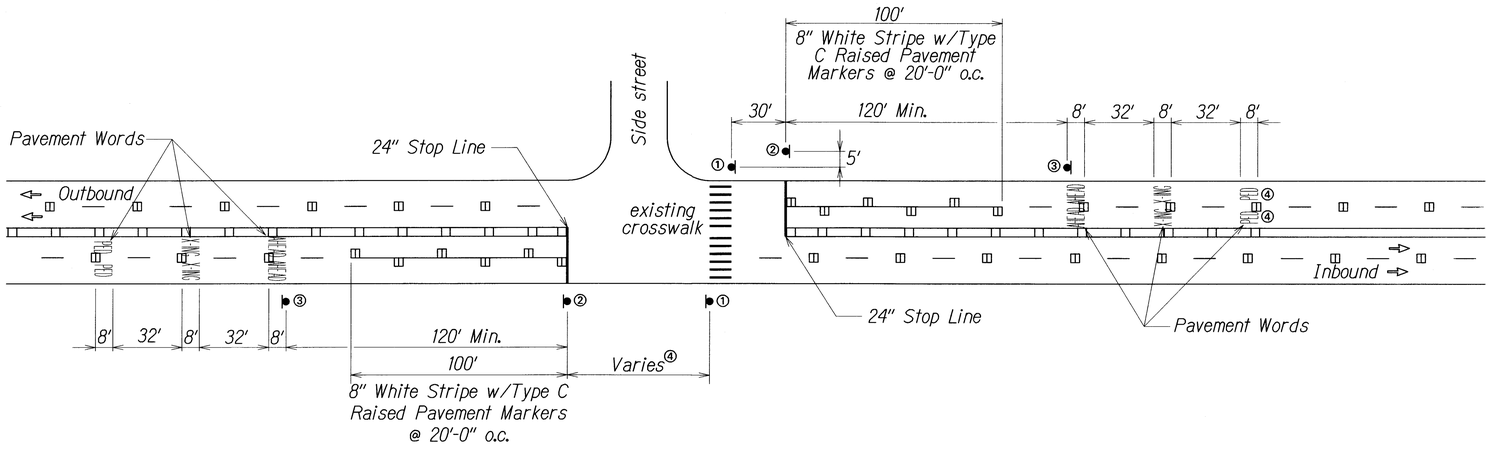
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-065-1(010)	2011	28	52

LEGEND

- 4 each Type A Raised Pavement Markers
  Type C Raised Pavement Markers @ 40'-0" o.c.
- 4 each Type J Raised Pavement Markers
  Type D Raised Pavement Markers @ 40'-0" o.c.
- 8" White Stripe with Type C Raised Pavement Markers @ 20'-0" o.c.
- 4" Double Solid Yellow with Type D Raised Pavement Markers @ 20'-0" o.c.
- 4" Double Solid Yellow Stripes with Type H Raised Pavement Markers @ 20'-0" o.c.
- 4" Yellow Edge Stripe with Type H Raised Pavement Markers @ 40'-0" o.c.
- 4" Double Solid White Stripes with Type C Raised Pavement Markers @ 20'-0" o.c.
- Lane Change Restriction Marking
  4 each Type A Raised Pavement Markers
  Type C Raised Pavement Markers @ 20'-0" o.c.
  4" White Stripe
- 4" White Edge Stripe with Type C Raised Pavement Markers @ 40'-0" o.c.
- 4" White or Yellow Guide Lines (Tape, Type III or Thermoplastic Extrusion)
- 12" Yellow Transverse Median Marking
- 12' White Transverse Shoulder Marking (Tape, Type II or Thermoplastic Extrusion)
- Channelizing Island or Deceleration Lane Gore
- (2) Crosswalk and Stop Line. All Stop Lines shall be 10'-0" from Crosswalk unless otherwise noted. The circled number indicates the number of lanes for payment
- Pavement Arrow
- STOP Pavement Word
- 4 Each Type J Raised Pavement Markers
  Type D Raised Pavement Markers @ 40'-0" o.c.
  Type H Raised Pavement Markers (Reflective Surface facing no-passing direction)
  4" Single Solid Yellow Stripe
- 10' 10' 10' 10' Extension of Edge Line, 4" Wide x 2'-0" Long White Stripe @ 10'-0" o.c. w/Type C Markers @ 40'-0" o.c.
- Reflector Marker (RM-2, White) w/Flexible Delineator Post
- Fire Hydrant Location
- Fire Hydrant - Type F Pavement Marker

NOTES

1. Layout of pavement markings and striping shall be done by the Contractor and approved by the Engineer prior to any installation work.
2. Existing pavement markings not incorporated in the final traffic pattern shall be removed as directed by the Engineer. Costs shall be incidental to the various pavement marking items.
3. Raised pavement markers shall not be installed within crosswalks.
4. Final locations of all signs shall be approved by the Engineer prior to any installation work.
5. Inform the Engineer of any existing sign not shown on these plans.
6. Final locations of all Stop Lines shall be approved by the Engineer prior to installation.
7. All pavement striping shall be as noted on the legend or plans.
8. All preformed pavement marking tapes over existing pavement shall be applied with an approved primer as recommended by the tape manufacturer and as approved by the Engineer. The primer shall be allowed to dry to the tacky stage prior to tape application.
9. All pedestrian warning signs with supplemental signs shall be on fluorescent yellow-green retroreflective background with a black legend and border.



①

Revised R1-5aL
30"x36"

②

③

NOTE:

If Distance is <50', Offset Stop Here For Pedestrian Sign 5' Horizontally With Crossing Sign

④

TYPICAL UNSIGNALIZED INTERSECTION MARKINGS

(NO LEFT TURN STORAGE LANES)

Not to Scale

ORIGINAL PLAN
SURVEY PLOTTED BY
DRAWN BY M. Ladish
TRACED BY
DESIGNED BY JF
QUANTITIES BY
CHECKED BY
NOTE BOOK
DATE 3/22/06

