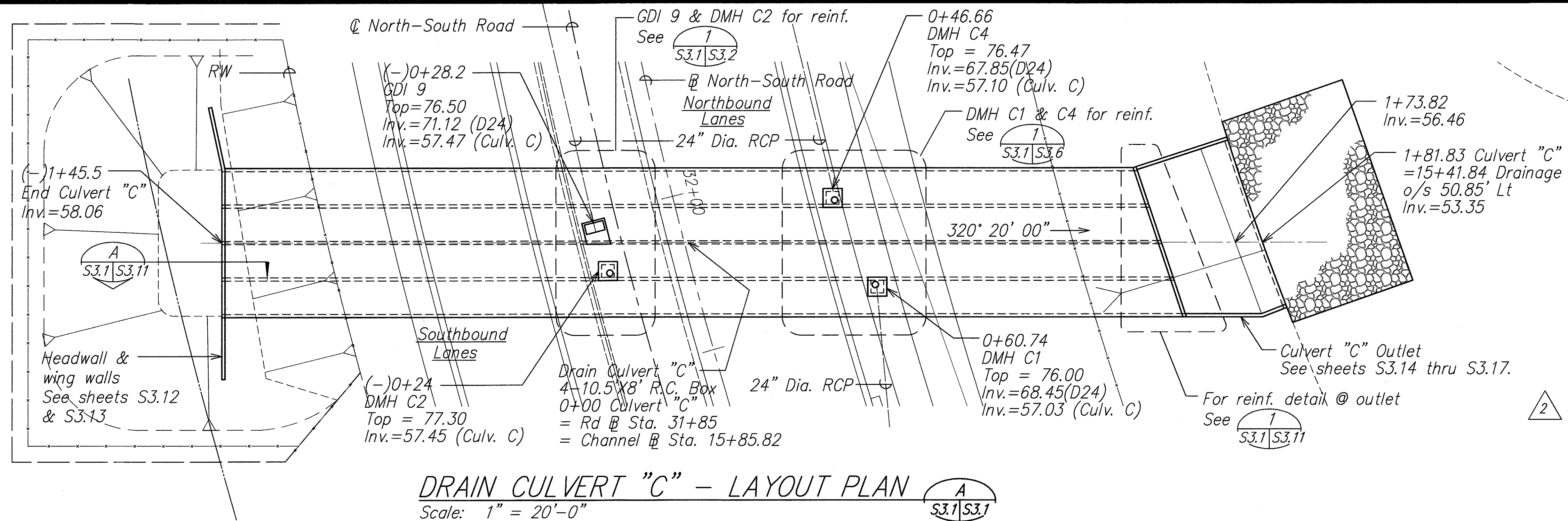
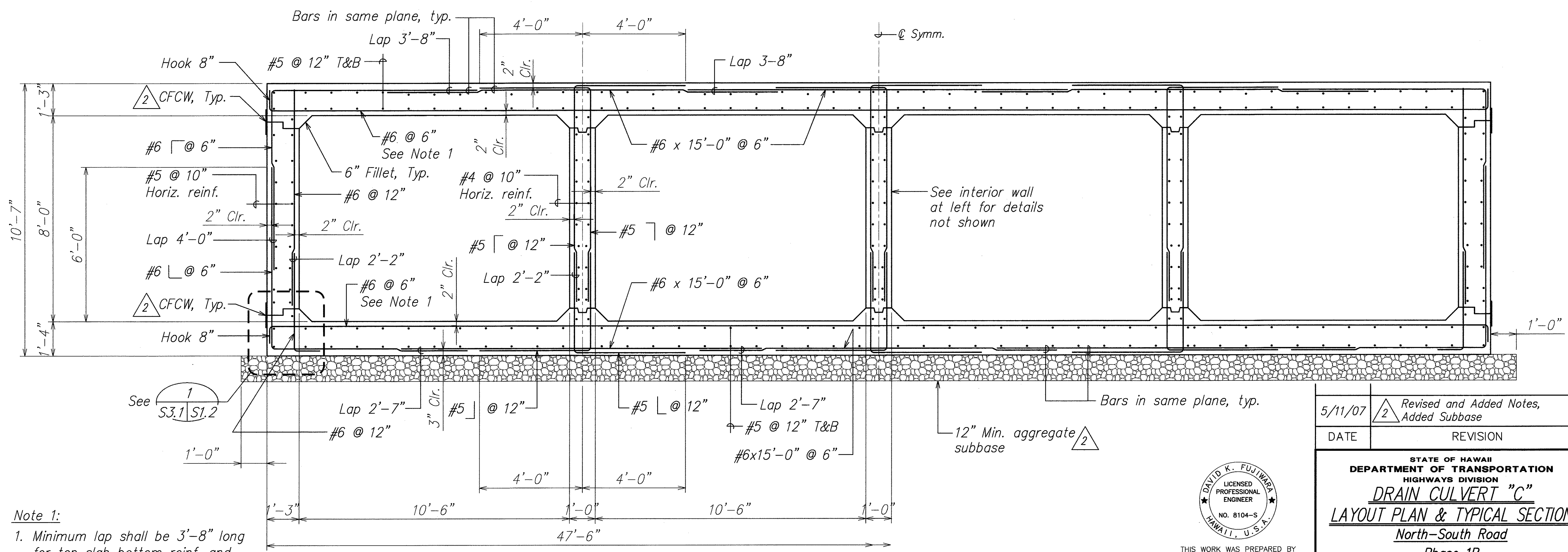


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-8930(2)	2007	ADD. 201	331



Note:
Provide transverse contraction joints at 20'-0" max. oc unless otherwise noted. Waterproof with continuous flashing compound waterproofing on three sides at each contraction joint.



Note 1:
1. Minimum lap shall be 3'-8" long for top slab bottom reinf. and bottom slab top reinf. and shall be centered over an interior wall. Alternate lap locations.

DRAIN CULVERT "C" - TYPICAL SECTION
Scale: 1/2" = 1'-0"

DAVID K. FUJIMURA
LICENSED PROFESSIONAL ENGINEER
NO. 8104-S
HAWAII, U.S.A.
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.
SIGNATURE: *David K. Fujimura* 4-30-08
EXPIRATION DATE OF THE LICENSE

5/11/07	2	Revised and Added Notes, Added Subbase
DATE	REVISION	

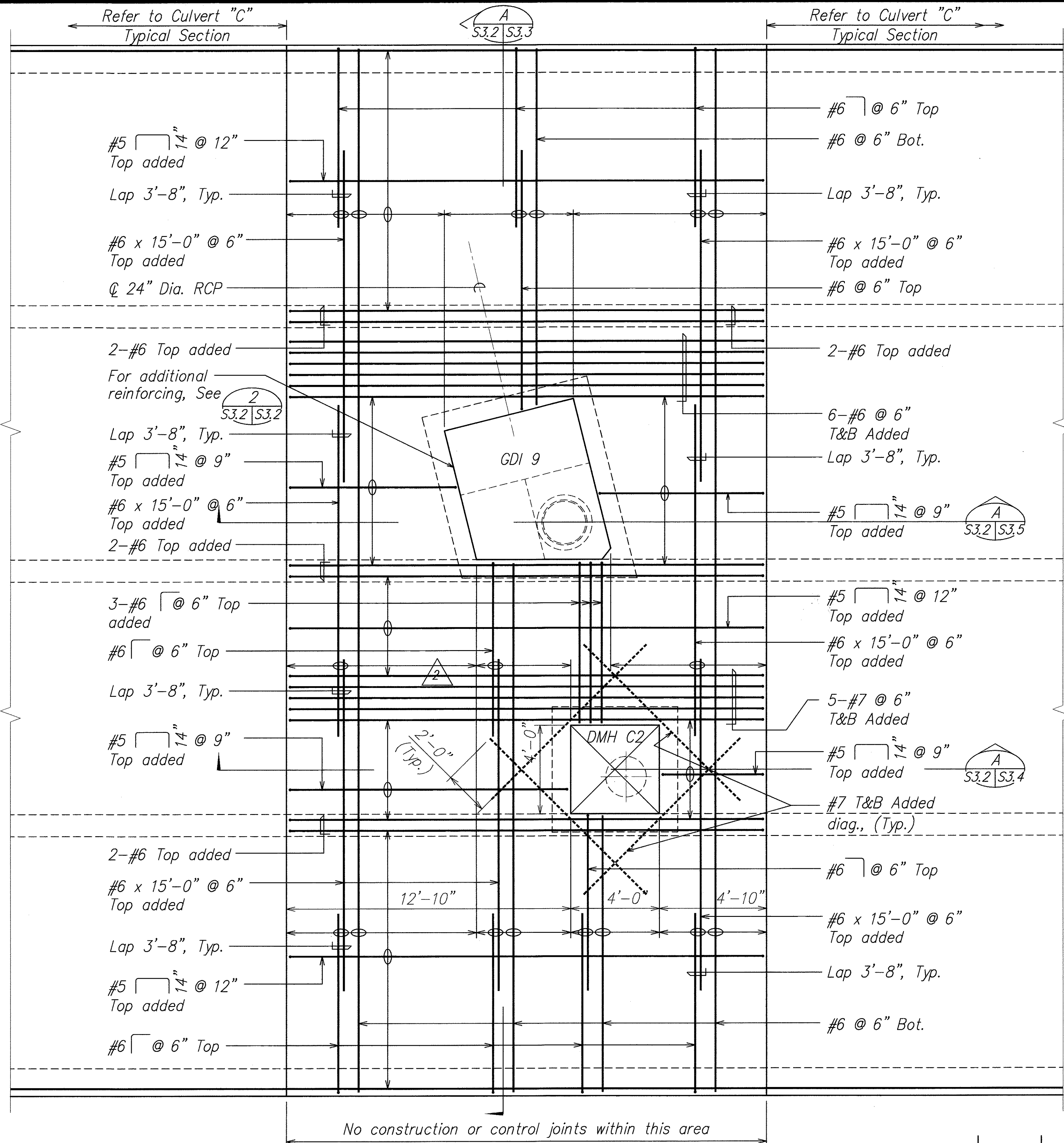
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAIN CULVERT "C"
LAYOUT PLAN & TYPICAL SECTION
North-South Road
Phase 1B
F.A.I. Proj. No. STP-8930(2)

