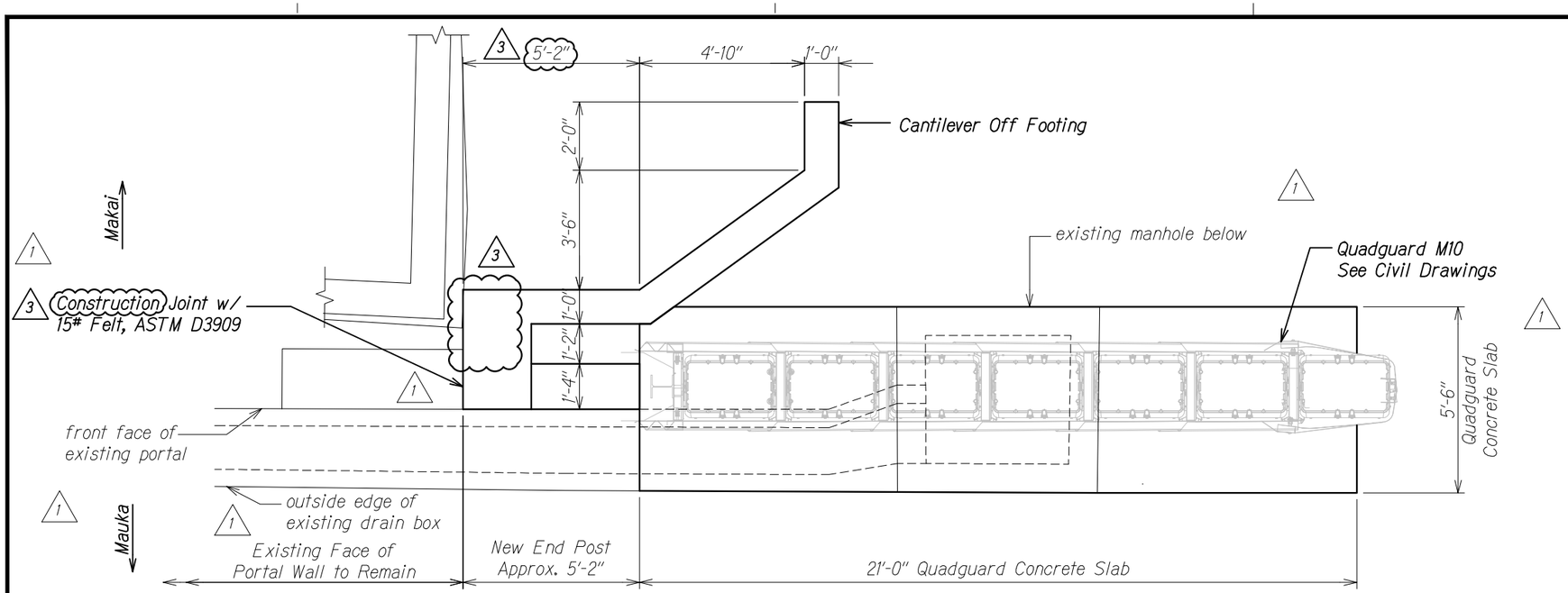
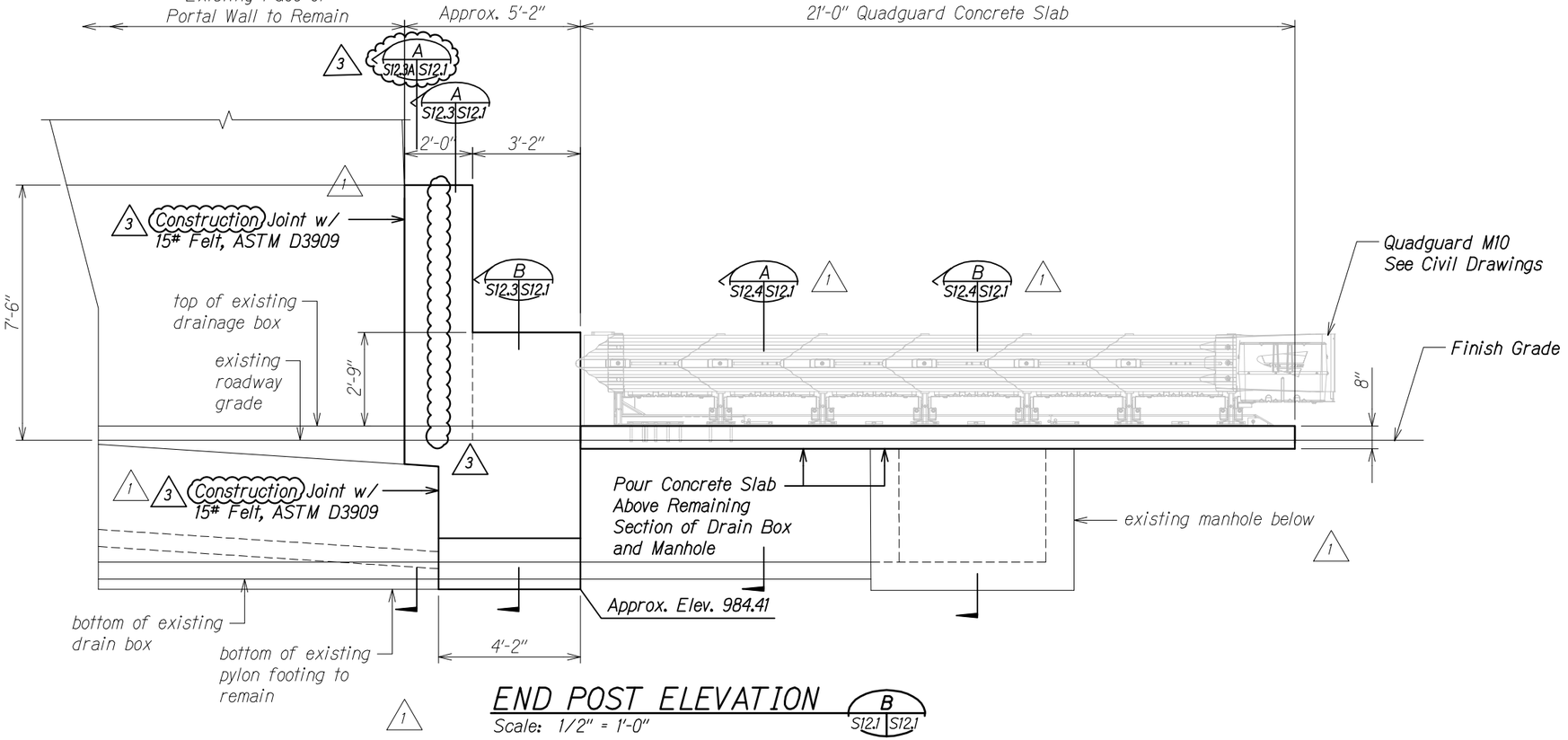
FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	ER-22(002)	2019	ADD 78	94



END POST PLAN

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

A S12.1 | S12.1



END POST ELEVATION

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

B S12.1 | S12.1

DATE	REVISION
6/12/19	3 Reference RFI 005
5/24/19	1 Revised Plan & Elevation

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

MAKAI END POST
PLAN AND ELEVATION

PALI HIGHWAY
LANDSLIDE MITIGATION PROJECT
FAP Proj. No. ER-22(002)

Scale: As Noted Date: May 6, 2019

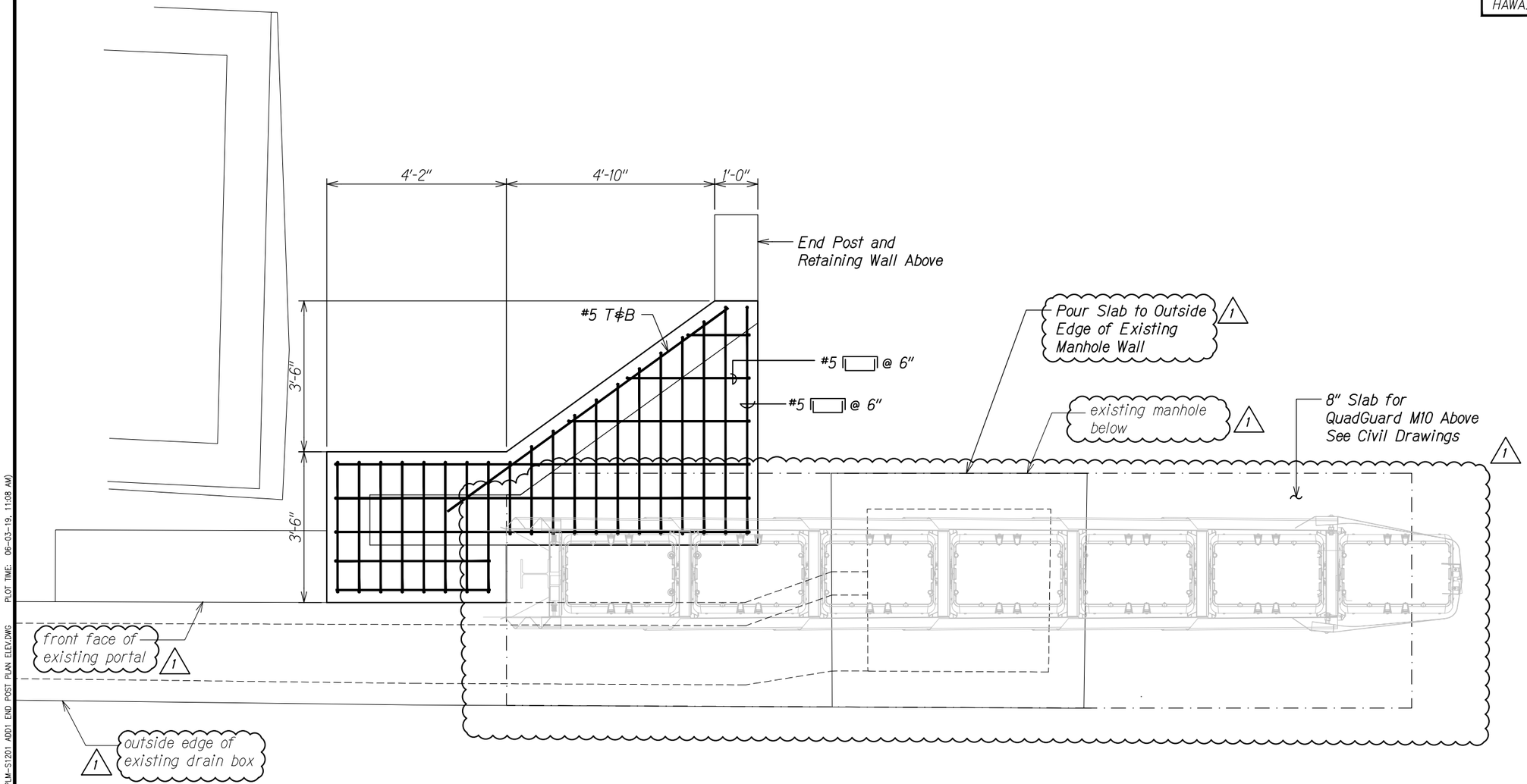
SHEET No. S12.1 OF 3 SHEETS

ADD 78

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

DRAWING NAME: Z:\00 ONGOING\19-014.1 PALI ROOF SHED-WSP TM\01 CAD\06-12-19 RFI\PLM-S1201 ADD1 RFI XXX END POST PLAN ELEV.DWG PLOT TIME: 06-12-19, 4:56 PM)

