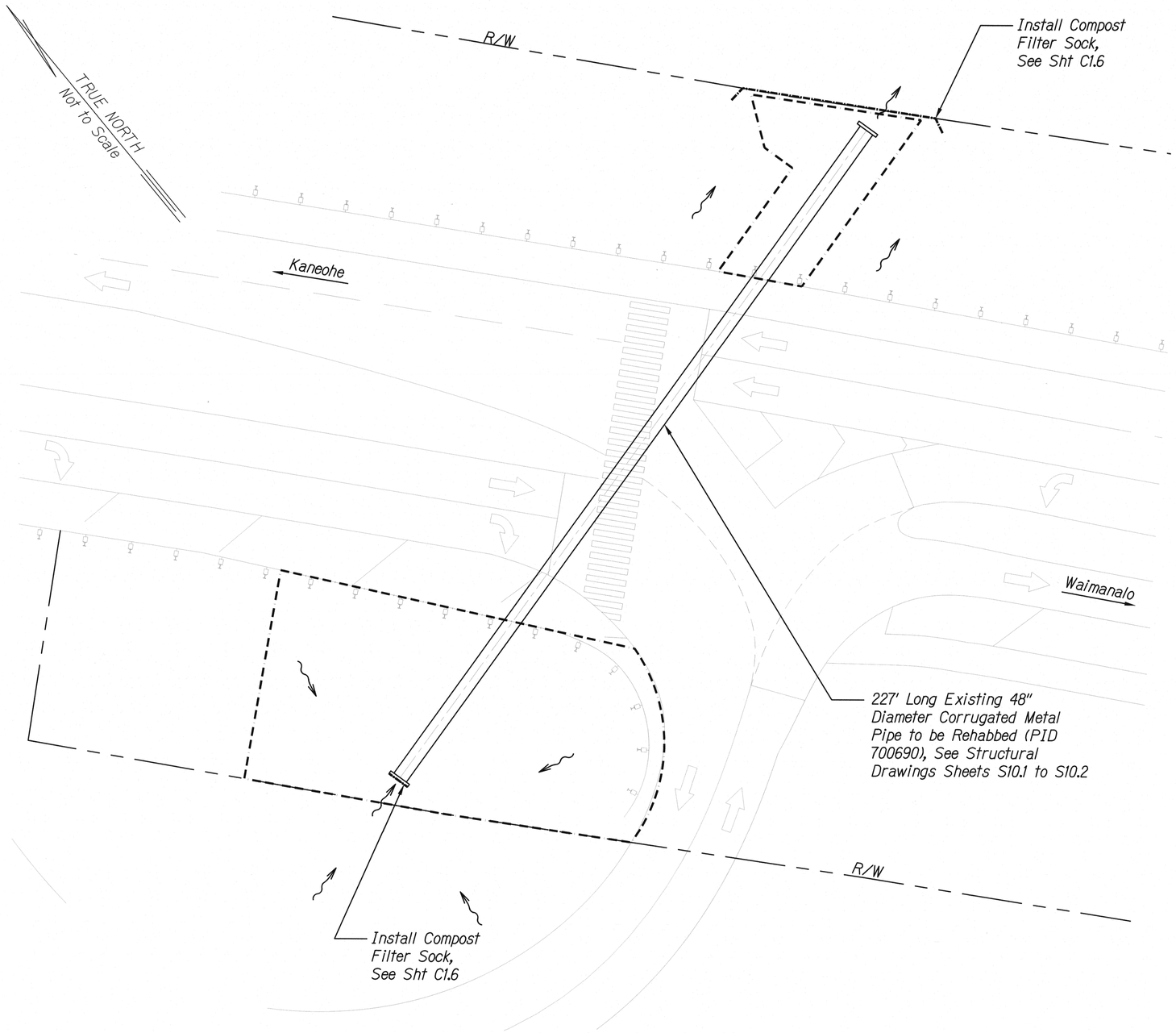
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-0-03-18	2018	81	93



MILEPOST 2.20 (KALANIANAOLE HWY) SITE SPECIFIC BMP (1 / C10.1 | C10.1)

Not to Scale

Notes:

1. Proposed BMP plan is provided to show general intent. Contractor shall submit BMP plan for review and approval by the Engineer prior to performing the work.
2. BMP's shall be in place and functional prior to the start of construction work and in accordance with sheet C1.6 and manufacturer's recommendations, whichever is more stringent.

