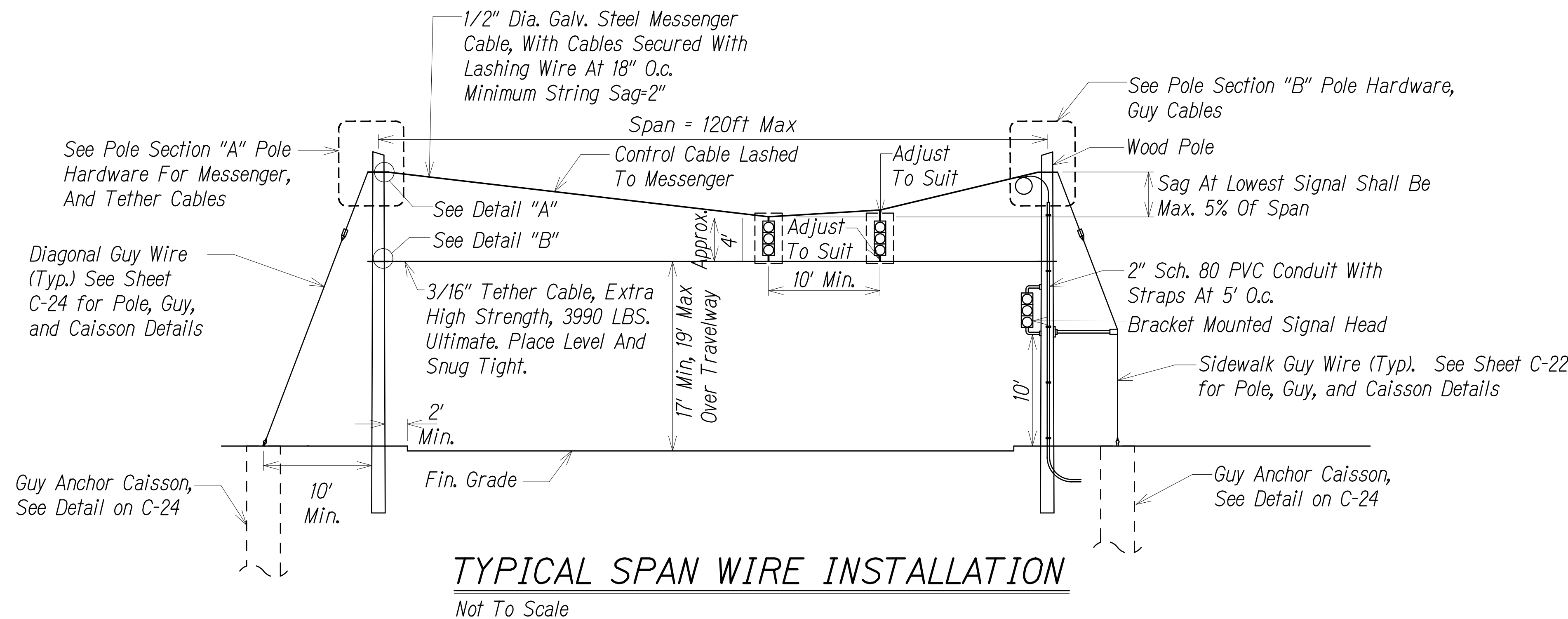
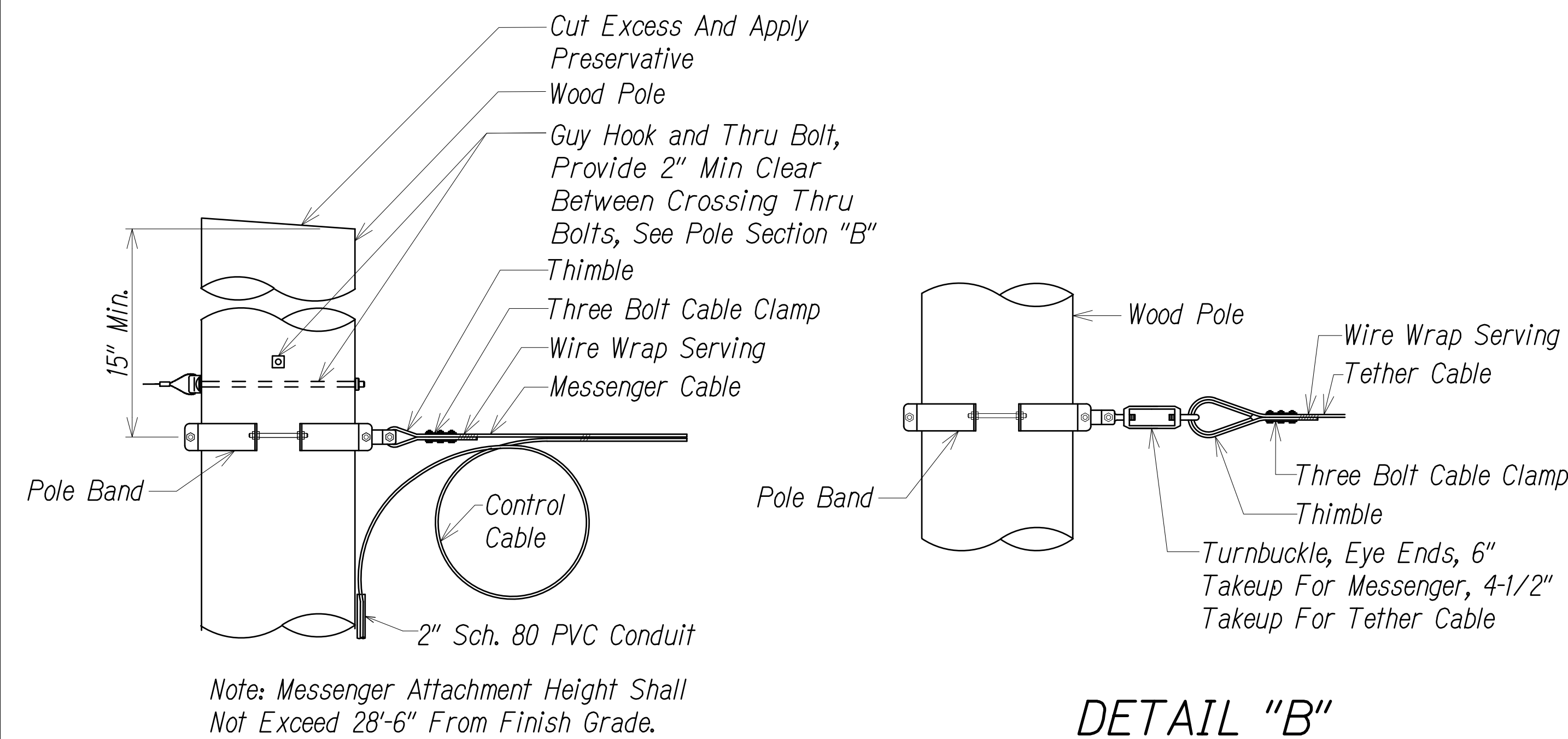
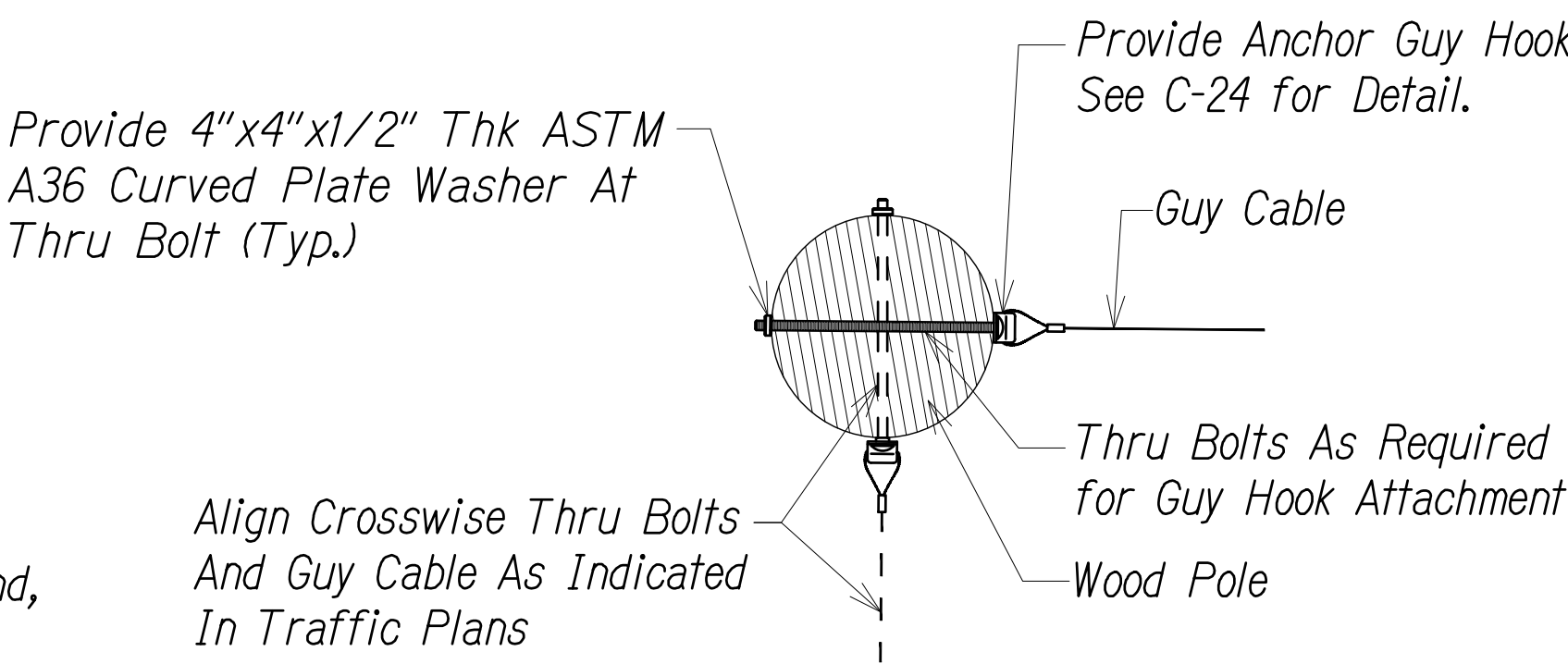


