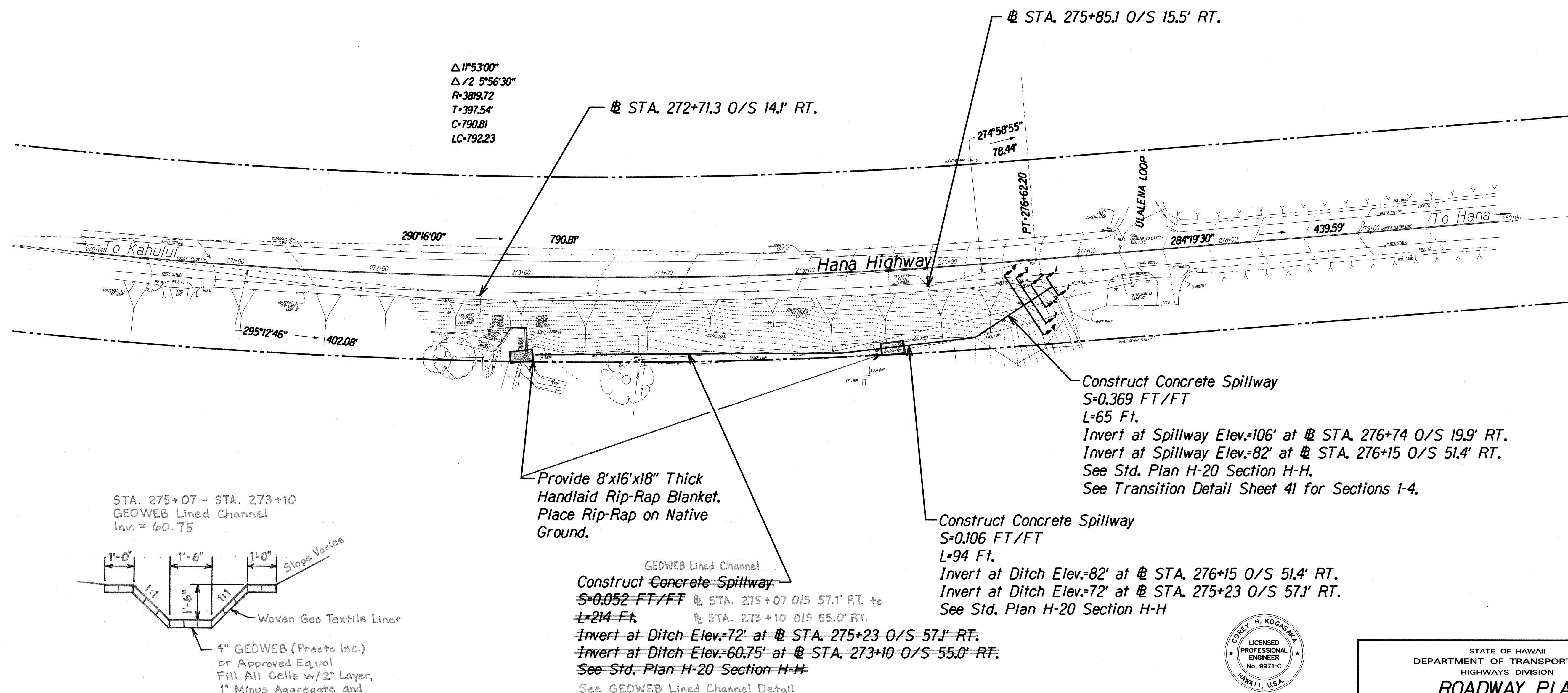


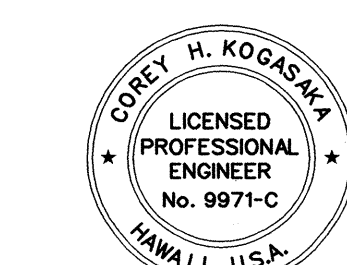
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	360AB-01-02M	2002	14	41

TRUE NORTH
SCALE: 1" = 40'



GEOWEB LINED CHANNEL
NTS

Site 1, Mile Post 1.9



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.
DATE: 4/30/02

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

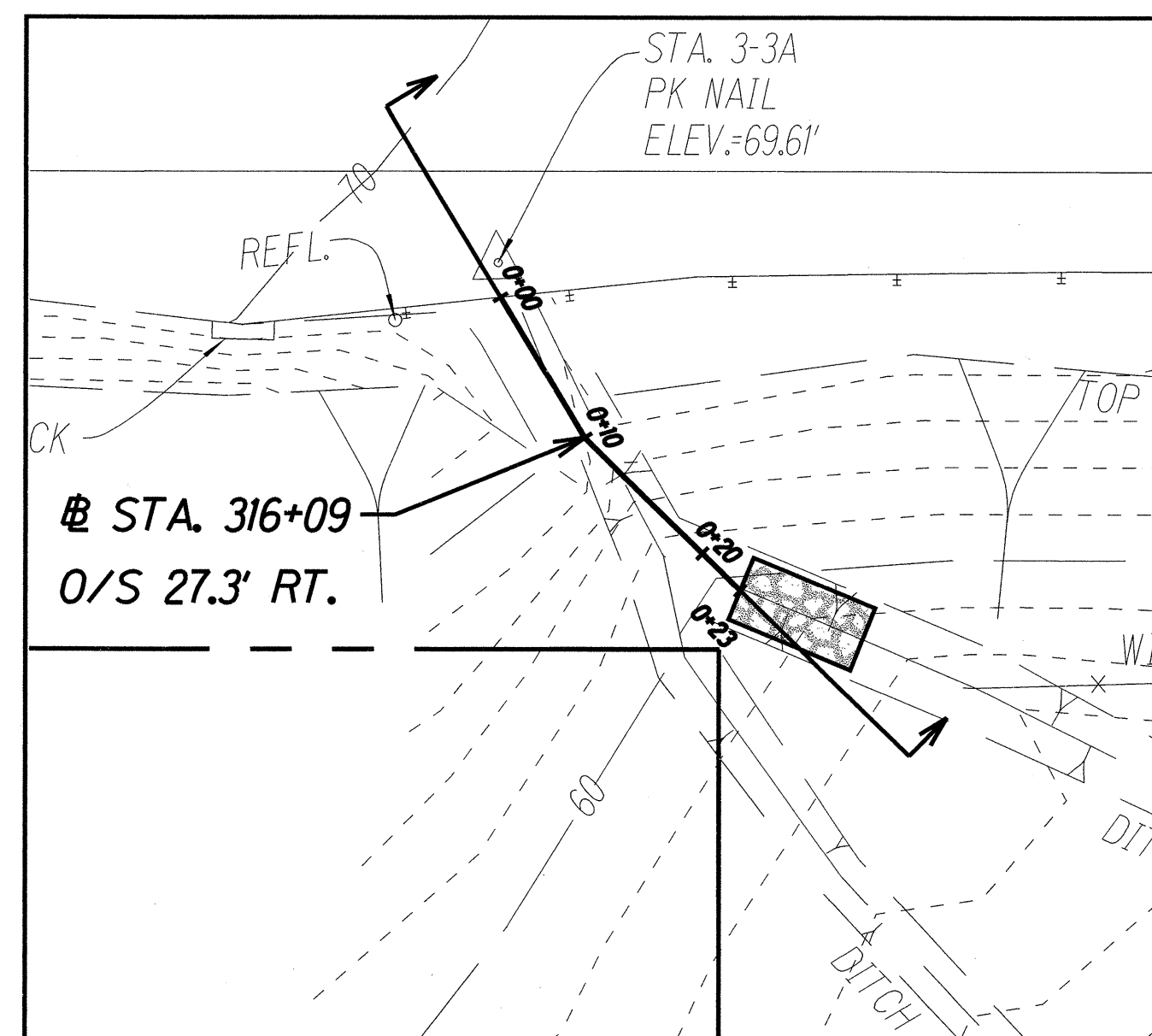
ROADWAY PLAN
SITE 1, M.P. 1.9
HANA HIGHWAY
REPAIRS AND MAINTENANCE
PROJECT NO. 360AB-01-02M