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EXPIRATION DATE OF THE LICENSE 4/30/2018
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

Site Specific BMP, Milepost 2.20 (Kal. Highway) PID No. 700690

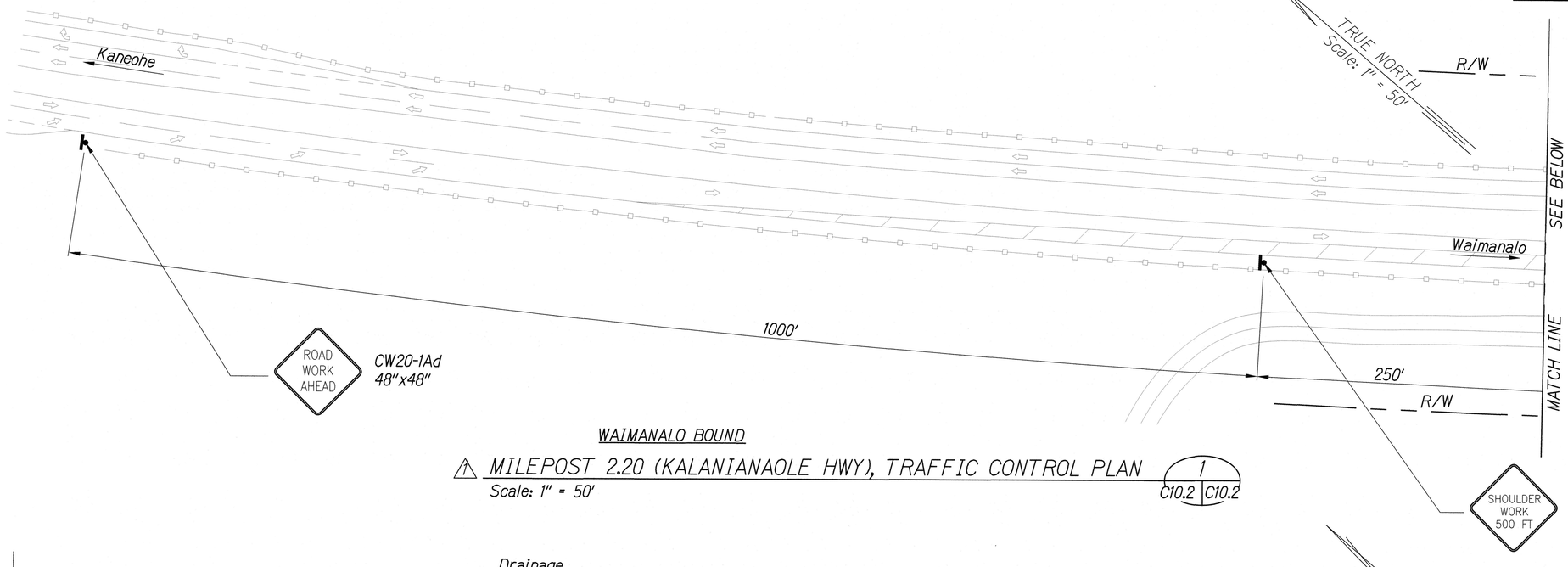
CULVERT REMEDIATION AT VARIOUS LOCATIONS ON OAHU, PHASE 2

Project No. HWY-0-03-18

Scale: As Shown Date: March 2018

SHEET No. C10.1 OF 6 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-0-03-18	2018	ADD. 82	93



