

C:\CIVIL 3D PROJECTS\2012_153.000 KEAAU-PAHOA RD IMPR RTE130\FOUNDABOUT DESIGN\01 CIVIL DRAWINGS\02 ORCH AND MAKUU\082 TCP NOTES.DWG 8/25/2020 11:18 AM SRODELAS

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0130(27)	2021	82	116

GENERAL NOTES FOR TRAFFIC CONTROL PLAN:

1. The Permittee shall make minor adjustments at intersections, driveways, ramps, bridges, structures, etc., to fit field conditions.
2. Cones or delineators shall be extended to a point where they are visible to approaching traffic.
3. Traffic control devices shall be installed such that the sign or device farthest from the work area shall be placed first. The others shall then be placed progressively toward the work area.
4. Regulatory and warning signs within the construction zone that are in conflict with the traffic control plans shall be removed or covered. All signs shall be restored upon completion of work.
5. Flaggers and/or police officers shall be in sight of each other or in direct communication at all times.
6. When required by the issuing office, the Contractor shall install a flashing arrow signal.
7. Sign spacings (D), taper lengths (T), and spacings of cones or delineators shall be as shown in Table 1, unless otherwise noted on the traffic control plans.
8. All traffic lanes shall be a minimum of 10 feet wide.
9. All construction warning signs shall be promptly removed or covered whenever the message is not applicable or not in use.
10. The backs of all signs used for traffic control shall be appropriately covered to preclude the display of inapplicable sign messages (i.e., when signs have messages on both faces).
11. At the end of each day's work or as soon as the work is completed, the Permittee shall remove all traffic control devices no longer needed to permit free and safe passage of public traffic. Removal shall be in the reverse order of installation.
12. Replace existing faded or obliterated pavement markings that are necessary for safe traffic flow in the construction area with temporary or permanent markings before opening the roadway to public each day.
13. All work zone traffic control devices shall comply with the "Statewide Guideline For Work Zone Traffic Control Devices" dated September 13, 2000.
14. Stationary construction lasting three (3) days or longer throughout the project corridor shall require long-term construction warning signs and regulatory speed limit signs, see the HDOT Work Zone Signing Plan, Notes and Details Sht. 83.

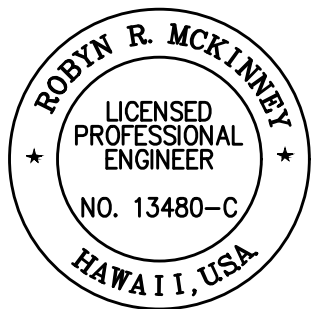
15. Work may be performed only between the hours of 8:30 a.m. and 3:00 p.m., Monday through Friday, except State Holidays, unless when otherwise approved in writing by the HDOT Director and/or designated Representative.

During work hours, written approval by the HDOT Director and/or designated Representative shall be required for any of the following:
 - Street closures
 - Lane closures of more than one (1) lane.
16. The Contractor shall submit the site-specific traffic control plan(s) intended for use during construction to the State of Hawaii Department of Transportation's District Engineer and/or designated Representative, with the traffic notification, a minimum of one (1) week prior to the scheduled start of the associated construction activities for review and approval. Construction may not proceed until the District Engineer and/or designated Representative has approved the site-specific traffic control plan(s).
17. Include a signed certification statement affirming that the site-specific traffic control plan(s) submitted to HDOT has been prepared under the direction or supervision of a Licensed Professional Engineer, is in compliance with the current HDOT and FHWA standards, and is an appropriate application of traffic control measures for the construction work to be performed.

TABLE 1 FOR TRAFFIC CONTROL PLAN

Posted Speed Limit (MPH)	Sign Spacing (D) (Feet)	Taper Length (T) (Feet)		Longitudinal Buffer Space (B) (Feet)	Spacing of Cones or Delineators (Feet)		
		W = 12' or Less Ⓢ	W = Greater Than 12' Ⓢ		Taper	Tangent	Work Area
20	250	200	W X 17	35	20	20	10
25	250	200	W X 17	55	25	25	10
30	250	250	W X 20	85	30	30	10
35	250	250	W X 20	120	35	35	10
40	500	350	W X 30	170	40	40	10
45	500	550	W X 45	220	45	45	10
50	1000	600	W X 50	280	50	50	10
55	1000	700	W X 55	335	55	55	10

Ⓢ Notes: W = Width of Lane or Shoulder



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.

SIGNATURE: Robyn R. McKinney 04/30/22
EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