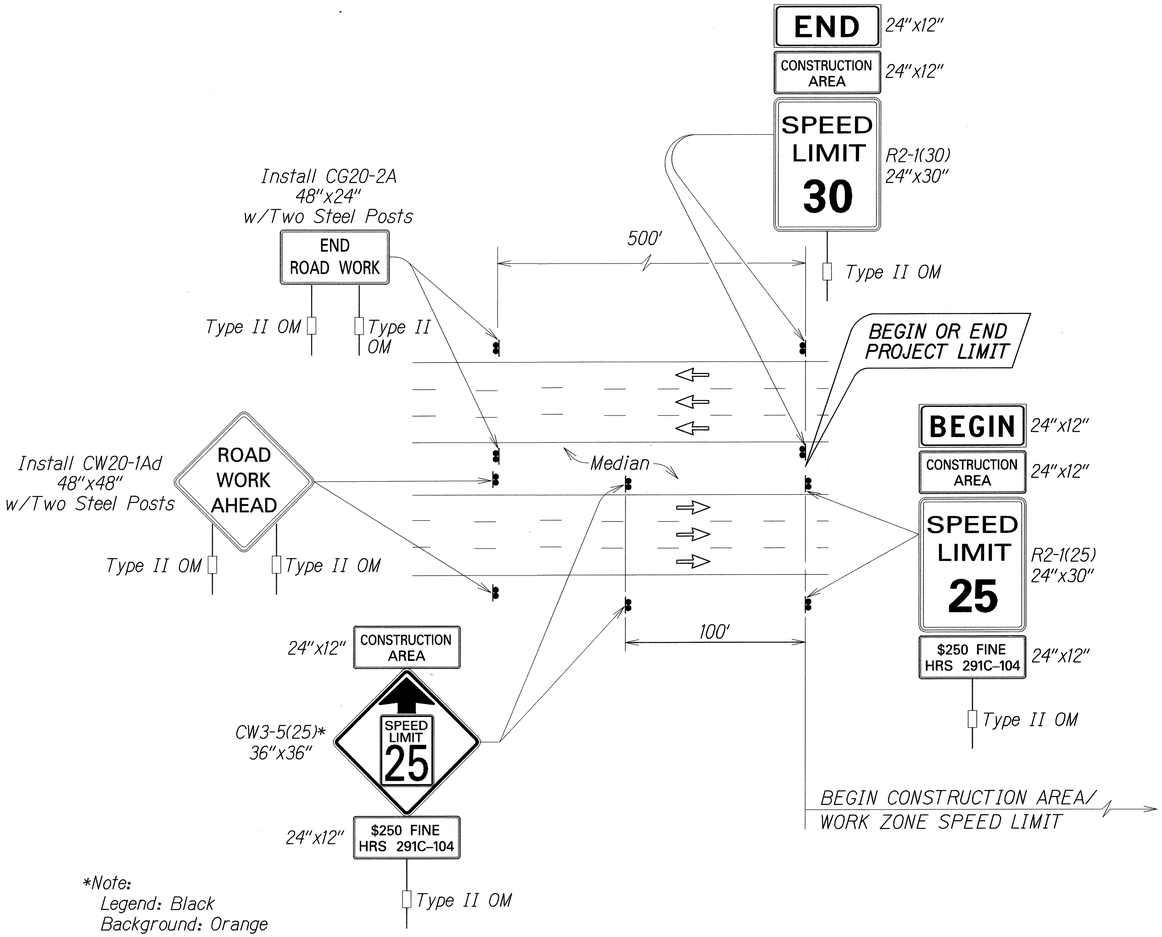
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PAVEMENT MARKING LEGEND, DETAILS & NOTES

MOKAPU SADDLE ROAD RESURFACING and
MOKAPU BOULEVARD RESURFACING
Kapaa Quarry Road to Kalaheo Avenue
M.P. 2.97 TO M.P. 4.15
Federal Aid Project No. STP-065-1(010)
Date: March 2010

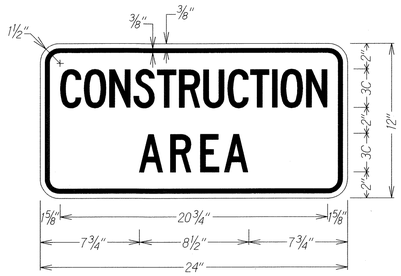
SHEET No. T1 OF 6 SHEETS

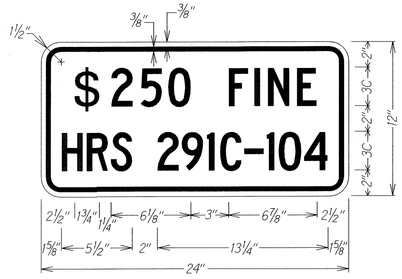
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-065-1(010)	2011	ADD. 29	52

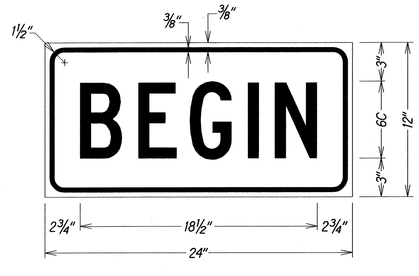


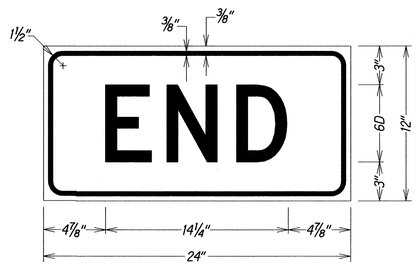
*Note:
Legend: Black
Background: Orange
Speed Limit: Black on White

TYPICAL DETAIL FOR CONSTRUCTION SIGNS ON MULTILANE DIVIDED LOW SPEED HIGHWAY









Work Zone Note:

1. 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 Special Provisions.
2. 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(25) and R2-5b(25) with "CONSTRUCTION AREA" and "$250 FINE HRS 291C-104" Supplemental Signs).
3. Construction sign assemblies shall be installed on both the approaching and trailing ends of each work zone as shown on this plan.
4. Each construction warning sign shall have a minimum of two (2) Type II OM. Each work zone speed limit assembly shall have a minimum of one (1) Type II OM. Installation of each Type II OM shall be considered incidental to Item No. 645.0100 - Traffic Control.
5. 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.
6. Placement of construction signs shall not obstruct the path of pedestrians and bicyclists.
7. The removal and restoration of existing regulatory speed limit signs with new posts along with the installation, maintenance and removal of work zone speed limit sign assemblies shall be considered incidental to Item No. 645.0100 - Traffic Control.

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
	DRAWN BY M. Takafuji	
NOTE BOOK	TRACED BY	
	DESIGNED BY JE	
	QUANTITIES BY	
	CHECKED BY	

DATE	REVISION
01/10/12	Revised dimensions on construction sign details

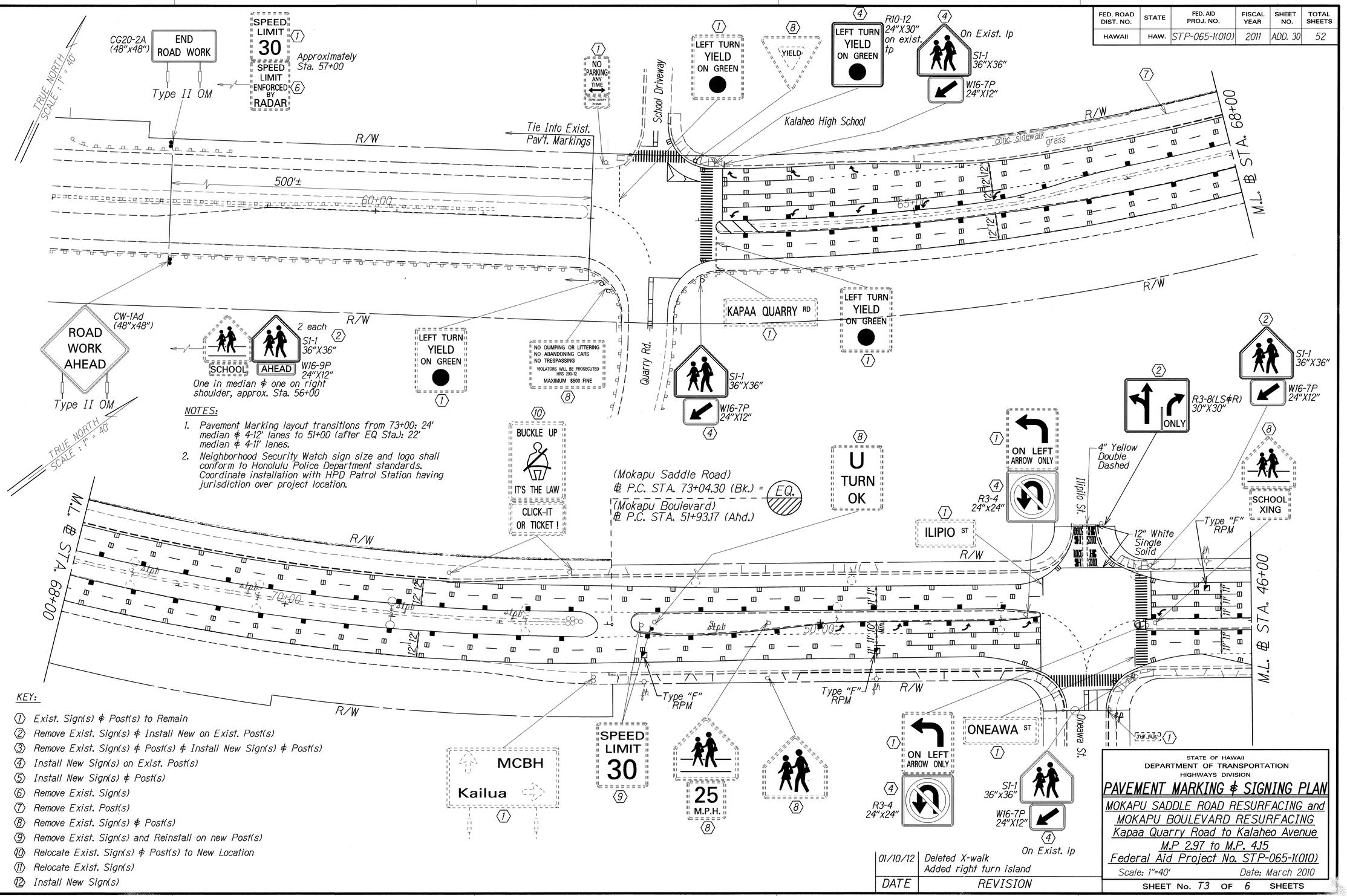
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

