

STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAW	19GHJ-01-05M	2006	8	39

Roadway marker along inlet (mauka) side of culvert



Photo 1
Clear loose debris from above & around inlet opening



Photo 2
Regrade to uniform slope (1H:1V max); Const GRP slope protection



Photo 3
Cut vegetation & remove loose debris around outlet



Photo 4

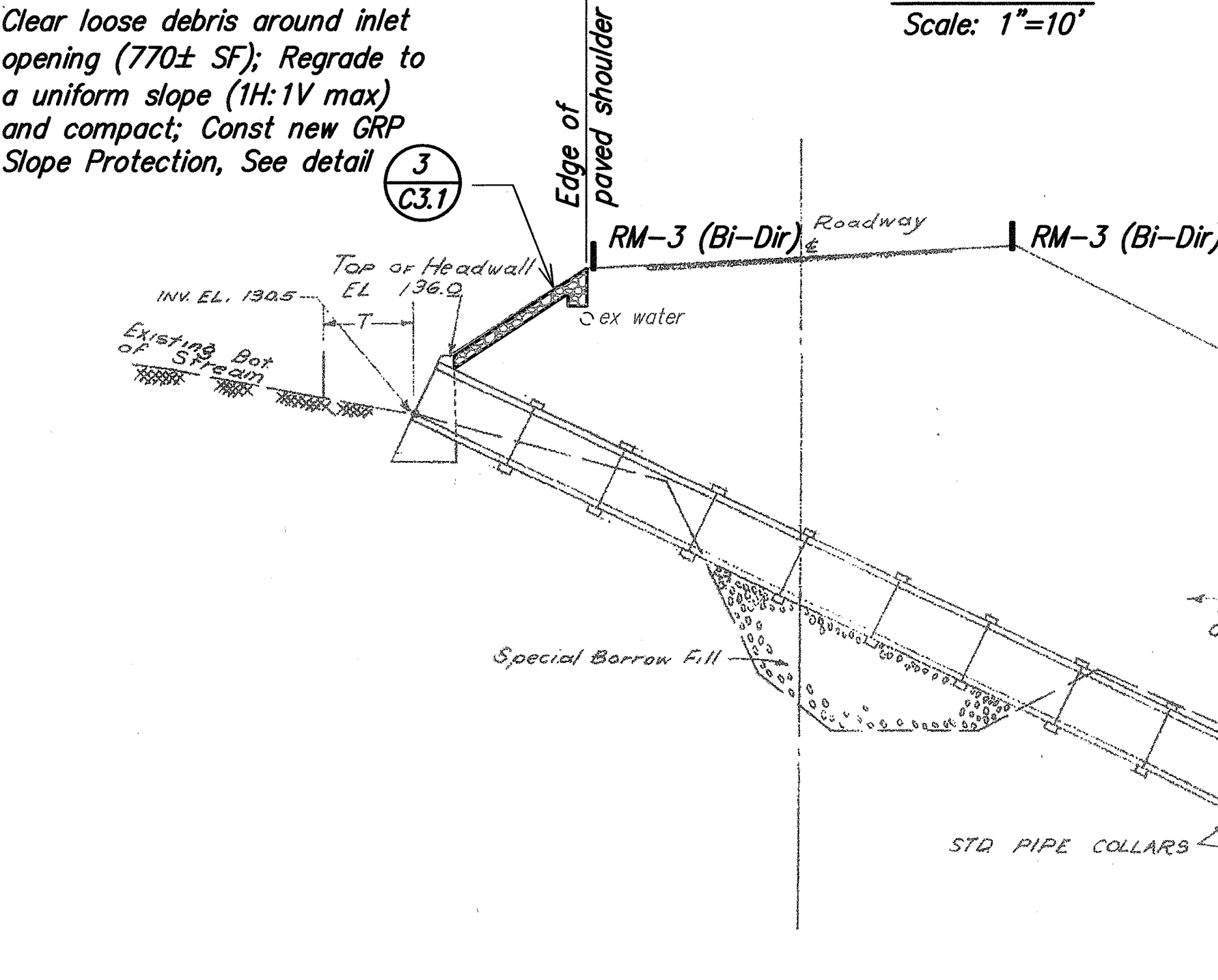
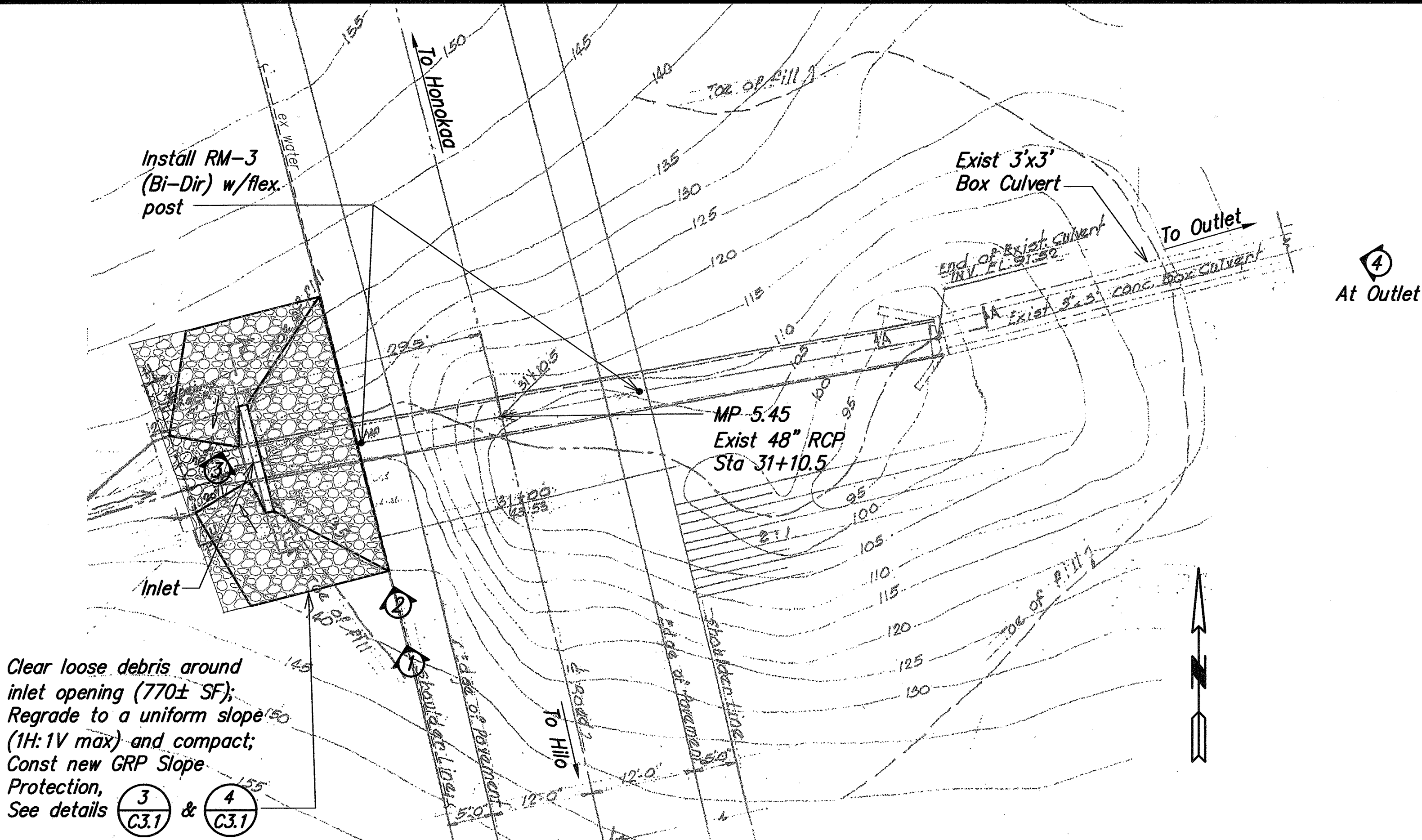
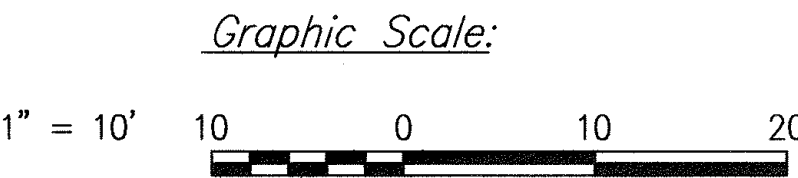


