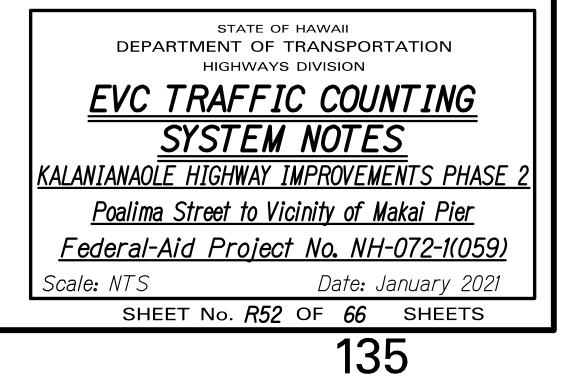
	<u>LECTRONIC VEHICLE COUNTING (EVC) SYSTE</u>
1.	The location of new sensor loops and piezo sensors shall be staked out in the field by the Contractor and approved by the Engineer prior to installation.
2.	The Contractor shall inform the Engineer at least three days prior to saw-cutting pavement and installing sensor loops and piezo sensors.
3.	Pull in in-bound lanes sensor loop cable and piezo sensor lead cables into conduit, where indicated. Cables shall be tested for acceptance before and after installation into conduit.
4.	Piezo lead cables shall be continuous with no splices.
5.	The Contractor shall restore all affected areas to their original condition. This item of work shall not be paid for separately, but shall be considered incidental to work of other paid items.
6.	The Contractor shall verify the location of the existing utilities and underground structures whether or not it is shown on the plans.
7.	The Contractor shall assume that existing underground utilities not shown on the plans may exist. The Contractor shall be responsible for contacting the different utility companies for information and toning.
3.	The Contractor shall be held liable for any damages incurred to the existing utilities and underground structures as a result of his operations. All damaged portions shall be replaced in accordance with the standards and specifications of the affected utility company at no cost to the State.
Э.	Changes to the contract plans and specifications will not be permitted, unless approved by the Engineer in writing.
0.	All cables are to be terminated within the EVC cabinet and shall have a minimum 12" additional slack.
1.	Highway crossing conduit shall be provided with 36" cover.
) -•	Saw cuts shall be made by wet cutting only.
3.	Clean away collected dust, dirt, and refuse after saw cutting is done. The saw cuts shall be cleared by water applied by pressure washer. Residual water within the saw cuys shall be vacuumed by use of a wet/dry vacuum. The saw cuts shall then be dried by air compressor.
	After slots are dried, any remaining debris stuck within the slot shall be removed. The saw cuts must be completely clean and dry before inserting the sensors and filling the voids with Epoxy Loop Sealant (for sensor loops) or PU200 Piezo Installation Resin (for piezo sensors).
	The collected slurry shall be disposed of appropriately (i.e., either, placed in Filter Fabric Lined Filtration Box or in a Filter Fabric Lined Dug Up Reten tion/Percolation Basin, and after Filtration/Percolation, the Filter Fabric an the retained sediments, disposed of appropriately).