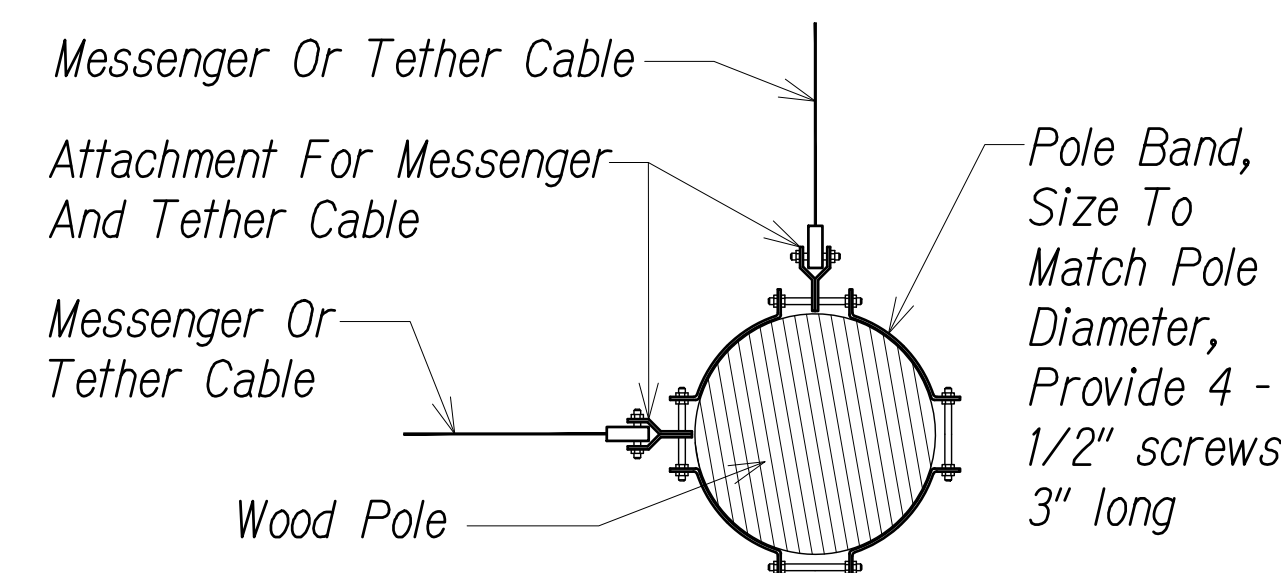
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	31A-02-17	2018	23	29



- Notes
1. Number Of Signal Faces Varies, Max. = 3. See Project Plans.
 2. Guy Wires, Messenger And Tether Cables Shall Conform To ASTM A 475, Extra High Strength, Class "C" Coating.
 3. All Cable Fittings Shall Be Galvanized.
 4. Conduit Riser Shall Be Mounted On The Backside Of The Wood Pole Away From Approaching Traffic.
 5. All Cable Connection Hardware Shall Have Capacity Greater Than Or Equal To The Minimum Breaking Strength Of Attached Cables.

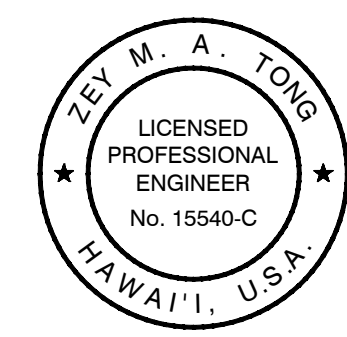


Note: Messenger Attachment Height Shall Not Exceed 28'-6" From Finish Grade.



- NOTES
1. Installation Of All Hardware Shall Be As Recommended By The Manufacturer.
 2. All Hardware Shall Be Hot Dip Galvanized.

