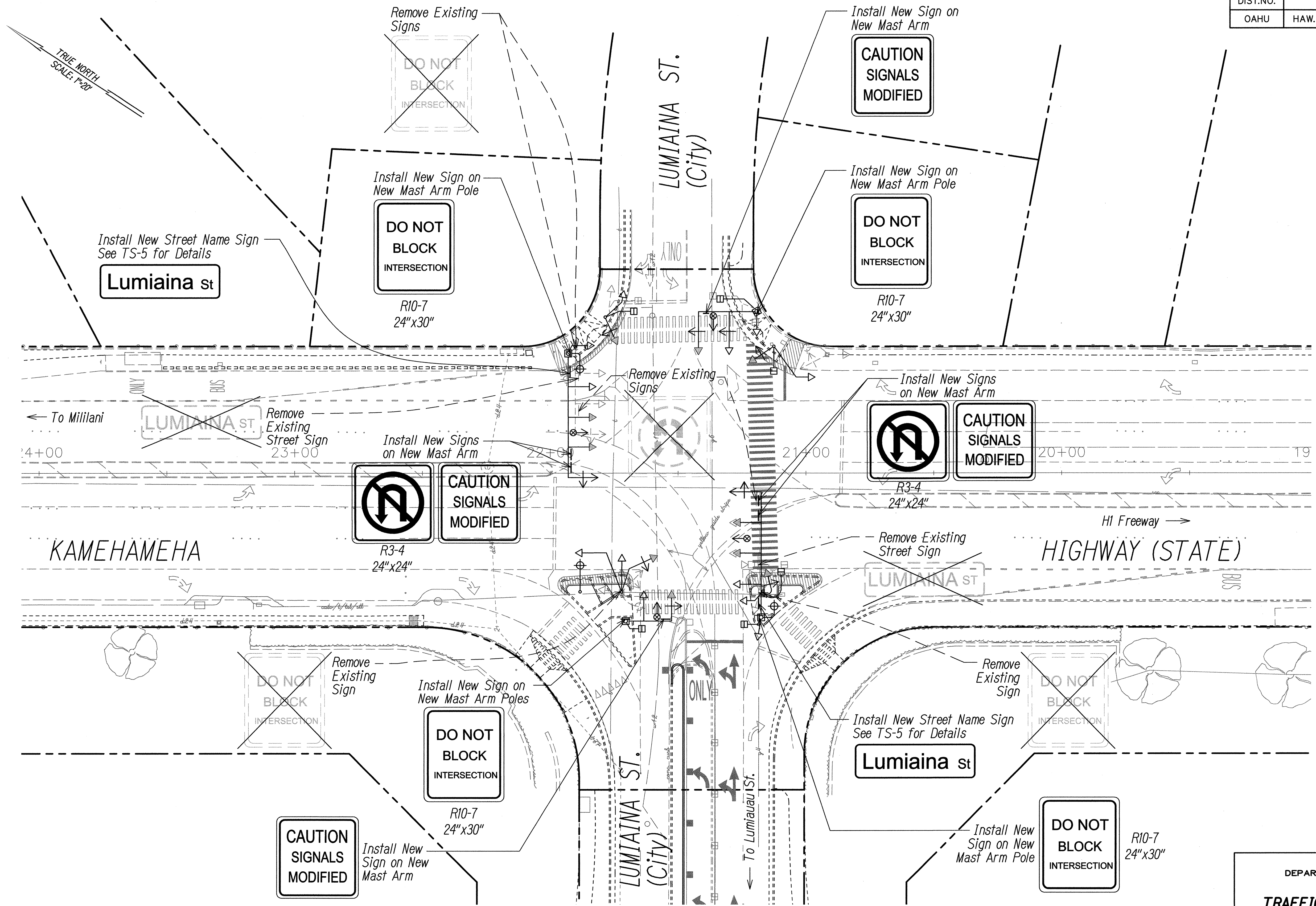
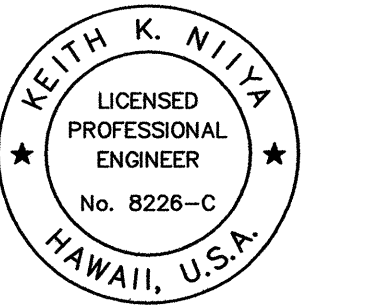


FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
OAHU	HAW.	99C-01-13	2014	28	41



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



THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION.
Keith K. Niya
AUSTIN, TSUTSUMI & ASSOC. INC. LIC. EXP. DATE APRIL 30, 2014