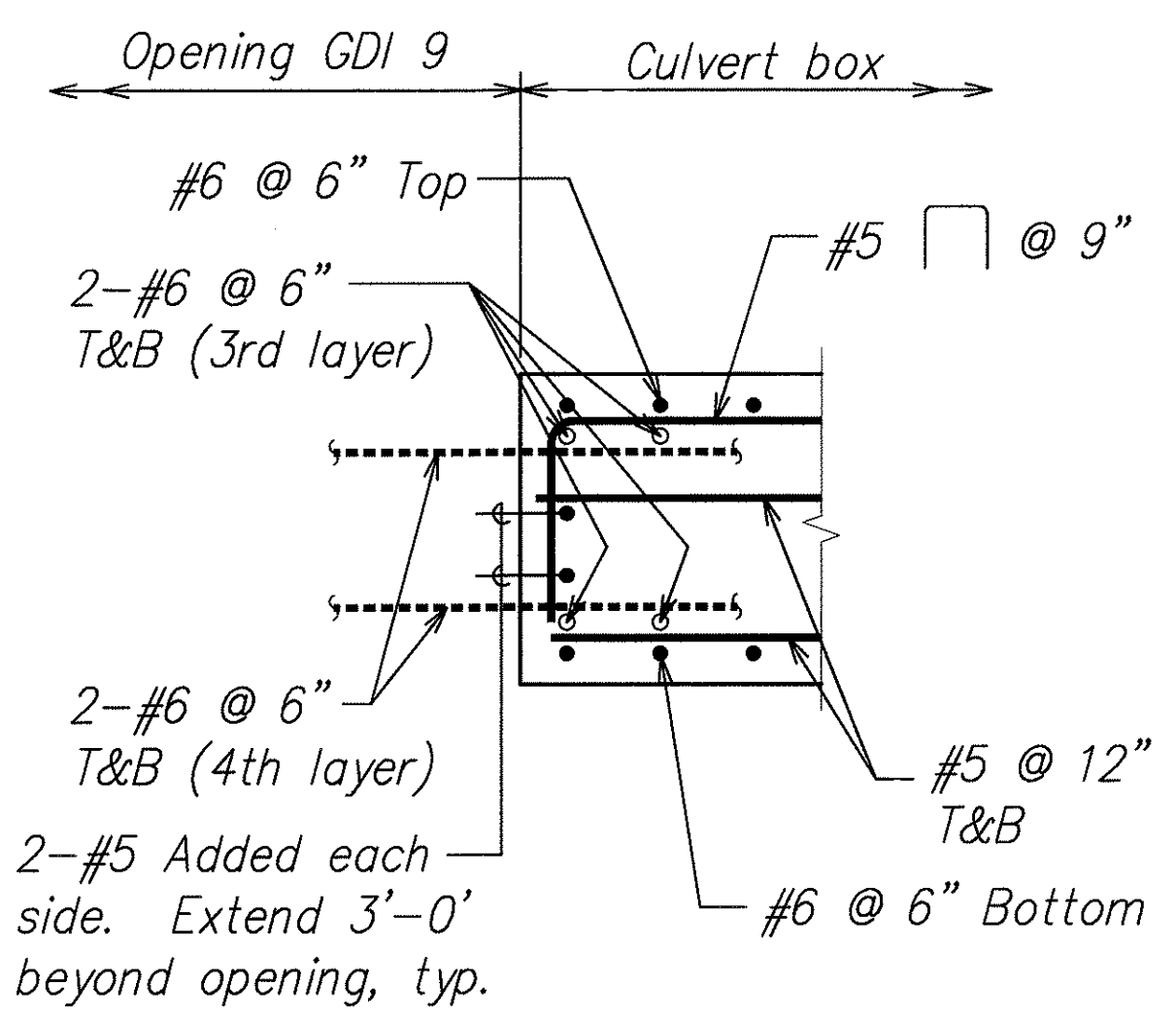
Scale: As Noted Date: Feb. 21, 2007

SHEET No. S3.1 OF 78 SHEETS

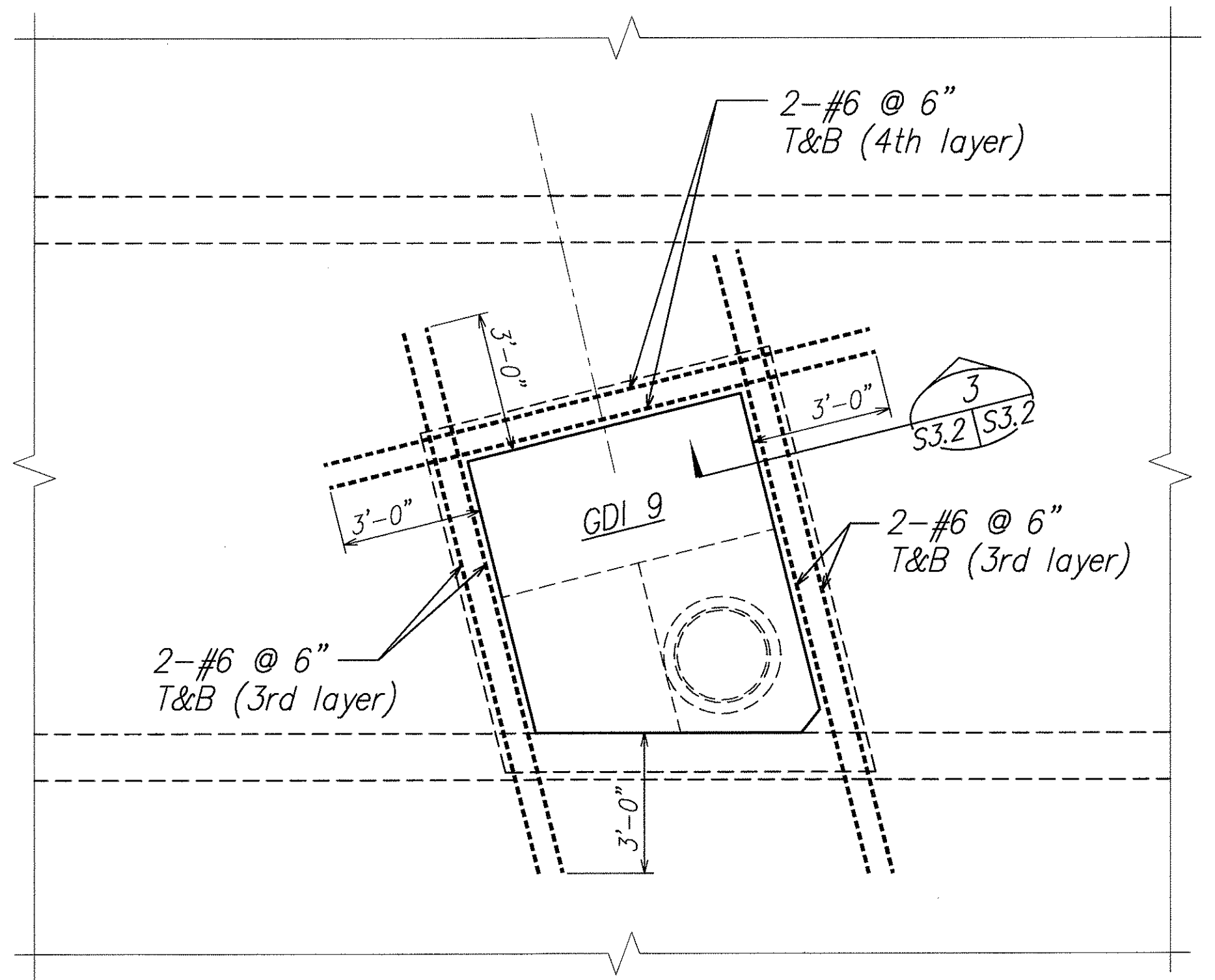
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-8930(2)	2007	ADD.202	331



DRAIN CULVERT "C" - TOP SLAB PLAN AT DMH C2 & GDI 9
Scale: 3/8" = 1'-0"
S3.1 S3.2

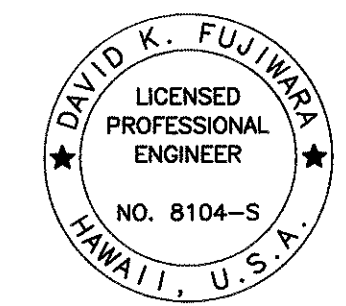


SECTION 3
Scale: 1" = 1'-0"
S3.2 S3.2



ADDITIONAL REINF. AT GDI 9
Scale: 3/8" = 1'-0"
S3.2 S3.2

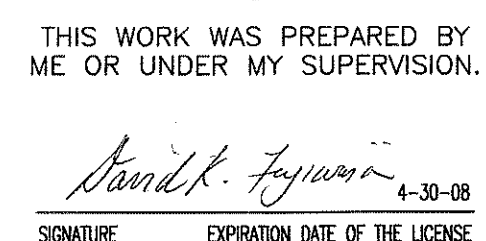
Note:
#5 @ 12" T&B Longit.
top slab reinforcing
not shown for clarity.
Cut bars at opening



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Signature: David K. Fujiwara
EXPIRATION DATE OF THE LICENSE: 4-30-08

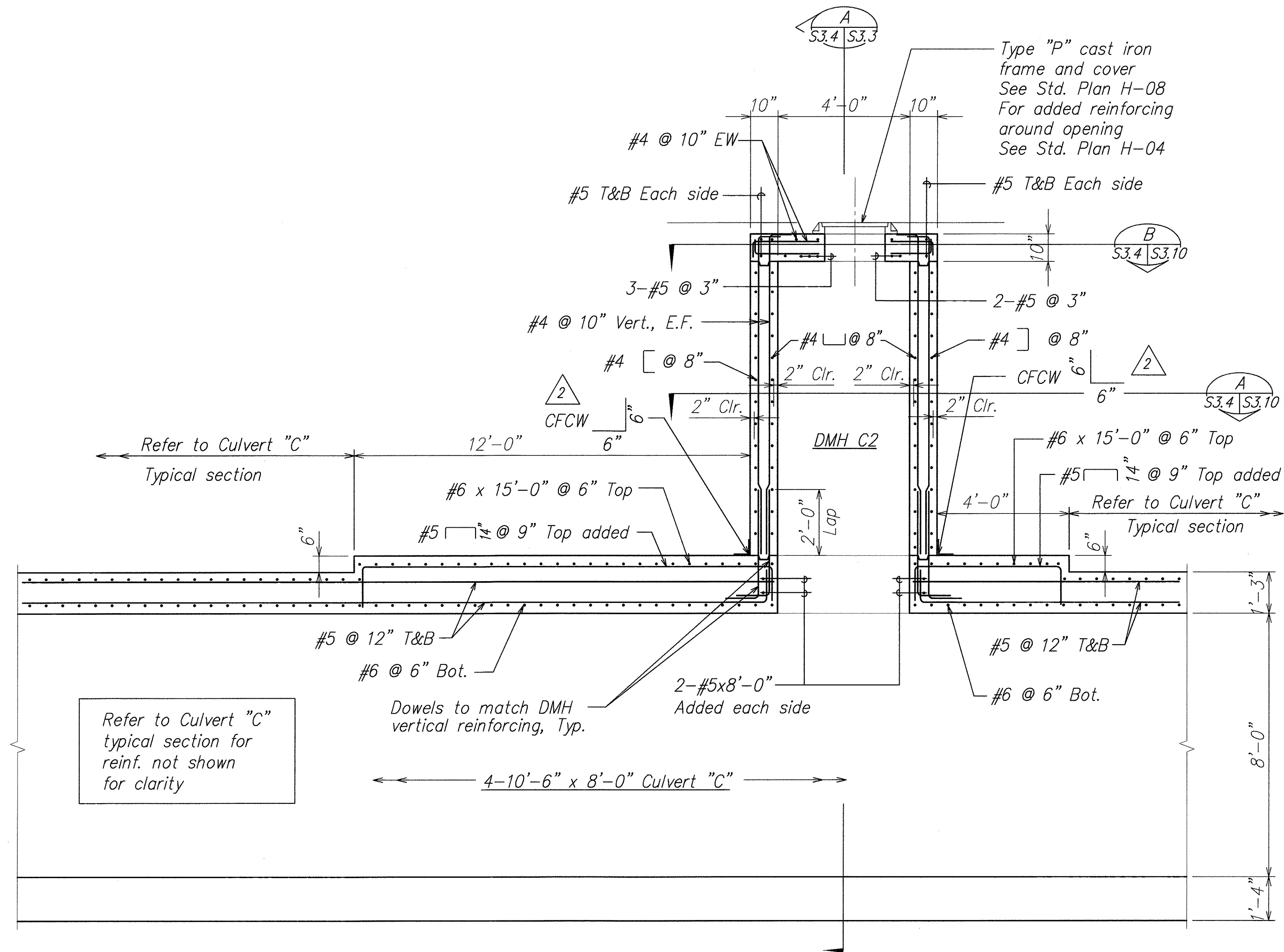
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
DRAIN CULVERT "C"
TOP SLAB PLAN AT DMH C2 & GDI 9
North-South Road
Phase 1B
F.A.I. Proj. No. STP-8930(2)
Scale: As Noted Date: Feb. 21, 2007
SHEET No. S3.2 OF 78 SHEETS



S3.4, S3.5

ADD. 203

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-8930(2)	2007	ADD. 204	331



DRAIN CULVERT "C" - TOP SLAB SECTION AT DMH C2 A
S3.2 | S3.4
Scale: 1/2" = 1'-0"

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

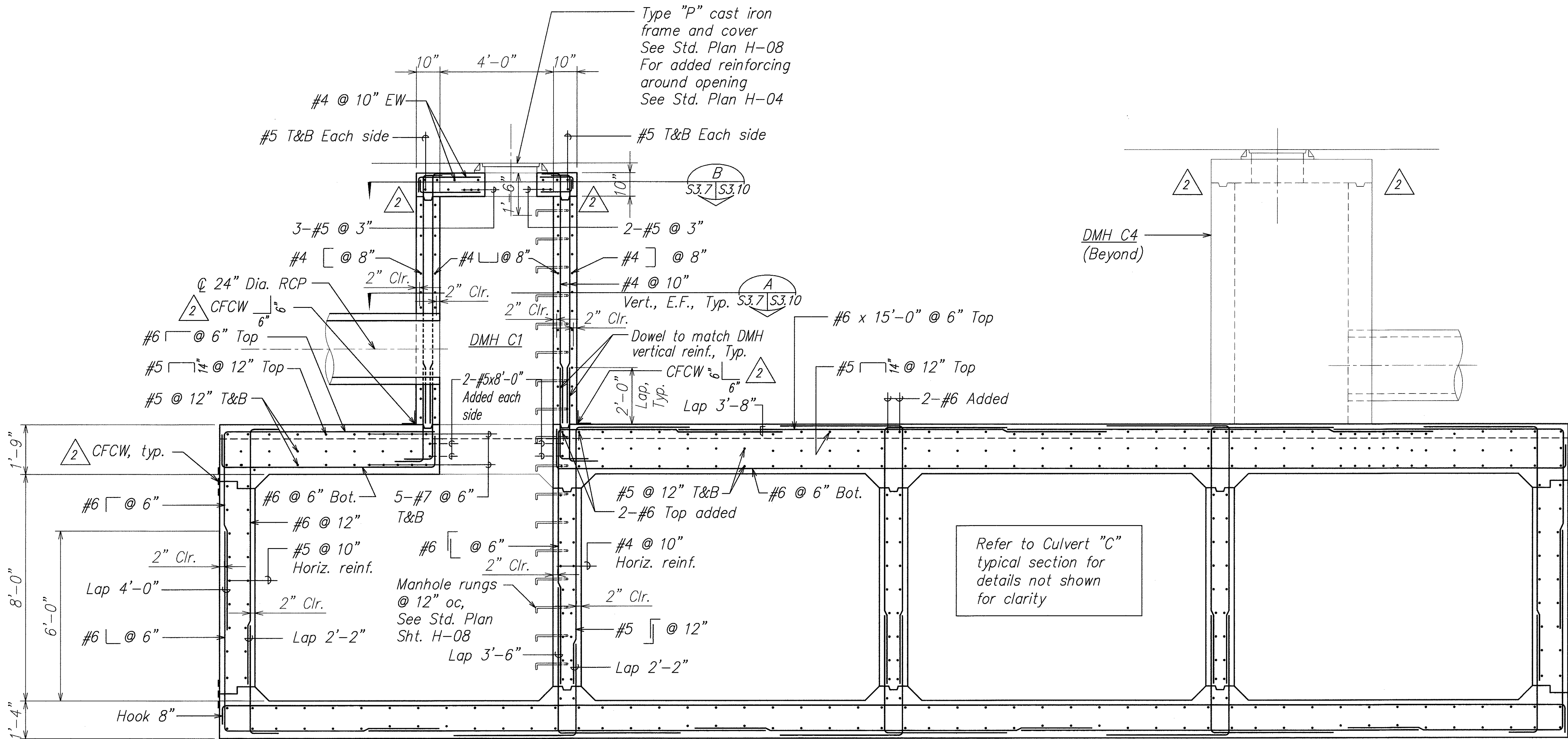
DAVID K. FUJIMURA
LICENSED PROFESSIONAL ENGINEER
NO. 8104-S
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

David K. Fujimura
SIGNATURE
4-30-08
EXPIRATION DATE OF THE LICENSE

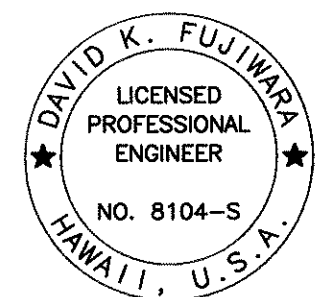
5/11/07	2 Revised Notes
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION DRAIN CULVERT "C" TOP SLAB SECTION AT DMH C2 North-South Road Phase 1B F.A.I. Proj. No. STP-8930(2) Scale: As Noted Date: Feb. 21, 2007 SHEET No. S3.4 OF 78 SHEETS	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-8930(2)	2007	ADD. 207	331



DRAIN CULVERT "C" - TOP SLAB SECTION AT DMH C1 & C4
Scale: 1/2" = 1'-0"

5/11/07	2	Revised Notes, Added Control Joints
DATE	REVISION	
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION <u>DRAIN CULVERT "C"</u> <u>TOP SLAB SECTION AT DMH C1 & C4</u> <u>North-South Road</u> <u>Phase 1B</u> <u>F.A.I. Proj. No. STP-8930(2)</u> Scale: As Noted Date: Feb. 21, 2007		
SHEET No. S3.7 OF 78 SHEETS		