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



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Zey Tong
APRIL 30, 2020
LIC. EXP. DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

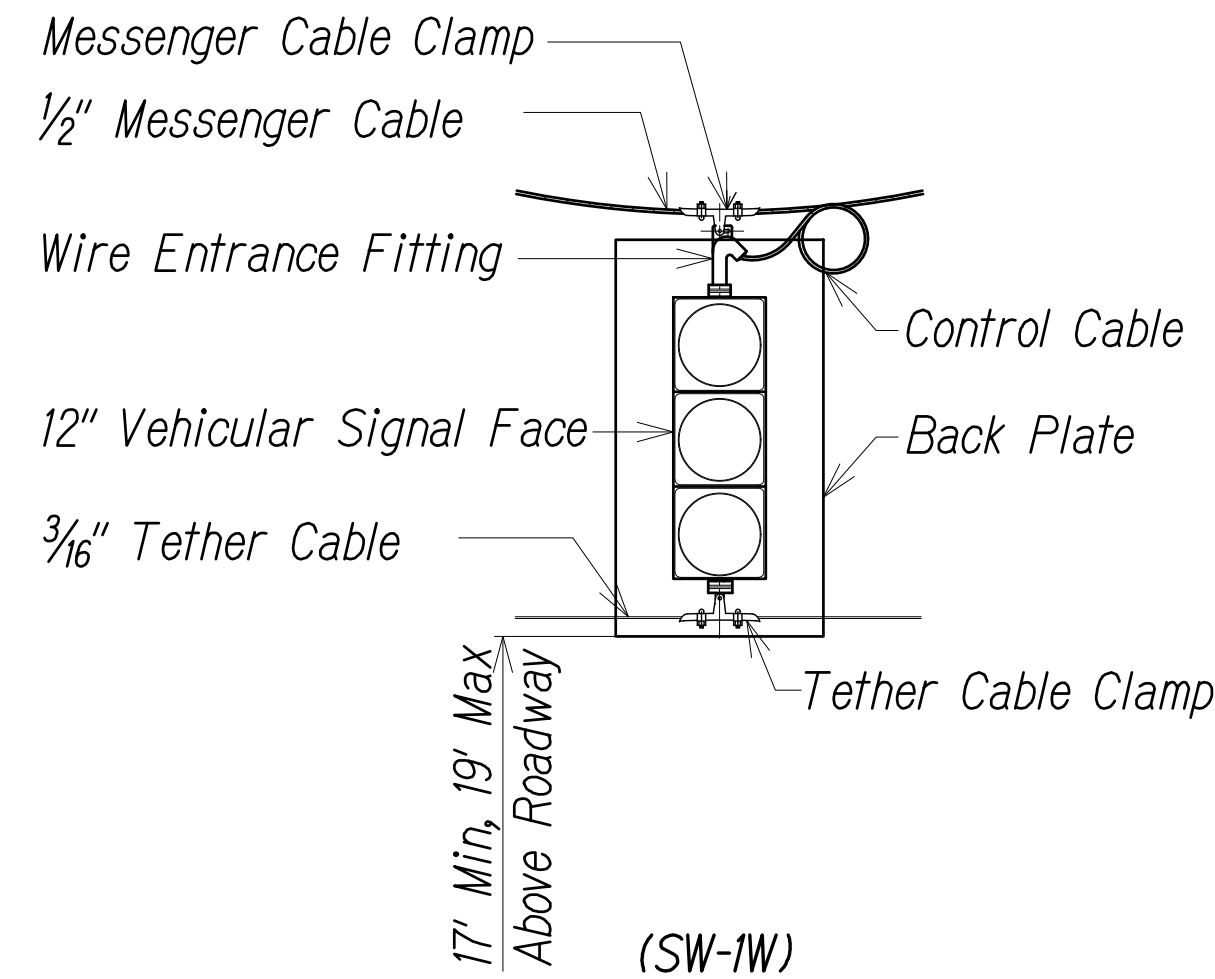
SPANWIRE DETAILS 1

Piilani Highway Improvements
Vicinity of Kulanihakai Street
Project No. 31A-02-17

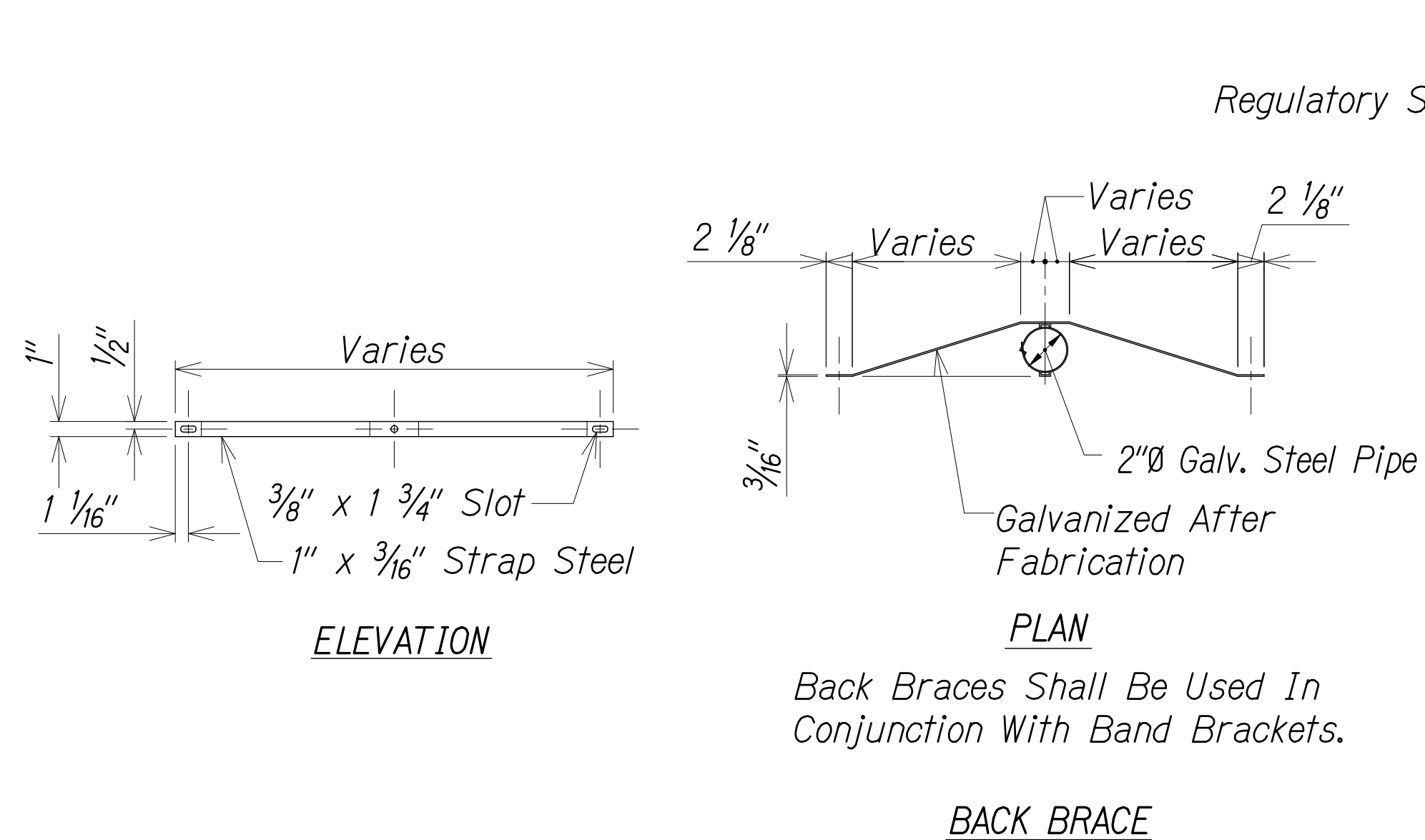
Scale: As Shown Date: Mar 2018

SHEET No. C-22 OF 24 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	31A-02-17	2018	24	29