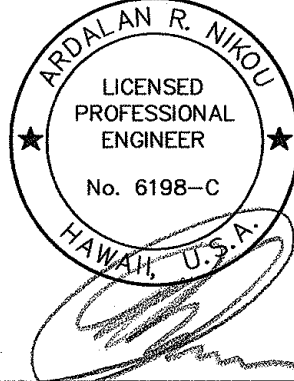
PHOTO NOTE:
Photographs are only for identifying the worksite. The Contractor shall perform his/her own site inspection to verify the existing site conditions that he/she may encounter during construction.

Legend:
① Photo direction and number

Notes:
1. See Structural drawings S2.1 thru S2.3 for culvert repairs.
2. Plan and profile background provide for information only. Image scanned from existing record drawings.



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EXPIRATION DATE OF THE LICENSE 4/30/2006
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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

SITE IMPROVEMENTS
MILE POST 5.45
HAWAII BELT ROAD DRAINAGE IMPROVEMENTS
Project No. 19GHJ-01-05M
Scale: 1"=10' Date: Apr 14, 2006

SHEET No. C2.1 OF 39 SHEETS

"AS-BUILT"

STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAW	19GHJ-01-05M	2006	9	39



Photo 1

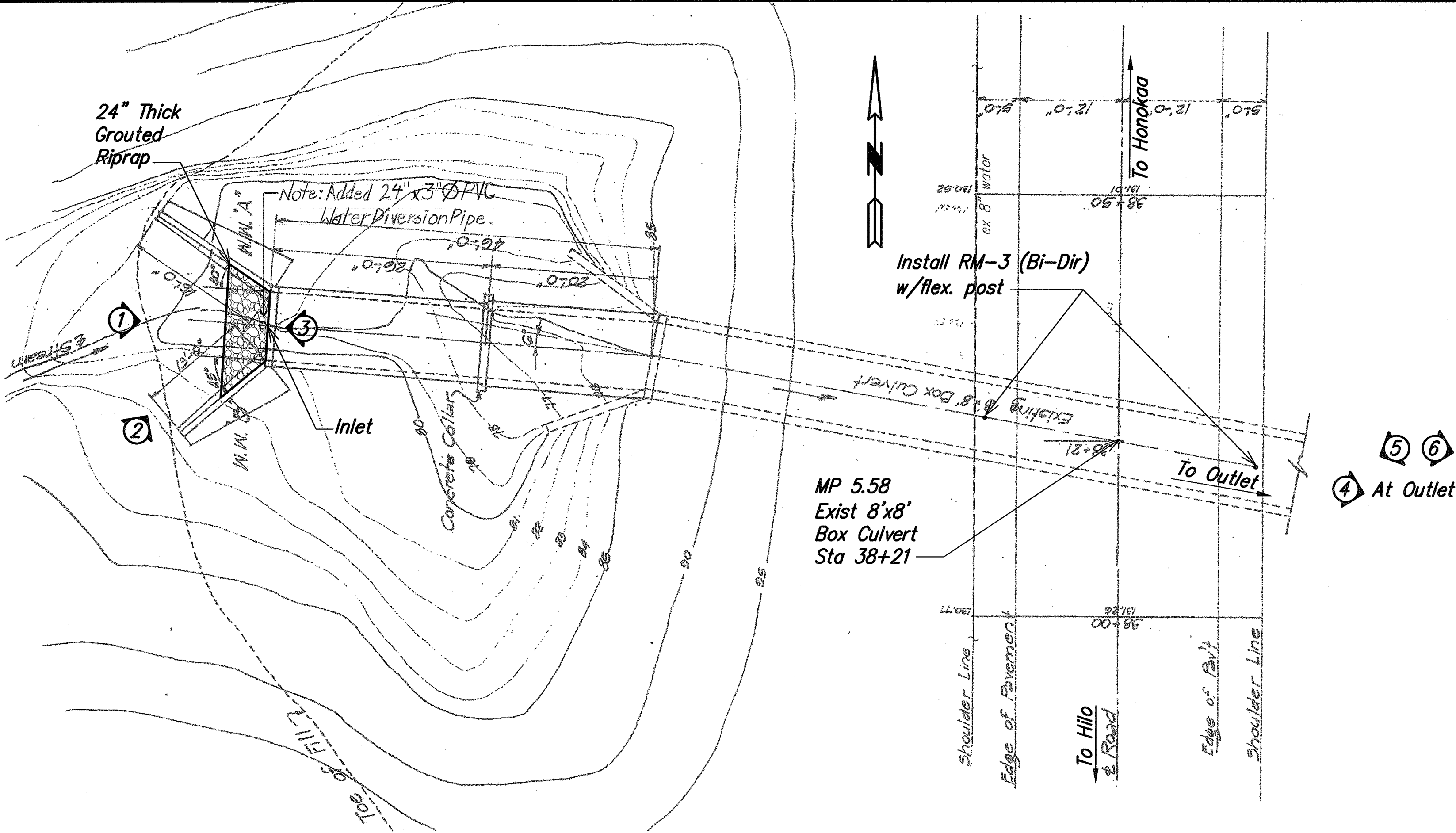


Photo 2

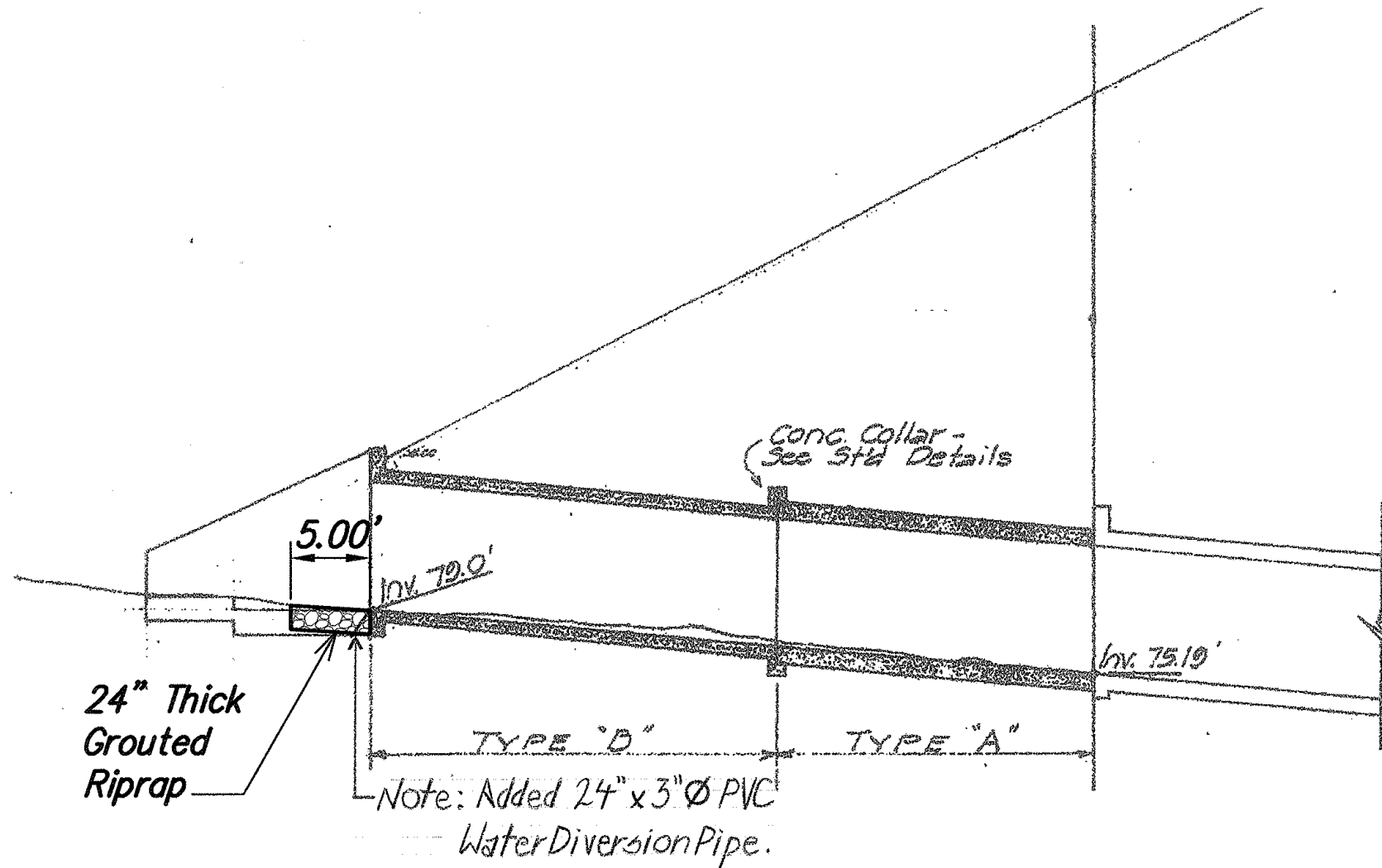


Photo 3

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SITE PLAN
Scale: 1"=10'



PROFILE
Scale: 1"=10'

Legend:
① Photo direction and number

- Notes:**
1. See Structural drawings S3.1 thru S3.3 for culvert repairs.
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Photo 4