Scale: 1"=40' Date: March, 2001

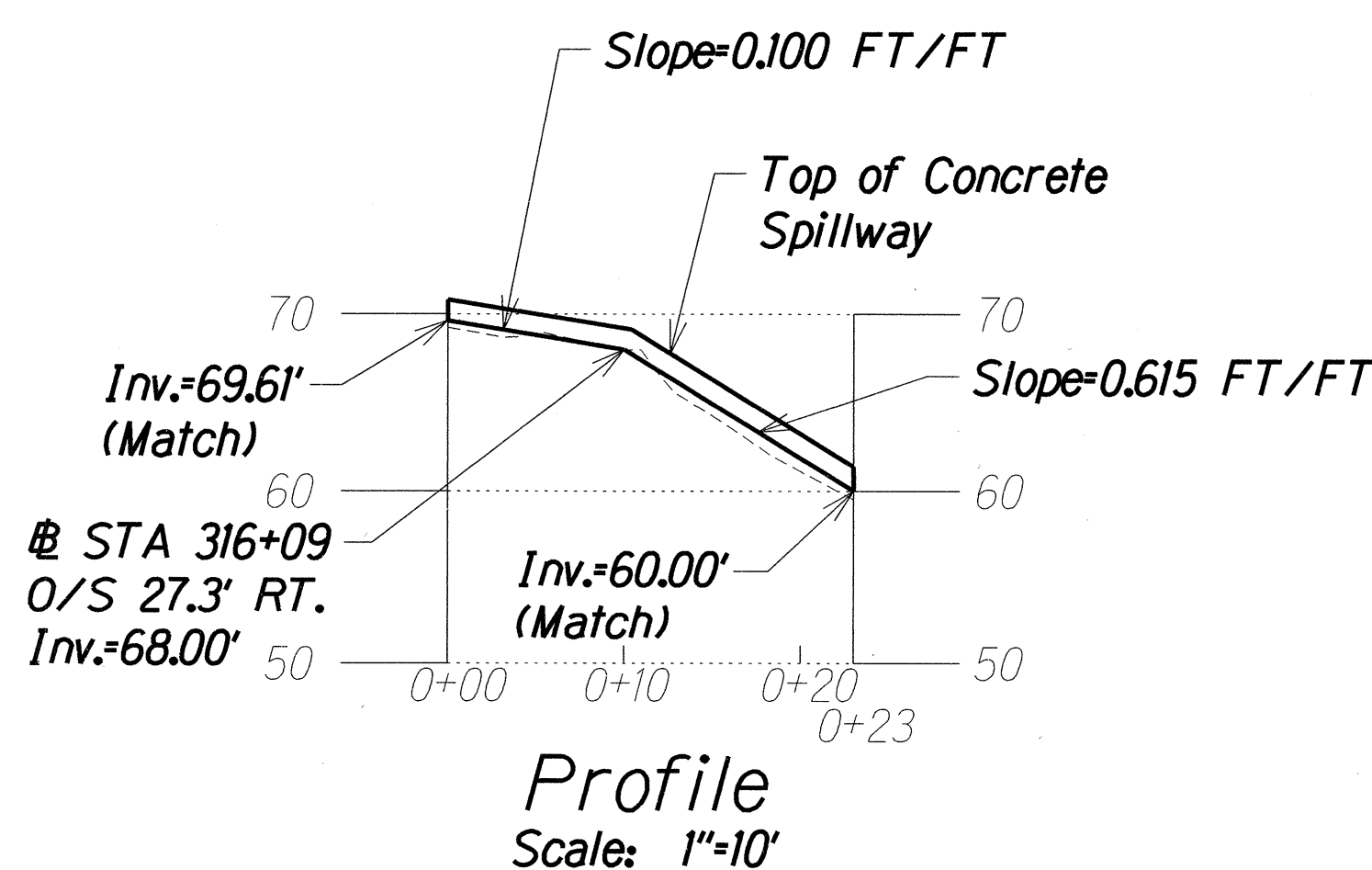
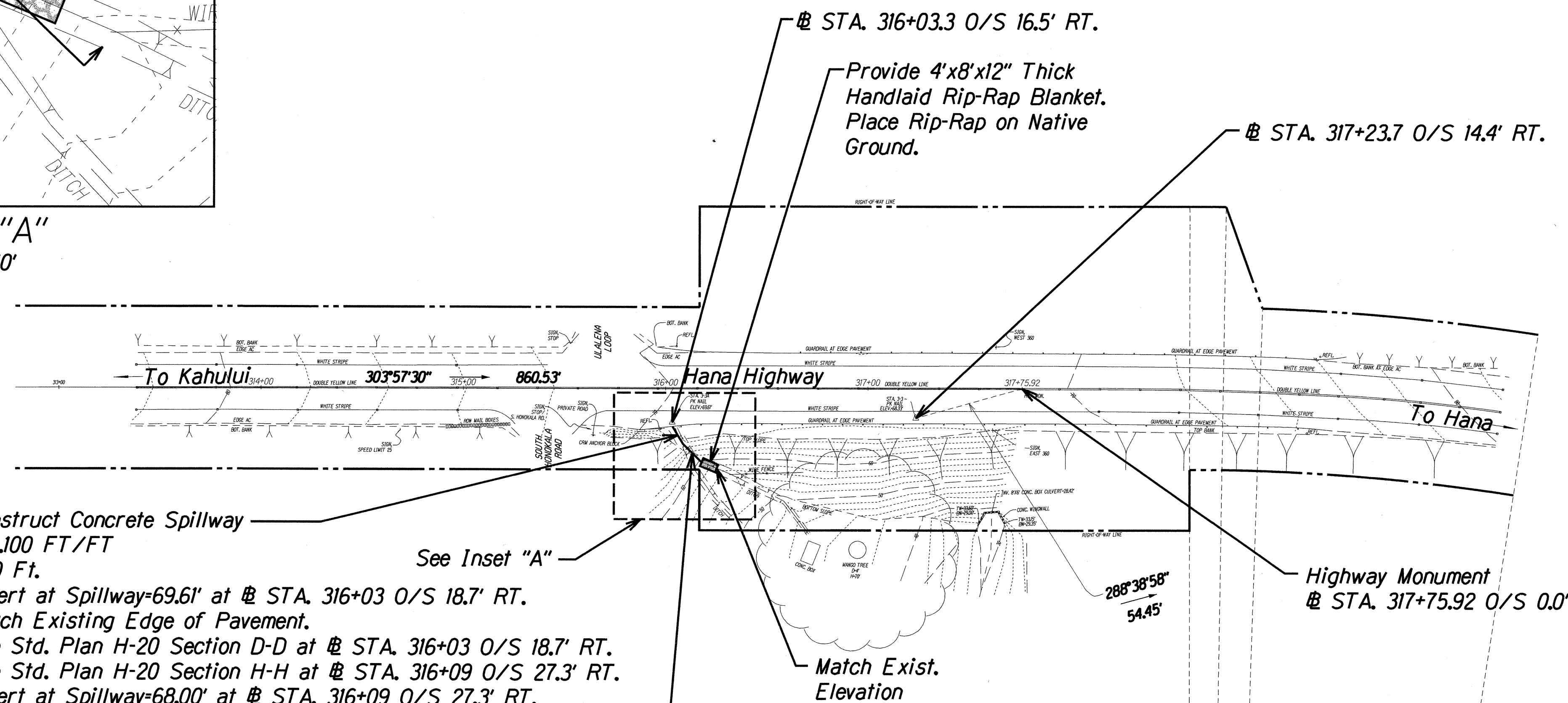
SHEET No. 1 OF 10 SHEETS

"AS-BUILT"

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	360AB-01-02M	2002	15	41

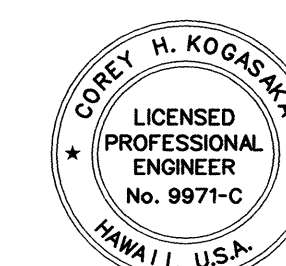


INSET "A"
Scale: 1"=10'



Profile
Scale: 1"=10'

Site 2, Mile Post 2.3



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.
DATE: 4/30/02

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
ROADWAY PLAN
SITE 2, M.P. 2.3
HANA HIGHWAY
REPAIRS AND MAINTENANCE
PROJECT NO. 360AB-01-02M
Scale: 1"=40' Date: March, 2001

SHEET No. 2 OF 10 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	360AB-01-02M	2002	16	41

@ STA. 201+40.89 O/S 20.14' LT.
 Demolish Existing Headwall. Remove Existing RCP Drainline.
 Install 2-24" Drainline. Construct Modified Concrete
 Outlet Structure. (See Sheet 41)
 S=0.021 FT/FT
 Inv.=94.57'
 L=29 Ft.
 Position Centerline of Posts 7 1/2" from Edge of Culvert.

@ STA. 201+08.8 to @ STA. 202+23.5
 Install 4" White Stripe.
 Place Stripe 6" From Face
 of Guardrail.
 (See Std. Plan TE-30).

Remove and Repair Barbed Wire
 Fence Approximately 20 L.F. at the
 End of Construction.

@ STA. 201+08.84 to @ STA. 202+58.90
 Install 160 L.F. of Strong Post
 W-Beam Guardrail in Existing Pavement
 with RM-5 Markers.
 Approach End: Fleet-350
 Trailing End: Type "A"

@ STA. 201+48.3 O/S 16.4' LT.

Sawcut Existing Pavement for Trenching.
 See Sheet 39 for Detail.
 Repave Over Culvert with 4" A.C. Mix
 No. IV Over 8" of Base Course on 12"
 of Subbase Course.
 Replace Striping as Required.

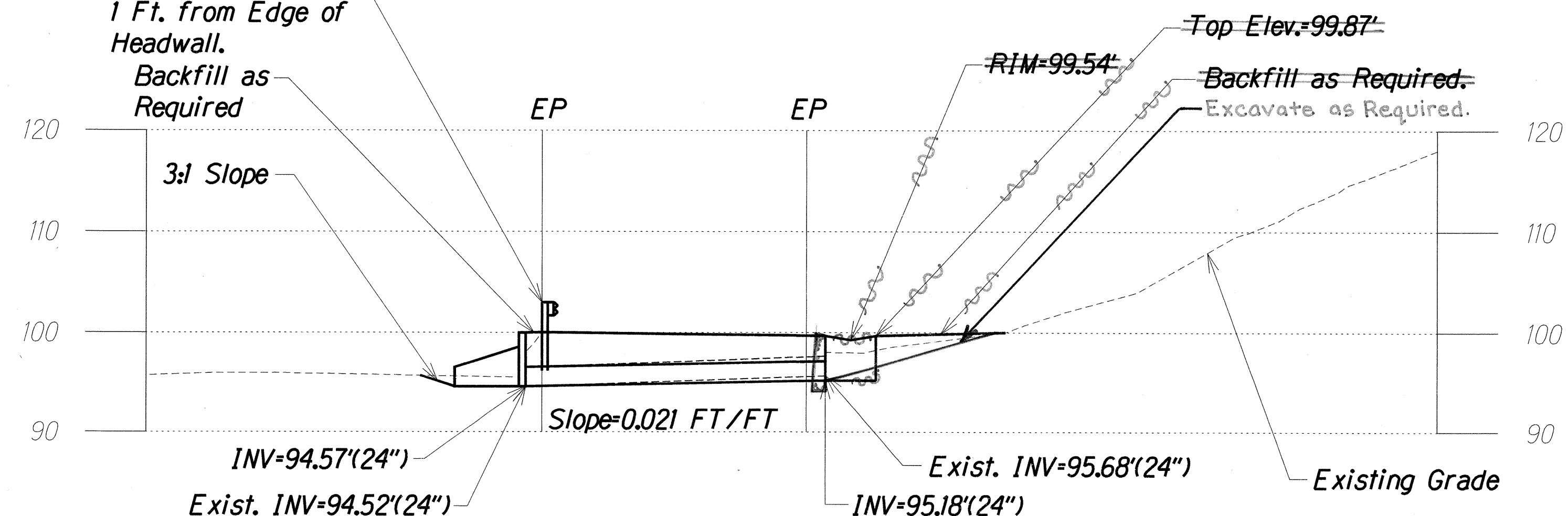
Remove and Repair Existing Barbed
 Wire Fence Approximately 25 L.F.
 at the End of Construction.