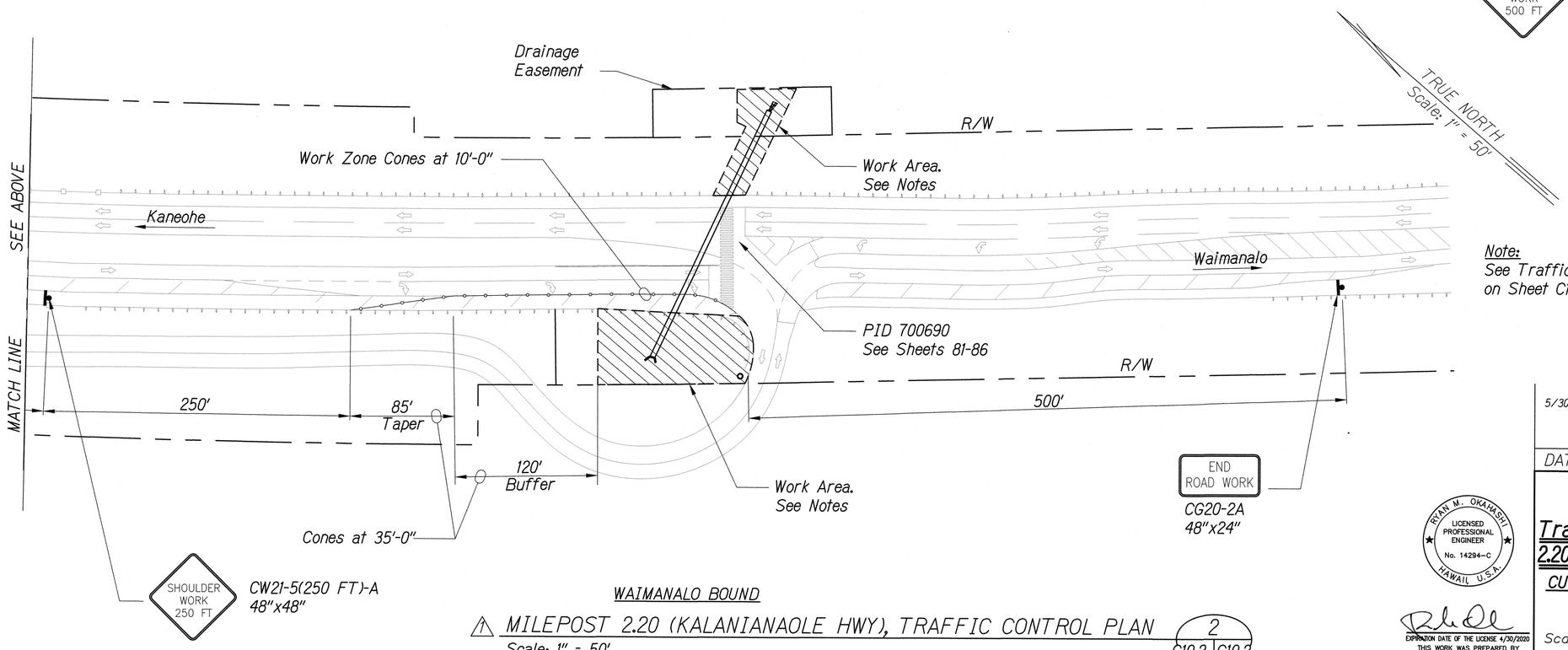
WAIMANALO BOUND

⚠1 MILEPOST 2.20 (KALANIANAOLE HWY), TRAFFIC CONTROL PLAN (1 / C10.2 | C10.2)

Scale: 1" = 50'

Notes:

1. Work areas shown here are approximate. Contractor shall submit a traffic control plan reflecting the proposed work areas to the Engineer for review and approval prior to starting construction.



Note:
See Traffic Control Notes and Table on Sheet C1.7

0 50 100 150
Scale: 1" = 50' Feet

WAIMANALO BOUND

⚠1 MILEPOST 2.20 (KALANIANAOLE HWY), TRAFFIC CONTROL PLAN (2 / C10.2 | C10.2)

Scale: 1" = 50'

DATE	REVISION
5/30/18	⚠1 Revised Date, R/W, and Work Area.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