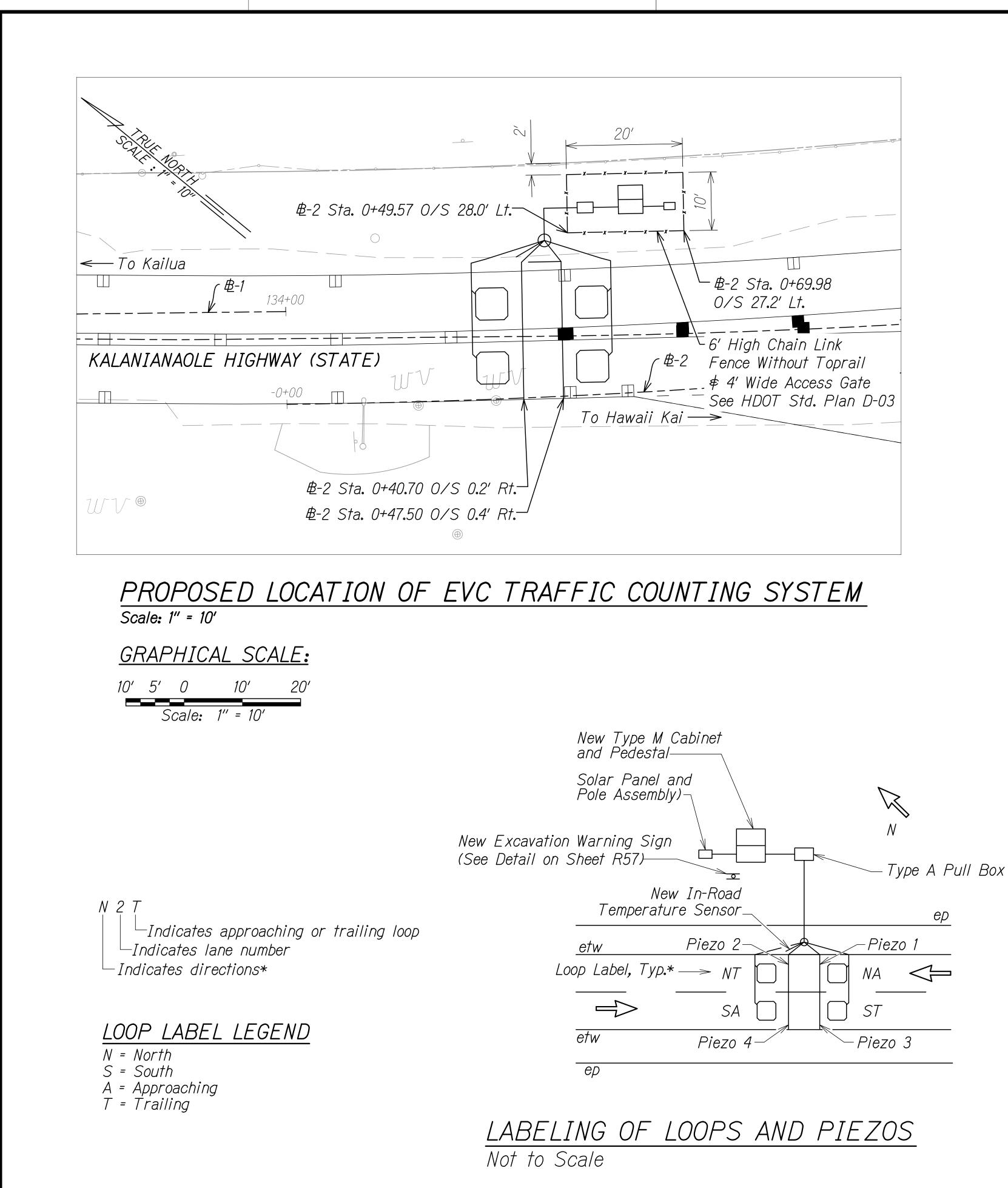
## EM NOTES

## SENSOR LOOP LAYOUT NOTES

- 1. Detector loop shall consist of four turns of 1C #14 cable meet. Spec 51-3 or equivalent embedded in a 3/8" wide by 4" deep except as noted. Detector loop shall be provided a minimum 2
- 2. After laying sensor loop in four (4) turns within the 4" deep 1" long pieces of backer rod in each foot of the loop and the saw cut, to anchor the wire in the slot before applying the E Sealant. Backer rod shall be embedded at least 2" below the pavement. The backer rod shall be placed into the saw cut w object, such as a wooden paint stir stick. No sharp objects screw driver shall be used to place the backer rod into the p
- 3. Sensor loop and lead cable shall be one continuous wire. Lead from the same loop shall be twisted in pairs, five twists per the edge of paved shoulder to the pullbox. Do not twist one with another loop pair.
- 4. Continuity of sensor loops and lead-in wires shall be tested a ted for one year from the date of acceptance by the Engineer
- 5. Sensor loop lead cables shall be spliced only at the final pull EVC cabinet. Splice point of cables must be suspended near the pullbox with a j-hook.
- 6. Splices shall be made by use of a splice kit.
- 7. All sensor loop lead cables shall be crimped with open end lug will fit into the terminal board slots snugly.
- 8. Stagger sensor loops on roadways with lanes that are less th in width.
- 9. The Contractor shall connect the sensor loop wires on each te slot, as shown on plans.
- 10. The left lane in the direction of traffic flow is designated as and the next lane to its right as lane 2 and so on as indicate plans.
- 11. All sensor loop lead wires in the EVC cabinet and the pullbox be identified and labeled by direction of traffic flow and lane as shown on plans.
- 12. Only one sensor loop shall be placed per saw cut.

	FED. ROAD	STATE	FEDAID	FISCAL	SHEET	TOTAL
	DIST. NO. HAWAII	HAW.	ргој. no. <i>NH-072-1(059)</i>	YEAR 2021	NO. 135	sheets 243
ting THACA						
ting IMSA sawcut, 2″ cover.						
cut, press loop lead poxy Loop top of with a blunt such as a pavement.						
ad wires foot from loop pair						
and warran- r.						
lbox to the the top of						
igs that						
han 12 feet						
erminal						
s lane 1, ted on						
kes shall be number						





New Type M Cabinet and Pedestal Solar Panel and Pole Assembly)-New Excavation Warning Sign (See Detail on Sheet R57)-New In-Road Temperature SensoreD etw New 6'x6' Loop Detectors Centered in Lane, Typ.

ēр

Condu	it Table:	
Conduit* #-Size	Class 1 BL Sensor Lead Cables	2C #18 Loop Detector Cable
1 - 2"	4	4

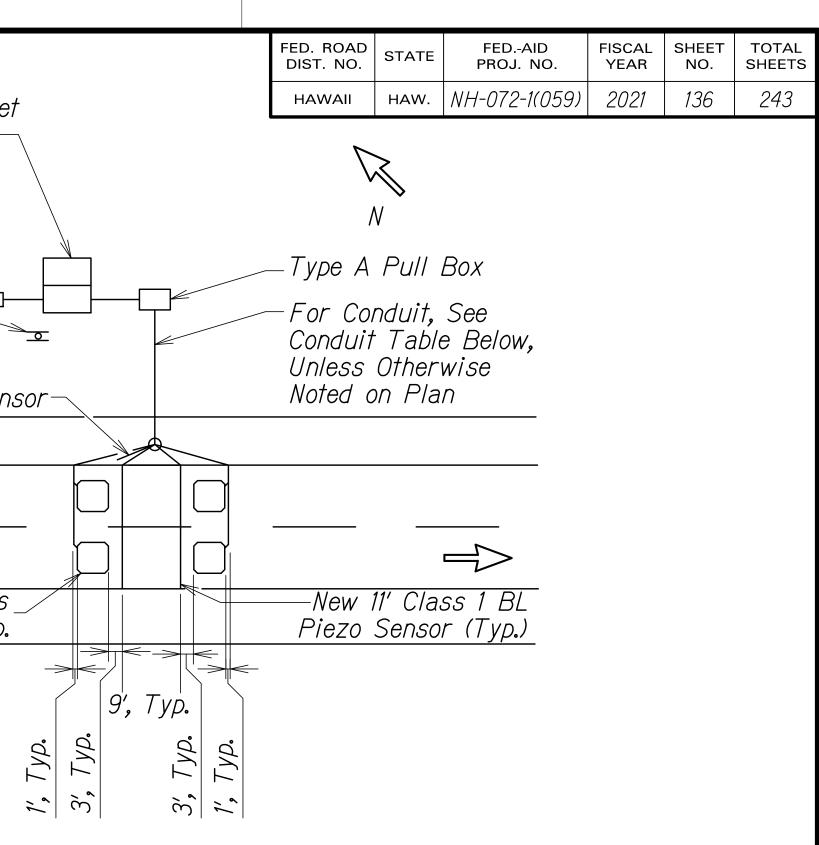
\*Conduits under pavement and at utility crossings shall be concrete encased

