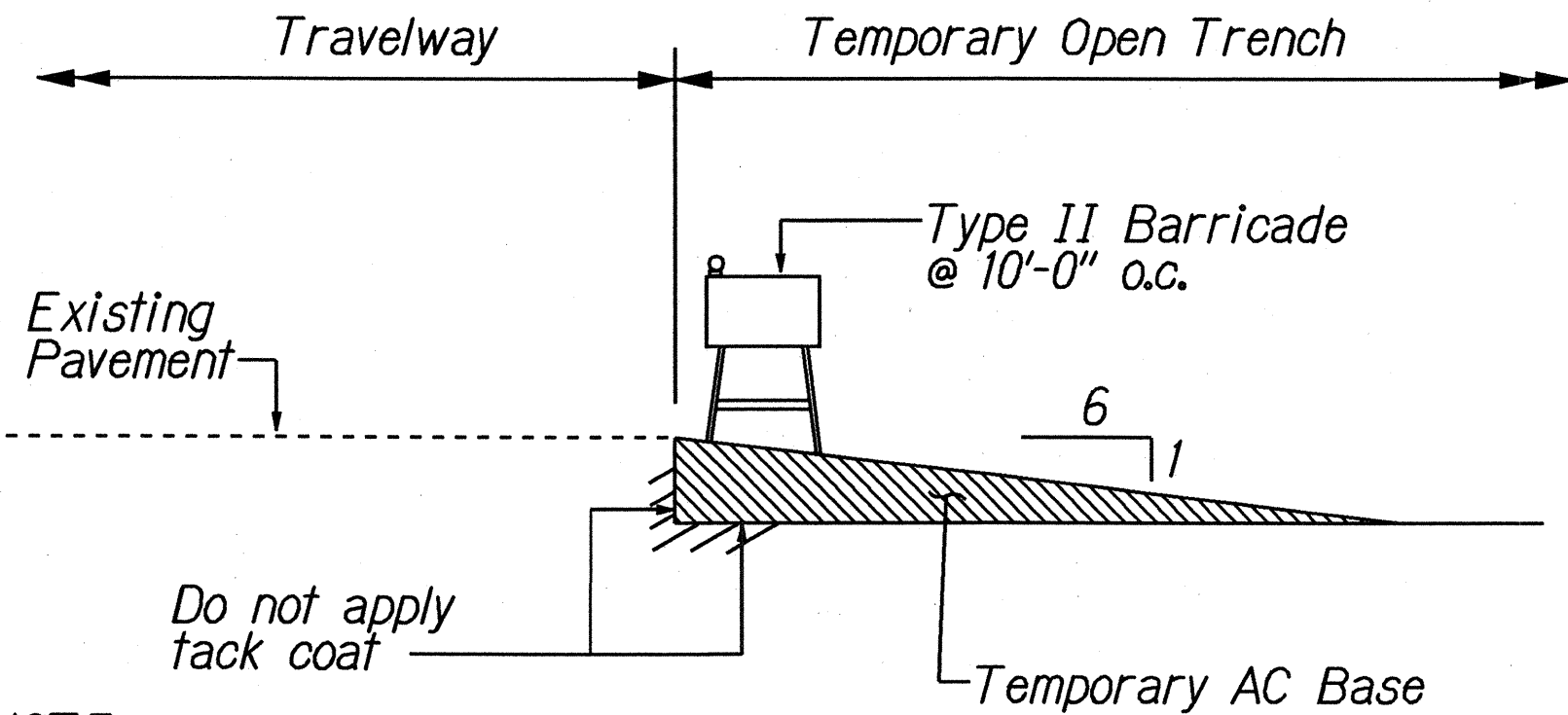


FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	92A-03-03M	2004	15	24

GENERAL NOTES FOR TRAFFIC CONTROL PLAN

- All lane closures and traffic pattern changes (detours) not shown on the plan shall be submitted to the Engineer for approval in accordance with Specifications Section 645 - Traffic Control. For restrictions on lane closures, detours, construction work during peak hours, and other requirements regarding maintaining vehicular and pedestrian traffic, see Section 107.13 - Public Convenience and Safety, Section 645 - Traffic Control, and Section 104.04 - Maintenance of Traffic.
- The Contractor shall make minor adjustments at intersections, driveways, bridges, structures, etc. to fit field conditions.
- Cones or delineators shall be extended to a point where they are visible to approaching traffic.
- 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.
- Flaggers and/or police officers shall be in sight of each other or in direct communications at all times.
- Sign spacings (L), taper lengths (T), and spacings of cones or delineators shall be as shown in Table 1 of Section 645 in the Specifications, unless otherwise noted on the Traffic Control Plans.
- All traffic lanes shall be minimum of 10 feet wide.
- All construction warning signs shall be promptly removed or covered whenever the message is not applicable or not in use.
- The backs of all signs for traffic control shall be appropriately covered to preclude the display of inapplicable sign messages (i.e., when signs have messages on both faces).
- At the end of each day's work or as soon as the work is completed, the Contractor 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.
- Replace permanent pavement markings and traffic signs upon completion of each phase of work.
- Existing conflicting pavement markings shall be removed and temporary pavement markings shall be installed before traffic patterns are changed. After completion of the work, temporary pavement markings shall be removed. Payment for removal of existing pavement markings and furnishing, installing, and removal of temporary pavement markings, whether or not shown on the Traffic Control Plans shall be considered incidental to the various contract items.
- The locations of pavement markings, signs, and delineators used in the Traffic Control shall be as shown on the Plans and/or as determined in the field by the Engineer.
- During working and non-working hours, the Contractor shall furnish, install, and maintain Type II Barricades at 10' spacing in new and existing pavement areas closed to public vehicles.

- The Contracator shall provide sand bags or other accepted weights for the Type II Barricades, when used. The Contractor shall provide steady burn amber lamps during hours of darkness. The lamps shall be attached on the Type II Barricade end closest to the traveled way. The lamp should be visible to the motorist. Payment for Type II Barricades with amber lamps shall be considered incidental to the various contract items.
- Contractor shall maintain access to adjacent properties at all times.
- Cones and signs for night work shall be retroreflective.
- The Contractor shall provide a transition taper during non-construction hours for open trenches adjacent to the travelway. Se Transition Taper Detail on this sheet.
- Steel plates for covering trenches shall have a skid resistant surface. Payment for steel plates shall be considered incidental to the various contract items.
- The Contractor shall limit the extent of trench and excavation work for pavement reconstruction to an area that can be satisfactorily backfilled in one work day.



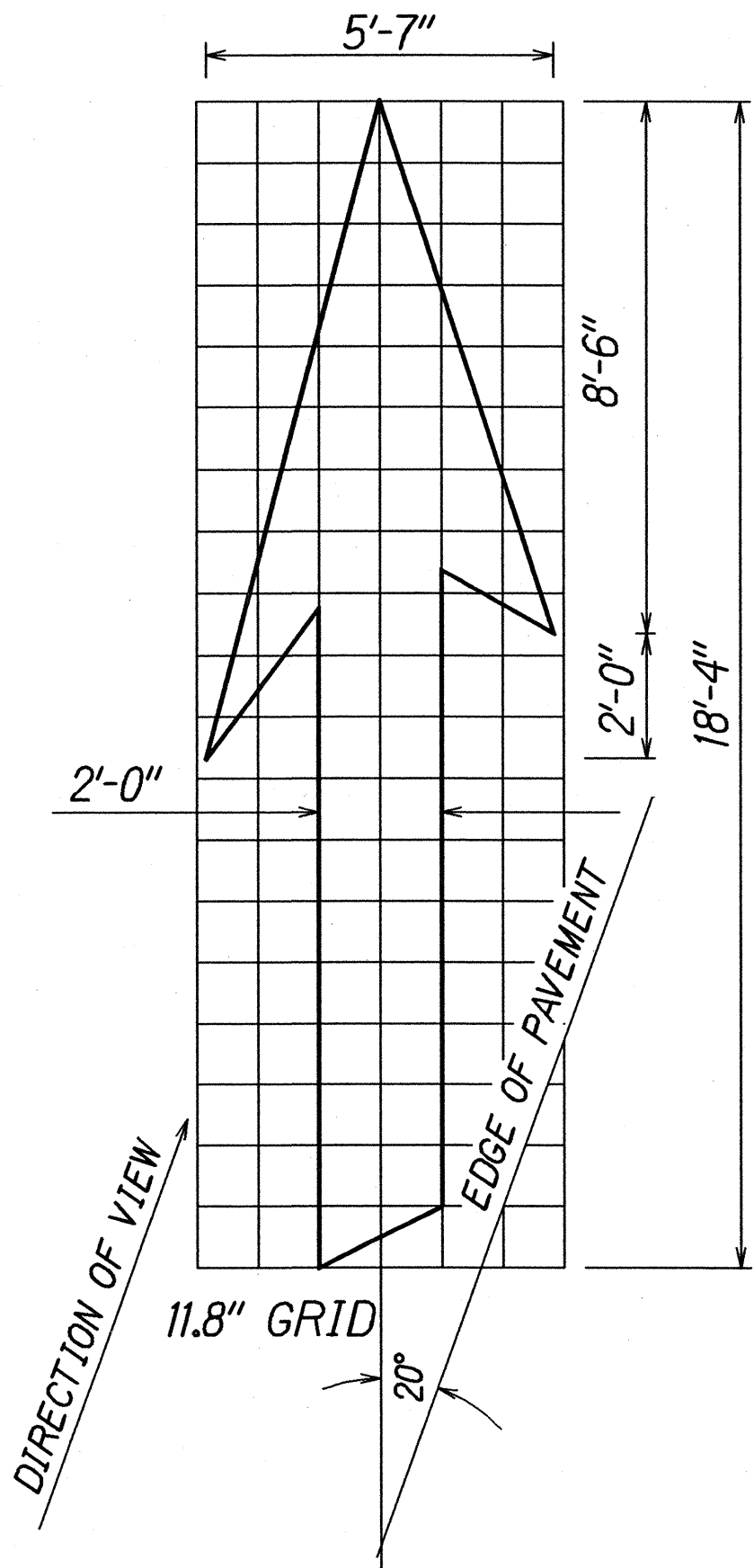
NOTE:  
Contractor shall install & maintain appropriate construction warning signs. Payment for furnishing, installing and removing construction warning signs shall be considered incidental to the various contract items.