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	ER-22(002)	2019	ADD 79	94



MAKAI END POST AND RETAINING WALL FOUNDATION REINFORCING LAYOUT PLAN

Scale: 3/4" = 1'-0"

DATE	REVISION
5/24/19	1 Revised Plan

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

MAKAI END POST REINFORCING LAYOUT PLAN

PALI HIGHWAY
LANDSLIDE MITIGATION PROJECT
FAP Proj. No. ER-22(002)

Scale: As Noted Date: May 6, 2019

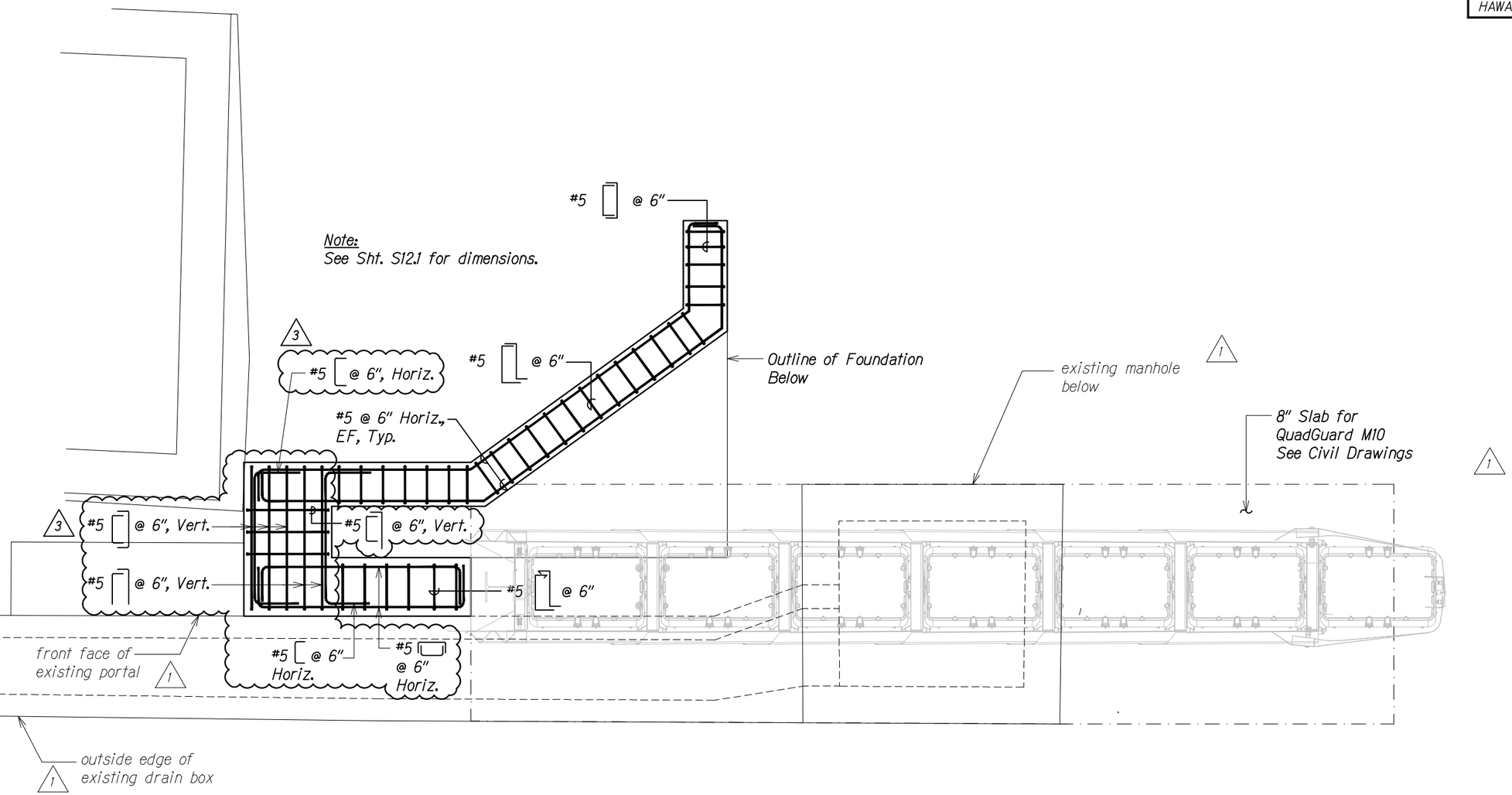
SHEET No. S12.2 OF 3 SHEETS

ADD 79

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

DRAWING NAME: Z:\00 ONGOING\19-014.1 PALI ROOF SHED-WSP TM\01 CAD\05-24-19 PH 2\PLM-S1201 ADD1 END POST PLAN ELEV.DWG PLOT TIME: 06-03-19, 11:08 AM)

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	ER-22(002)	2019	ADD 79S-1	94



MAKAI END POST AND RETAINING WALL REINFORCING LAYOUT PLAN

Scale: 3/4" = 1'-0"

DATE	REVISION
6/12/19	3 Reference RFI 005
5/24/19	1 New Sheet

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

MAKAI END POST REINFORCING LAYOUT PLAN

PALI HIGHWAY
LANDSLIDE MITIGATION PROJECT
FAP Proj. No. ER-22(002)

Scale: As Noted Date: May 6, 2019

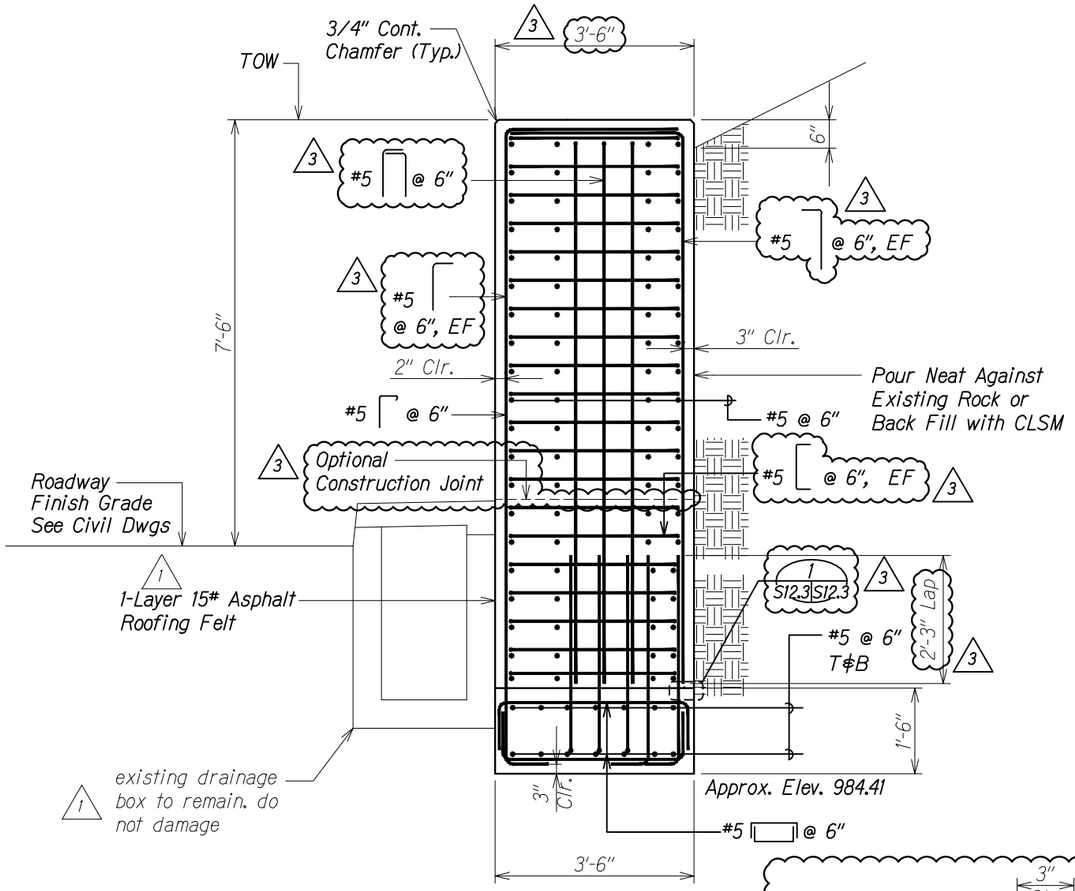
SHEET No. S12.2A OF 3 SHEETS

ADD 79S-1

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

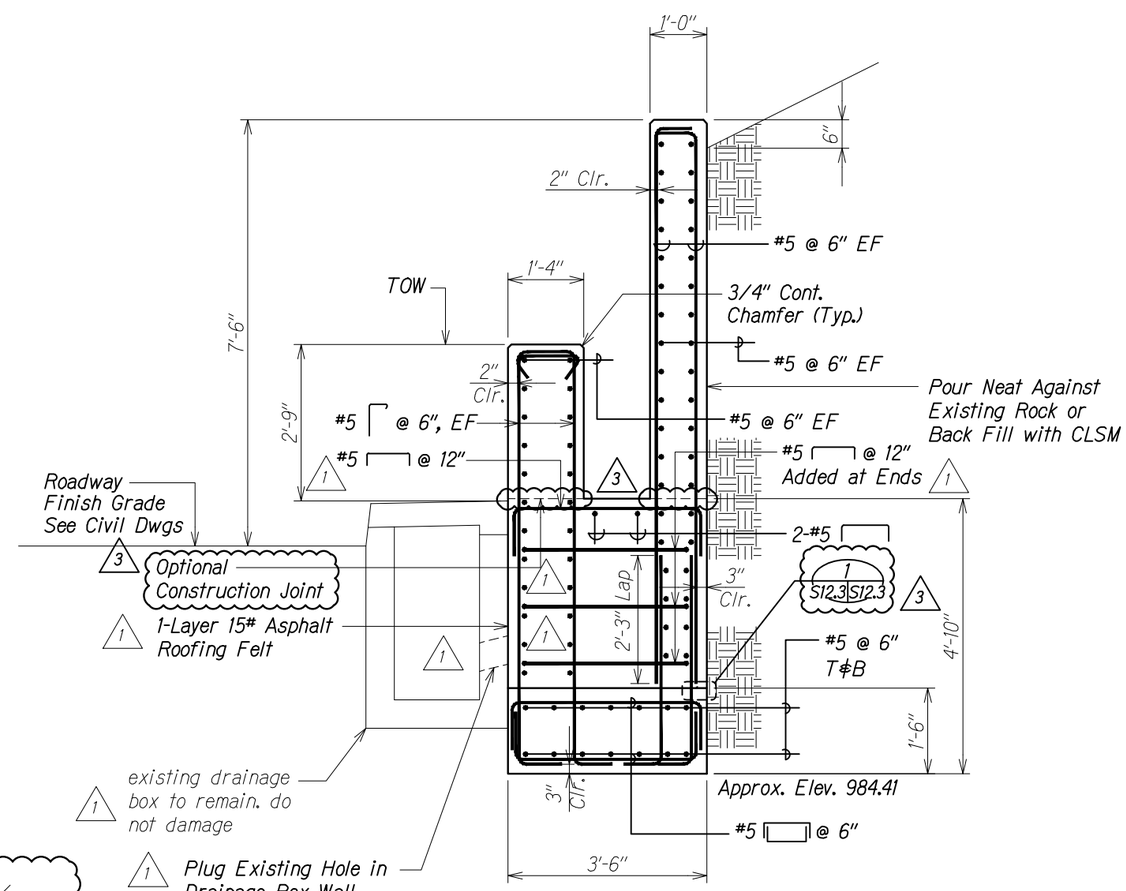
DRAWING NAME: Z:\00 ONGOING\19-014.1 PALI ROOF SHED-WSP TNA\01 CAD\06-12-19 RFI\PLM-S1201 ADD1 RFI XXX END POST PLAN ELEV.DWG PLOT TIME: 06-12-19, 4:57 PM)