LOW SPEED DIVIDED HIGHWAY
WORK ZONE SIGNING PLAN, NOTES & DETAILS
MOKAPU SADDLE ROAD RESURFACING and
MOKAPU BOULEVARD RESURFACING
Kapaa Quarry Road to Kalaheo Avenue
M.P. 2.97 to M.P. 4.15
Federal Aid Project No. STP-065-1(010)
Not To Scale Date: March 2010

SHEET No. T2 OF 6 SHEETS

ADD. 29

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-065-1(010)	2011	ADD. 30	52



NOTES:

1. Pavement Marking layout transitions from 73+00: 24' median ℄ 4-12' lanes to 51+00 (after EQ Sta.): 22' median ℄ 4-11' lanes.
2. Neighborhood Security Watch sign size and logo shall conform to Honolulu Police Department standards. Coordinate installation with HPD Patrol Station having jurisdiction over project location.

KEY:

⟨1⟩ Exist. Sign(s) ℄ Post(s) to Remain
⟨2⟩ Remove Exist. Sign(s) ℄ Install New on Exist. Post(s)
⟨3⟩ Remove Exist. Sign(s) ℄ Post(s) ℄ Install New Sign(s) ℄ Post(s)
⟨4⟩ Install New Sign(s) on Exist. Post(s)
⟨5⟩ Install New Sign(s) ℄ Post(s)
⟨6⟩ Remove Exist. Sign(s)
⟨7⟩ Remove Exist. Post(s)
⟨8⟩ Remove Exist. Sign(s) ℄ Post(s)
⟨9⟩ Remove Exist. Sign(s) and Reinstall on new Post(s)
⟨10⟩ Relocate Exist. Sign(s) ℄ Post(s) to New Location
⟨11⟩ Relocate Exist. Sign(s)
⟨12⟩ Install New Sign(s)

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
	DRAWN BY	
NOTE BOOK	TRACED BY	
	DESIGNED BY	
	QUANTITIES BY	
	CHECKED BY	

DATE	REVISION
01/10/12	Deleted X-walk Added right turn island

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PAVEMENT MARKING & SIGNING PLAN

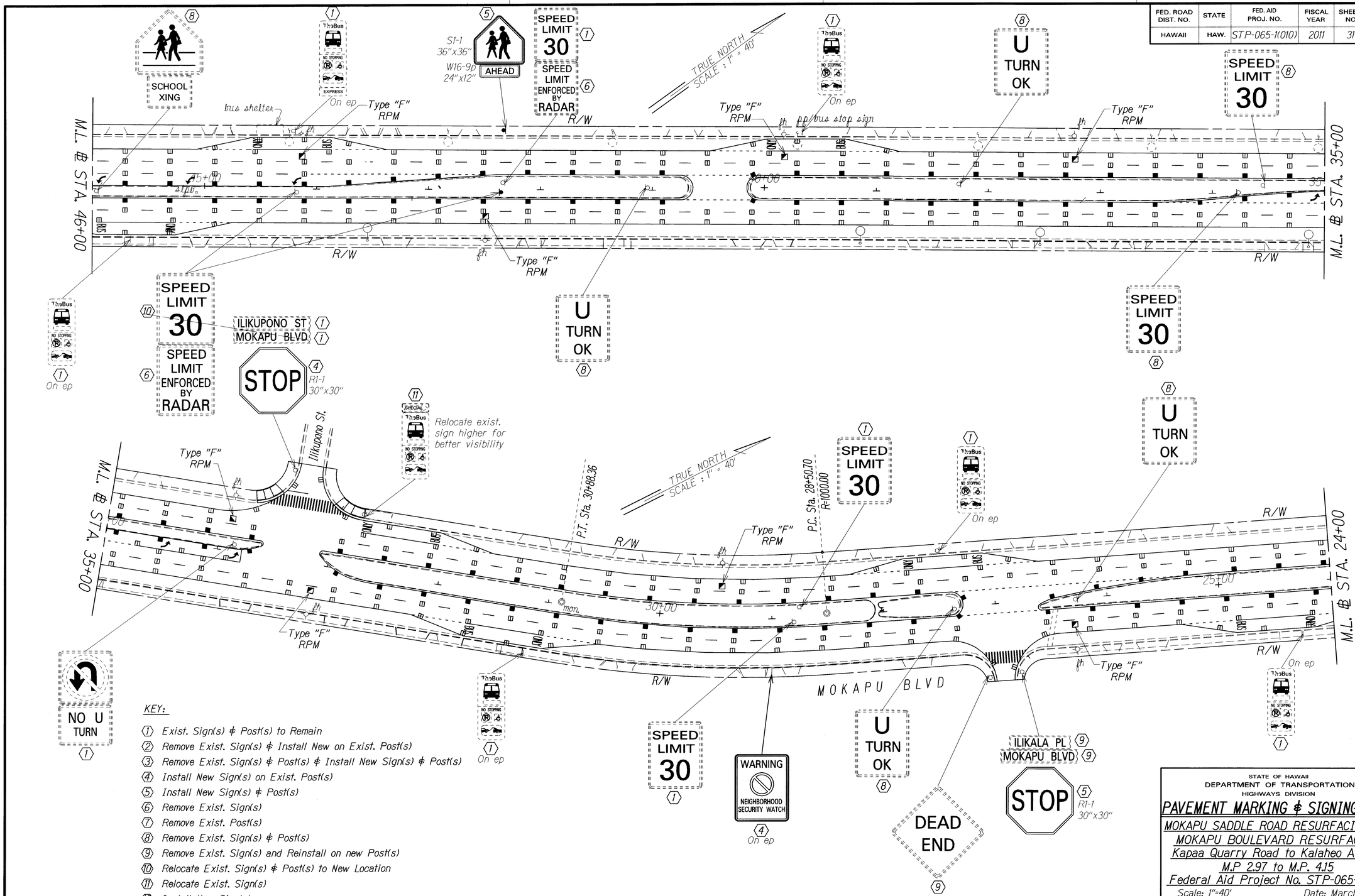
MOKAPU SADDLE ROAD RESURFACING and MOKAPU BOULEVARD RESURFACING
Kapaa Quarry Road to Kalaheo Avenue
M.P 2.97 to M.P. 4.15
Federal Aid Project No. STP-065-1(010)

