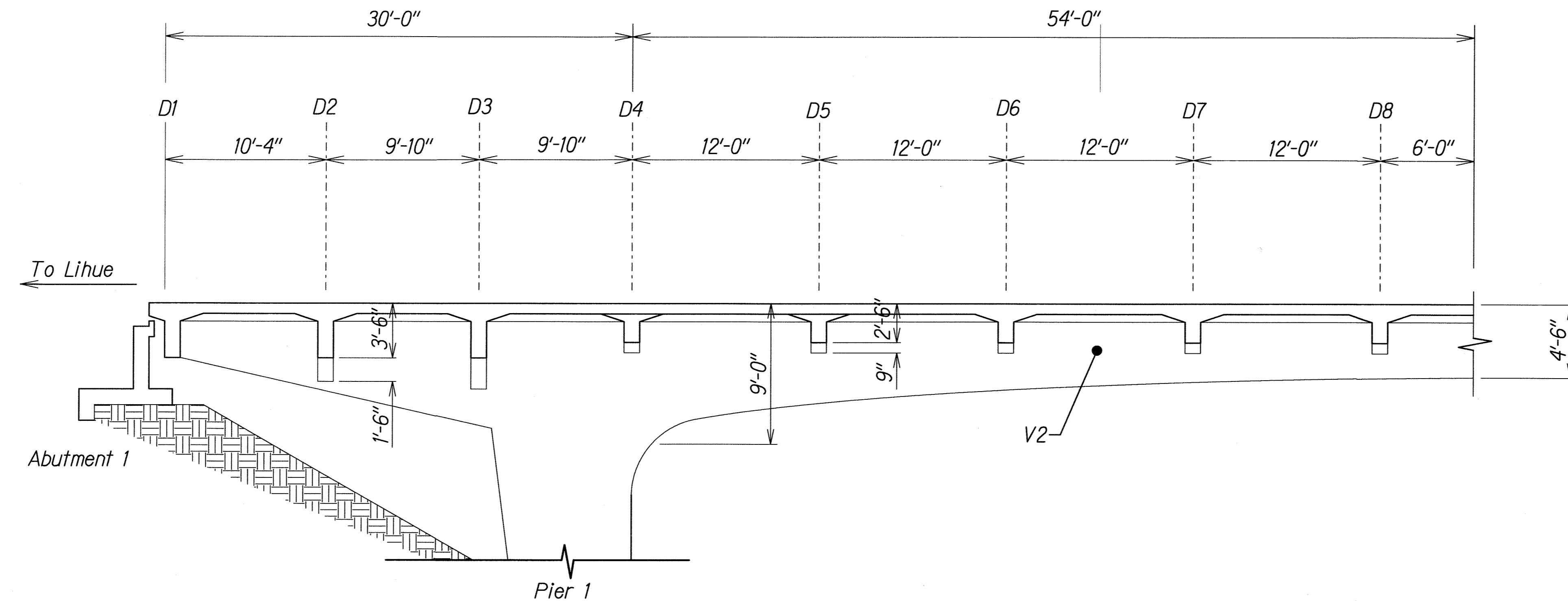
LEGEND FOR AS-BUILT POSTINGS	
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=====	Double line for as-built deletion
Roadway	Text for as-built posting

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
GIRDER & DIAPHRAGM SOFFIT SPALLS
KAUMUALII HIGHWAY
Spall Repairs at Wahiawa Stream Bridge
Project No. 50C-02-07M
Scale: N.T.S. Date: April 2008
SHEET No. 2 OF 5 SHEETS

"AS-BUILT"

10

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	50C-02-07M	2008	11	13



ELEVATION - GIRDER G1, MAUKA FACE

Scale: 1'=5'

TABLE "C"

Spall No.	Spall Size (ft x ft)	Area (sf)	Location / Remarks
V1	1.5	6.0	mauka face between D9 and D10
V2	1.0	3.0	mauka face between D6 and D7
VP1a	1.0	32.0	makai face between D12 and D14
VP1b	2.0	15.0	makai face between D13 and D14
VP2	3.0	6.0	makai face between D13 and D14
VP3	1.0	5.0	makai face between D12 and D13
Total Area 97.0 sf			

See Revised Table "C" on Sheet 11 S-1

SURVEY PLOTTED BY	DATE
ORIGINAL PLAN	1-2-08
DRAWN BY	
TRACED BY	
NOTES / ETC	
REMOVED BY	
QUANTITY SURVEYED BY	
CHECKED BY	

NOTES:

- Concrete parapet and a.c. wearing surface not shown.
- See Table "C" on this sheet for spall sizes and descriptions.