Temporary AC Base  
(Remove prior to pavement construction) Payment for construction and removal of Temporary AC Base shall be considered incidental to the various contract items.

TRANSITION TAPER  
Not to Scale

LEGEND

- • • Cones
- ⦿ Tubular Delineator
- ▢ Portable Arrow Board
- ▢ Portable Electronic Message Board
- ➔ Direction of Traffic
- New Sign
- ◡ Existing Sign
- ⊢ Type II Barricade
- ⊢⊢ Type III Barricade
- ▣ Work Area



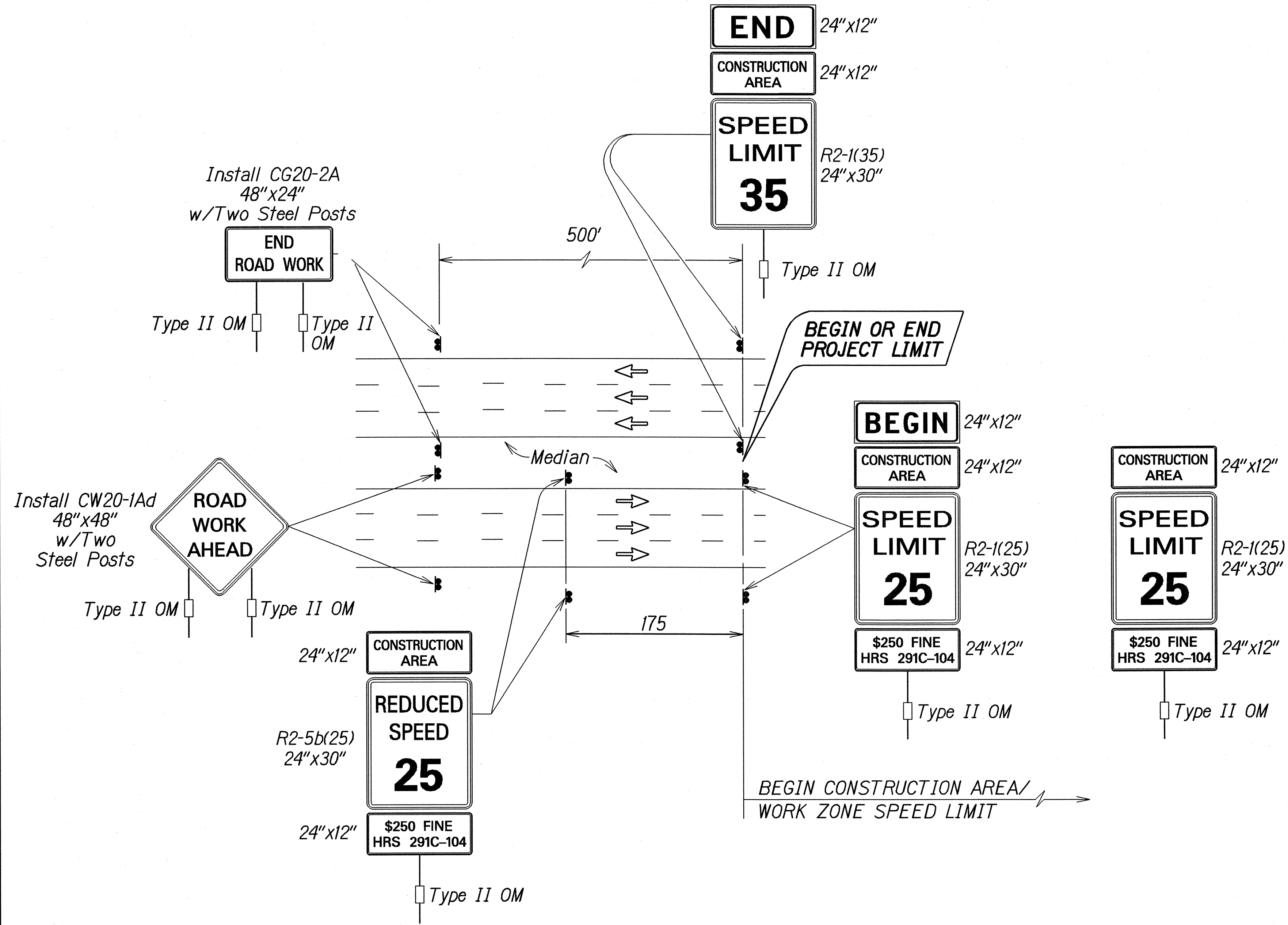
TYPE VI ARROW  
RIGHT LANE DROP ARROW  
(FOR LEFT LANE,  
USE MIRROR IMAGE)

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	10/1/04
DESIGNED BY	DESIGNED BY	10/1/04
CHECKED BY	CHECKED BY	10/1/04

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**TRAFFIC CONTROL NOTES & LEGEND**  
  
**NIMITZ HIGHWAY**  
**PAVEMENT PREVENTIVE MAINTENANCE**  
**Keehi Interchange to Waiakamilo Road**  
**Project No. 92A-03-03M**  
Scale: None Date: May 2004  
SHEET No. 11 OF 10 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	92A-03-03M	2004	ADD. 15S-1	24