Scale: 1"=40' Date: March 2010

SHEET No. T3 OF 6 SHEETS

ADD. 30

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-065-1(010)	2011	31	52



KEY:

1. Exist. Sign(s) & Post(s) to Remain
2. Remove Exist. Sign(s) & Install New on Exist. Post(s)
3. Remove Exist. Sign(s) & Post(s) & Install New Sign(s) & Post(s)
4. Install New Sign(s) on Exist. Post(s)
5. Install New Sign(s) & Post(s)
6. Remove Exist. Sign(s)
7. Remove Exist. Post(s)
8. Remove Exist. Sign(s) & Post(s)
9. Remove Exist. Sign(s) and Reinstall on new Post(s)
10. Relocate Exist. Sign(s) & Post(s) to New Location
11. Relocate Exist. Sign(s)
12. Install New Sign(s)

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
	DRAWN BY M. Tadaki	
	TRACED BY	
NOTE BOOK	DESIGNED BY JF	
	QUANTITIES BY	
	CHECKED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

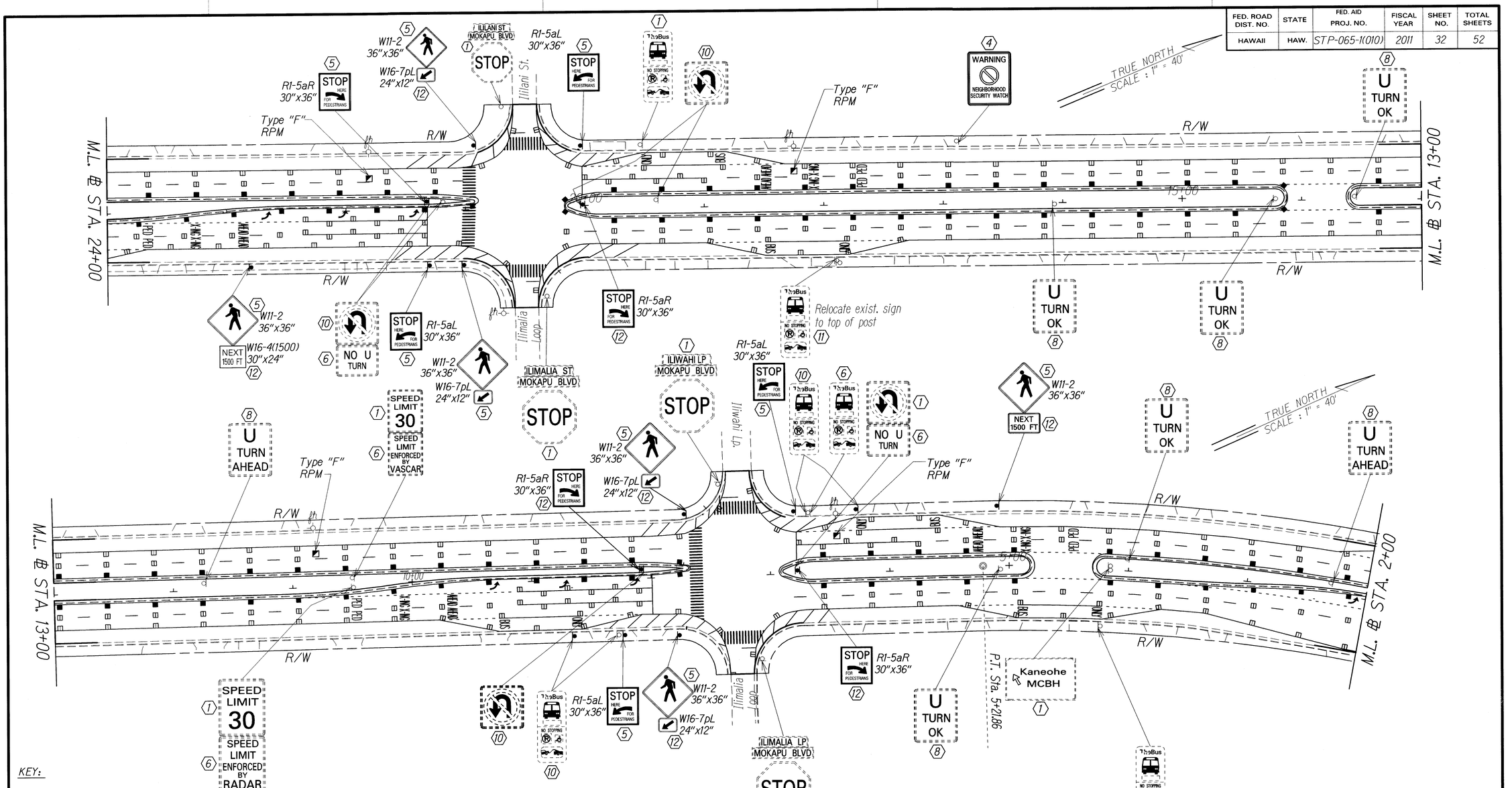
PAVEMENT MARKING & SIGNING PLAN

MOKAPU SADDLE ROAD RESURFACING and
MOKAPU BOULEVARD RESURFACING
Kapaa Quarry Road to Kalaheo Avenue
M.P 2.97 to M.P. 4.15
Federal Aid Project No. STP-065-1(010)

Scale: 1"=40' Date: March 2010

SHEET No. T4 OF 6 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-065-1(010)	2011	32	52



KEY:

1. Exist. Sign(s) & Post(s) to Remain
2. Remove Exist. Sign(s) & Install New on Exist. Post(s)
3. Remove Exist. Sign(s) & Post(s) & Install New Sign(s) & Post(s)
4. Install New Sign(s) on Exist. Post(s)
5. Install New Sign(s) & Post(s)
6. Remove Exist. Sign(s)
7. Remove Exist. Post(s)
8. Remove Exist. Sign(s) & Post(s)
9. Remove Exist. Sign(s) and Reinstall on new Post(s)
10. Relocate Exist. Sign(s) & Post(s) to New Location
11. Relocate Exist. Sign(s)
12. Install New Sign(s)

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY M. Nakata	
	TRACED BY	
	DESIGNED BY M. Nakata	
	QUANTITIES BY	
	CHECKED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

