

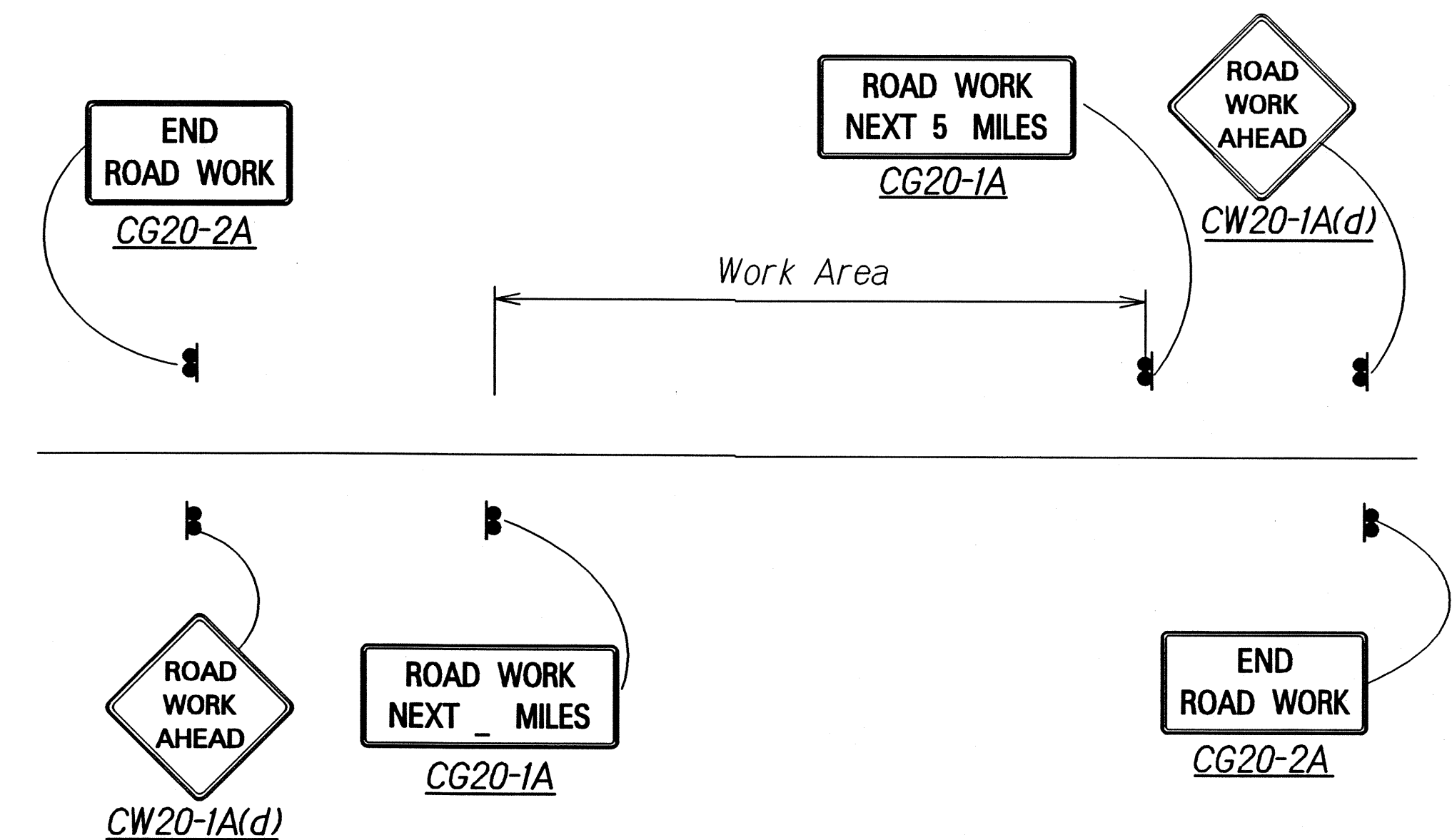
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	ARR-0360(10)	2009	17	28