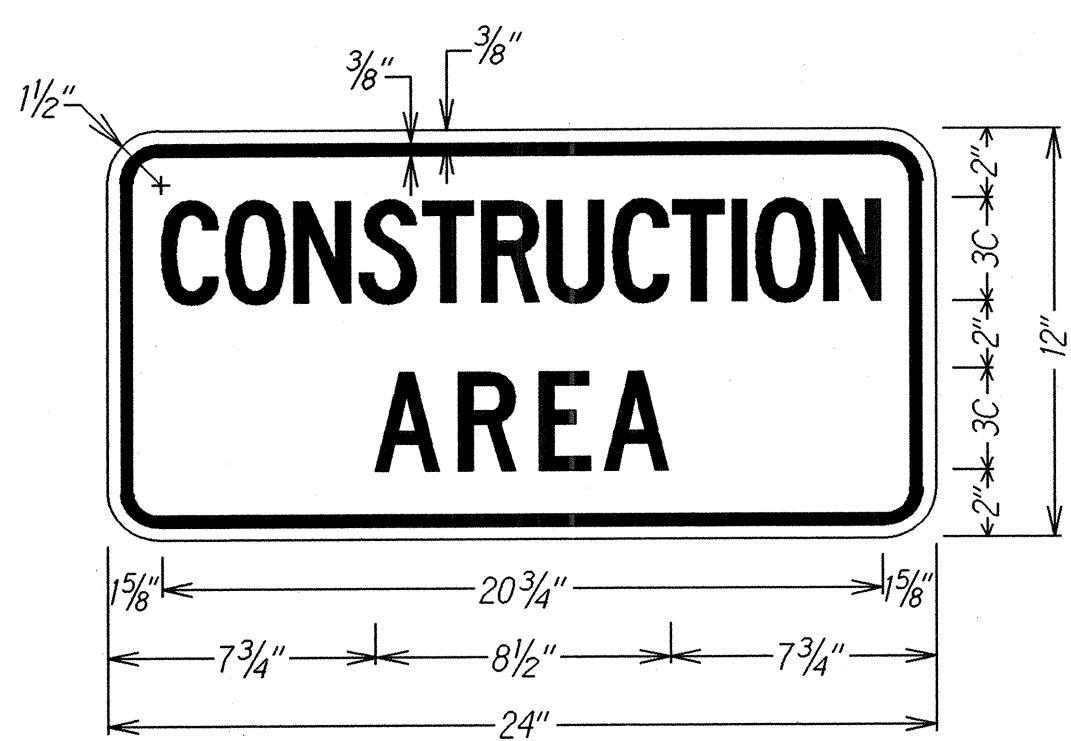


TYPICAL DETAIL FOR CONSTRUCTION SIGNS  
ON MULTILANE DIVIDED LOW SPEED HIGHWAY

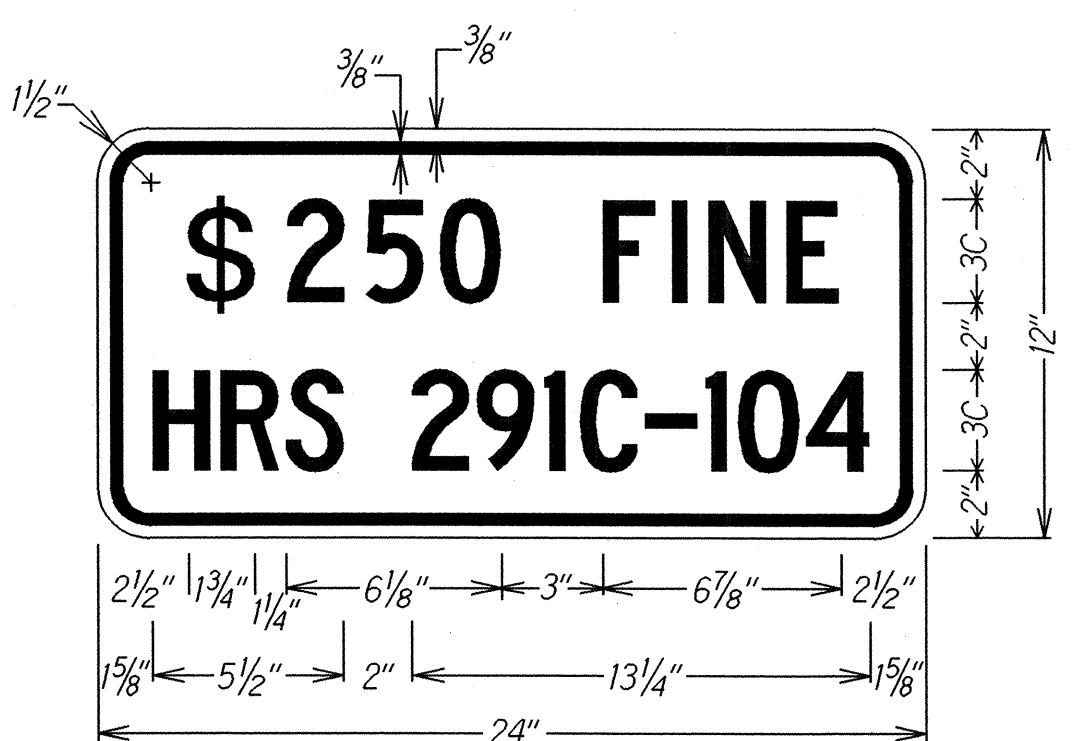
Work Zone Notes:

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(XX) and R2-5b(XX) 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. 621.7100, Construction Sign with Posts.
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 shall be considered incidental to Item No. 621.7100, Construction Sign with Posts.
8. The fabrication and initial installation of work zone speed limit sign assemblies shall be paid for under Item No. 621.7100, Construction Sign with Posts.
9. The subsequent relocation, maintenance and removal of work zone speed limit sign assemblies shall be considered incidental to Item No. 621.7100, Construction Sign with Posts.
10. The work zone speed limit signs shall be new and become property of the Contractor at completion of project.

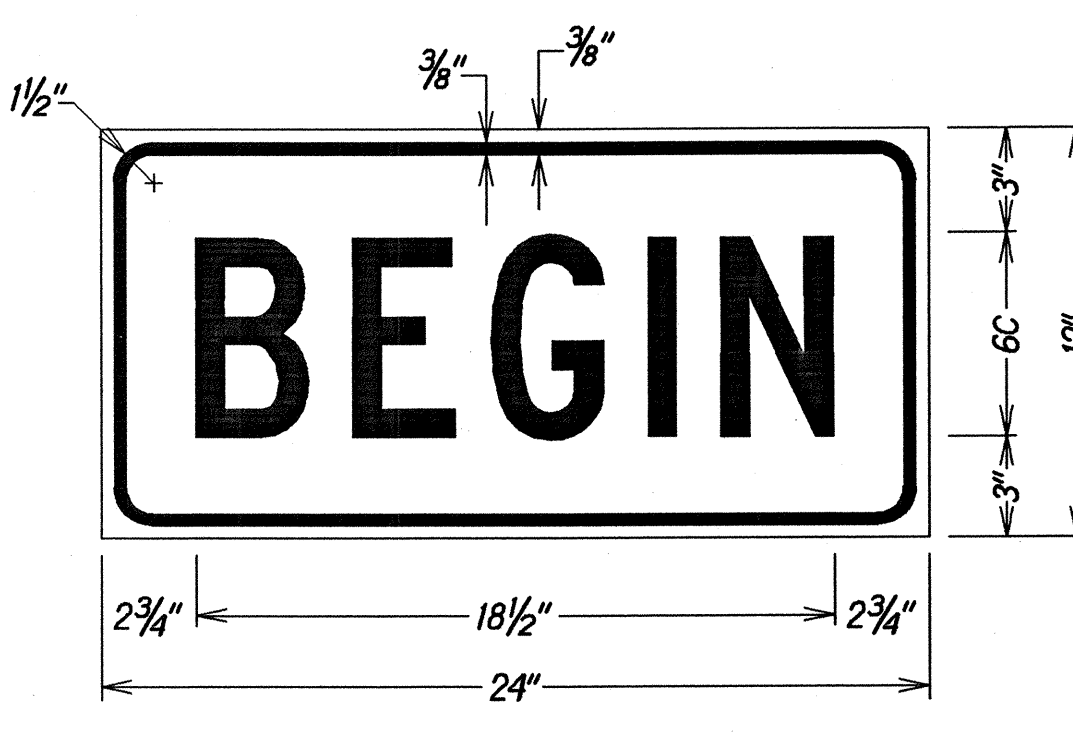
DATE	6/8/04
SURVEY PLOTTED BY	
DRAWN BY	AW/ID
DESIGNED BY	AW/ID
CHECKED BY	AW/ID
NOTED BY	AW/ID
DATE	6/8/04