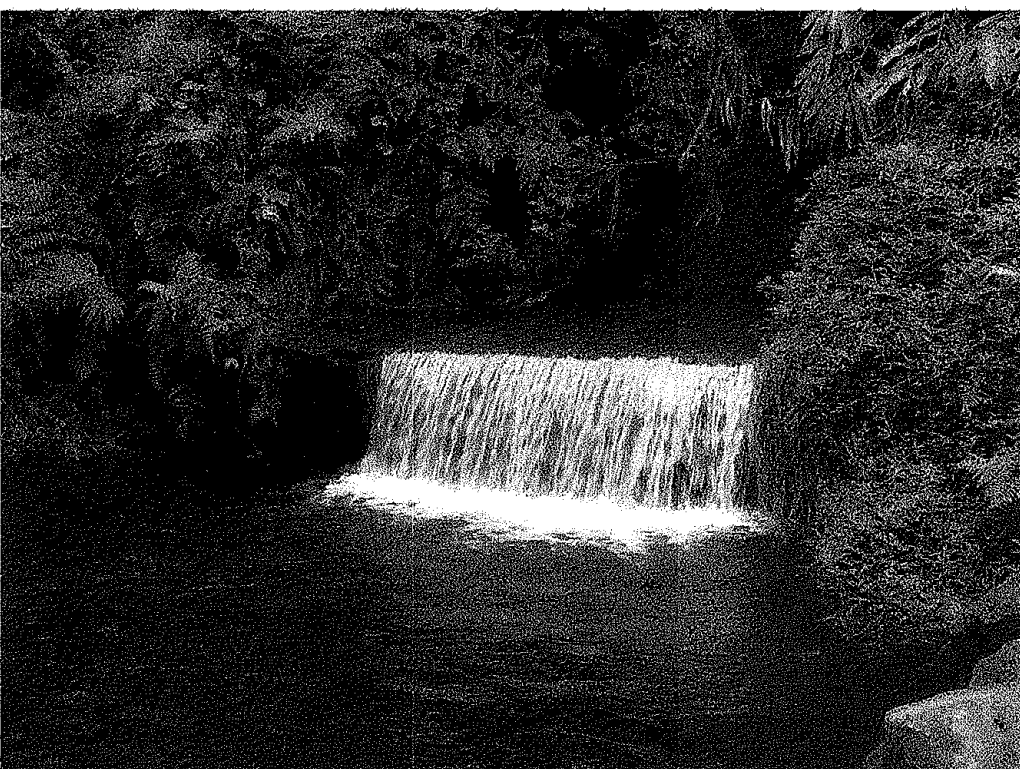


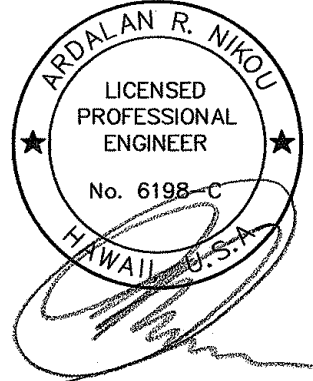
Photo 5



Photo 6

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

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STATE OF HAWAII
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HIGHWAYS DIVISION

SITE IMPROVEMENTS
MILE POST 5.58
HAWAII BELT ROAD DRAINAGE IMPROVEMENTS
Project No. 19GHJ-01-05M
Scale: 1"=10' Date: Apr 14, 2006

SHEET No. C2.2 OF 39 SHEETS

"AS-BUILT"

STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAW	19GHJ-01-05M	2006	10	39