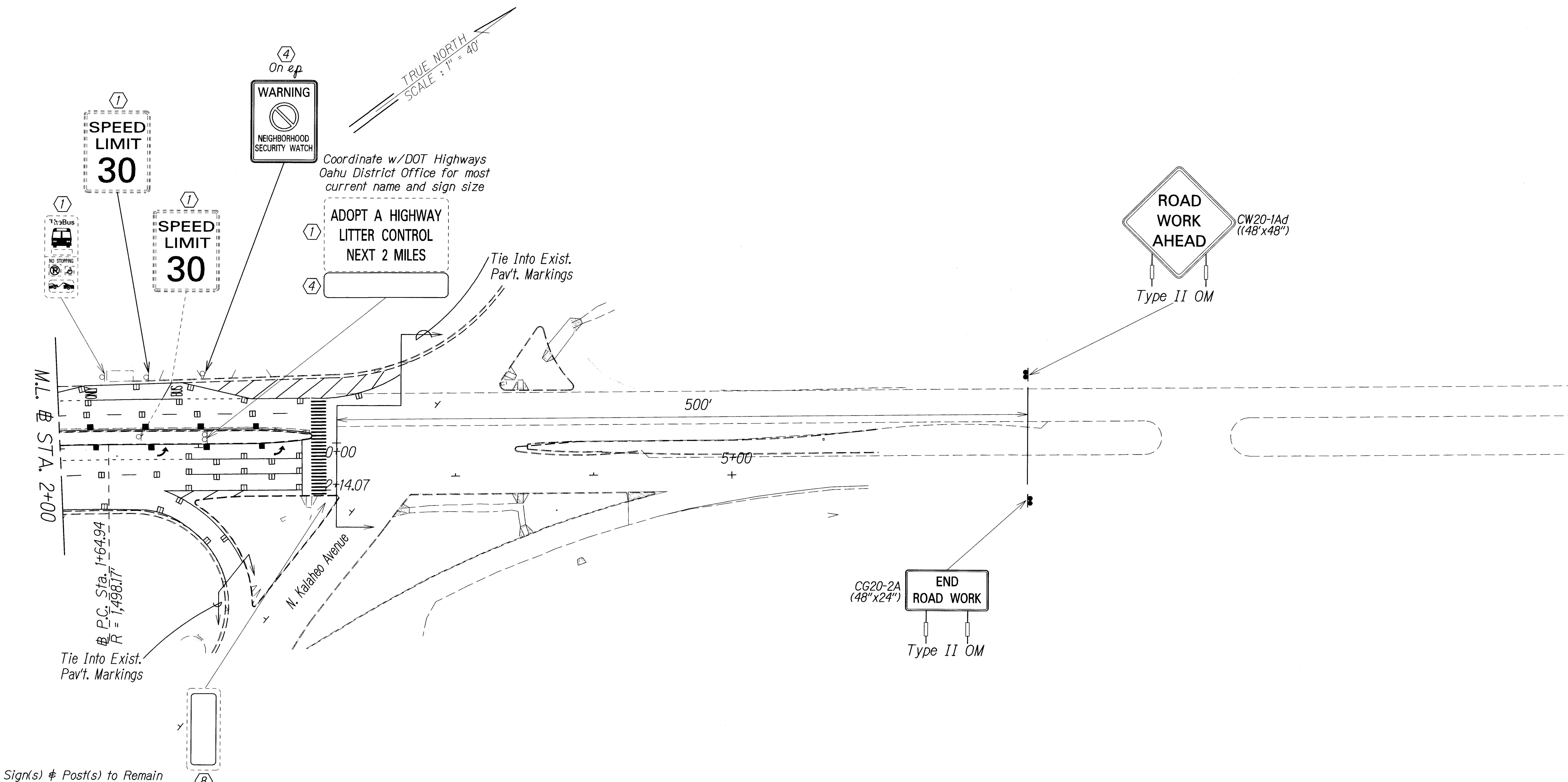
PAVEMENT MARKING & SIGNING PLAN

MOKAPU SADDLE ROAD RESURFACING and
MOKAPU BOULEVARD RESURFACING
Kapaa Quarry Road to Kalaheo Avenue
M.P 2.97 to M.P. 4.15
Federal Aid Project No. STP-065-1(010)

Scale: 1"=40' Date: March 2010

SHEET No. T5 OF 6 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-065-1(010)	2011	33	52



KEY:

1. Exist. Sign(s) & Post(s) to Remain
2. Remove Exist. Sign(s) & Install New on Exist. Post(s)
3. Remove Exist. Sign(s) & Post(s) & Install New Sign(s) & Post(s)
4. Install New Sign(s) on Exist. Post(s)
5. Install New Sign(s) & Post(s)
6. Remove Exist. Sign(s)
7. Remove Exist. Post(s)
8. Remove Exist. Sign(s) & Post(s)
9. Remove Exist. Sign(s) and Reinstall on new Post(s)
10. Relocate Exist. Sign(s) & Post(s) to New Location
11. Relocate Exist. Sign(s)
12. Install New Sign(s)

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PAVEMENT MARKING & SIGNING PLAN

MOKAPU SADDLE ROAD RESURFACING and MOKAPU BOULEVARD RESURFACING
Kapaa Quarry Road to Kalaheo Avenue
M.P 2.97 to M.P. 4.15
Federal Aid Project No. STP-065-1(010)

Scale: 1"=40' Date: March 2010

SHEET No. T6 OF 6 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-065-1(010)	2011	34	52

TRAFFIC SIGNAL NOTES

1. The locations of the Traffic Signal Standards, Traffic Signal Standards w/Mast Arms, Pedestrian Push Buttons, Traffic Controller, Pullboxes, Conduits and Loop Detectors shall be staked out in the field by the Contractor and approval of the locations shall be obtained from the Engineer prior to construction and installation.
2. All splicing shall be done in the pullboxes.
3. Furnishing and installing the conduit stubouts (pullboxes to edge of pavement) will not be paid for separately but shall be considered incidental to the various contract items.
4. A solid #8 bare copper wire shall be pulled with the traffic signal control cable for equipment ground. Cost shall be incidental to the installation of the control cable.
5. All Traffic signal controller equipment shall be completely wired in the cabinet and shall control the traffic signals as called for in the plans.
6. The loop amplifier units furnished for this project shall be capable of operating the loop detector configurations shown on the plans. Cost for the loop amplifier shall be incidental to the installation of the loop detector.
7. Should any defect be encountered during the warranty period, the manufacturer will be notified and he shall promptly correct such defect. Service call (by factory qualified representative) during the warranty period for repairs or other maintenance shall be answered within 24 hours and shall be done at no expense to the State. All repairs shall be done as soon as possible.
8. All traffic signal work shall conform to the requirements of the "Manual On Uniform Traffic Control Devices For Streets And Highways", Federal Highway Administration (1988) and Amendments.
9. Locations of traffic markings and markers (lane lines, Stop lines, crosswalk, etc.) shown on the plans shall be verified with the Engineer prior to the installation of the traffic signal system.
10. All Conduits between pullboxes and Traffic Signal/Highway Lighting Standards shall not be paid for separately but shall be considered incidental to the various contract items.
11. All Signal-Drop Cables (Type 5 Cables) from the various Types of Traffic Signal Head on the traffic signal standards and mast arms to the pullboxes shall not be paid for separately but considered incidental to the Traffic Signal Head.
12. After installing all the traffic signal cables, the Contractor shall duct seal all conduits in the pullboxes, traffic signal standards and traffic signal controller cabinet concrete base. The duct seal material shall be approved by the Traffic Signal Inspector/Engineer and shall not be paid for separately but considered incidental to the direct buried and/or concrete encased conduits.
13. After installing the Traffic Signal System, the Contractor shall apply grease to all parts of the Traffic Signal System (i.e. fittings, brackets, nipples, elbows, screws, signal head assemblies, bolts, hinges, etc.) as directed by the Traffic Signal Inspector, to prevent rust and corrosion. The grease material shall be approved by the Signal Inspector.
14. Connecting into existing traffic signal system and making all necessary adjustments shall not be paid for separately, but considered incidental to the various traffic signal contract items.
15. The Contractor shall notify the Traffic Control Branch, Department of Transportation Services, City & County of Honolulu, (phone no. 523-4589) two weeks prior to commencing any work on the traffic signal system.
16. The Department of Transportation Services, City & County of Honolulu, may assist the Engineer in construction inspection for the traffic signal system. The Contractor shall notify the Electrical and Maintenance Services Division, Department of Transportation Services, three (3) working days prior to commencing work on the traffic signal system (Phone No. 564-6101).