Traffic Control Plan-01, Milepost 2.20 (Kal. Highway) PID No. 700690

CULVERT REMEDIATION AT VARIOUS LOCATIONS ON OAHU, PHASE 2

Project No. HWY-0-03-18 ⚠1

Scale: As Shown Date: May 2018

RYAN M. OKAHASHI
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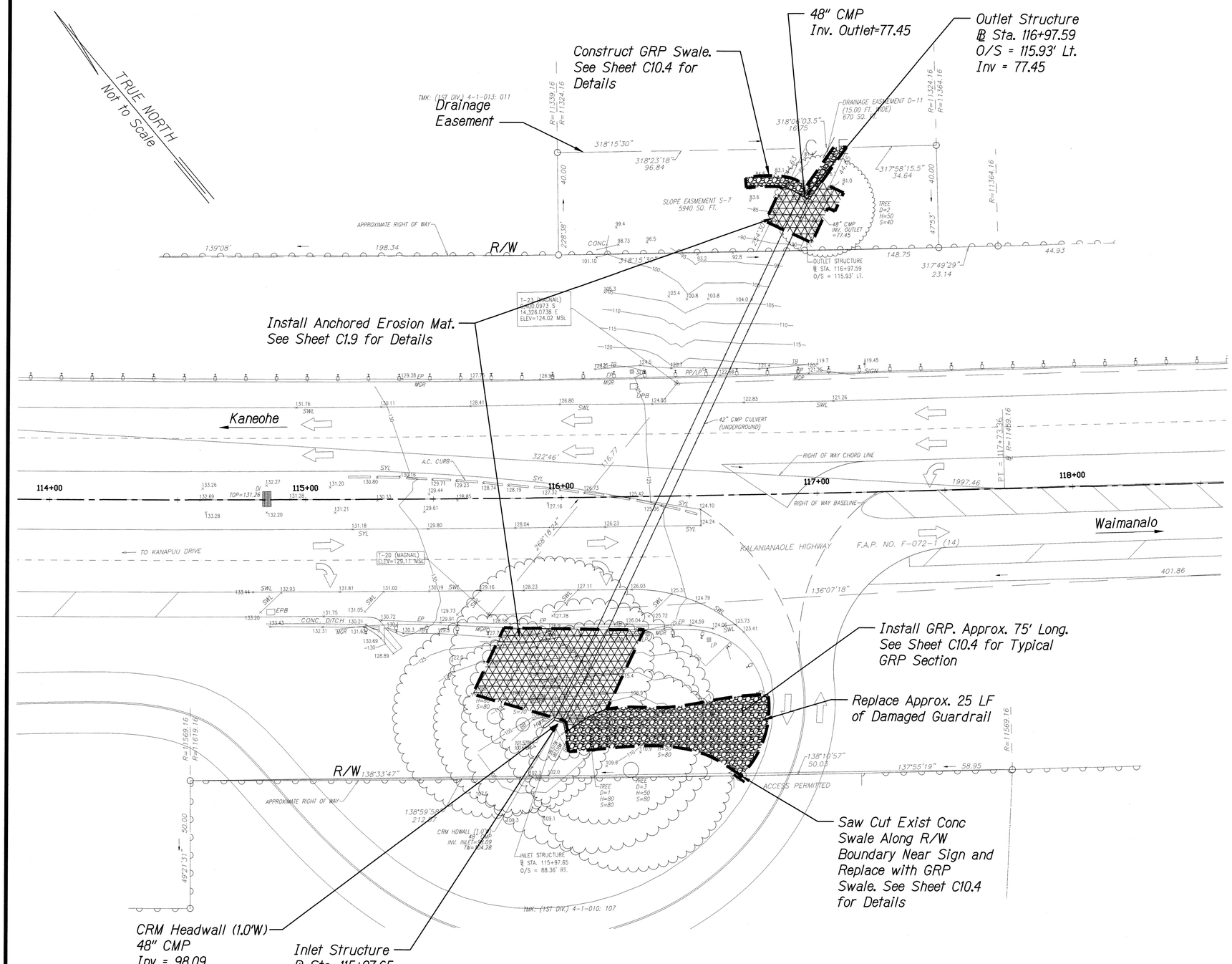
EXPIRATION DATE OF THE LICENSE 4/30/2020
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

SHEET No. C10.2 OF 6 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-0-03-18	2018	ADD. 83	93



Notes:

1. Contractor shall confirm all locations for mitigation with the Engineer prior to beginning work. All dimensions and details shown shall be checked and verified by the Contractor prior to the start of construction.
2. See Kalanianaole Highway MP 2.40 Site Plan on Sheet C11.3 for potential staging areas within the State Right of Way.
3. Contractor shall protect all existing signs, highway lighting and conduits in the work area.