TRAFFIC SIGNAL SPAN WIRE MOUNTING
Not To Scale

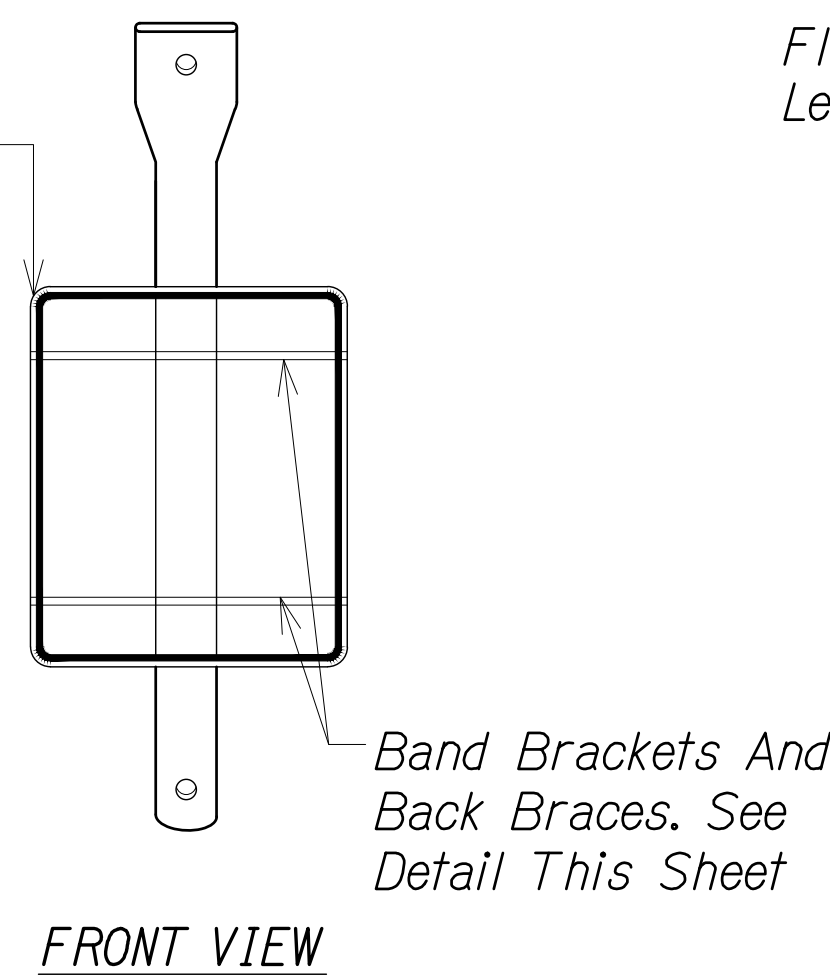


ELEVATION

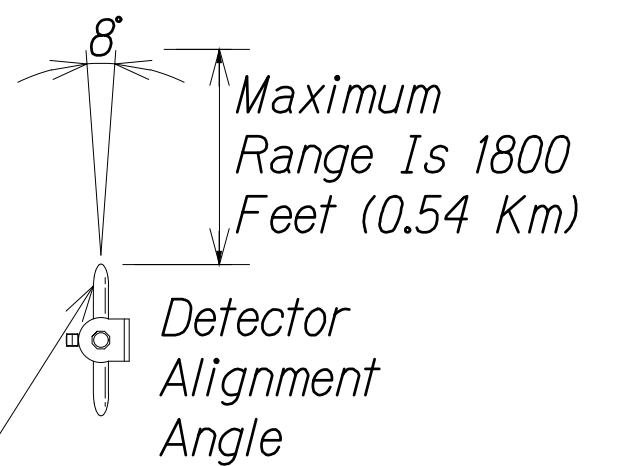
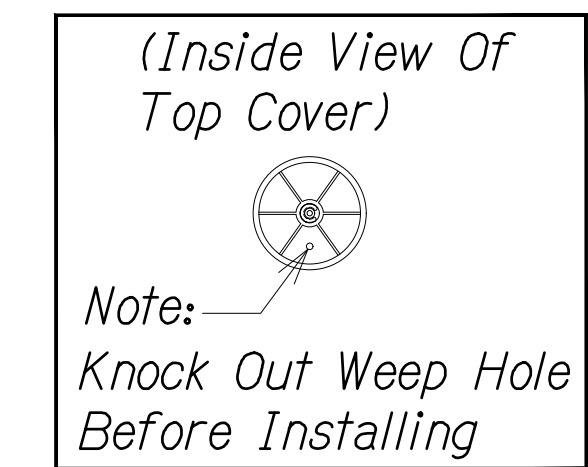
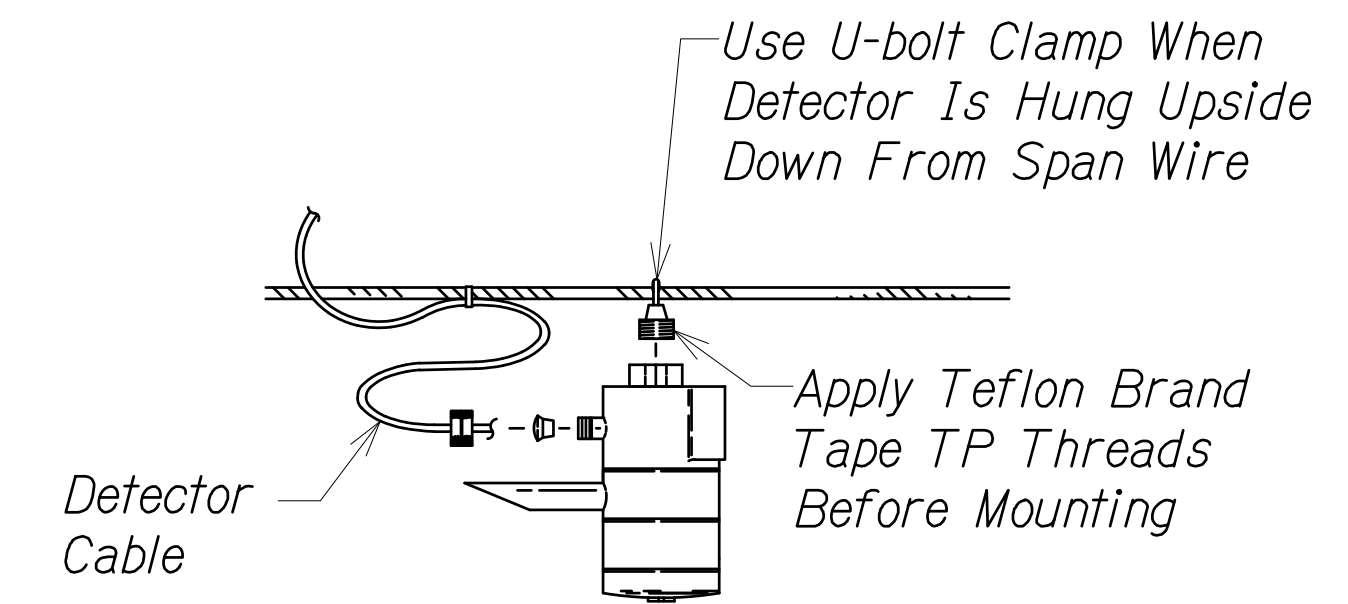
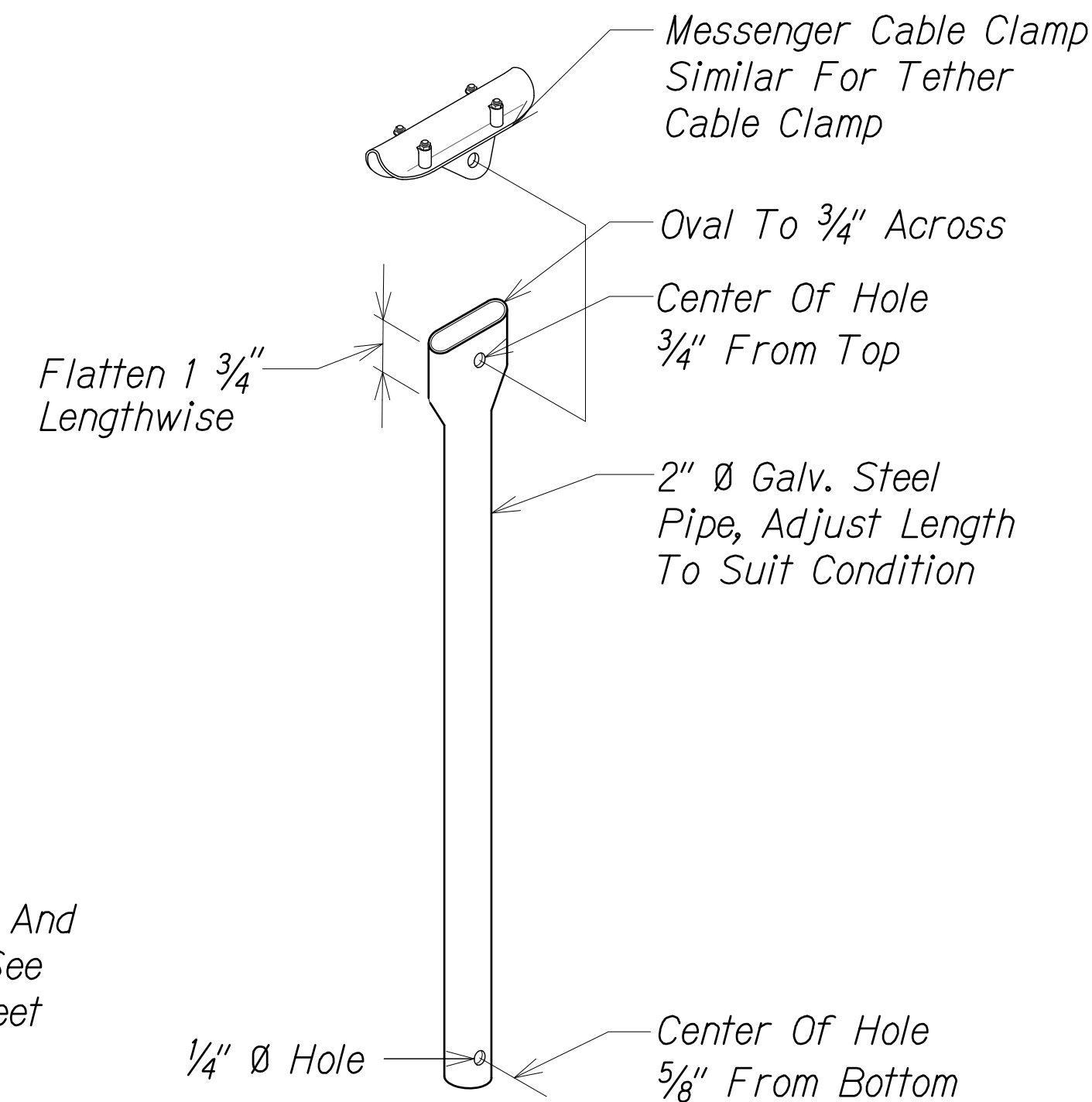
PLAN