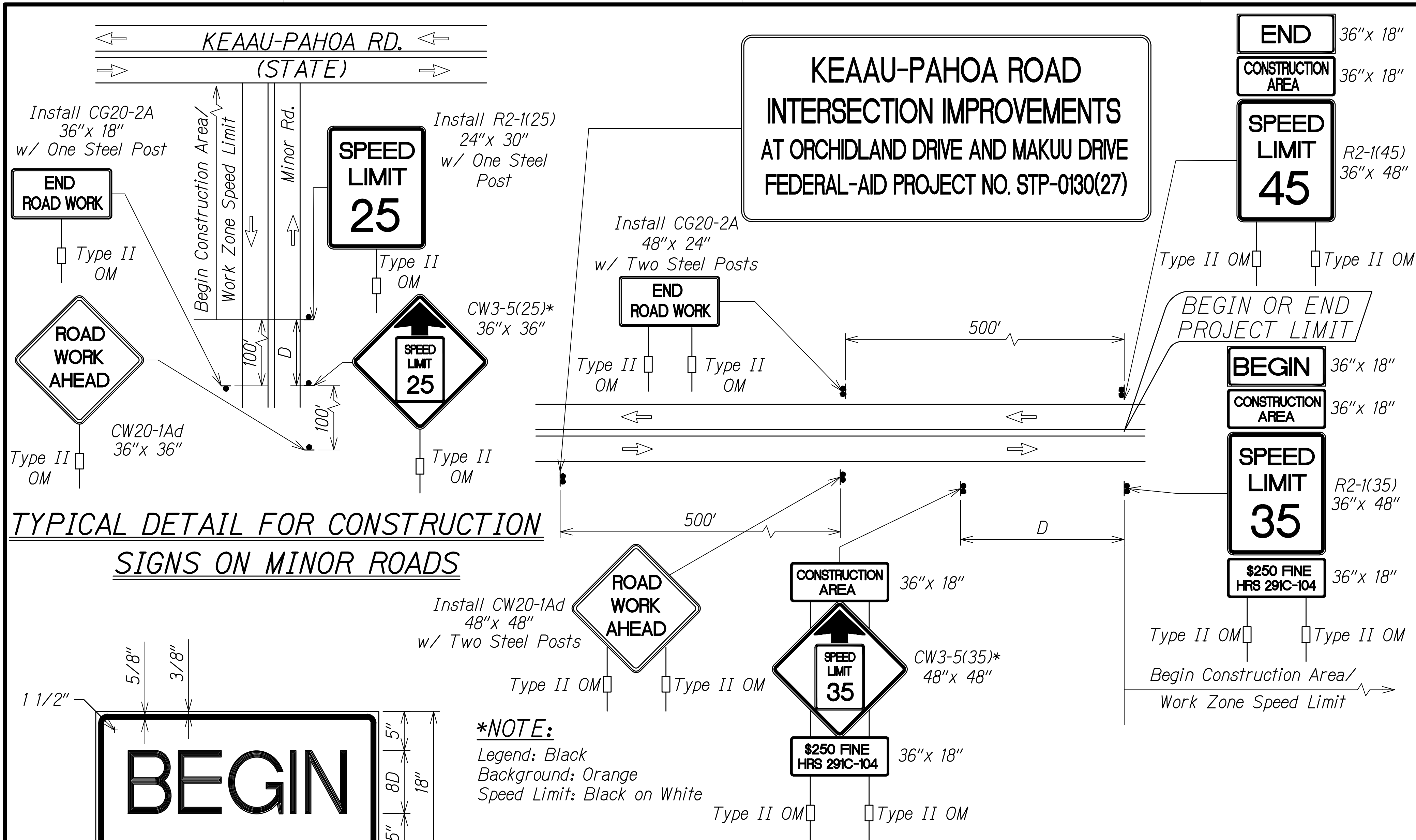
TRAFFIC CONTROL PLAN
NOTES

KEAAU-PAHOA ROAD
INTERSECTION IMPROVEMENTS
at Orchidland Drive & Makuu Drive
Federal-Aid Project No. STP-0130(27)

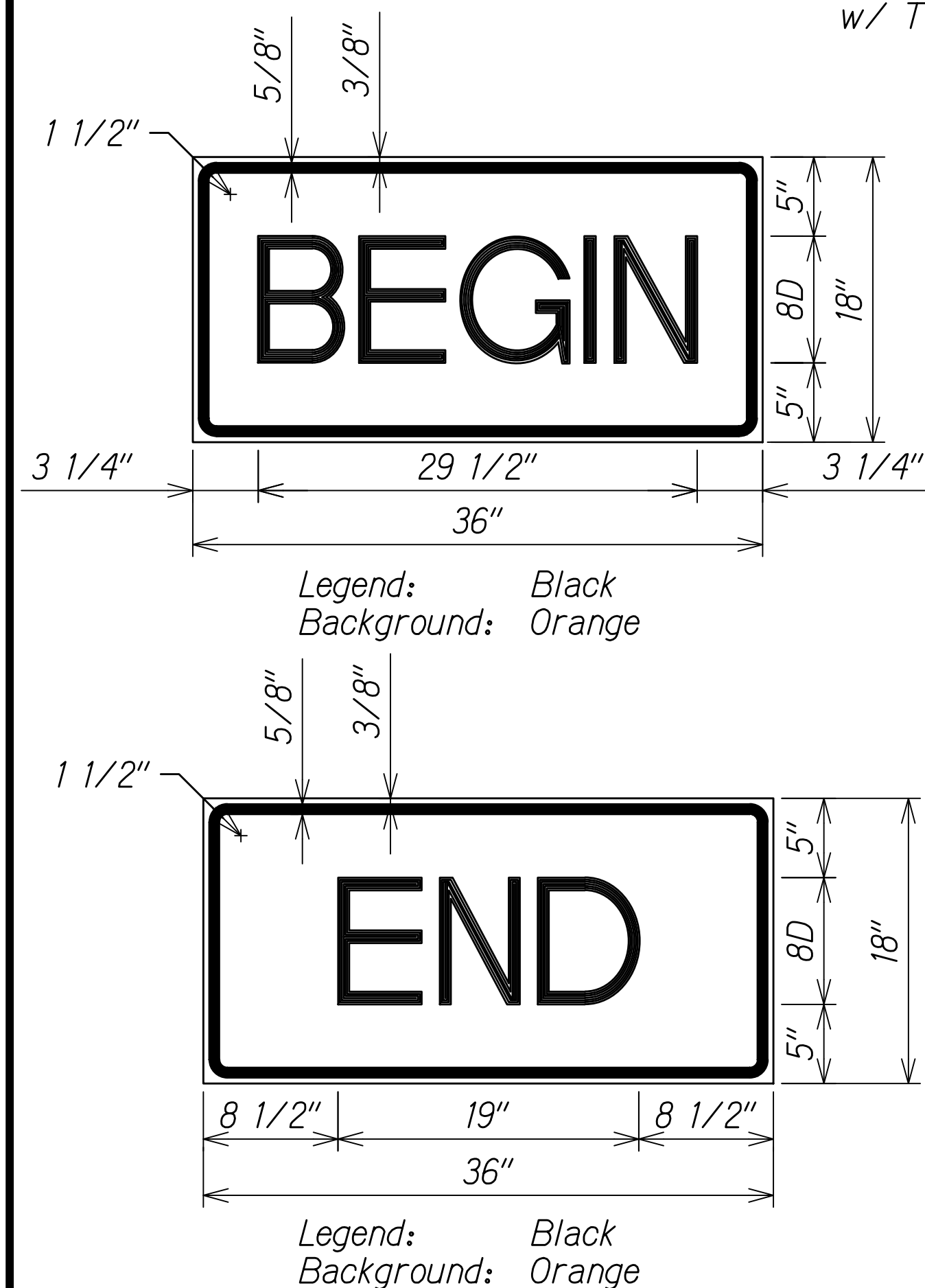
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SHEET No. 1 OF 8 SHEETS