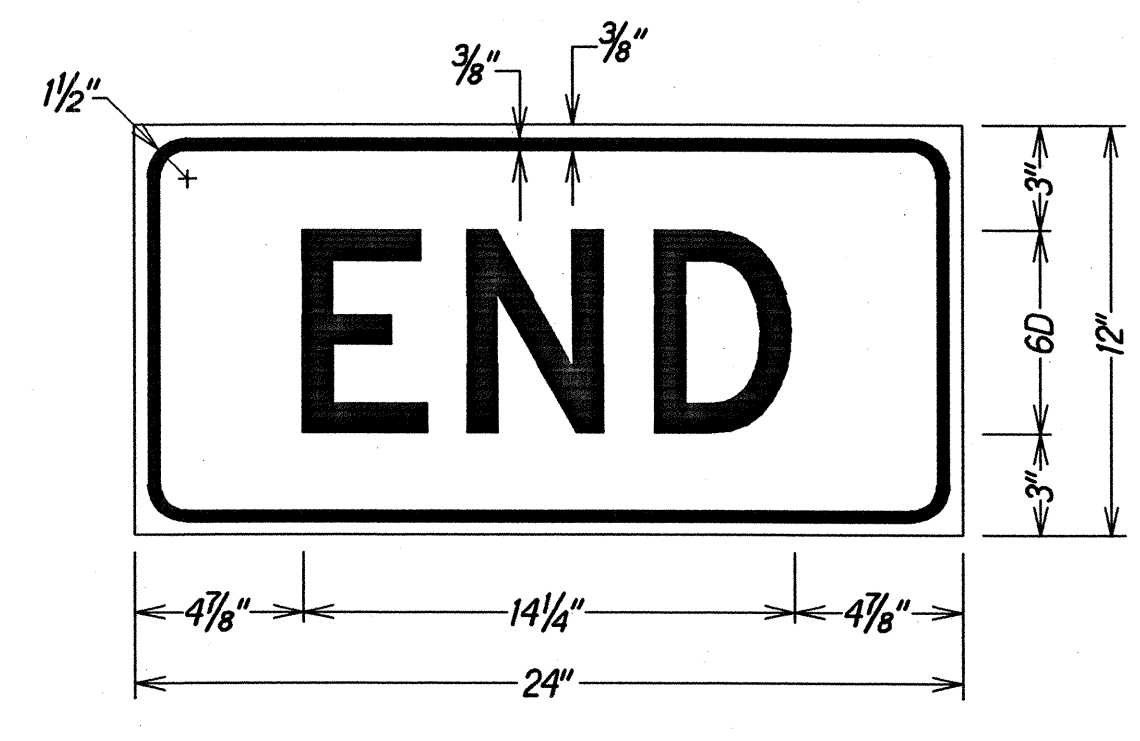
LEGEND: BLACK  
BACKGROUND: ORANGE



LEGEND: BLACK  
BACKGROUND: WHITE



LEGEND: BLACK  
BACKGROUND: ORANGE



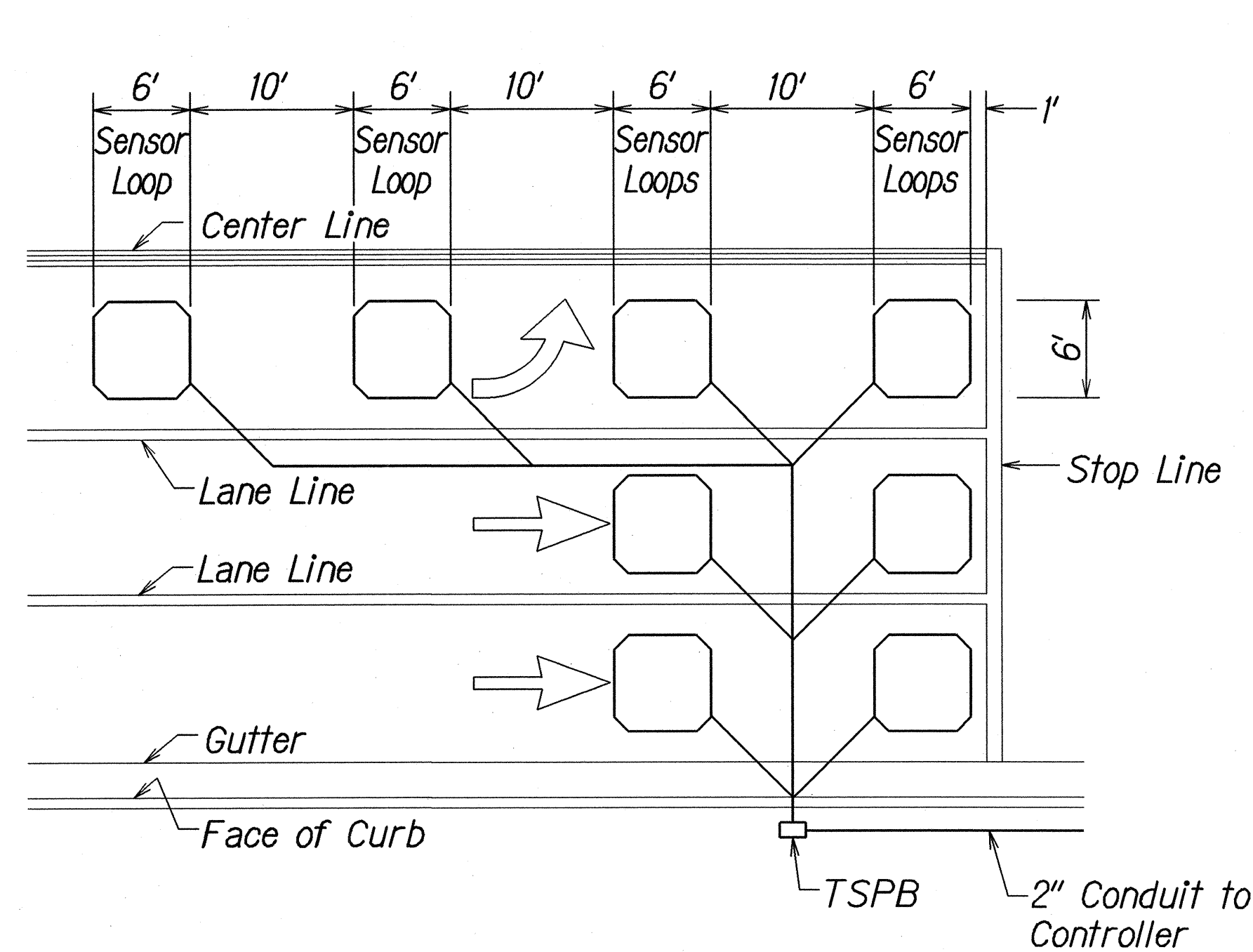
LEGEND: BLACK  
BACKGROUND: ORANGE

DATE	6/8/04
REVISION	Add this sheet to contract plans.
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION <b>WORK ZONE SIGNING PLAN, NOTES &amp; DETAILS</b> NIMITZ HIGHWAY PAVEMENT PREVENTIVE MAINTENACE Keeli Interchange to Waiakamilo Road Project No. 92A-03-03M Not To Scale Date: May 2004	
SHEET No. T1A OF 10 SHEETS	





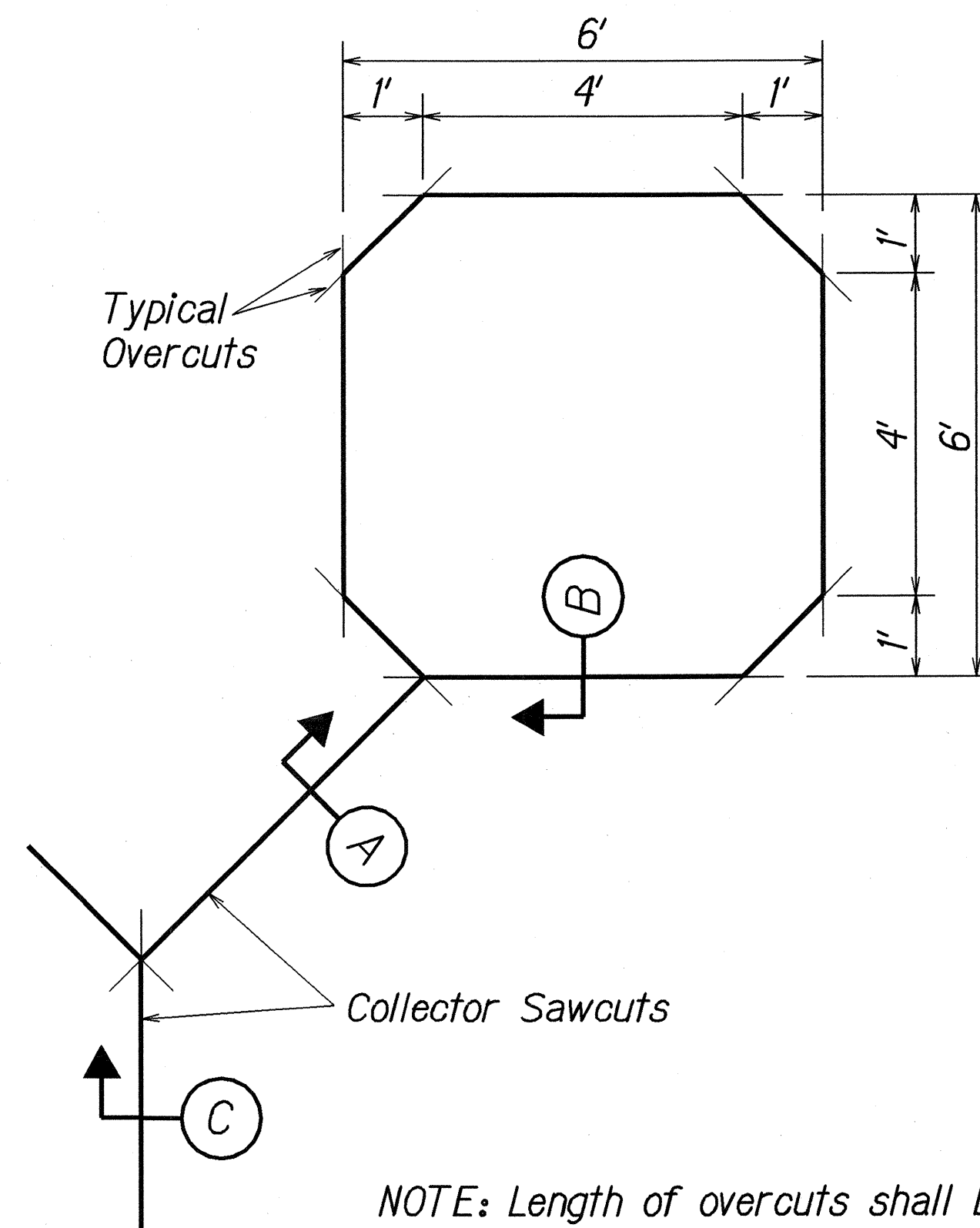
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	92A-03-03M	2004	17	24