Demolish Existing Headwall.
 Install 61614P Grated Drop Inlet.
 (See Std. Plan H-II and Sheet 40)
 Top Elev.=99.87'
 (Match Exist. Road Grade)
 RIM=99.54'
 Inv.=95.18'
 (To Be Verified in Field).

Regrade Channel to Direct Flow to Inlet CRM Structure.
 Grading Incidental to GDI and will not be
 Paid for Separately. CRM

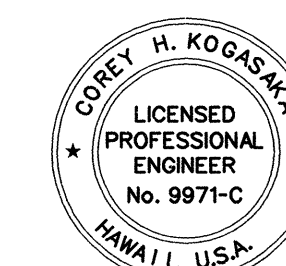
@ STA. 199+00.43 O/S 10.0' RT.

New Guardrail.
 Place Back of Post
 1 Ft. from Edge of
 Headwall.
 Backfill as
 Required



Profile
 Scale: 1"=10'

Site 3, Mile Post 6.70

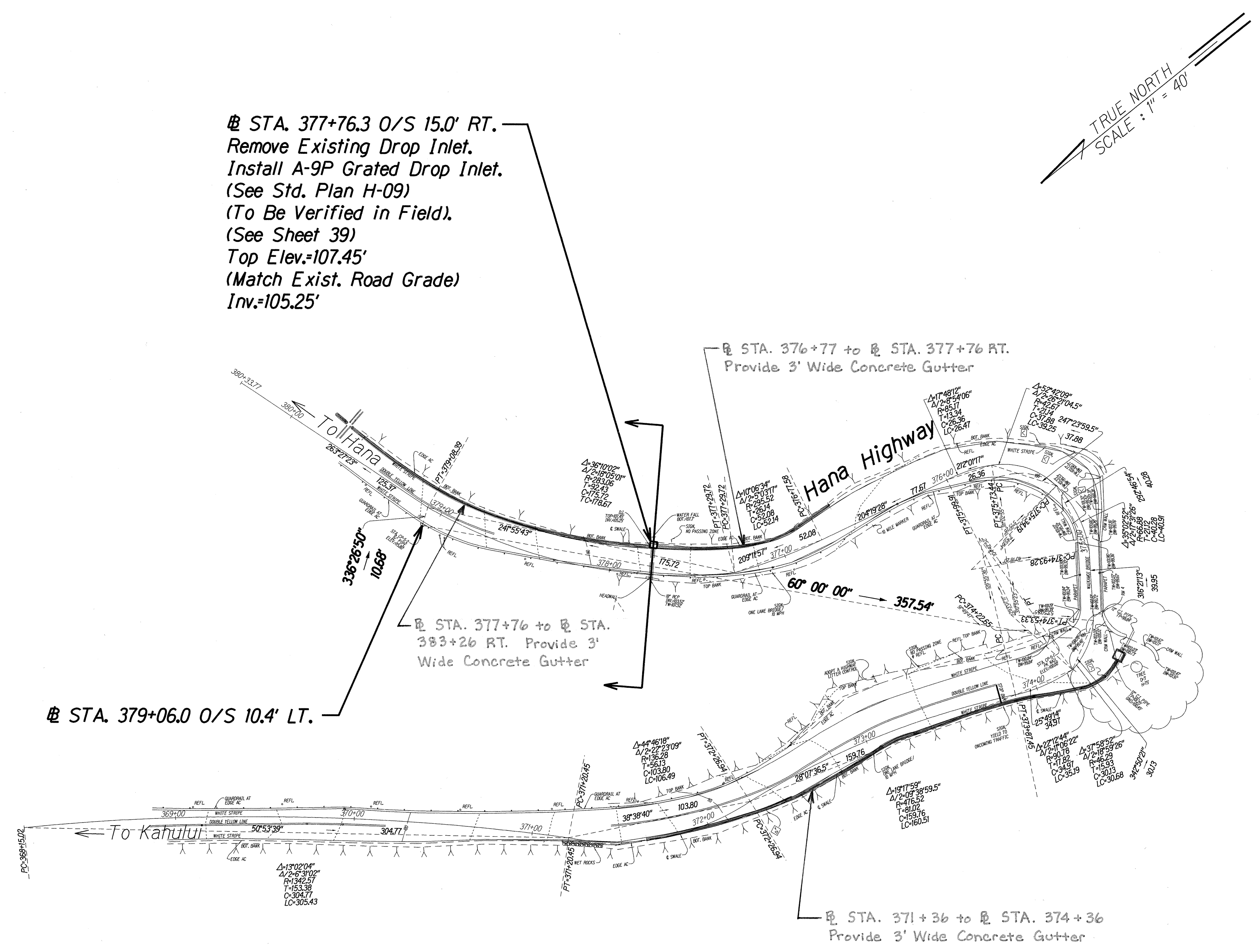


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 PROJECT WILL BE UNDER MY OBSERVATION.
 DATE: 4/30/02

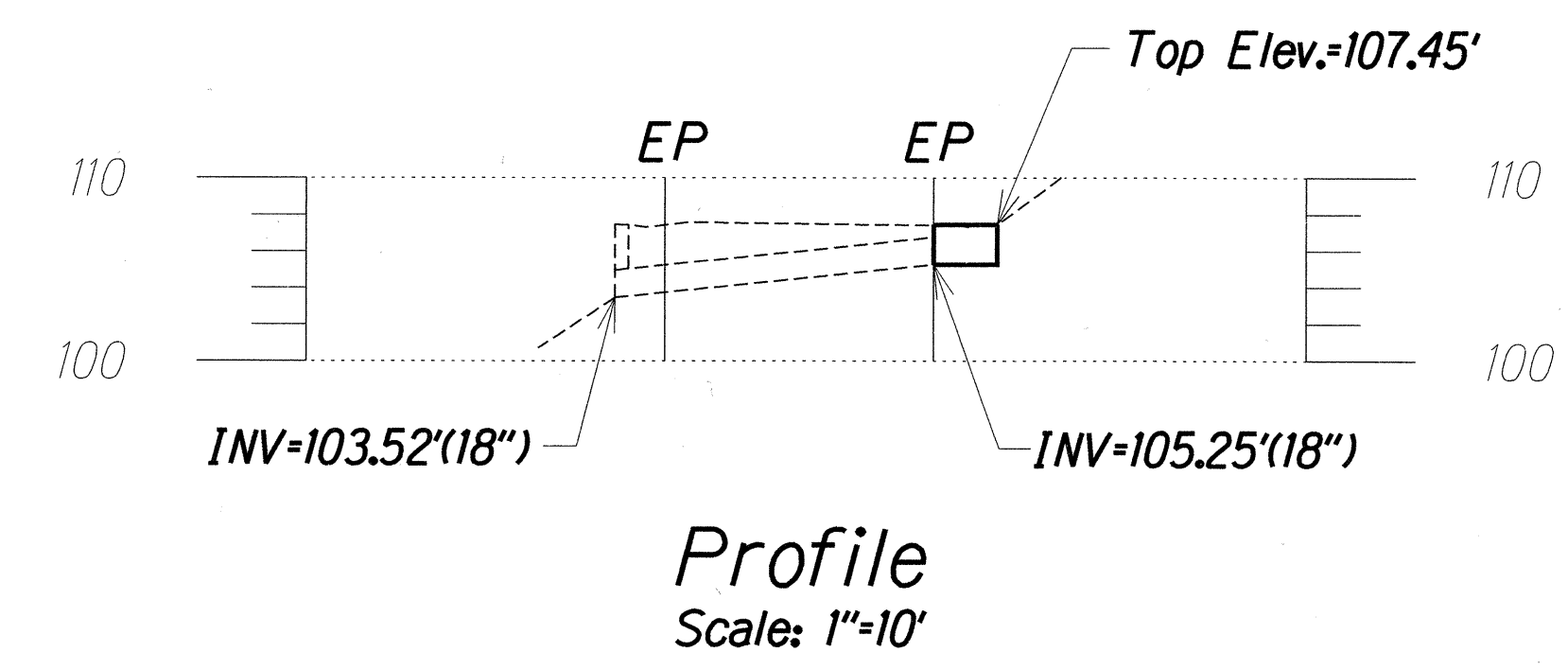
STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
ROADWAY PLAN
SITE 3, M.P. 6.7
HANA HIGHWAY
REPAIRS AND MAINTENANCE
PROJECT NO. 360AB-01-02M
 Scale: 1"=40' Date: March, 2001
 SHEET No. 3 OF 10 SHEETS

"AS-BUILT"

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	360AB-01-02M	2002	17	41

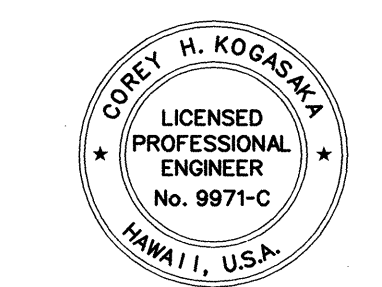


TRUE NORTH
SCALE: 1" = 40'



Site 4, Mile Post 10.0

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
DRAWN BY		
DESIGNED BY		
CHECKED BY		
NO.		