Approx location of new box culvert alignment across roadway



Photo 1

Approx location of exist outlet



Photo 2

Exist inlet

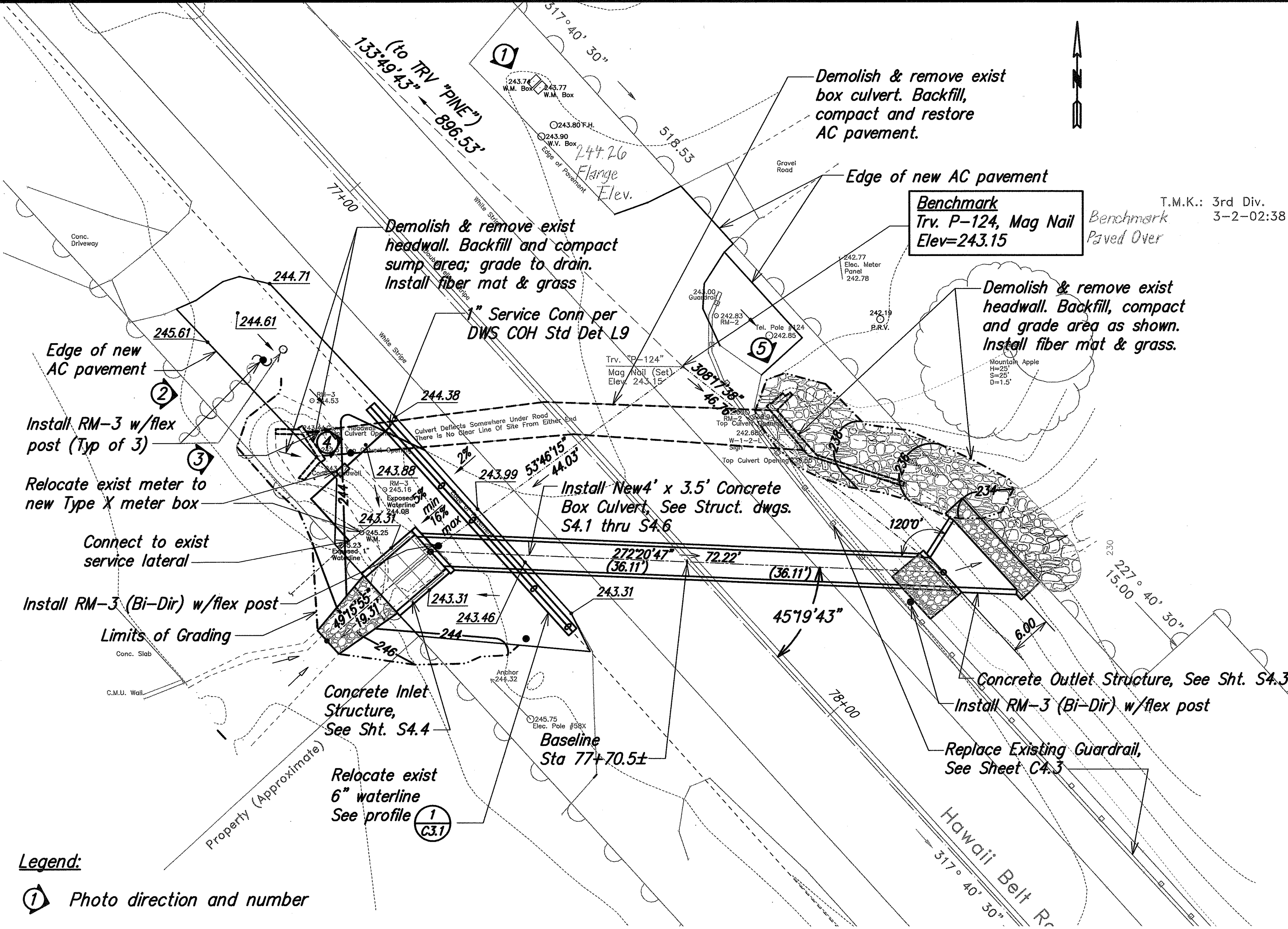


Photo 3

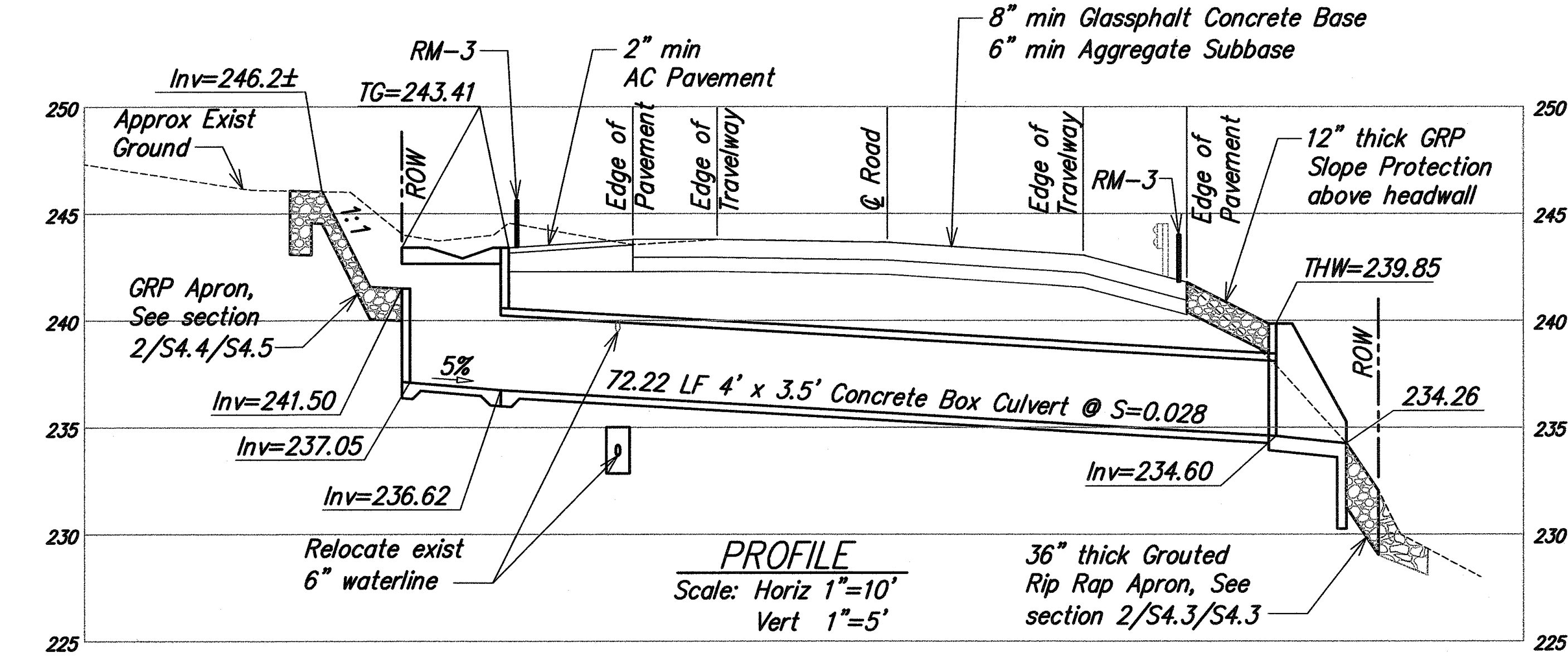
Remove exist waterline for culvert demolition. Const new waterline.



Photo 4



SITE LAYOUT PLAN
Scale: 1"=10'



PROFILE
Scale: Horiz 1"=10'
Vert 1"=5'



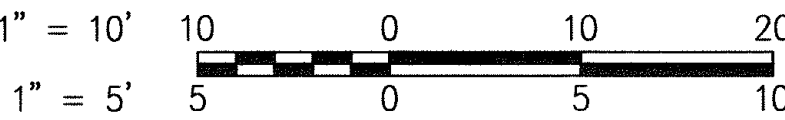
Photo 5

PHOTO NOTE:
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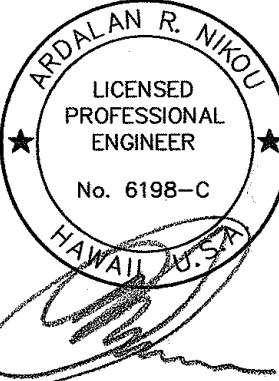
Notes:

1. For typical culvert trench and restoration detail, See Sht. C3.1.
2. For complete travel lane and shoulder cold-planing and resurfacing, See Sht. C4.3.

Graphic Scale:



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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
SITE IMPROVEMENTS
MILE POST 19.36
HAWAII BELT ROAD DRAINAGE IMPROVEMENTS
Project No. 19GHJ-01-05M
Scale: As Shown Date: Apr 14, 2006

SHEET No. C2.3 OF 39 SHEETS

"AS-BUILT"

STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAW	19GHJ-01-05M	2006	11	39