△2 MILEPOST 2.20 (KALANIANAOLE HWY) SITE PLAN

Scale: 1" = 20'

1 / C10.3 | C10.3

0 20 40 60

Scale: 1" = 20' Feet

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DATE	REVISION
6/07/18	△2 Revised Date and Plan with Topo.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

Site Plan, Milepost 2.20 (Kal. Highway) PID No. 700690

CULVERT REMEDIATION AT VARIOUS LOCATIONS ON OAHU, PHASE 2

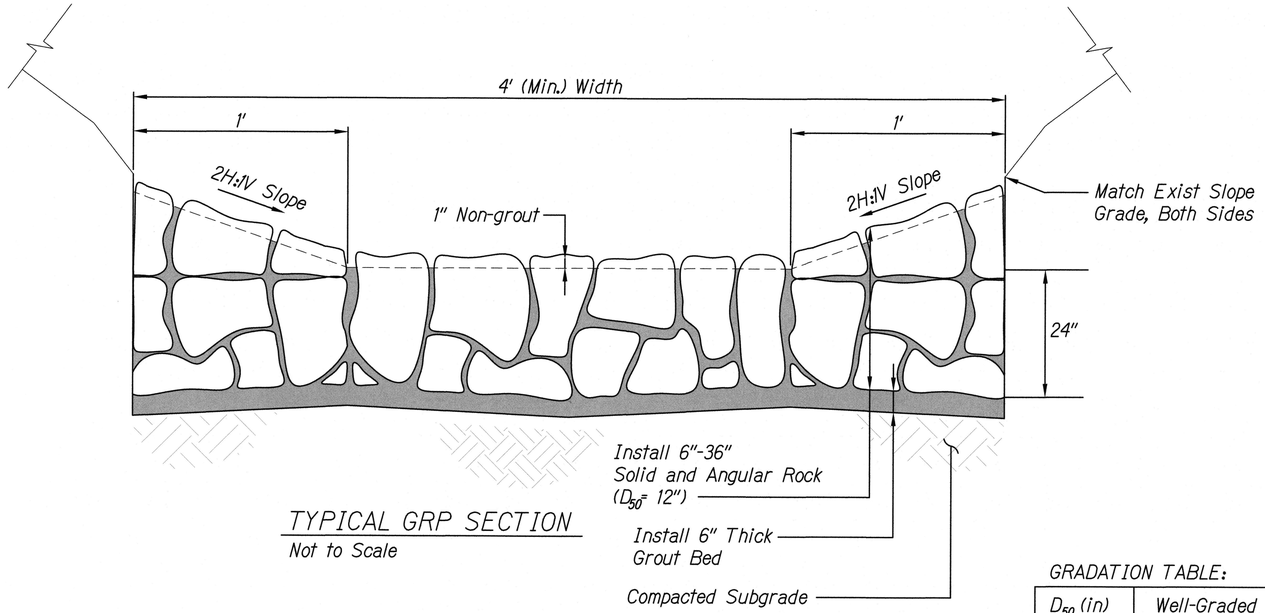
Project No. HWY-0-03-18 △2

Scale: As Shown Date: June 2018

SHEET No. C10.3 OF 6 SHEETS

ADD. 83

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-0-03-18	2018	ADD. 84	93



TYPICAL GRP SECTION

Not to Scale

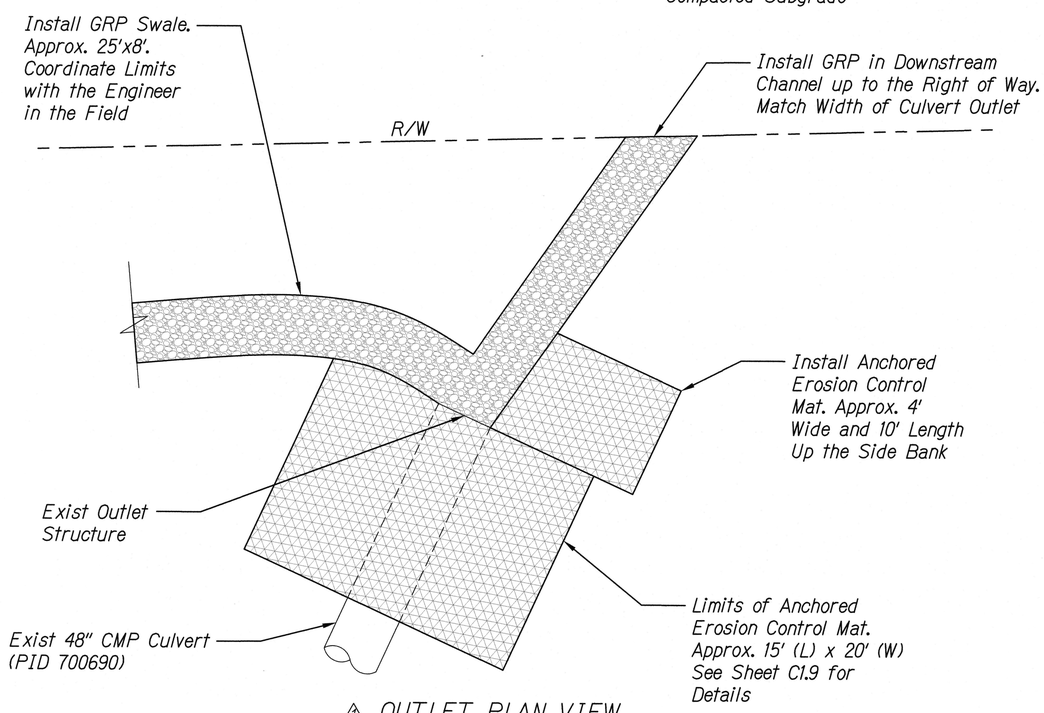
GRP Notes:

1. Prior to laying stones, Contractor shall notify the Engineer 3 working days in advance for inspection of foundation bed. Work shall commence only after foundation is acceptable to the Engineer.
2. See gradation table this sheet as a guide.

GRADATION TABLE:

D_{50} (in)	Well-Graded from	Min. of 50% by weight larger than	Max. of 10% by weight smaller than
12	6" to 36"	30"	8"

Note: Gradation table is provided as a guide. Contractor shall submit the well-graded stone gradation to the Engineer for review and approval prior to laying of stone.



1 OUTLET PLAN VIEW

Not to Scale

Erosion Mat Notes:

1. Mitigation areas are shown in plan view and are approximate. Contractor shall coordinate actual limits with the Engineer in the field.

MILEPOST 2.20 (KALANIANAOLE HWY) SECTION & DETAIL

Not to Scale

1 C10.4 C10.4

DATE	REVISION
5/30/18	1 Revised Date and Detail.

RYAN M. OKATASHI LICENSED PROFESSIONAL ENGINEER No. 14294-C HAWAII, U.S.A.

EXPIRATION DATE OF THE LICENSE 4/30/2020
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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