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

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION  
**GIRDER G1, MAUKA FACE**  
**KAUMUALII HIGHWAY**  
**Spall Repairs at Wahiawa Stream Bridge**  
**Project No. 50C-02-07M**  
Scale: 1'=5' Date: April 2008  
SHEET No. 3 OF 5 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	50C-02-07M	2008	11 S-1	13

Spall No.	Spall Size(ft.xft.)	Area(sf)	Location/Remarks
S1	1x1.5	1.5	Between G1 and G2, and D8 and D9
S2	4x2	8	Between G1 and G2, and D10 and D11
S3	8x2.75	22	Between G1 and G2, and D12 and D13
S4	3.5x3.5	12.25	Between G2 and G3, and D13 and D14
S5	6.5x2.5	16.25	Between G2 and G3, and D12 and D13
S6	2.5x5.5	13.75	Between G2 and G3, and D11 and D12
S7			Poured together with S6
S8	3.75x2.3	8.625	Between G1 and G2, and D5 and D6
S9	2x2	4	G3 Deck Overhang Between D5 and D6
SP10	1.16x2.33	2.7	G3 Deck Overhang Between D4 and D5
SP1	2.5x1.5	3.75	Between G1 and G2, and D10 and D11
SP2	3x8	24	Between G2 and G3, and D9 and D10
SP3	1.5x5.5	8.25	Between G2 and G3, and D9 and D10
SP4	4x1.5	6	Between G2 and G3, and D8 and D9
SP5	2x4	8	Between G2 and G3, and D5 and D6
SP6	5.5x3	16.5	Between G1 and G2, and D4 and D5
SP7	4x4.5	18	Between G1 and G2, and D4 and D5
Total Area(sf)		173.58	

Table "A"

Spall No.	Spall Size(ft.xft.)	Area(sf)	Location/Remarks
G1	4x3.125	12.5	G1, Between D13 and D14
G2	3.5x2.89	10.115	G2, Between D13 and D14
G3	4x1.58	6.32	G2, Between D13 and D14
G4	4.75x2.16	10.26	G3, Between D13 and D14
G5	2.5x4.5	11.25	G3, Between D13 and D14
G6	1.5x2	3	G2, Between D9 and D10
G7	1.5x2	3	G2, Between D11 and D12
G8	6.33x1.75	11.0775	G2, Between D12 and D13
G9	2.5x4.5	11.25	G1, Between D5 and D6
G10	6x4	24	G1, Between D4 and D5
G11	5.5x2	11	G1 at D4
G12	4.5x3.5	15.75	G1, Between D4 and D5
G13	5x3	15	G2 at D4
G14	2x2	4	G3 at D4
G15	3.5x3.1	10.85	G3, Between D4 and D5
G16			Poured with G15
G17	3x2.9	8.7	G3, Between D4 and D5
G18			Poured with G17
G19	1.5x3.5	5.25	G3, Between D4 and D5
G20	1x2.5	2.5	G3, Between D4 and D5
G21	6x1.66	9.96	G2 at D5
G22	2x1.5	3	G3, Between D10 and D11
G23	1.67x1.83	3.06	G1 at D14
GP1	1.3x2	2.6	G2, Between D11 and D12
GP2	1.5x2	3	G2, Between D12 and D13
GP3	2x1.215	2.43	G2, Between D13 and D14
GP4	2x2	4	D13, Between G2 and G3
GP5	2x2	4	D9 at G3
GP6	2x2.8	5.6	D10, Between G2 and G3
GP7	2x2	4	D9, Between G1 and G2
GP8	1.75x2	3.5	D12, Between G1 and G2
GP9	1.5x4.3	6.45	G2, Between D8 and D9
GP10	1x1	1	G2 at D5
G1A	4.5x2.19	9.86	G1 at D14
G4A	1.66x1.58	2.62	G3 at D14
Total Area(sf)		240.90	

Table "B"