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	ER-22(002)	2019	ADD 80	94



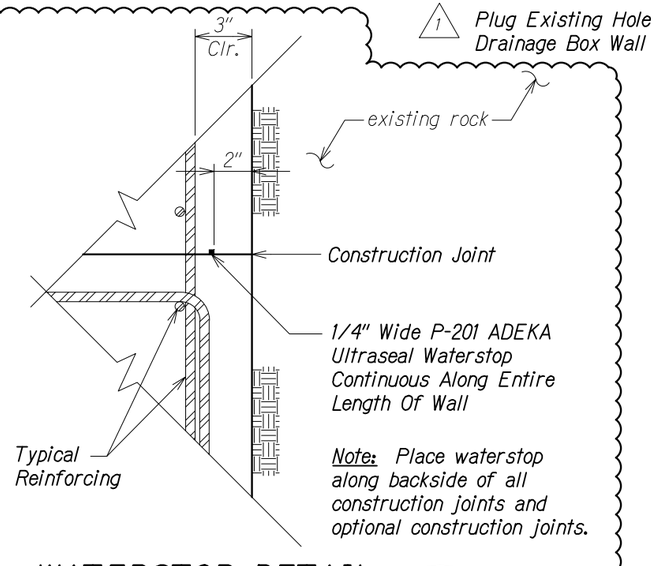
SECTION A

Scale: 3/4" = 1'-0"



SECTION B

Scale: 3/4" = 1'-0"



WATERSTOP DETAIL

Scale: 3" = 1'-0"

DATE	REVISION
6/12/19	3 Reference RFI 005
5/24/19	1 Revised Callouts and Section

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

MAKAI END POST SECTIONS

PALI HIGHWAY
LANDSLIDE MITIGATION PROJECT
FAP Proj. No. ER-22(002)

Scale: As Noted Date: May 6, 2019

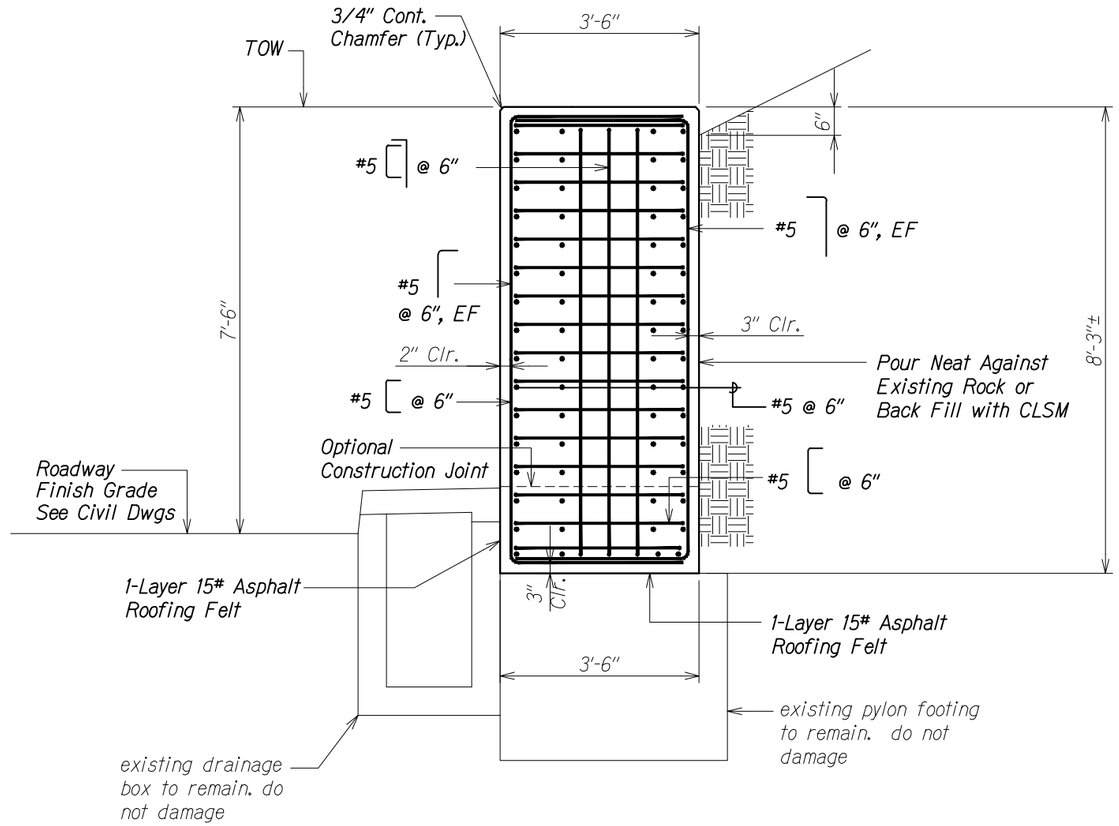
SHEET No. S12.3 OF 3 SHEETS

ADD 80

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

DRAWING NAME: Z:\OD ONGOING\19-014.1 PALI ROOF SHED-WSP TM\01 CAD\06-12-19 RFI\PLM-S1201 ADD1 RFI XXX END POST PLAN ELEV.DWG PLOT TIME: 06-12-19, 4:58 PM)

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	ER-22(002)	2019	ADD 80S-1A	94



SECTION

Scale: 3/4" = 1'-0"

A S12.1 | S12.3A

DATE	REVISION
6/12/19	3 Reference RFI 005 - New Sheet
5/24/19	1 Revised Callouts and Section

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

MAKAI END POST
SECTION

PALI HIGHWAY
LANDSLIDE MITIGATION PROJECT
FAP Proj. No. ER-22(002)