**LEGEND**

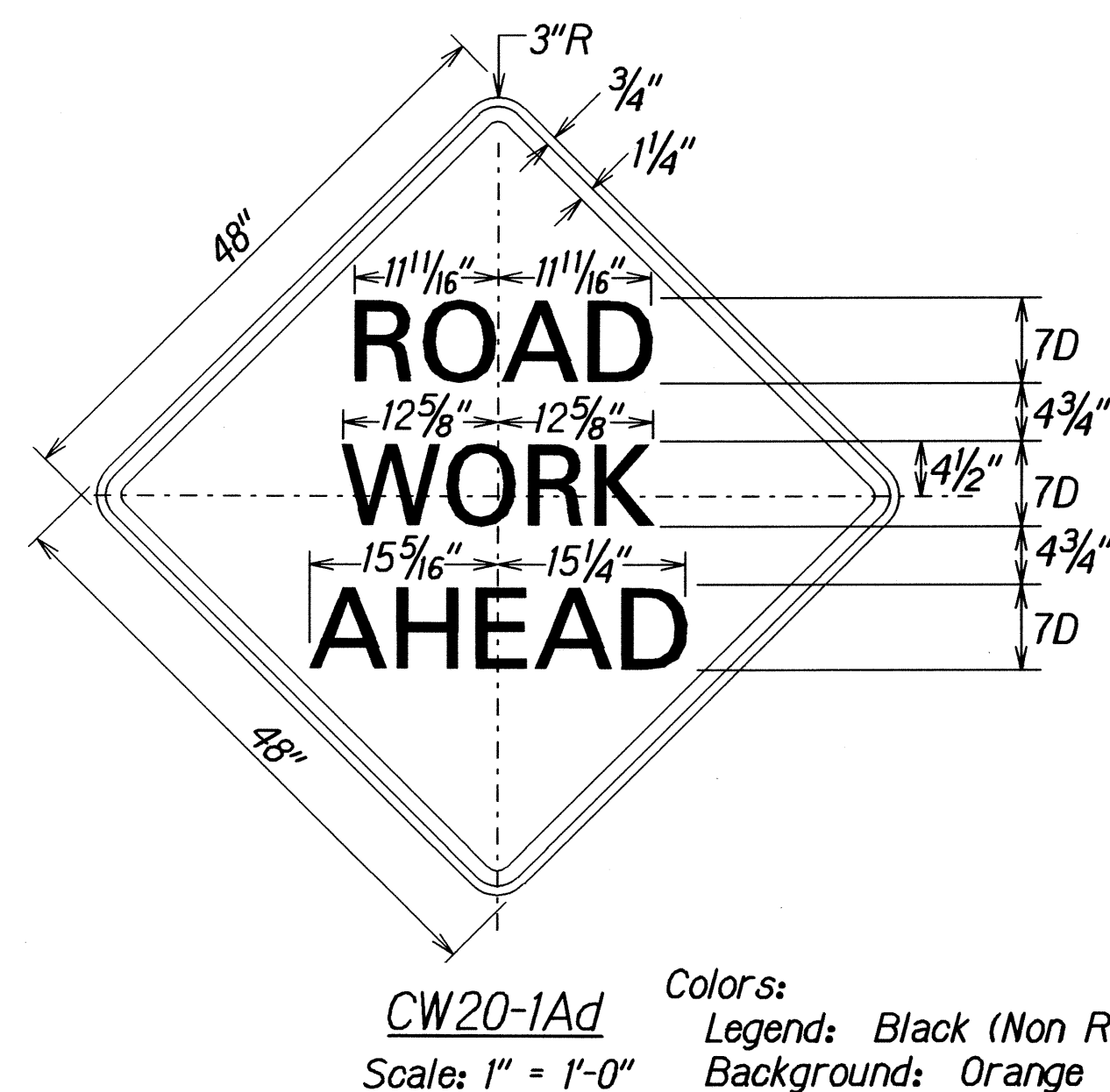
- 4 each Type A Raised Pavement Markers  
Type C Raised Pavement Markers @ 40'-0" o.c.
- 4 each Type J Raised Pavement Markers  
Type D Raised Pavement Markers @ 40'-0" o.c.
- 8" White Stripe with Type C Raised Pavement Markers @ 20'-0" o.c. (Thermoplastic)
- 4" Double Solid Yellow with Type D Raised Pavement Markers @ 20'-0" o.c. (Thermoplastic)
- 4" Double Solid Yellow Stripes with Type H Raised Pavement Markers @ 20'-0" o.c. (Thermoplastic)
- 4" Yellow Edge Stripe with Type H Raised Pavement Markers @ 40'-0" o.c. (Thermoplastic)
- 4" Double Solid White Stripes with Type C Raised Pavement Markers @ 20'-0" o.c. (Thermoplastic)
- Lane Change Restriction Marking  
4 each Type A Raised Pavement Markers  
Unless Noted Otherwise in The Plans  
Type C Raised Pavement Markers @ 20'-0" o.c.  
4" White Stripe (Thermoplastic)
- 4" or 8" White Edge Stripe with Type C Raised Pavement Markers @ 40'-0" o.c. (Thermoplastic)
- 4" White Guide Lines (Thermoplastic)
- Transverse Median Marking (Thermoplastic)
- Transverse Shoulder Marking (Thermoplastic)
- Channelizing Island or Deceleration Lane Gore (Thermoplastic)
- 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 (Thermoplastic)
- Pavement Arrow (Thermoplastic)
- STOP Pavement Word (Thermoplastic)
- 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 (Thermoplastic)
- Extension of Edge Line, 4" Wide x 2'-0" Long White Stripe @ 10'-0" o.c. w/Type C Markers @ 40'-0" o.c. (Thermoplastic)
- || SW Reflector Marker (RM-2, White) w/steel post
- || FW Reflector Marker (RM-2, White) w/flexible post