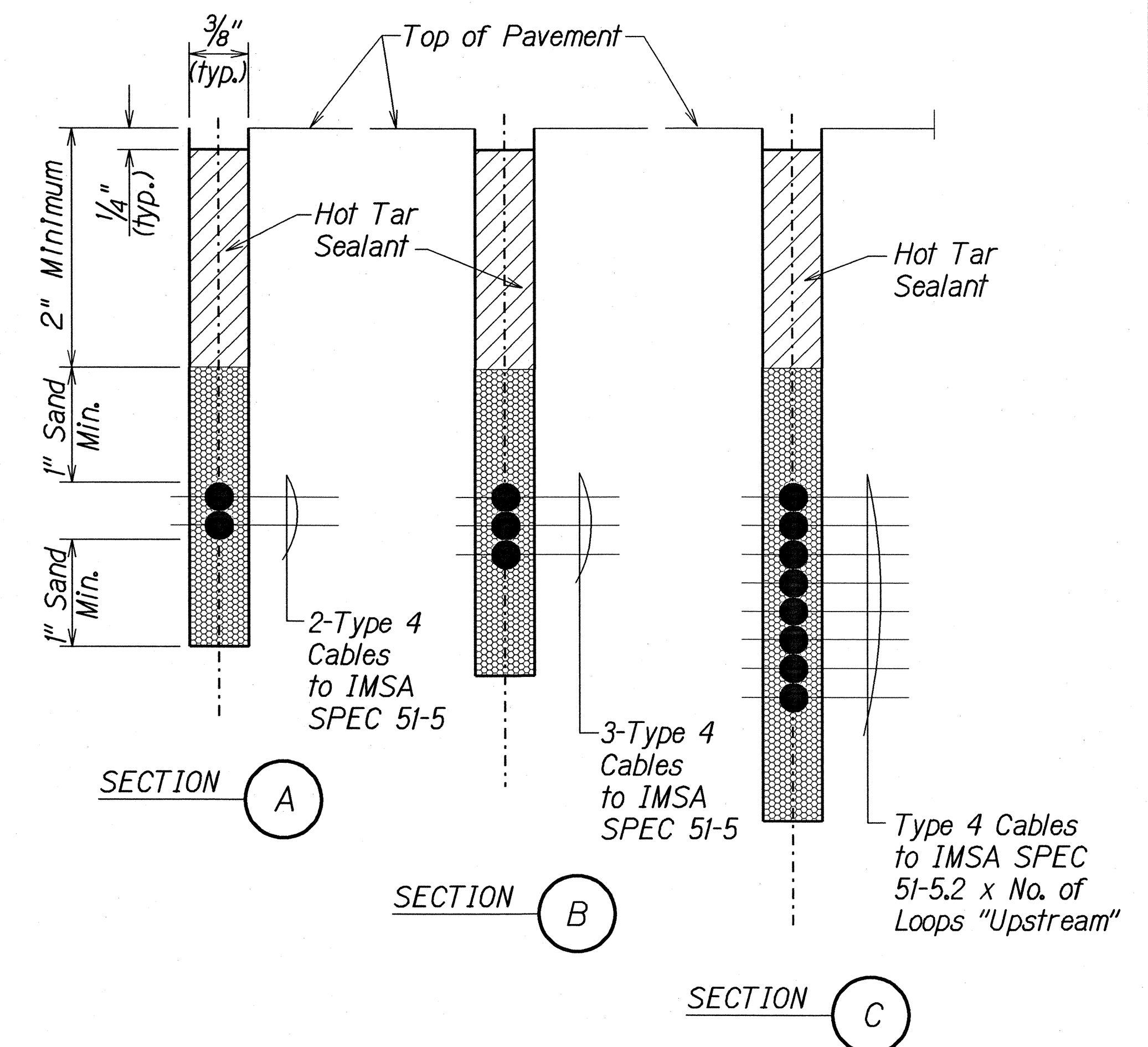
**NOTES:**

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.