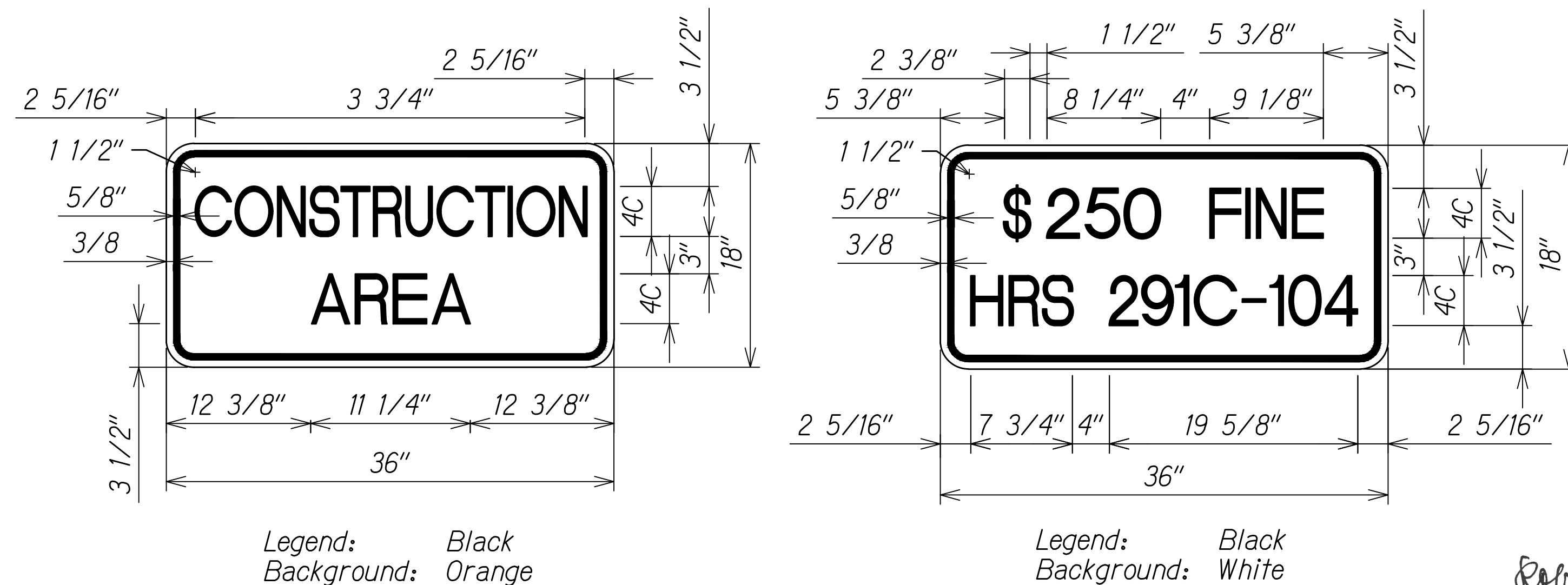
C:\CIVIL 3D PROJECTS\2012_153.000_KEAAU-PAHOA RD IMPR RTE130\ROUNDABOUT DESIGN\01 CIVIL DRAWINGS\02 ORCH AND MAKUU\083 WORK ZONE PLANDWG 8/26/2020 2:29 PM KSAW



TYPICAL DETAIL FOR CONSTRUCTION SIGNS ON MINOR ROADS



TYPICAL DETAIL FOR CONSTRUCTION SIGNS ON TWO LANE OR MULTILANE UNDIVIDED HIGH SPEED HIGHWAY



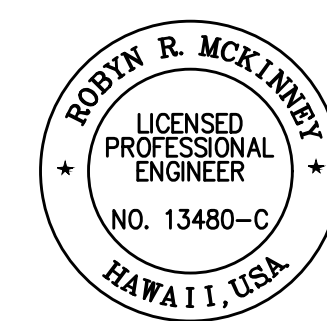
FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0130(27)	2021	83	116

NOTES:

- This Work Zone Sign Plan is intended for use on long-term stationary work zones/construction phases (3 days or more). All work zones or construction phases less than 3 days duration will use Traffic Control Plans shown in Section 645 of The Standard Specifications.
- All existing regulatory speed limit signs with posts within the work zone/project limits shall be removed and replaced with work zone speed limit sign assemblies R2-1(XX) and CW3-5(XX) with "CONSTRUCTION AREA" and "\$250 FINE HRS 291C-104" Supplemental Signs).
- Construction sign assemblies shall be installed on both the approaching and trailing ends of each work zones as shown on this plan.
- Each construction warning sign and work zone speed limit assembly shall have a minimum of two (2) Type II OM. Installation of each Type II OM shall be considered incidental to Item No. 645.0100, Traffic Control.
- Upon the completion of all physical work or as directed by the Engineer, all construction signs and work zone speed limit assemblies shall be removed. All speed limit signs and posts that were existing at the start of the project within the work zone/project limits shall be restored back to their original locations and configurations.
- Placement of construction signs shall not obstruct the path of pedestrians and bicyclists.
- The removal and restoration of existing regulatory speed limit signs with new posts along with the installation shall be considered incidental to Item No. 631.0100 Regulatory Sign. Maintenance and removal of work zone speed limit sign assemblies shall be considered incidental to Item No. 645.0100, Traffic Control.

TABLE 1

Guideline for Advance Placement of Speed Reduction Sign CW3-5(XX), Construction Area Speed Limit		
Existing Posted Speed Limit (MPH)	XX-New Construction Area Speed Limit (MPH)	D-Reduced Speed Limit Sign Spacing to First Construction Area Speed Limit Sign (Feet)
35	25	175
45	35	250



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.