Scale: As Noted Date: May 6, 2019

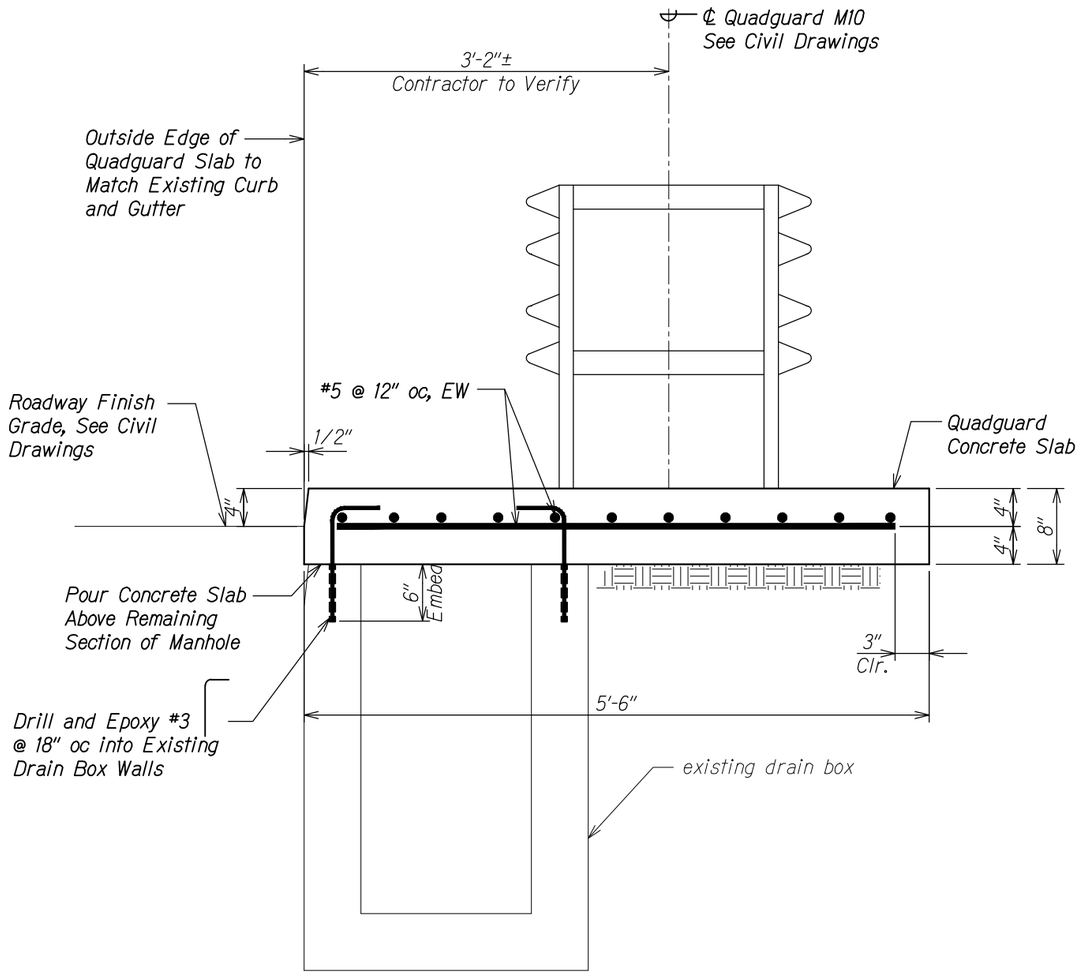
SHEET No. S12.3A OF 3 SHEETS

ADD 80S-1A

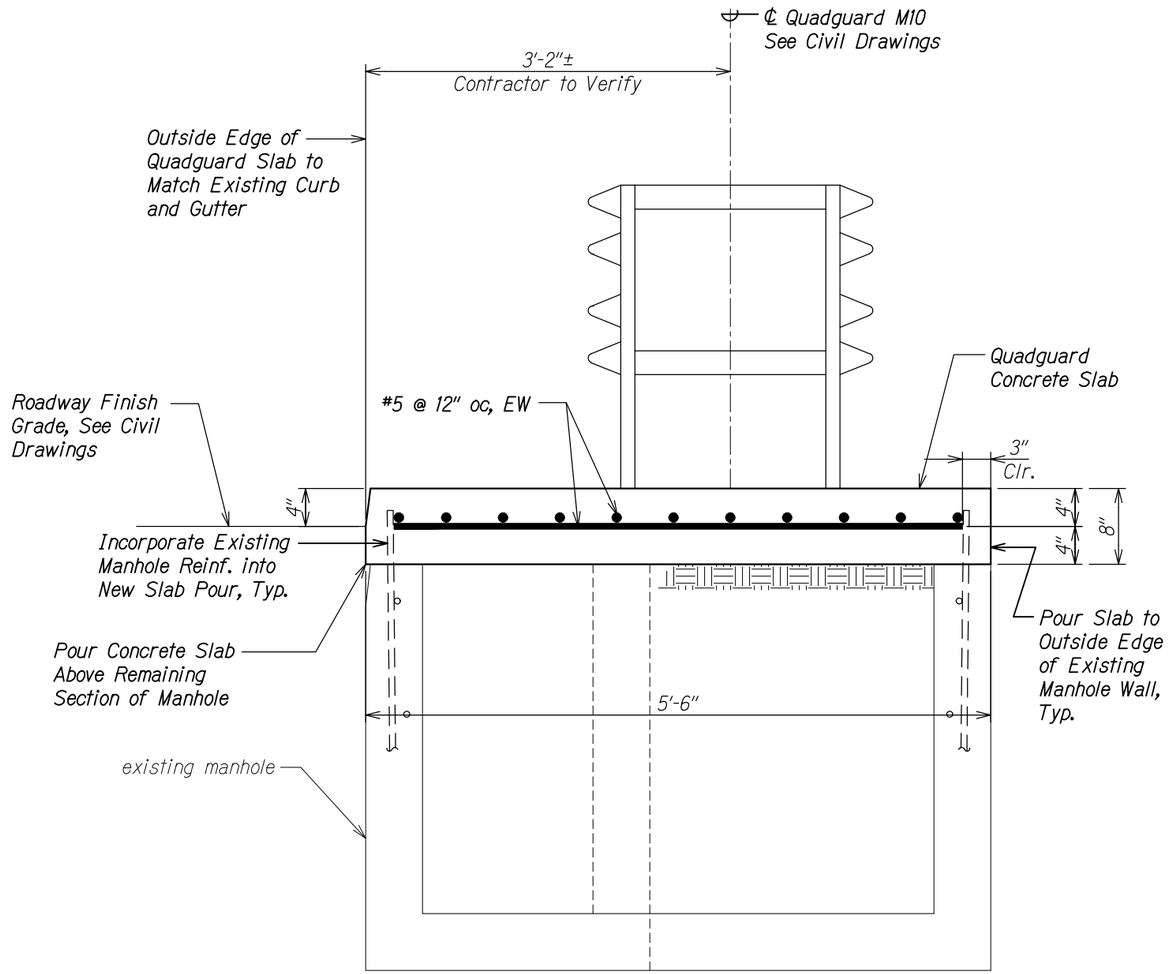
ORIGINAL PLAN
NOTE BOOK
No.
SURVEY PLOTTED BY DATE
DRAWN BY
TRACED BY
DESIGNED BY
QUANTITIES BY
CHECKED BY

DRAWING NAME: Z:\00 ONGOING\19-014.1 PALI ROOF SHED-WSP TM\01 CAD\06-12-19 RFI\PLM-S1201 ADD1 RFI XXX END POST PLAN ELEV.DWG PLOT TIME: 06-12-19, 4:58 PM)

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	ER-22(002)	2019	ADD 80S-1	94



SECTION
Scale: 1 1/2" = 1'-0"
A S12.1 S12.4



SECTION
Scale: 1 1/2" = 1'-0"
B S12.1 S12.4

DATE	REVISION
5/24/19	1 New Sheet

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

MAKAI END POST SECTION

PALI HIGHWAY
LANDSLIDE MITIGATION PROJECT
FAP Proj. No. ER-22(002)

Scale: As Noted Date: May 6, 2019

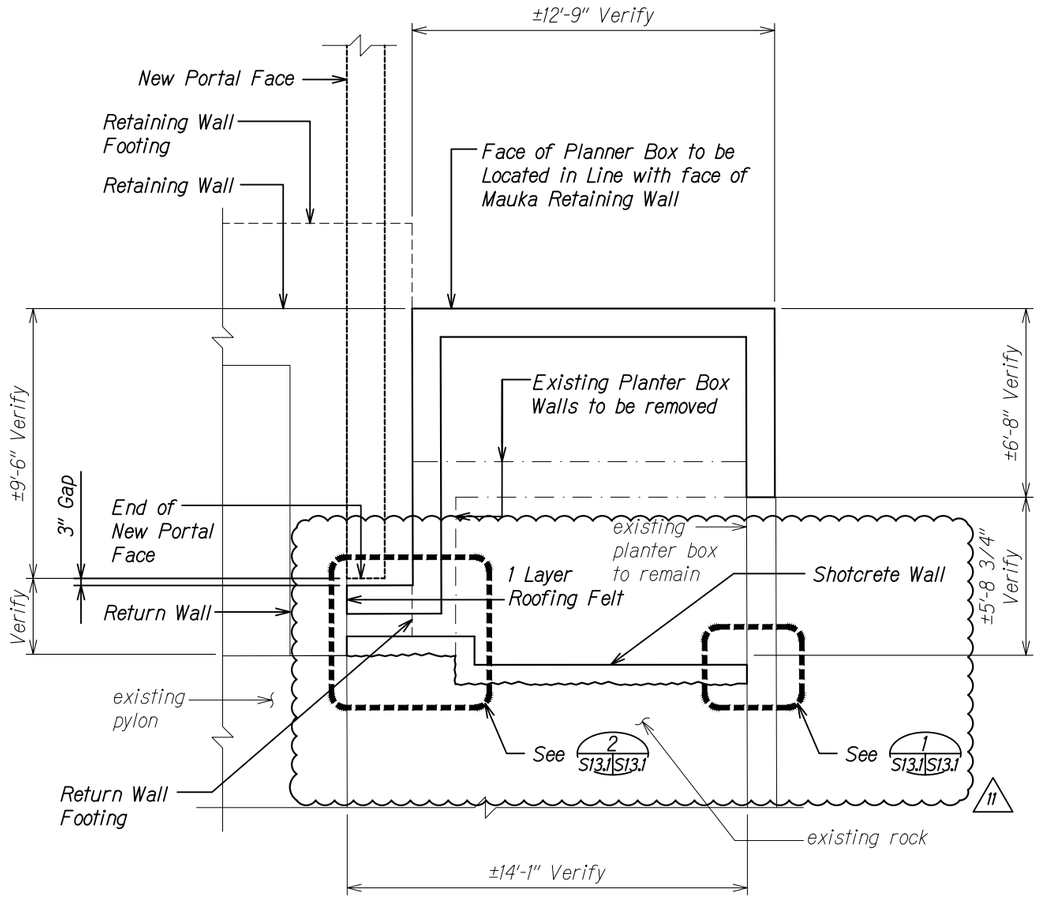
SHEET No. S12.4 OF 3 SHEETS

ADD 80S-1

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

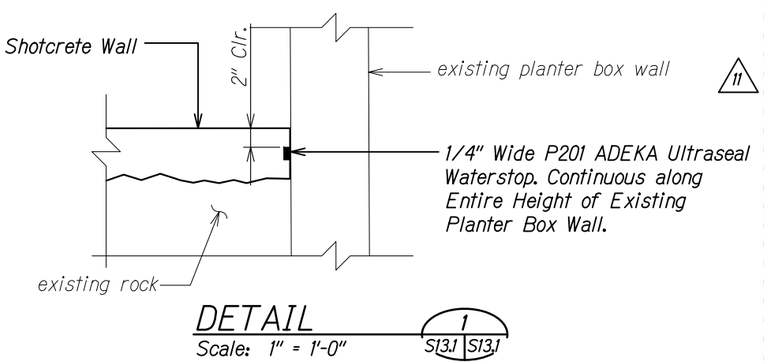
DRAWING NAME: Z:\00 ONGOING\19-014.1 PALI ROOF SHED-WSP TM\01 CAD\05-24-19 PH 2\PLM-S1201 ADD1 END POST PLAN ELEV.DWG PLOT TIME: 06-03-19, 11:12 AM)

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	ER-22(002)	2019	80S-2	94



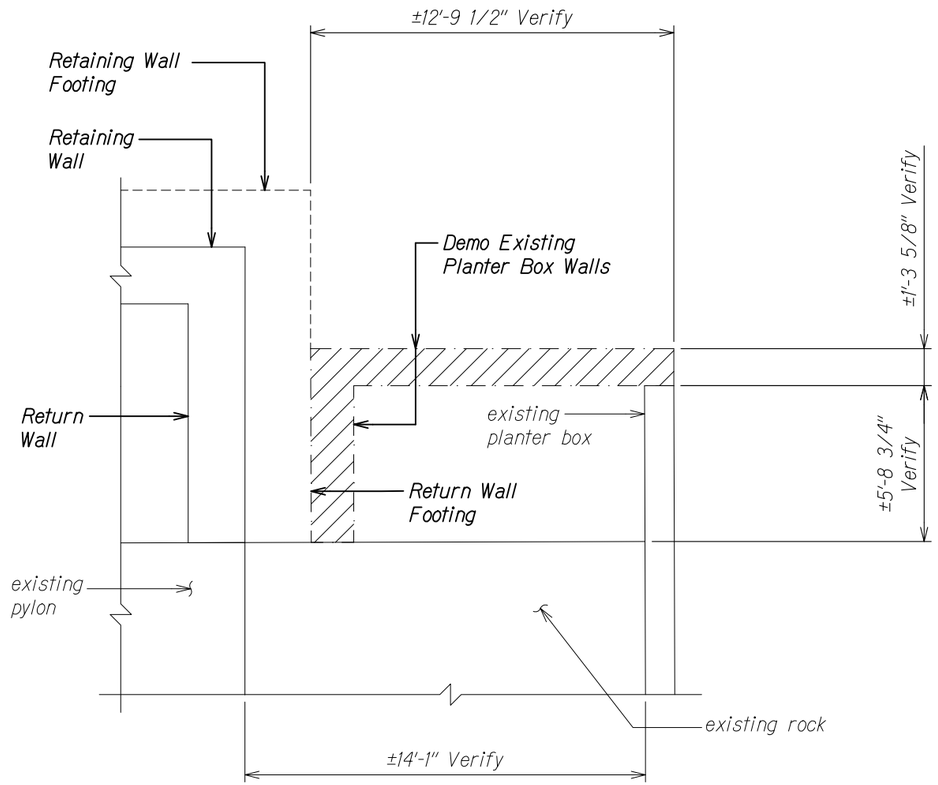
PLANTER BOX PLAN

Scale: 3/8" = 1'-0"