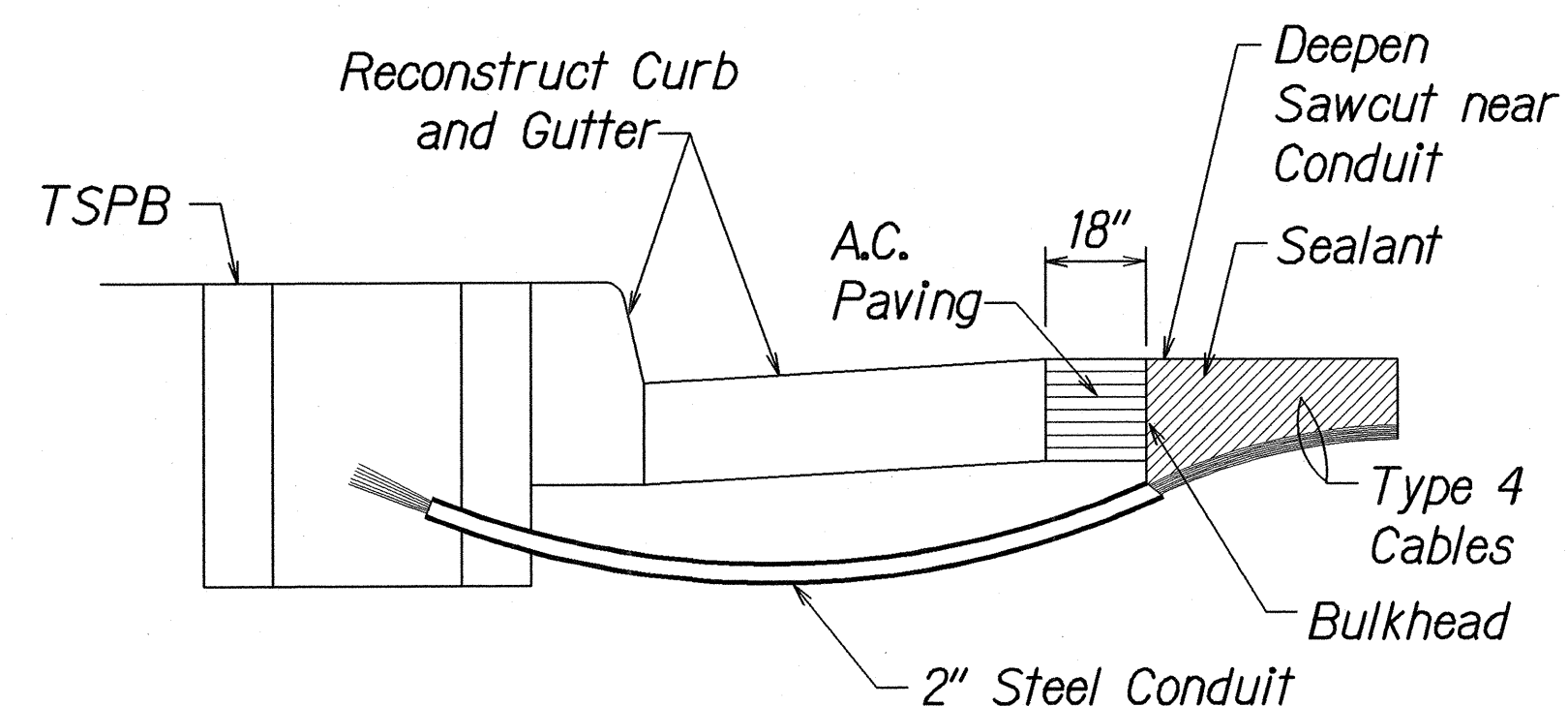
TYPICAL SENSOR LOOP LAYOUT



TYPICAL SENSOR LOOP SAWCUT DETAIL



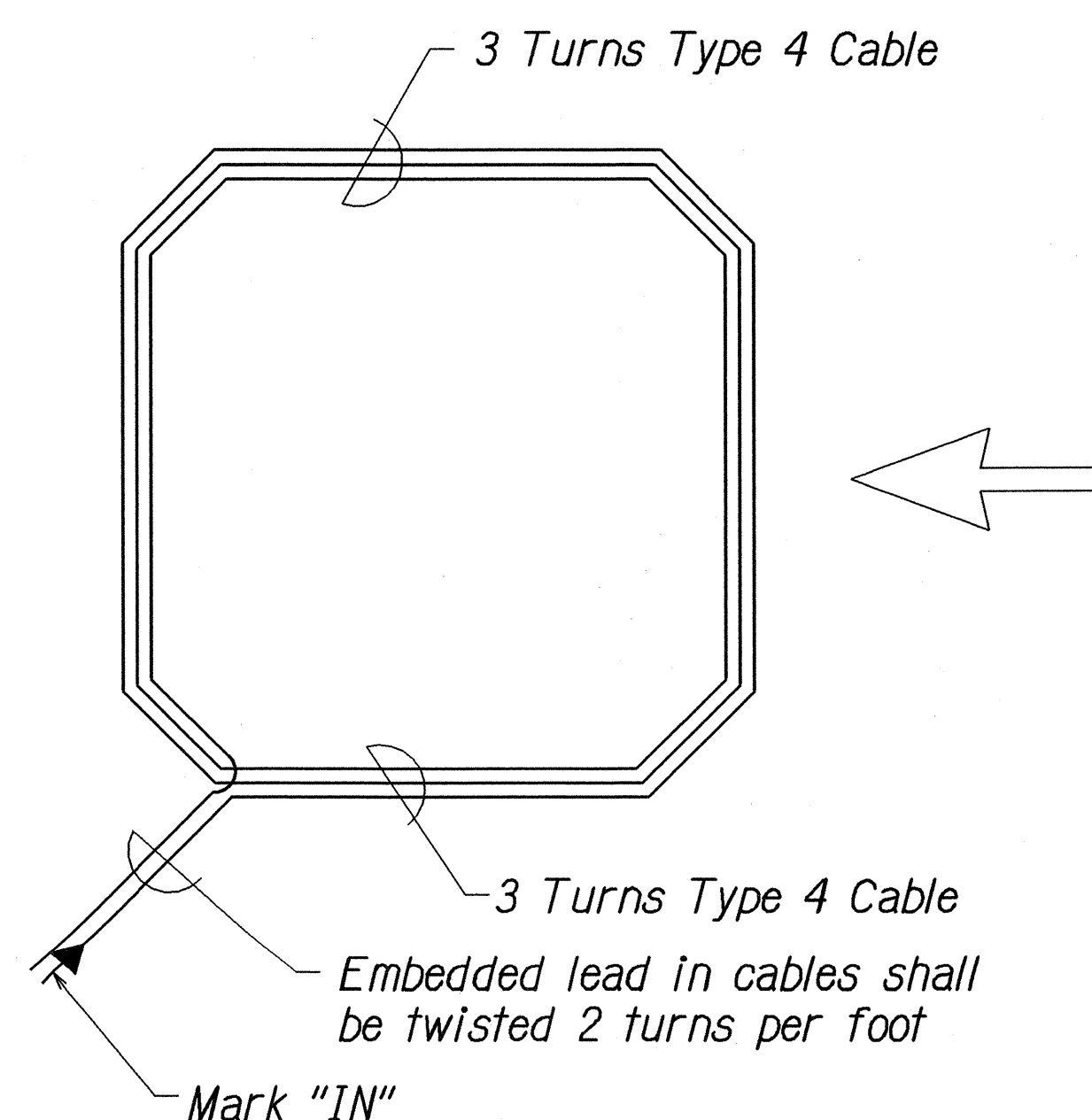
TYPICAL SECTION THROUGH SENSOR LOOP



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 PLAN	DATE
SURVEY PLOTTED BY	
DRAWN BY	
DESIGNED BY	
CHECKED BY	

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

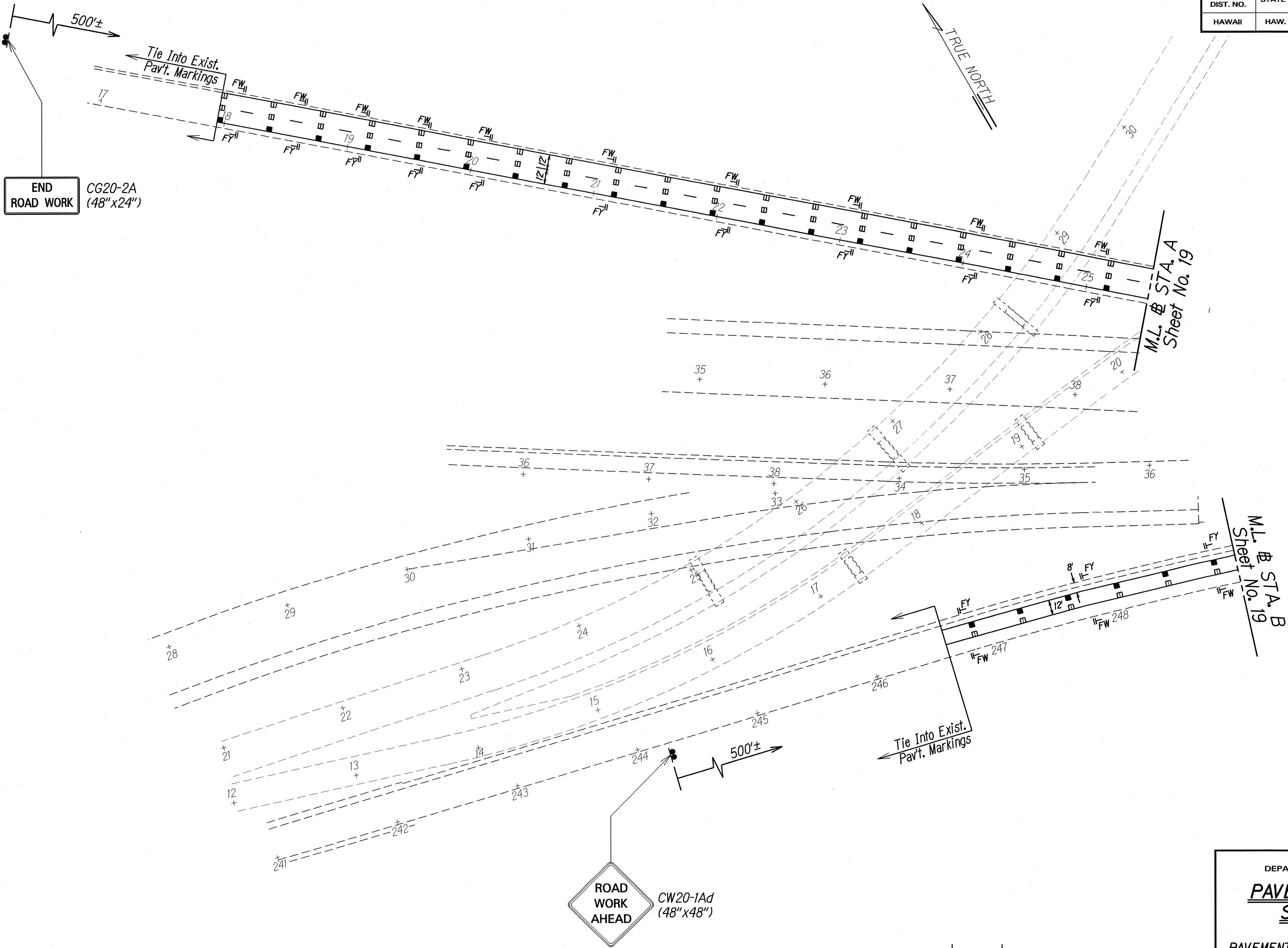
**LOOP DETECTOR DETAILS**

**NIMITZ HIGHWAY**  
**PAVEMENT PREVENTIVE MAINTENANCE**  
**Keahi Interchange to Waiakamilo Road**  
**Project No. 92A-03-03M**  
Not to Scale Date: May 2004

SHEET No. T3 OF 10 SHEETS



FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	92A-03-03M	2004	18	24



SURVEY PLOTTED BY	DATE
DRAWN BY	
TRACED BY	
DESIGNED BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
NO. 102.000	

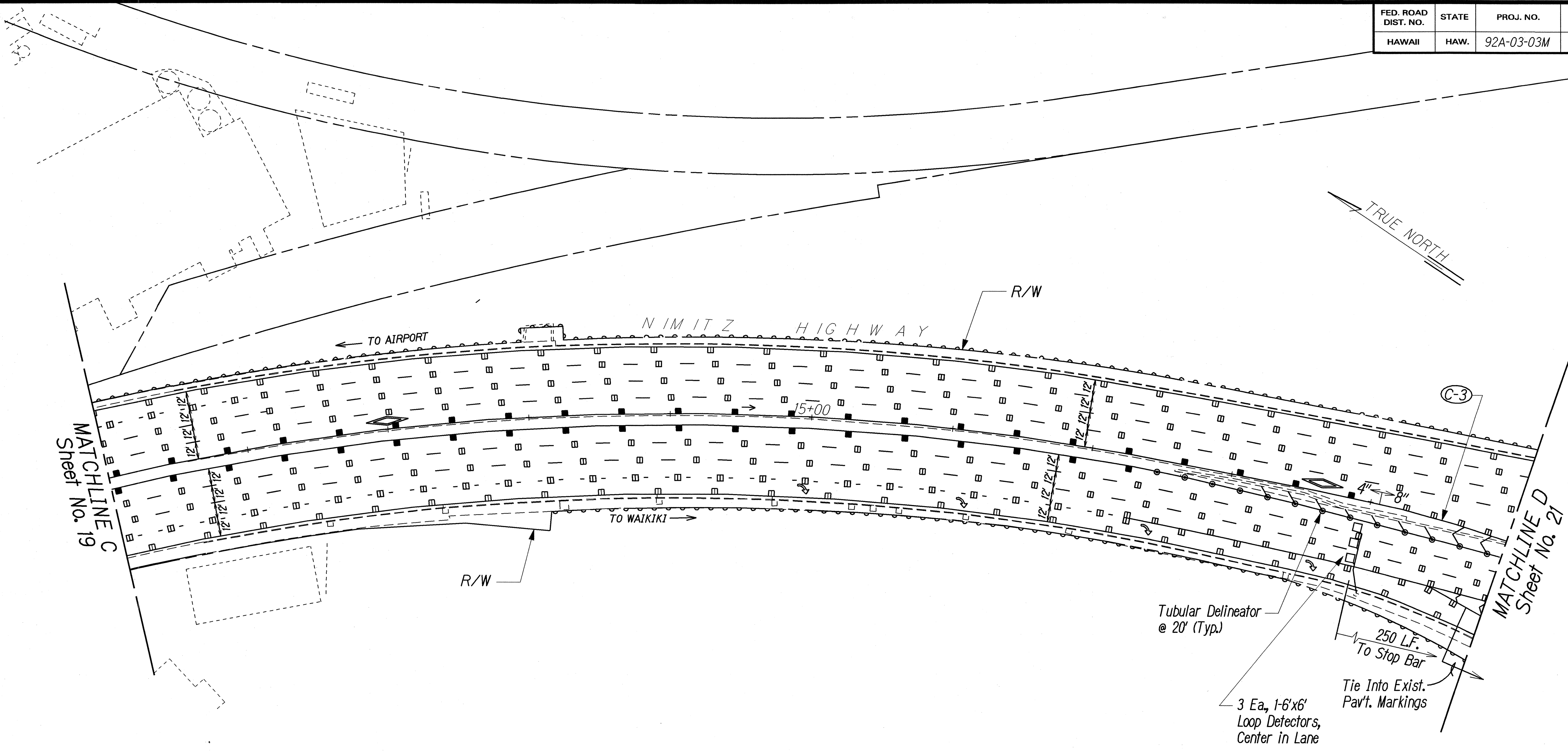
6/8/04	Add construction signs.
DATE	REVISION

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION  
**PAVEMENT MARKING & STRIPING PLAN**  
NIMITZ HIGHWAY  
PAVEMENT PREVENTIVE MAINTENANCE  
Keehi Interchange to Waiakamilo Road  
Project No. 92A-03-03M  
Scale: 1" = 40' Date: May 2004  
SHEET No. 14 OF 10 SHEETS

ADD. 18



FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	92A-03-03M	2004	20	24



CONTRAFLOW CURVE DATA

CURVE	RADIUS	LENGTH	TANGENT	CHORD	DELTA
(C-3)	940.66'	149.17'	74.74'	149.01'	9°05'09.66"

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	
NO. 102.000	DESIGNED BY	
	CHECKED BY	