SIGNATURE: Rodney R. McKinney EXPIRATION DATE OF THE LICENSE: 04/30/22

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

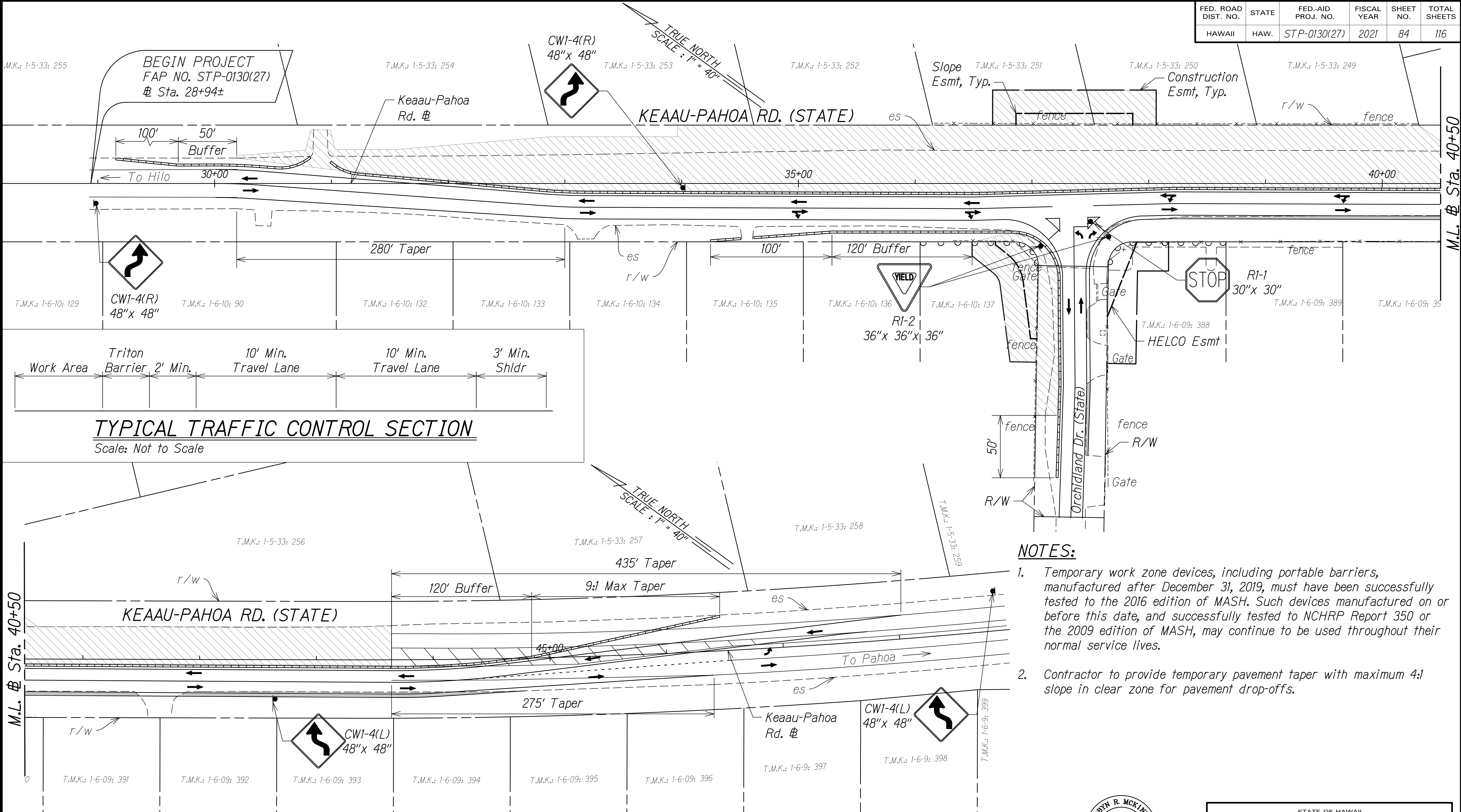
WORK ZONE SIGNING PLAN.
NOTES AND DETAILS

KEAAU-PAHOA ROAD
INTERSECTION IMPROVEMENTS
at Orchidland Drive & Makuu Drive
Federal-Aid Project No. STP-0130(27)

Scale: Not to Scale Date: Sept, 2020

SHEET No. 2 OF 8 SHEETS

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0130(27)	2021	84	116



- NOTES:**
- Temporary work zone devices, including portable barriers, manufactured after December 31, 2019, must have been successfully tested to the 2016 edition of MASH. Such devices manufactured on or before this date, and successfully tested to NCHRP Report 350 or the 2009 edition of MASH, may continue to be used throughout their normal service lives.
 - Contractor to provide temporary pavement taper with maximum 4:1 slope in clear zone for pavement drop-offs.

LEGEND:

	Triton Barrier		Temp. AC Pav't
	Work Area		
	Direction of Traffic		

ORCHIDLAND ROUNDABOUT - PHASE 1
Scale: 1" = 40'

GRAPHIC SCALE:

40' 20' 0 40' 80'

Scale: 1" = 40'

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Robyn McKinney 04/30/22
SIGNATURE EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