Section & Detail, Milepost 2.20 (Kal. Highway) PID No. 700690

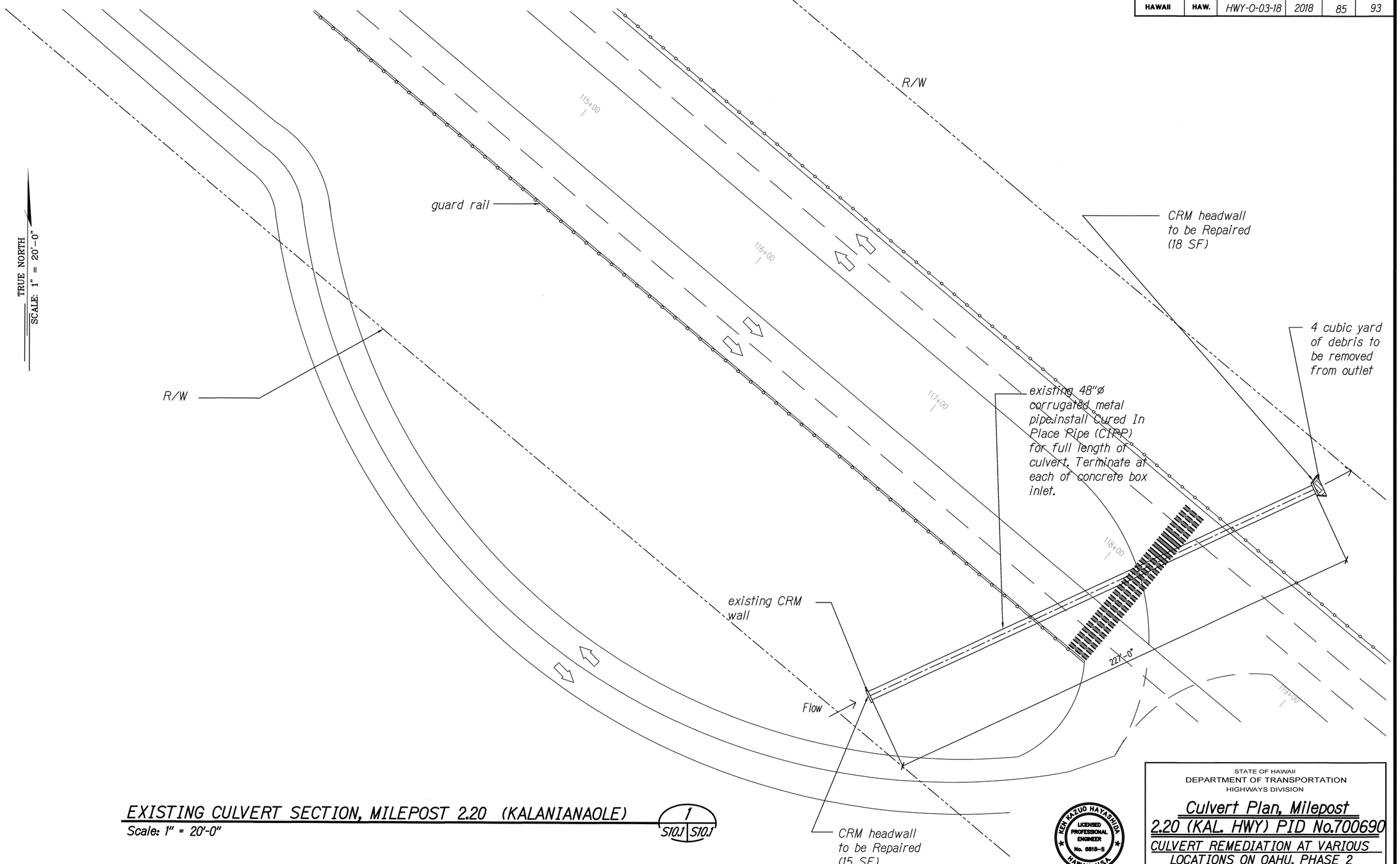
CULVERT REMEDIATION AT VARIOUS LOCATIONS ON OAHU, PHASE 2

Project No. HWY-0-03-18 1

Scale: As Shown Date: May 2018

SHEET No. C10.4 OF 6 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-0-03-18	2018	85	93



EXISTING CULVERT SECTION, MILEPOST 2.20 (KALANIANAOLE) 1 S10.1 S10.1

Scale: 1" = 20'-0"

KEN KAZUO HAYASHIDA LICENSED PROFESSIONAL ENGINEER No. 6818-S HAWAII, U.S.A.