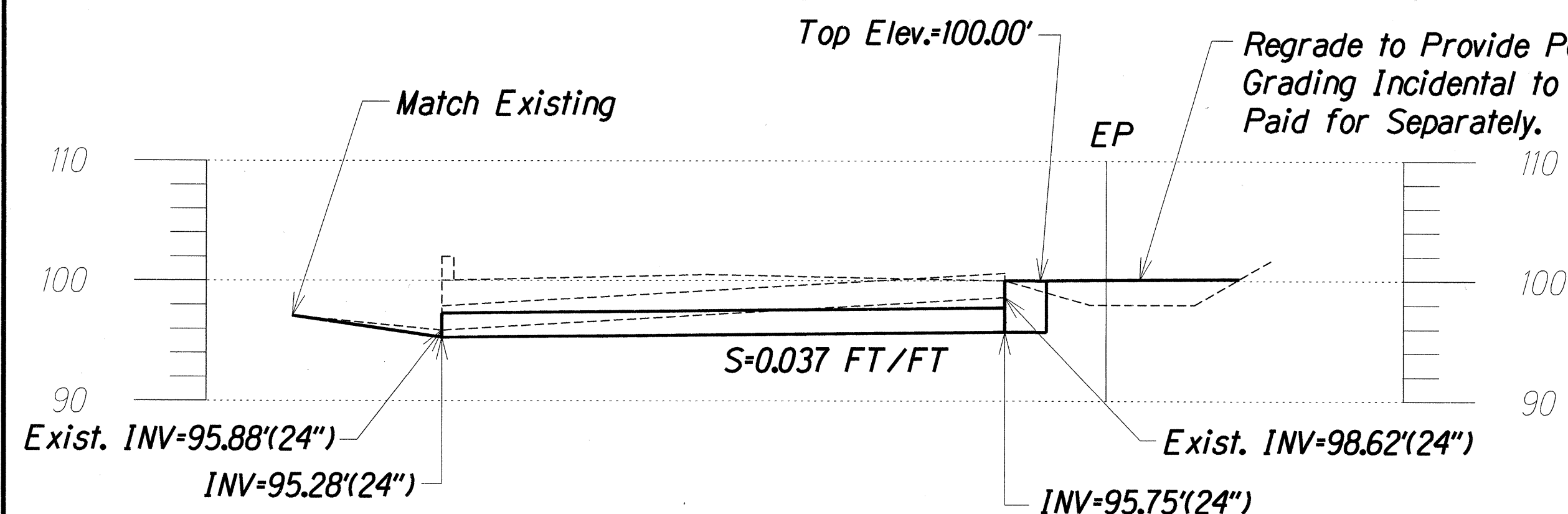


THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.
DATE: 4/30/02

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
ROADWAY PLAN
SITE 4, M.P. 10.0
HANA HIGHWAY
REPAIRS AND MAINTENANCE
PROJECT NO. 360AB-01-02M
Scale: 1"=40' Date: March, 2001
SHEET No. 4 OF 10 SHEETS

"AS-BUILT"

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	360AB-01-02M	2002	18	41



Profile A-A
Scale: 1"=10'

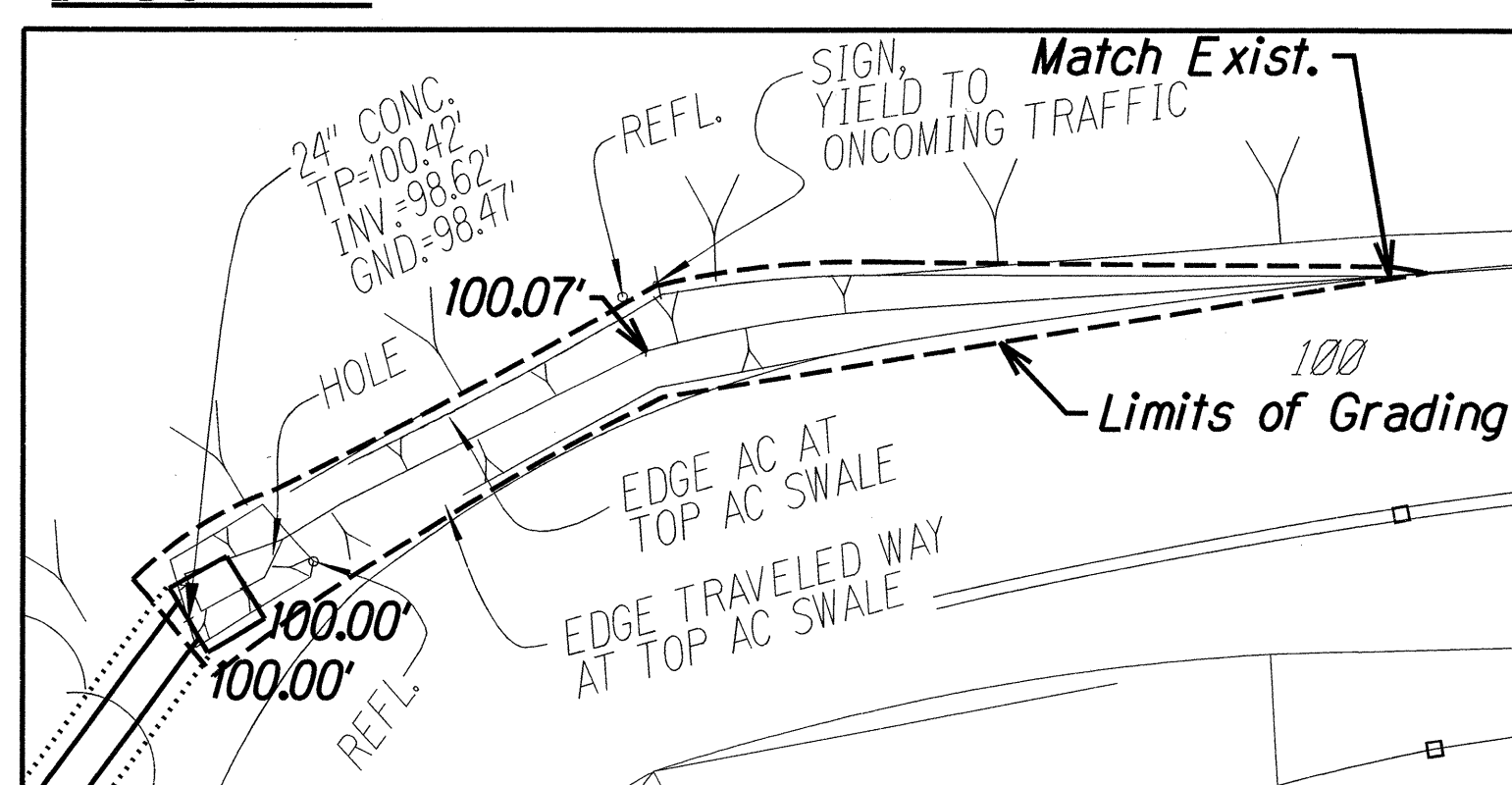
Sawcut Existing Pavement for Trenching.
See Sheet 39 for Detail.

⊕ STA. 431+92.2 O/S 37.4' RT.
Demolish Existing CRM Wall.
Remove Existing 24" Pipe.
Install 24" RCP Drainline.
Repave With 2" A.C. Mix No. IV
Over 6" of Crushed Rock.
Reconstruct CRM Wall, Using the Existing CRM Wall's Material.
L=47 Ft.
S=0.037 FT/FT
Inv.=95.28'

⊕ STA. 431+94.9 O/S 9.2' RT.

⊕ STA. 432+85.6 to ⊕ STA. 433+67.8
Provide 3' Wide Concrete Gutter.
Match Back of Gutter With Existing Ground Elevation.
See Sheet 39 for Detail.

Inset "1"



Scale: 1"=10'

Regrade to Provide Positive Flow to Inlet.
Grading Incidental to GDI and will not be Paid for Separately.

⊕ STA. 431+67.8 O/S 22.1' RT.
Install A-9P Grated Drop Inlet.
(See Std. Plan H-09)
(See Sheet 39 for Detail)
Top Elev.=100.00'
Inv.=95.75'
(To Be Verified in Field)

Regrade to Provide Positive Flow to Inlet.
See Inset "1".

⊕ STA. 434+39.7
High Point in Concrete Gutter
Elev.=98.22'

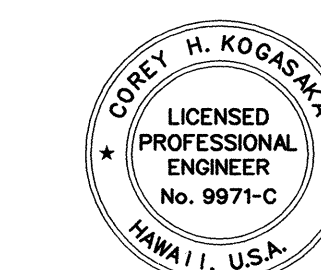
Sawcut Pavement to Place Gutter. Restripe
8" 4" White Line 6" from Gutter.

