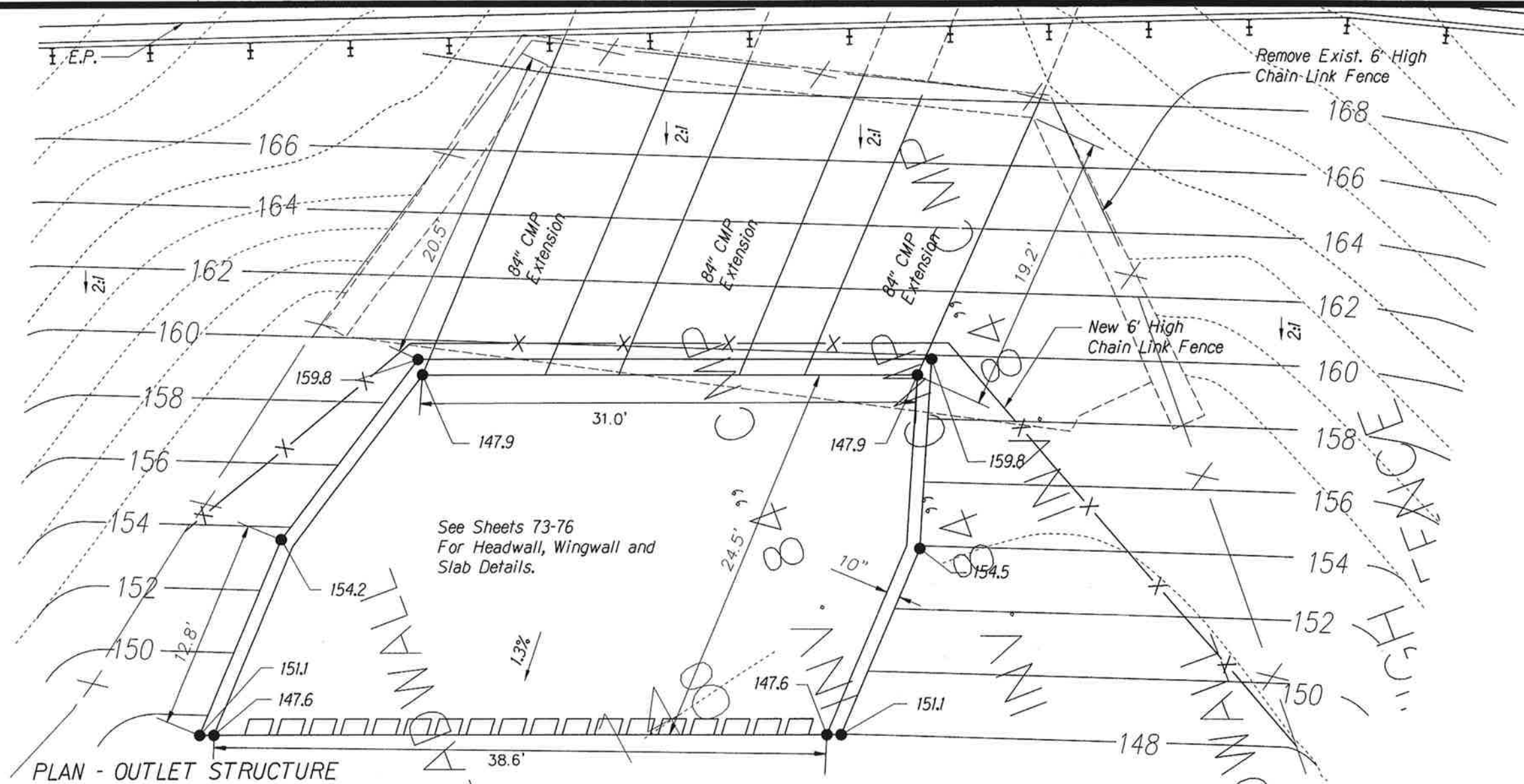
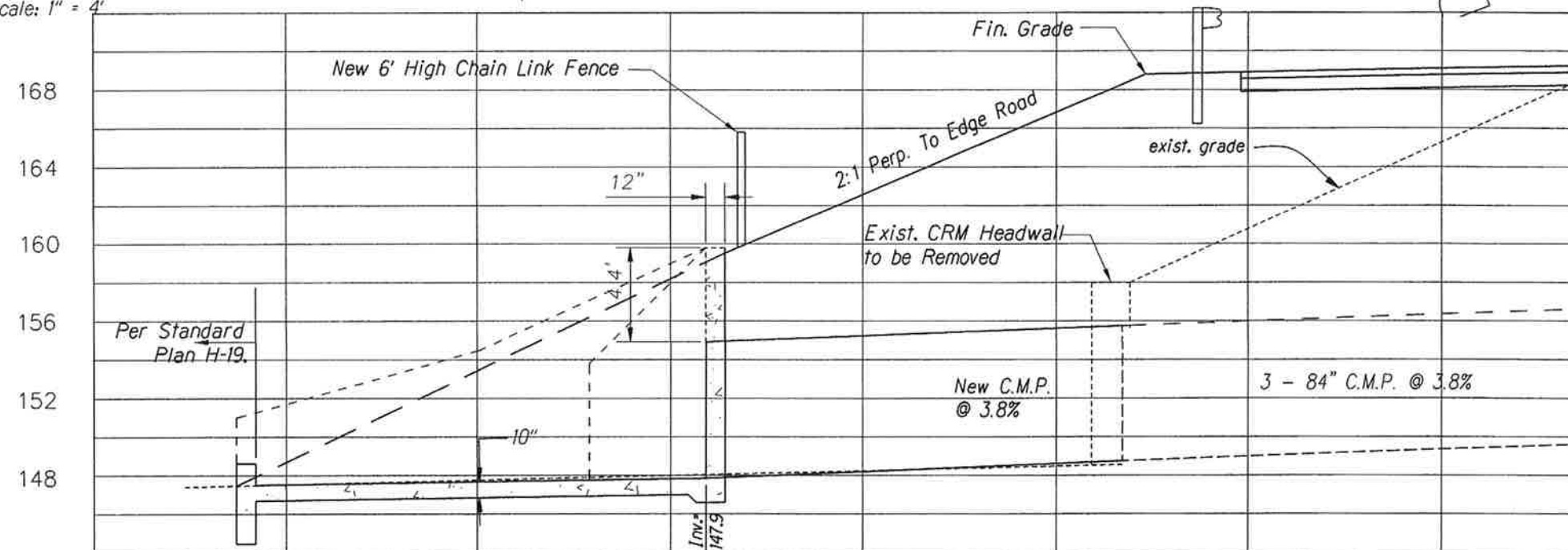


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-019-1(20)	2005	72	315



Scale: 1" = 4'



PROFILE - OUTLET STRUCTURE @ CENTER

Scale: 1" = 4'



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Exp. 04-30-10
Neal S. Fukunaga
Wesley R. Segond & Associates, Inc.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

3-84" CMP EXTENSION
AT STA. -115+10±

QUEEN KAAHUMANU HIGHWAY WIDENING
HENRY ST. to KEALAKEHE PKWY - PHASE I
Federal Aid Project No. NH-019-1(20)

Scale: As Noted Date: November 2009

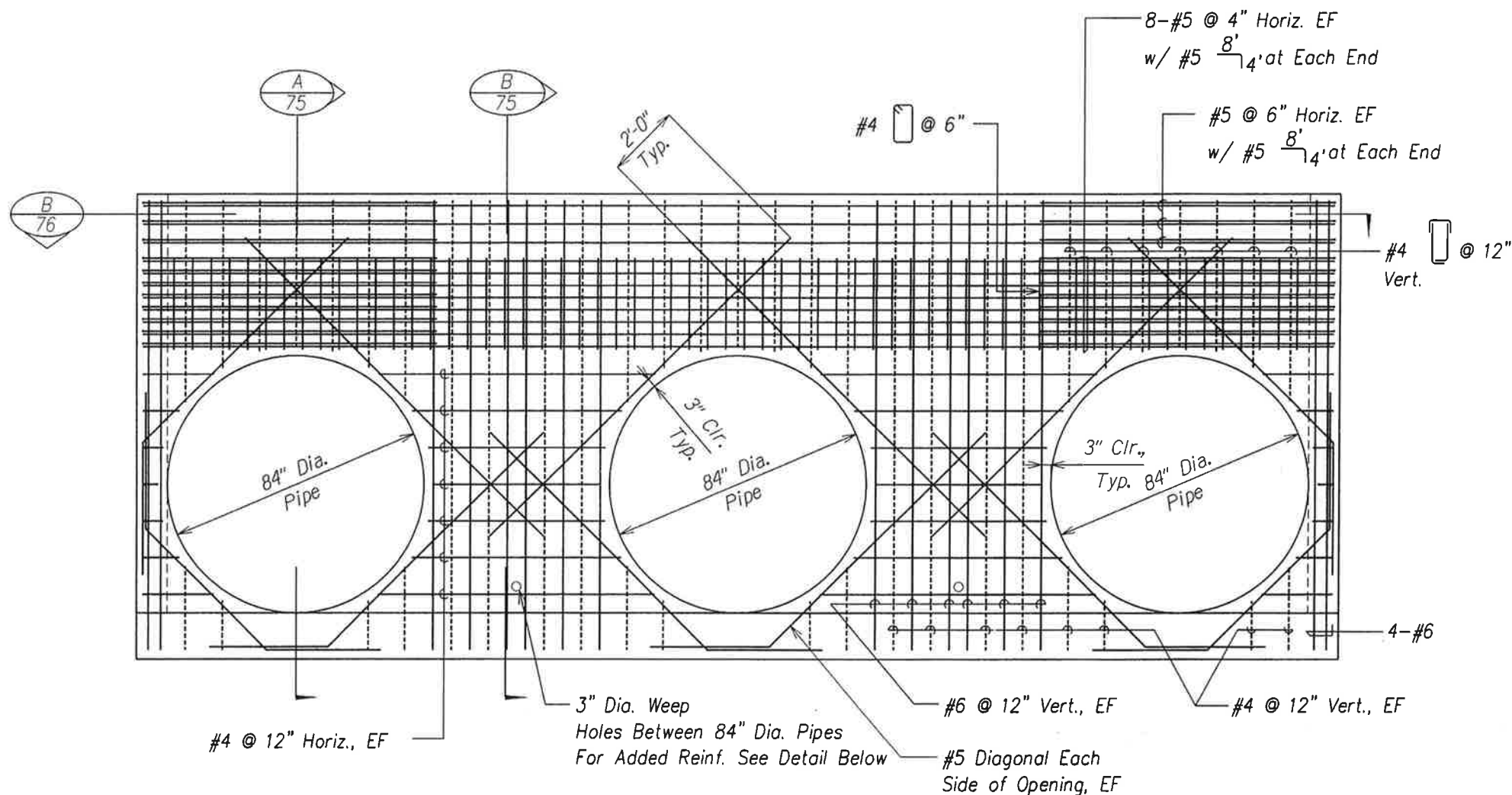
SHEET No. 1 OF 5 SHEETS

AS-BUILT

72

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

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-019-1(20)	2005	73	315



Notes:

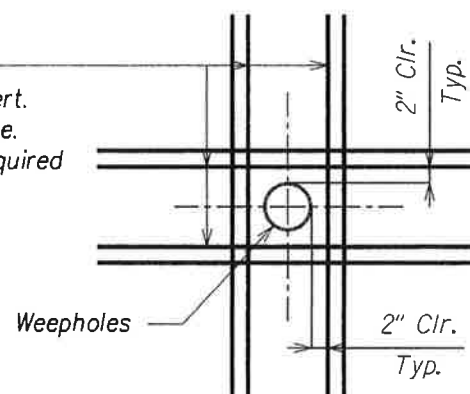
1. Concrete shall develop a minimum 28-Day Compressive Strength of 4,000 psi.
2. All reinforcing bars shall be ASTM A615 Grade 60.
3. Concrete of invert slab shall contain a minimum of 7.5 lbs./cy of synthetic structural fiber and conform to ASTM C1116 and ACI 544.
4. A shrinkage reducing admixture (SRA), Tetraguard AS20 by Master Builders or Eclipse Eclipse by W.R. Grace & Co., shall be added to the concrete mix for all concrete.

ELEVATION @ PIPE OPENING

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

A
73

2-#4 GFRP Bars x
4'-0" EF, Horiz & Vert.
Each side of weephole.
Bend bars 90° as required



ADDED REINFORCING @ WEEPHOLES

Scale: 1" = 1'-0"

B
73



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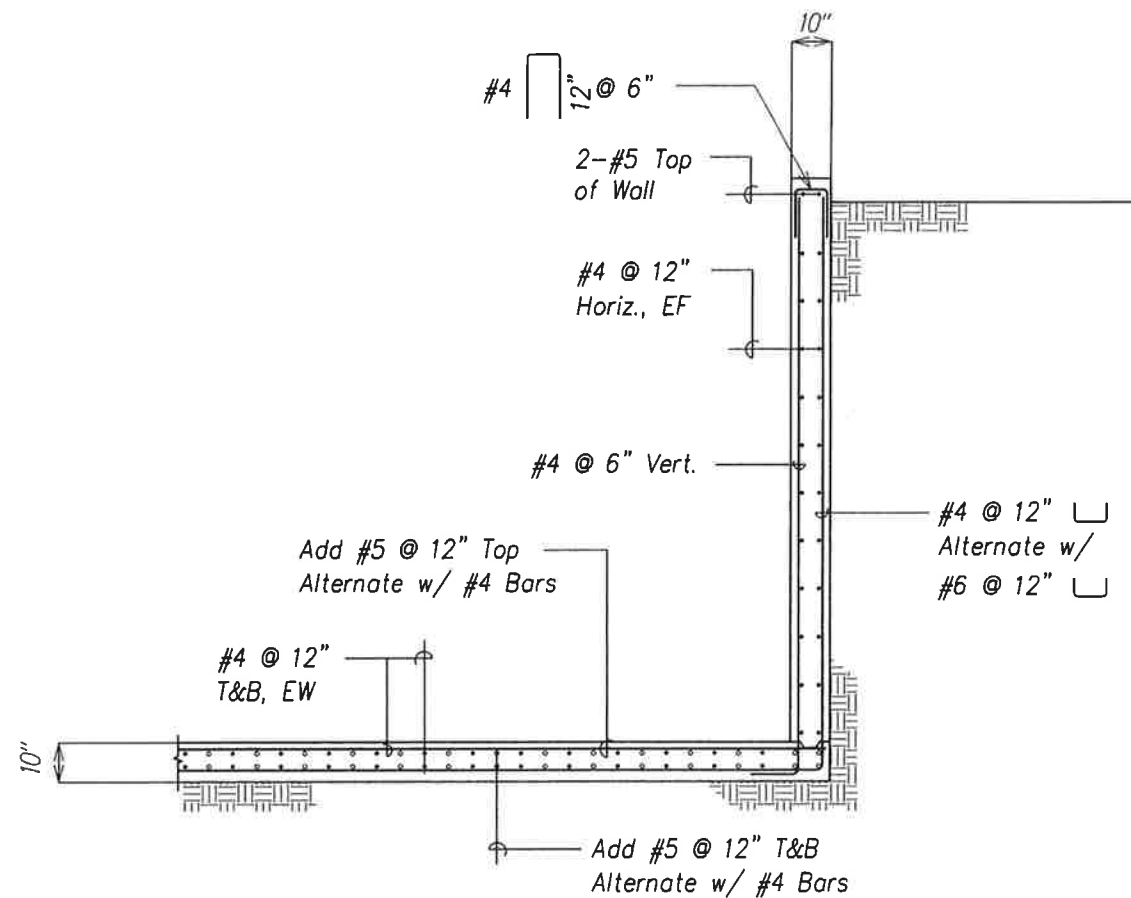
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
ELEVATION @ PIPE OPENING
3-84" CMP EXTENSION
QUEEN KAAHUMANU HIGHWAY WIDENING
HENRY ST. to KEALAKEHE PKWY - PHASE I
Federal Aid Project No. NH-019-1(20)
Scale: As Noted Date: November 2009