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TRAFFIC SIGNAL SIGNING PLAN
TRAFFIC OPERATIONAL IMPROVEMENTS
AT VARIOUS LOCATIONS
Vicinity of Kamehameha Highway and
Lumiaina Street
Project No. 99C-01-13
Scale: As Noted Date: Jan 2014
SHEET No. TS-2 OF 6 SHEETS

TRAFFIC SIGNAL SIGNING PLAN
Scale: 1"=20'

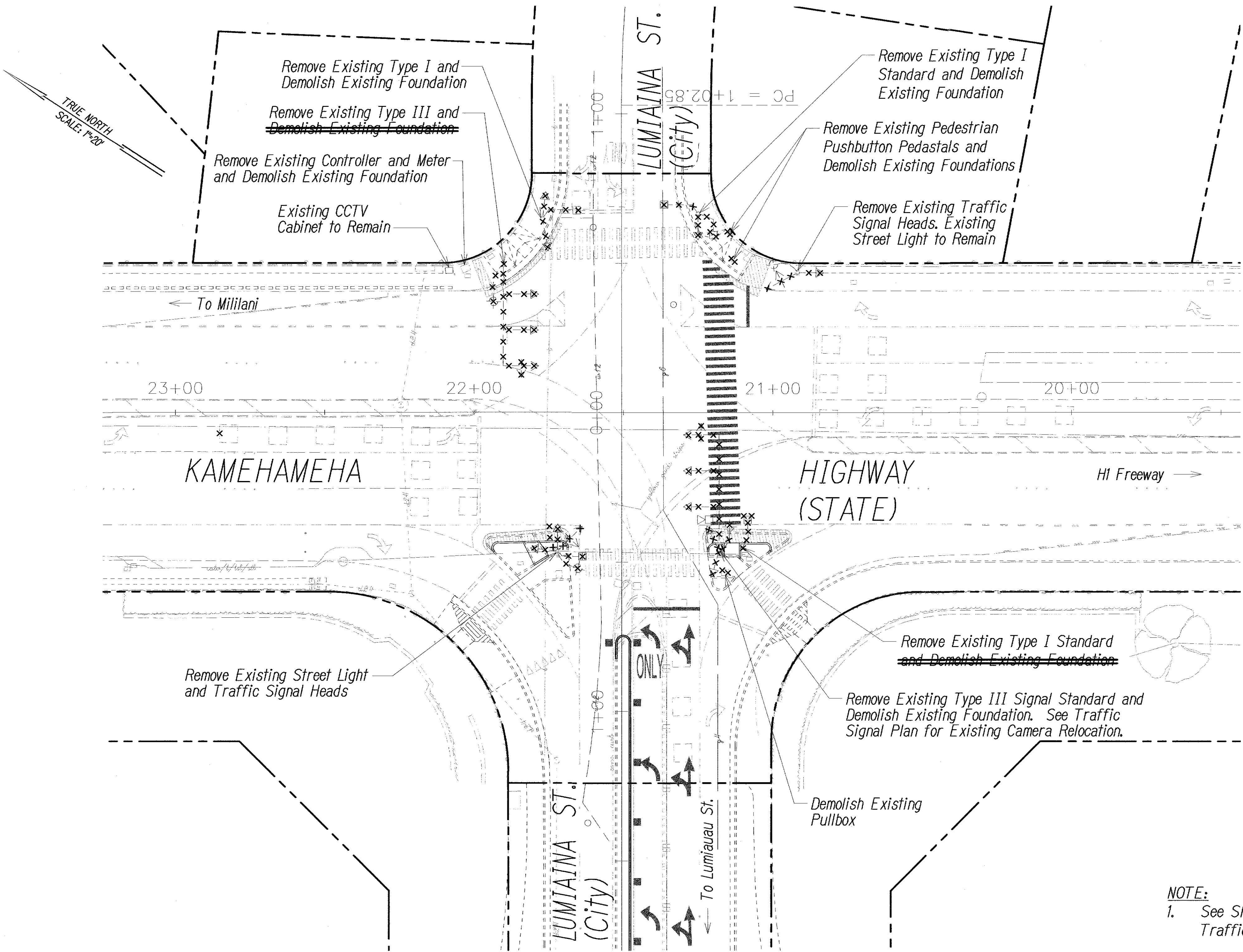
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
OAHU	HAW.	99C-01-13	2014	29	41

LEGEND FOR
AS-BUILT POSTINGS


Squiggly line for as-built deletion


Double line for as-built deletion

Roadway
Text for as-built posting

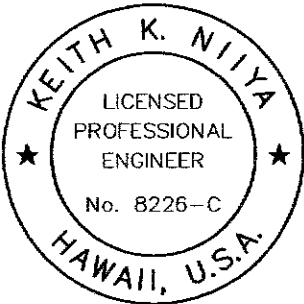


EXISTING TRAFFIC SIGNAL DEMOLITION PLAN

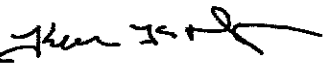
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- NOTE:
1. See Sheet TS-4 for Proposed Traffic Signal Improvements.