⊕ STA. 433+48.79 O/S 9.8' RT.
Connect to Existing A.C. Swale.
Drop Inlet

⊕ STA. 433+35.29
High Point in Concrete Gutter
Elev.=98.48'

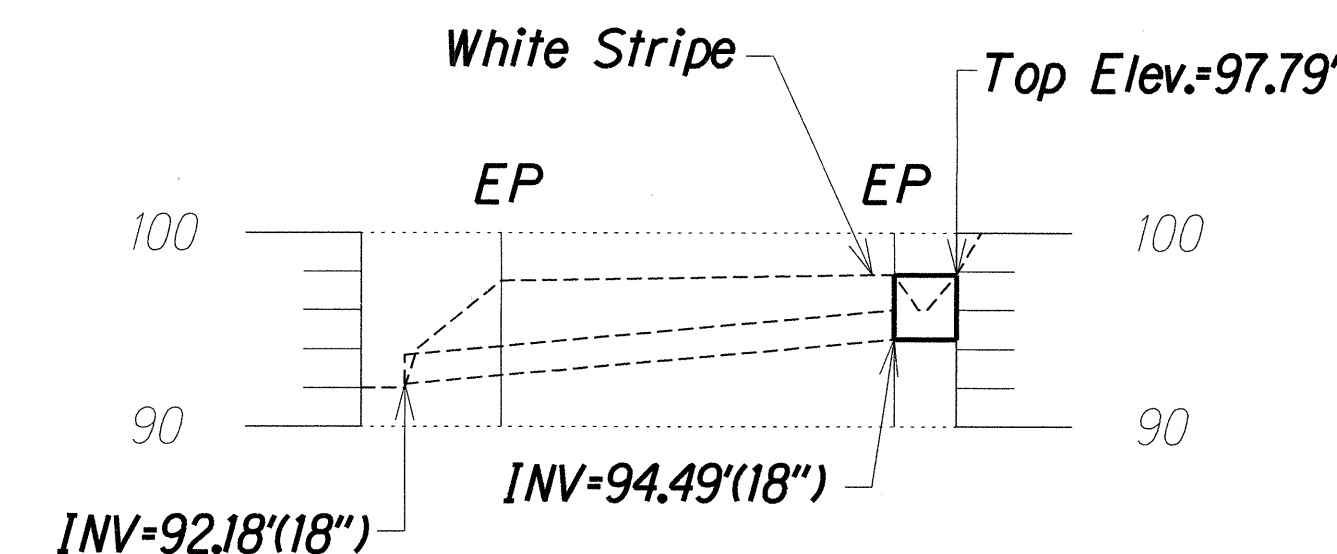
⊕ STA. 433+72.1 to ⊕ STA. 436+13.8
Provide 3' Wide Concrete Gutter.
Match Back of Gutter With Existing Ground Elevation.
See Sheet 39 for Detail.

⊕ STA. 436+16.0 O/S 7.8' RT.
Remove Existing Drop Inlet.
Install A-9P Grated Drop Inlet.
(See Std. Plan H-09)
(See Sheet 39 for Detail)
Top Elev.=97.79'
Inv.=94.49'
(To Be Verified in Field).



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DATE: 4/30/02

TRUE NORTH
SCALE: 1"=40'



Profile B-B
Scale: 1"=10'

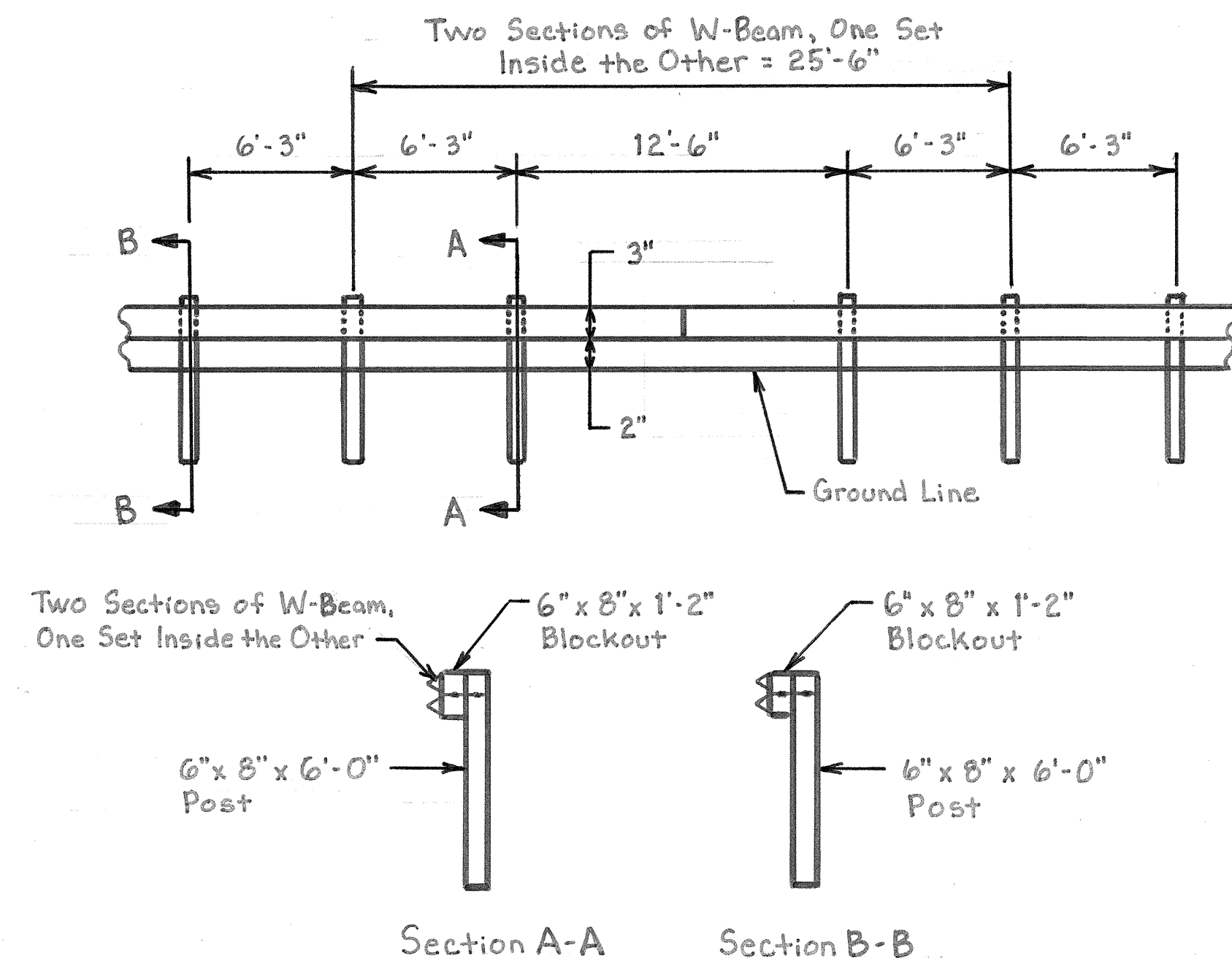
Site 5, Mile Post 11.0

"AS-BUILT"

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
ROADWAY PLAN
SITE 5, M.P. 11.0
HANA HIGHWAY
REPAIRS AND MAINTENANCE
PROJECT NO. 360AB-01-02M
Scale: 1"=40' Date: March, 2001
SHEET No. 5 OF 10 SHEETS

18

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	360AB-01-02M	2002	19	41



GUARDRAIL DETAIL OVER LOW-FILL CULVERT

N.T.S.

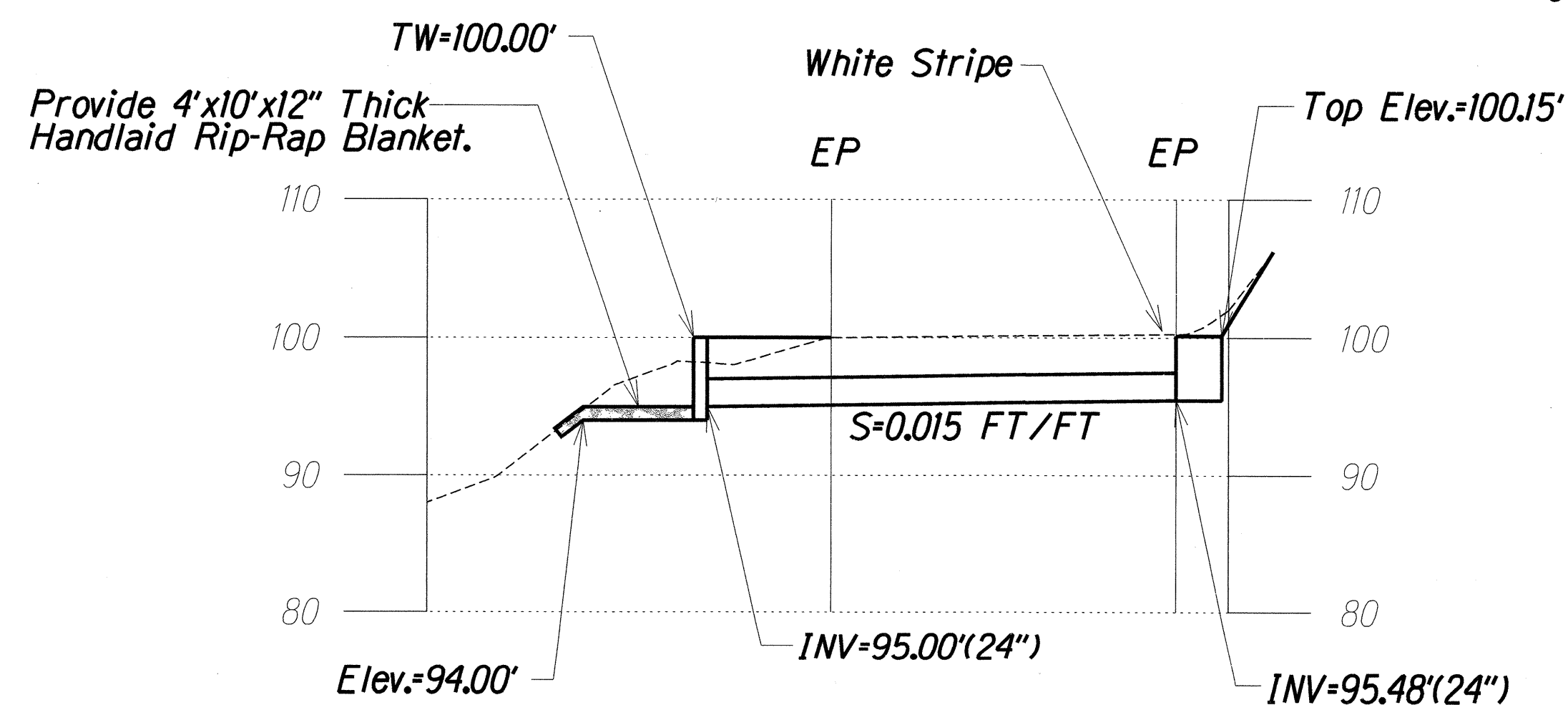
Provide 4'x10'x12" Thick
Handlaid Rip-Rap Blanket.

STA. 568+07.3 O/S 17.4' LT.