SHEET No. 2 OF 5 SHEETS

AS-BUILT

73

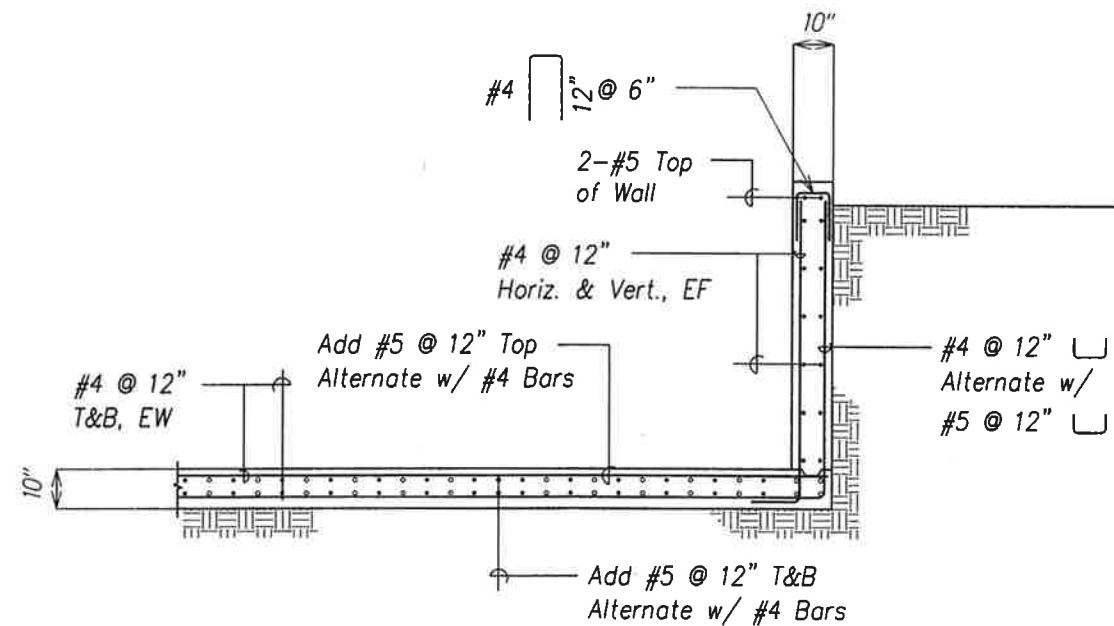
FED. R JAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-019-1(20)	2005	74	315



WING WALL SECTION ($6' \leq H < 12'$)

Scale: $\frac{1}{2}" = 1'-0"$

A
74



WING WALL SECTION ($H < 6'$)

Scale: $\frac{1}{2}" = 1'-0"$

B
74

SURVEY PLOTTED BY	DATE
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TRACED BY	
NOTED BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
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WESLEY R. SEGAWA & ASSOCIATES, INC.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

HEAD WALL SECTION
3-84" CMP EXTENSION

QUEEN KAAHUMANU HIGHWAY WIDENING
HENRY ST. to KEALAKEHE PKWY - PHASE I
Federal Aid Project No. NH-019-1(20)

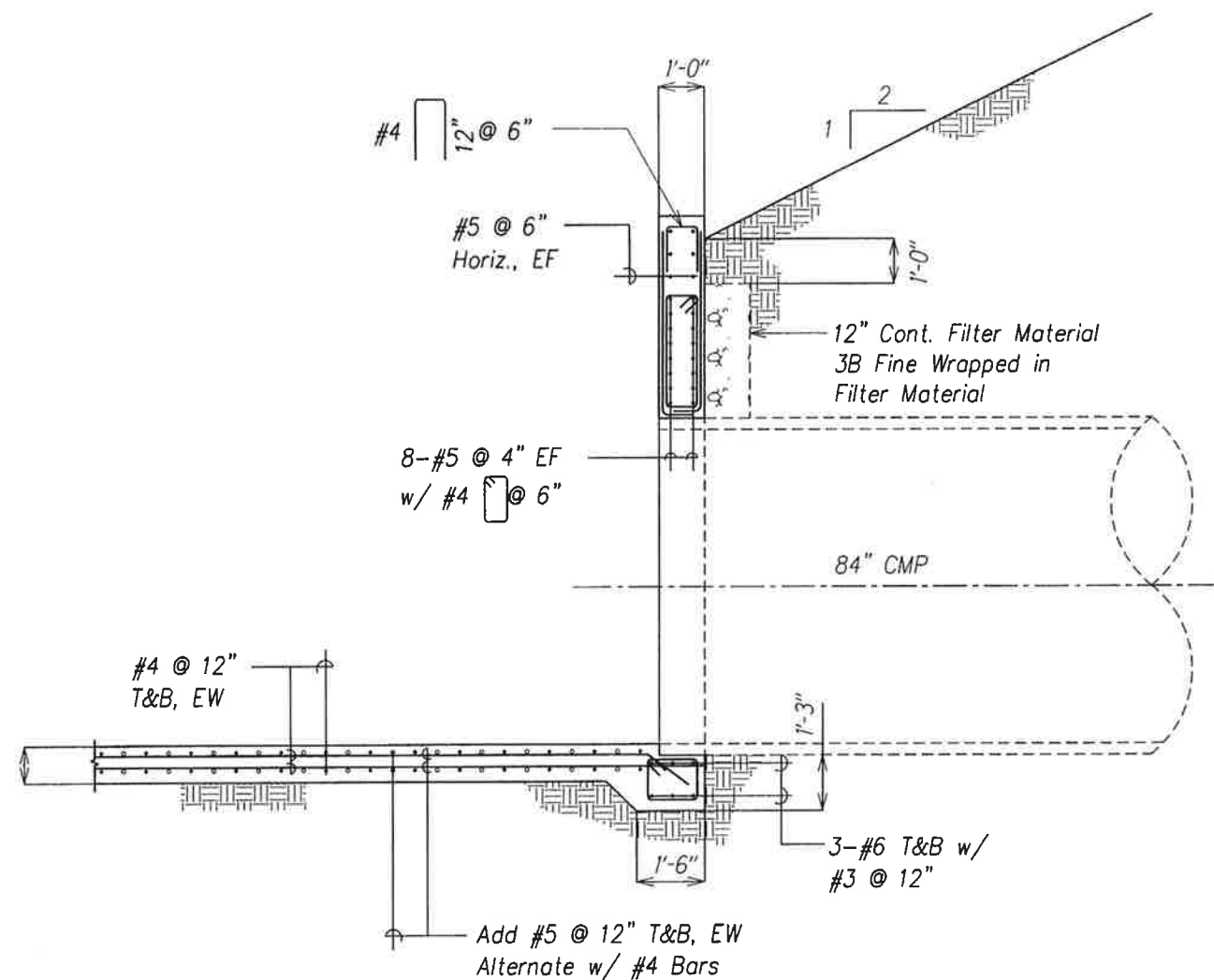
Scale: As Noted Date: November 2009

SHEET No. 3 OF 5 SHEETS

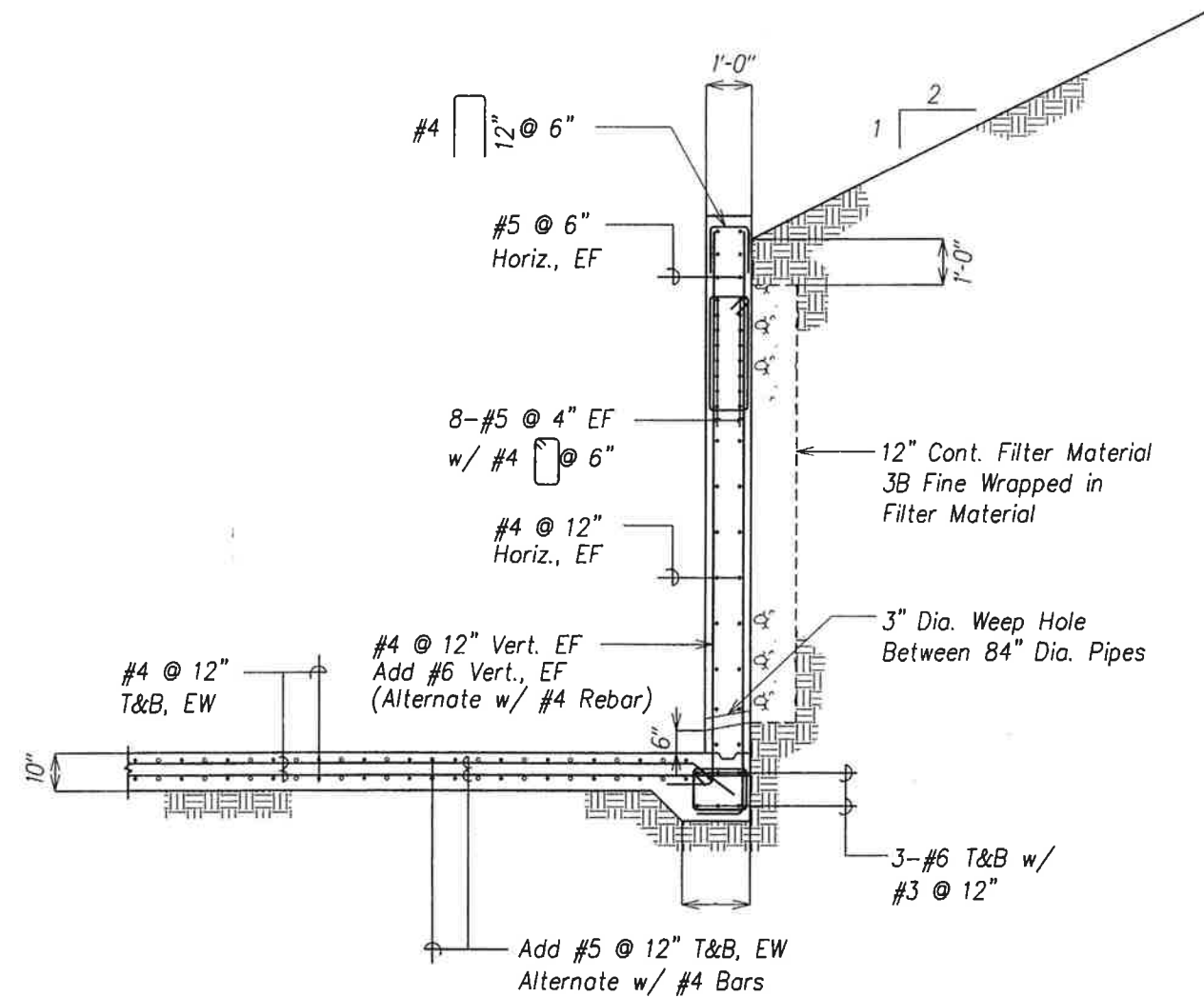
AS-BUILT

74

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-019-1(20)	2005	75	315



HEADWALL SECTION A
75
Scale: 1/2" = 1'-0"



HEADWALL SECTION B
75
Scale: 1/2" = 1'-0"

SURVEY PLOTTED BY	DATE
DRAWN BY	
CHECKED BY	
NOTED BY	
QUANTITIES BY	
CHECKED BY	



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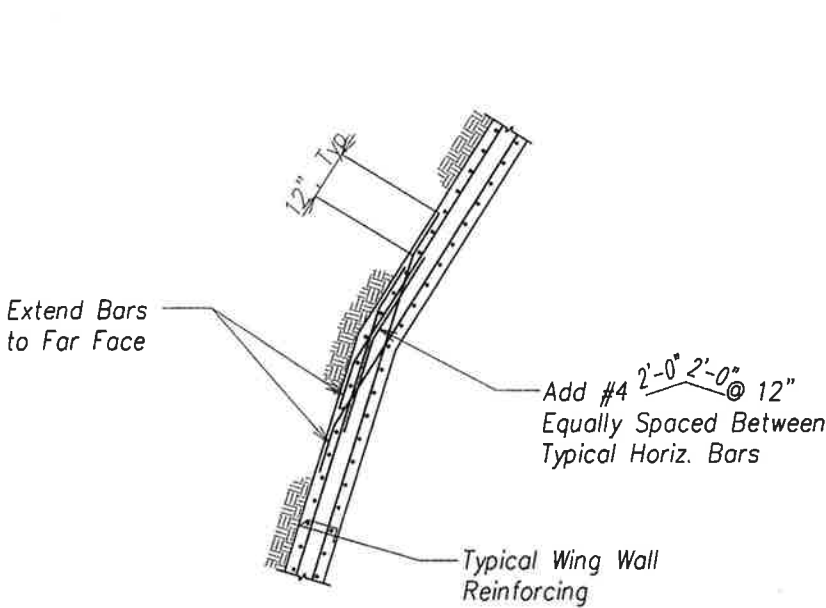
WESLEY R. SEGAWA & ASSOCIATES, INC.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
HEAD WALL SECTION
3-84" CMP EXTENSION
QUEEN KAAHUMANU HIGHWAY WIDENING
HENRY ST. to KEALAKEHE PKWY - PHASE I
Federal Aid Project No. NH-019-1(20)
Scale: As Noted Date: November 2009
SHEET No. 4 OF 5 SHEETS