Spall No.	Spall Size(ft.xft.)	Area(sf)	Location/Remarks
V1	1x6	6	Mauka Face Between D9 and D10
V2	1.25x2.5	3.125	Mauka Face Between D6 and D7
VP1a			DELETED
VP1b			DELETED
VP2			DELETED
VP3	1x6	6	Makai Face Between D12 and D13
Total Area(sf)		15.13	

Table "C"

Spall No.	Spall Size(ft.xft.)	Area(sf)	Location/Remarks
G1-1	1x1	1	Between D4 and D5 Inside of G1
G1-2	1x1	1	Between D7 and D8 Inside of G1
G1-3	1x1	1	Between D10 and D11 Inside of G1
G1-4	1x1	1	Between D13 and D14 Inside G1
G3-1	1x1	1	Between D4 and D5 Through G3
G3-2	1x1	1	Between D7 and D8 Through G3
G3-3	1x1	1	Between D10 and D11 Through G3
G3-4	1x1	1	Between D13 and D14 Through G3
Total Area(sf)		8.0	

Drain Repair Table

ORIGINAL	SURVEY PLOTTED BY	DATE	4/08
PLAN	DRAWN BY	TRACED BY	X
NOTE BOOK	DESIGNED BY	QUANTITIES BY	X
Kel	Kel	N*	Kauai/HI/33/g