Trim vegetation & clear loose debris from around inlet opening



Photo 1

Clear & regrade slope above north wingwall; Const GRP slope protection

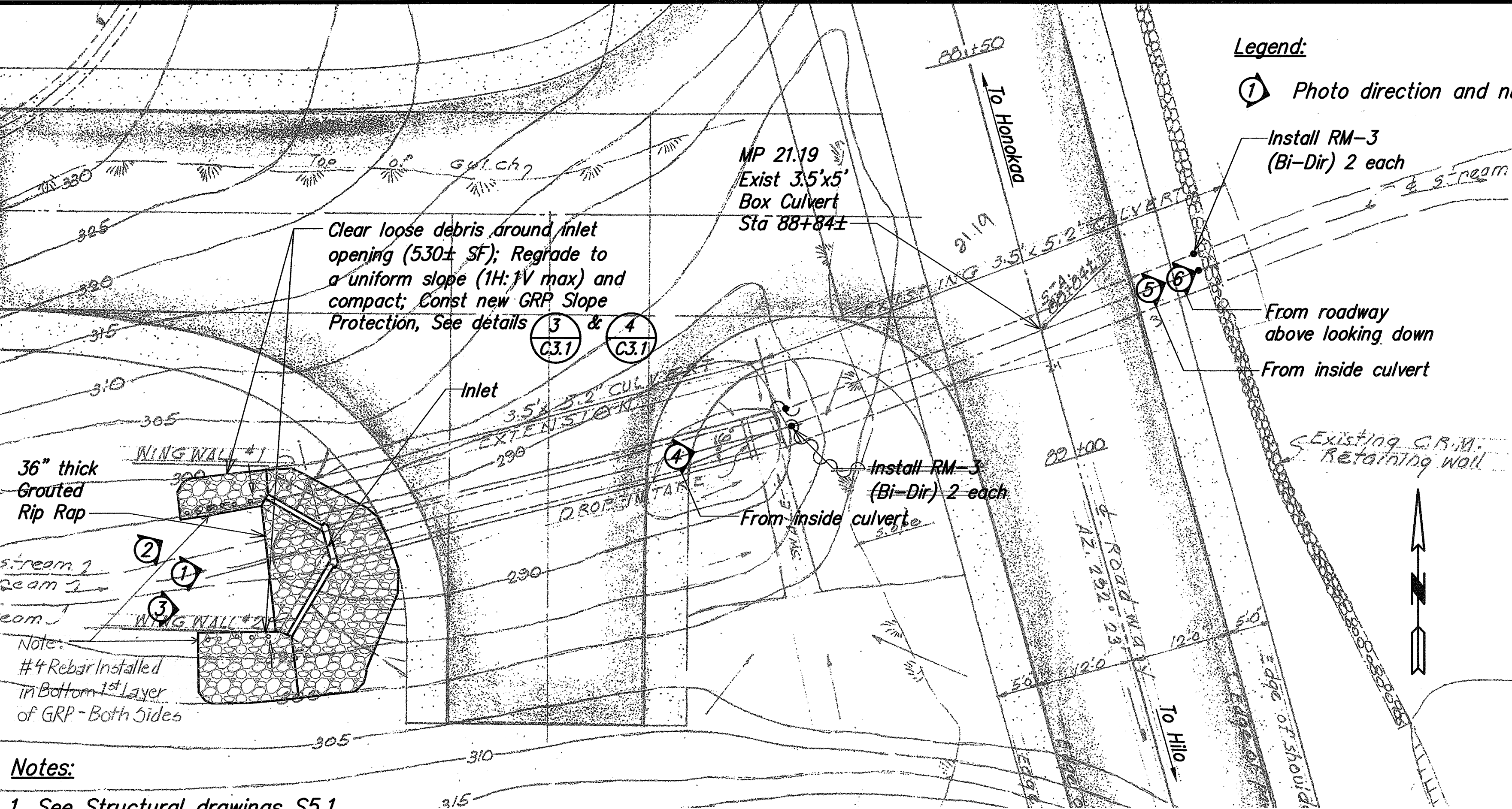


Photo 2

Clear & regrade slope above south wingwall; Const GRP slope protection



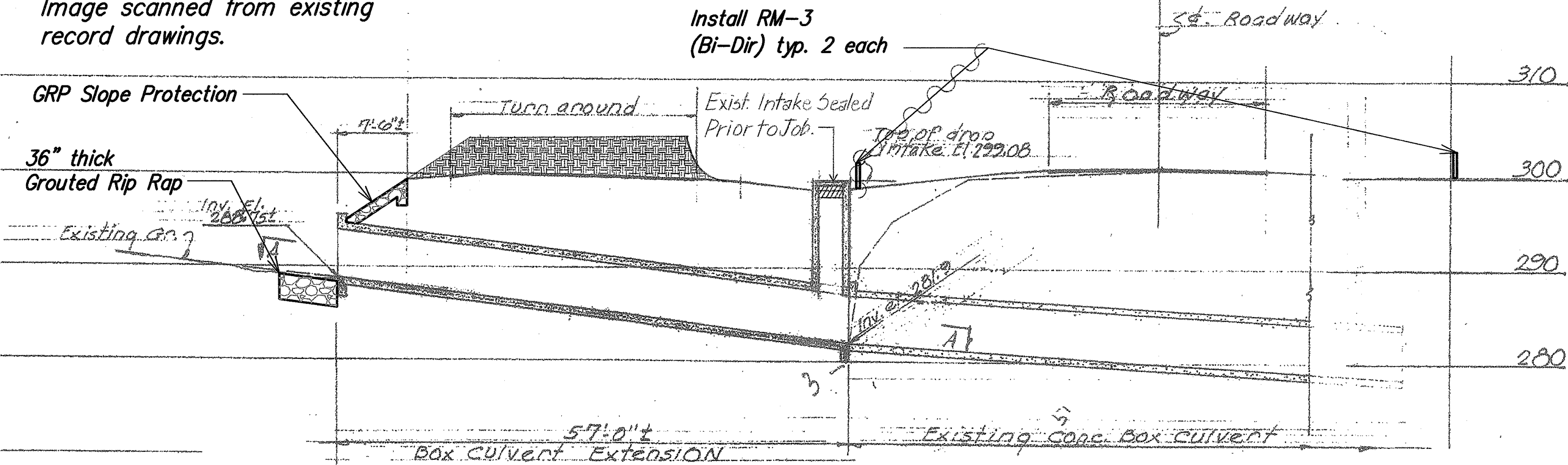
Photo 3



Notes:

1. See Structural drawings S5.1 thru S5.3 for culvert repairs.
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SITE PLAN
Scale: 1"=10'



PROFILE
Scale: 1"=10'

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Legend:
① Photo direction and number