Back Braces Shall Be Used In Conjunction With Band Brackets.

BACK BRACE

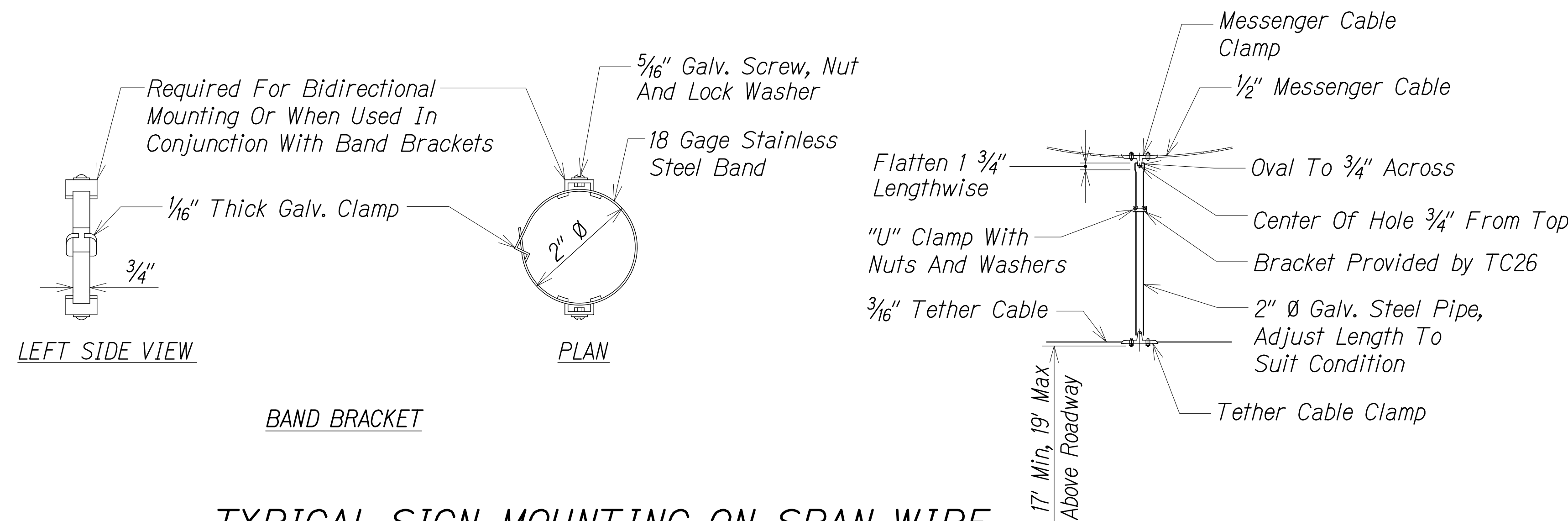


FRONT VIEW



Detector Reception Angle Varies With Distance. It Is Approximately 8° At 1800 Feet (0.54km). Due To Reflection, Reception Angle Is Increased At Close Range. The Detector Must Be Aligned Within 8° of The Farthest Point Where Priority Vehicle Is To Be Sensed.