AS-BUILT

75

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-019-1(20)	2005	76	315

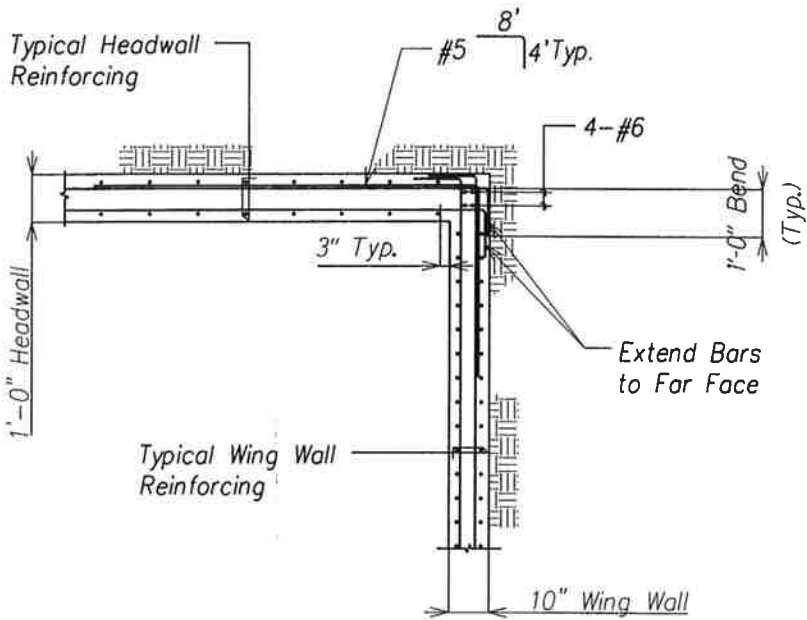


PLAN AT KINK IN WING WALL

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

A

76



PLAN AT HEADWALL AND WING WALL CORNER

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

B

76

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



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WESLEY R. SEGAWA & ASSOCIATES, INC.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
HEADWALL PLAN & SECTION
3-84" CMP EXTENSION
QUEEN KAAHUMANU HIGHWAY WIDENING
HENRY ST. to KEALAKEHE PKWY - PHASE I
Federal Aid Project No. NH-019-1(20)
Scale: As Noted Date: November 2009
SHEET No. 5 OF 5 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-019-1(20)	2005	77	315

NOTES FOR WORK WITHIN COUNTY RIGHT-OF-WAY(CONT)

- THE EXISTING PAVEMENT SHALL BE SAW-CUT BEFORE COMMENCING OF TRENCHING WORK. PAYMENT FOR SAW-CUTTING SHALL BE CONSIDERED INCIDENTAL TO THE OTHER CONTRACT ITEMS.
- ANY PAVEMENT OUTSIDE THE CONTRACT ZONE LIMITS DAMAGED AS A RESULT OF CONSTRUCTION OPERATIONS SHALL BE RESTORED TO ITS ORIGINAL CONDITION, OR BETTER, AS DIRECTED BY THE DPW.
- A TEMPORARY COLD MIX PATCH SHALL BE APPLIED IMMEDIATELY UPON COMPLETION OF THE BACKFILLING OPERATION AND SHALL BE MAINTAINED BY THE CONTRACTOR UNTIL A PERMANENT PATCH IS AUTHORIZED BY THE DEPARTMENT OF PUBLIC WORKS.
- NO MATERIAL, EXCEPT THE TRENCH EXCAVATED MATERIAL, SHALL BE STOCKPILED CLOSER THAN SIX (6) FEET FROM THE EXISTING EDGE OF PAVEMENT.
- NO CONSTRUCTION EQUIPMENT SHALL BE PARKED WITHIN THE ROAD RIGHT-OF-WAY IN SUCH A MANNER THAT THE EQUIPMENT WILL OBSTRUCT THE NORMAL MOVEMENT AND SIGHT DISTANCE OF THE DRIVING MOTORIST, EXCEPT DURING ACTUAL WORKING HOURS.
- EXCEPT DURING ACTUAL WORKING HOURS, ALL SIGNS THAT DO NOT PERTAIN TO THE CONSTRUCTION ACTIVITY, SUCH AS "MEN WORKING" AND "FLAGMAN AHEAD" SHALL BE COVERED OR LAID DOWN. HOWEVER, ALL SIGNS NECESSARY FOR THE SAFETY OF THE PUBLIC SHALL BE MAINTAINED.
- ANY PAVEMENT MARKINGS, STRUCTURES, AND APPURTENANCES (WITHIN OR OUTSIDE OF THE CONSTRUCTION LIMITS) DAMAGED AND/OR WORN AWAY UNDER THE PERMIT SHALL BE REPAINTED OR RECONSTRUCTED AS DIRECTED BY THE DEPARTMENT OF PUBLIC WORKS.
- NO TRENCHING SHALL BE LEFT OPEN FOR MORE THAN FIVE (5) WORKING DAYS.
- SHOULD TRENCHING OCCUR THROUGH AN EXISTING SIDEWALK OR SHOULD DAMAGES OCCUR TO THE SIDEWALK AS A RESULT OF ANY CONSTRUCTION WORK, THE FOLLOWING PROCEDURE SHALL BE UTILIZED TO REPAIR THE SIDEWALK:
 - ALL PORTLAND CEMENT CONCRETE TO BE REMOVED SHALL FIRST BE CUT WITH A CONCRETE SAW THAT HAS A DIAMOND OR CARBORUNDUM ABRASIVE WHEEL. THOSE CUTS SHALL BE MADE TO A DEPTH EQUAL TO AT LEAST ONE-FOURTH OF THE DEPTH OF THE SLAB, OR ENOUGH AS IS DEEMED NECESSARY BY THE DEPARTMENT OF PUBLIC WORKS, TO PERMIT BREAKING OUT THE BALANCE OF THE CONCRETE WITHOUT SPALLING OFF THE EXPOSED EDGES OF THE SLAB LEFT IN PLACE.
 - IF ANY CONCRETE BLOCK IS TOUCHED, THE WHOLE BLOCK SHALL BE REMOVED AND LATER REPLACED, UNLESS A MINOR VARIATION IS AUTHORIZED BY THE DPW OR ITS REPRESENTATIVE.
 - ANY DAMAGES TO ADJACENT AREAS DUE TO SETTLEMENT OR TO ANY OTHER EFFECTS WHATSOEVER CAUSED BY THE TRENCH CONSTRUCTION SHALL BE PROPERLY REPAIRED AND CORRECTED.
 - ALL OTHER INCIDENTAL WORK SHALL BE SATISFACTORILY PERFORMED TO EFFECT THE PROPER RESTORATION OF THE SIDEWALK AREA.
 - SHOULD DAMAGE TO A SIDEWALK, CURB AND/OR GUTTER OCCUR AT A LOCATION WHERE A CURB RAMP SHOULD EXIST, OR TO A DRIVEWAY THAT DOES NOT MEET WITH THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT (ADA), REPAIR WORK SHALL INCLUDE THE CONSTRUCTION OF A CURB RAMP, OR RECONSTRUCTION TO THE DRIVEWAY SUCH THAT THE REPAIR WORK COMPLIES WITH THE ADA AND MEETS WITH THE APPROVAL OF THE DPW.
- THE PERMITTEE SHALL MAINTAIN, TO THE SATISFACTION OF THE DEPARTMENT OF PUBLIC WORKS, THE AREA WORKED WITHIN THE GOVERNMENT RIGHT-OF-WAY INCLUDING ANY REPAIRS TO PAVEMENT AND SHOULDER DAMAGED AS A RESULT OF THE INSTALLATION WORK, FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF FINAL INSPECTION. THE PERMITTEE SHALL UNDERTAKE REPAIRS EXPEDITIOUSLY, WHENEVER DIRECTED BY THE DEPARTMENT OF PUBLIC WORKS DURING THE MAINTENANCE PERIOD.



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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

HENRY STREET
MAUKA CATCH BASIN

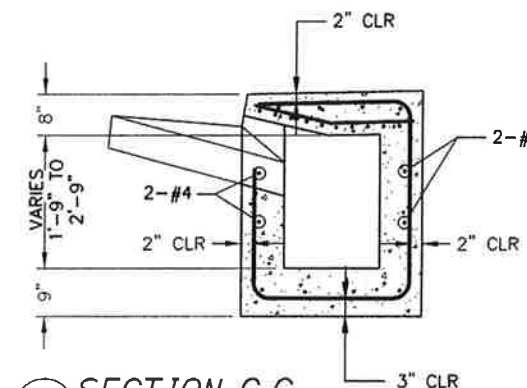
QUEEN KAAHUMANU HIGHWAY WIDENING
HENRY ST. to KEALAKEHE PKWY - PHASE I
Federal Aid Project No. NH-019-1(20)

Scale: As Noted Date: November 2009

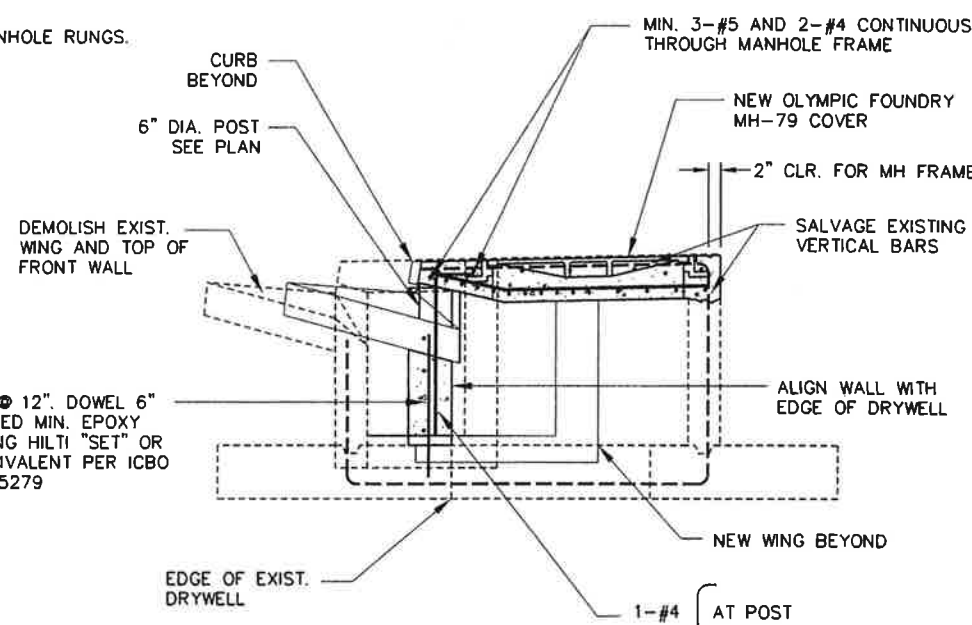
SHEET No. 1 OF 2 SHEETS

NOTES FOR WORK WITHIN COUNTY RIGHT-OF-WAY

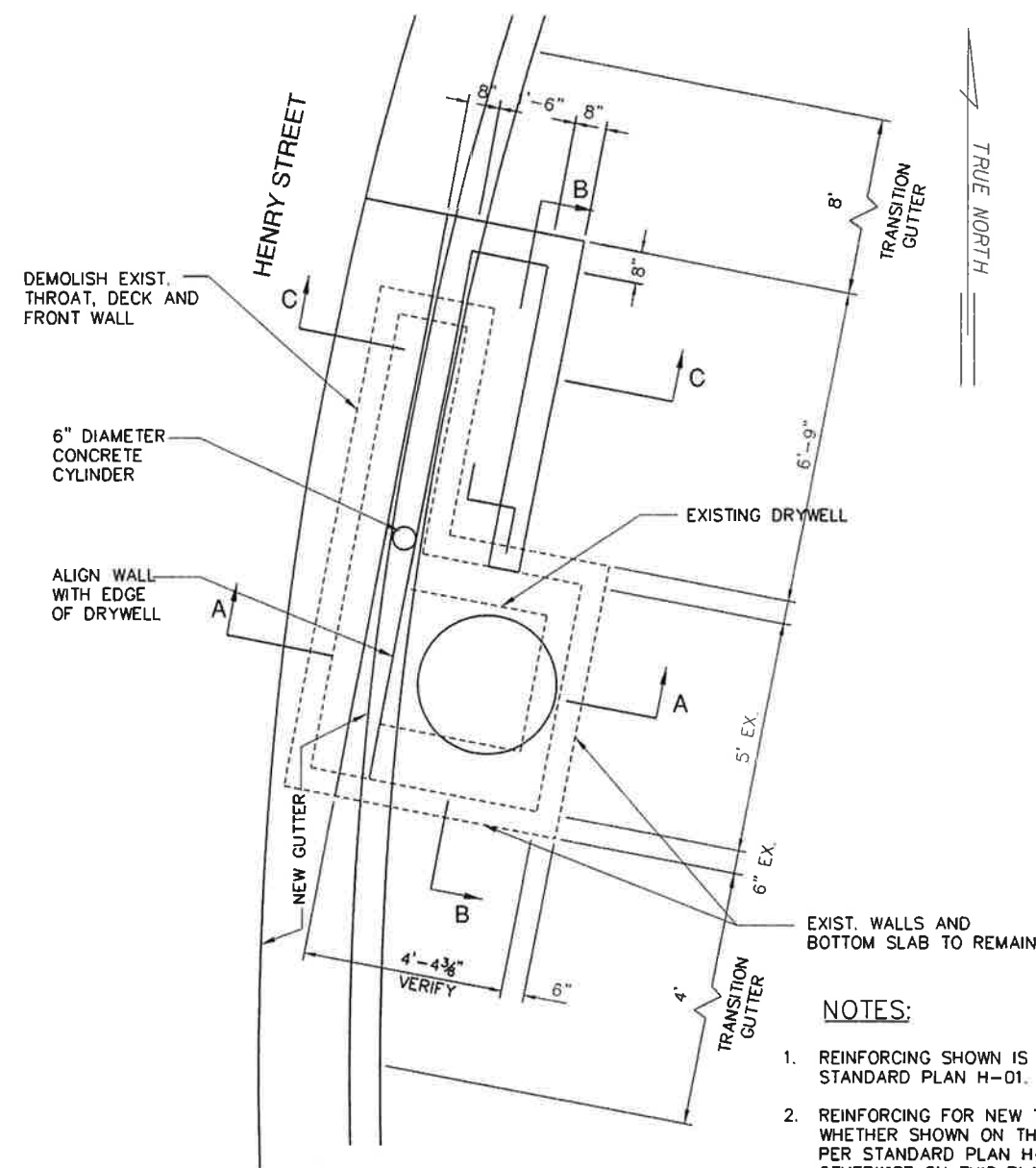
- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, SEPTEMBER 1986 AND STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION, SEPTEMBER 1984, AS AMENDED, OF THE DEPARTMENT OF PUBLIC WORKS, CITY AND COUNTY OF HONOLULU AND THE COUNTIES OF KAUAI, MAUI, AND HAWAII, UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES, WHETHER SHOWN ON THE PLAN OR NOT, AND SHALL BE RESPONSIBLE FOR THE REPAIR OR REPLACEMENT OF SAME IN THE EVENT OF DAMAGES DUE TO HIS CONSTRUCTION PRACTICES. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH THE RESPECTIVE UTILITY COMPANIES.
- THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL TRAFFIC CONTROL DEVICES IN CONFORMANCE WITH THE CURRENT EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS," AND AS DIRECTED BY THE DEPARTMENT OF PUBLIC WORKS.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS FORTY-EIGHT (48) HOURS BEFORE THE COMMENCEMENT OF ANY UTILITY LINE WORK TO SCHEDULE A FIELD REVIEW AND SECURE APPROVAL OF THE PROPOSED UTILITY LINE LOCATION WITHIN THE COUNTY RIGHT-OF-WAY.
- THE PROPOSED UTILITY LINE LOCATION SHALL BE LAID OUT IN THE FIELD PRIOR TO THE CONDUCTING OF THE FIELD REVIEW BY THE DEPARTMENT OF PUBLIC WORKS.
- FIELD ADJUSTMENTS SHALL BE MADE AS DIRECTED BY THE DEPT OF PUBLIC WORKS PRIOR TO THE COMMENCEMENT OF ANY UTILITY LINE WORK.
- THE REQUIRED PERMIT, UNDER CHAPTER 22, ARTICLE 3, SECTION 22-4.1 OF THE HAWAII COUNTY CODE, SHALL BE OBTAINED FROM THE DEPT OF PUBLIC WORKS BY THE CONTRACTOR FOR WORK WITHIN THE COUNTY RIGHT-OF-WAY.