2. See Electrical Drawings for HECO Meter and Street Light Details.



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APR 30, 2014

AUSTIN, TSUTSUMI & ASSOC., INC. LIC. EXP. DATE

STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

HIGHWAYS DIVISION

TRAFFIC SIGNAL DEMOLITION PLAN

TRAFFIC OPERATIONAL IMPROVEMENTS AT VARIOUS LOCATIONS

Vicinity of Kamehameha Highway and Lumiaina Street

Project No. 99C-01-13

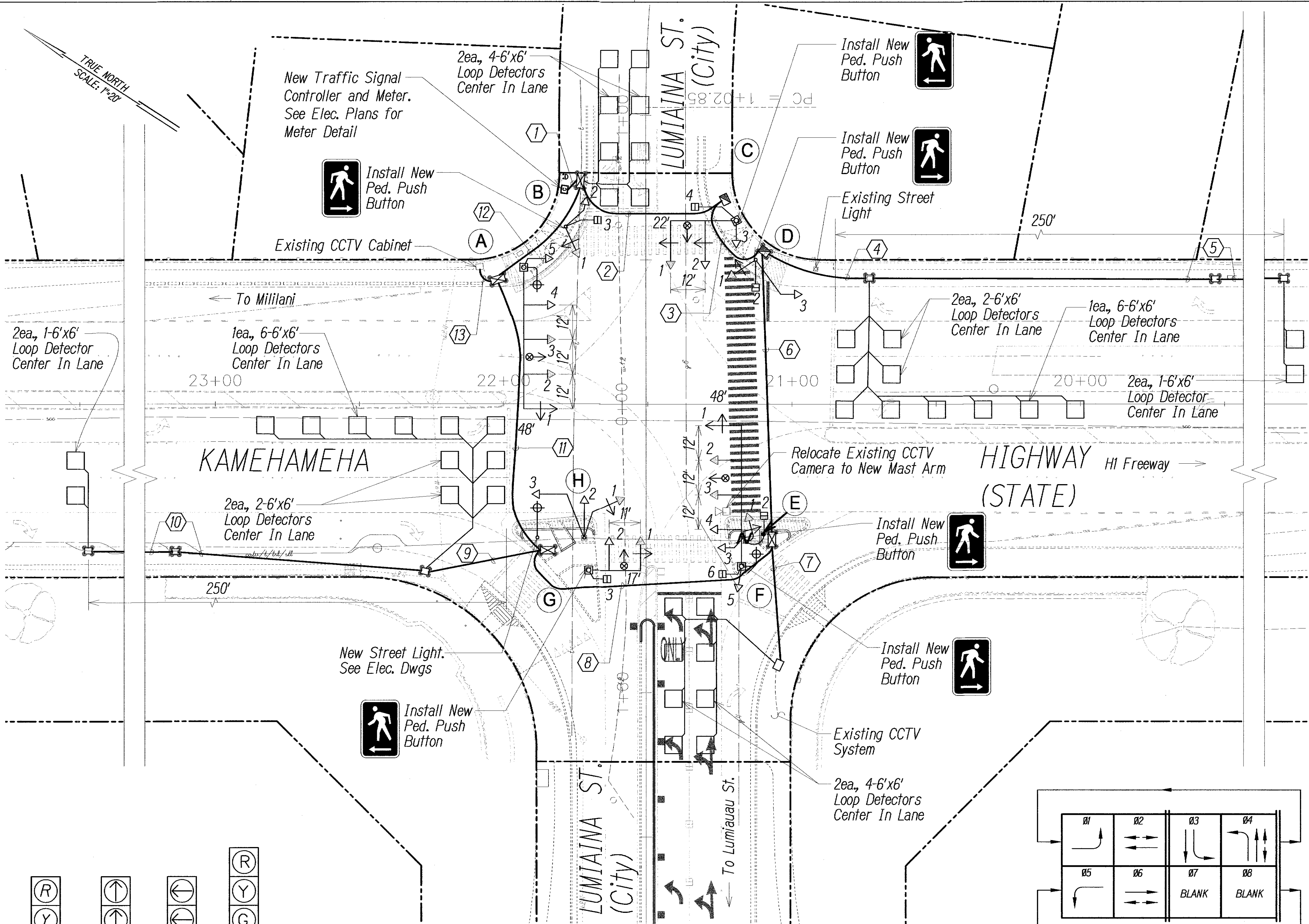
Scale: As Noted Date: Jan 2014

SHEET No. TS-3 OF 6 SHEETS

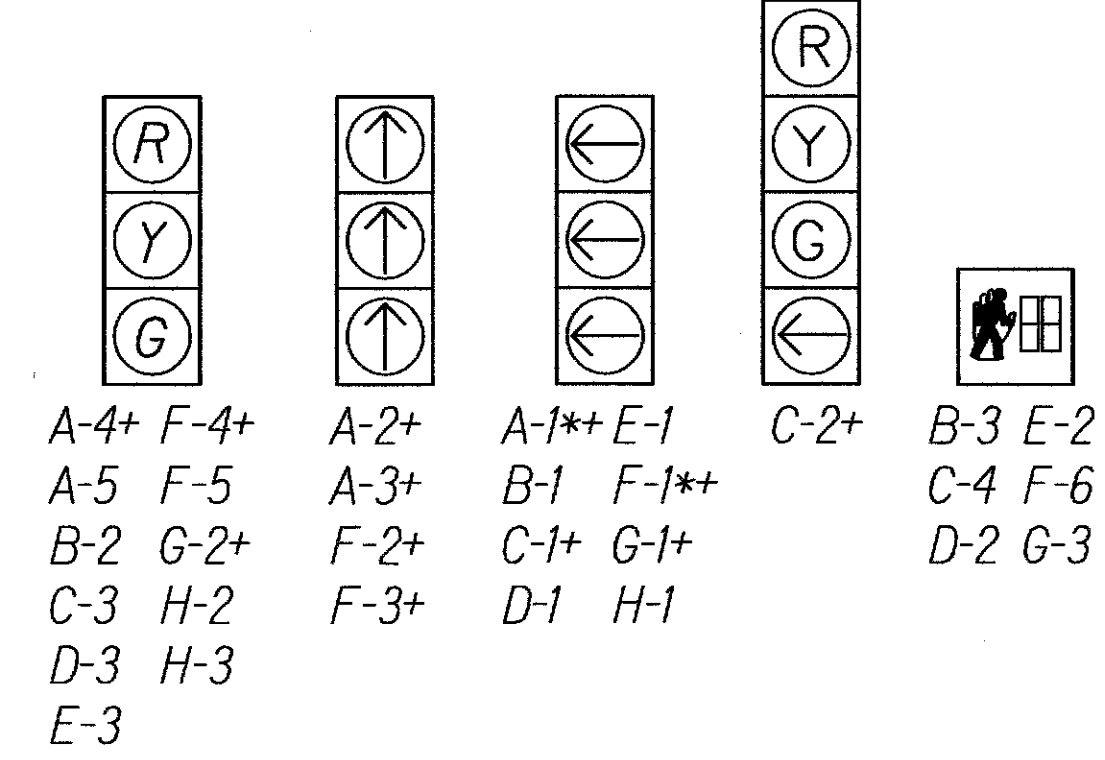
29

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

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
OAHU	HAW.	99C-01-13	2014	30	41



CONDUIT AND CABLE SCHEDULE					
Symbol	Cond.	Description	Symbol	Cond.	Description
①	3" Conc. 3" Conc. 3" Conc. 3" Conc. 2" Conc. 2" Conc.	2-26C#14 2-26C#14 10-2C#14 9-2C#14 Exist 2-12C#19 *Comm. Cable	⑦	3" Exist. 3" Exist. 3" Exist.	Exist. FOC Exist 1-24C#19 3-2C#14