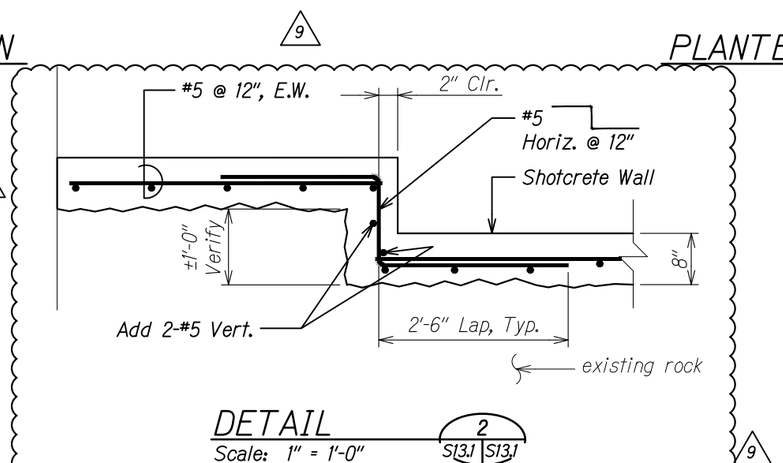
DETAIL 1 S13.1 S13.1

Scale: 1" = 1'-0"



PLANTER BOX DEMO PLAN

Scale: 3/8" = 1'-0"



DETAIL 2 S13.1 S13.1

Scale: 1" = 1'-0"

DATE	REVISION
11/15/19	11 Revised shotcrete wall
11/04/19	9 Revised shotcrete wall
10/04/19	8 New Sheet

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PLANTER BOX LAYOUT AND DEMO PLAN

PALI HIGHWAY
LANDSLIDE MITIGATION PROJECT
FAP Proj. No. ER-22(002)

Scale: As Noted Date: May 6, 2019

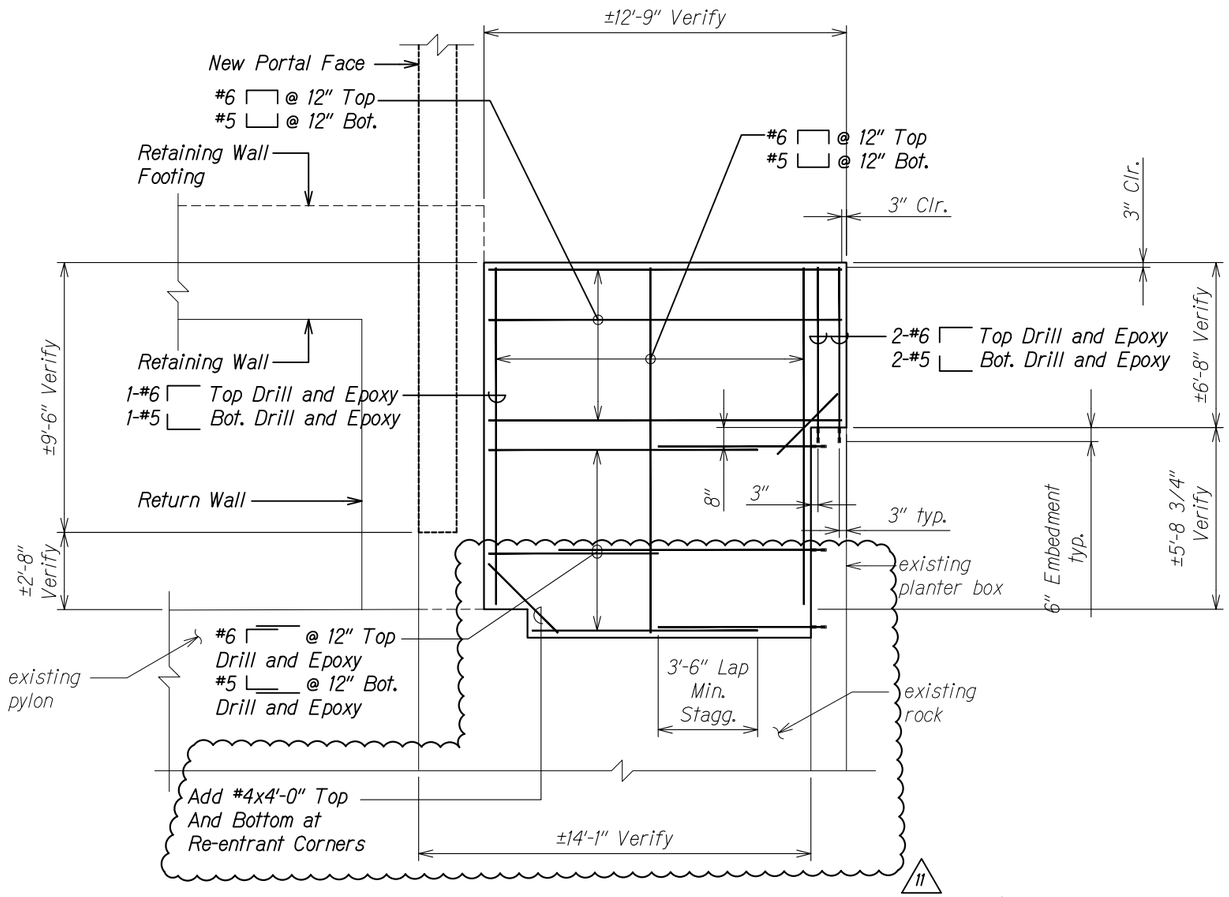
SHEET No. S13.1 OF 5 SHEETS

80S-2

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

DRAWING NAME: Z:\00 ONGOING\19-014.1A PALI ROOF SHED POST DESIGN-WSP TM\01 CAD\04-06-20B RF123 RVSD REBAR\PLM-S1301 PLANTER DELTA8 DELTA9 DELTA11.DWG PLOT TIME: 07-02-20, 11:40 AM)

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	ER-22(002)	2019	80S-3	94



PLANTER BOX
BOTTOM SLAB REINFORCING PLAN
Scale: 3/8" = 1'-0"

DATE	REVISION
11/15/19	11 Revised Bot. Slab Reinf.
11/04/19	9 Revised shotcrete wall
10/04/19	8 New Sheet

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PLANTER BOX BOTTOM SLAB REINFORCING PLAN

PALI HIGHWAY
LANDSLIDE MITIGATION PROJECT
FAP Proj. No. ER-22(002)

Scale: As Noted Date: May 6, 2019

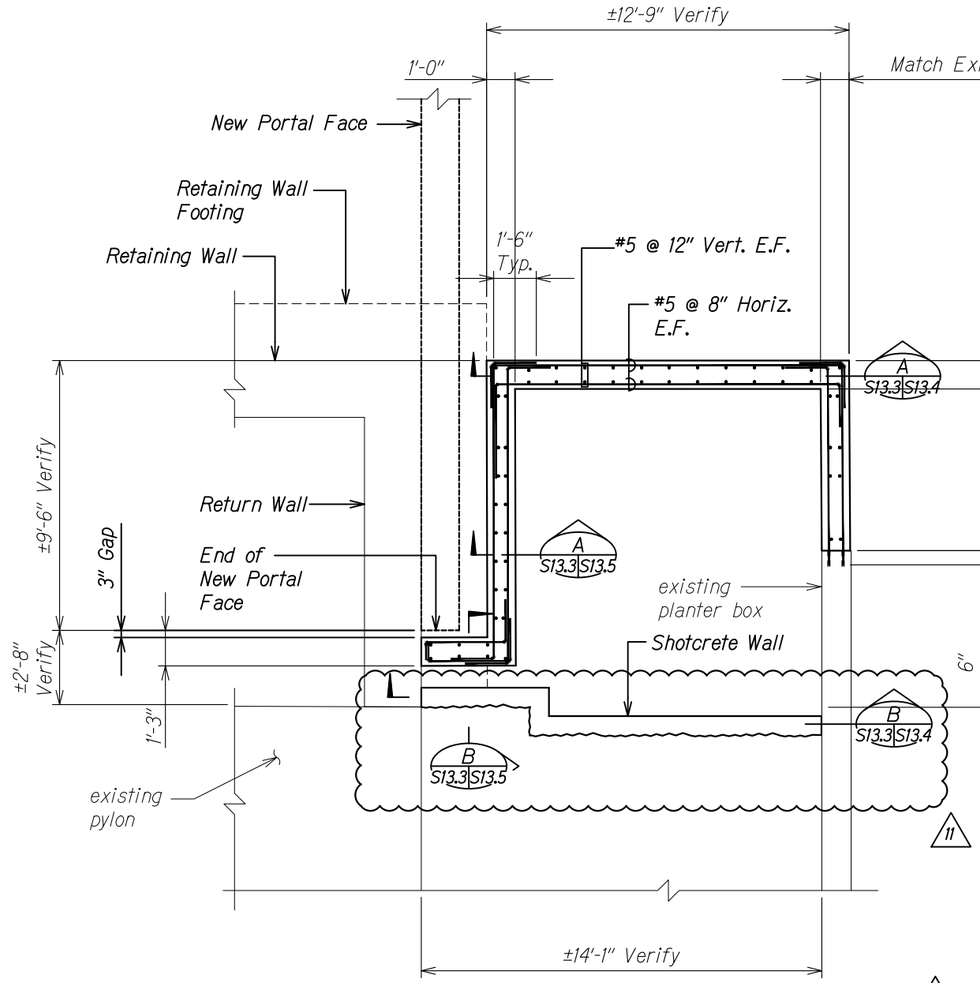
SHEET No. S13.2 OF 5 SHEETS

80S-3

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

DRAWING NAME: Z:\OO ONGOING\19-014.1A PALI ROOF SHED POST DESIGN-WSP TM\01 CAD\04-06-20B RF123 RVSD REBAR\PLM-S1301 PLANTER DELTA8 DELTA9 DELTA11.DWG PLOT TIME: 07-02-20, 11:41 AM)

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	ER-22(002)	2019	80S-4	94



PLANTER BOX WALL REINFORCING PLAN

Scale: 3/8" = 1'-0"

DATE	REVISION
11/15/19	11 Revised shotcrete wall
11/04/19	9 Revised shotcrete wall
10/04/19	8 New Sheet

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PLANTER BOX WALL REINFORCING PLAN

PALI HIGHWAY
LANDSLIDE MITIGATION PROJECT
FAP Proj. No. ER-22(002)