\*NOTES:

1. All dimensions and callouts are typical unless otherwise noted on plan

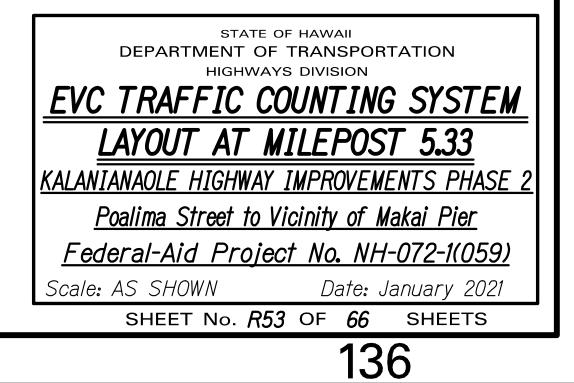
587-1839).

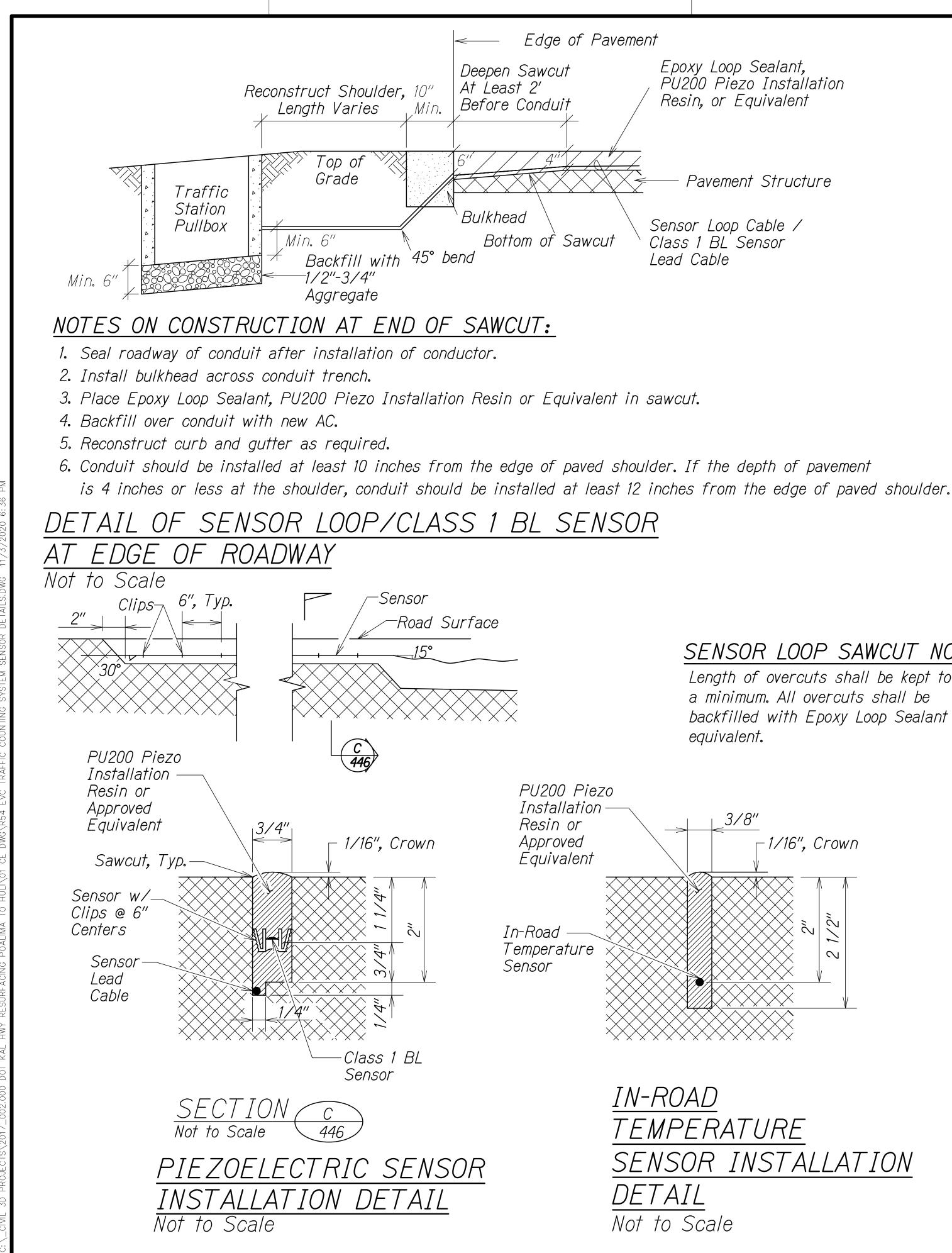




2. Contractor shall coordinate service agreements and connections to electrical and communication service. Contractor shall also contact the appropriate State Dept. of Transportation Representative for service agreement. (Highway Planning, Contact, Goro Sulijoadikusumo, P.E., at