4 SECTION C-C
Scale: 3/4" = 1'



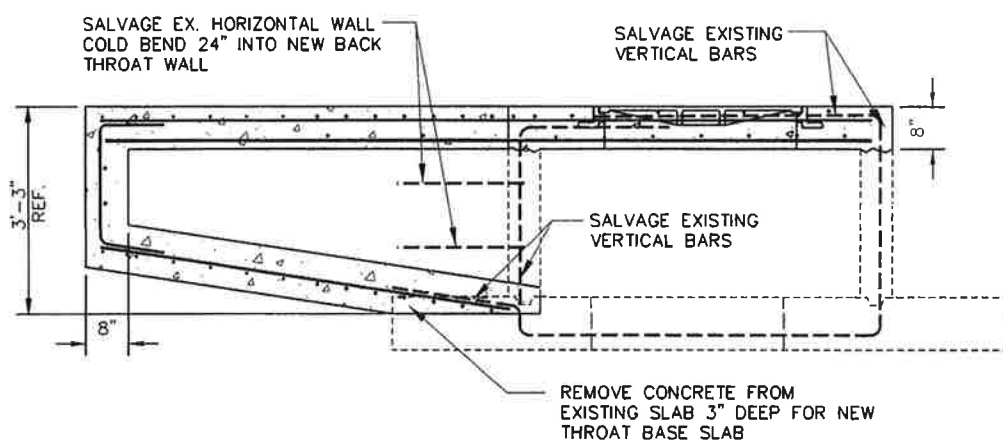
3 SECTION A-A
Scale: 3/4" = 1'



1 PLAN
Scale: 1/2" = 1'
DECK NOT SHOWN FOR CLARITY

NOTES:

- REINFORCING SHOWN IS DETAILED FURTHER ON DOT STANDARD PLAN H-01.
- REINFORCING FOR NEW THROAT AND DECK, WHETHER SHOWN ON THE PLAN OR NOT, SHALL BE PER STANDARD PLAN H-01, UNLESS NOTED OTHERWISE ON THIS PLAN.
- THERE ARE NO EXISTING MANHOLE RUNGS. NONE ARE PROPOSED.



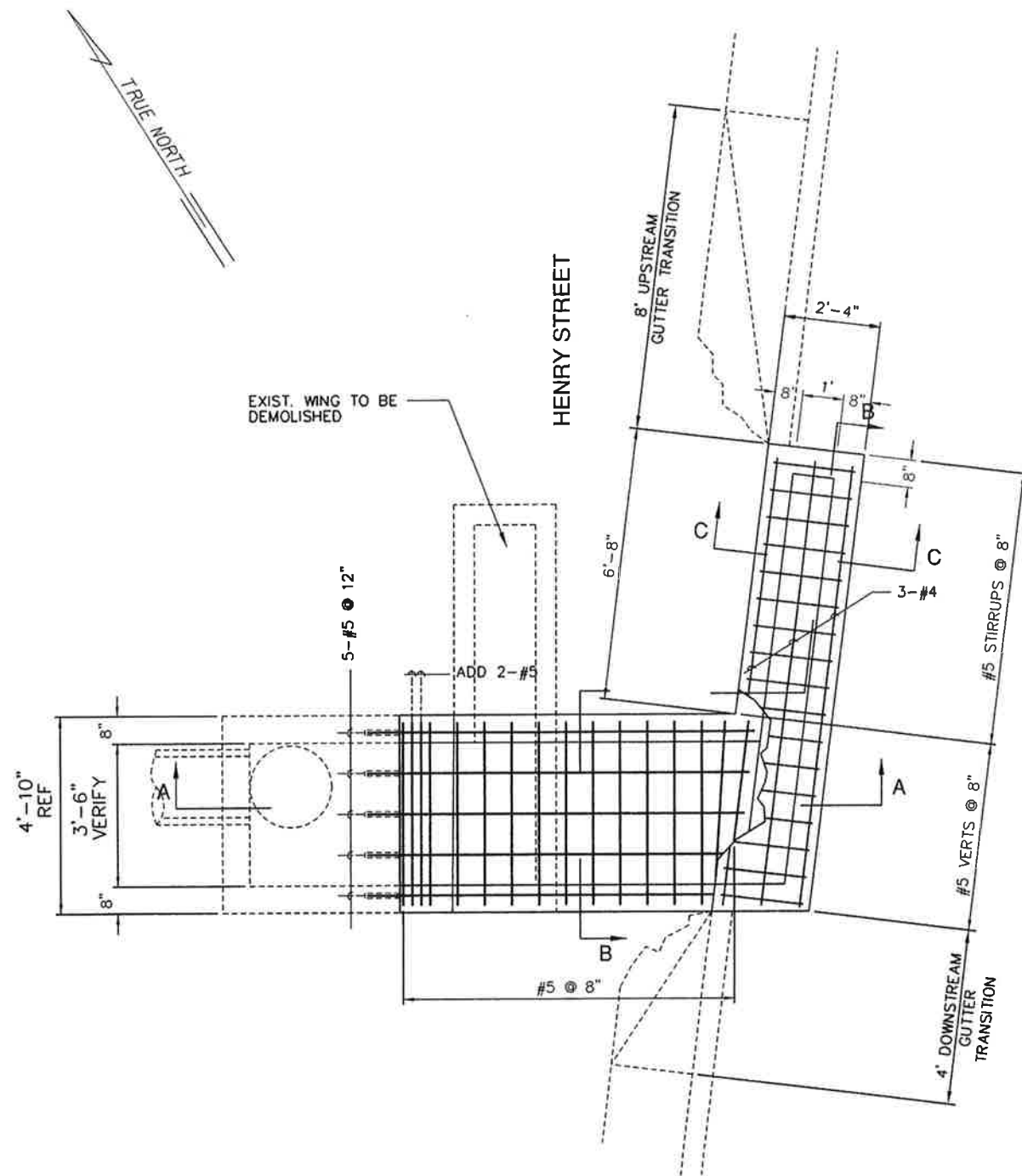
2 SECTION B-B
Scale: 3/4" = 1'

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

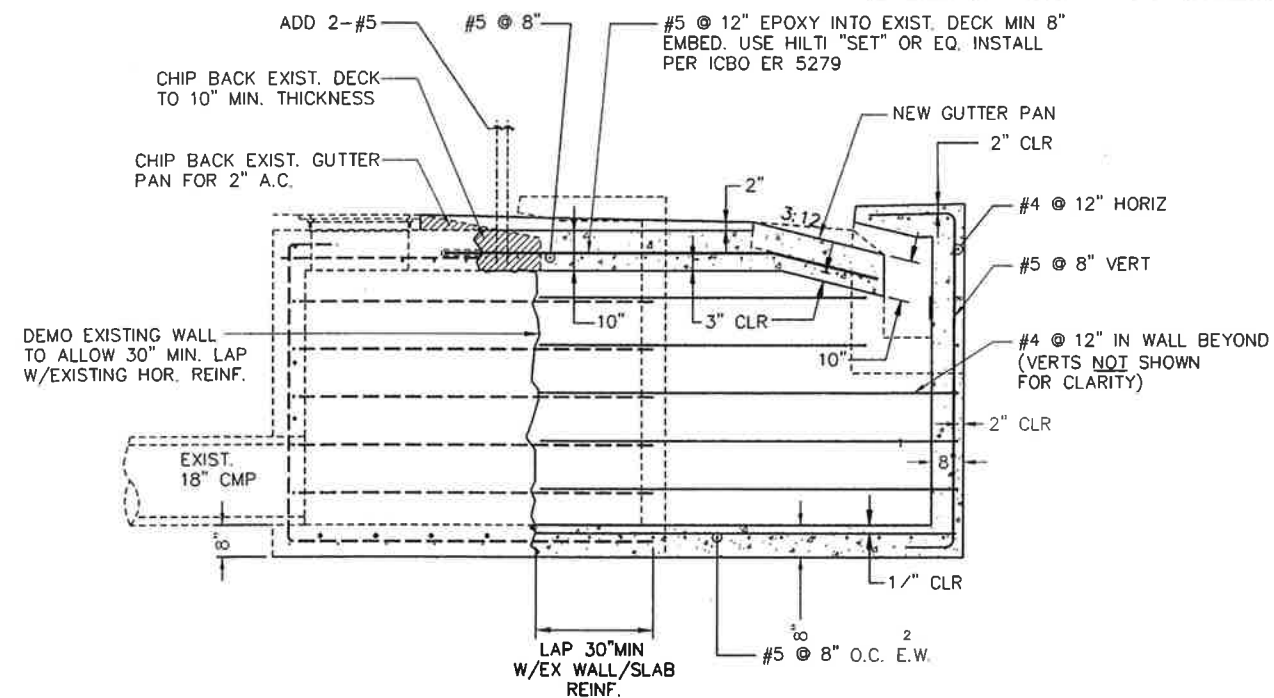
AS-BUILT

77

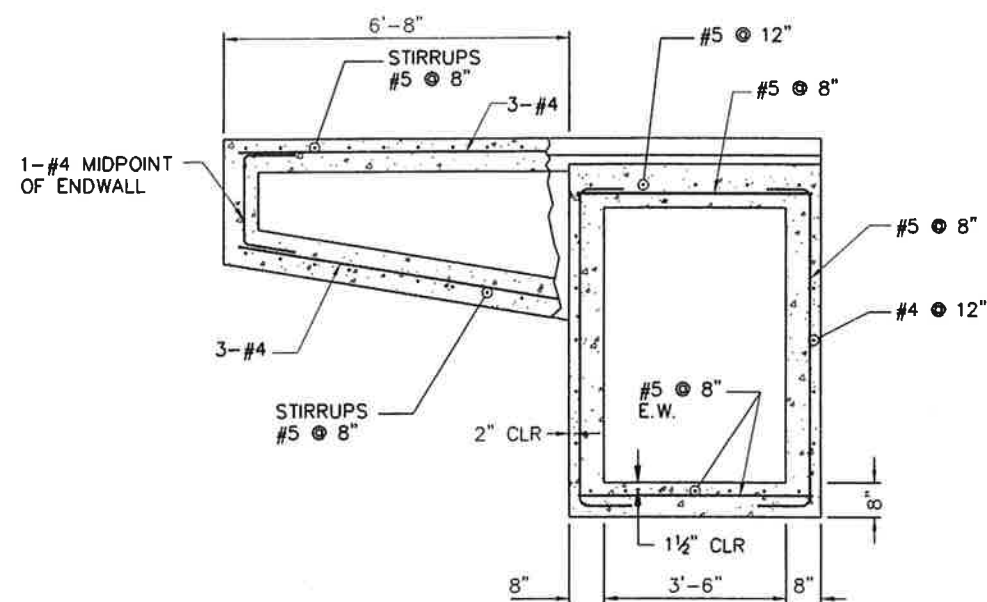
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-019-1(20)	2005	78	315



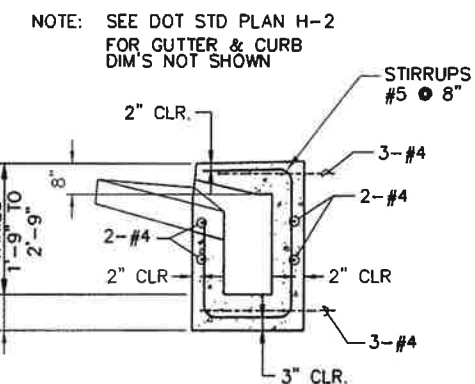
1 PLAN
Scale: 1/2" = 1'



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



3 SECTION B-B
Scale: 1/2" = 1'



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

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



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Wesley R. Segawa
Wesley R. Segawa & Associates, Inc.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**HENRY STREET
MAKAI CATCH BASIN**

QUEEN KAAHUMANU HIGHWAY WIDENING
HENRY ST. to KEALAKEHE PKWY - PHASE I
Federal Aid Project No. NH-019-1(20)

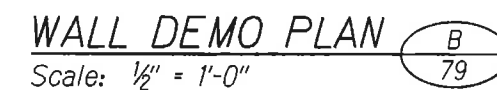
Scale: As Noted Date: November 2009

SHEET No. 2 OF 2 SHEETS

AS-BUILT

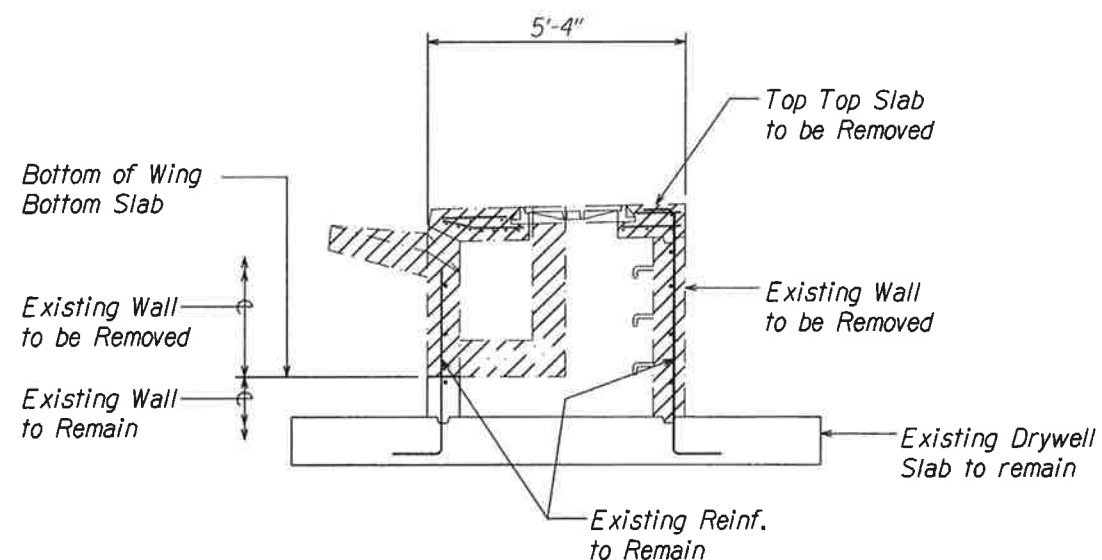
78

ORIGINAL PLAN	SURVEY PLOTTED BY _____	DATE _____
NOTE BOOK	DRAWN BY _____	*
	TRACED BY _____	*
	DESIGNED BY _____	*
	QUANTITIES BY _____	*
N. _____	CHECKED BY _____	_____