Install RM-3 (Bi-Dir) 2 each
From roadway above looking down
From inside culvert

Exist drop inlet above

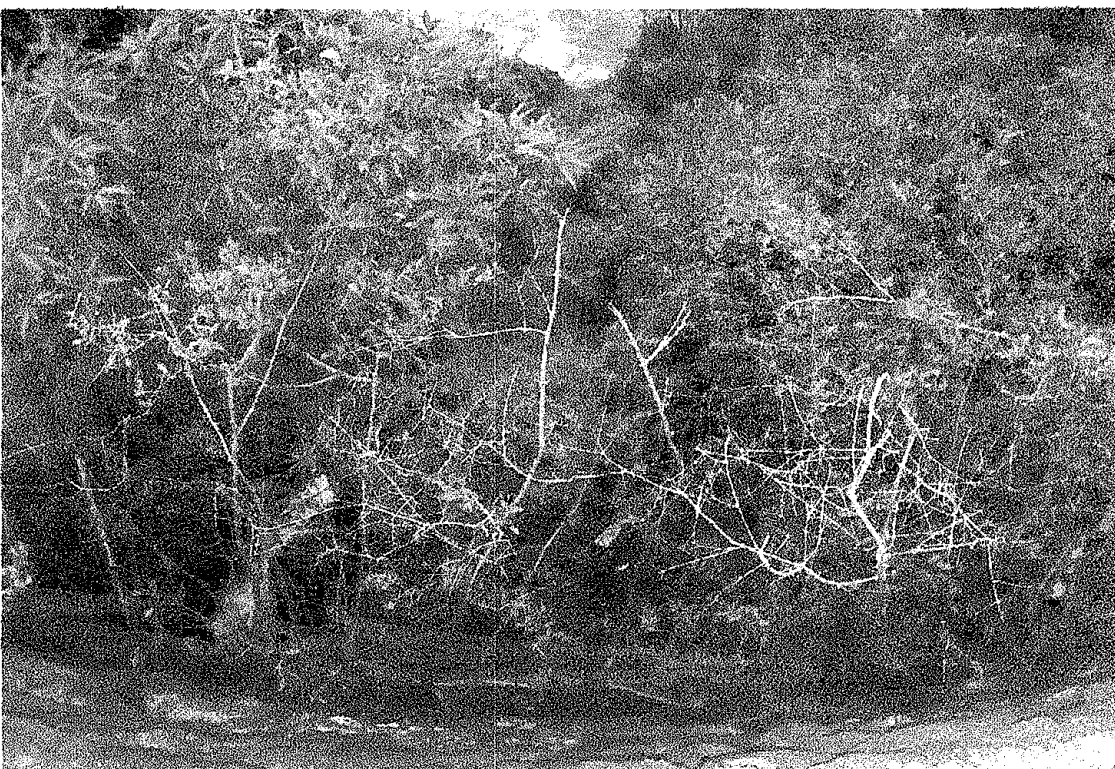


Photo 4



View looking downstream from within culvert

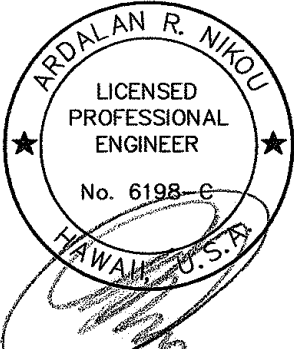
Photo 5



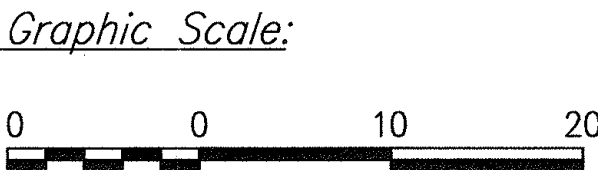
View from roadway looking down at outlet discharge

Photo 6

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"AS-BUILT"

STATE OF HAWAII
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HIGHWAYS DIVISION
SITE IMPROVEMENTS
MILE POST 21.19
HAWAII BELT ROAD DRAINAGE IMPROVEMENTS
Project No. 19GHJ-01-05M
Scale: 1"=10'
Date: Apr 14, 2006
SHEET No. C2.4 OF 39 SHEETS

STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAW	19GHJ-01-05M	2006	12	39



Photo 1 Remove loose rocks Repair slope embankment Remove loose rocks



Photo 2



Photo 3

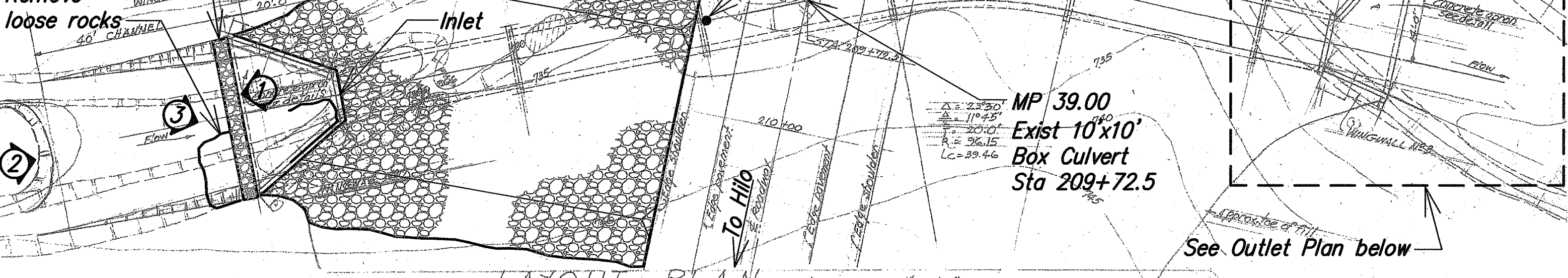


Photo 4

Clear exist slope above inlet head/wingwalls of loose rocks, debris & vegetation (5,330± SF); Backfill voids, regrade to a uniform slope (1H:1V max), and compact; Const GRP Slope Protection; See details 3 & 4

Construct 36" thick Grouted Rip-Rap

Remove loose rocks



SITE PLAN
Scale: 1"=20'