# EVC TRAFFIC COUNTING SYSTEM LAYOUT DETAIL

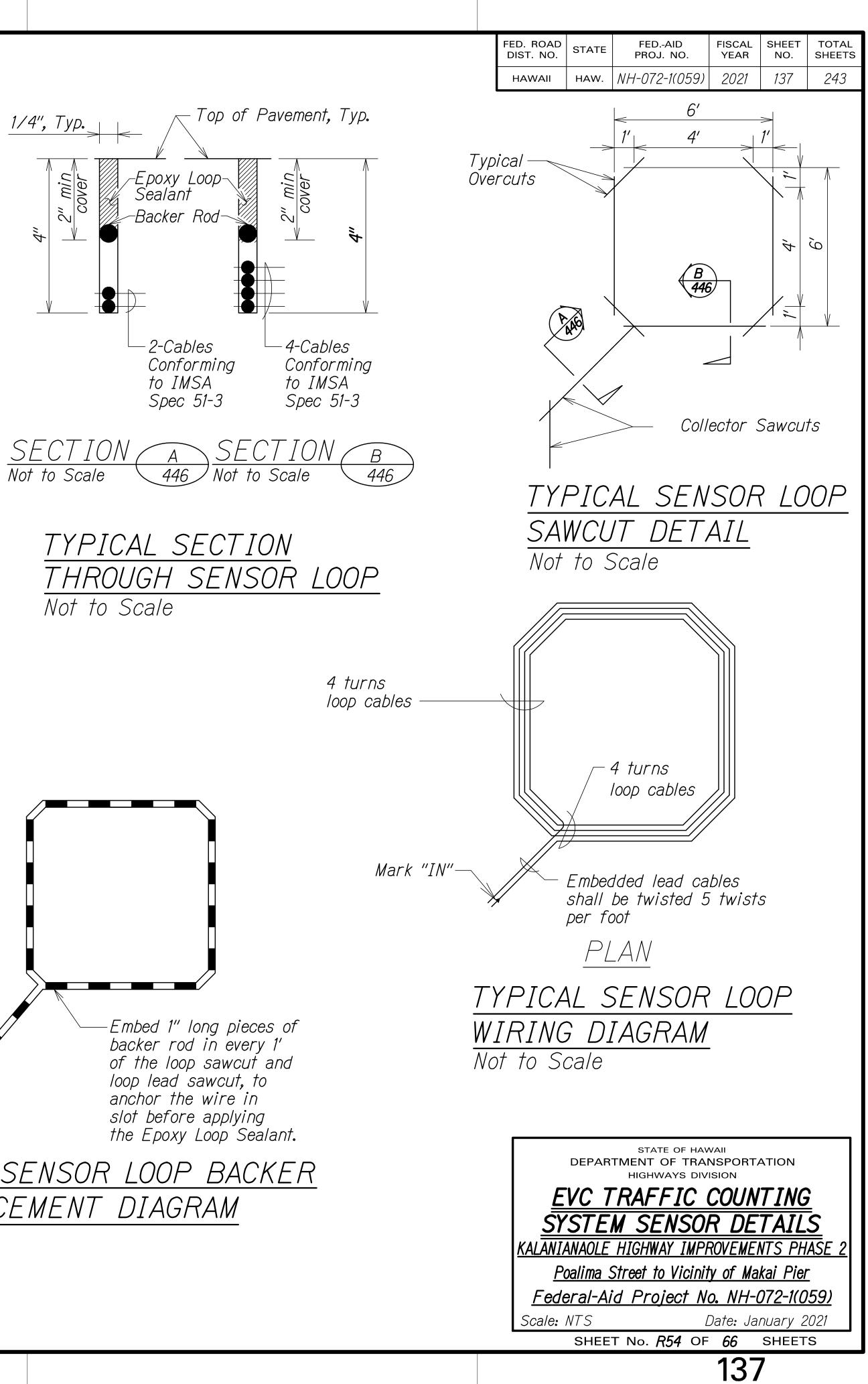


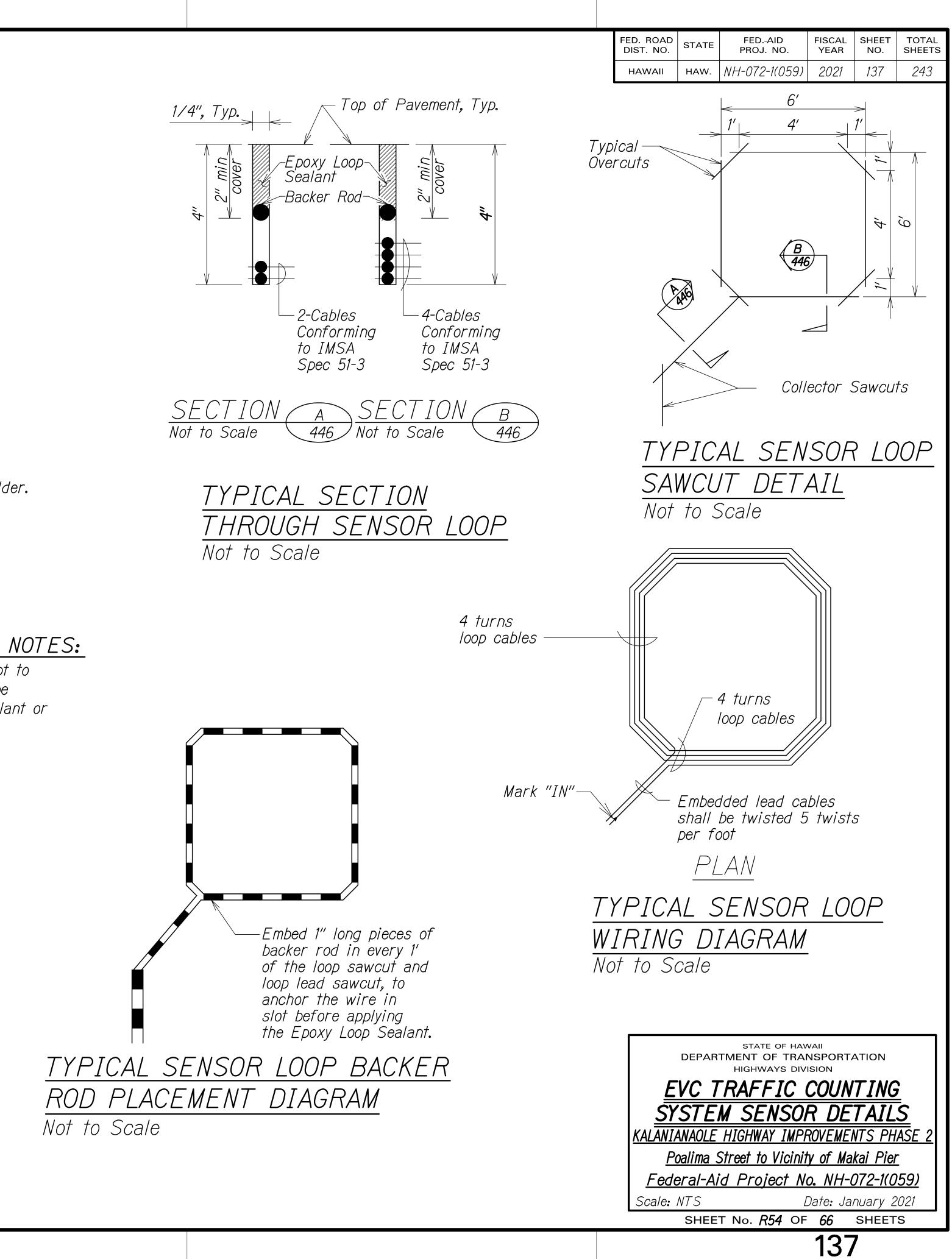


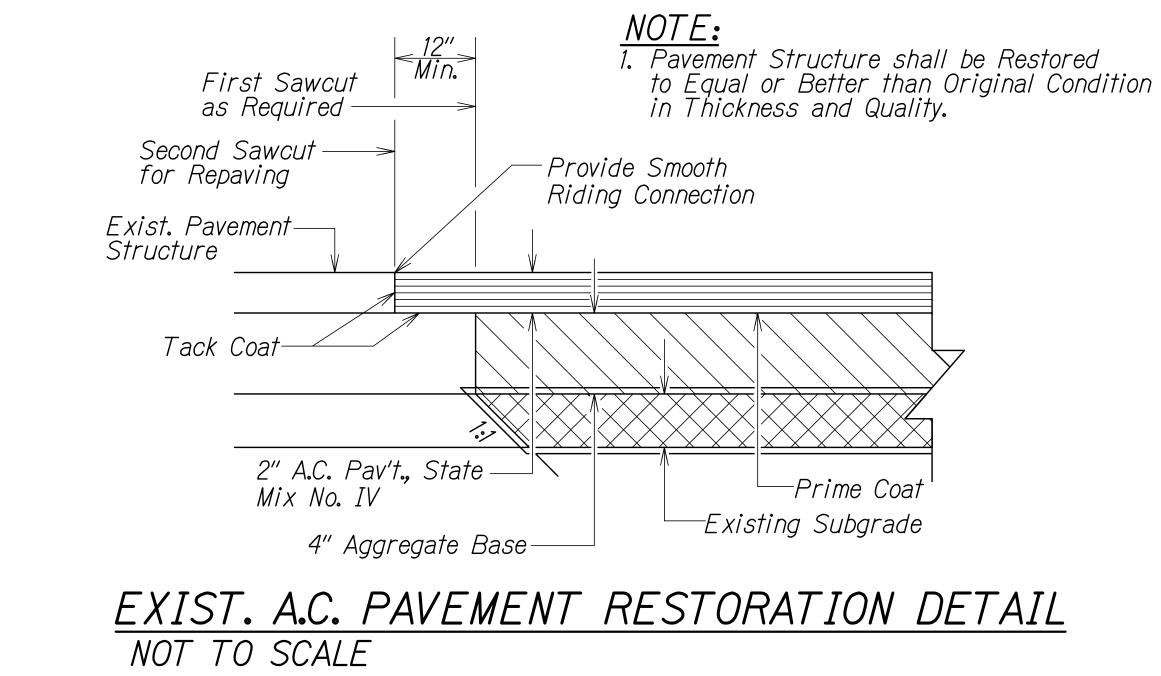
### SENSOR LOOP SAWCUT NOTES:

Length of overcuts shall be kept to a minimum. All overcuts shall be backfilled with Epoxy Loop Sealant or