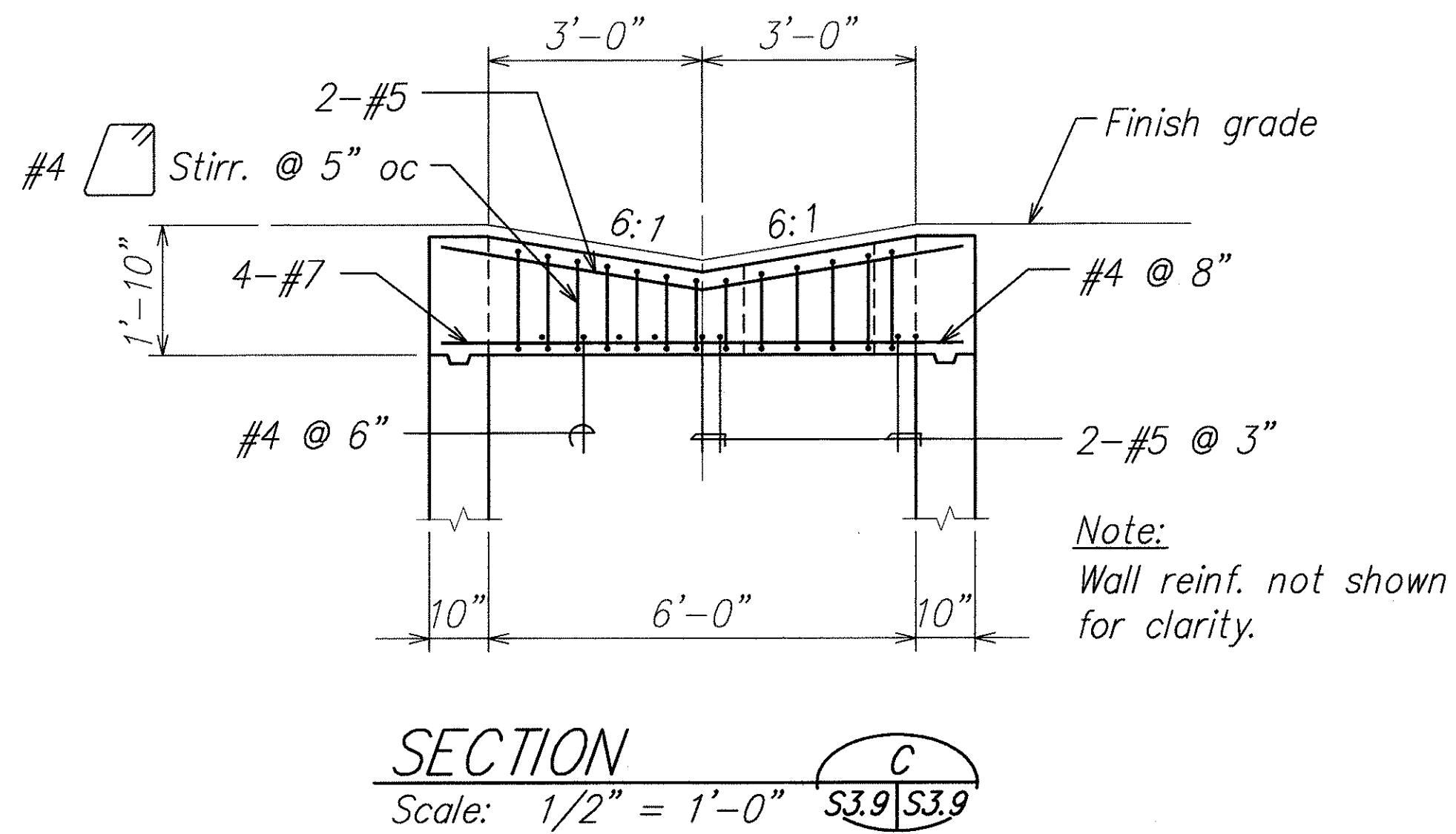
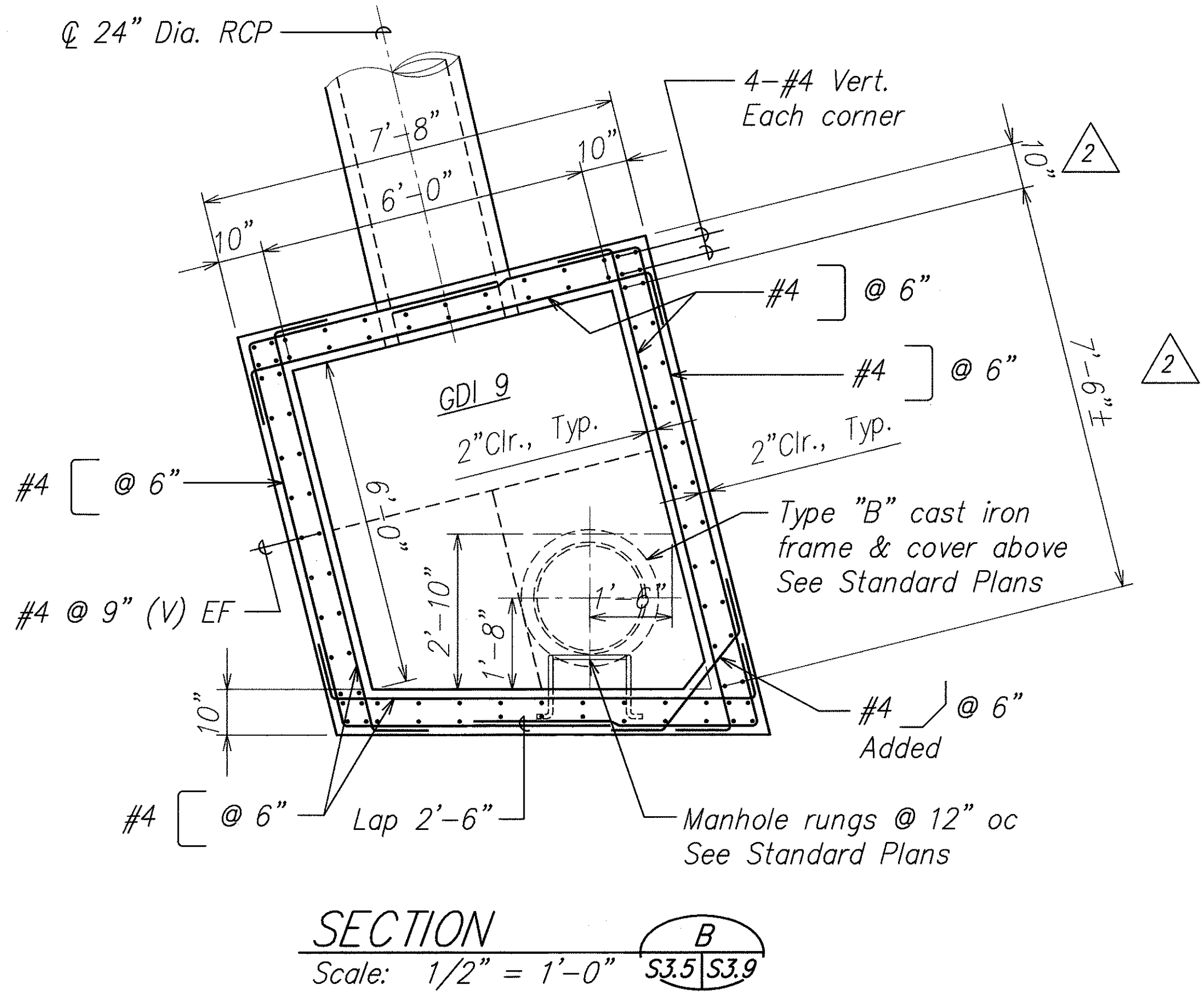
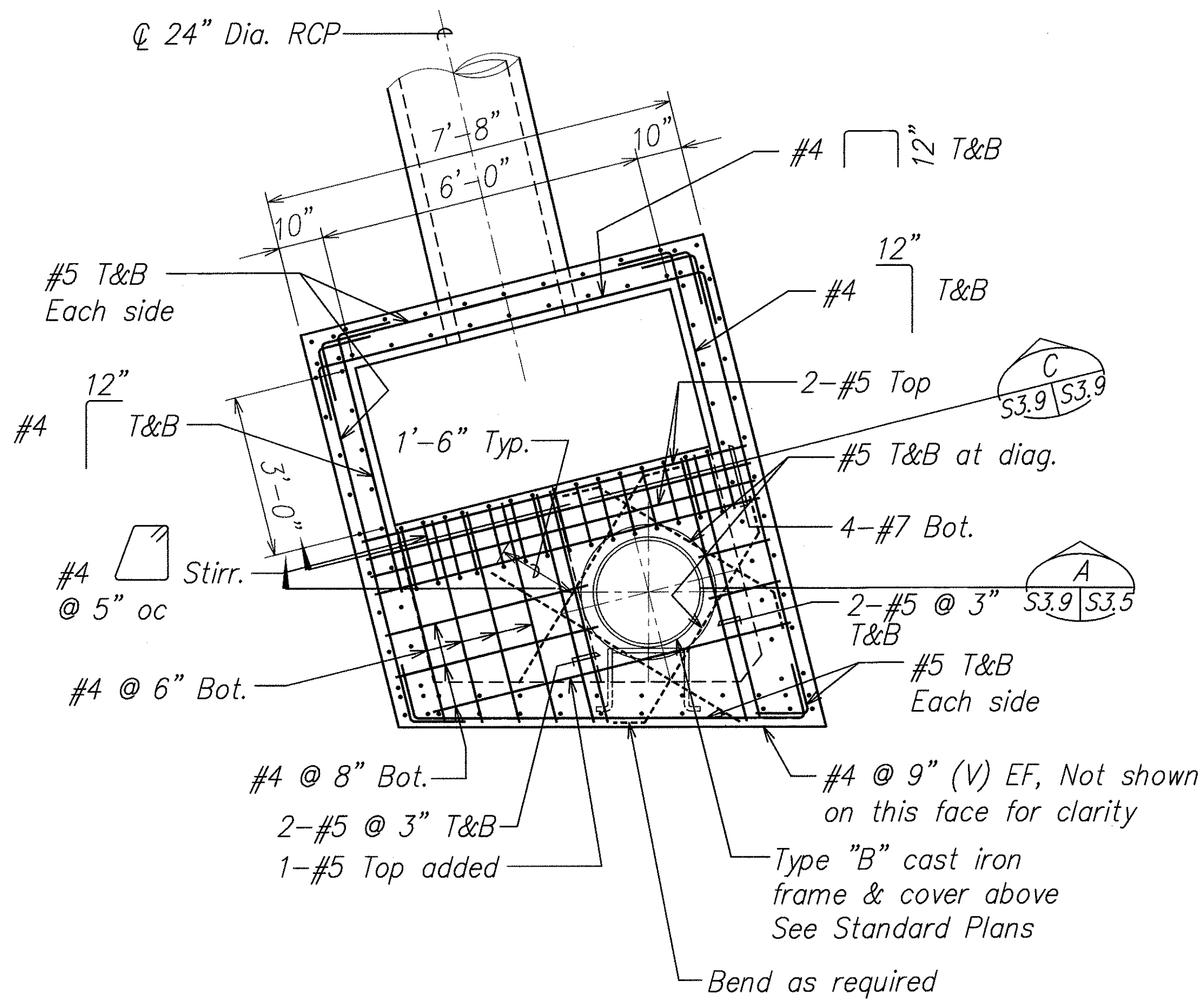


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Signature: David K. Fujiwara
EXPIRATION DATE OF THE LICENSE: 4-30-08