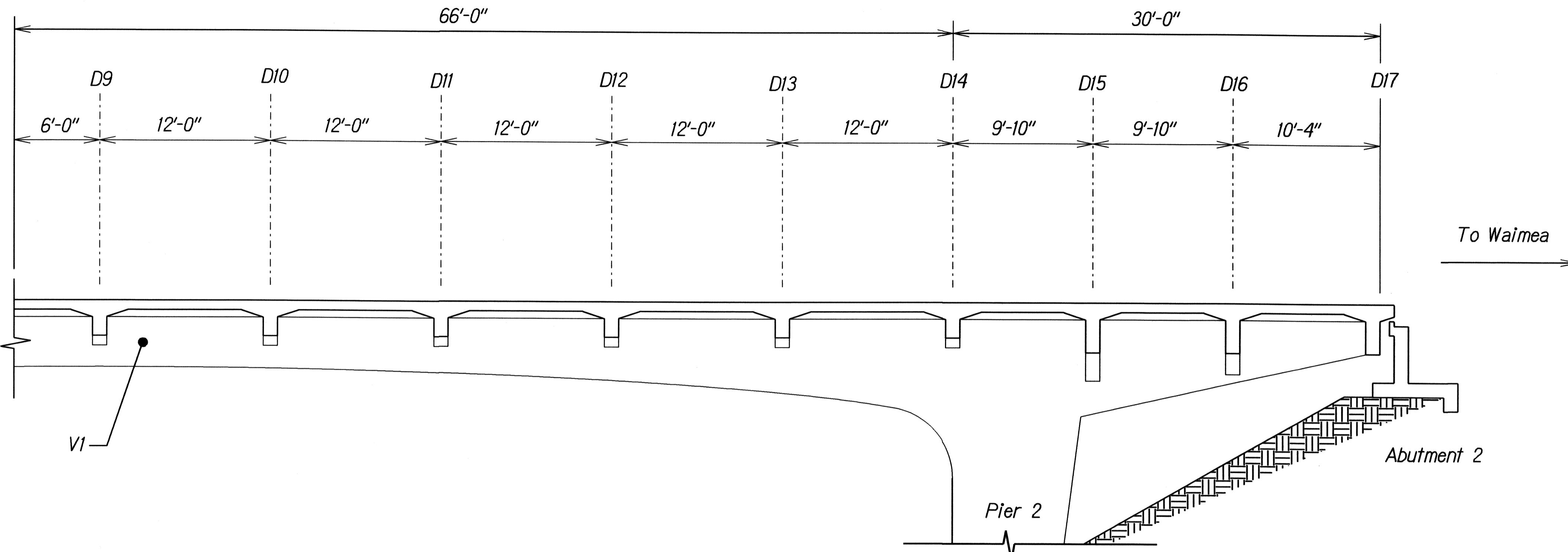
LEGEND FOR AS-BUILT POSTINGS	
~~~~~	Squiggly line for as-built deletion
=====	Double line for as-built deletion
Roadway	Text for as-built posting

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
<u>REVISED TABLES</u>	
KAUMUALII HIGHWAY	
Spall Repairs at Wahiawa Stream Bridge Project No. 50C-02-07M	
Scale: NTS	Date: June 2011
SHEET No. 1 OF 1 SHEETS	

"AS-BUILT"

11 S-1

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	50C-02-07M	2008	12	14



ELEVATION - GIRDER G1, MAUKA FACE

Scale: 1"=5'

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	X
Kaumuali'i Highway No.	TRADED BY	
	DESIGNED BY	
	QUANTITATED BY	
	CHECKED BY	

NOTES:

- Concrete parapet and a.c. wearing surface not shown.
- See Table "C" on Plan Sht. 10 for spall sizes and descriptions.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GIRDER G1, MAUKA FACE

KAUMUALII HIGHWAY

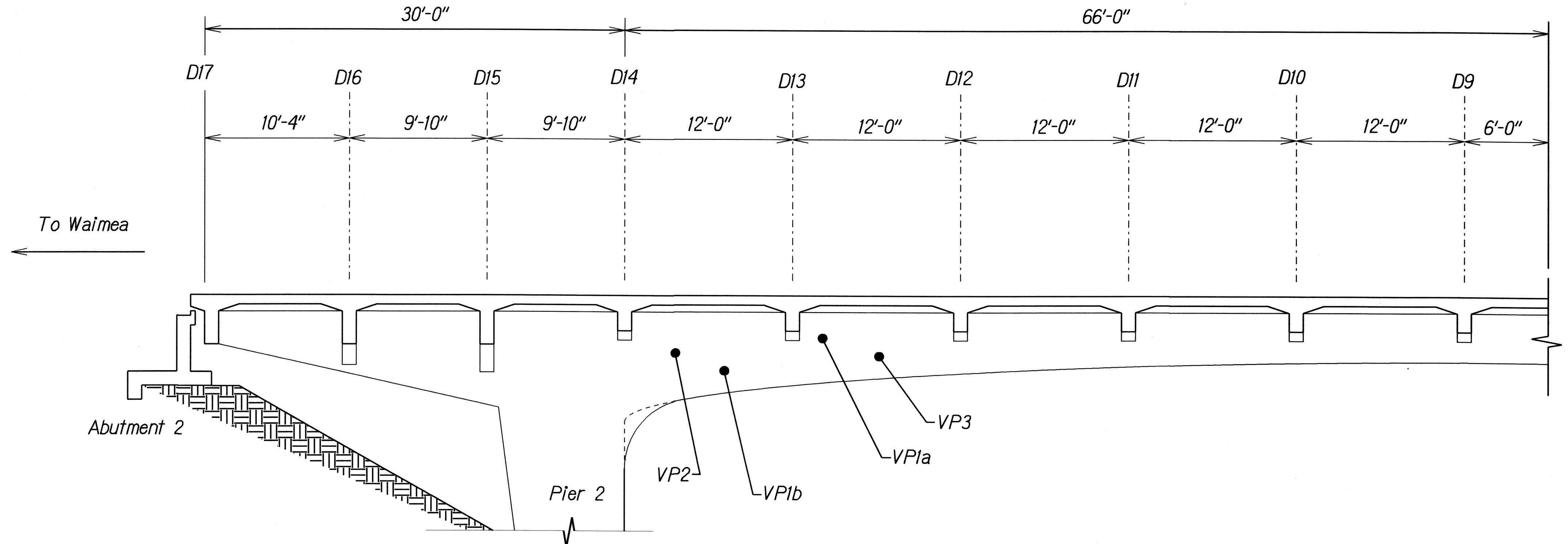
Spall Repairs at Wahiawa Stream Bridge

Project No. 50C-02-07M

Scale: 1"=5' Date: April 2008

SHEET NO. 4 OF 5 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	50C-02-07M	2008	13	14



ELEVATION - GIRDER G1, MAKAI FACE
Scale: 1"-5'

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	4/08
K2	TRADED BY	
K2/MS/SD	DESIGNED BY	
	QUANTITATED BY	
	CHECKED BY	

NOTES:

- Concrete parapet and a.c. wearing surface not shown.
- See Table "C" on Plan Sht. 10 for spall sizes and descriptions.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
GIRDER G1, MAKAI FACE
KAUMUALII HIGHWAY
Spall Repairs at Wahiawa Stream Bridge
Project No. 50C-02-07M
Scale: 1"-5' Date: April 2008
SHEET NO. 5 OF 5 SHEETS