SENSOR INSTALLATION

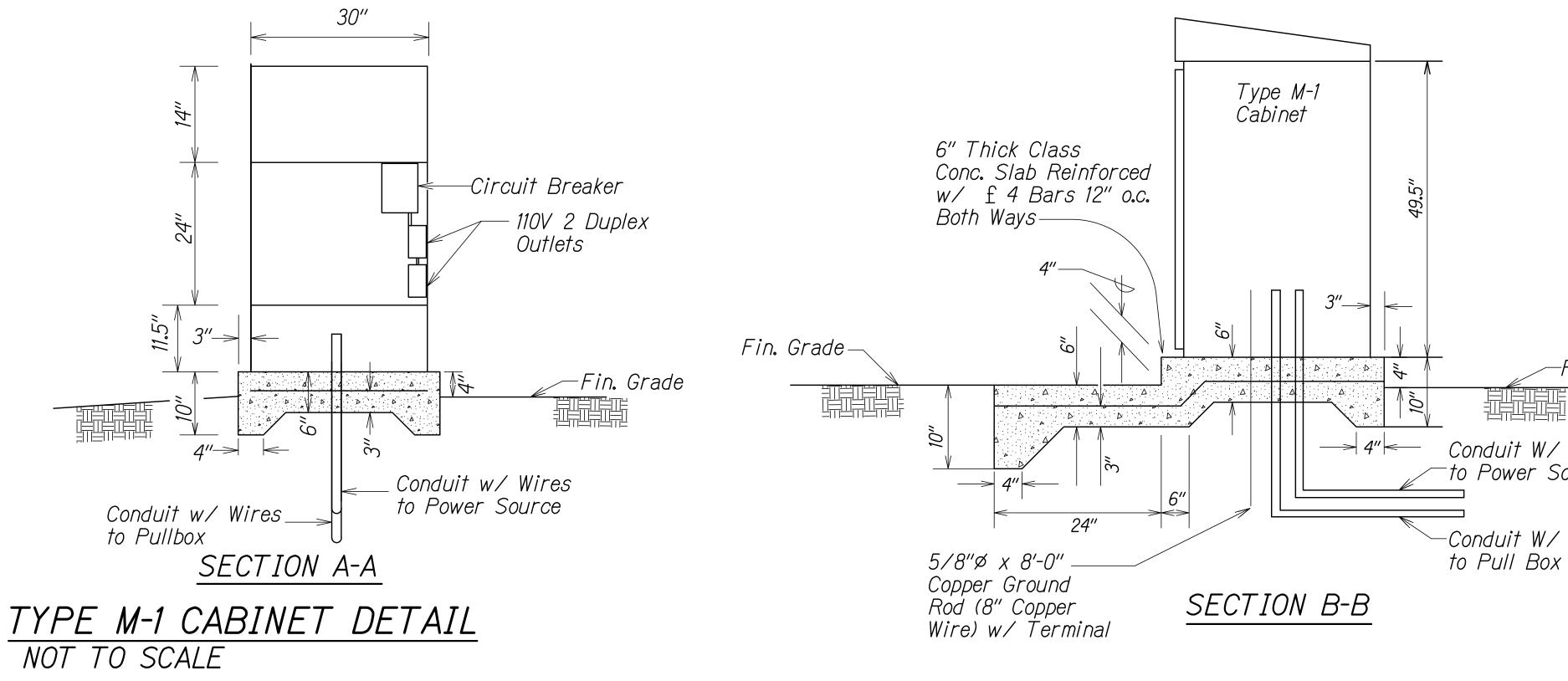


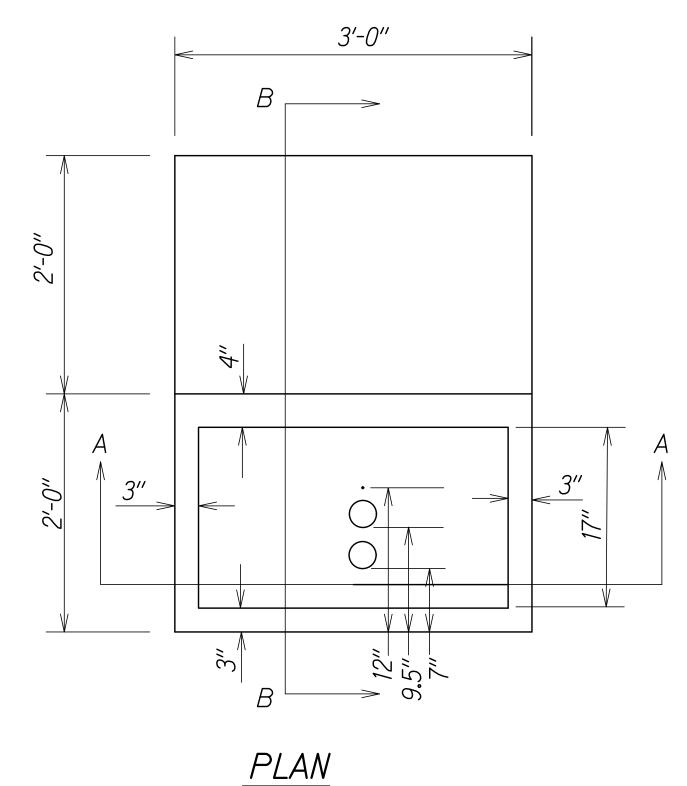




### NOTES:

- Mount type M-1 cabinet slab and secured with bolts and nuts.
- 2. Concrete slab shall be poured in place.
- 3. Connect 110 VAC power to dual outlet boxes mounted on inside wall of the cabinet.
- The Contractor shall furnish the State key(s) to the cabinet. 4.
- 5. Provide #8 copper wire ground terminal to the cabinet.
- 6. Mount one 10 pin terminal board on inside of cabinet.
- 7. All conduits shall be steel or PVC schedule 80.