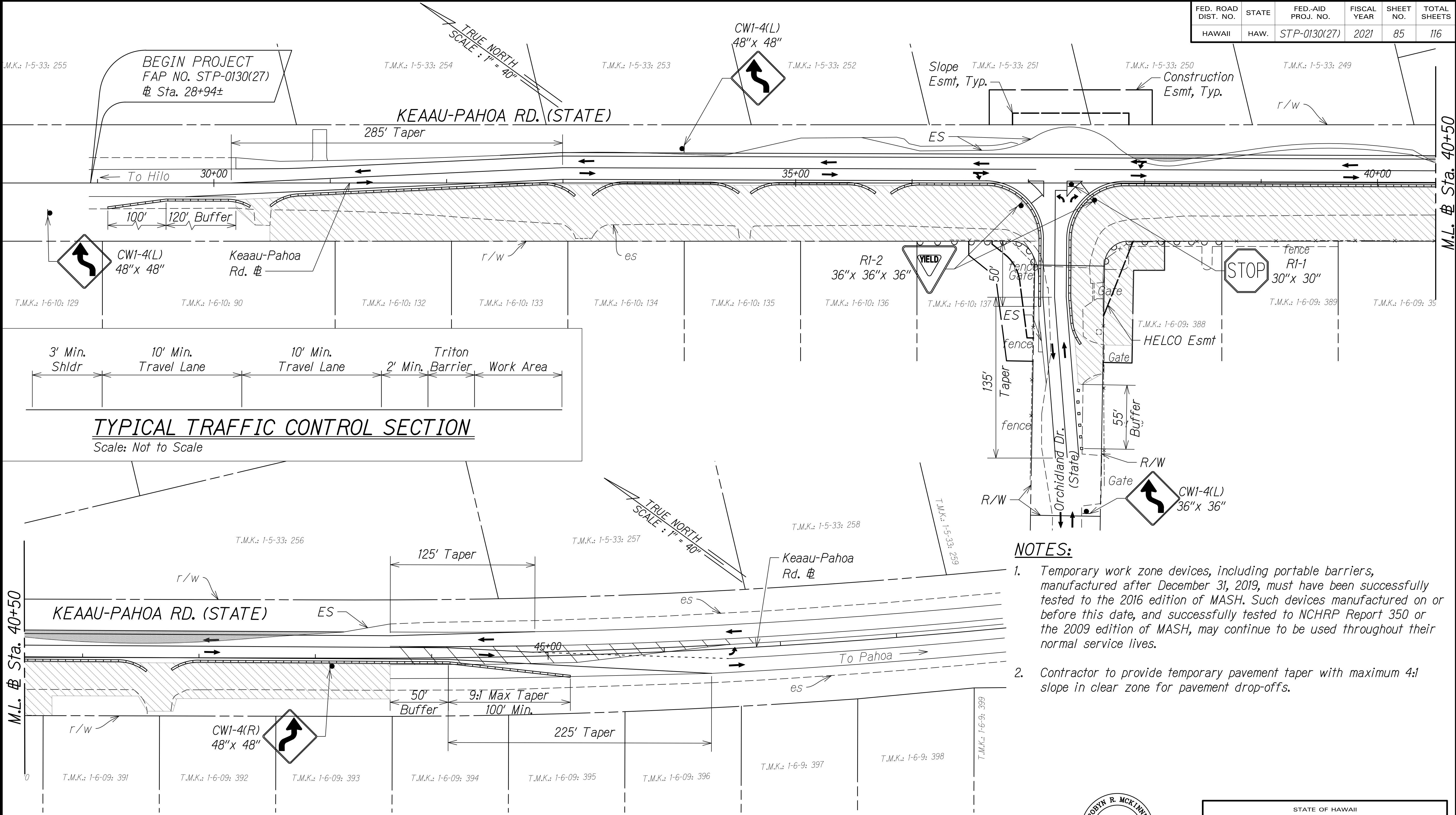
TRAFFIC CONTROL PLAN

KEAAU-PAHOA ROAD
INTERSECTION IMPROVEMENTS
at Orchidland Drive & Makuu Drive
Federal-Aid Project No. STP-0130(27)

Scale: As Noted Date: Sept, 2020

SHEET No. 3 OF 8 SHEETS

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0130(27)	2021	85	116

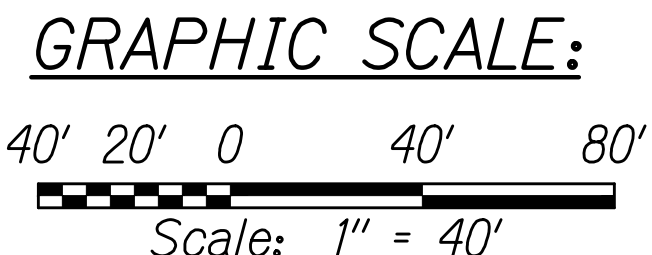


- NOTES:**
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LEGEND:

	Triton Barrier		Temp. AC Pav't
	Work Area		Delineators
	Direction of Traffic		

ORCHIDLAND ROUNDABOUT - PHASE 2
Scale: 1" = 40'



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Robyn R. McKinney 04/30/22
SIGNATURE EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
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HIGHWAYS DIVISION

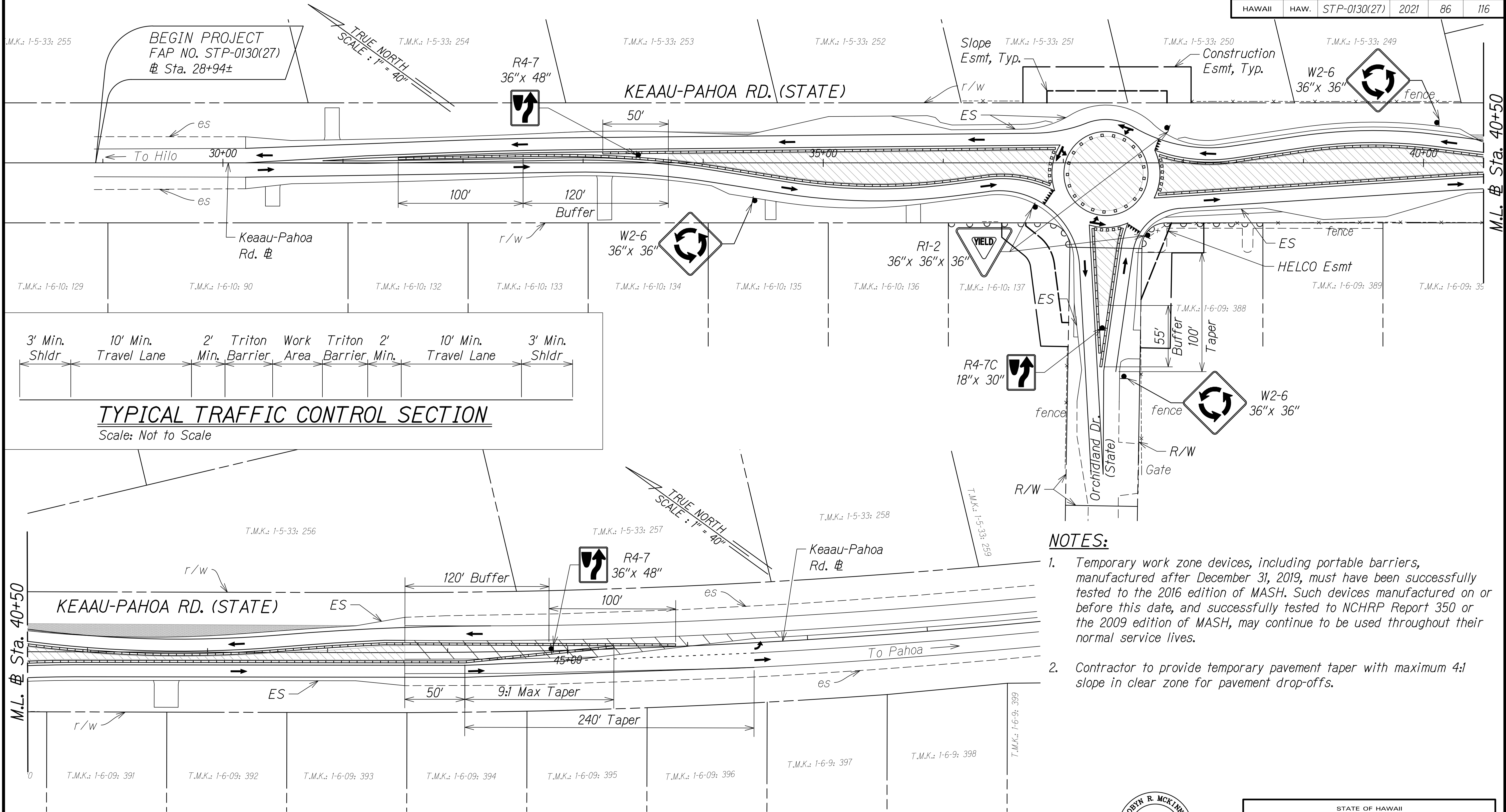
TRAFFIC CONTROL PLAN

KEAAU-PAHOA ROAD
INTERSECTION IMPROVEMENTS
at Orchidland Drive & Makuu Drive
Federal-Aid Project No. STP-0130(27)

Scale: As Noted Date: Sept, 2020

SHEET No. 4 OF 8 SHEETS

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0130(27)	2021	86	116

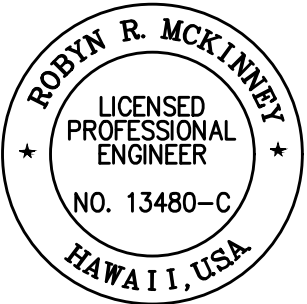
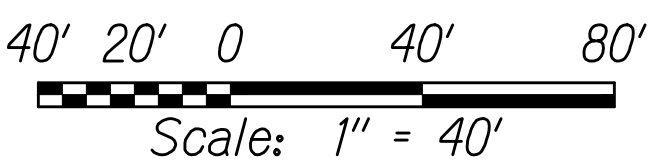


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 - Contractor to provide temporary pavement taper with maximum 4:1 slope in clear zone for pavement drop-offs.