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	
	DESIGNED BY	
	CHECKED BY	

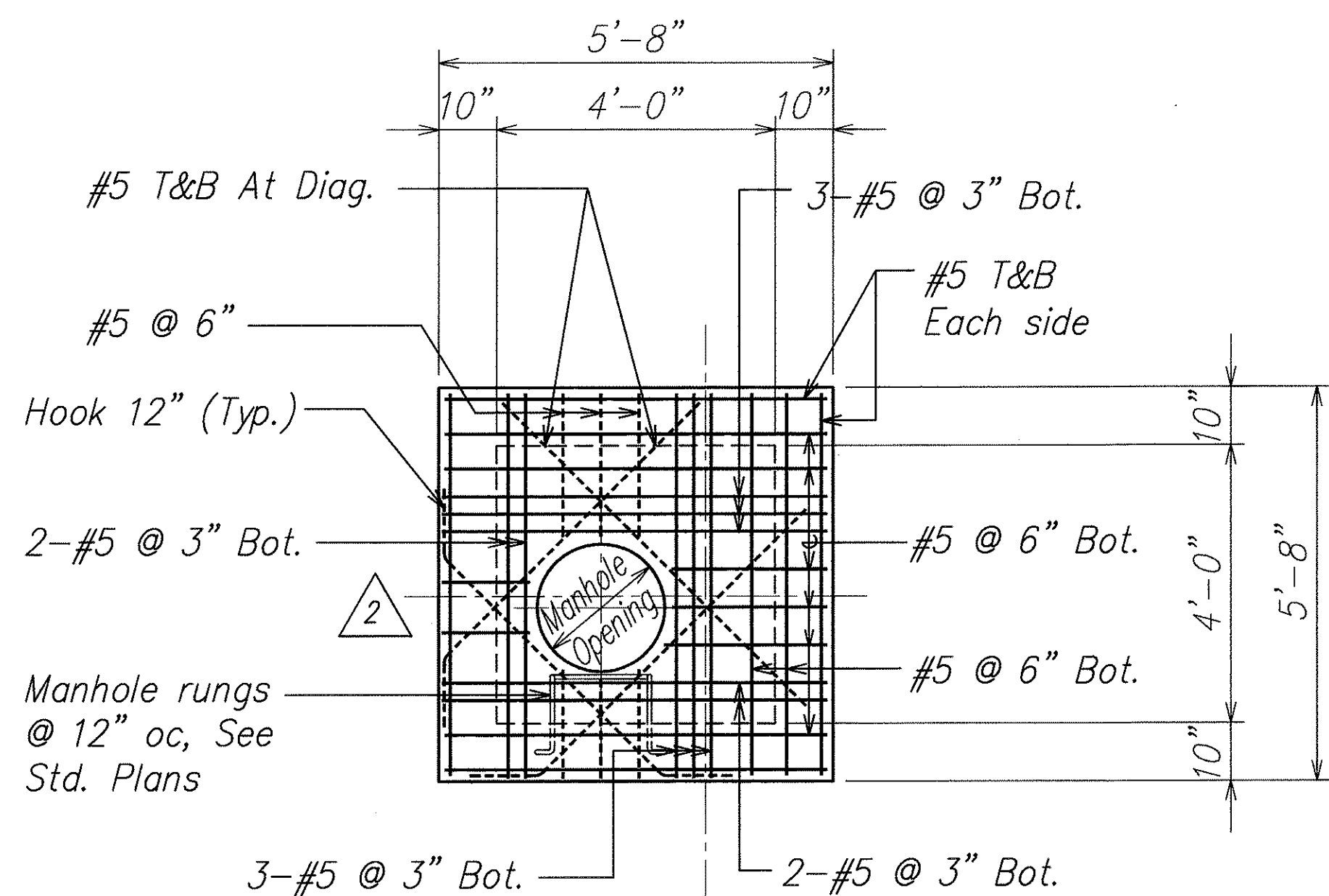
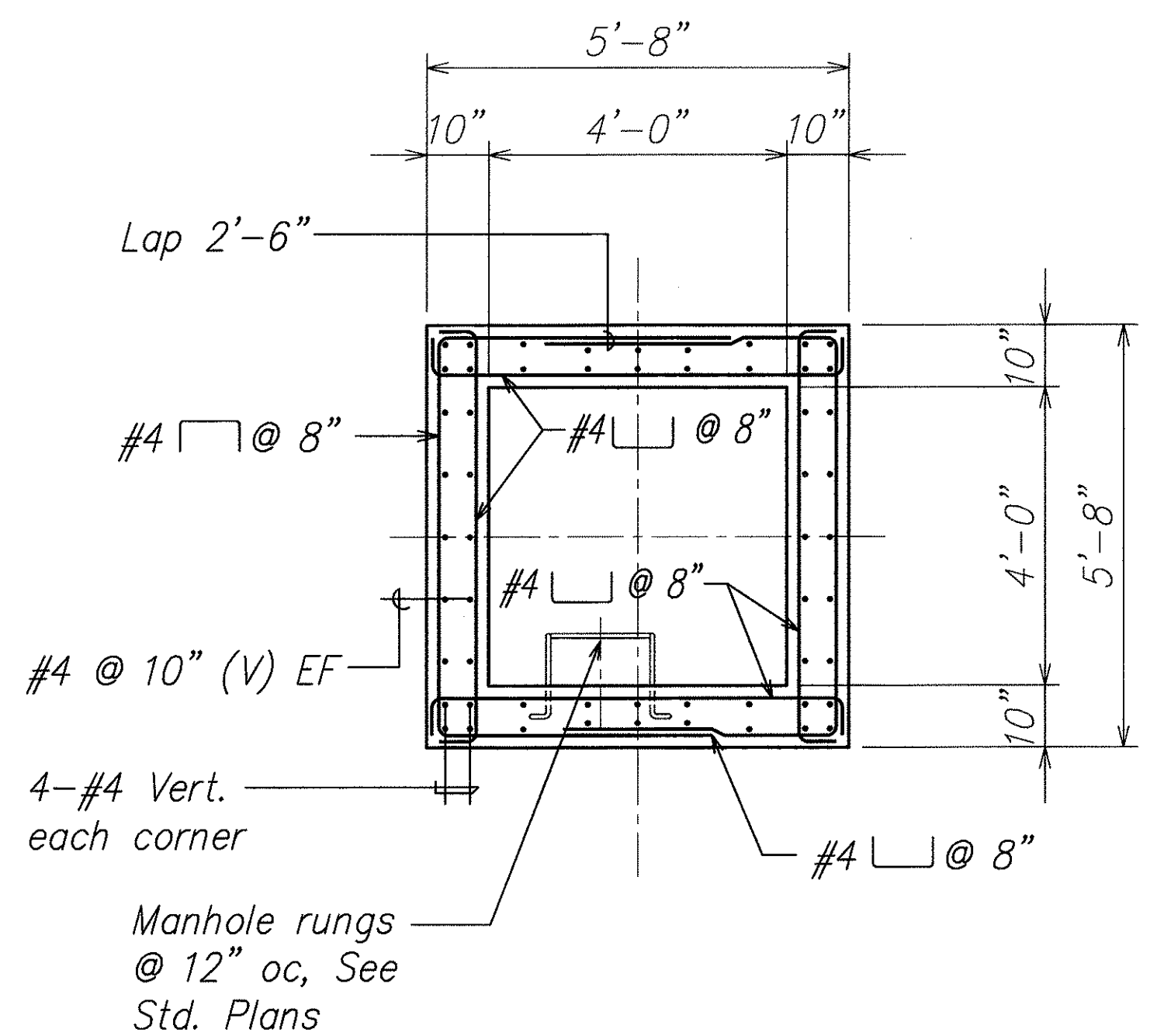
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-8930(2)	2007	ADD. 209	331



5/11/07	2 Revised Dimensions
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION DRAIN CULVERT "C" GDI 9 SECTIONS North-South Road Phase 1B F.A.I. Proj. No. STP-8930(2) Scale: As Noted Date: Feb. 21, 2007	
SHEET No. S3.9 OF 78 SHEETS	

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 SIGNATURE: *David K. Fujiwara*
 EXPIRATION DATE OF THE LICENSE: 4-30-08

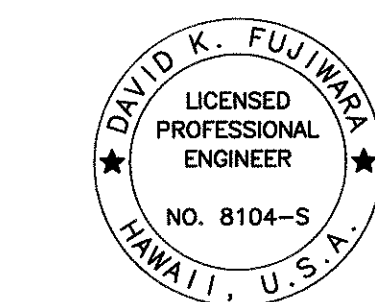
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-8930(2)	2007	ADD. 210	331



Note:
#4 @ 10" Top EW,
not shown for clarity.

DMH C1, C2 & C4 - TOP SLAB PLAN
Scale: 1/2" = 1'-0"

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

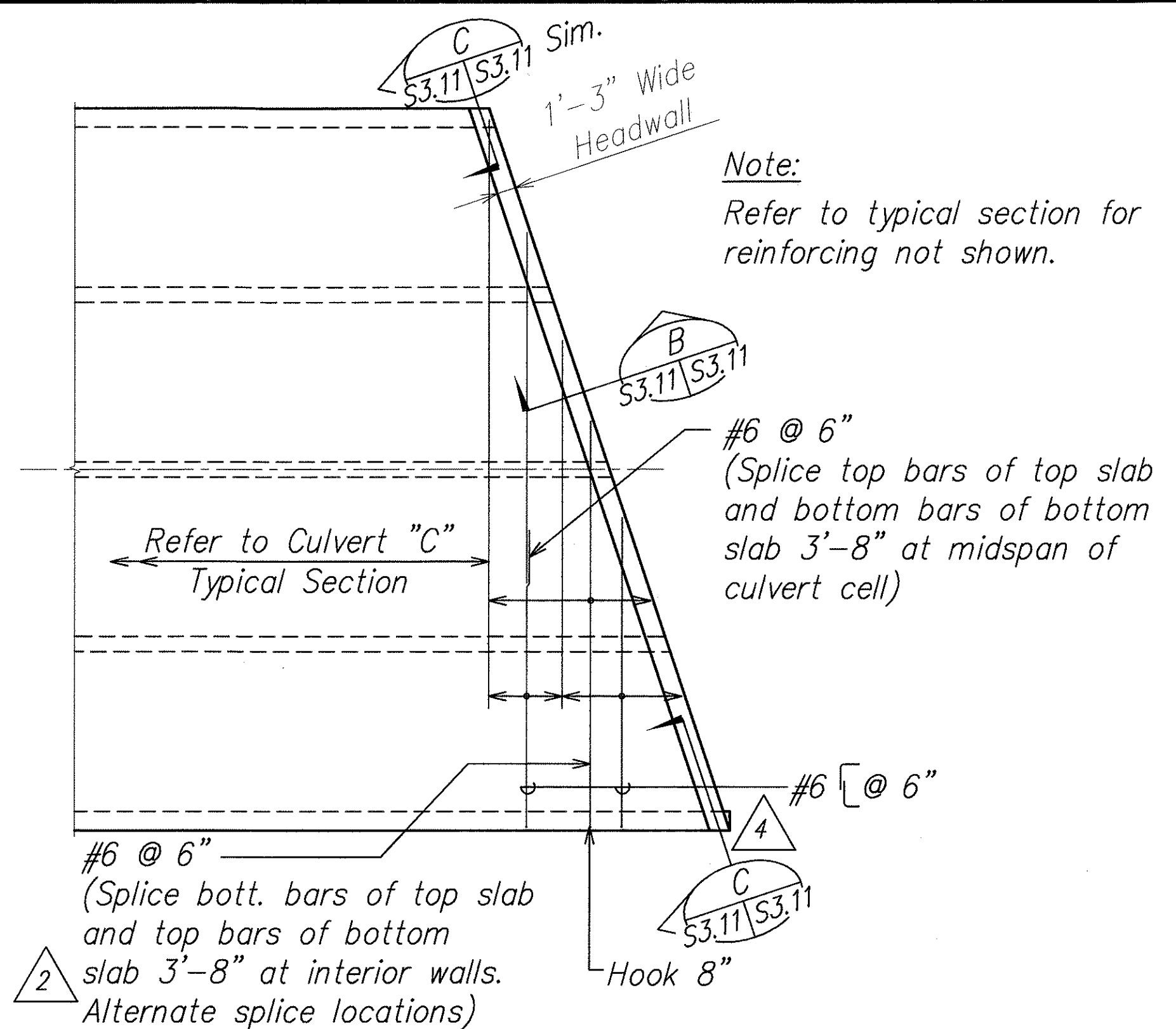


THIS WORK WAS PREPARED BY
ME OR UNDER MY SUPERVISION.

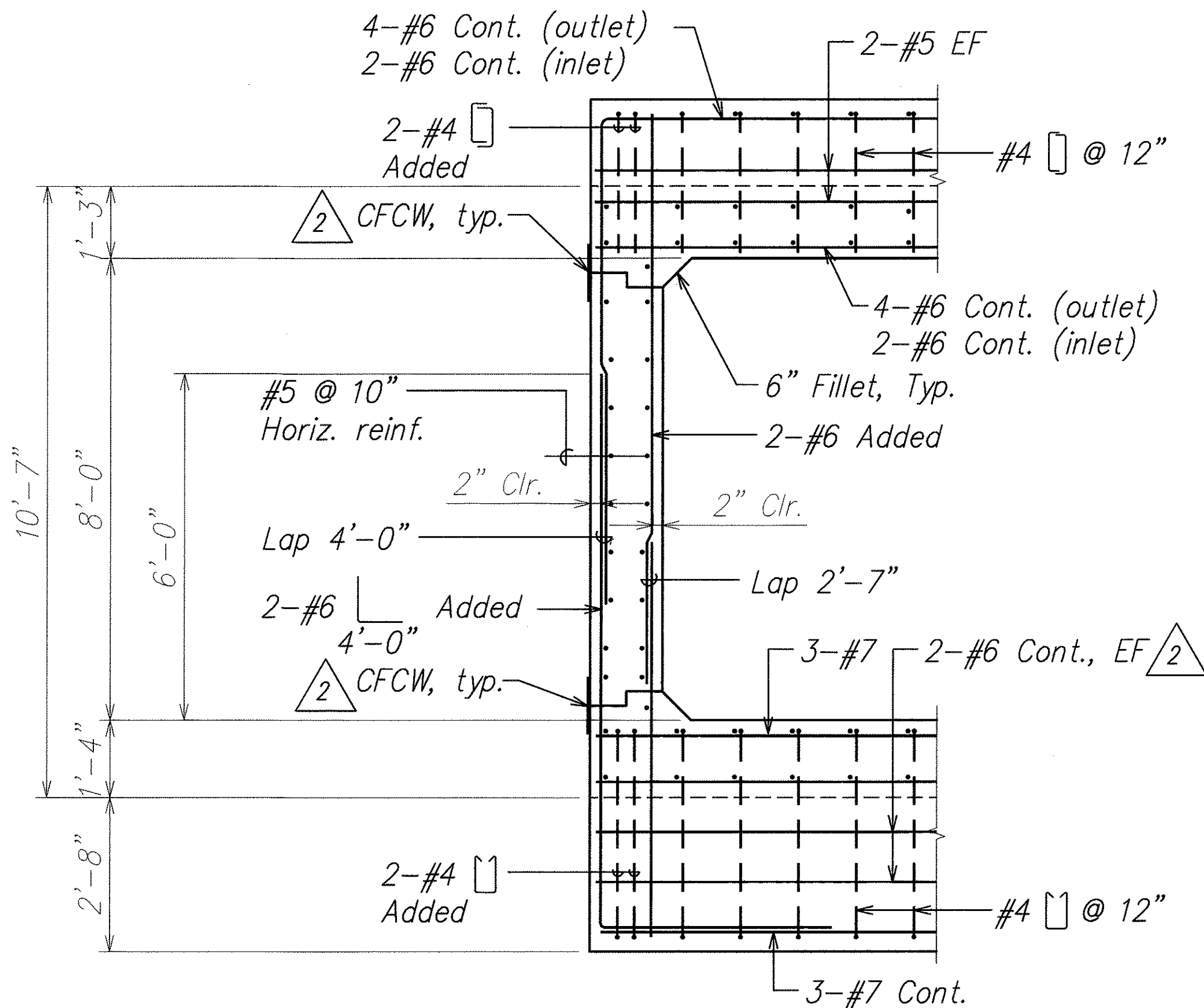
Signature: David K. Fujiwara
EXPIRATION DATE OF THE LICENSE: 4-30-08

5/11/07	2 Added Note
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION DRAIN CULVERT "C" - TOP SLAB PLAN & SECTION AT DMH C1, C2 & C4 North-South Road Phase 1B F.A.I. Proj. No. STP-8930(2) Scale: As Noted Date: Feb. 21, 2007	
SHEET No. S3.10 OF 78 SHEETS	