TYPICAL SPAN WIRE INSTALLATION OF EVP DETECTOR
Not To Scale



LEFT SIDE VIEW

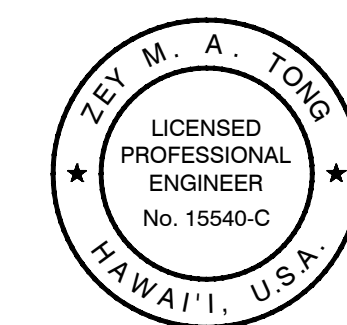
PLAN

BAND BRACKET

TYPICAL SIGN MOUNTING ON SPAN WIRE
Not To Scale

SURVEY PLOTTED BY	DATE
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	

ORIGINAL PLAN	No.
NOTE BOOK	



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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

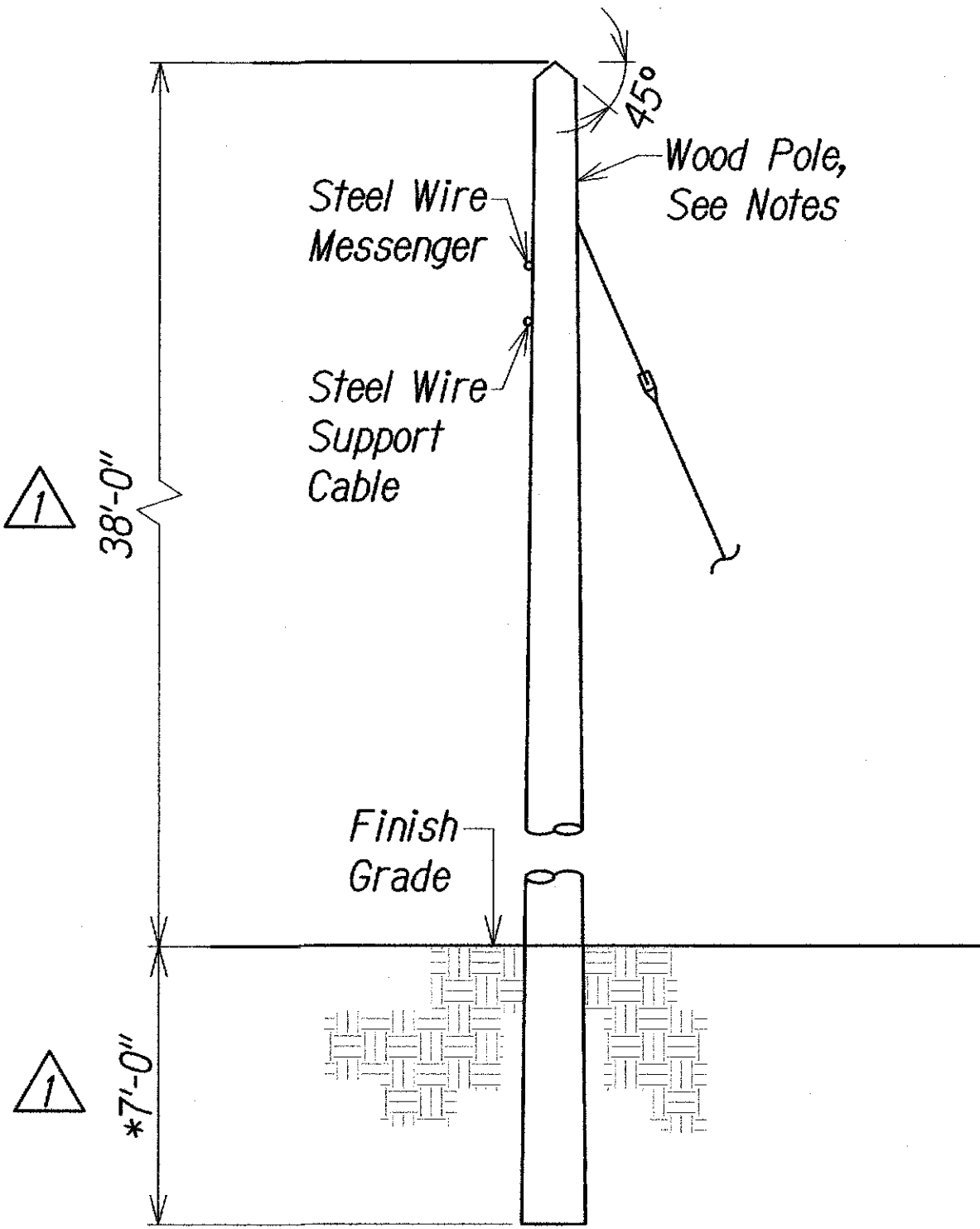
SPANWIRE DETAILS 2

*Piilani Highway Improvements
Vicinity of Kulanihakai Street
Project No. 31A-02-17*

Scale: As Shown Date: Mar 2018

SHEET No. C-23 OF 24 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	31A-02-17	2018	25	29