Scale: As Noted Date: May 6, 2019

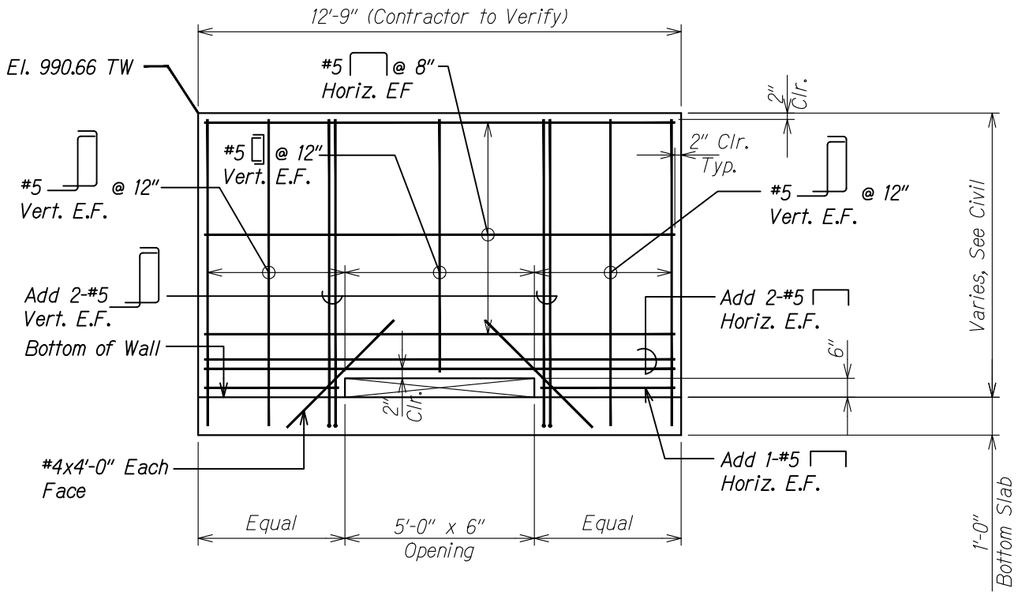
SHEET No. S13.3 OF 5 SHEETS

80S-4

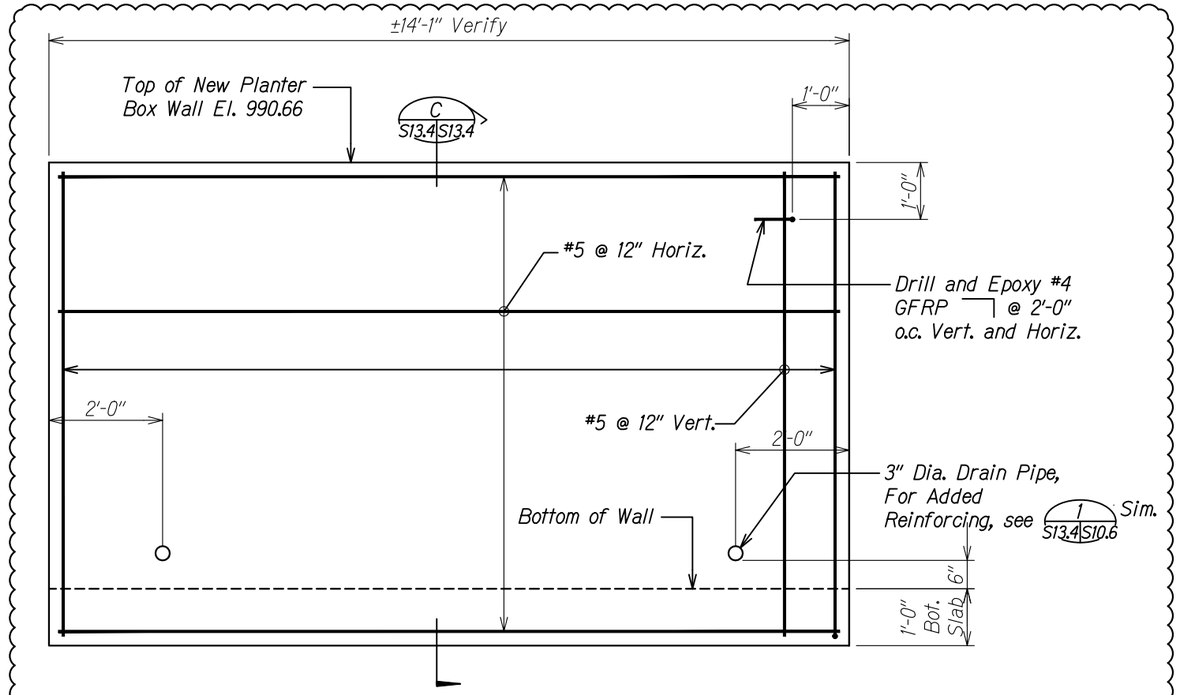
ORIGINAL PLAN | NOTE BOOK | No.
SURVEY PLOTTED BY
DRAWN BY
TRACED BY
DESIGNED BY
QUANTITIES BY
CHECKED BY
DATE

DRAWING NAME: Z:\00 ONGOING\19-014.1A PALI ROOF SHED POST DESIGN-WSP TM\01 CAD\04-06-20B RF123 RVSD REBAR\PLM-S1301 PLANTER DELTA8 DELTA9 DELTA11.DWG PLOT TIME: 07-02-20, 11:41 AM)

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	ER-22(002)	2019	80S-5	94



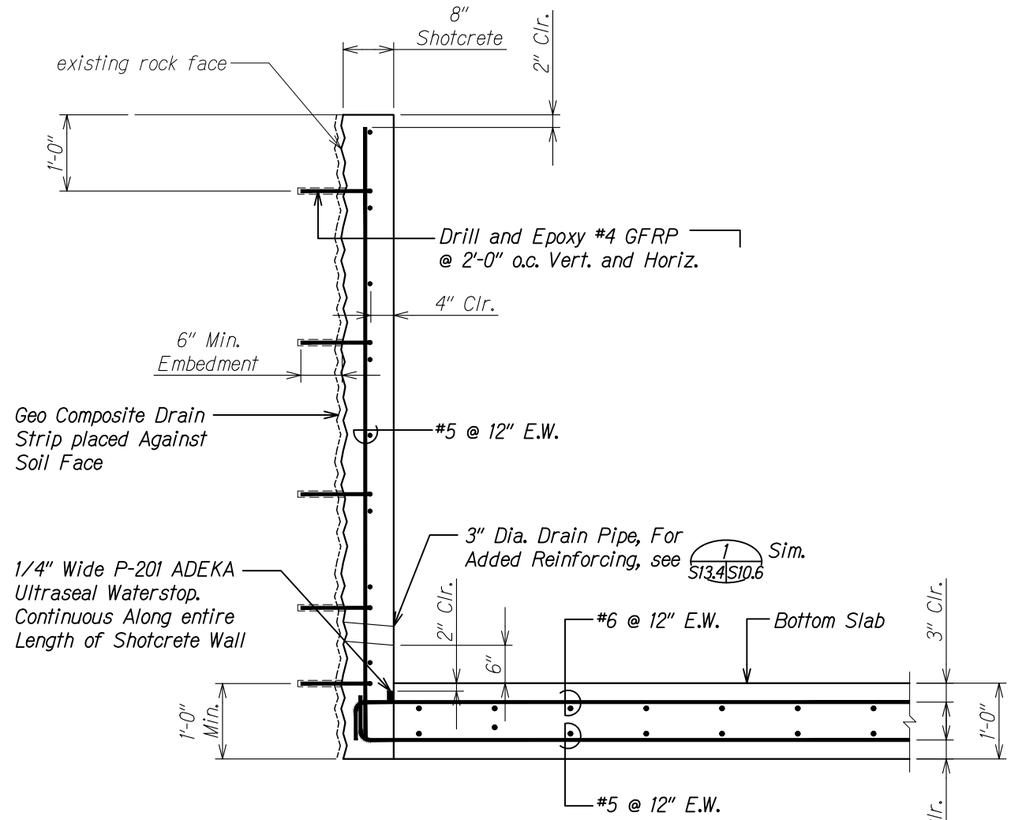
SECTION
Scale: 1/2" = 1'-0"
A S13.3 | S13.4



SECTION
Scale: 3/4" = 1'-0"
B S13.3 | S13.4

9

9



SECTION
Scale: 1" = 1'-0"
C S13.4 | S13.4

DATE	REVISION
11/04/19	9 Revised shotcrete wall
10/04/19	8 New Sheet

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PLANTER BOX SECTIONS

PALI HIGHWAY
LANDSLIDE MITIGATION PROJECT
FAP Proj. No. ER-22(002)