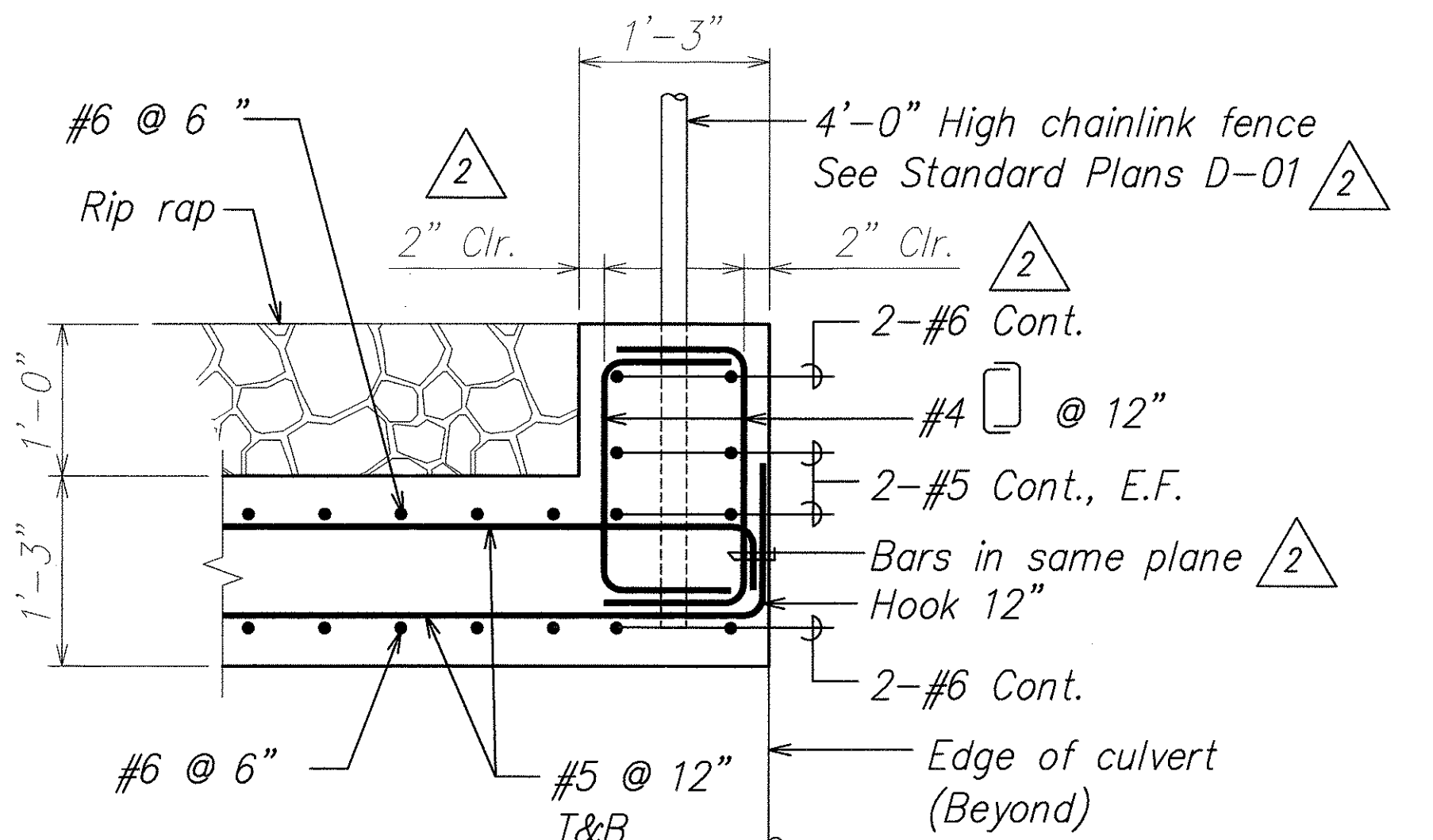
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-8930(2)	2007	ADD. 211	331



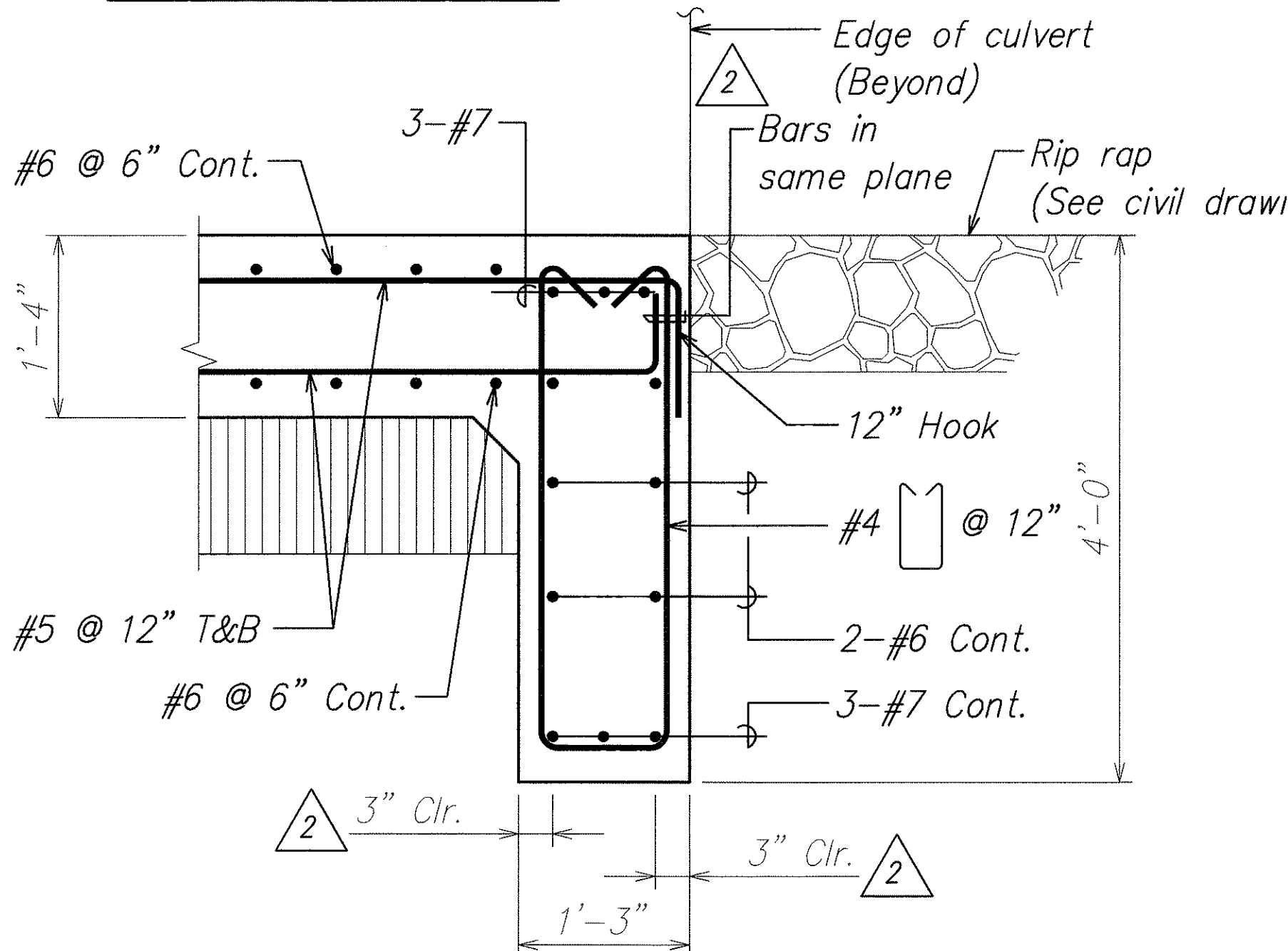
DRAIN CULVERT "C" DETAIL PLAN
TOP SLAB AT OUTLET (BOT. SLAB SIM.)
 Scale: 1/8" = 1'-0"



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

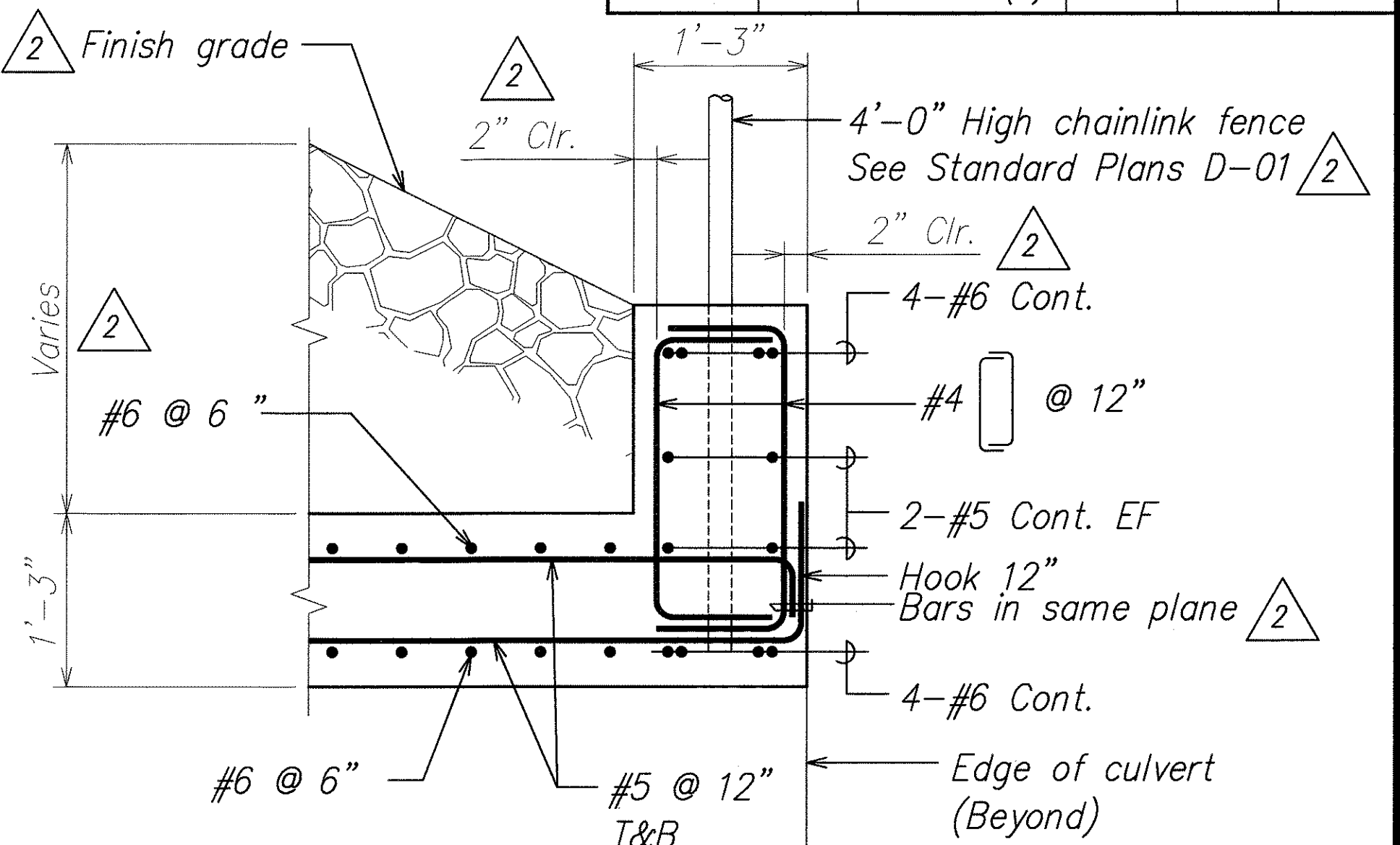


AT INLET TOP SLAB

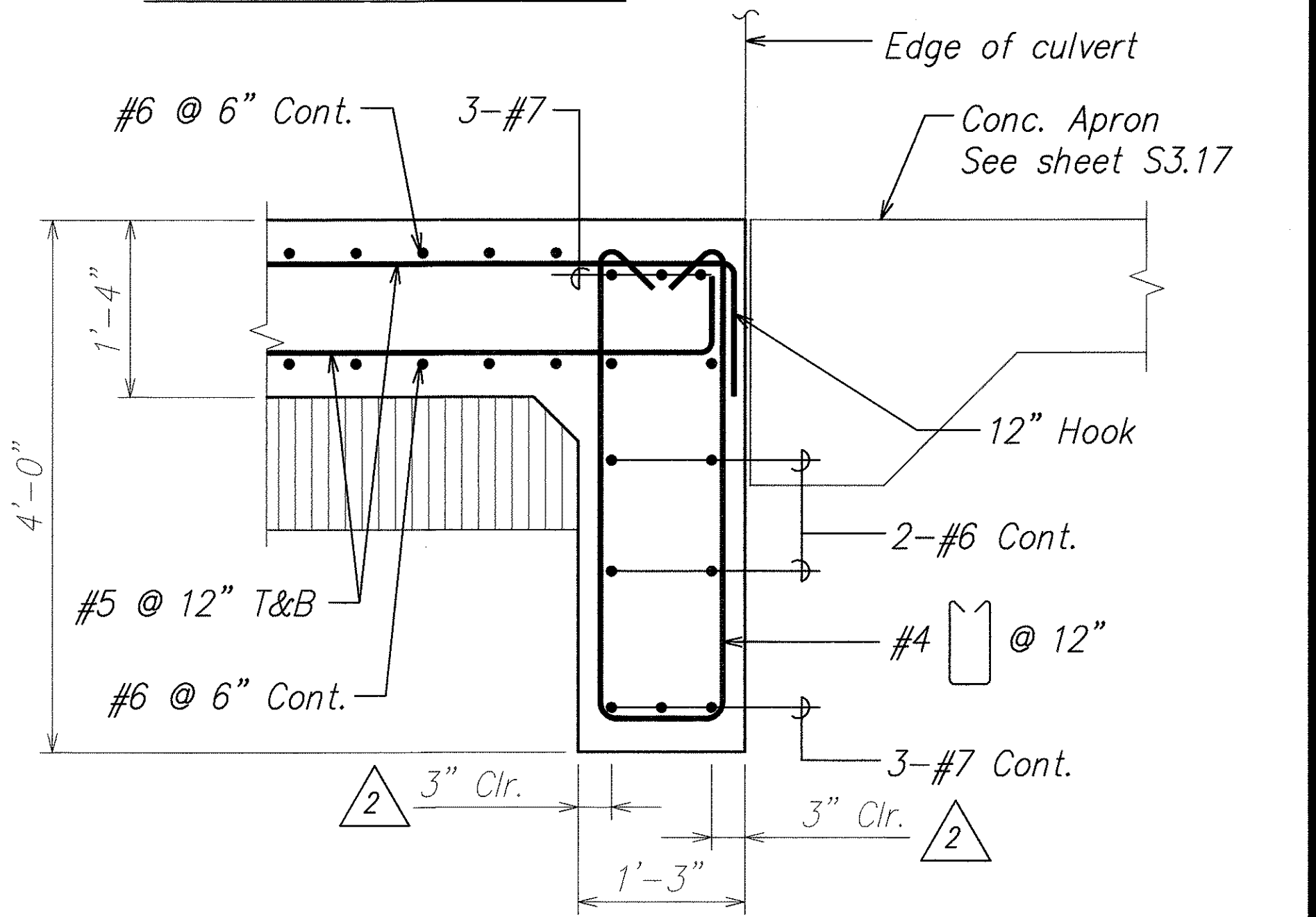


AT INLET BOTTOM SLAB

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



AT OUTLET TOP SLAB

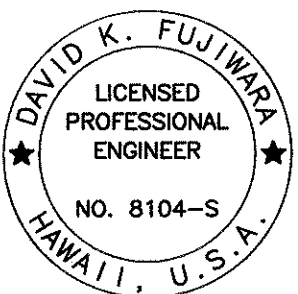


AT OUTLET BOTTOM SLAB

SECTION B
 Scale: 1" = 1'-0"