Sawcut Existing Pavement.
for Trenching.

Install A-9P Grated Drop Inlet.
(See Std. Plan H-09)
(See Sheet 39 For Detail)
Top Elev.=100.15'(Match Exist. Road Grade)
RIM=100.15'
Inv.=95.48'
(To Be Verified in Field).

Site 6, Mile Post 13.6



TRUE NORTH
SCALE: 1" = 40'

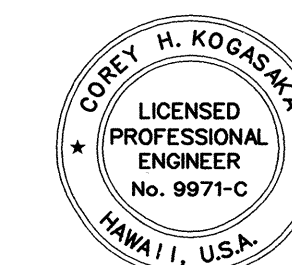
Remove Existing 8" Pipe.
Install 24" RCP Drainline.
Construct CRM Headwall.
(See Std. Plan H-16)
Repave Over Culvert with 4" A.C.
Mix No. IV Over 8" of Base Course
on 12" of Subbase Course.
S=0.015 FT/FT
L=33 L.F.
Inv.=95.00'
Regrade to Provide Drainage to the
Bottom of Bank. Grading will be
Incidental to Headwall and will not be
Paid for Separately.

STA. 568+03.6 to STA. 568+90.0
Install 81 L.F. of Strong Post
W-Beam Guardrail.
Approach End: Type "A"
Trailing End: Connect to
Existing Guardrail

Eliminate Guard Post Over Low-Fill
Culvert and Install Guardrail Per
Detail Shown on This Sheet

Hana Highway

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



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PROJECT WILL BE UNDER MY OBSERVATION.
Corey H. Kogaska
DATE: 4/30/02

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

SITE 6, M.P. 13.6

HANA HIGHWAY

REPAIRS AND MAINTENANCE

PROJECT NO. 360AB-01-02M

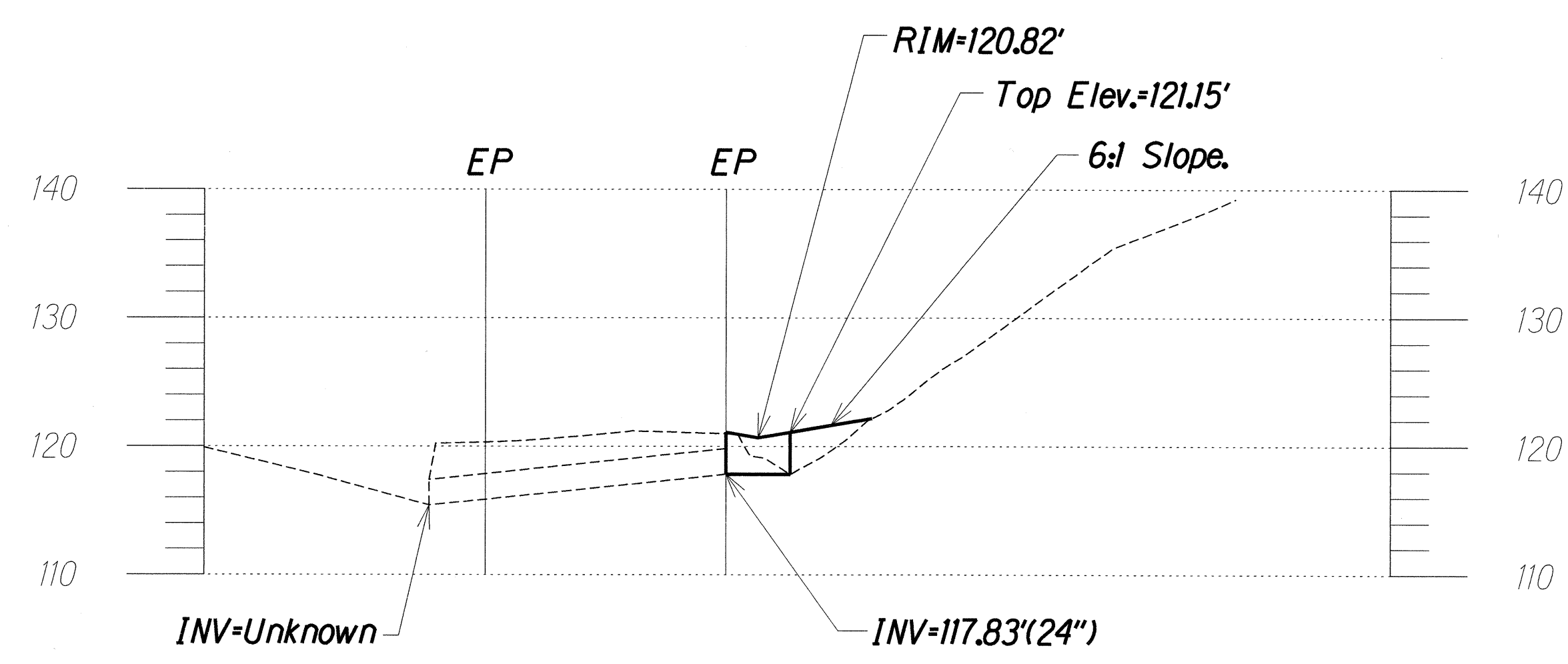
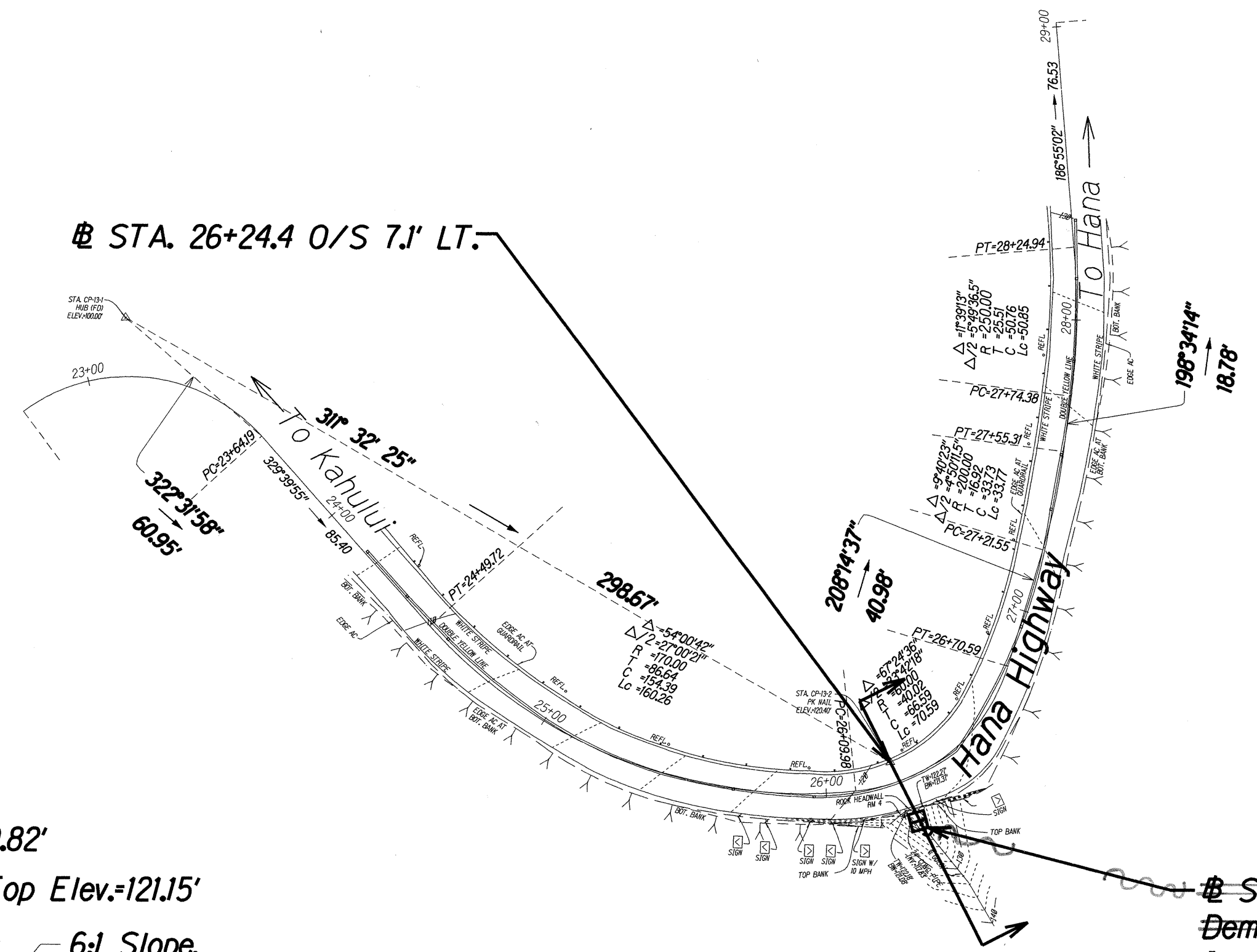
Scale: 1"=40' Date: March, 2001

SHEET No. 6 OF 10 SHEETS

"AS-BUILT"

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	360AB-01-02M	2002	20	41

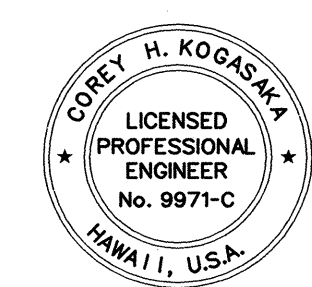
TRUE NORTH
SCALE: 1" = 40'



Profile
Scale: 1"=10'

• STA. 26+26.8 O/S 10.1' RT.
Demolish Existing Headwall;
Install 61614P Grated Drop Inlet;
(See Std. Plan H-II, and Sheet 40)
Top Elev.=121.15'(Match Exist. Road Grade)
~~RIM=120.82'~~
~~Inv.=117.83'~~
(To Be Verified in Field)