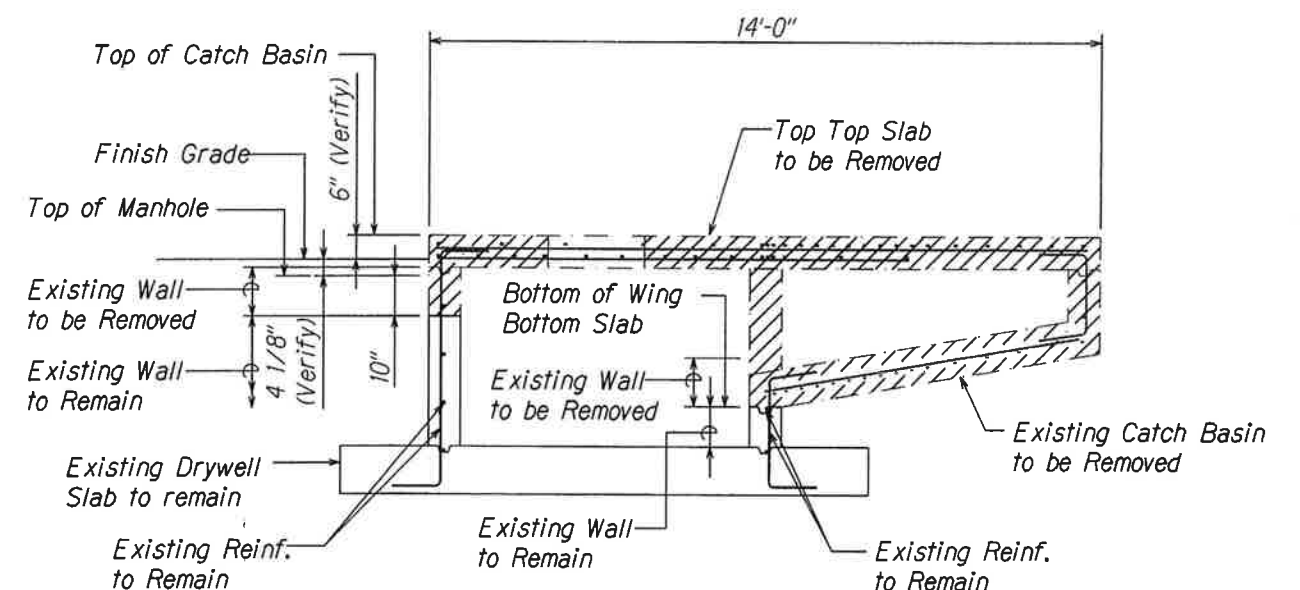


79

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-019-1(20)	2005	80	315



CATCH BASIN DEMO SECTION A
80
Scale: 1/2" = 1'-0"



CATCH BASIN DEMO SECTION B
80
Scale: 1/2" = 1'-0"

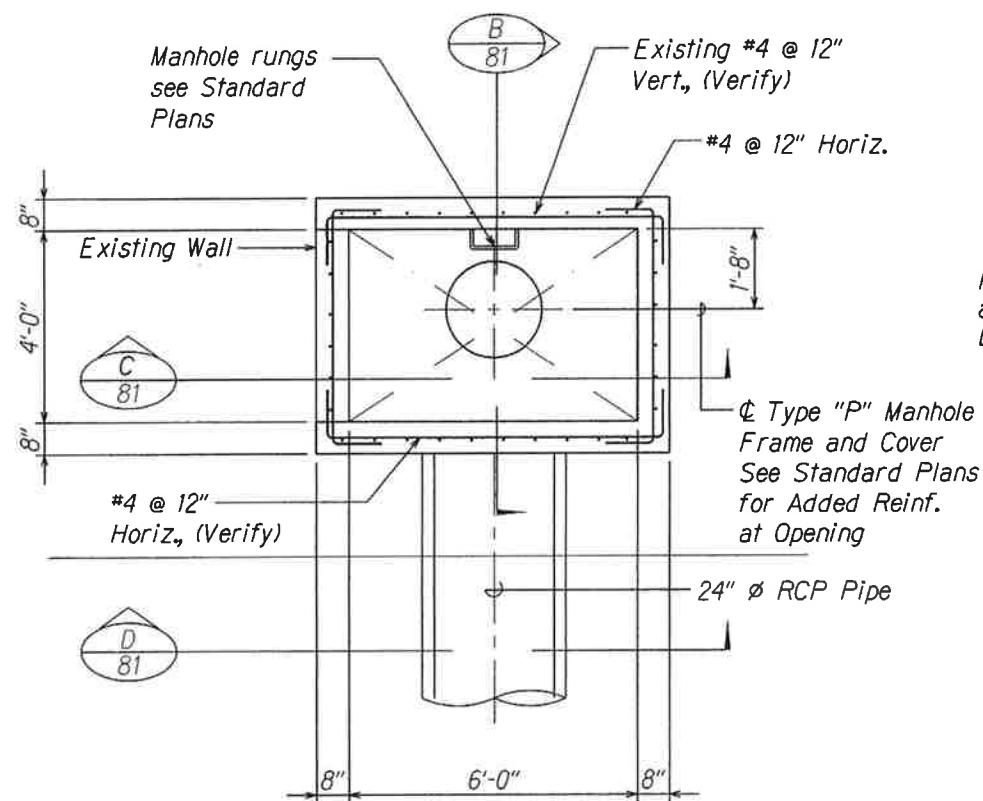
SURVEY PLOTTED BY	DATE
DRAWN BY	
CHECKED BY	
NOTED BY	
QUANTITIES BY	
CHECKED BY	



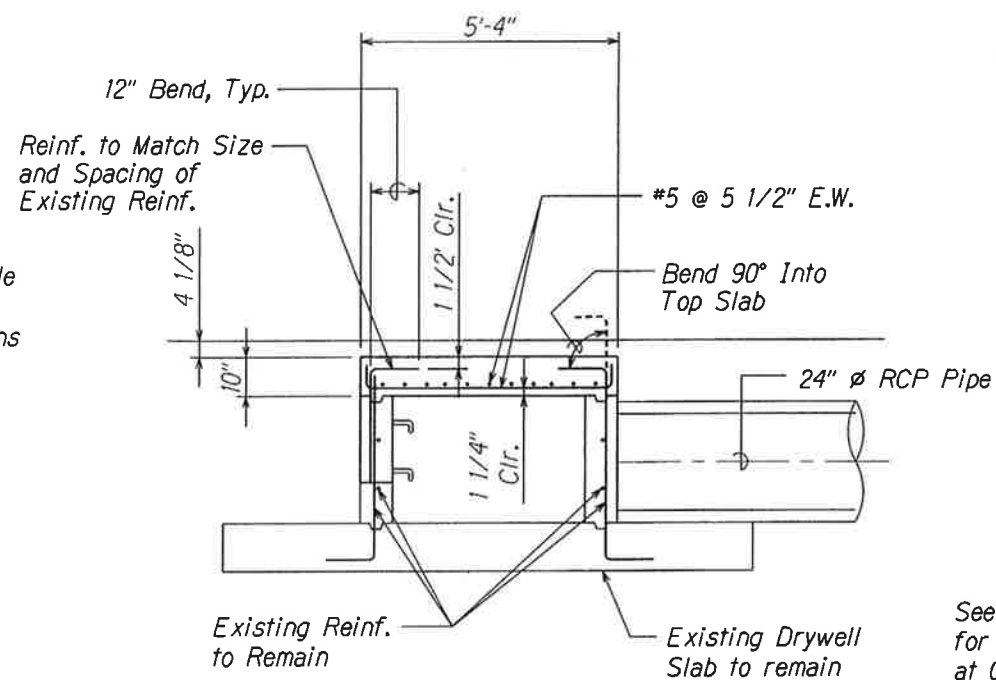
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EXP. 04-30-10
Wesley R. Segawa
WESLEY R. SEGAWA & ASSOCIATES, INC.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
**CATCH BASIN "CB2"
TO "CB8" - PLANS**
**QUEEN KAAHUMANU HIGHWAY WIDENING
HENRY ST. to KEALAKEHE PKWY - PHASE I**
Federal Aid Project No. NH-019-1(20)
Scale: 1/2" = 1'-0" Date: November 2009
SHEET No. 2 OF 3 SHEETS

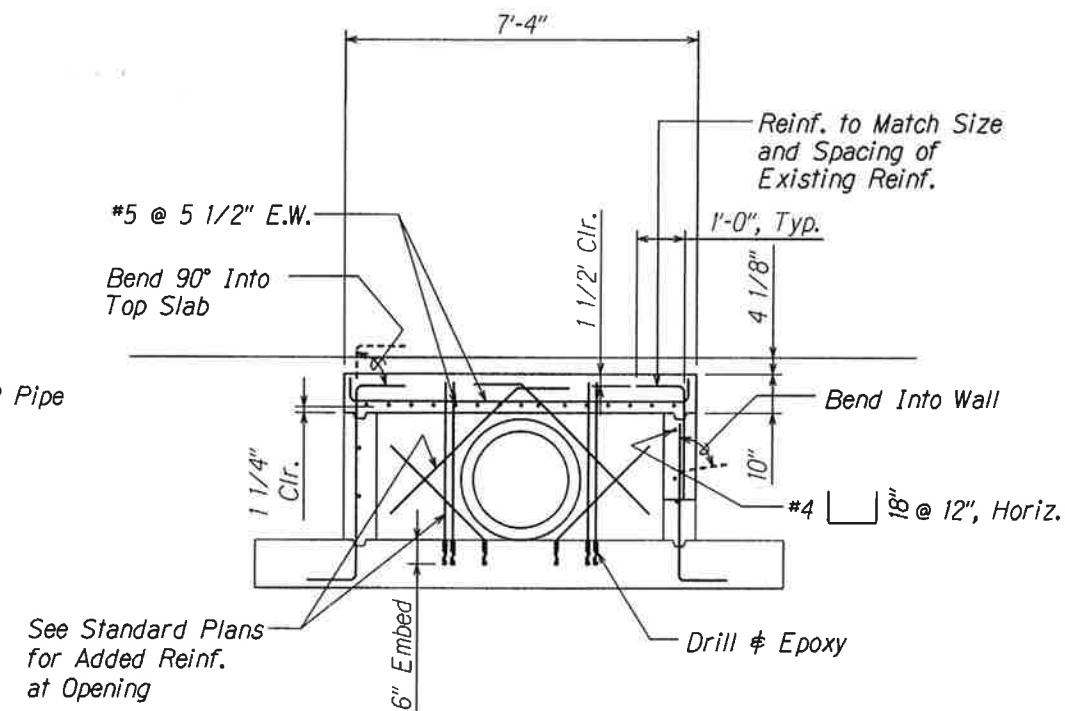
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-019-1(20)	2005	81	315



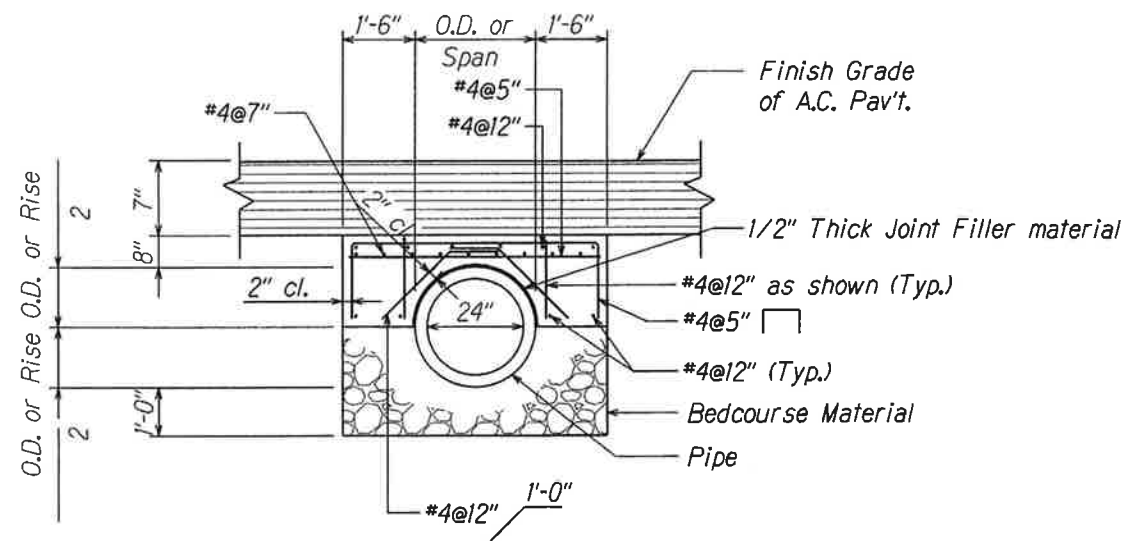
NEW MANHOLE PLAN (A) 81
Scale: 1/2" = 1'-0"



SECTION (B) 81
Scale: 1/2" = 1'-0"



SECTION (C) 81
Scale: 1/2" = 1'-0"



DETAIL OF REINFORCED CONCRETE JACKET (D) 81
Scale: 1/2" = 1'-0"

SURVEY PLOTTED BY	DATE
DRAWN BY	
TRACED BY	
QUANTITIES BY	
CHECKED BY	



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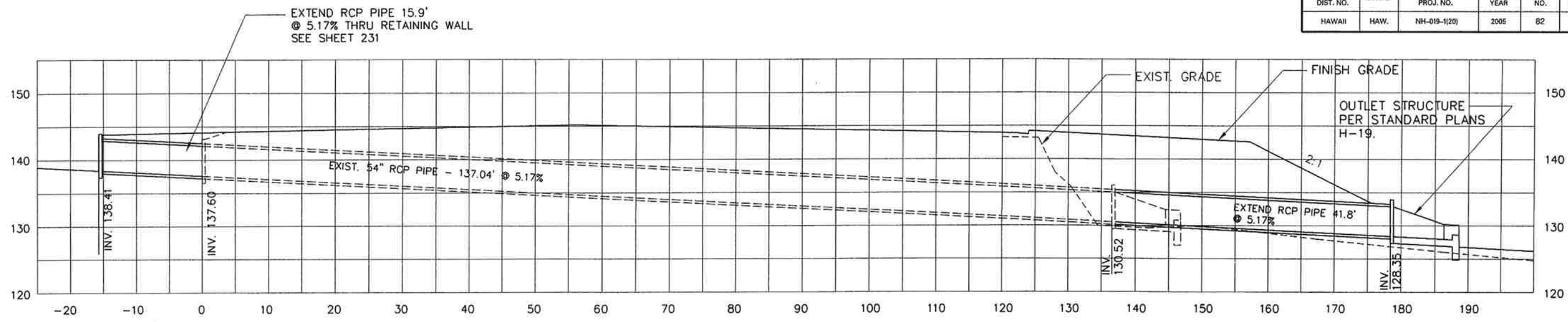
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**CATCH BASIN "CB2"
TO "CB8" - PLANS**
 QUEEN KAAHUMANU HIGHWAY WIDENING
 HENRY ST. to KEALAKEHE PKWY - PHASE I
 Federal Aid Project No. NH-019-1(20)
 Scale: 1/2" = 1'-0" Date: November 2009