Scale: As Noted Date: May 6, 2019

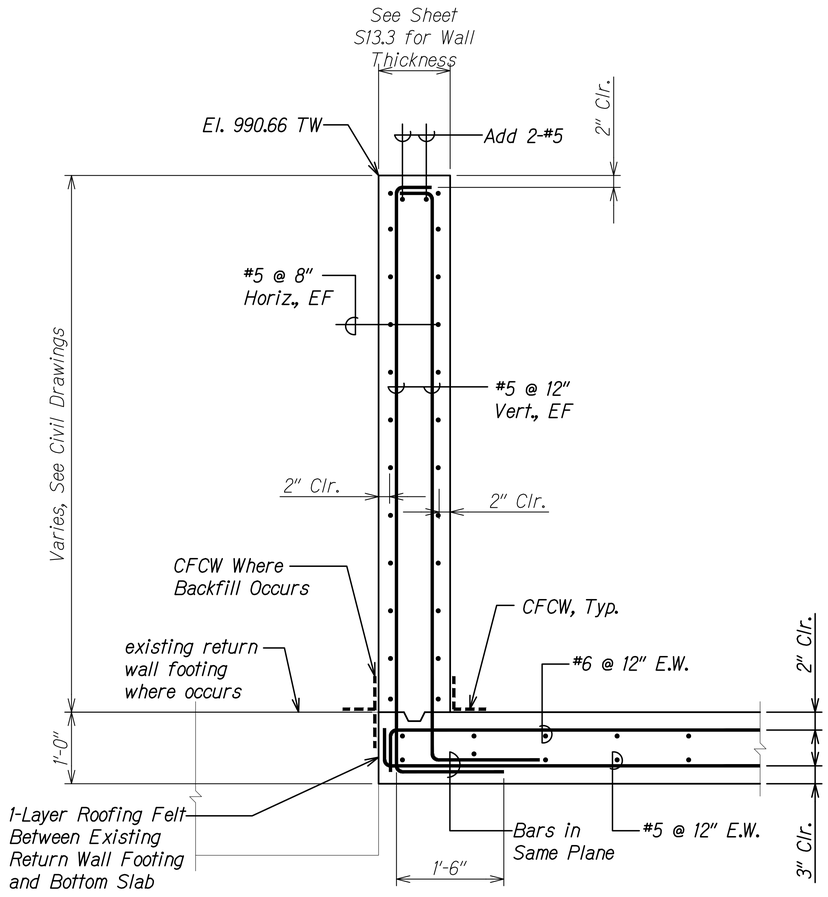
SHEET No. S13.4 OF 5 SHEETS

80S-5

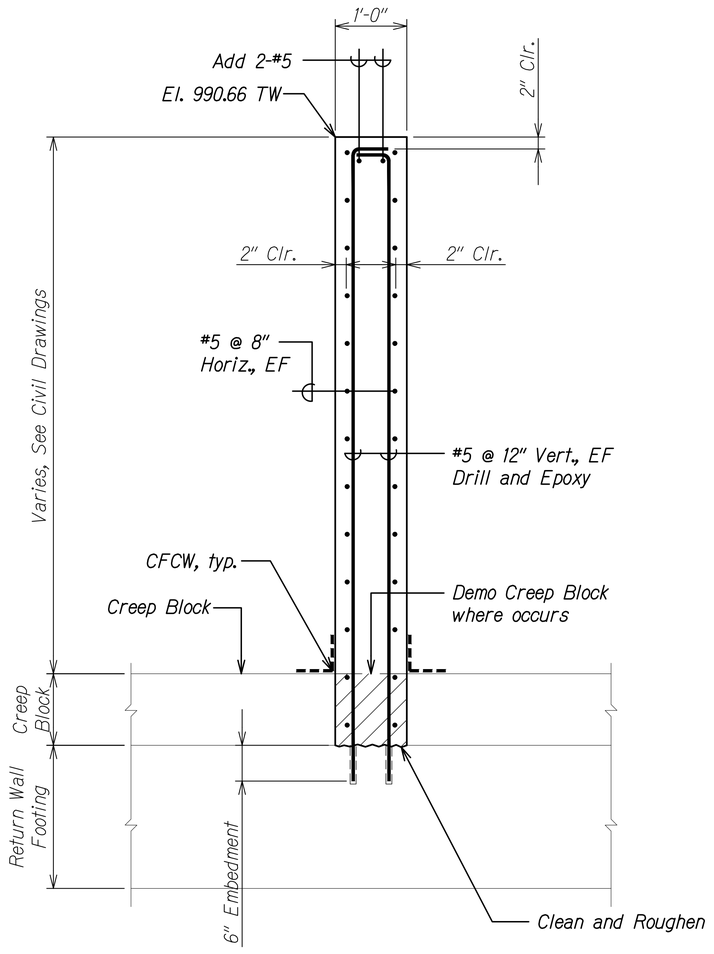
ORIGINAL PLAN | NOTE BOOK | No.
DATE
SURVEY PLOTTED BY
DRAWN BY
TRACED BY
DESIGNED BY
QUANTITIES BY
CHECKED BY

DRAWING NAME: Z:\00 ONGOING\19-014.1A PALI ROOF SHED POST DESIGN-WSP TIA\01 CAD\04-06-20B RF123 RVSD REBAR\PLM-S1304 PLANTER DELTA8 DELTA9.DWG PLOT TIME: 07-02-20, 11:42 AM)

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	ER-22(002)	2019	80S-6	94



SECTION A
Scale: 1" = 1'-0"
S13.3 | S13.5



SECTION B
Scale: 1" = 1'-0"
S13.3 | S13.5

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

DRAWING NAME: Z:\OD ENGINEERING\19-014.1A PALI ROOF SHED POST DESIGN-MSP IMAGES\07-14-20 REV SHT NO. ELEC BLDG PLAN-S1304 PLANTER DETAIL DETAILS.DWG PLOT TIME: 07-14-20, 10:47 AM

10/04/19	8 New Sheet
DATE	REVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

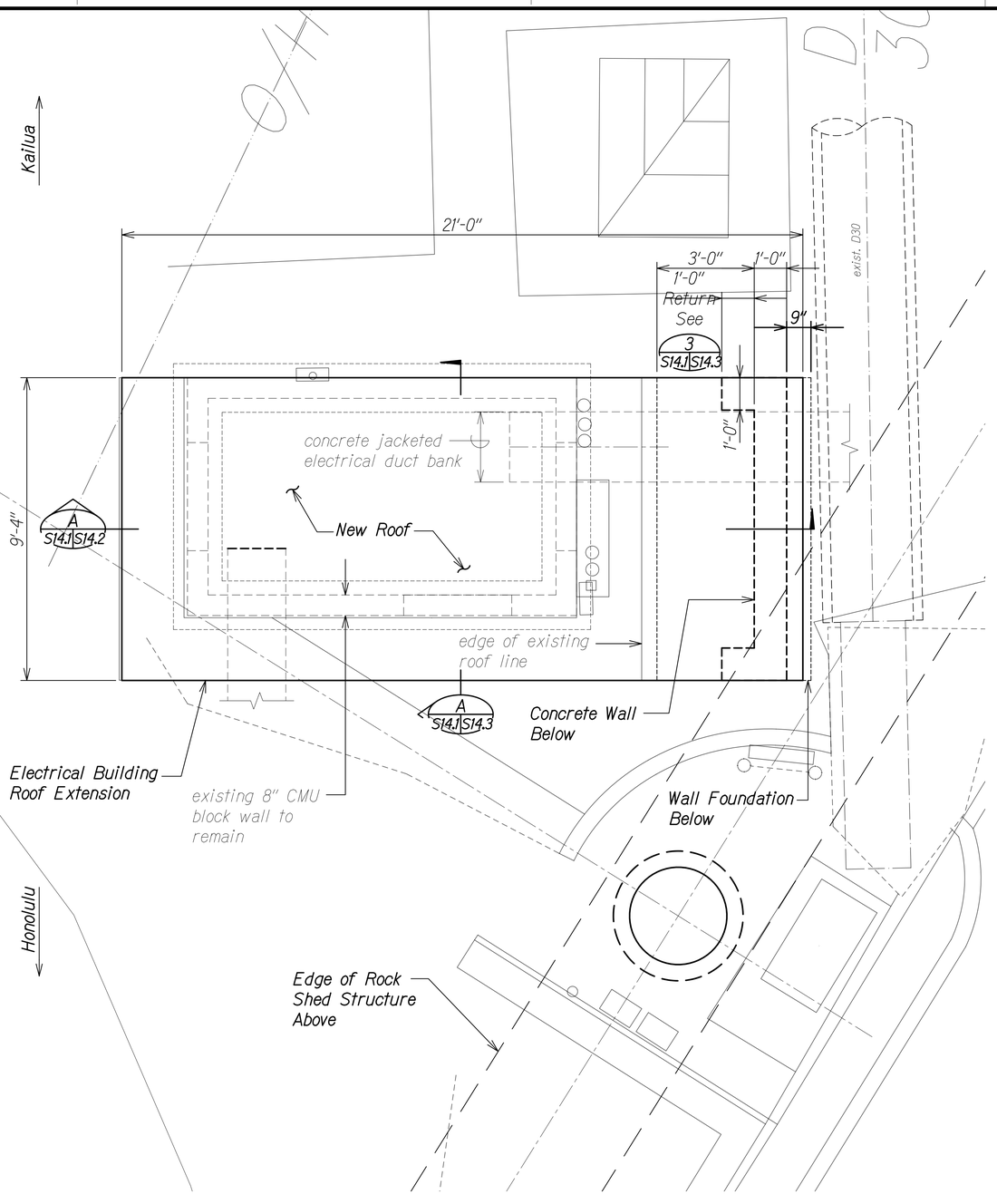
PLANTER BOX SECTIONS

PALI HIGHWAY
LANDSLIDE MITIGATION PROJECT
FAP Proj. No. ER-22(002)

Scale: As Noted Date: May 6, 2019

SHEET No. S13.5 OF 5 SHEETS

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	ER-22(002)	2019	80S-7	94



ELECTRICAL BUILDING LAYOUT PLAN

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

A S14.1|S14.1

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

DRAWING NAME: Z:\OD ONDONGA\19-014.1A PALI ROOF SHED POST DESIGN-MSP TM\01 CAD\07-14-20 REV SHT NO. ELEC BLDG\PLN-S1401-ELEC BLDG EXTNSN PLAN DETAILS.DWG PLOT TIME: 07-14-20, 10:48 AM

DATE	REVISION
10/4/19	8 New Sheet

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

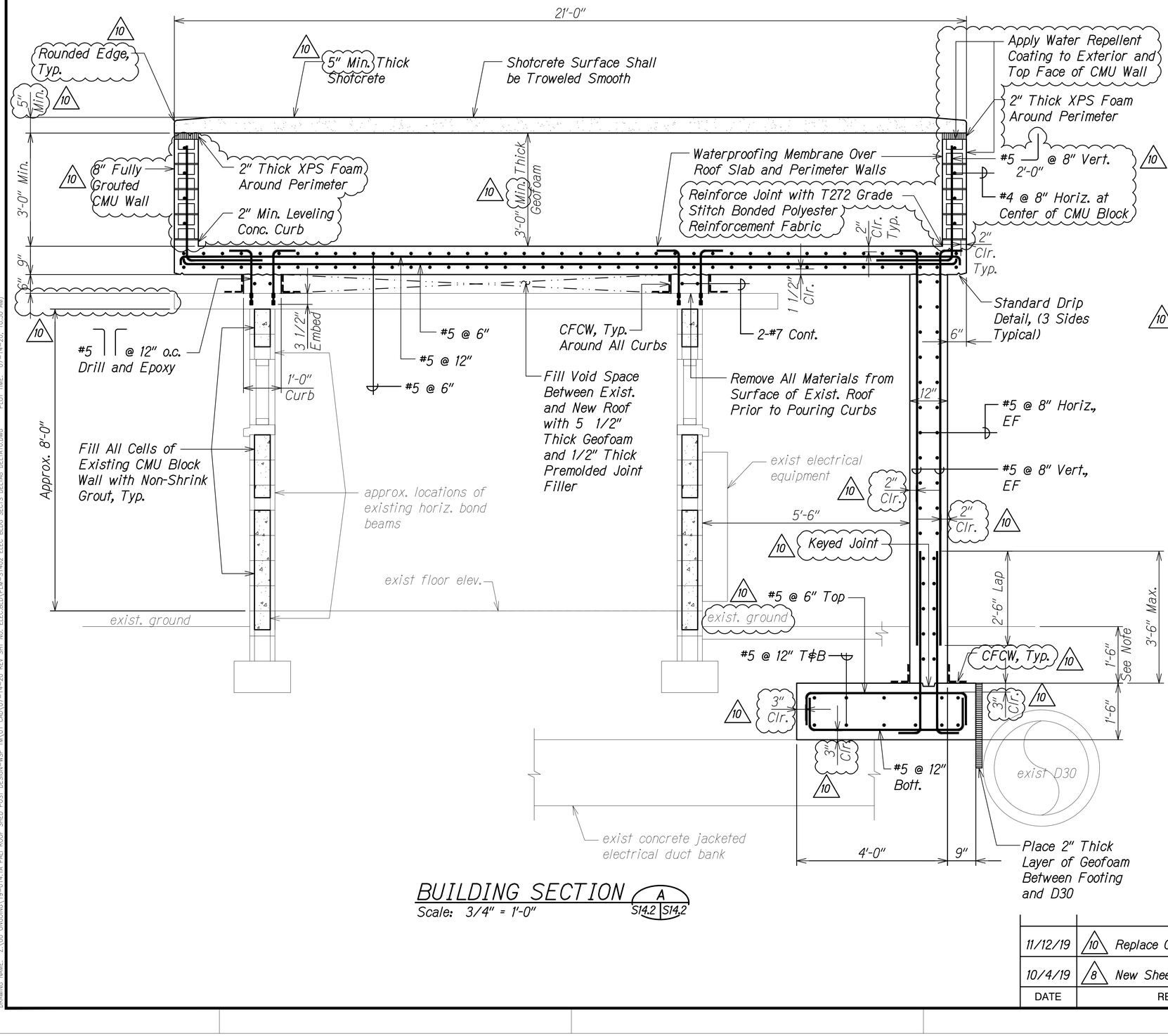
ELECTRICAL BUILDING LAYOUT PLAN

PALI HIGHWAY
LANDSLIDE MITIGATION PROJECT
FAP Proj. No. ER-22(002)