Site 7, Mile Post 14.5



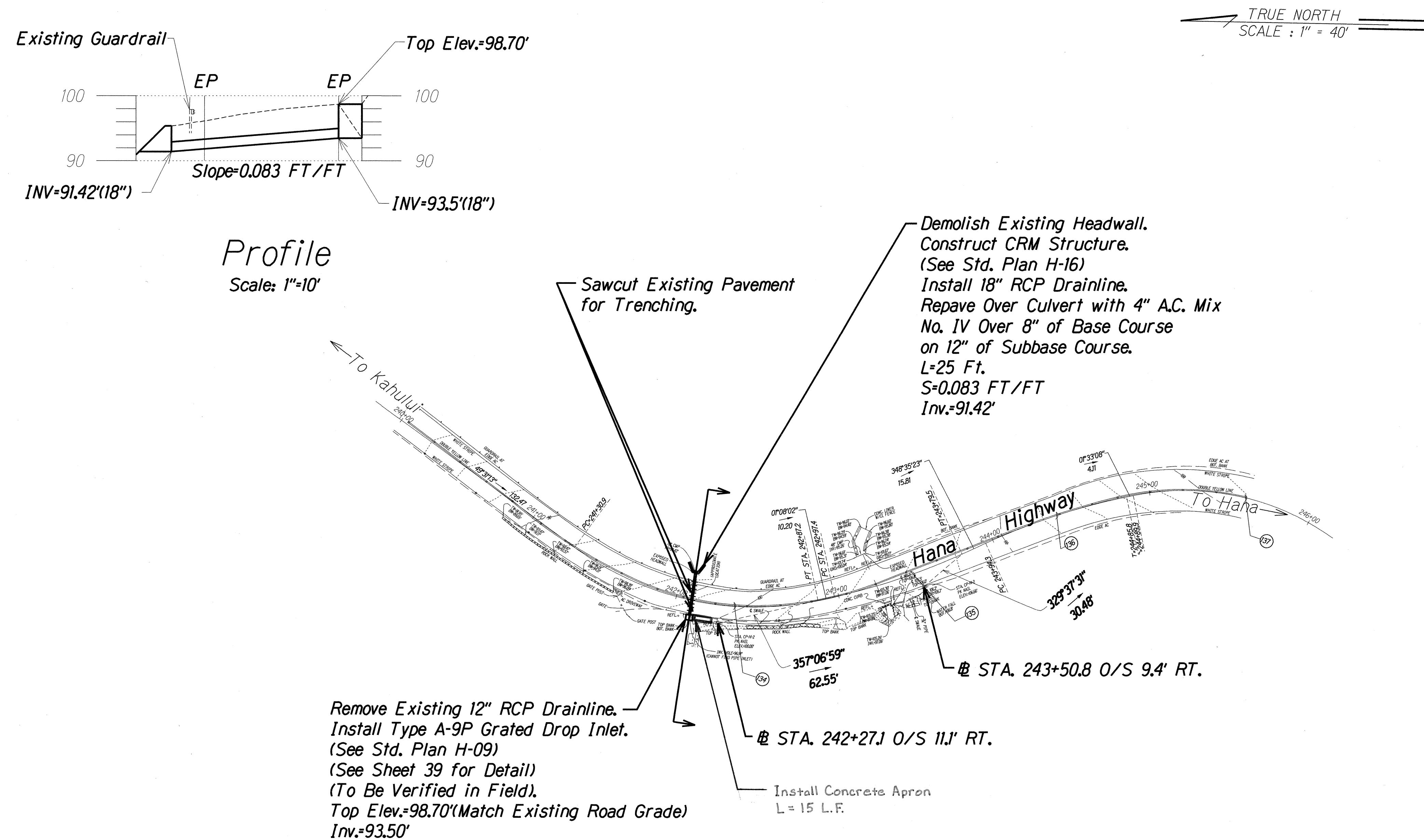
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Corey H. Kogasaki
DATE: 4/30/02

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
ROADWAY PLAN
SITE 7, M.P. 14.5
HANA HIGHWAY
REPAIRS AND MAINTENANCE
PROJECT NO. 360AB-01-02M
Scale: 1"=40' Date: March, 2001
SHEET No. 7 OF 10 SHEETS

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
DRAWN BY		
DESIGNED BY		
CHECKED BY		
NO.		

AS-BUILT

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	360AB-01-02M	2002	21	41



Site 8, Mile Post 18.8

CURVE DATA TABLE

	134	135	136	137
Δ	48° 23' 11"	12° 32' 39"	12° 57' 45"	49° 02' 12"
$\Delta/2$	24° 11' 35"	6° 16' 19.5"	6° 28' 52.5"	24° 31' 06"
R	185.00'	375.00'	400.00'	155.00'
T	83.12'	41.22'	45.44'	70.70'
C	151.63'	81.92'	90.30'	128.65'
Lc	156.23'	82.10'	90.50'	132.66'



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 DATE: 4/20/02

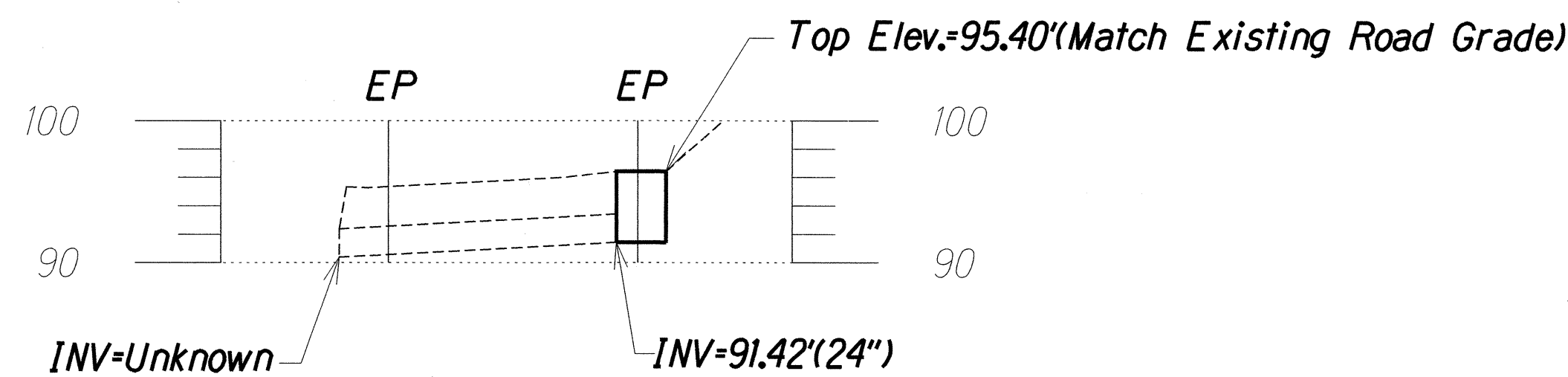
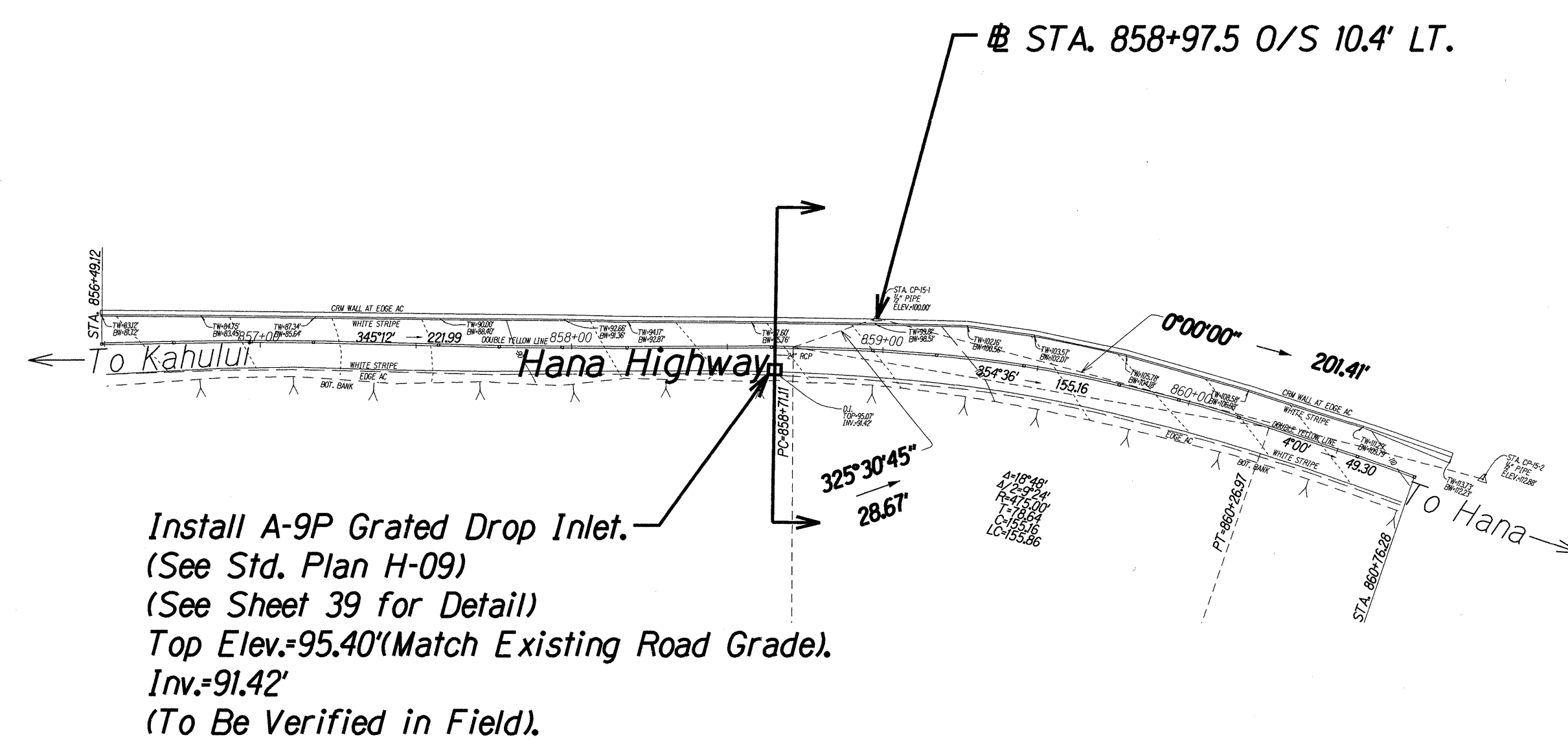
STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
ROADWAY PLAN
SITE 8, M.P. 18.8
 HANA HIGHWAY
 REPAIRS AND MAINTENANCE
 PROJECT NO. 360AB-01-02M

Scale: 1"=40' Date: March, 2001

SHEET No. 8 OF 10 SHEETS

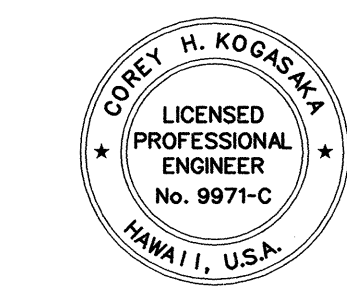
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	360AB-01-02M	2002	22	41

TRUE NORTH
SCALE: 1" = 40'



Site 9, Mile Post 19.3

SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
CHECKED BY	
NOTE BOOK	
NO.	