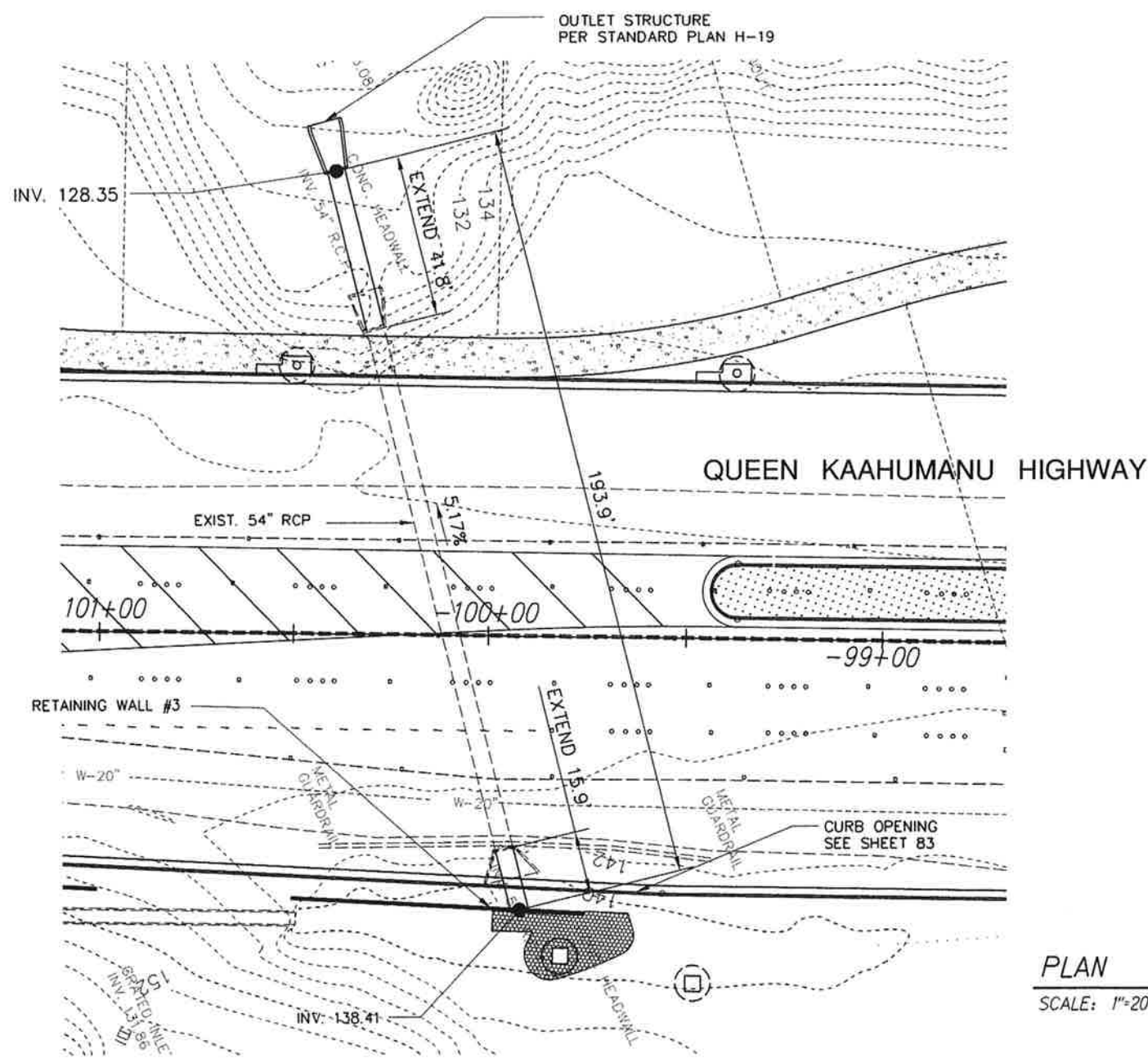
SHEET No. 3 OF 3 SHEETS

AS-BUILT

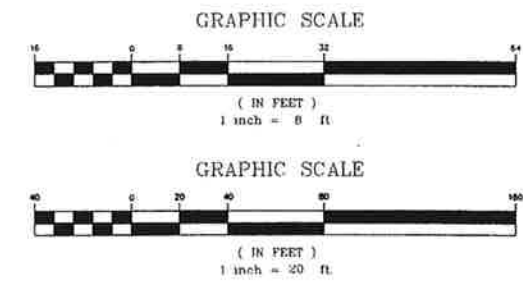
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-019-1(20)	2005	82	315



PROFILE
SCALE: 1"=8'



PLAN
SCALE: 1"=20'



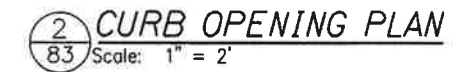
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE PLAN AND PROFILE
CULVERT #1
QUEEN KAAHUMANU HIGHWAY WIDENING
HENRY ST. to KEALAKEHE PKWY - PHASE I
Federal Aid Project No. NH-019-1(20)
Scale: As Noted Date: November 2009

SHEET No. 1 OF 1 SHEETS

SURVEY PLOTTED BY	DATE
DRAWN BY	
TRACED BY	
NOTE BOOK	
QUANTITIES BY	
CHECKED BY	
N.	

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



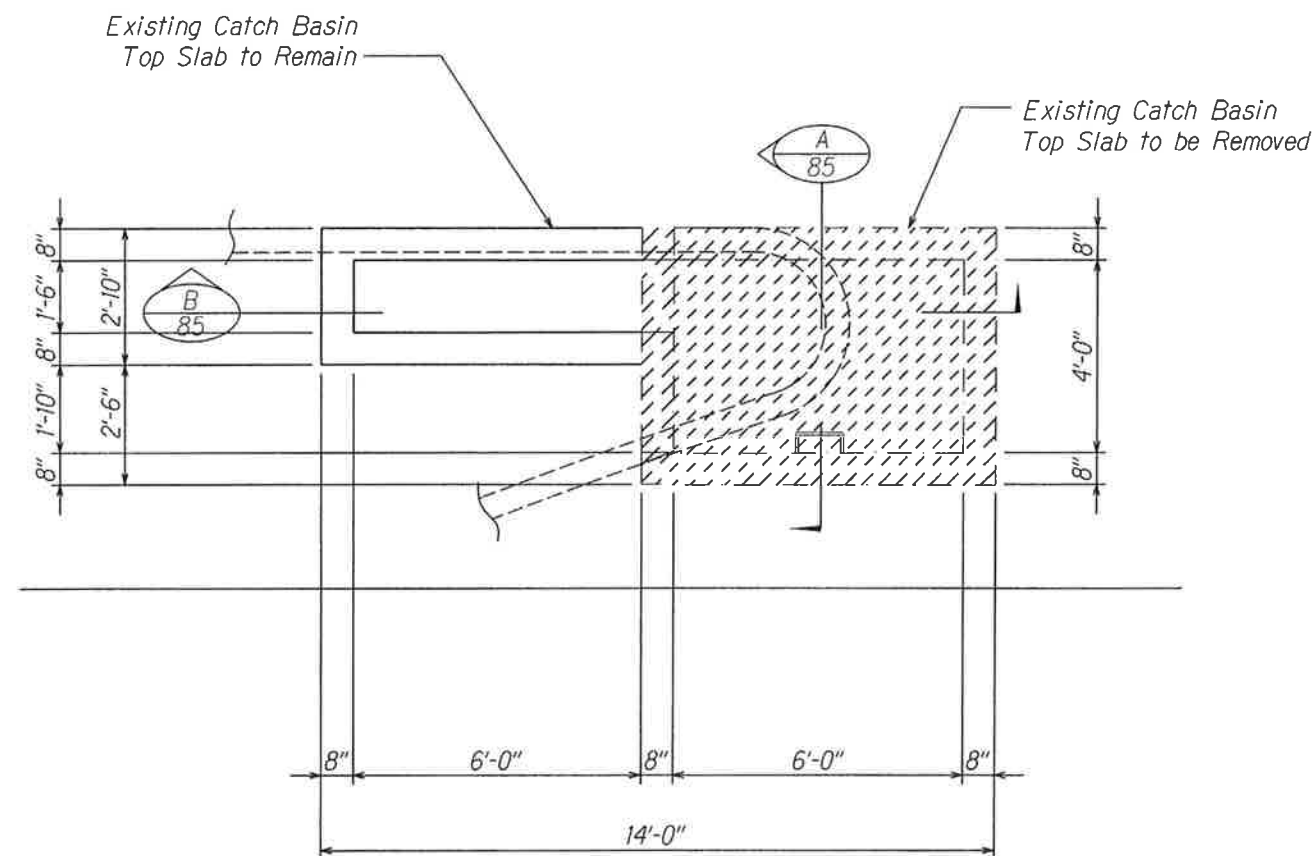
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or under my supervision.
Exp. 04-30-10

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CURB OPENING DETAIL
AT CULVERT #1

QUEEN KAAHUMANU HIGHWAY WIDENING
HENRY ST. to KEALAKEHE PKWY - PHASE I
Federal Aid Project No. NH-019-1(20)

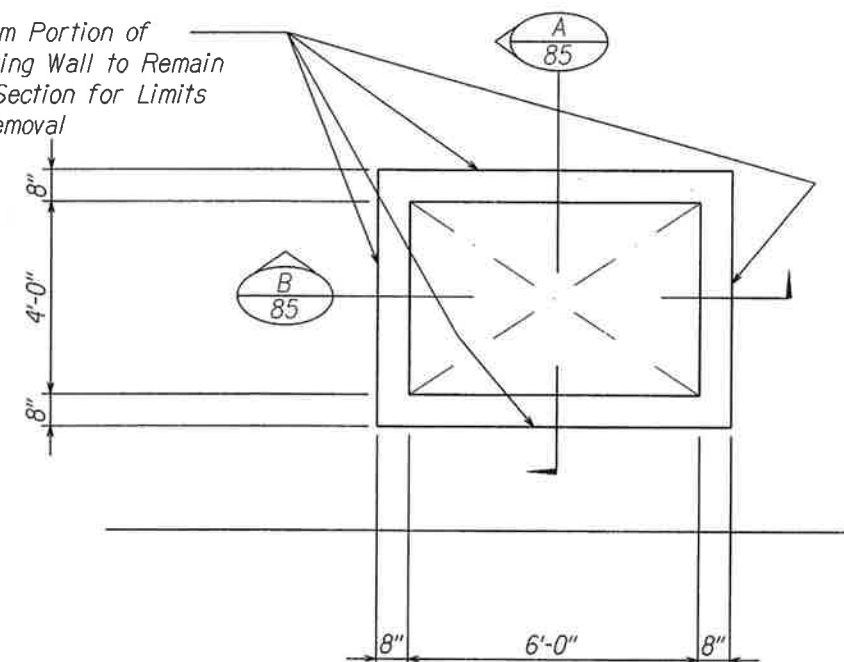
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-019-1(20)	2005	84	315



TOP SLAB DEMO PLAN
SCALE: $\frac{1}{2}" = 1'-0"$

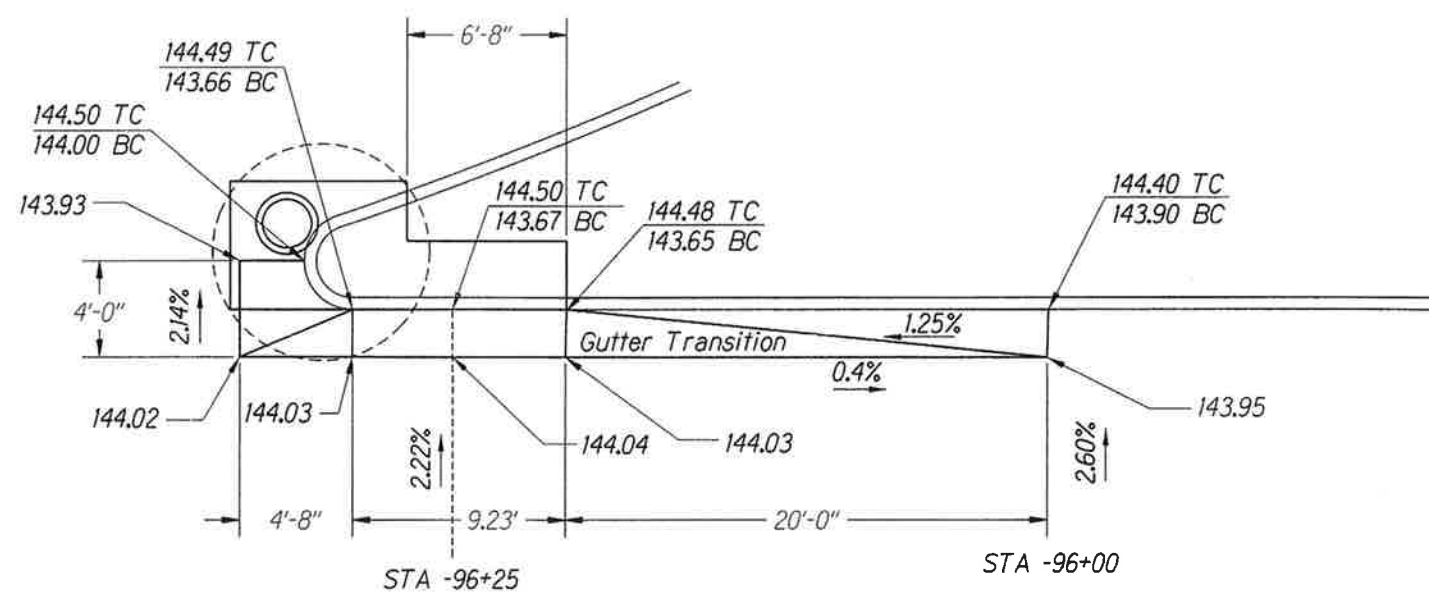
A
84

Bottom Portion of Existing Wall to Remain
See Section for Limits of Removal



WALL DEMO PLAN
SCALE: $\frac{1}{2}" = 1'-0"$

B
84



PLAN VIEW
Scale: 1" = 4'