Tmmp3\_ADD1

6/14/04	Add HOV symbol.
---------	-----------------

DATE	REVISION
------	----------

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

PAVEMENT MARKING, STRIPING  
& TRAFFIC SIGNAL PLAN

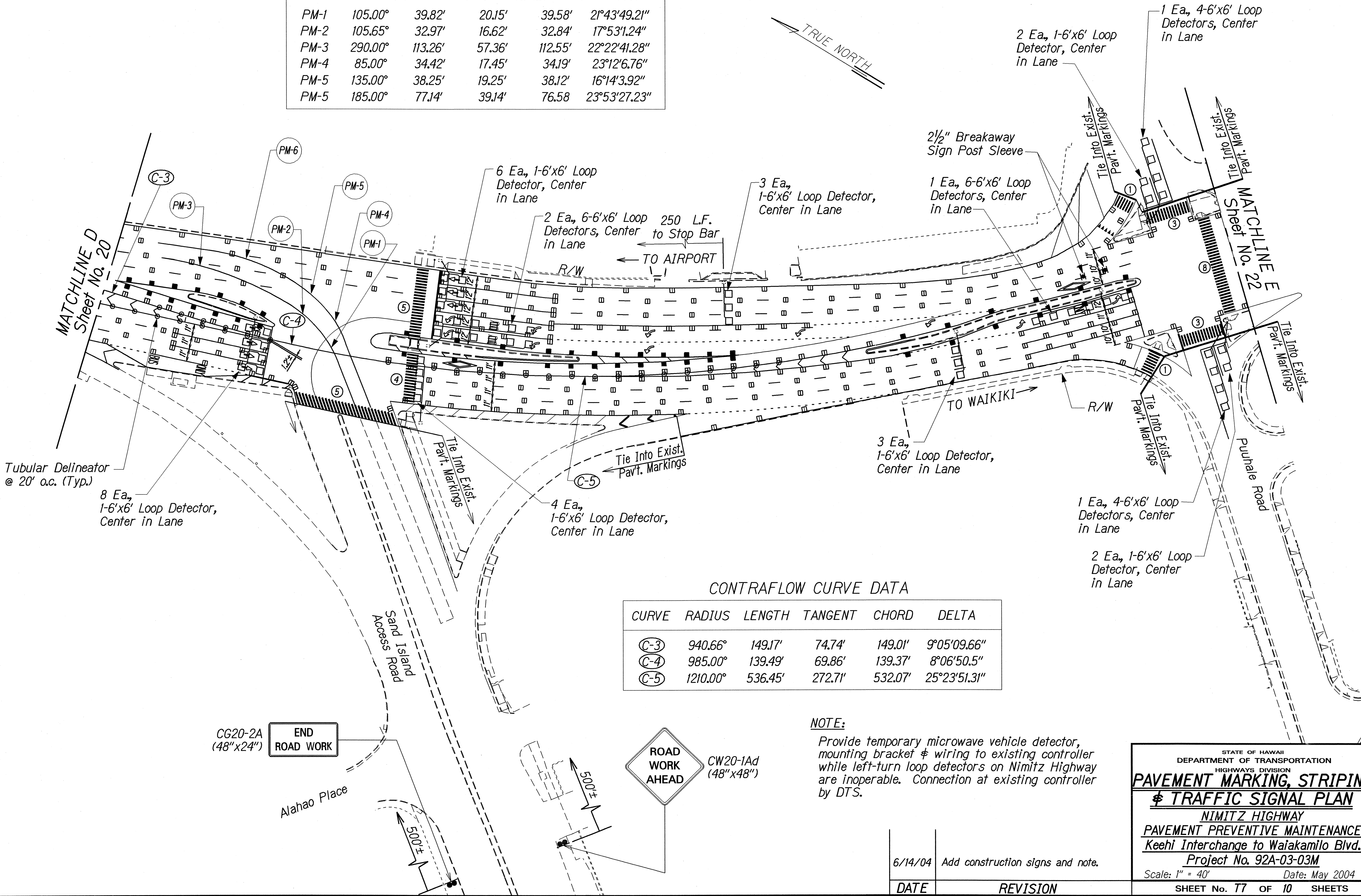
NIMITZ HIGHWAY  
PAVEMENT PREVENTIVE MAINTENANCE  
Keehi Interchange to Waiakamilo Road  
Project No. 92A-03-03M  
Scale: 1" = 40'      Date: May 2004

SHEET No. T6 OF 10 SHEETS



FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	92A-03-03M	2004	21	24

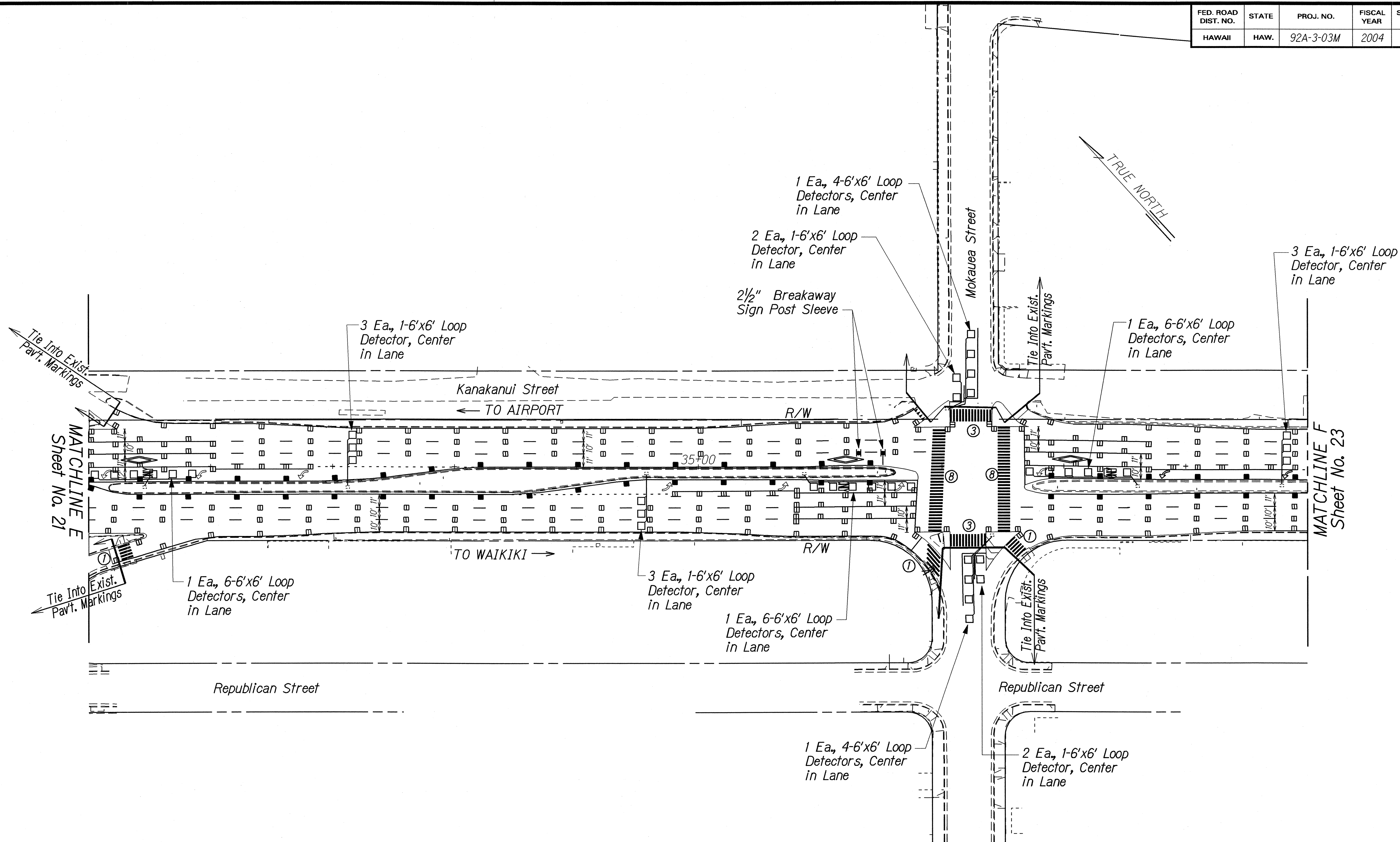
CURVE	RADIUS	LENGTH	TANGENT	CHORD	DELTA
PM-1	105.00°	39.82'	20.15'	39.58'	21°43'49.21"
PM-2	105.65°	32.97'	16.62'	32.84'	17°53'1.24"
PM-3	290.00°	113.26'	57.36'	112.55'	22°22'41.28"
PM-4	85.00°	34.42'	17.45'	34.19'	23°12'6.76"
PM-5	135.00°	38.25'	19.25'	38.12'	16°14'3.92"
PM-5	185.00°	77.14'	39.14'	76.58'	23°53'27.23"



DATE	_____
SURVEY PLOTTED BY	_____
DRAWN BY	_____
DESIGNED BY	_____
CHECKED BY	_____
NOTE BOOK	_____
NO. 102.may	_____



FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	92A-3-03M	2004	22	24



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

**NOTE:**  
 Provide temporary microwave vehicle detector, mounting bracket & wiring to existing controller while left-turn loop detectors on Nimitz Highway are inoperable. Connection at existing controller by DTS.