DATE	DESIGNED BY	CHECKED BY
NO.	QUANTITIES BY	NO.
NOTE BOOK	DESIGNED BY	CHECKED BY
ORIGINAL PLAN	DESIGNED BY	CHECKED BY

5/31/07	4	Revised Drawing
5/11/07	2	Revised and Added Notes, Added Dimensions
DATE	REVISION	

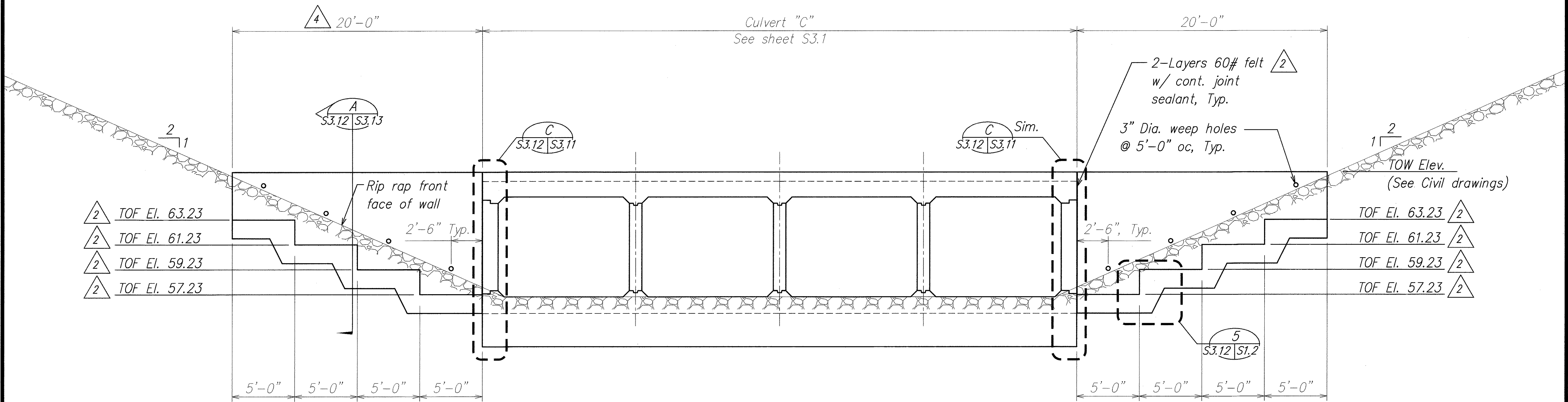


THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

SIGNATURE EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
DRAIN CULVERT "C"
SLAB PLAN AT OUTLET AND SECTIONS
 North-South Road
 Phase 1B
 F.A.I. Proj. No. STP-8930(2)
 Scale: As Noted Date: Feb. 21, 2007
 SHEET No. S3.11 OF 78 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-8930(2)	2007	ADD. 212	331



INLET ELEVATION A
 Scale: 1/4" = 1'-0" S3.12 | S3.12

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

5/31/07	4	<i>Revised Note</i>
5/11/07	2	<i>Revised Notes, Added Elevations</i>
DATE	REVISION	

STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

HIGHWAYS DIVISION

DRAIN CULVERT "C"

INLET ELEVATION

North-South Road

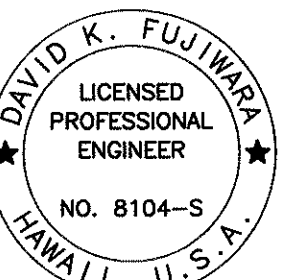
Phase 1B

F.A.I. Proj. No. STP-8930(2)

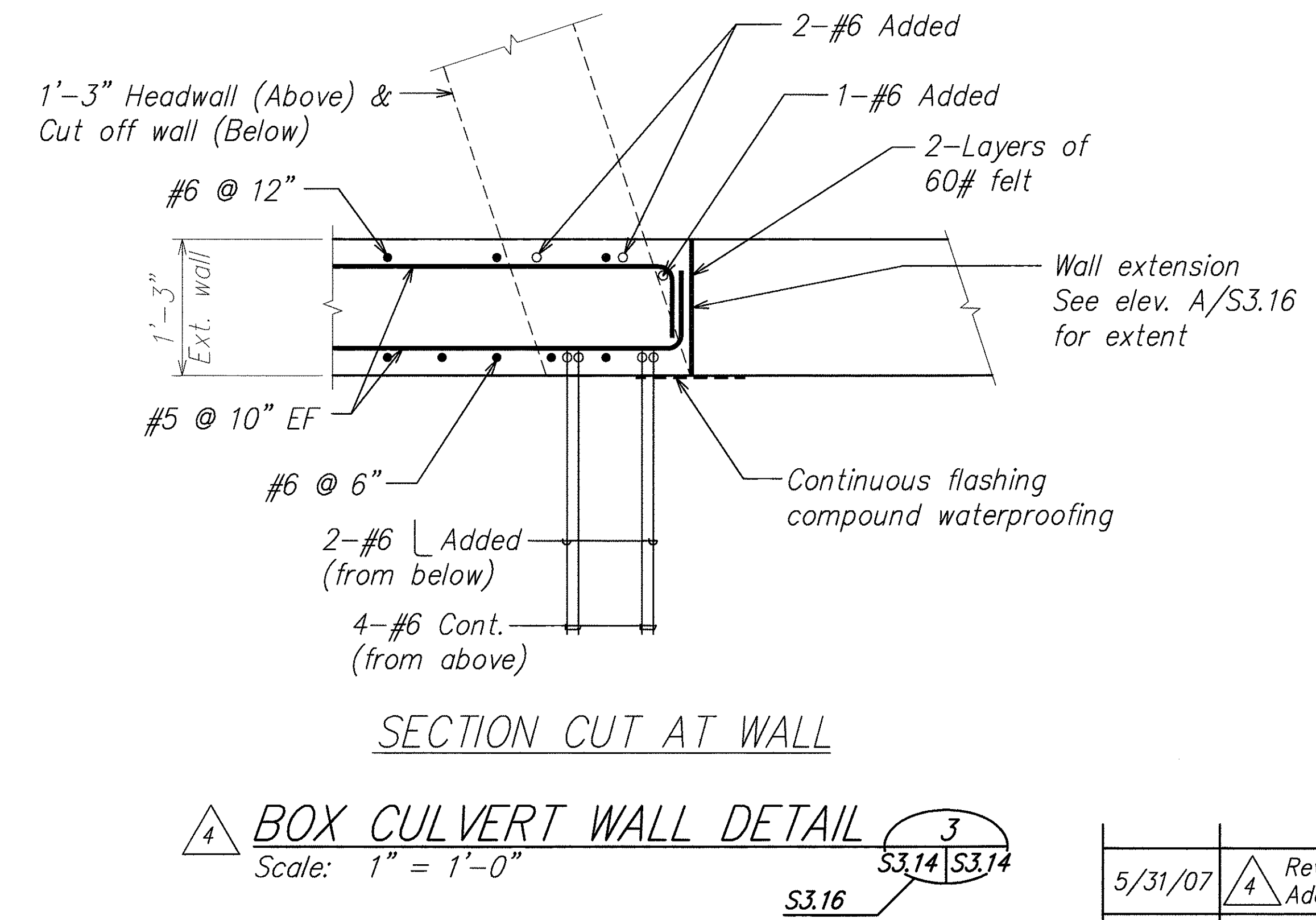
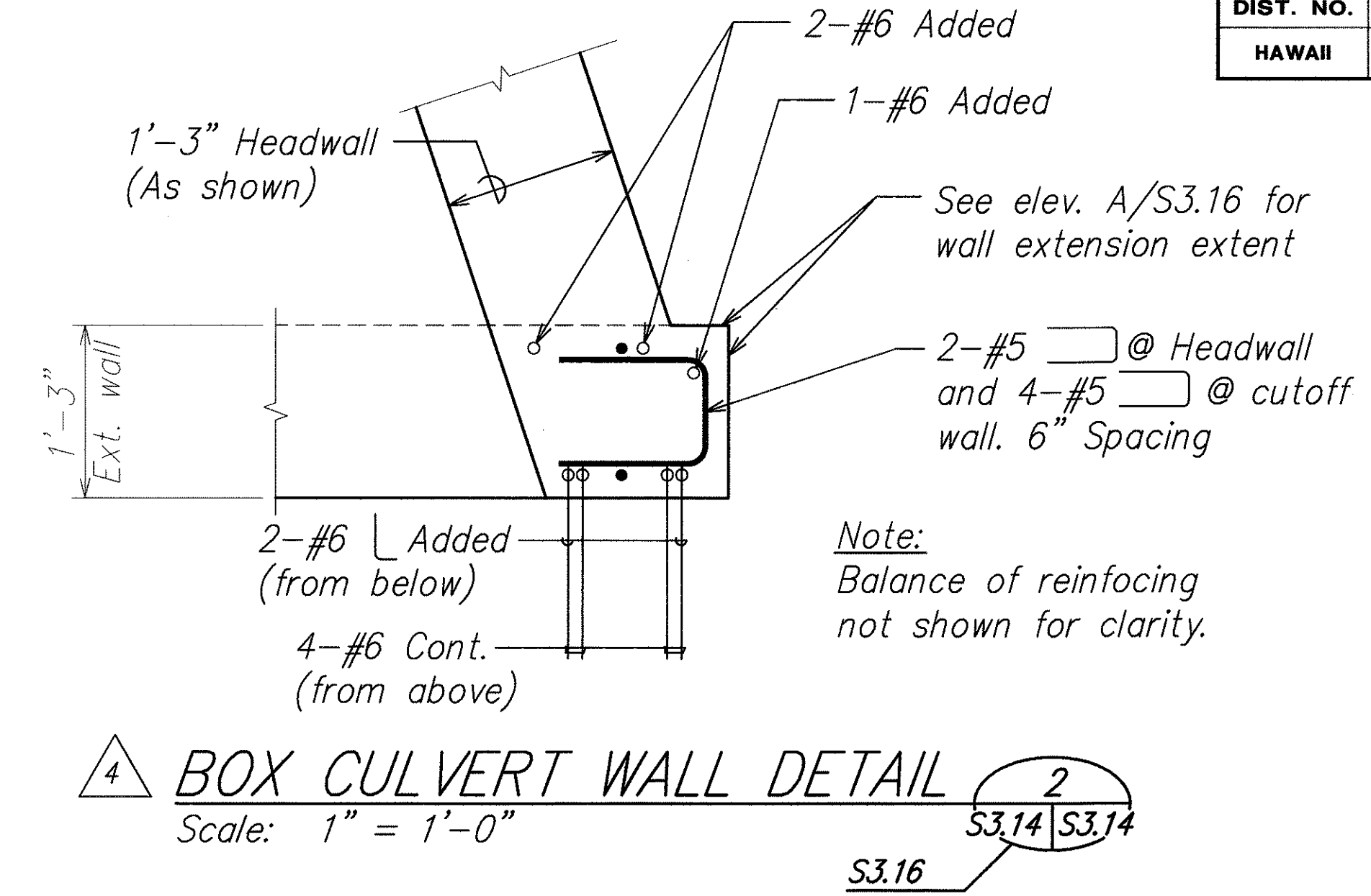
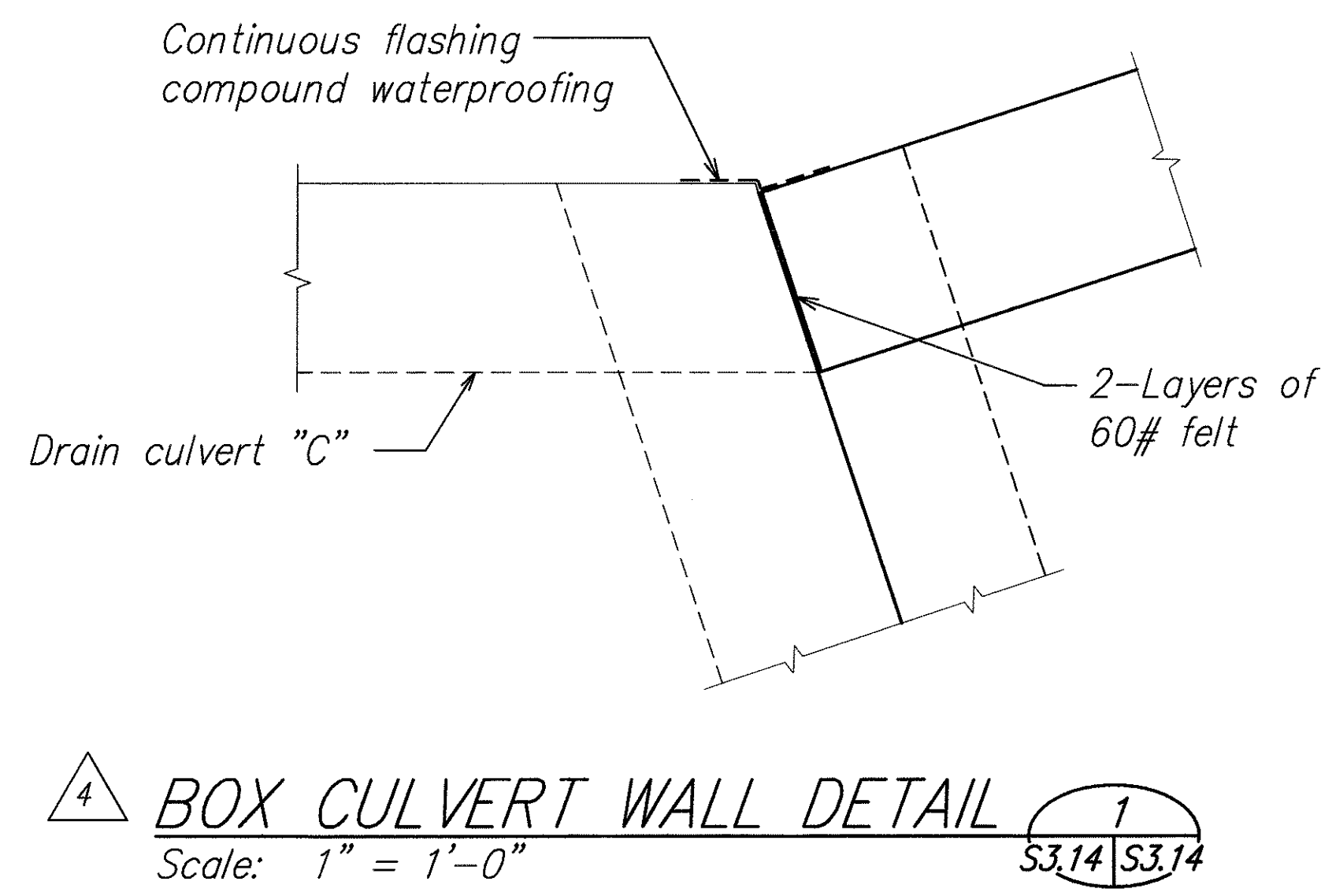
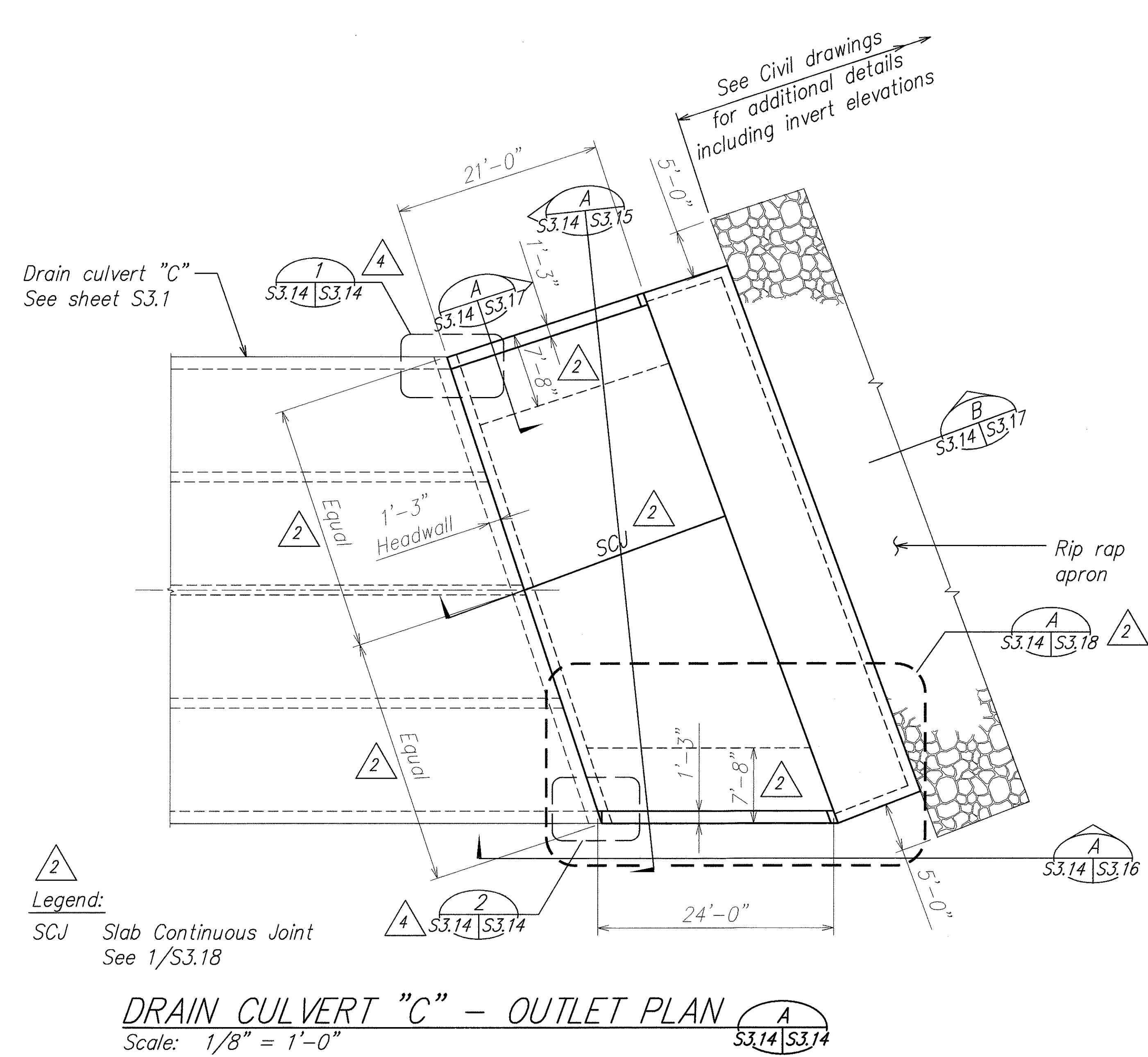
Scale: As Noted