C
84



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DEPARTMENT OF TRANSPORTATION
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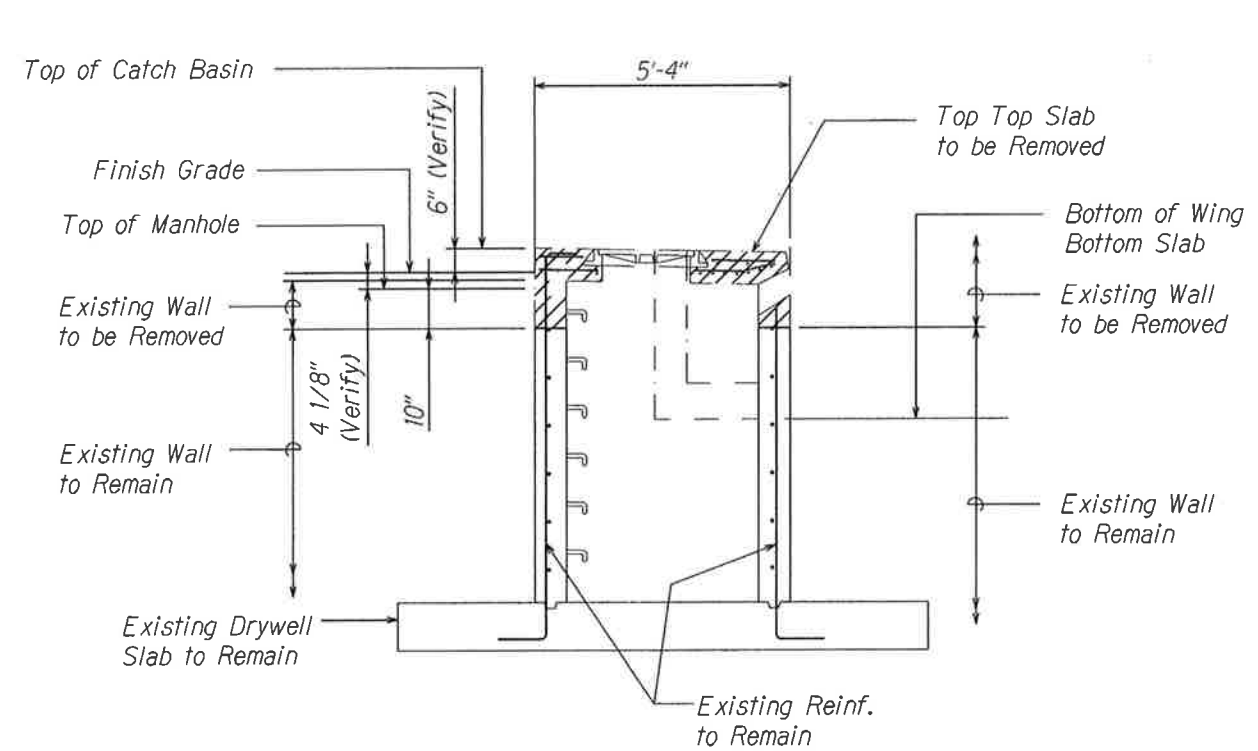
CATCH BASIN "CB15"

QUEEN KAAHUMANU HIGHWAY WIDENING
HENRY ST. to KEALAKEHE PKWY - PHASE I
Federal Aid Project No. NH-019-1(20)

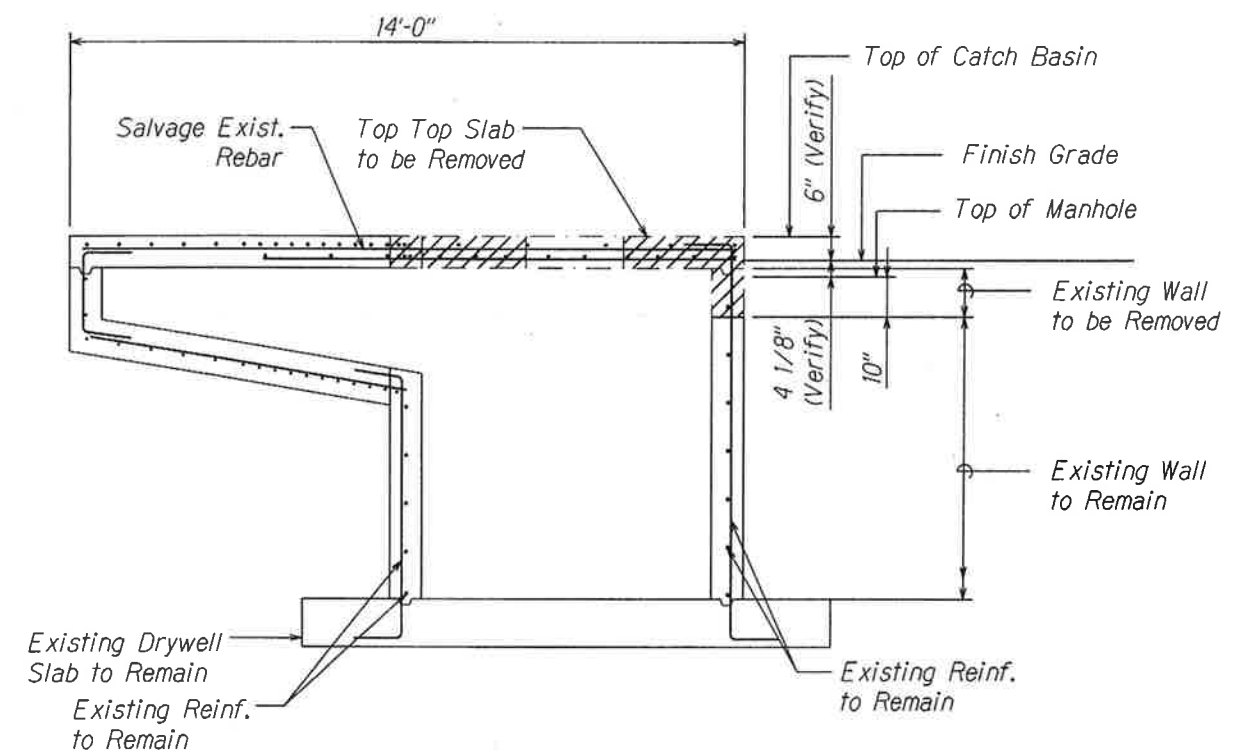
Scale: As Noted Date: November 2009

SHEET No. 1 OF 3 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-019-1(20)	2006	85	315



CATCH BASIN DEMO SECTION A
85
SCALE: 1/2" = 1'-0"



CATCH BASIN DEMO SECTION B
85
SCALE: 1/2" = 1'-0"

SURVEY PLOTTED BY	DATE
DRAWN BY	
CHECKED BY	
NOTE BOOK	
QUANTITIES BY	
CHECKED BY	



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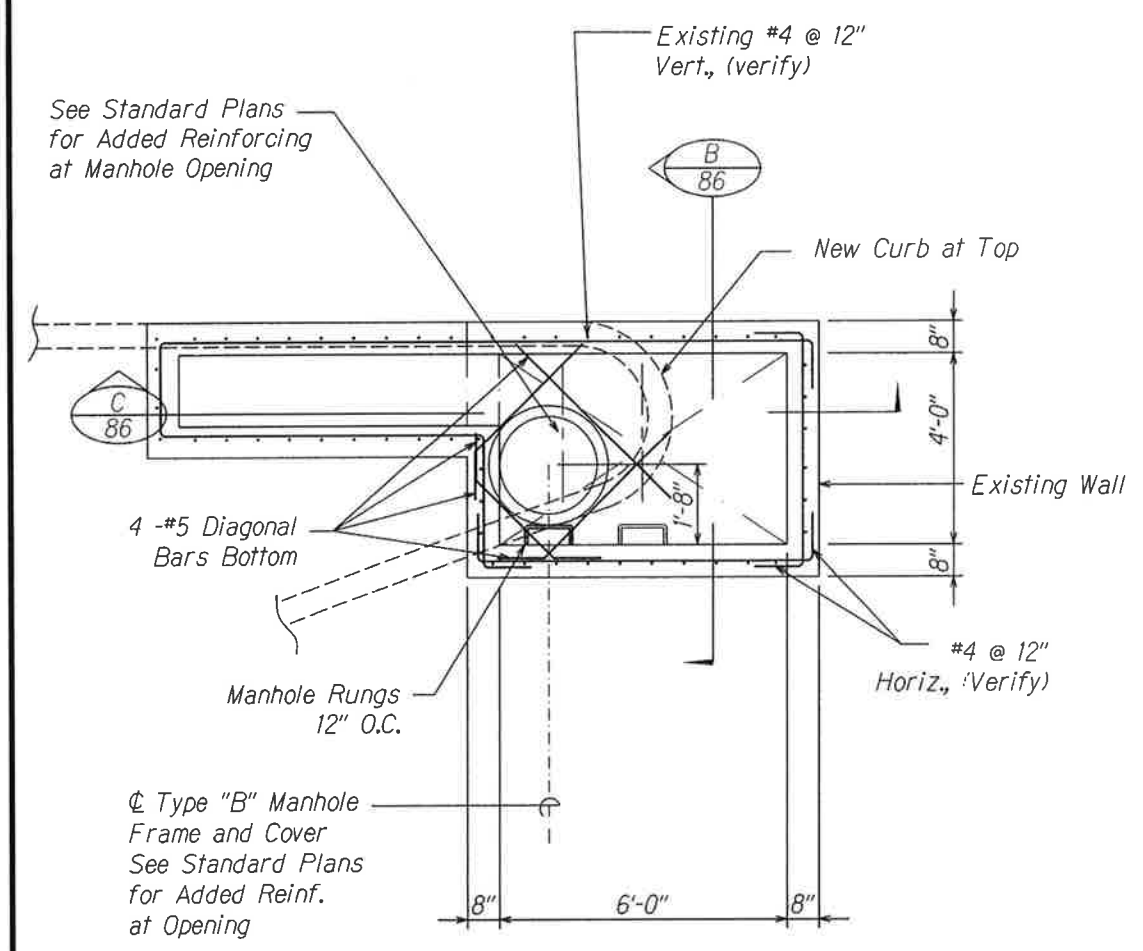
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CATCH BASIN "CB15"

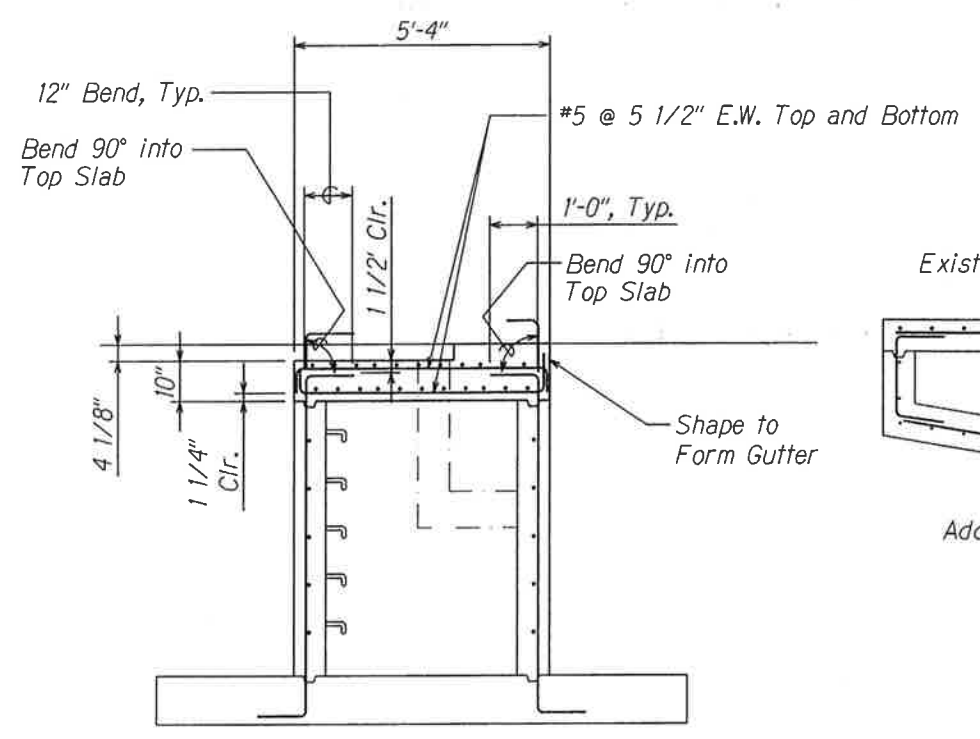
QUEEN KAAHUMANU HIGHWAY WIDENING
HENRY ST. to KEALAKEHE PKWY - PHASE I
Federal Aid Project No. NH-019-1(20)

Scale: As Noted Date: November 2009

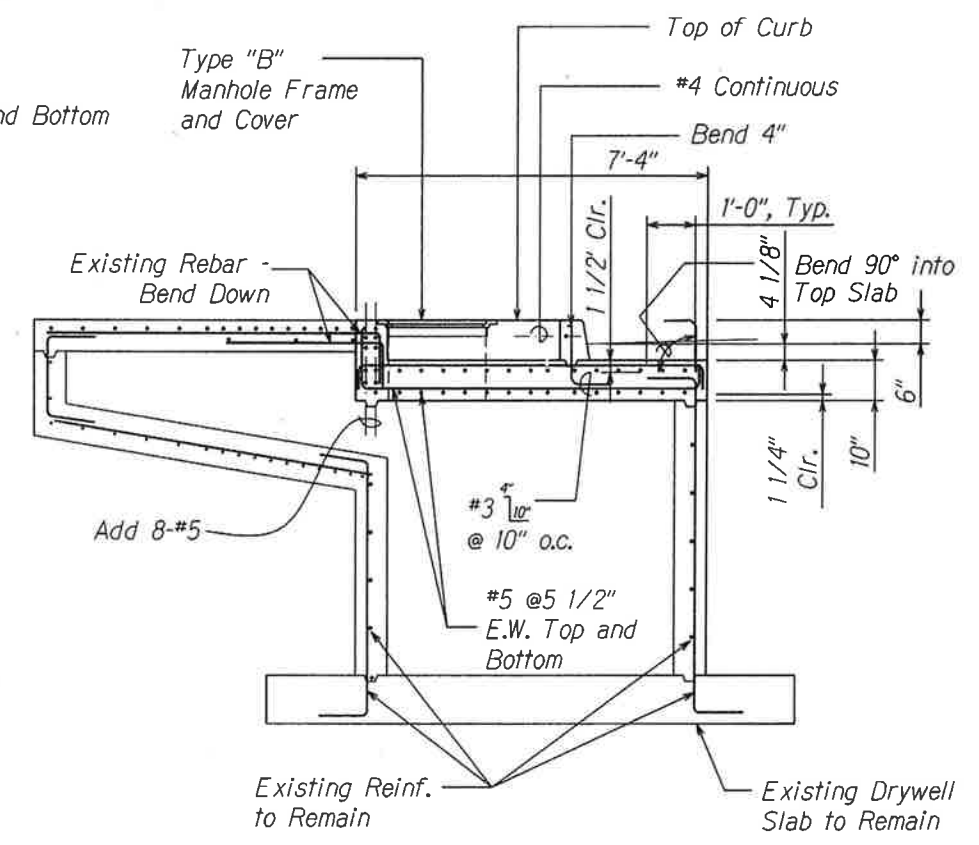
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-019-1(20)	2005	86	315



MANHOLE PLAN
SCALE: 1/2" = 1'-0"



SECTION
SCALE: 1/2" = 1'-0"



SECTION
SCALE: 1/2" = 1'-0"