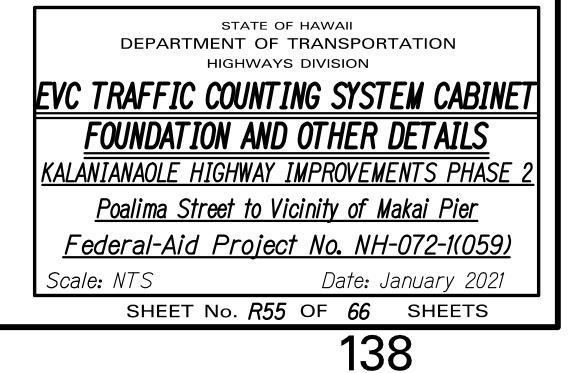


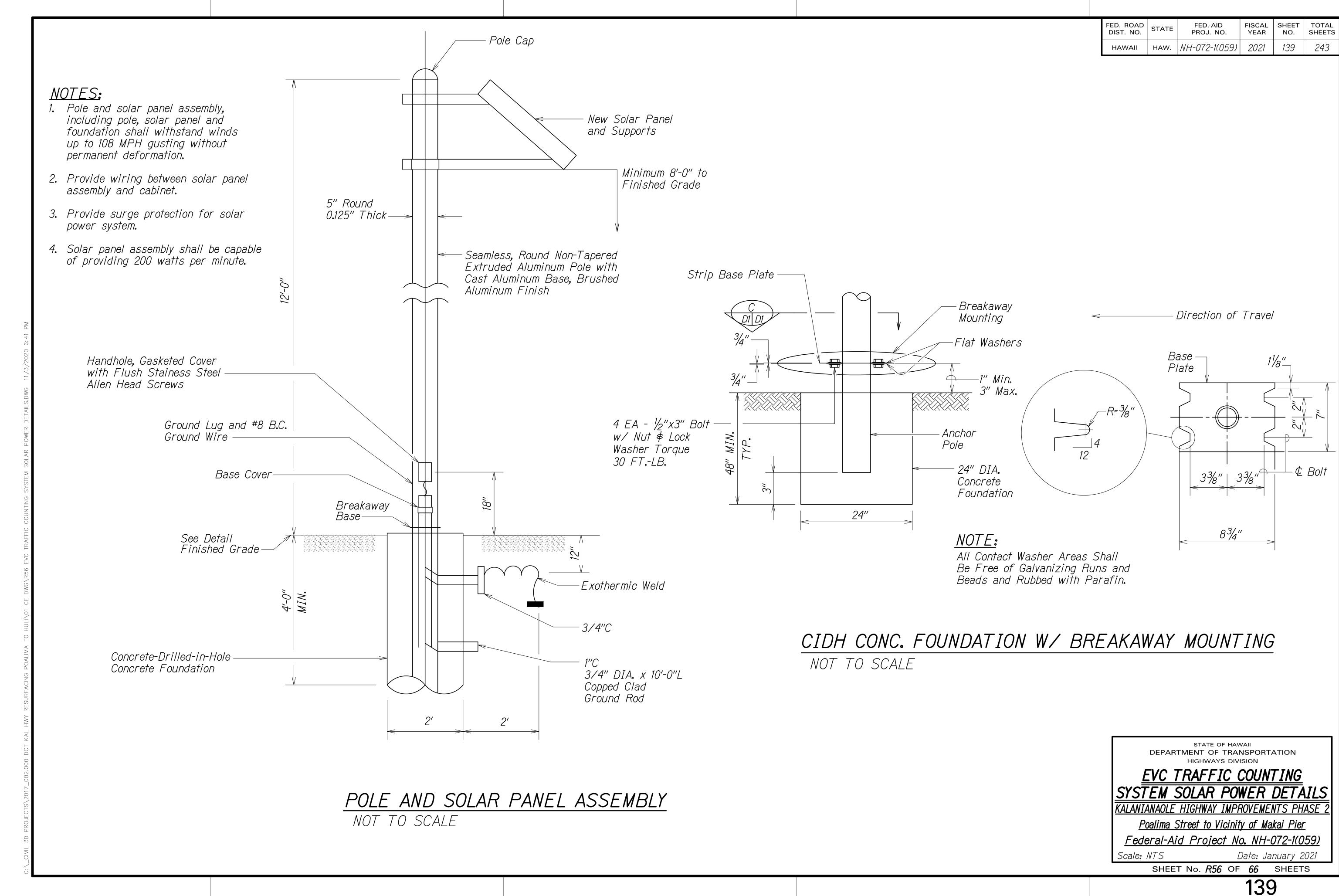
FED. ROAD DIST. NO.STATEFEDAID PROJ. NO.FISCAL YEARSHEET NO.TOTAL SHEETSHAWAIIHAW.NH-072-1(059)2021138243						
HAWAII HAW. NH-072-1(059) 2021 138 243		STATE				
	HAWAII	HAW.	NH-072-1(059)	2021	138	243