6/14/04	Add note.
---------	-----------

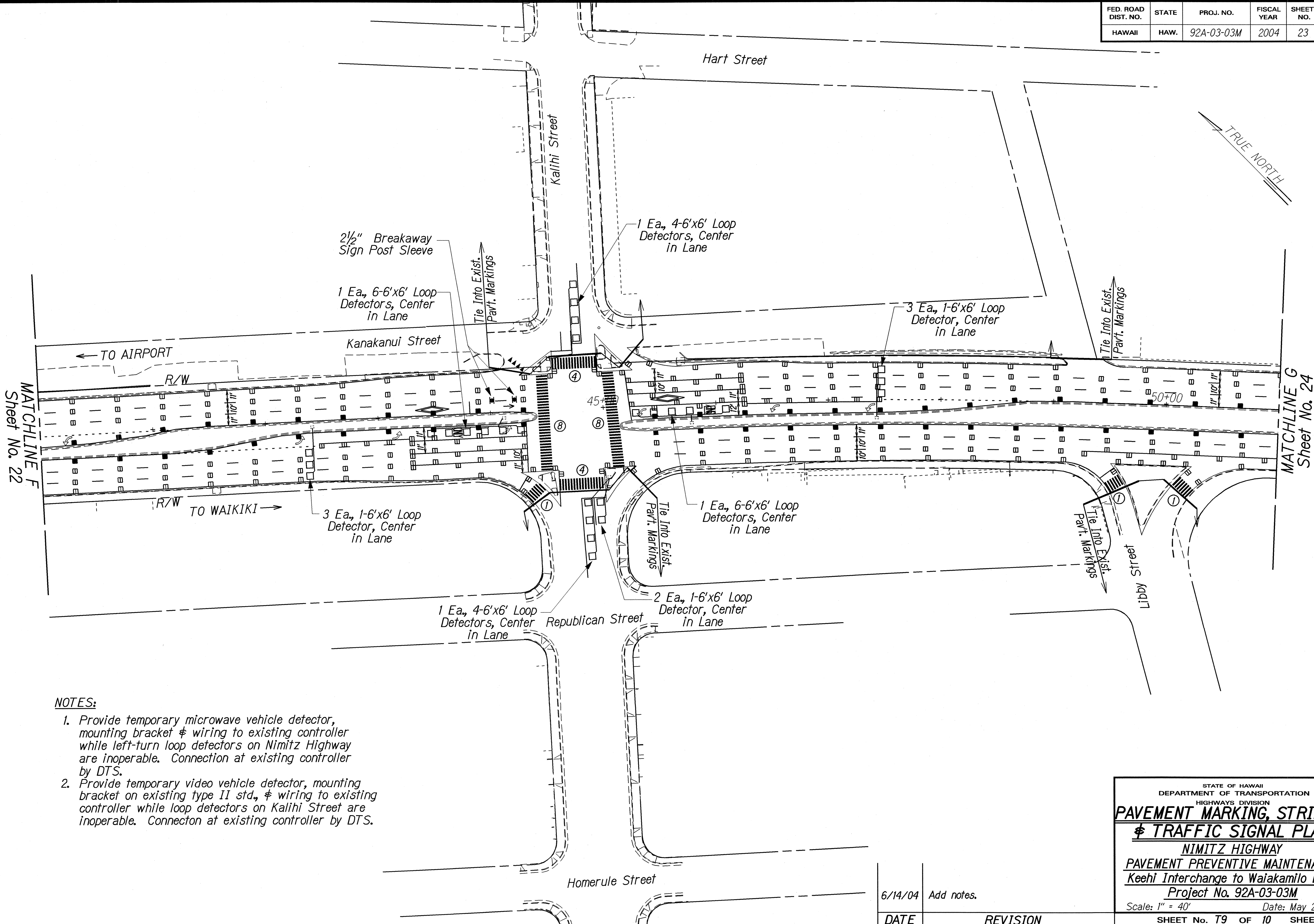
DATE	REVISION
------	----------

STATE OF HAWAII  
 DEPARTMENT OF TRANSPORTATION  
 HIGHWAYS DIVISION

**PAVEMENT MARKING, STRIPING**  
**& TRAFFIC SIGNAL PLAN**  
 NIMITZ HIGHWAY  
 PAVEMENT PREVENTIVE MAINTENANCE  
 Keehi Interchange to Waiakamilo Blvd.  
 Project No. 92A-03-03M  
 Scale: 1" = 40'      Date: May 2004

SHEET No. 78 OF 10 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	92A-03-03M	2004	23	24



- NOTES:**
1. Provide temporary microwave vehicle detector, mounting bracket & wiring to existing controller while left-turn loop detectors on Nimitz Highway are inoperable. Connection at existing controller by DTS.
  2. Provide temporary video vehicle detector, mounting bracket on existing type II std., & wiring to existing controller while loop detectors on Kalihi Street are inoperable. Connecton at existing controller by DTS.

DATE	6/14/04
SURVEY PLOTTED BY	ADD.
DRAWN BY	ADD.
DESIGNED BY	ADD.
CHECKED BY	ADD.
NOTE BOOK	ADD.
NO. 102 MAY	ADD.

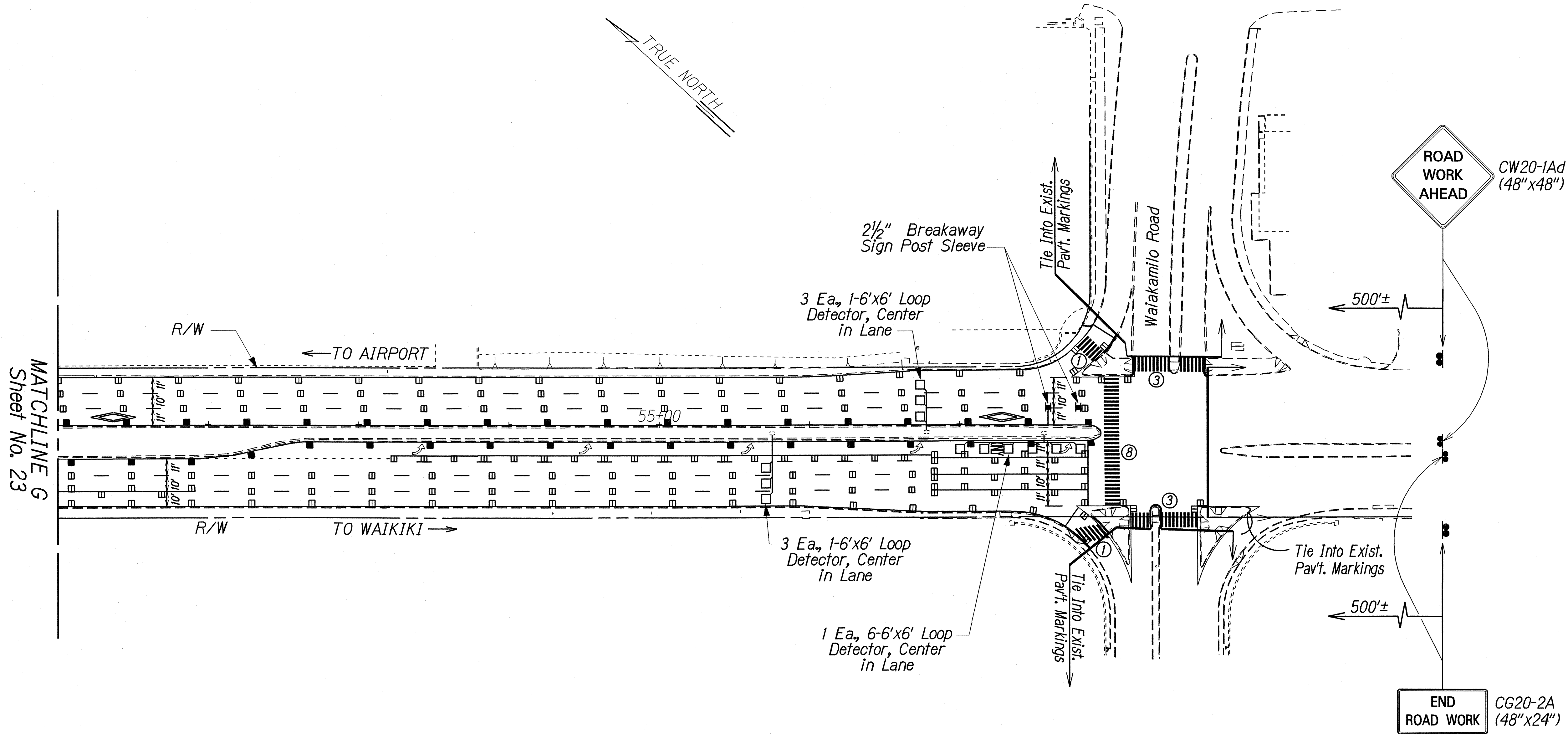
6/14/04	Add notes.
DATE	REVISION

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

PAVEMENT MARKING, STRIPING  
& TRAFFIC SIGNAL PLAN  
NIMITZ HIGHWAY  
PAVEMENT PREVENTIVE MAINTENANCE  
Keehi Interchange to Waiakamilo Blvd.  
Project No. 92A-03-03M  
Scale: 1" = 40'      Date: May 2004  
SHEET No. T9 OF 10 SHEETS



FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	92A-03-03M	2004	24	24



**NOTE:**  
Provide temporary microwave vehicle detector, mounting bracket & wiring to existing controller while left-turn loop detectors on Nimitz Highway are inoperable. Connection at existing controller by DTS.

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

6/14/04	Add construction signs and note.
DATE	REVISION

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

PAVEMENT MARKING, STRIPING  
& TRAFFIC SIGNAL PLAN  
NIMITZ HIGHWAY  
PAVEMENT PREVENTIVE MAINTENANCE  
Keehi Interchange to Waikamilo Blvd.  
Project No. 92A-03-03M  
Scale: 1" = 40' Date: May 2004  
SHEET No. T10 OF 10 SHEETS