SURVEY PLOTTED BY	DATE
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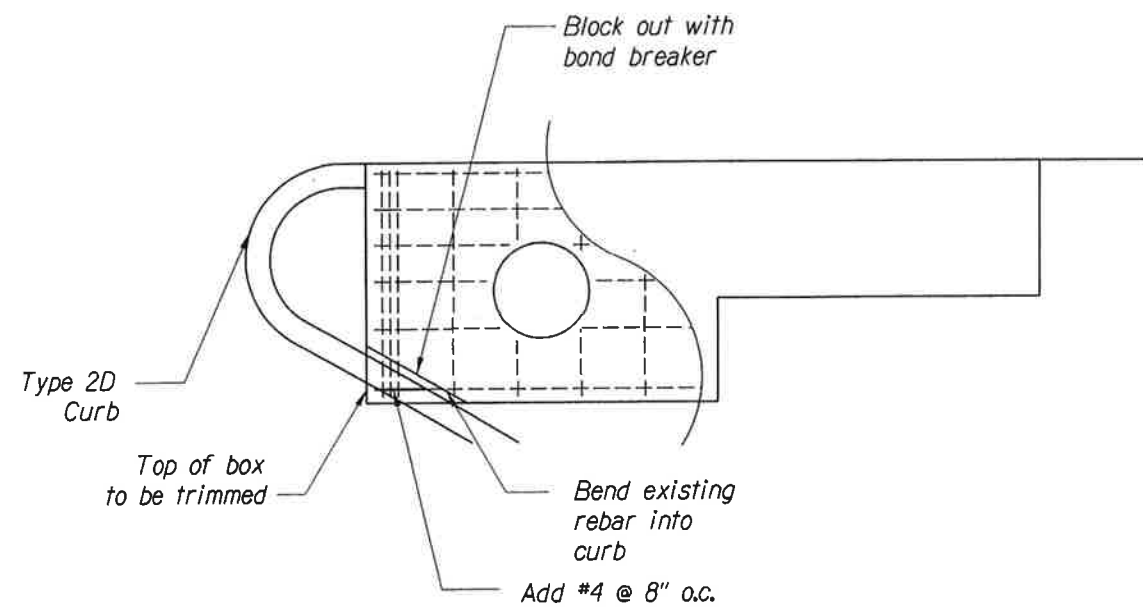
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CATCH BASIN "CB15"

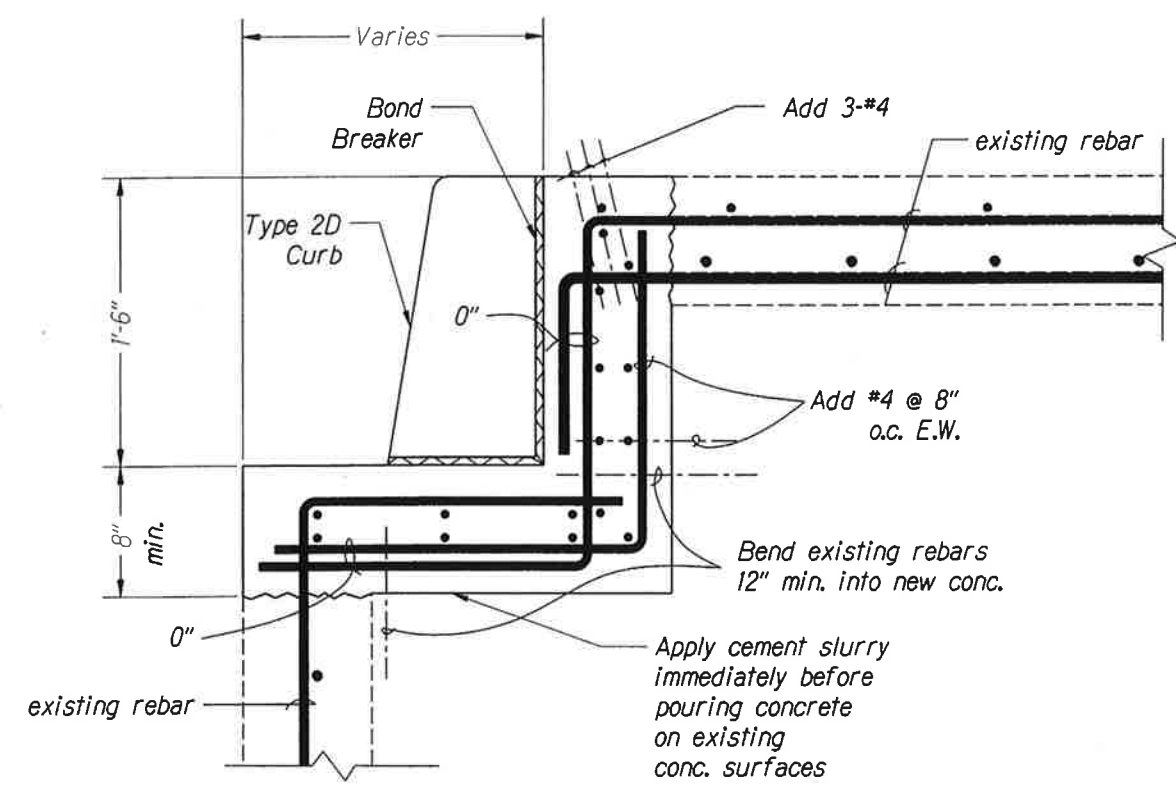
QUEEN KAAHUMANU HIGHWAY WIDENING
HENRY ST. to KEALAKEHE PKWY - PHASE I
Federal Aid Project No. NH-019-1(20)

Scale: As Noted Date: November 2009

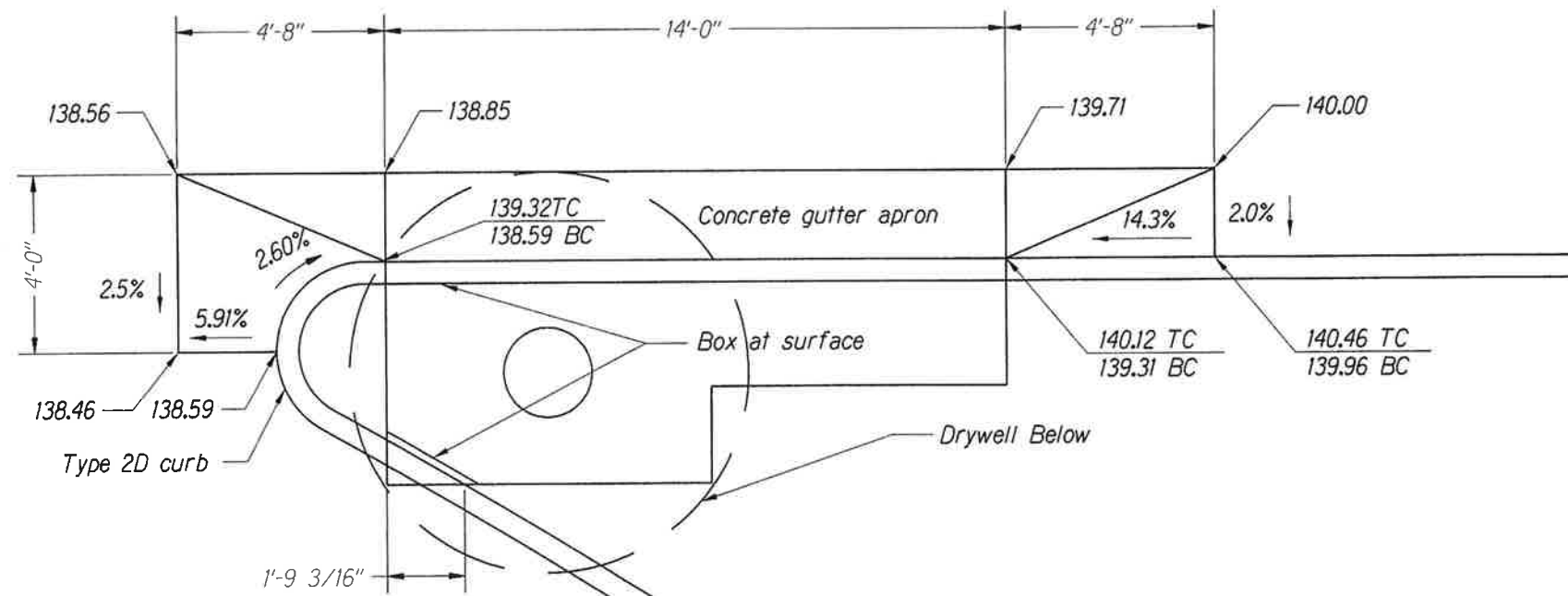
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-019-1(20)	2005	87	315



1
87 PLAN VIEW OF TOP REINFORCING STEEL
Scale: 1/2" = 1'



2
87 SECTION
Scale: 2" = 1'



3
87 PLAN VIEW
Scale: 1/2" = 1'

SURVEY PLOTTED BY	DATE
DRAWN BY	
TRACED BY	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
N.	



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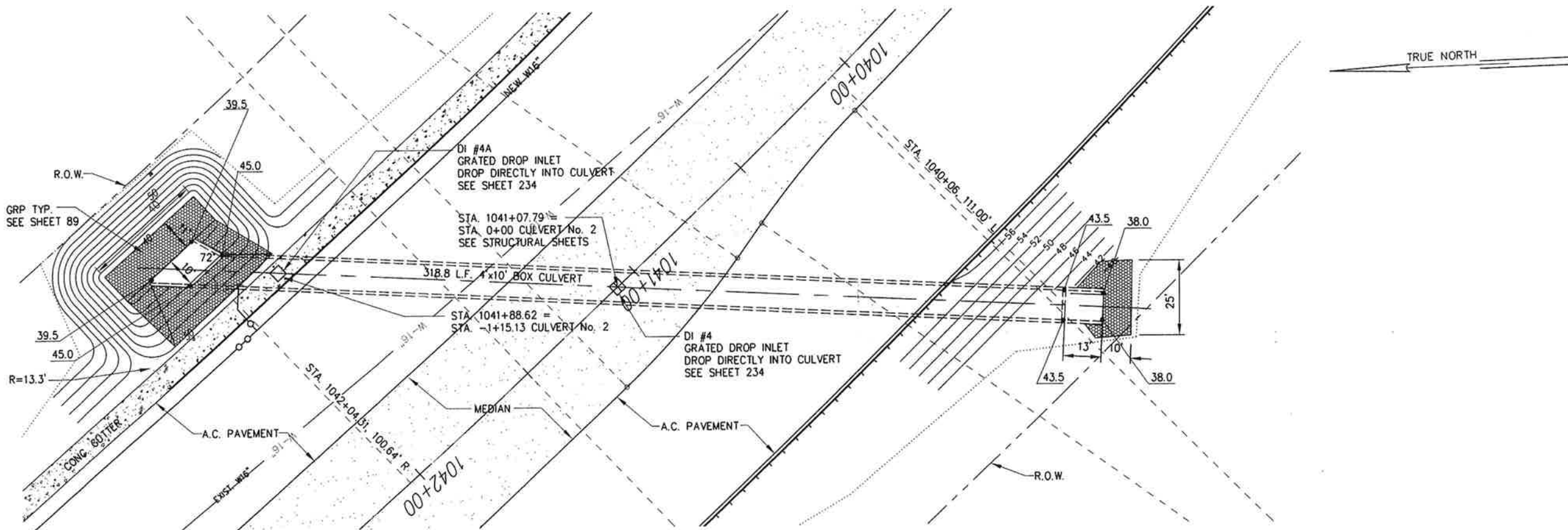
CATCH BASIN "CB16"

QUEEN KAAHUMANU HIGHWAY WIDENING
HENRY ST. to KEALAKEHE PKWY - PHASE I
Federal Aid Project No. NH-019-1(20)

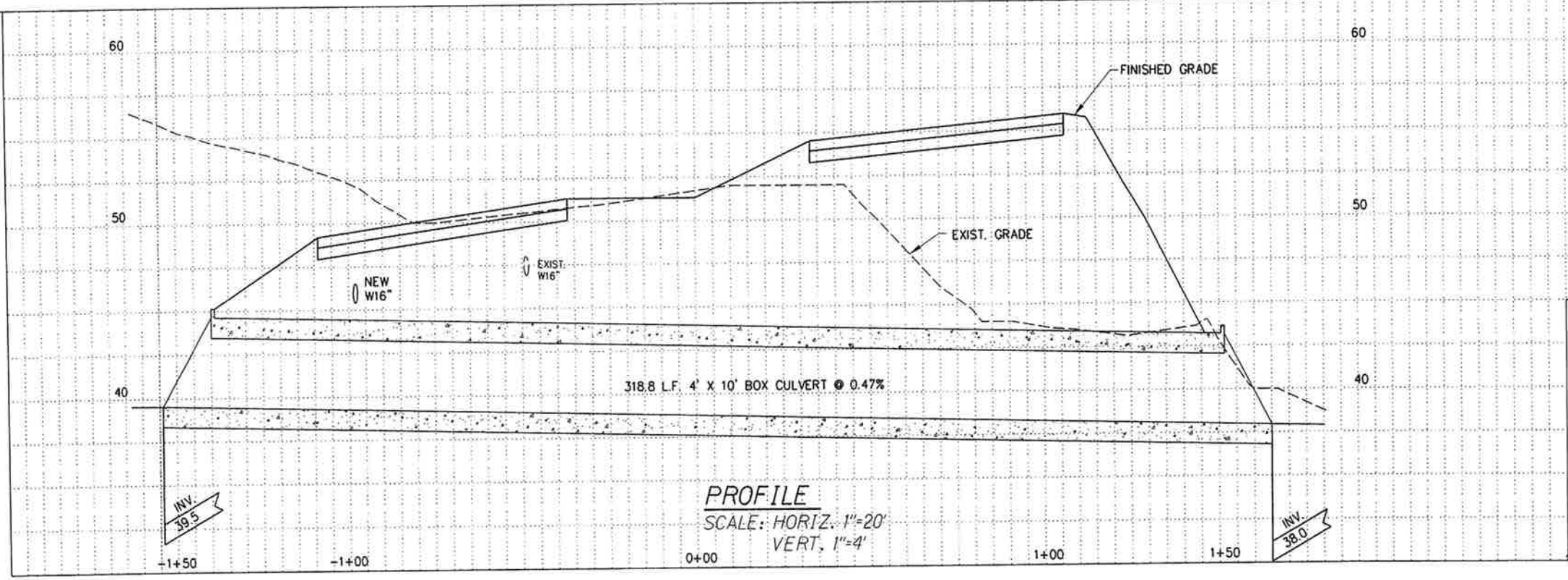
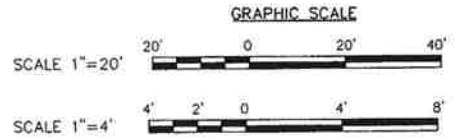
Scale: As Noted Date: November 2009

AS-BUILT

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-019-1(20)	2005	88	315



PLAN
SCALE: 1"=20'



PROFILE
SCALE: HORIZ. 1"=20'
VERT. 1"=4'

NEAL S. FUKUNAGA
 LICENSED PROFESSIONAL ENGINEER
 No. 6185-C
 HAWAII U.S.A.
 This work was prepared by me or under my supervision.
 Exp. 04-30-10
 Wesley R. Seigawa & Associates, Inc.

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

CULVERT PLAN AND PROFILE
CULVERT 2

QUEEN KAAHUMANU HIGHWAY WIDENING
 HENRY ST. to KEALAKEHE PKWY - PHASE I
 Federal Aid Project No. NH-019-1(20)
 Scale: As Noted Date: November 2009

SHEET No. 1 OF 1 SHEETS

AS-BUILT