Scale: As Noted Date: May 6, 2019

SHEET No. S14.1 OF 3 SHEETS

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	ER-22(002)	2019	80S-8	94



BUILDING SECTION A

Scale: 3/4" = 1'-0"

S14.2 | S14.2

Notes:

1. Contractor to field verify depth of exist. concrete jacketed electrical duct bank.
2. Existing CMU walls of electrical building are partially grouted. All remaining ungrouted cells to be filled with high-performance non-shrink grout. Contractor to assume existing grouted blocks are located at horizontal bond beams and at 24" o.c. vertically.
3. Locate access points in CMU such that entire vertical height of block, and between bond beams, are filled with grout.
4. Non-shrink grout shall be Dayton Superior Sure-Grip.
5. New CMU blocks shall comply with ASTM C90 and shall be high-strength with a minimum 28-day compressive strength of 3,750 psi.
6. New CMU blocks shall be 8x8x16 Double Open End except at corners where 8x8x16 Corner Knock Out and 8x8x8 Knock Out Half are acceptable.
7. Mortar shall comply with Type M, in accordance with ASTM C270 and have a minimum 28-day compressive strength of 2,500 psi.
8. Joints shall be tooled with a concave shape.
9. Grout shall comply with ASTM C476 and shall be a coarse type grout with a minimum 28-day compressive strength of 4,000 psi.
10. Water repellant coating shall be Diedrich 303S Siloxseal.

DATE	REVISION
11/12/19	10 Replace Conc. Walls with CMU
10/4/19	8 New Sheet

ORIGINAL PLAN | NOTE BOOK | No.

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

DRAWING NAME: Z:\OD ONGOING\19-014.1A PALI ROOF SHED POST DESIGN-WSP TM\01 CAD\07-14-20 REV SHT NO. ELEC-BLD\PLM-S1402 ELEC BLDG SECTS DELTA8 DELTA10.DWG PLOT TIME: 07-14-20, 10:50 AM

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

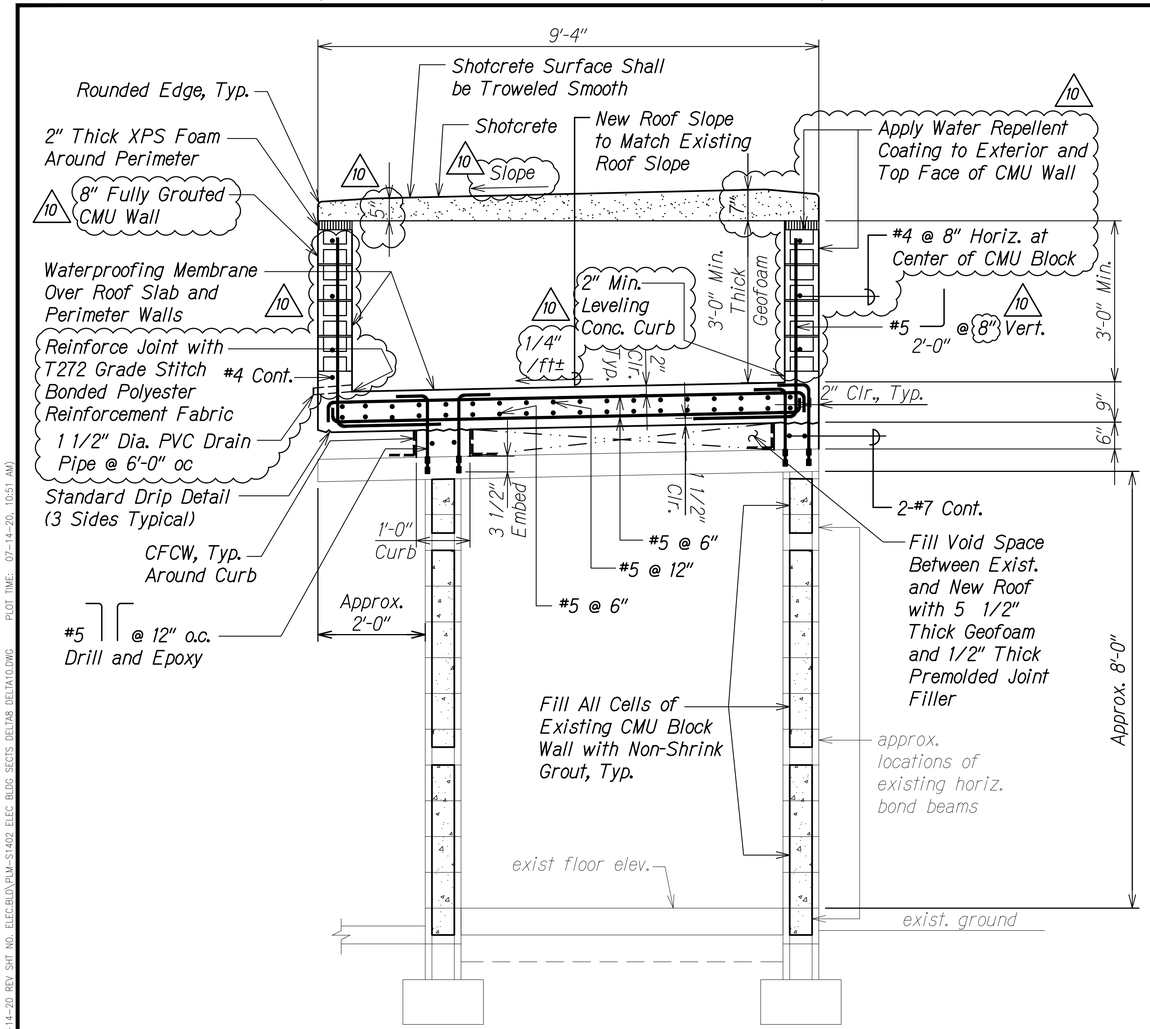
ELECTRICAL BUILDING SECTION

PALI HIGHWAY
LANDSLIDE MITIGATION PROJECT
FAP Proj. No. ER-22(002)

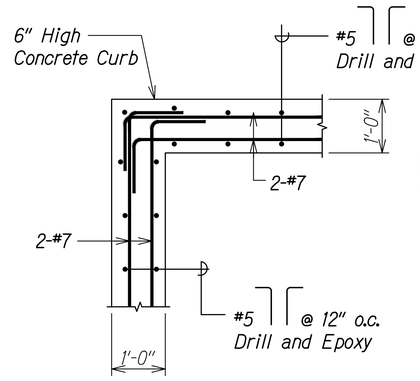
Scale: As Noted Date: May 6, 2019

SHEET No. S14.2 OF 3 SHEETS

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	ER-22(002)	2019	80S-9	94

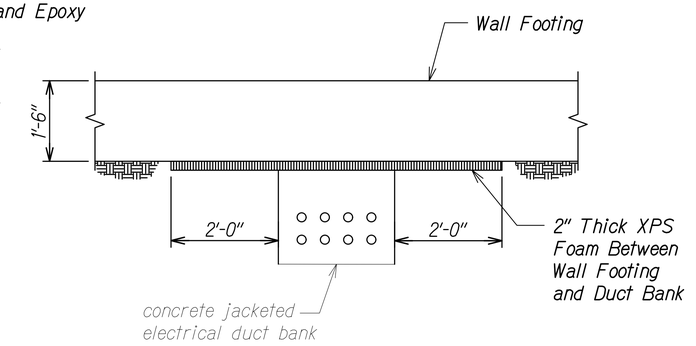


BUILDING SECTION A
Scale: 3/4" = 1'-0"
S14.3 | S14.3

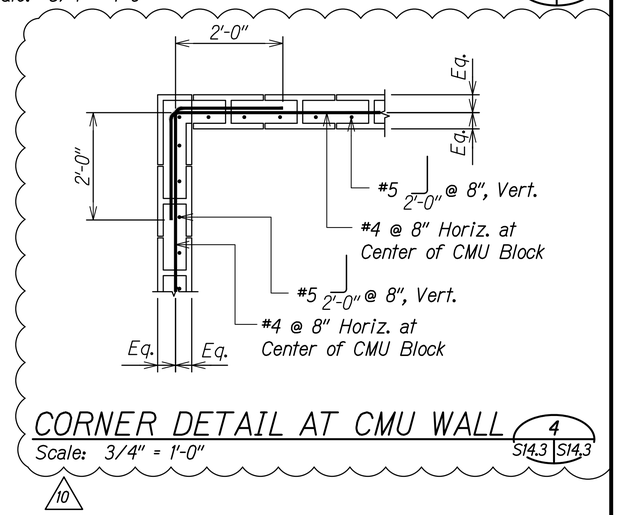


CORNER DETAIL AT CURB 1
Scale: 3/4" = 1'-0"
S14.3 | S14.3

CORNER DETAIL AT RETURN WALL 3
Scale: 3/4" = 1'-0"
S14.1 | S14.3



FOOTING DETAIL OVER DUCTLINE 2
Scale: 3/4" = 1'-0"
S14.3 | S14.3



CORNER DETAIL AT CMU WALL 4
Scale: 3/4" = 1'-0"
S14.3 | S14.3

10

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

DATE	REVISION
11/12/19	10 Replace Conc. Walls with CMU
10/4/19	8 New Sheet

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ELECTRICAL BUILDING SECTION AND DETAILS

PALI HIGHWAY
LANDSLIDE MITIGATION PROJECT
FAP Proj. No. ER-22(002)

Scale: As Noted Date: May 6, 2019

SHEET No. S14.3 OF 3 SHEETS

80S-9