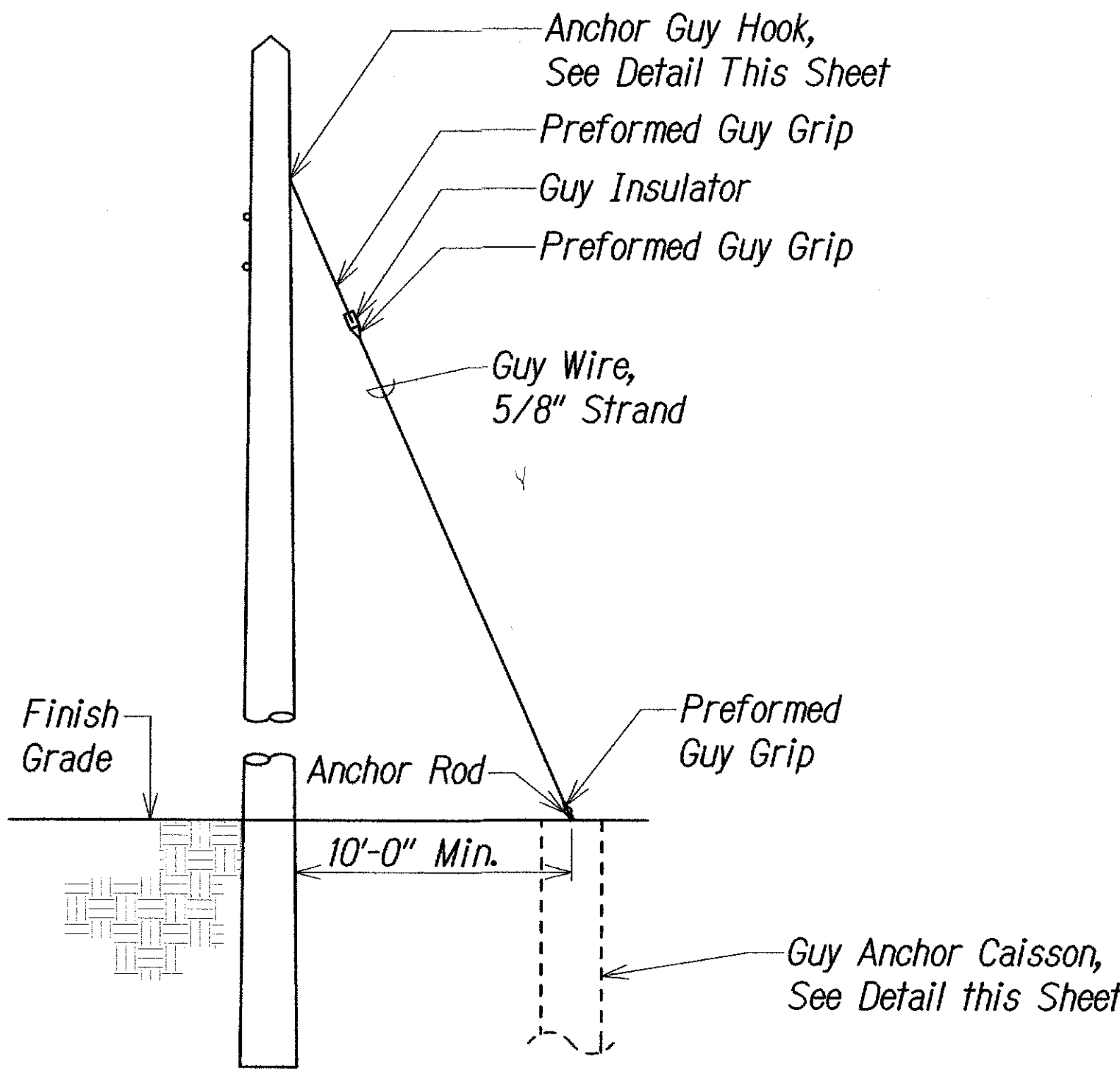


**TRAFFIC SIGNAL WOOD POLE
INSTALLATION DETAIL**
Not To Scale

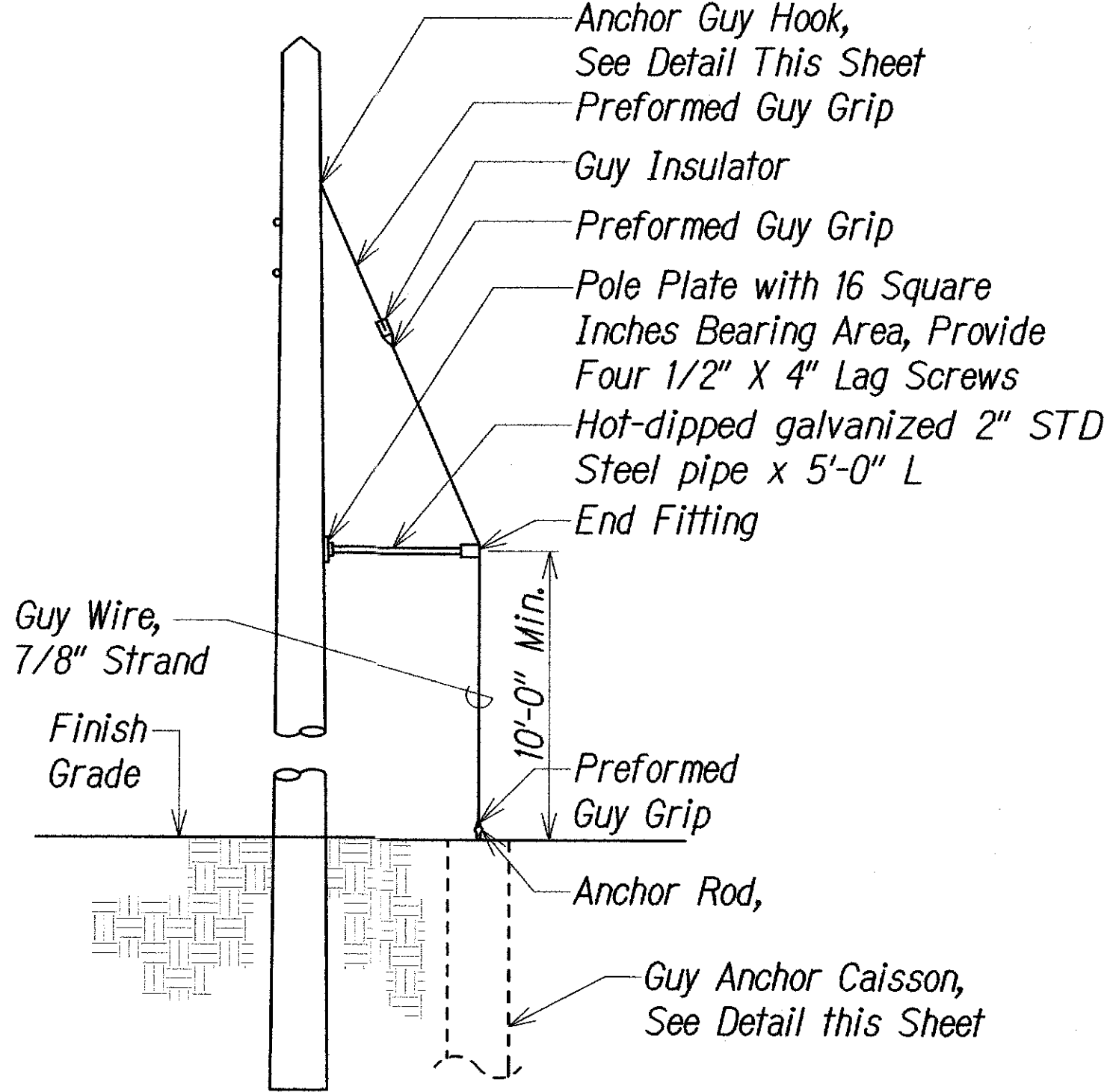
Notes

1. Wood Poles Shall Meet The Requirements Of The American National Standards Institute, Inc. And The American Wood Preservers Association.
2. Wood Poles Shall Be Douglas-Fir Poles.
3. Pole Shall be Treated with Pentachlorophenol Using the "Celon" Process, by a Licensed Termite Treatment Company.
4. Termite Treat the Bottom of the Hole and Backfill Material with Aqueous Chemical Solution Consisting of 0.5% Aldrin or 0.5% Dursban. Minimum 5 Gallons of the Solution Shall be Used for Each Hole. Application Shall be Performed by Contractor Licensed for this Type of Work. Treatment Shall be Done as the Hole is Being Backfilled.
5. See Sheet C-22 for Pole Information.