EXPIRATION DATE OF THE LICENSE 4/30/2020
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

Culvert Plan, Milepost 2.20 (KAL. HWY) PID No.700690

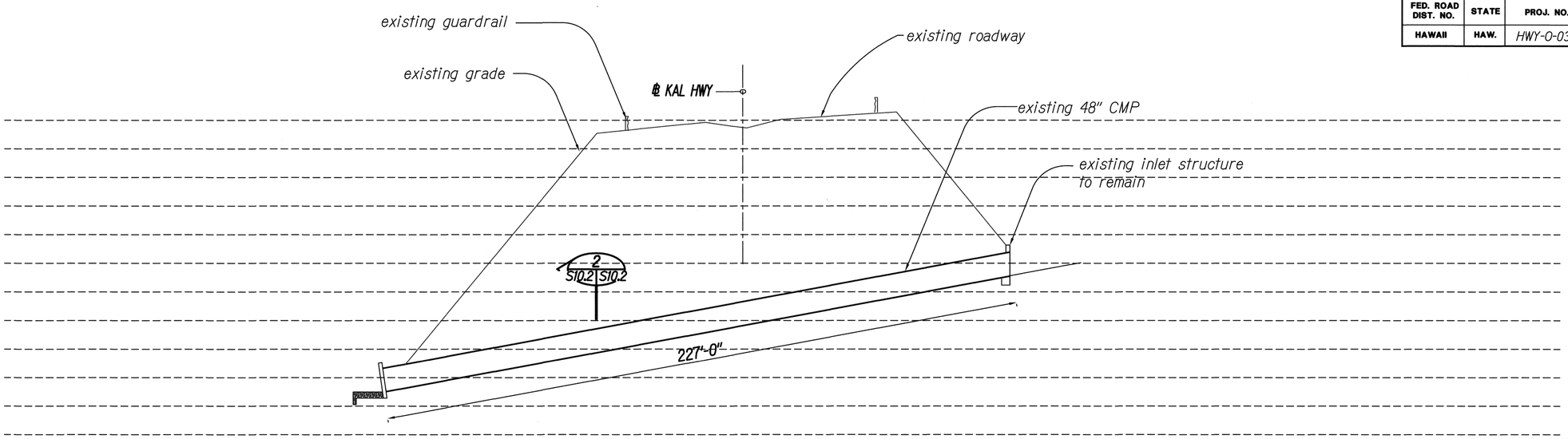
CULVERT REMEDIATION AT VARIOUS LOCATIONS ON OAHU, PHASE 2

Project No. HWY-0-03-18

Scale: As Shown Date: March 2018

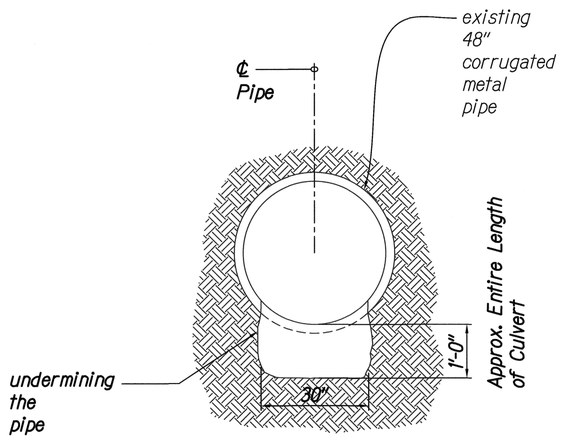
SHEET No. S10.1 OF 6 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-0-03-18	2018	86	93



EXISTING CULVERT SECTION, MILEPOST 2.20 (KAL. HWY) 1 S10.2 S10.2

Scale: HOR 1" = 20'-0" VERT 1"=10'-0"



EXISTING CULVERT SECTION 2 S10.2 S10.2

Scale: 1" = 2'-0"

For Repair Details
See Sheet S1.2

KEN KAZUO HAYASHIDA
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HAWAII, U.S.A.

EXPIRATION DATE OF THE LICENSE 4/30/2020
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

Culvert Sections, Milepost 2.20 (KAL. HWY) PID No.700690

CULVERT REMEDIATION AT VARIOUS LOCATIONS ON OAHU, PHASE 2

Project No. HWY-0-03-18

Scale: As Shown Date: March 2018

SHEET No. S10.2 OF 6 SHEETS