ORIGINAL PLANS | SURVEY PLOTTED BY | DRAWN BY | TRACED BY | DESIGNED BY | QUANTITIES BY | CHECKED BY | DATE
NOTE BOOK

TRAFFIC SIGNAL LEGEND

NEW	EXISTING	
———	- - - - - -	Traffic Signal Conduit
1 2 3	1 2 3	Conduit Run Numbers
A B C	A B C	Equipment description, installation or item no.
M	M	Traffic Signal Master Controller Door Indicates Front of Cabinet
C	C	Traffic Signal Controller Door Indicates Front of Cabinet
		Meter Pedestal
		12" RYG Traffic Signal Head
		12" RY↑ Traffic Signal Head
		12" RY← Traffic Signal Head
		12" RY← Traffic Signal Head (Programmed Visibility)
		12" RYG ←G/Y Fiber Optic Traffic Signal Head
		Type I Standard and Attached Signals
24' 12'		Type II Standard with Signal Mast Arm and Attached Signals (Nos. indicates mast arm length & distance between signal heads as specified on plans)
8' 24' 12'		Type III Standard with Luminaire and Signal Mast Arm and Attached Signals (Nos. indicates mast arm lengths & distance between signal heads as specified on plans)
Y	Y	Flashing Beacon, One Signal Section, "Y" indicates 12" Yellow Lens
		Opticom Receiver (Arrow indicates direction detector faces)
		Pipe Guard
		Pedestrain Signal Head
	tspb	Type A Pullbox
	tspb	Type B Pullbox
	tspb	Type C Pullbox
		Loop Detectors

HIGHWAY LIGHTING LEGEND

NEW	EXISTING	
—— HL ——	- - - - hl - - - -	Highway Lighting Conduit
	hl	Type A Pullbox (Hwy. Ltg.)
		Highway Lighting Standard

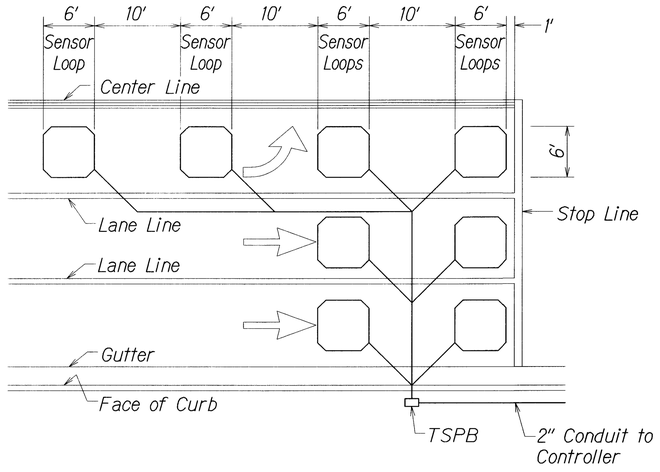
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TRAFFIC SIGNAL LEGEND AND NOTES

MOKAPU SADDLE ROAD RESURFACING and MOKAPU BOULEVARD RESURFACING
Kapaa Quarry Road to Kalaheo Avenue
M.P. 2.97 TO M.P. 4.15
Federal Aid Project No. STP-065-1(010)
Date: March 2010

SHEET No. TSI OF 5 SHEETS

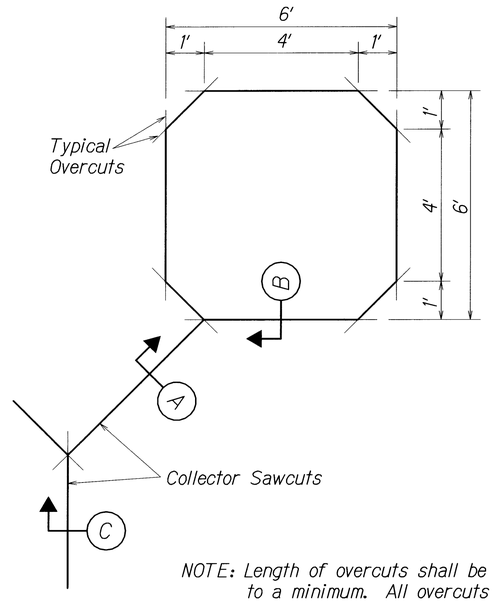
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-065-1(010)	2011	35	52



NOTES:

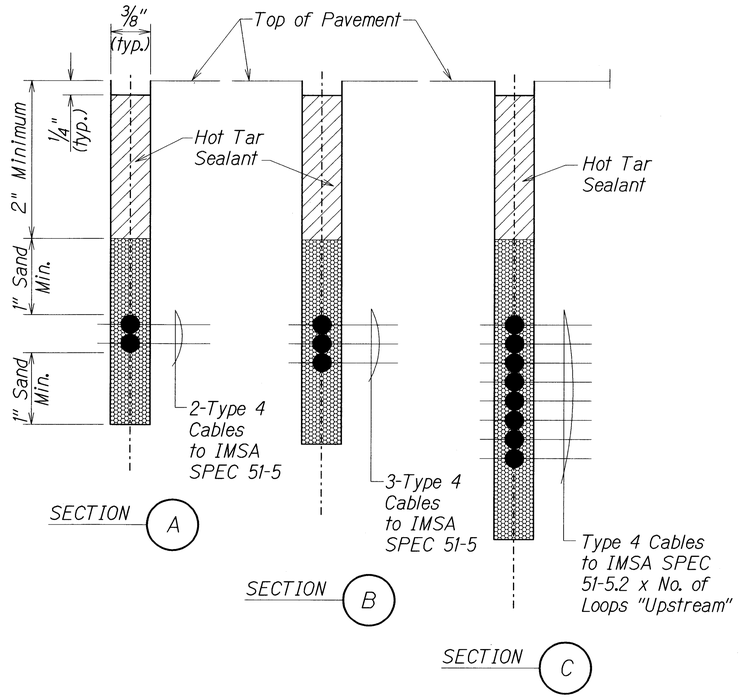
1. Center sensor loops in lanes.
2. Collector cables shall be twisted 2 turns per foot.
3. Number of loops and locations vary. See project plans.
4. Number and locations of collector sawcuts may be varied in the field to suit.

TYPICAL SENSOR LOOP LAYOUT

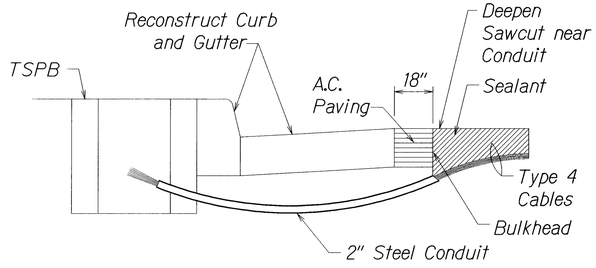


NOTE: Length of overcuts shall be kept to a minimum. All overcuts shall be back filled with hot tar.

TYPICAL SENSOR LOOP SAWCUT DETAIL



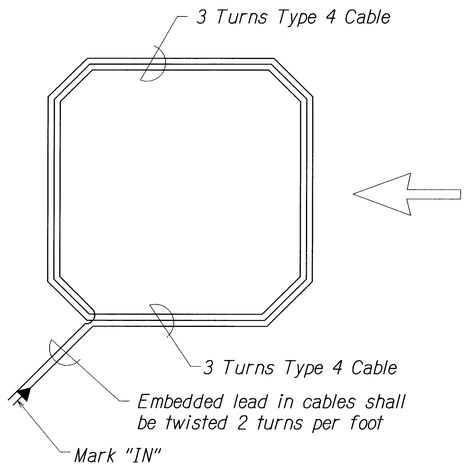
TYPICAL SECTION THROUGH SENSOR LOOP



NOTES ON CONSTRUCTION AT END OF SAWCUT

1. Seal roadway end of conduit after installation of conductors.
2. Install bulkhead across conduit trench.
3. Place hot tar in sawcut.
4. Backfill over conduit with new A.C.
5. Reconstruct curb and gutter as required.