Date: Feb. 21, 2007

SHEET No. S3.12 OF 78 SHEETS


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 ME OR UNDER MY SUPERVISION.
David K. Fujiwara
 SIGNATURE 4-30-08
 EXPIRATION DATE OF THE LICENSE

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-8930(2)	2007	ADD. 214	331



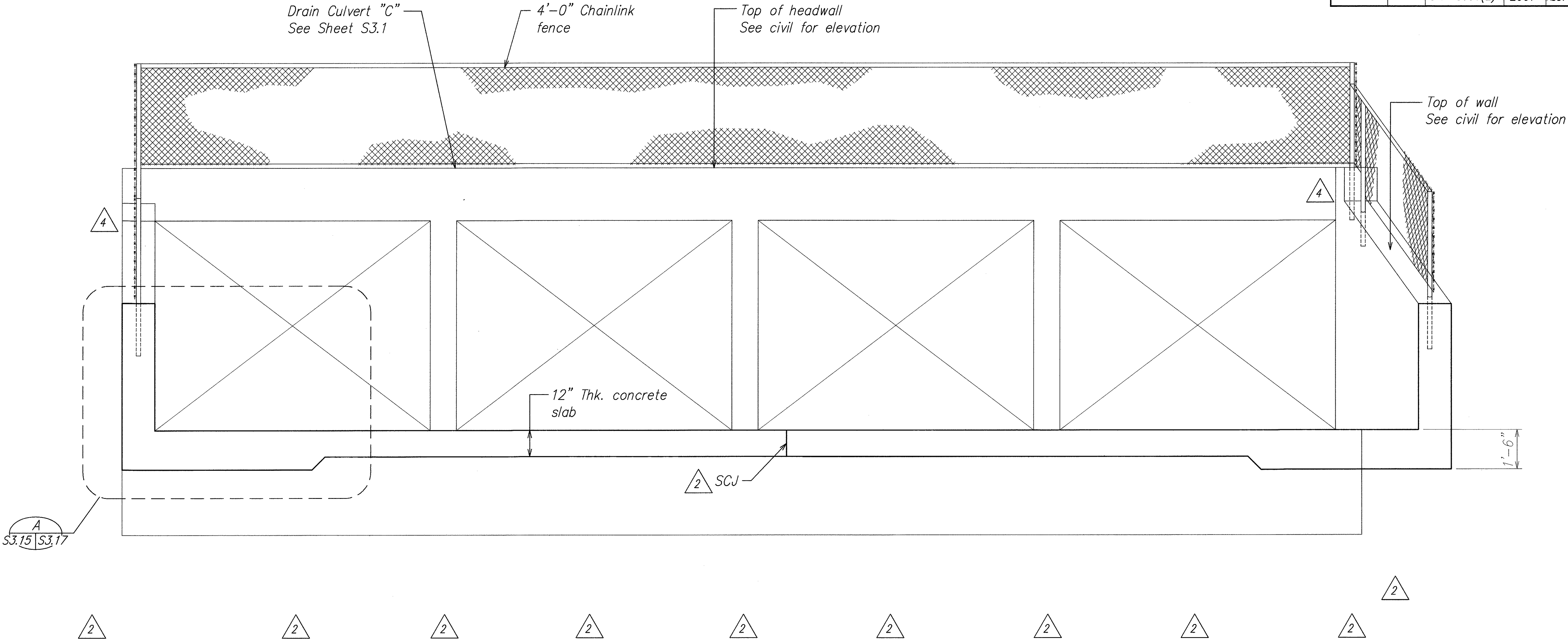
5/31/07	4	Revised Drawing and Added Details
5/11/07	2	Revised and Added Notes and Dimensions
DATE	REVISION	

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION <u>DRAIN CULVERT "C"</u> <u>OUTLET PLAN</u> <u>North-South Road</u> <u>Phase 1B</u> <u>F.A.I. Proj. No. STP-8930(2)</u> Scale: As Noted Date: Feb. 21, 2007	
SHEET No. S3.14 OF 78 SHEETS	

DAVID K. FUJIMURA
 LICENSED PROFESSIONAL ENGINEER
 NO. 8104-S
 HAWAII, U.S.A.
 THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.
 Signature: *David K. Fujimura*
 EXPIRATION DATE OF THE LICENSE: 4-30-08

ORIGINAL PLAN	DATE
SURVEY PLOTTED BY	
DESIGNED BY	
TRACED BY	
NOTED BY	
CHECKED BY	
NO.	

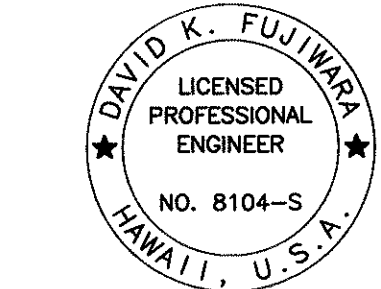
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-8930(2)	2007	ADD. 215	331



2 Legend:
 SCJ Slab control joint
 See 1/S3.18

DRAIN CULVERT "C" – SECTION A
 Scale: 1/2" = 1'-0" S3.14 | S3.15

DESIGNED BY	DATE
TRACED BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
NO.	



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ME OR UNDER MY SUPERVISION.

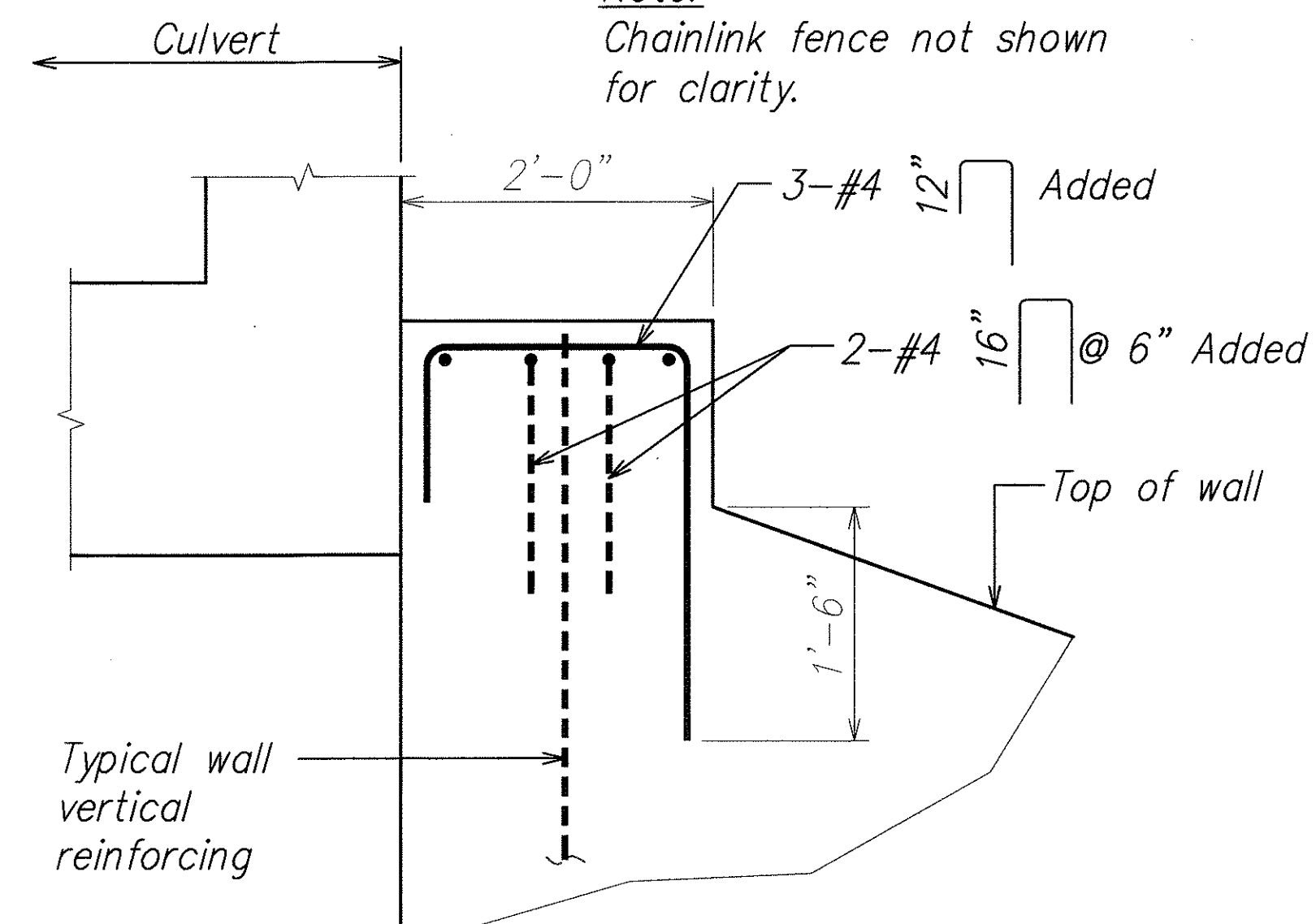
Signature: *David K. Fujiwara* 4-30-08
 EXPIRATION DATE OF THE LICENSE