②	2" Conc. 2" Conc. 2" Conc. 2" Conc. 2" Conc. 2" Conc.	1-26C#14 1-26C#14 5-2C#14 5-2C#14 2-evp Spare	⑧	3" Exist. 3" Exist. 2" Conc. 2" Conc. 2" Conc. 2" Conc.	Exist. FOC Exist. CCTV Exist 1-12C#19 1-26C#14 1-26C#14 1-2C#14 Spare
③	2" Conc. 2" Conc. 2" Conc. 2" Conc. 2" Conc. 2" Conc.	1-26C#14 1-26C#14 5-2C#14 4-2C#14 1-evp Spare	⑨	2" Conc.	5-2C#14
④	Exist. 2" Conc.	5-2C#14	⑩	2" Conc.	2-2C#14
⑤	Exist. 2" Conc.	2-2C#14	⑪	3" Exist. 3" Exist. 3" Exist. 2" Conc. 2" Conc. 2" Conc. 2" Conc.	Exist. FOC Exist. FOC Exist. CCTV Exist 1-12C#19 1-26C#14 1-26C#14 1-evp 6-2C#14 Spare
⑥	2" Conc. 2" Conc. 2" Conc. 2" Conc. 2" Conc.	1-26C#14 1-26C#14 4-2C#14 1-evp Spare	⑫	2" Conc. 2" Conc. 2" Conc. 2" Conc. 2" Conc.	1-26C#14 1-26C#14 2-evp 6-2C#14 Exist 2-12C#19 *Comm. Cable Spare
			⑬	Exist.	*Comm. Cable