**NOTES**

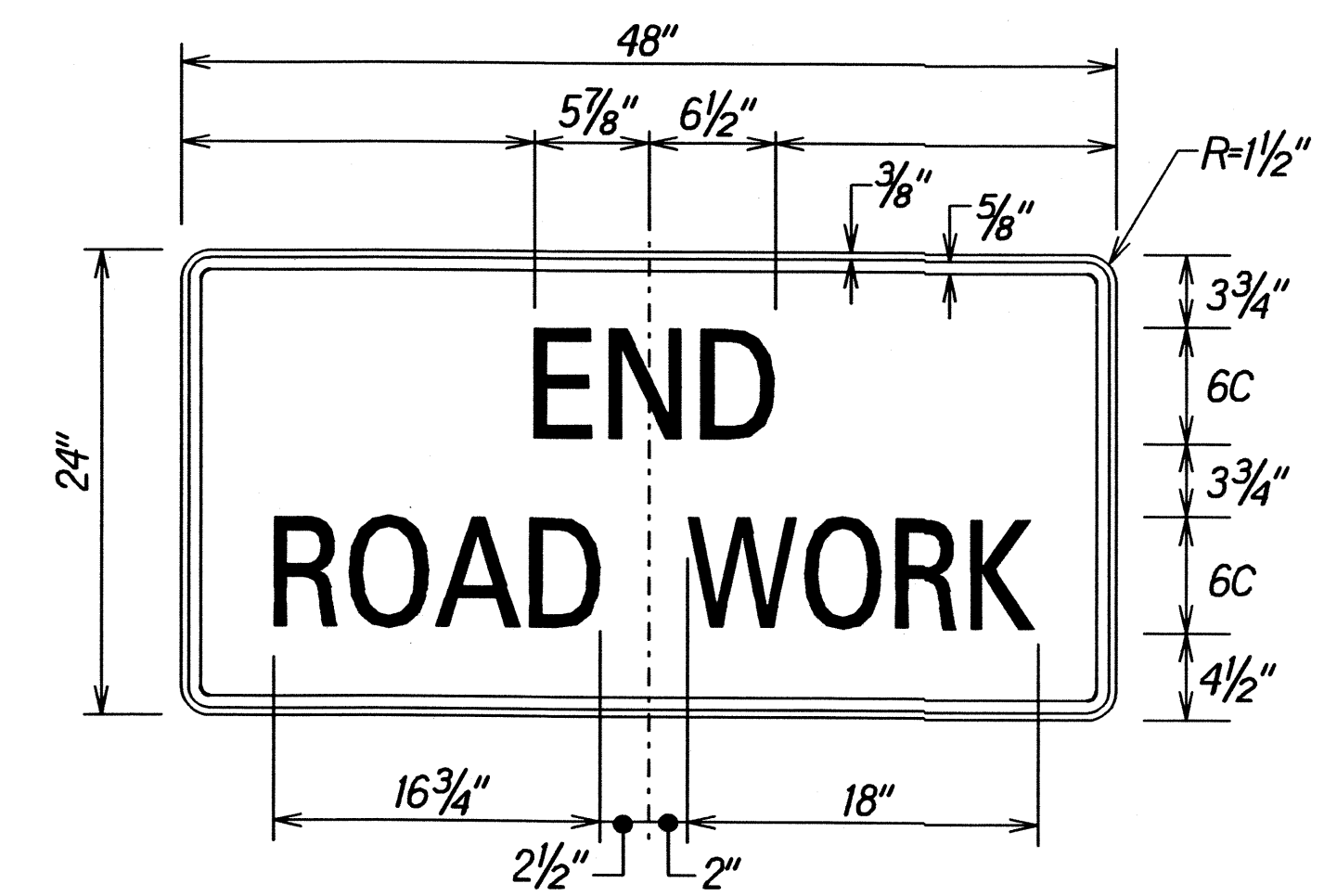
1. Layout of pavement markings and striping shall be done by the Contractor and approved by the Engineer prior to any installation work.
2. Existing pavement markings not incorporated in the final traffic pattern shall be removed as directed by the Engineer. Costs shall be incidental to the various pavement 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. Existing signs not shown on these plans shall remain as posted unless otherwise directed by the Engineer. Removal and disposal of existing signs and/or post as designated on these plans shall be incidental to the various signing items.
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. The Contractor shall erect at the beginning of the project and at the end of the project advance construction warning signs placed as indicated on the plans or as directed by the Engineer for the duration of the highway project and shall be maintained by the Contractor. These signs shall be placed in addition to the required traffic control signs called for in Section 645 - Traffic Control. The advance construction warning signs shall be new and become the property of the State. The Contractor shall remove, clean, and deliver the signs and posts to the District Baseyard, or as directed by the Engineer, upon the completion of the project.