Clear exist slope above inlet head/wingwalls of loose rocks, debris & vegetation (5,330± SF); Backfill voids, regrade to a uniform slope (1H:1V max), and compact; Const new GRP Slope Protection, See detail 4

Construct New Concrete Apron, See Shts. S6.4

Demolish & remove exist apron

Construct 36" thick Grouted Rip-Rap

Install RM-3 (Bi-Dir) w/flex. post

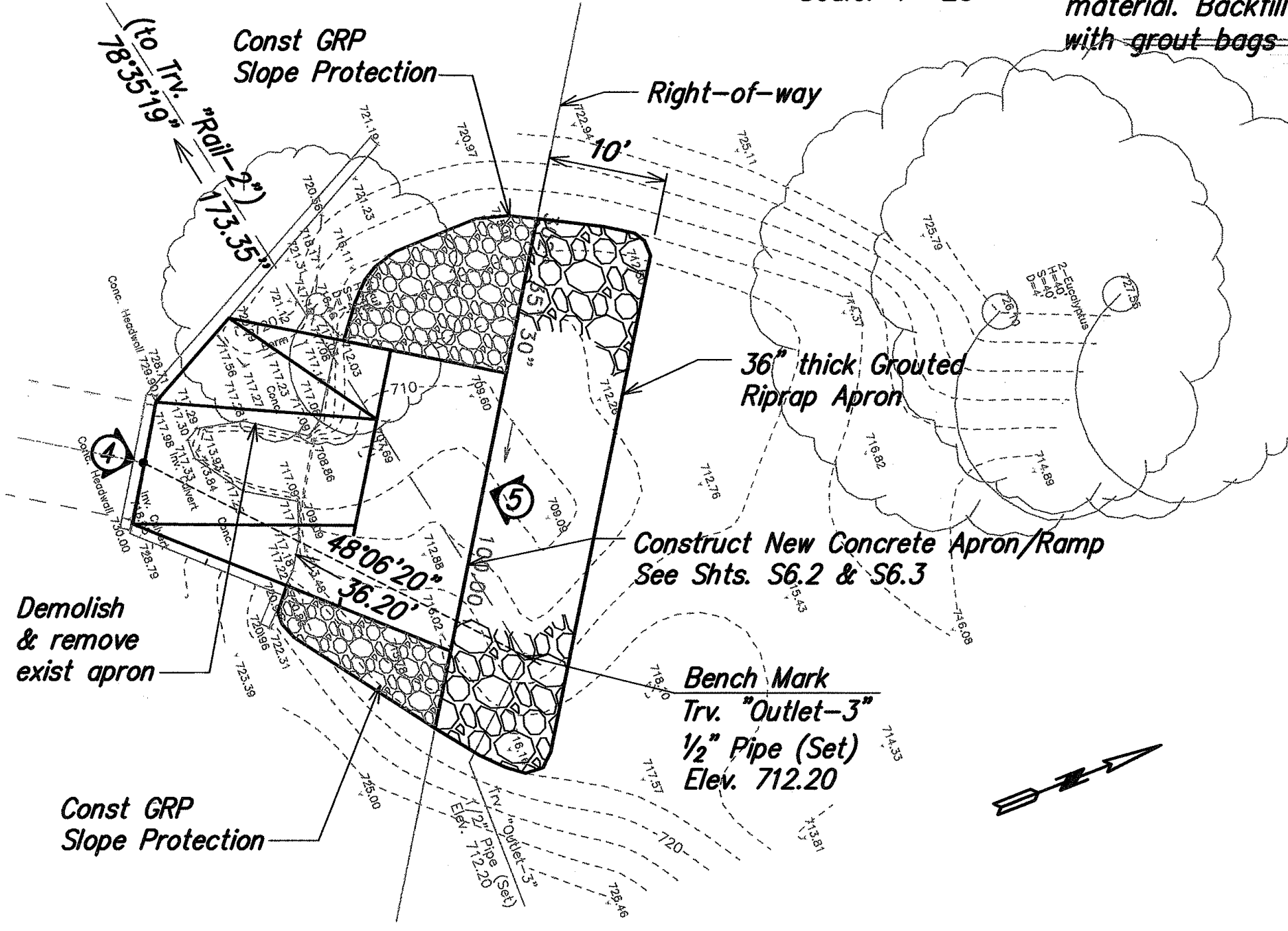
Construct New Concrete Apron/Ramp. See struct dwgs.

Demolish & remove exist apron

Construct 36" thick Grouted Rip Rap

SECTION
Scale: 1"=20'

Remove loose rocks & debris and overexcavate soft soils to firm substrate but not deeper than 5' from finish elevation Line bottom with geotextile material. Backfill cavity below new apron with grout bags or Class D concrete



OUTLET PLAN
Scale: 1"=10'

Repair damaged conc apron. See Struct dwg.



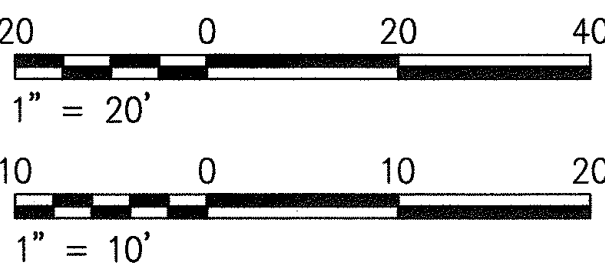
Photo 5

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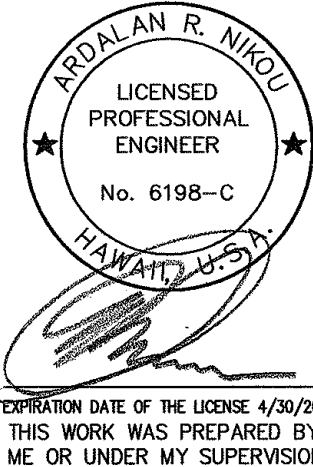
Legend:
① Photo direction and number

Notes:
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STATE OF HAWAII
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SITE IMPROVEMENTS
MILE POST 39.00
HAWAII BELT ROAD DRAINAGE
IMPROVEMENTS

Project No. 19GHJ-01-05M

Scale: As Shown Date: Apr 14, 2006

SHEET No. C2.5 OF 39 SHEETS

"AS-BUILT"