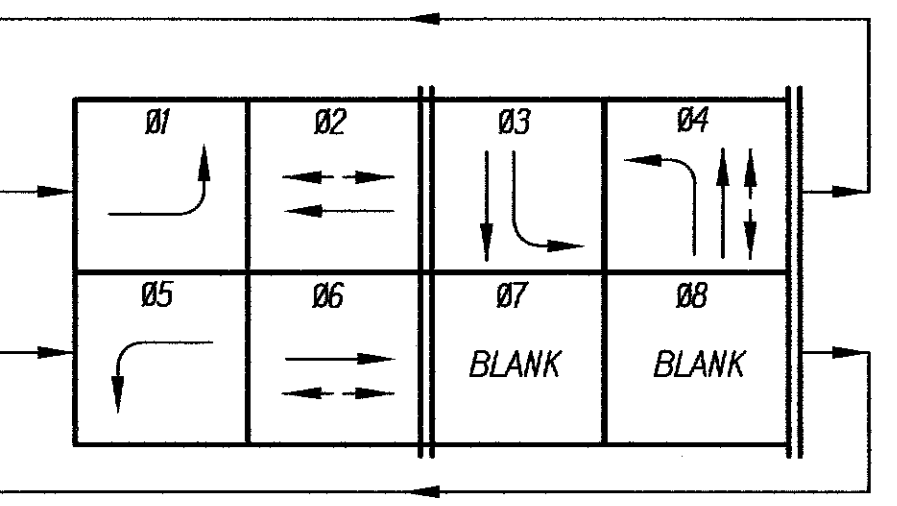


SIGNAL INDICATIONS

* Programmable Visibility Heads
+ Indicates Back Plate w/ Retro Reflective Border

NOTES:

- For Traffic Signal System References, See Standard Plans Summary Sheet 2.
- Contractor to Locate all Existing Conduits and Verify the Location of the Traffic Signal Standards and Length of Mast Arms Prior to Ordering.
- Foundation for Type II Traffic Signal Standards with Mast Arms less than 40 feet in Length shall be constructed in accordance with Hawaii State Department of Transportation Standard Plans, 2008 as Amended.
- The Contractor shall be responsible to coordinate the foundation with the Traffic Signal Standard provided; any changes required to the foundation due to the Traffic Signal Standard provided shall be designed by a Licensed Structural Engineer. All Design and Construction Cost for these changes will be borne by the Contractor.
- The Contractor shall ensure that minimum accessible clearance is provided from the base of the Type II and Type III Traffic Signal Standard.
- For Traffic Signal Controller and CCTV Cabinet Power, see Electrical Plans.



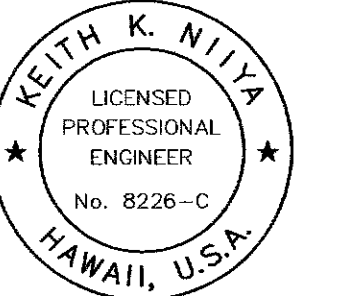
PHASE DIAGRAM

New 170E Controller with Software
New 332A Cabinet

LEGEND FOR AS-BUILT POSTINGS

- Squiggly line for as-built deletion
- Double line for as-built deletion
- Roadway Text for as-built posting

*Communication Cable Cost Shall be Considered Incidental to the Various Traffic Signal Items, See TS-1 Note #23.



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APR 30, 2014
AUSTIN, TSUTSUMI & ASSOC. INC. L.C. EXP. DATE

**STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
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TRAFFIC SIGNAL PLAN
TRAFFIC OPERATIONAL IMPROVEMENTS
AT VARIOUS LOCATIONS
Vicinity of Kamehameha Highway and Lumiana Street
Project No. 99C-01-13
Scale: As Noted Date: Jan 2014
SHEET No. TS-4 OF 6 SHEETS