CONSTRUCTION SIGN LAYOUT DETAIL  
Not to Scale



CW20-1Ad  
Colors: Legend: Black (Non Refl) Background: Orange

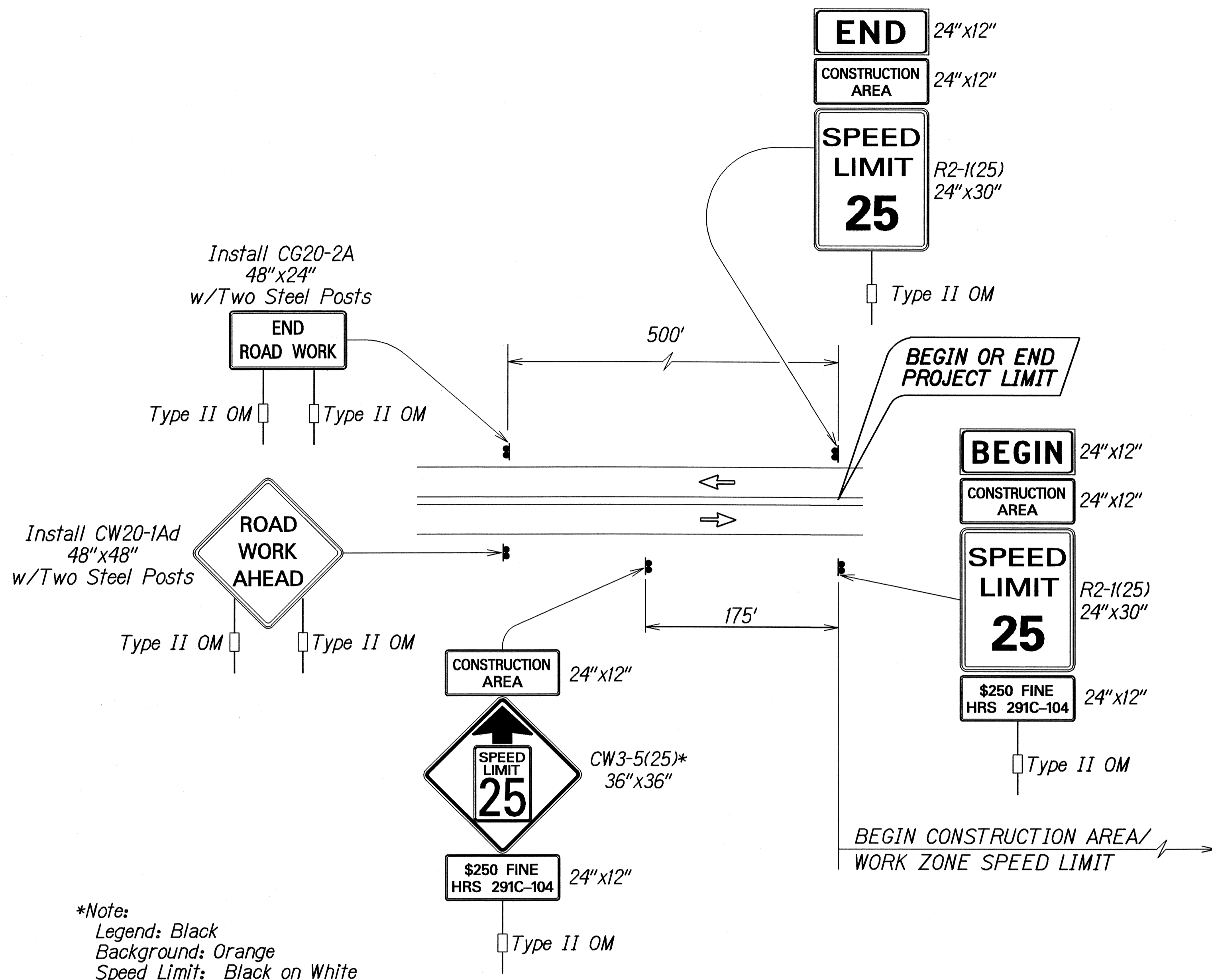


CG20-2A  
Scale: 1/2" = 1'-0" Colors: Legend: Black (Non Refl) Background: Orange (Relf)