DETAIL OF SENSOR LOOP INSTALLATION AT EDGE OF ROADWAY



TYPICAL SENSOR LOOP WIRING DIAGRAM

ORIGINAL PLANS	SURVEY PLOTTED BY	DATE
	DRAWN BY	
NOTE BOOK	TRACED BY	
No. Inserted	DESIGNED BY	
	QUANTITIES BY	
	CHECKED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

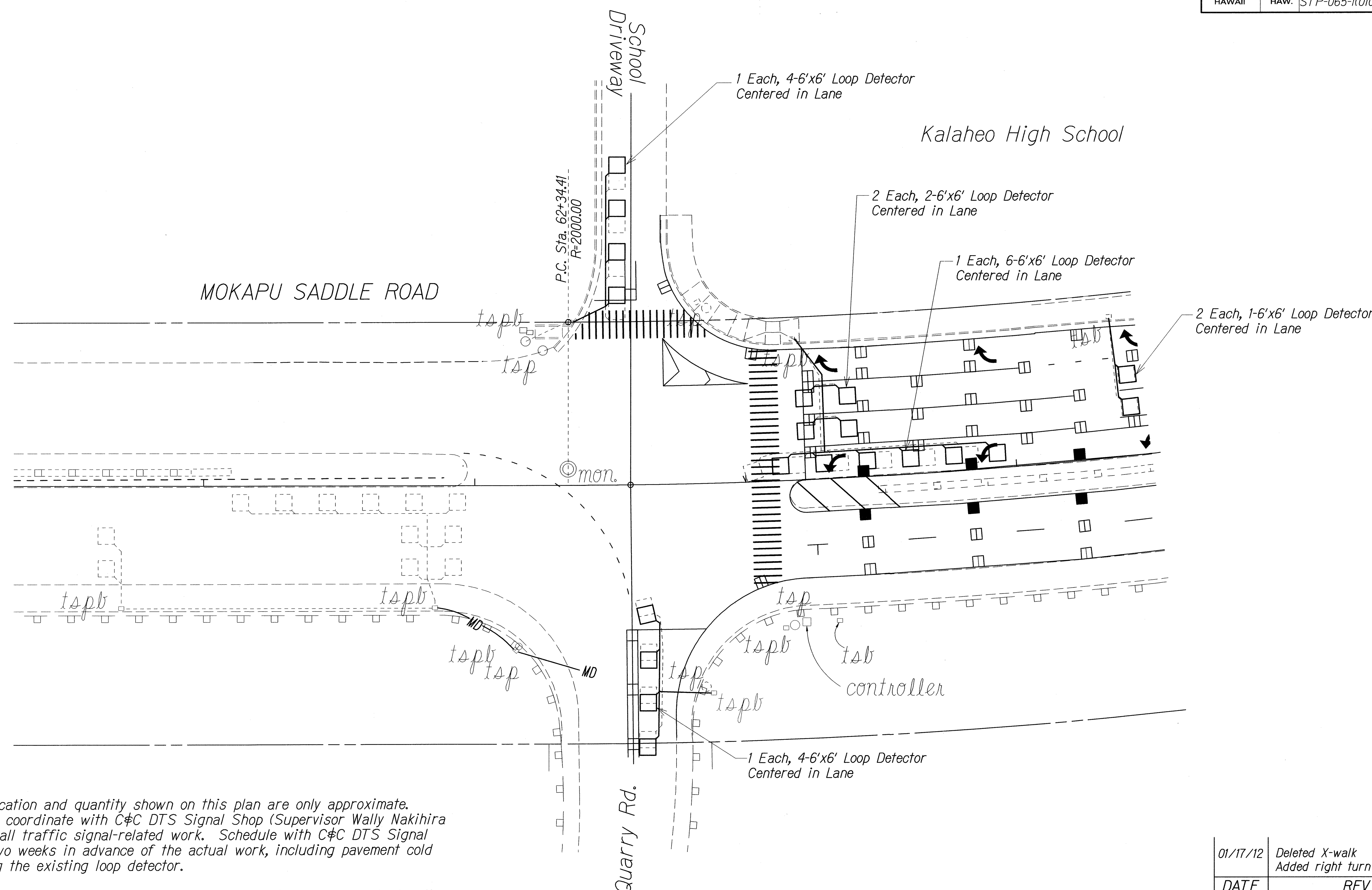
LOOP DETECTOR DETAILS

MOKAPU SADDLE ROAD RESURFACING and
MOKAPU BOULEVARD RESURFACING
Kapaa Quarry Road to Kalaheo Avenue
M.P. 2.97 to M.P. 4.15
Federal Aid Project No. STP-065-1(010)

Not to Scale — Date: March 2010

SHEET No. TS2 OF 5 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-065-1(010)	2011	ADD. 36	52



NOTES:

1. Loop detector location and quantity shown on this plan are only approximate. Contractor shall coordinate with C&C DTS Signal Shop (Supervisor Wally Nakihira @ 564-6101) for all traffic signal-related work. Schedule with C&C DTS Signal Shop at least two weeks in advance of the actual work, including pavement cold planing removing the existing loop detector.

2. Contractor shall perform all traffic signal-related work following field instructions from DTS Signal Shop personnel. Such field instructions shall include, but not limited to, the final location and quantity of the temporary microwave sensors and permanent detector loops. DTS Signal Shop personnel will be responsible for traffic signal controller programming at the traffic signal cabinet to accommodate the temporary and permanent operations.

3. Contractor shall promptly take down and turnover the temporary microwave sensors to DTS when the permanent detector loops are in place and operational. Contractor shall perform all necessary work to restore traffic signal system back to a neat appearance of the electrical trade.

ORIGINAL PLAN		DATE
	SURVEY PLOTTED BY	
	DRAWN BY M. Takafuji	
	TRACED BY	
NOTE BOOK	DESIGNED BY JF	
	QUANTITIES BY	
	CHECKED BY	