5/31/07	4	Revised Drawing
5/11/07	2	Deleted dimensions, Added Notes and Control Joint
DATE	REVISION	

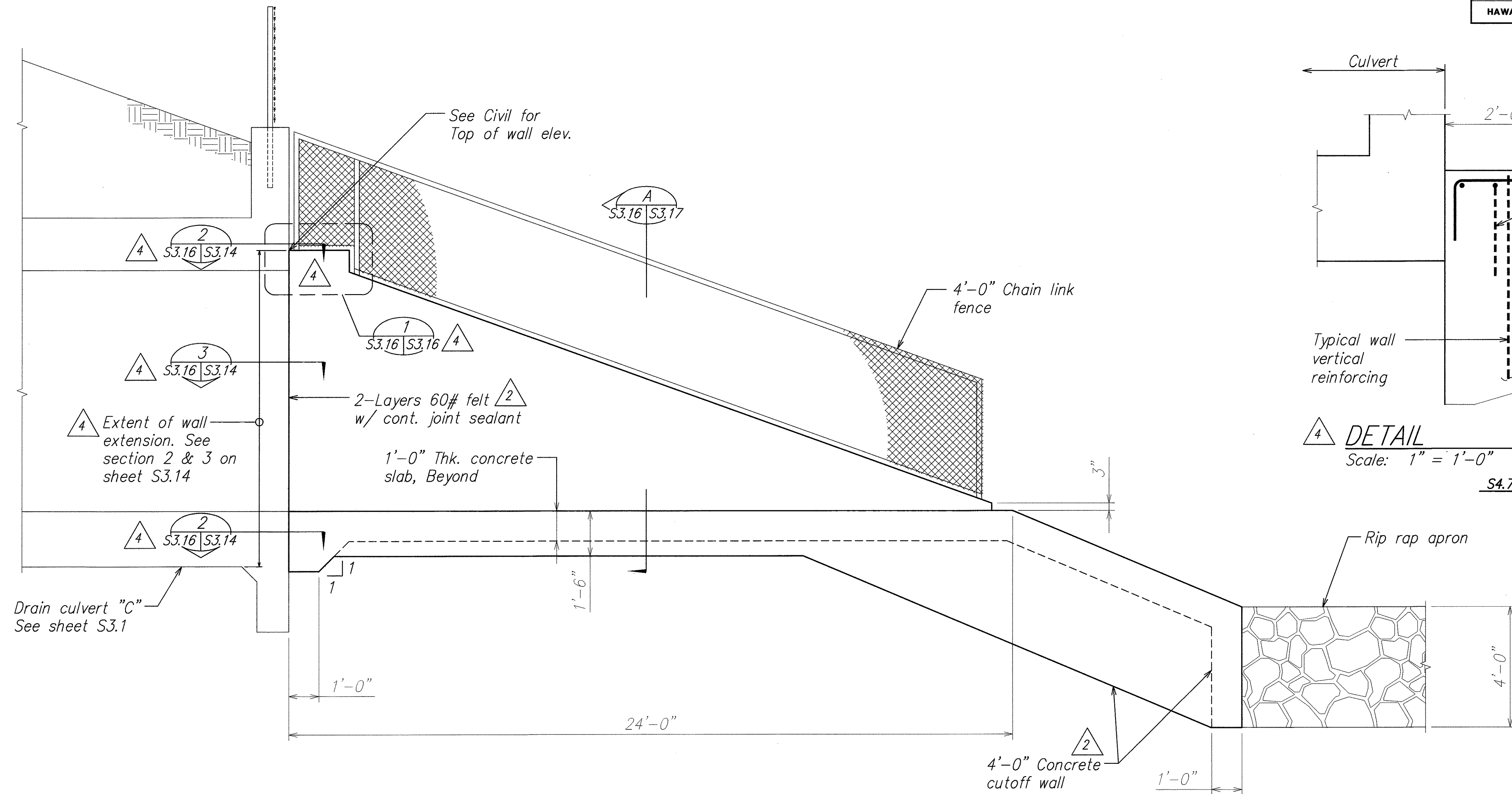
STATE OF HAWAII	
DEPARTMENT OF TRANSPORTATION	
HIGHWAYS DIVISION	
<u>DRAIN CULVERT "C"</u>	
<u>OUTLET SECTION</u>	
<u>North-South Road</u>	
<u>Phase 1B</u>	
<u>F.A.I. Proj. No. STP-8930(2)</u>	
Scale: As Noted	Date: Feb. 21, 2007
SHEET No. S3.15 OF 78 SHEETS	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-8930(2)	2007	ADD. 216	331

Note:
Chainlink fence not shown for clarity.



4 DETAIL
Scale: 1" = 1'-0"
S3.16 S3.16
S4.7



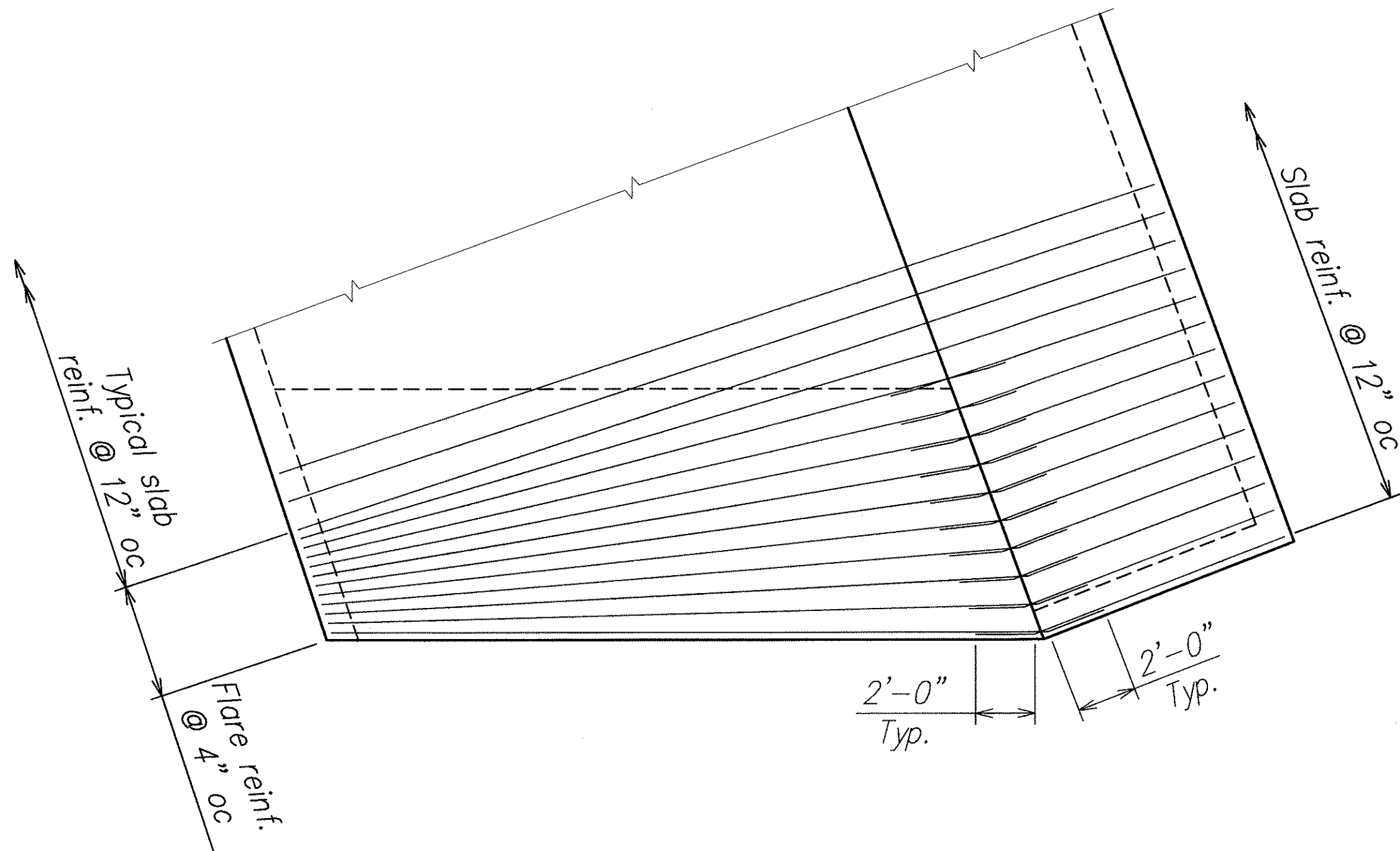
DRAIN CULVERT "C" - ELEVATION
Scale: 1/2" = 1'-0"
S3.14 S3.16

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

5/31/07	4 Revised Drawing
5/11/07	2 Revised Notes
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION DRAIN CULVERT "C" OUTLET ELEVATION North-South Road Phase 1B F.A.I. Proj. No. STP-8930(2) Scale: As Noted Date: Feb. 21, 2007	
SHEET No. S3.16 OF 78 SHEETS	

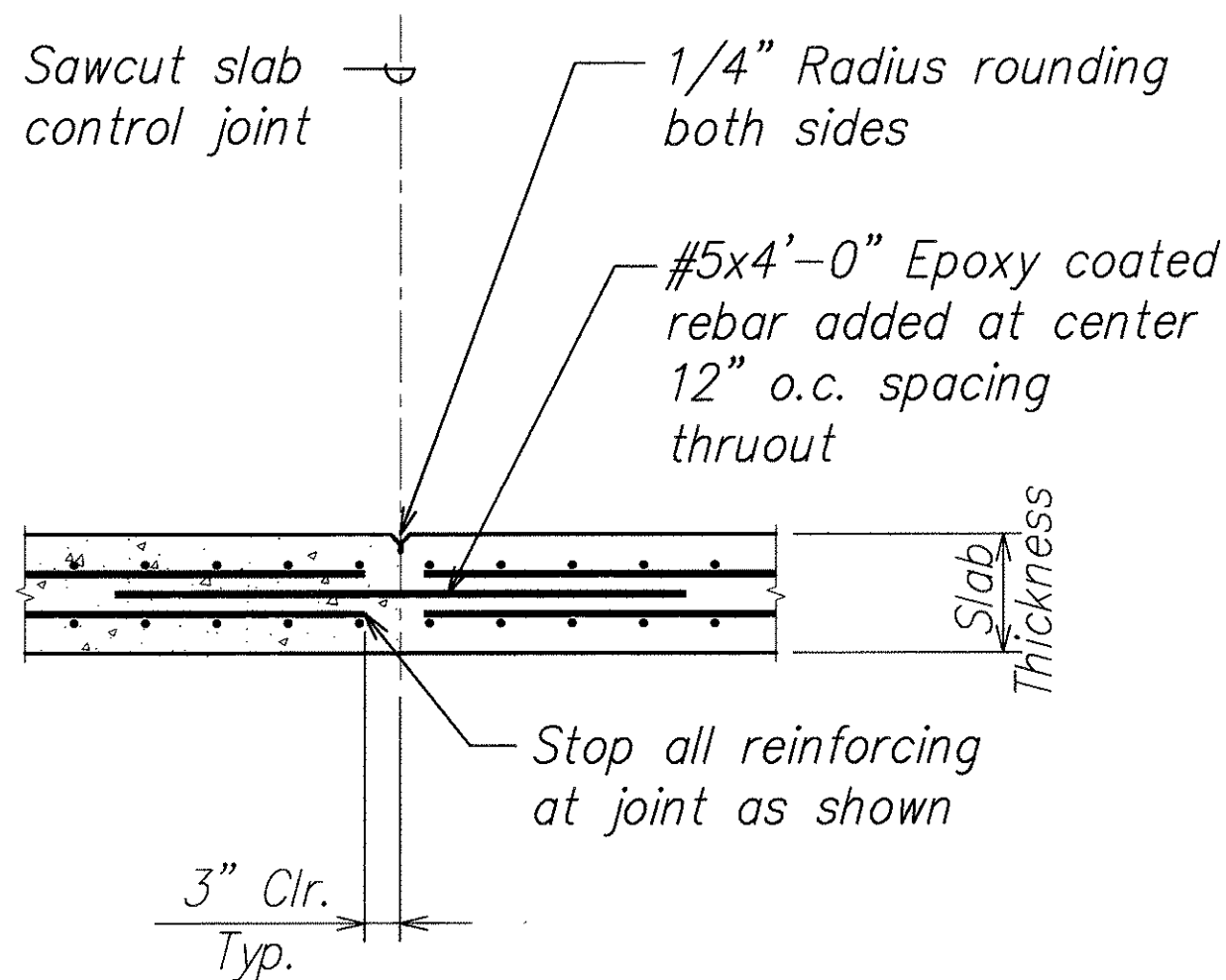
DAVID K. FUJIMURA
LICENSED PROFESSIONAL ENGINEER
NO. 8104-S
HAWAII, U.S.A.
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.
Signature: David K. Fujimura
EXPIRATION DATE OF THE LICENSE: 4-30-08

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-8930(2)	2007	ADD. 217S-1	331



DRAIN CULVERT "C" –
PARTIAL PLAN SLAB REINF.
Scale: 1/4" = 1'-0"

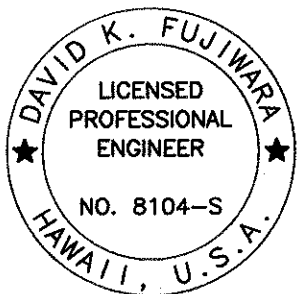
A
S3.14 | S3.18



SLAB CONTROL JOINT DETAIL
Scale: 3/4" = 1'-0"

1
S3.18 | S3.18

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



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ME OR UNDER MY SUPERVISION.

Signature: David K. Fujiwara
EXPIRATION DATE OF THE LICENSE: 4-30-08

5/11/07	2 New Sheet
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION DRAIN CULVERT "C" PLAN AND DETAIL North-South Road Phase 1B F.A.I. Proj. No. STP-8930(2) Scale: As Noted Date: Feb. 21, 2007	
SHEET No. S3.18 OF 78 SHEETS	

ADD. 217S-1