DATE	02/08
SURVEY PLOTTED BY	
ORIGINAL PLAN	
DRAWN BY	
NOTE BOOK	
TRACED BY	
QUANTITIES BY	
CHECKED BY	

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION  
**PAVEMENT MARKING  
LEGEND, DETAILS & NOTES**  
HANA HIGHWAY PAVEMENT  
PREVENTIVE MAINTENANCE  
Kaupakalua Road to Huelo  
Federal-Aid Project No. ARR-0360(10)  
Scale: As Noted Date: November, 2008  
SHEET No. 1 OF 1 SHEETS

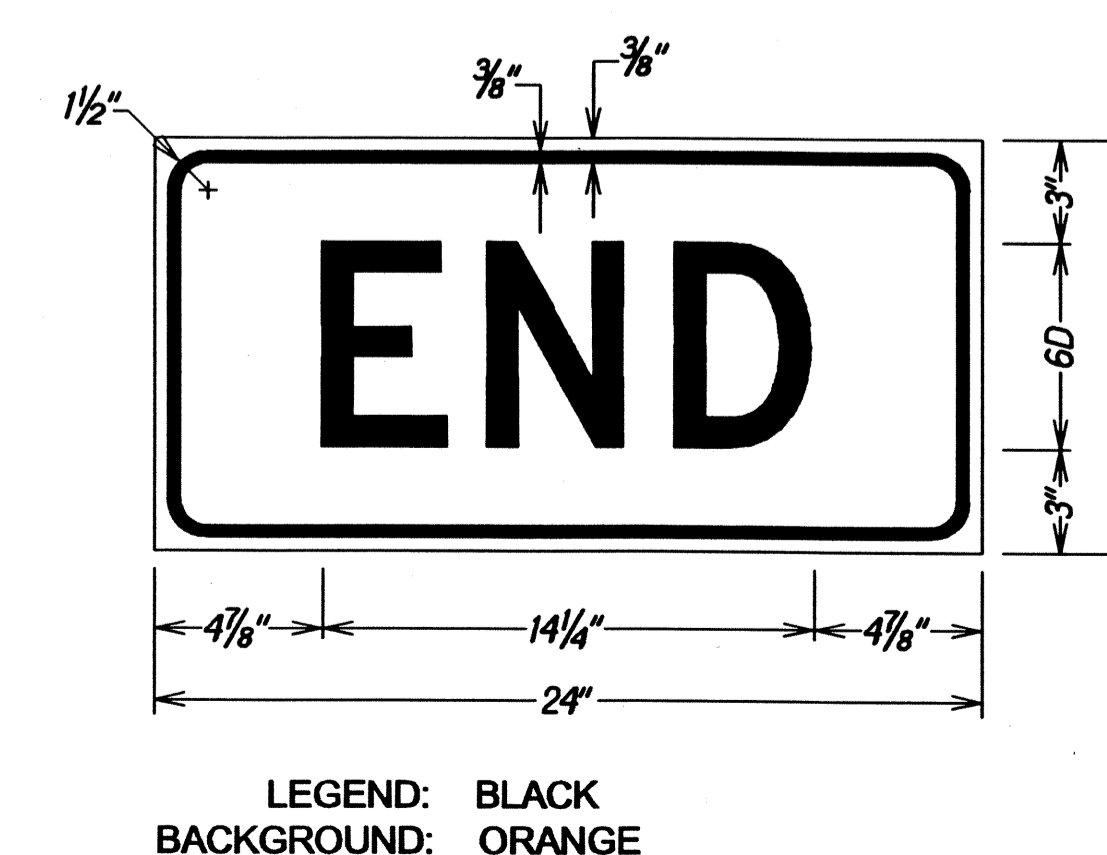