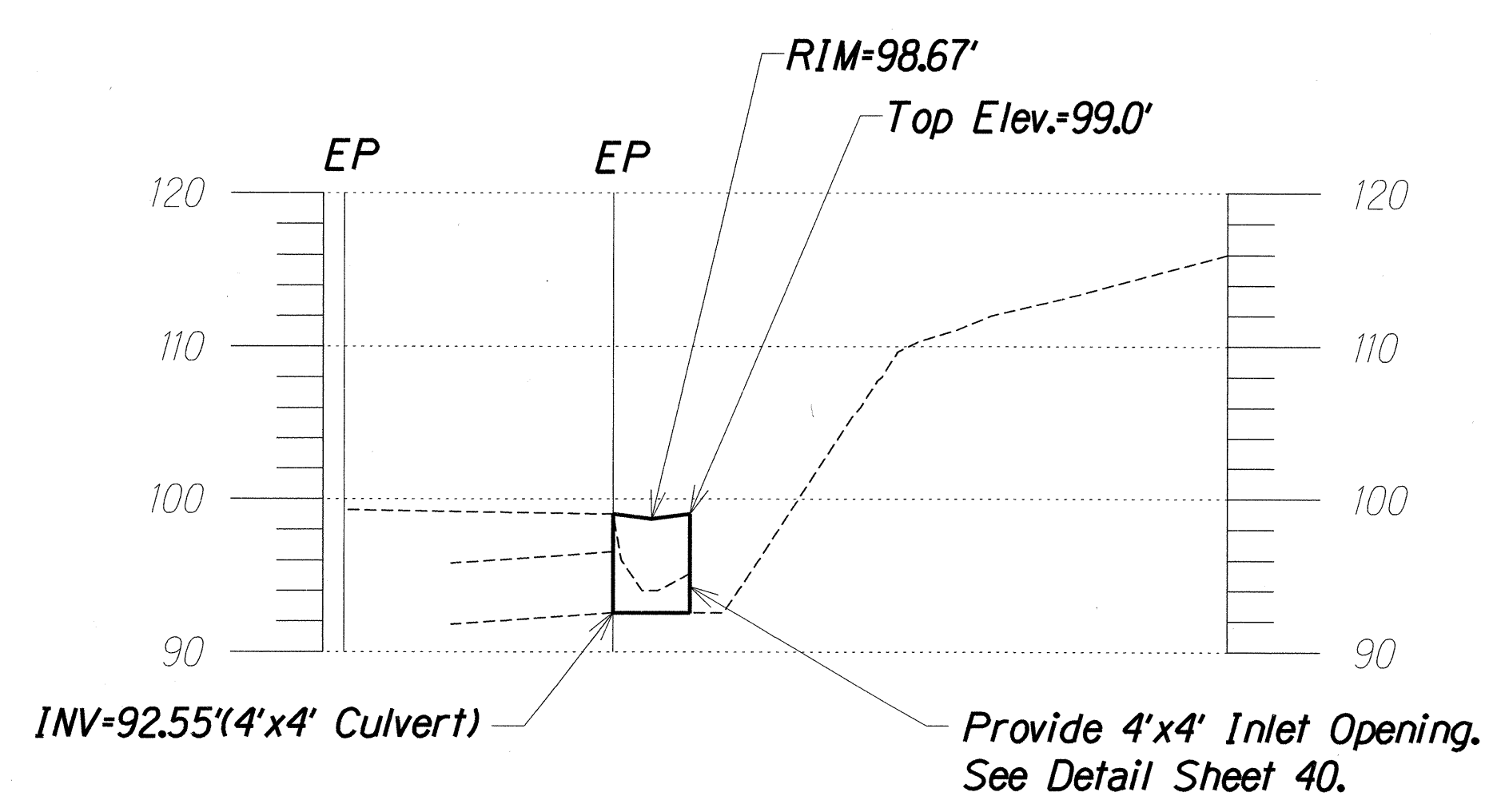
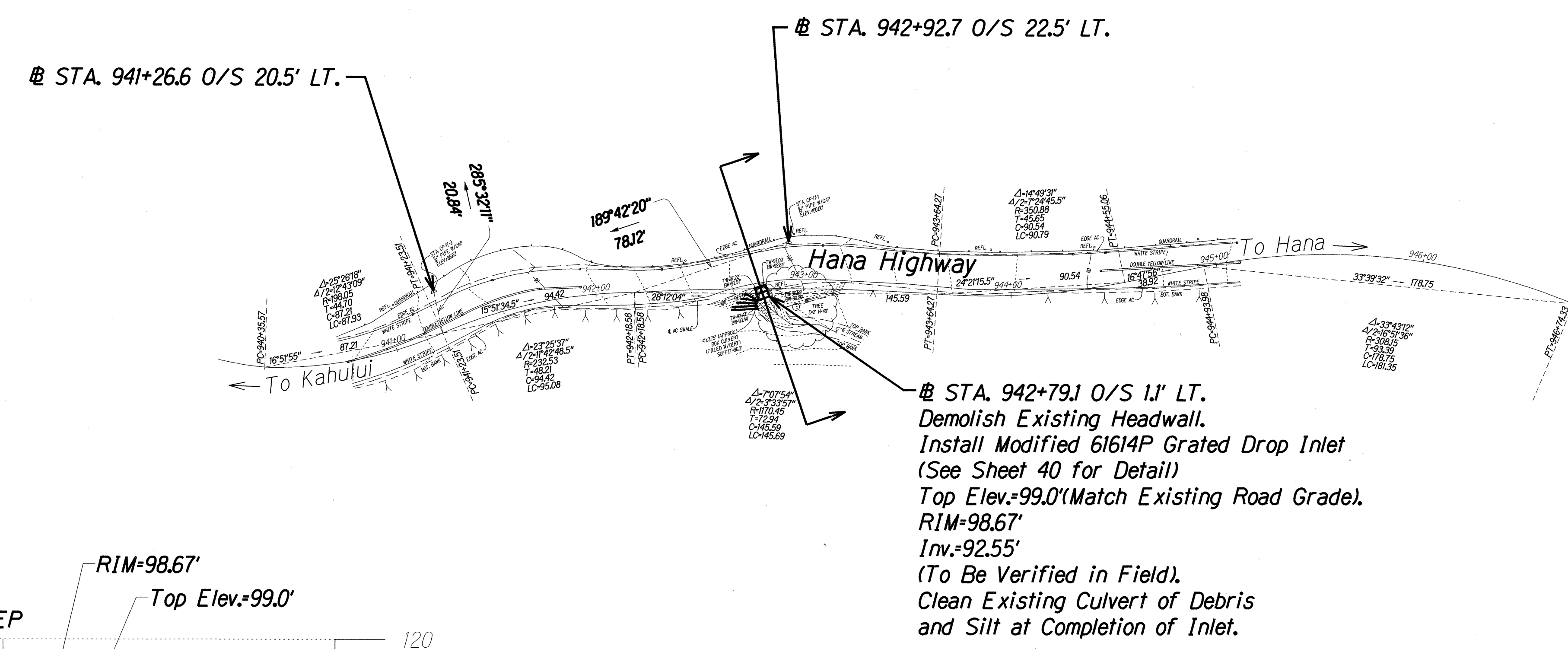


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Corey H. Kogaleka
DATE: 4/30/02

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
ROADWAY PLAN
SITE 9, M.P. 19.3
HANA HIGHWAY
REPAIRS AND MAINTENANCE
PROJECT NO. 360AB-01-02M
Scale: 1"=40' Date: March, 2001
SHEET No. 9 OF 10 SHEETS

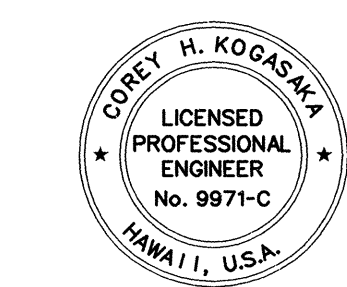
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	360AB-01-02M	2002	23	41

TRUE NORTH
SCALE: 1" = 40'



Profile
Scale: 1"=10'

Site 10, Mile Post 20.8



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DATE: 4/30/02

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
ROADWAY PLAN
SITE 10, M.P. 20.8
HANA HIGHWAY
REPAIRS AND MAINTENANCE
PROJECT NO. 360AB-01-02M
Scale: 1"=40' Date: March, 2001
SHEET No. 10 OF 10 SHEETS

SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
CHECKED BY	
NOTED BY	
DATE	