DATE	REVISION
01/17/12	Deleted X-walk Added right turn island

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

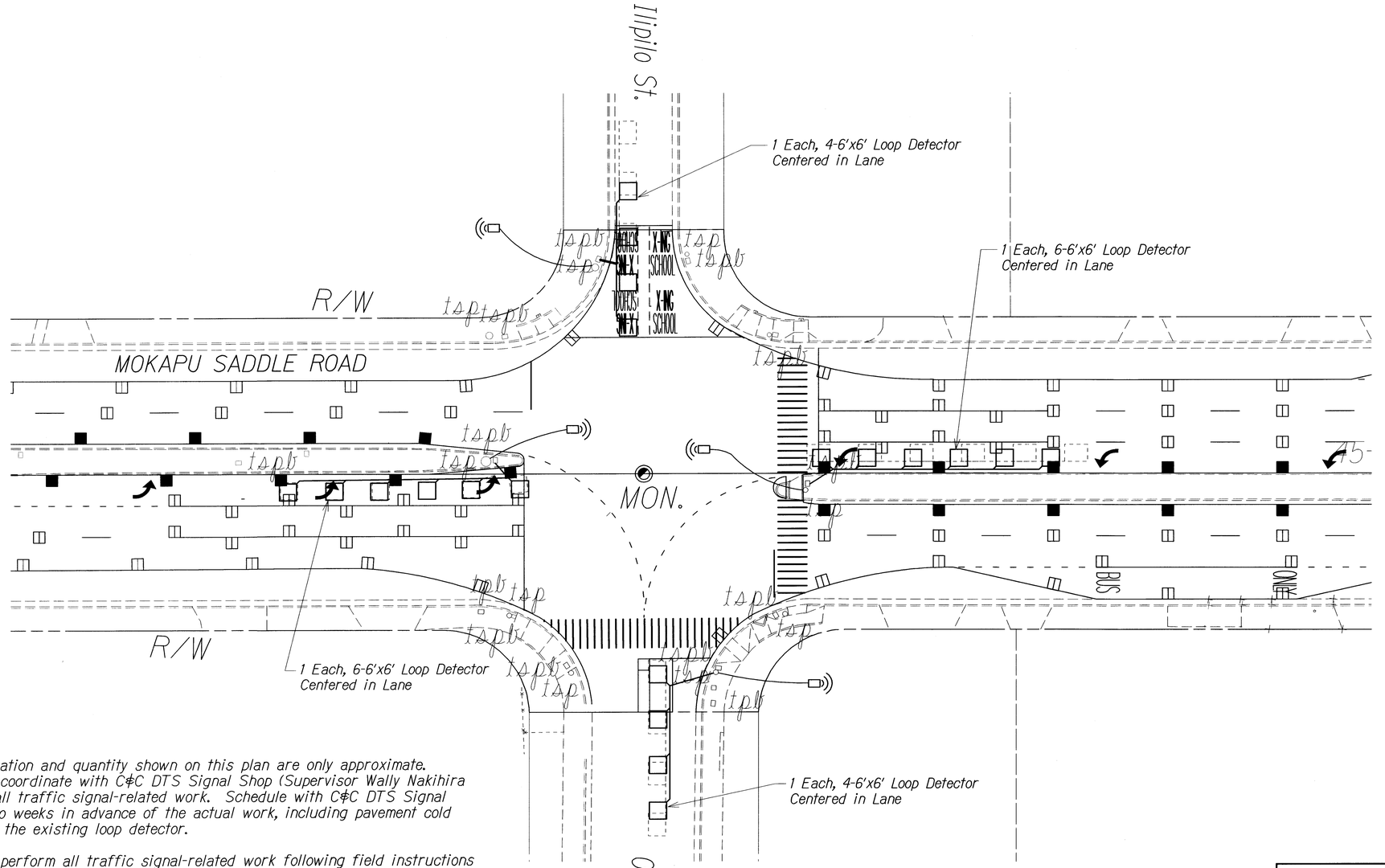
LOOP DETECTOR PLAN

MOKAPU SADDLE ROAD RESURFACING and
MOKAPU BOULEVARD RESURFACING
Kapaa Quarry Road to Kalaheo Avenue
M.P. 2.97 TO M.P. 4.15
Federal Aid Project No. STP-065-1(010)

Scale: 1"=20' Date: March 2010

SHEET No. TS3 OF 5 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-065-1(010)	2011	37	52



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3. Contractor shall promptly take down and turnover the temporary microwave sensors to DTS when the permanent detector loops are in place and operational. Contractor shall perform all necessary work to restore traffic signal system back to a neat appearance of the electrical trade.

TRAFFIC SIGNAL LEGEND

Temporary Microwave Detector

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
	DRAWN BY	
NOTE BOOK	TRACED BY	
	DESIGNED BY	
	QUANTITIES BY	
	CHECKED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

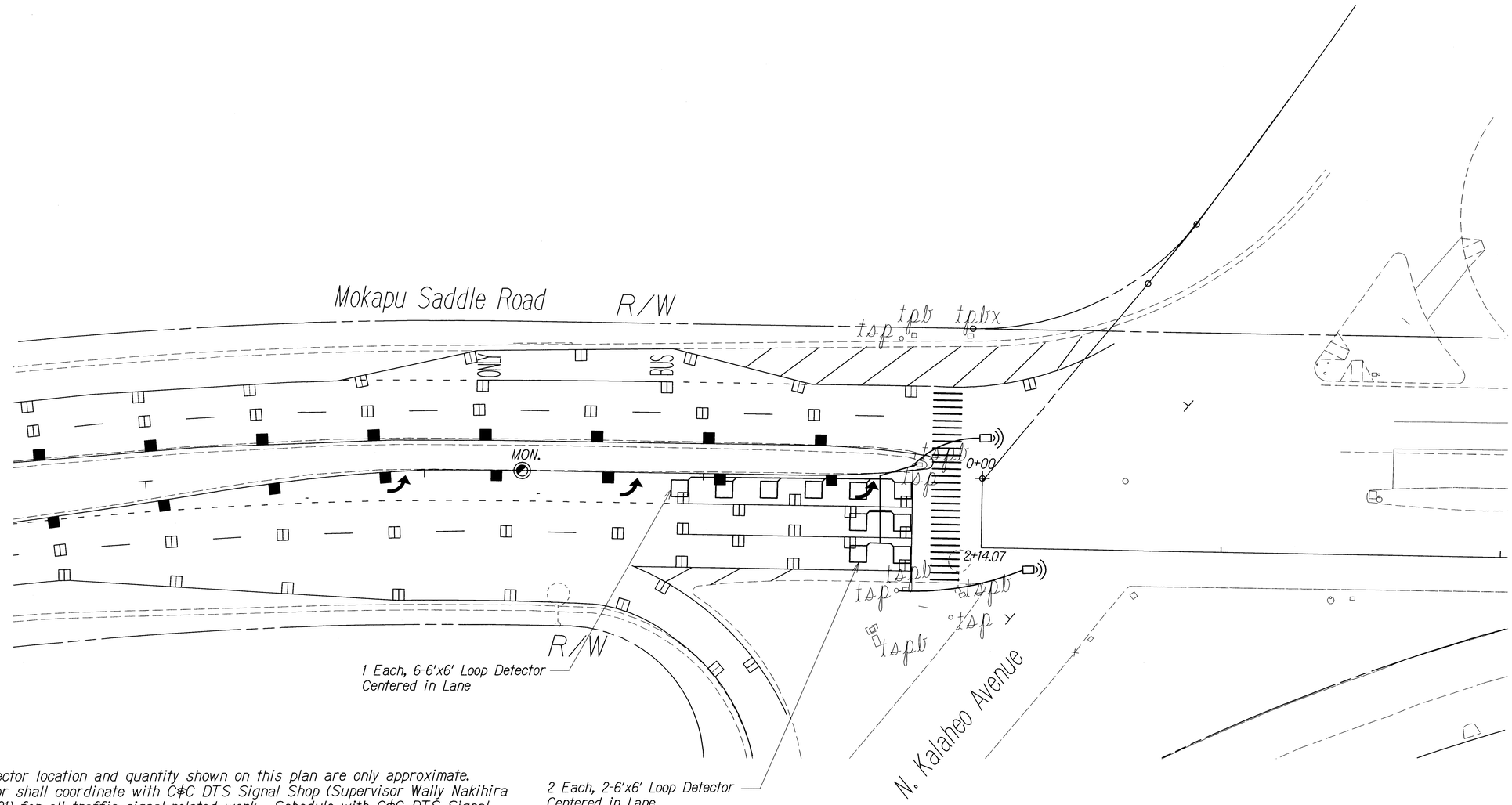
LOOP DETECTOR PLAN

MOKAPU SADDLE ROAD RESURFACING and
MOKAPU BOULEVARD RESURFACING
Kapaa Quarry Road to Kalaheo Avenue
M.P. 2.97 TO M.P. 4.15
Federal Aid Project No. STP-065-1(010)

Scale: 1"=20' Date: March 2010

SHEET No. TS4 OF 5 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-065-1(010)	2011	38	52



NOTES:

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TRAFFIC SIGNAL LEGEND

((⊏ Temporary Microwave Detector

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

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

LOOP DETECTOR PLAN

MOKAPU SADDLE ROAD RESURFACING and
MOKAPU BOULEVARD RESURFACING
Kapaa Quarry Road to Kalaheo Avenue
M.P. 2.97 TO M.P. 4.15
Federal Aid Project No. STP-065-1(010)

Scale: 1"=20' Date: March 2010

SHEET No. TS5 OF 5 SHEETS