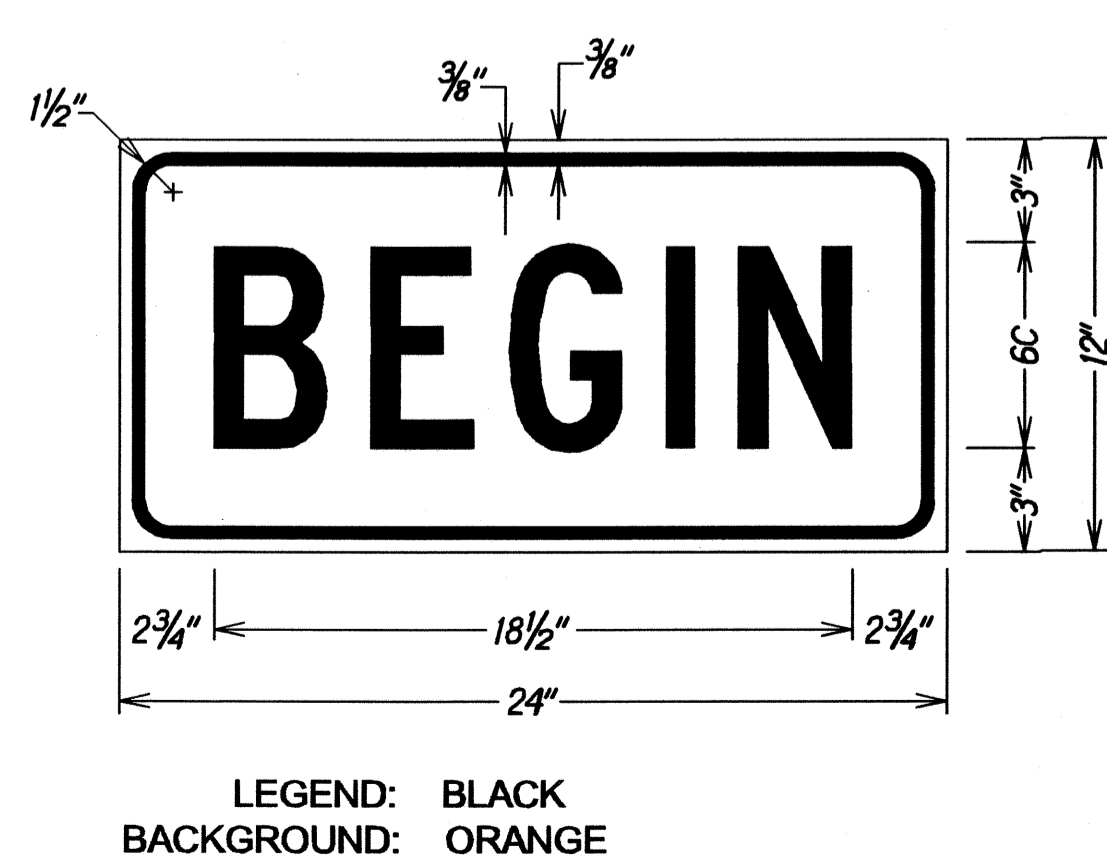
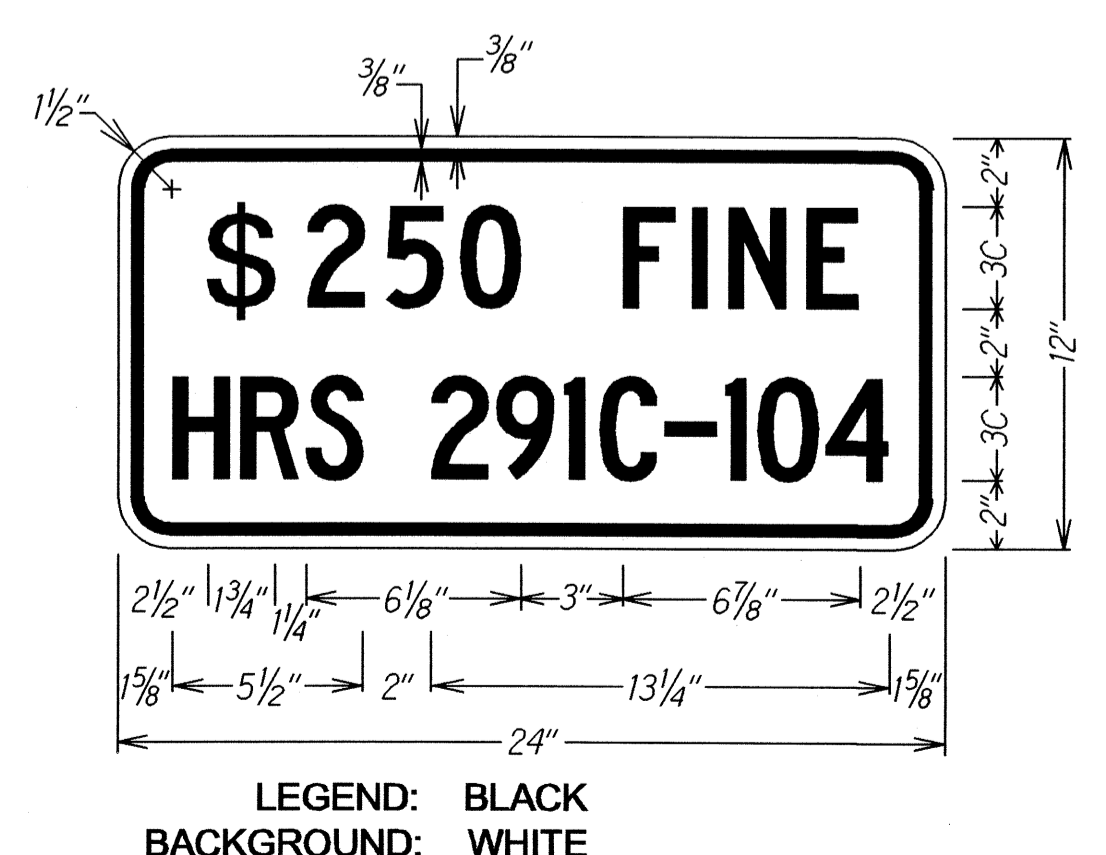
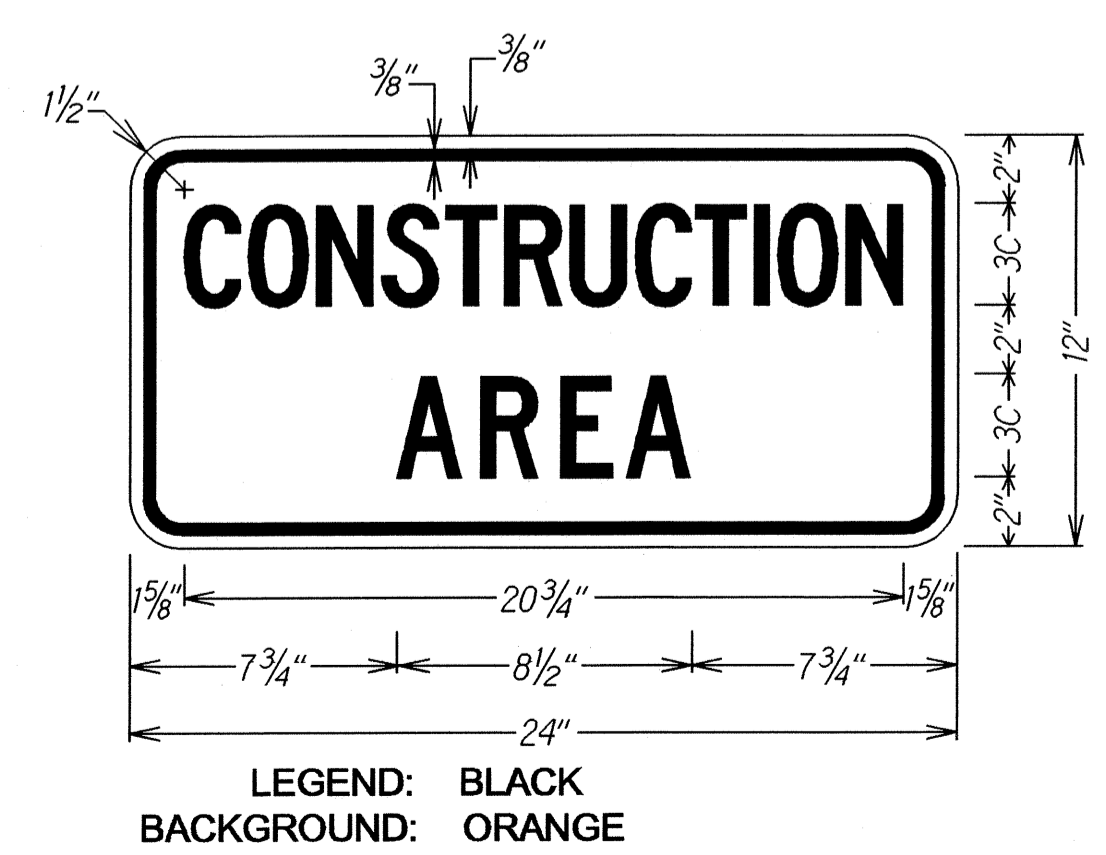
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	ARR-0360(10)	2009	18	28