LEGEND:

- | | | | |
|--|----------------------|--|------------------------------------|
| | Triton Barrier | | Temp. AC Pav't From Previous Phase |
| | Work Area | | Delineators |
| | Direction of Traffic | | |

GRAPHIC SCALE:



THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION AND
CONSTRUCTION OF THIS PROJECT
WILL BE UNDER MY OBSERVATION.

Robyn R. McKinney
SIGNATURE

04/30/22
EXPIRATION DATE
OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

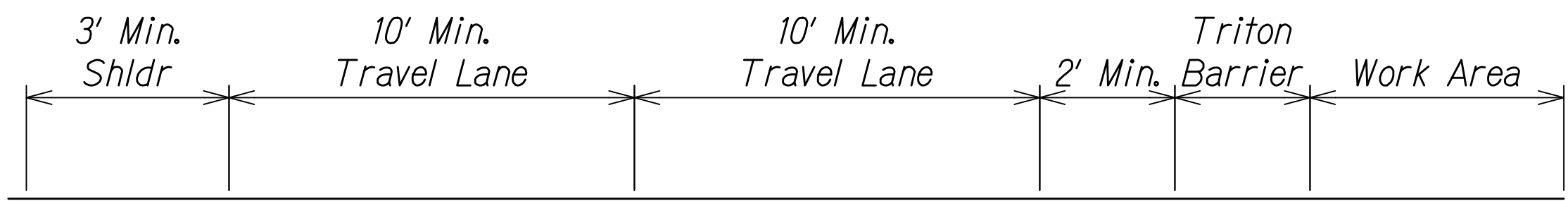
TRAFFIC CONTROL PLAN

KEAAU-PAHOA ROAD
INTERSECTION IMPROVEMENTS
at Orchardland Drive & Makuu Drive
Federal-Aid Project No. STP-0130(27)

Scale: As Noted Date: Sept, 2020

SHEET No. 5 OF 8 SHEETS

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0130(27)	2021	87	116

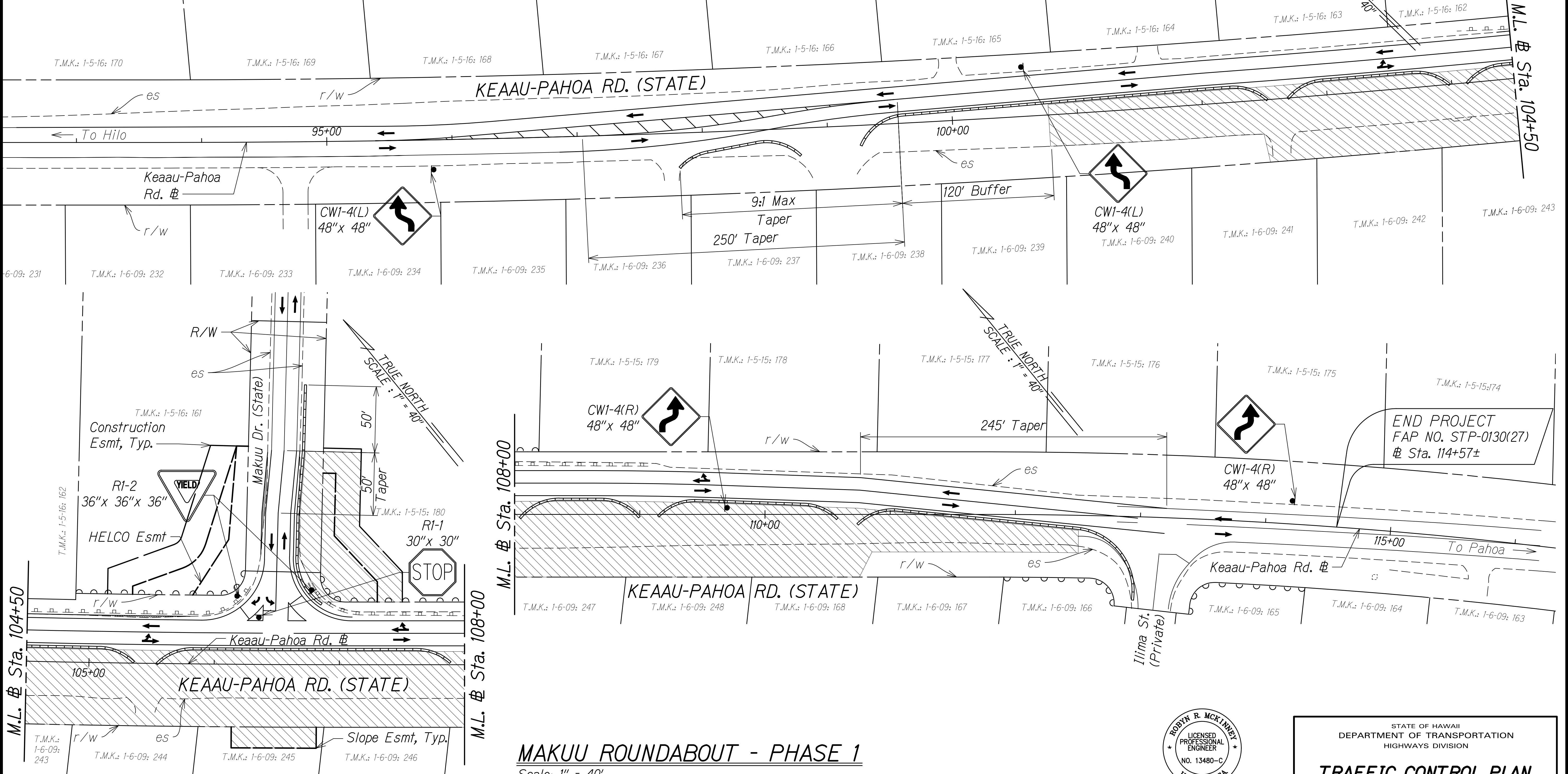


TYPICAL TRAFFIC CONTROL SECTION

Scale: Not to Scale

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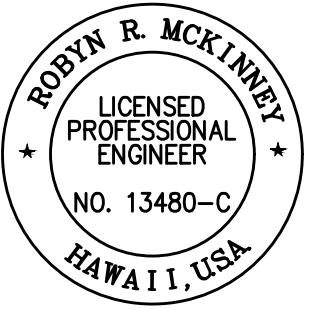
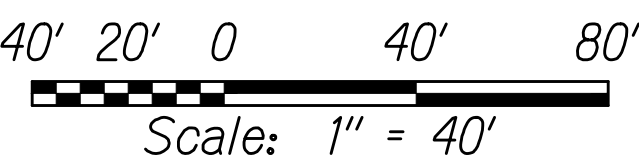
LEGEND:

- Triton Barrier
- Work Area
- Direction of Traffic
- Temp. AC Pav't

MAKUU ROUNDABOUT - PHASE 1

Scale: 1" = 40'

GRAPHIC SCALE:



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SIGNATURE: *Rodyn McKinney* 04/30/22
EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
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HIGHWAYS DIVISION

TRAFFIC CONTROL PLAN

KEAAU-PAHOA ROAD
INTERSECTION IMPROVEMENTS
at Orchidland Drive & Makuu Drive
Federal-Aid Project No. STP-0130(27)

Scale: As Noted Date: Sept, 2020

SHEET No. 6 OF 8 SHEETS

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0130(27)	2021	88	116

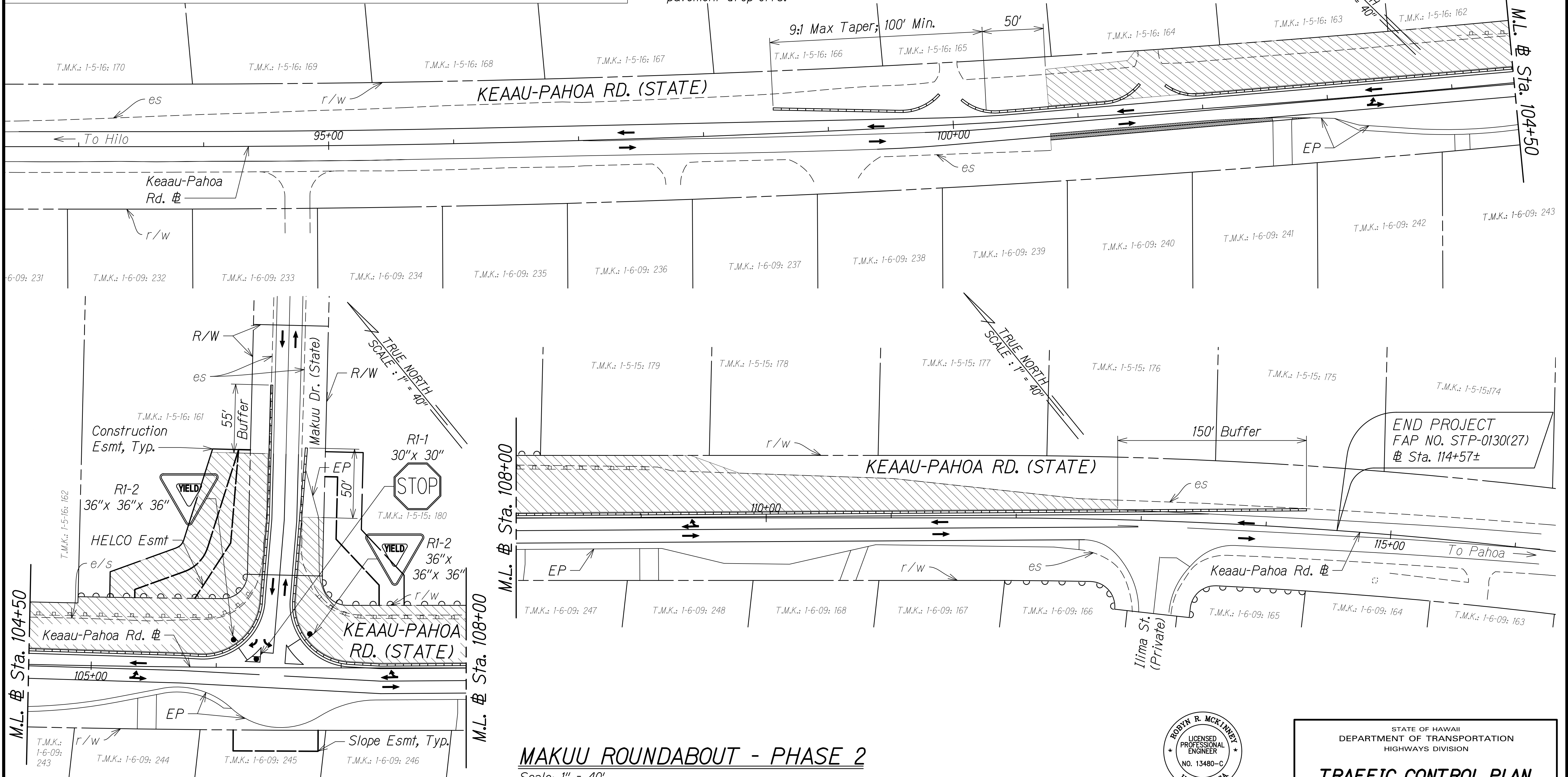


TYPICAL TRAFFIC CONTROL SECTION

Scale: Not to Scale

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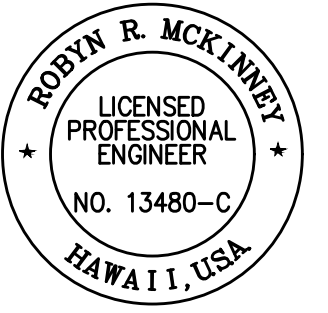
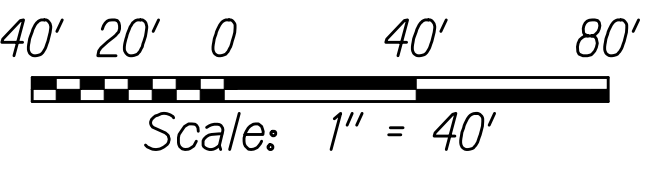
LEGEND:

- Triton Barrier
- Work Area
- Direction of Traffic
- Temp. AC Pav't

MAKUU ROUNDABOUT - PHASE 2

Scale: 1" = 40'

GRAPHIC SCALE:



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SIGNATURE: *Rodyn McKinney* DATE: 04/30/22
EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
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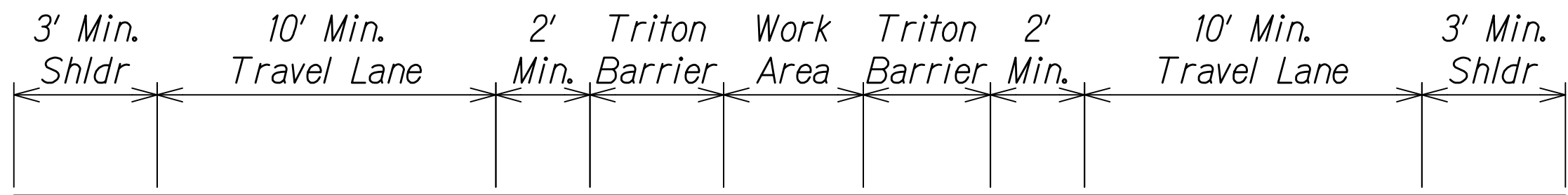
TRAFFIC CONTROL PLAN

KEAAU-PAHOA ROAD
INTERSECTION IMPROVEMENTS
at Orchidland Drive & Makuu Drive
Federal-Aid Project No. STP-0130(27)

Scale: As Noted Date: Sept, 2020

SHEET No. 7 OF 8 SHEETS

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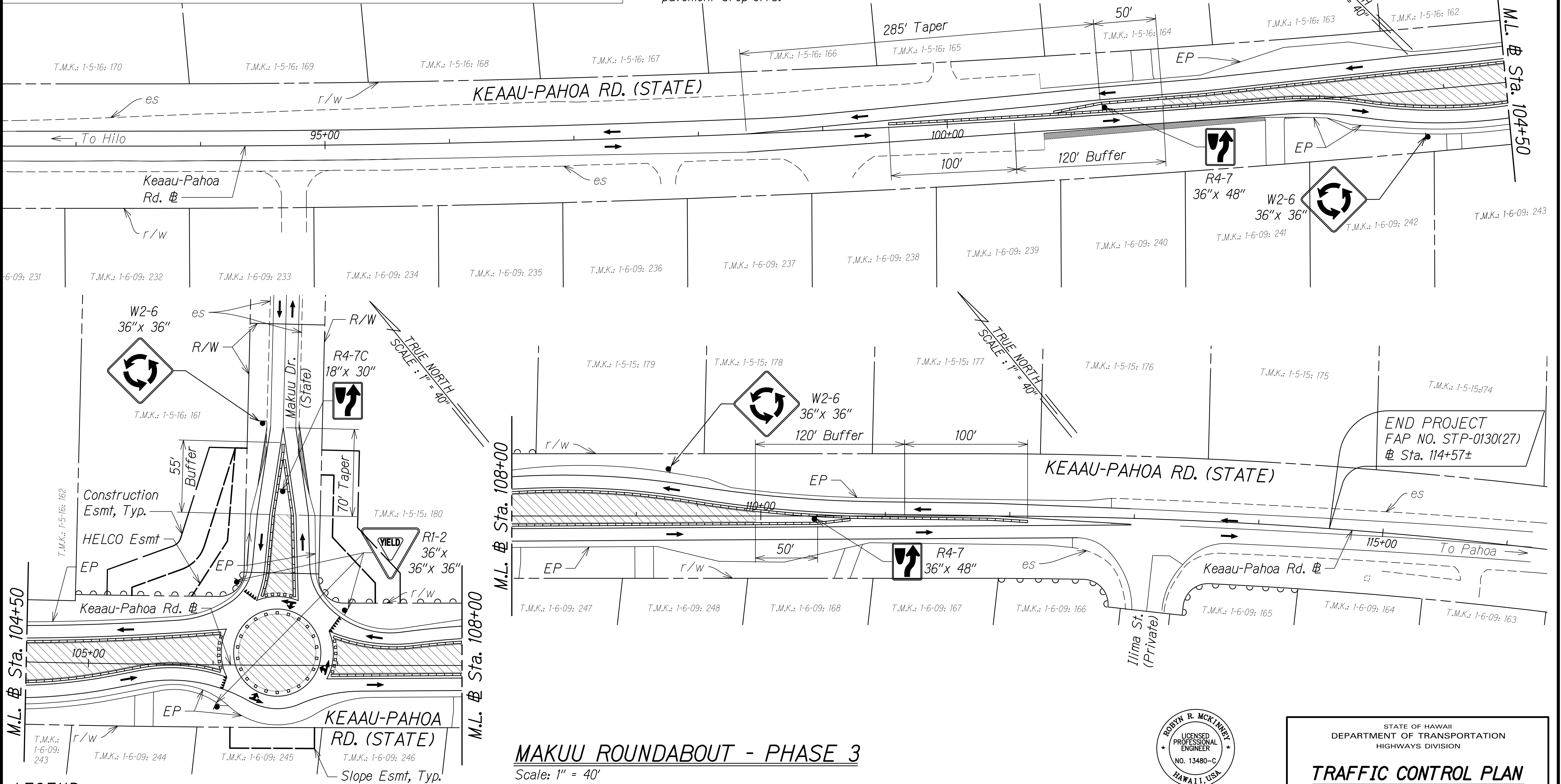
TYPICAL TRAFFIC CONTROL SECTION

Scale: Not to Scale

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HAWAII	HAW.	STP-0130(27)	2021	89	116



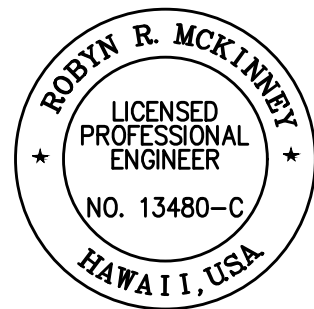
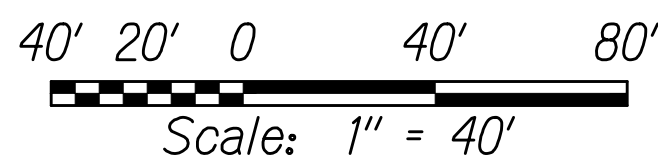
LEGEND:

- Triton Barrier
- Work Area
- Direction of Traffic
- Temp. AC Pav't
- Delineators

MAKUU ROUNDABOUT - PHASE 3

Scale: 1" = 40'

GRAPHIC SCALE:



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TRAFFIC CONTROL PLAN

KEAAU-PAHOA ROAD
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SHEET No. 8 OF 8 SHEETS