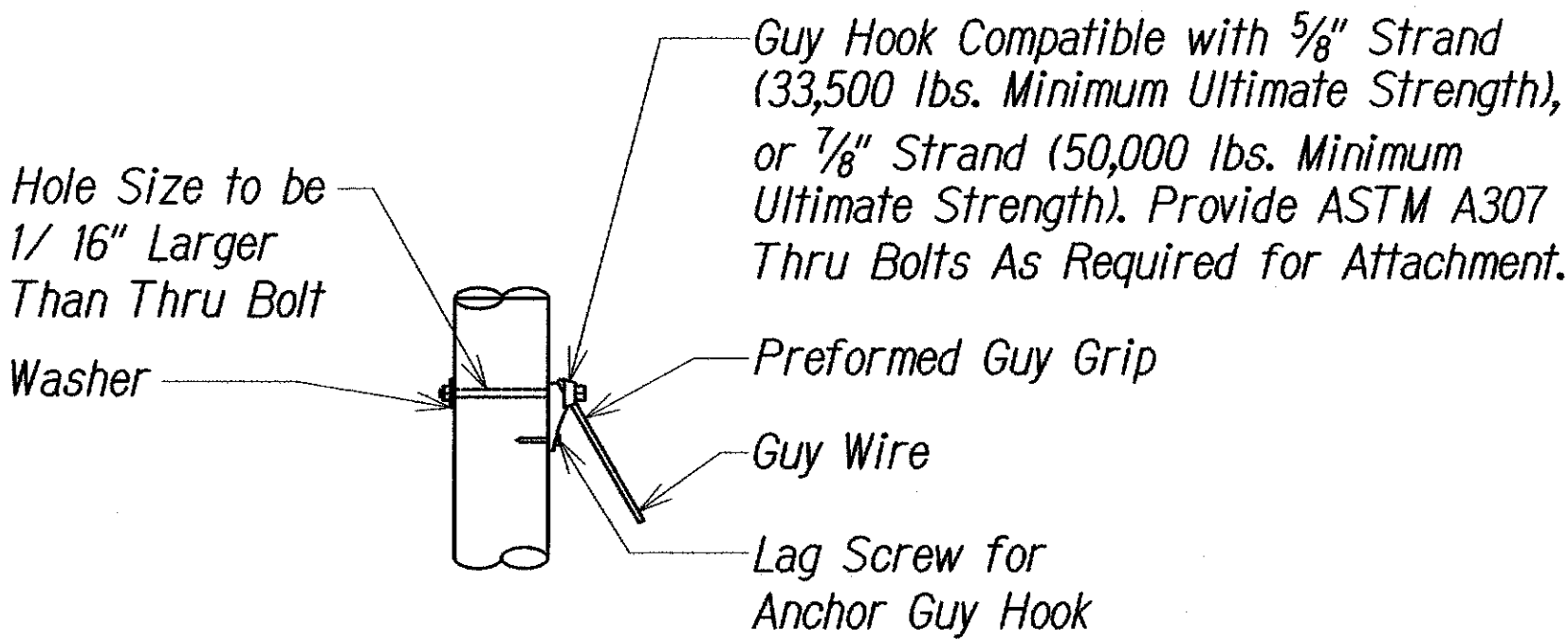
Note: Per Ongoing "Kihei High School" Project, Confirm Grade Elevation For Poles "B" and "C" with Engineer Before Installation.



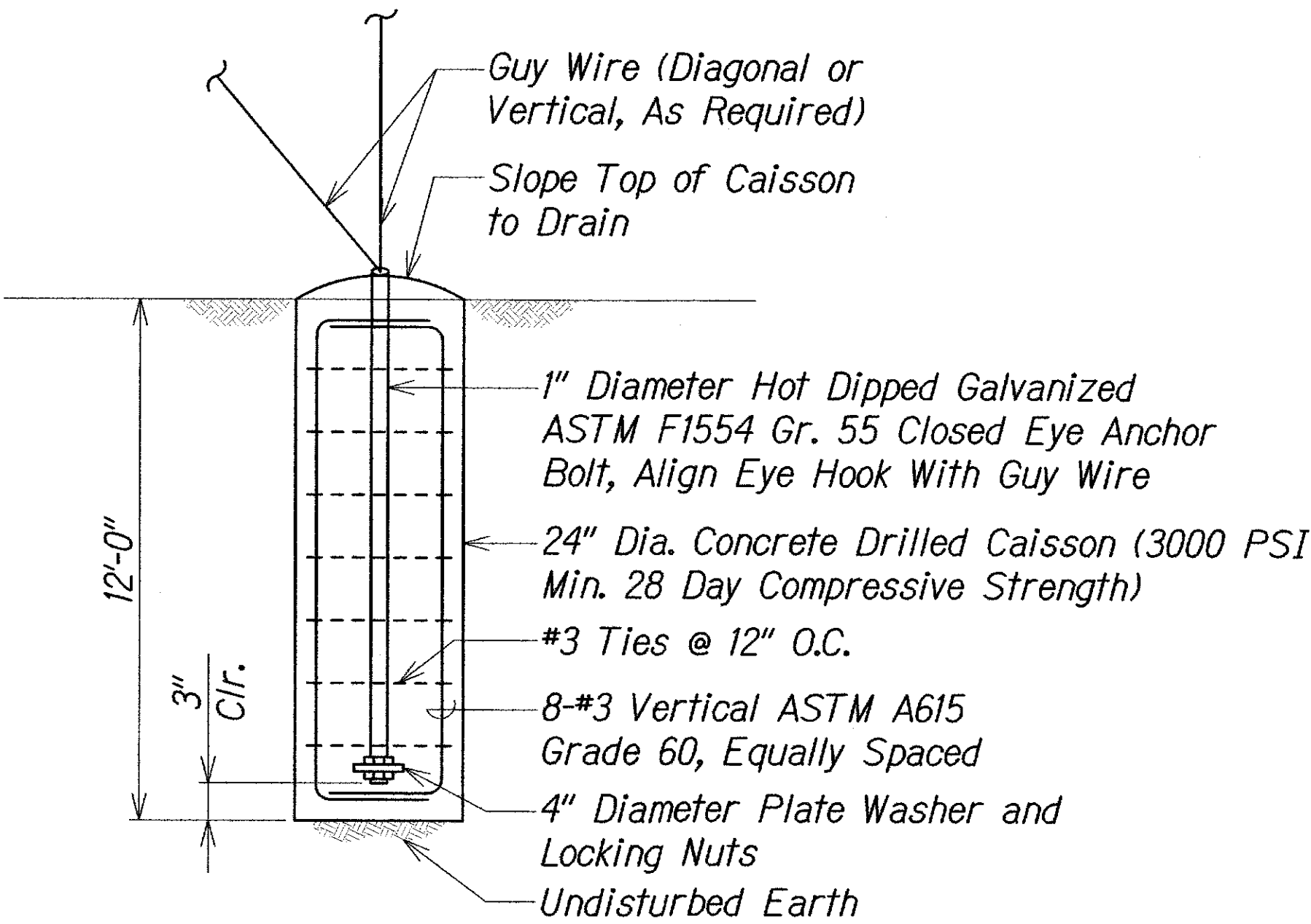
DIAGONAL GUY DETAIL
Not To Scale



SIDEWALK GUY DETAIL
Not To Scale

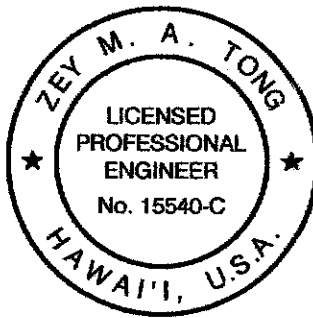


ANCHOR GUY HOOK ATTACHMENT DETAIL
Not To Scale



GUY ANCHOR CAISSON DETAIL
Not To Scale

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



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APRIL 30, 2020
LIC. EXP. DATE

1	Revised Wood Pole Height and Added Note for Pole Depth
6/04/18	
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION SPANWIRE DETAILS 3 <i>Piilani Highway Improvements Vicinity of Kulanihakai Street Project No. 31A-02-17</i> Scale: As Shown Date: Mar 2018	
SHEET No. C-24 OF 24 SHEETS	