-Fin. Grade 

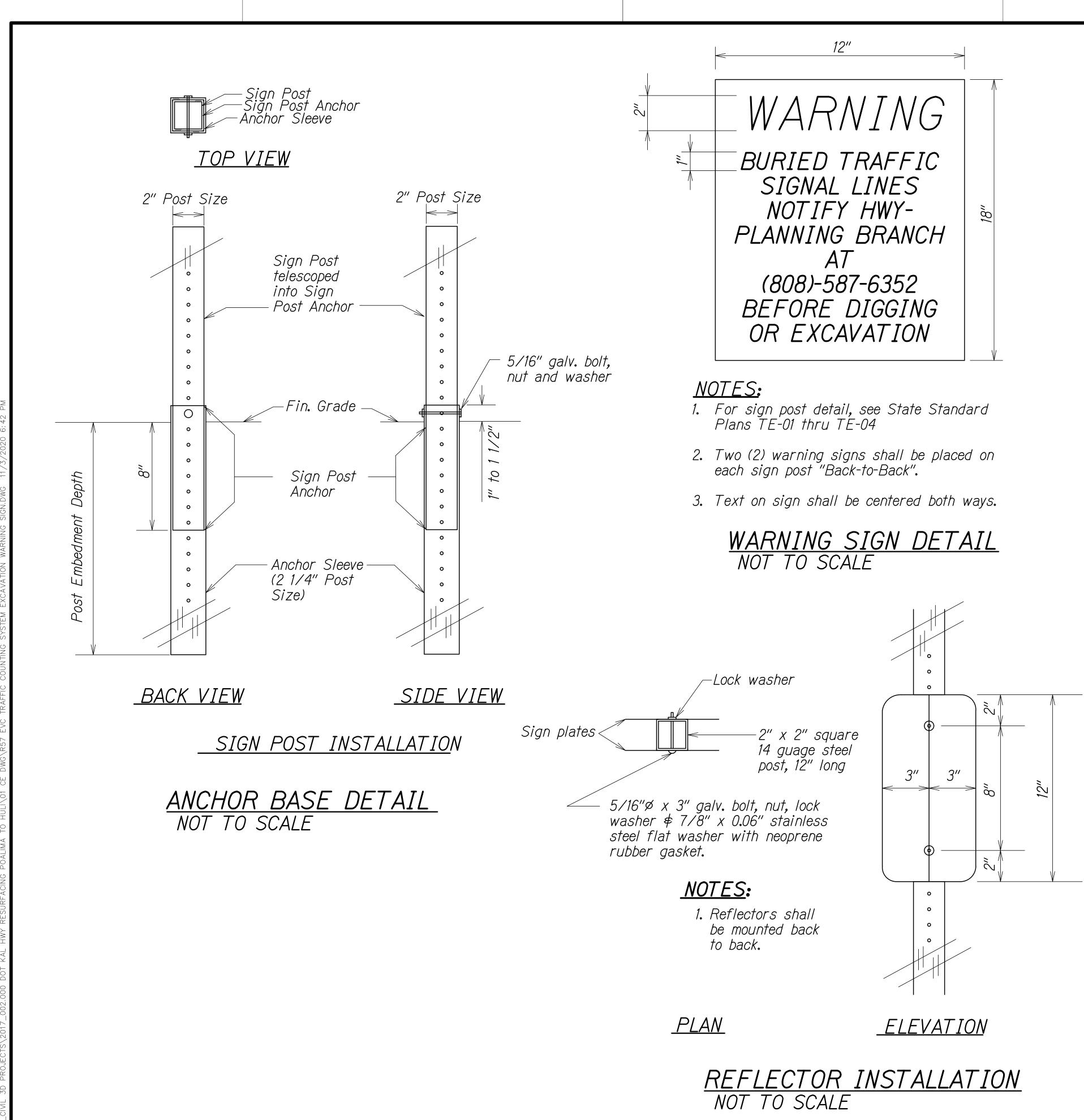
Conduit W/ Wires to Power Source

Conduit W/ Wires





FED. ROAD DIST. NO.STATEFEDAID PROJ. NO.FISCAL YEARSHEET NO.TOTAL SHEETSHAWAIIHAW.NH-072-1(059)2021139243						
HAWAII HAW. <i>NH-072-1(059)</i> 2021 139 243		STATE				
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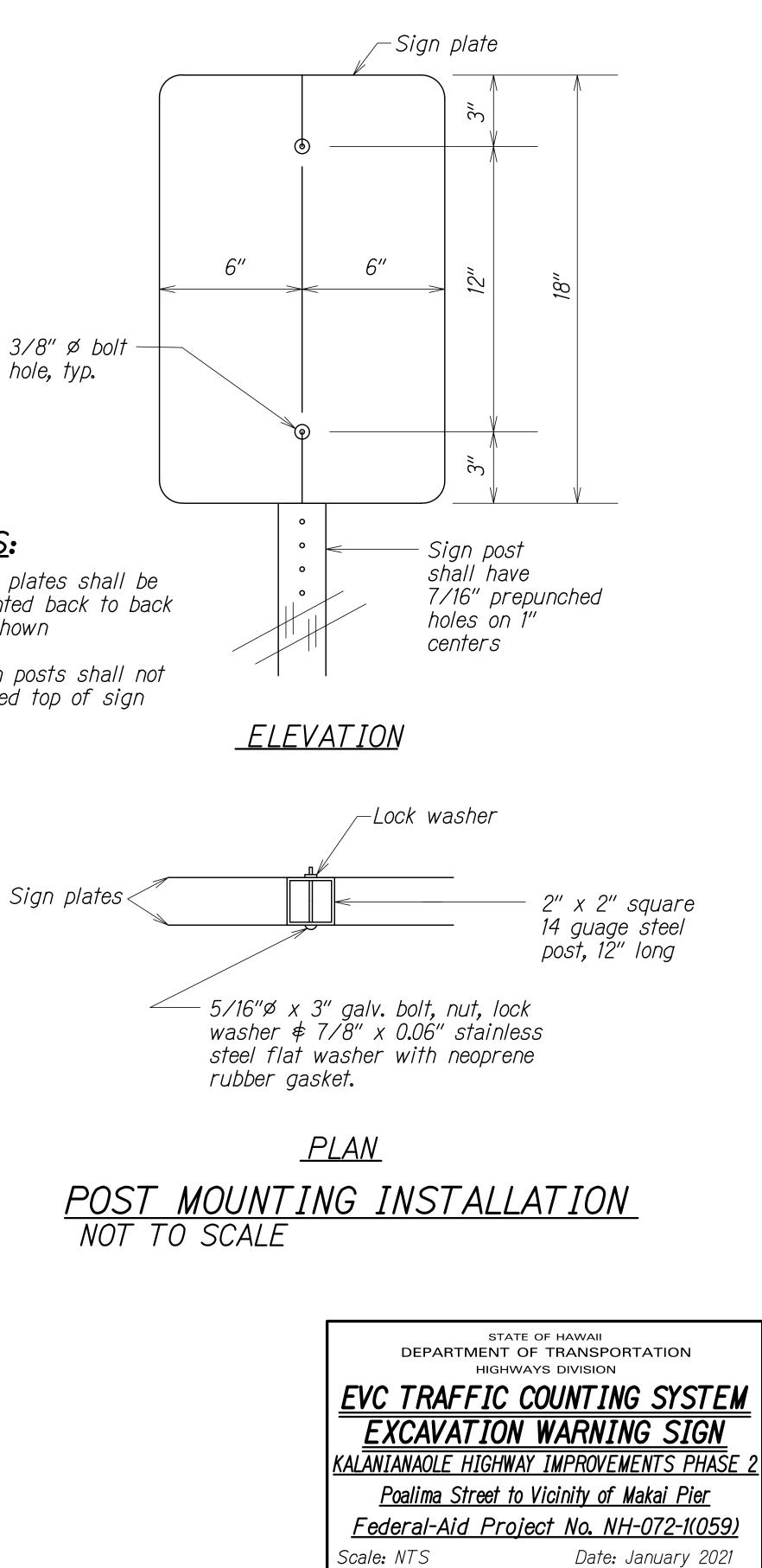
hole, typ.

NOTES:

1. Sign plates shall be mounted back to back as shown

2. Sign posts shall not exceed top of sign

FED. ROAD DIST. NO.	STATE	FEDAID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-072-1(059)	2021	140	243



SHEET No. R57 OF 66 SHEETS

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