**TYPICAL DETAIL FOR CONSTRUCTION SIGNS  
ON TWO LANE OR MULTILANE UNDIVIDED 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(25) and CW3-5(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. 631.1100, 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 with new posts along with the installation, maintenance and removal of work zone speed limit sign assemblies shall be considered incidental to Item No. 631.1100, Construction Sign with Posts.



DATE	_____
SURVEY PLOTTED BY	_____
PLAN	_____
DRAWN BY	_____
NOTED BY	_____
CHECKED BY	_____
QUANTITIES BY	_____
NO.	_____

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**LOW SPEED UNDIVIDED HIGHWAY**

**WORK ZONE SIGNING PLAN, NOTES & DETAILS**

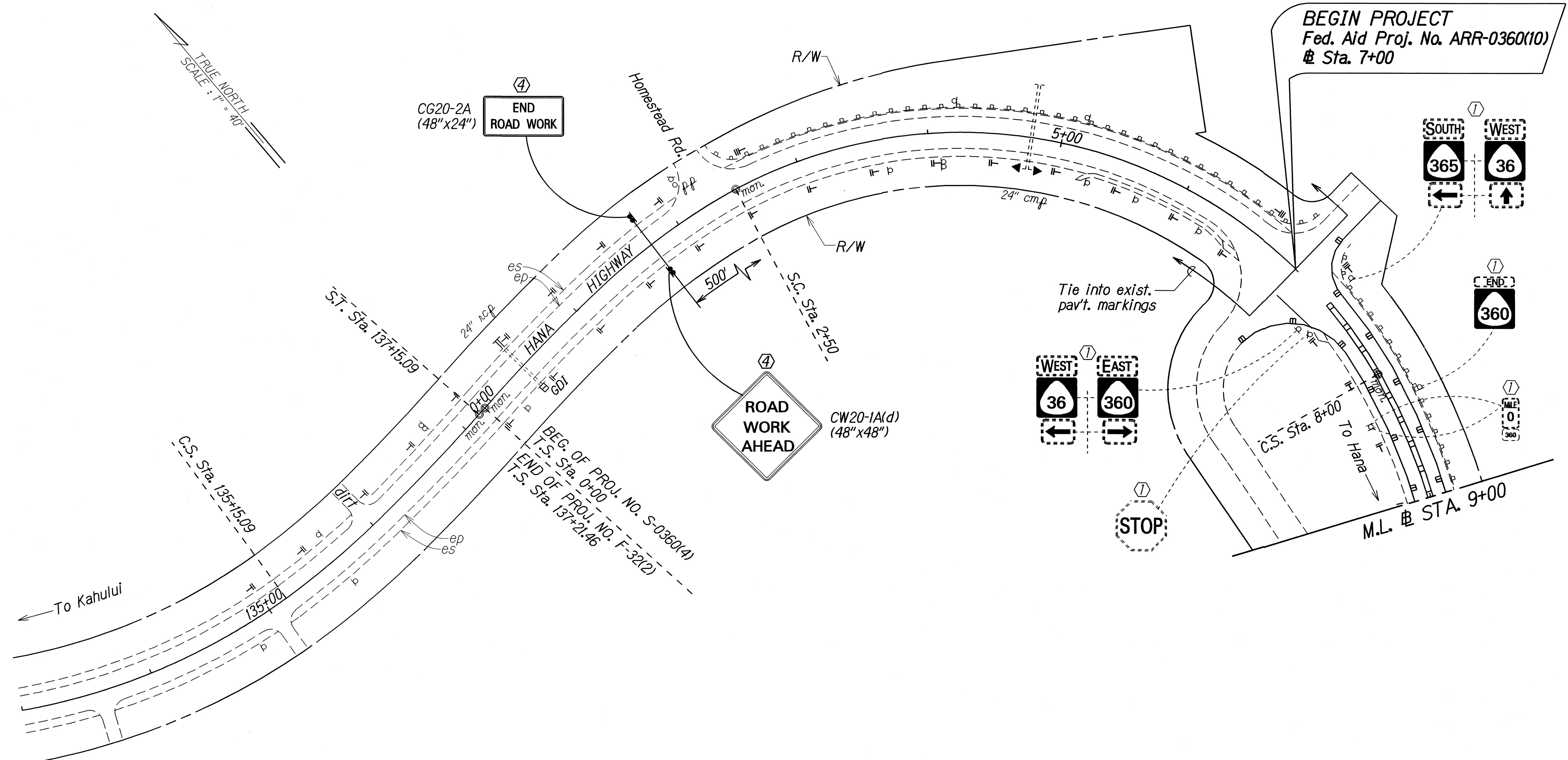
HANA HIGHWAY PAVEMENT PREVENTIVE MAINTENANCE

Kaupakalua Road to Huelo

Federal-Aid Project No. ARR-0360(10)

Not To Scale Date: November, 2008

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	ARR-0360(10)	2009	19	28



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

- KEY:**
- ① Exist. Sign(s) & Post(s) to Remain
  - ② Remove Exist. Sign(s) & Post(s)
  - ③ Remove Exist. & Install New Sign(s) & Post(s)
  - ④ Install New Sign(s) & Post(s)

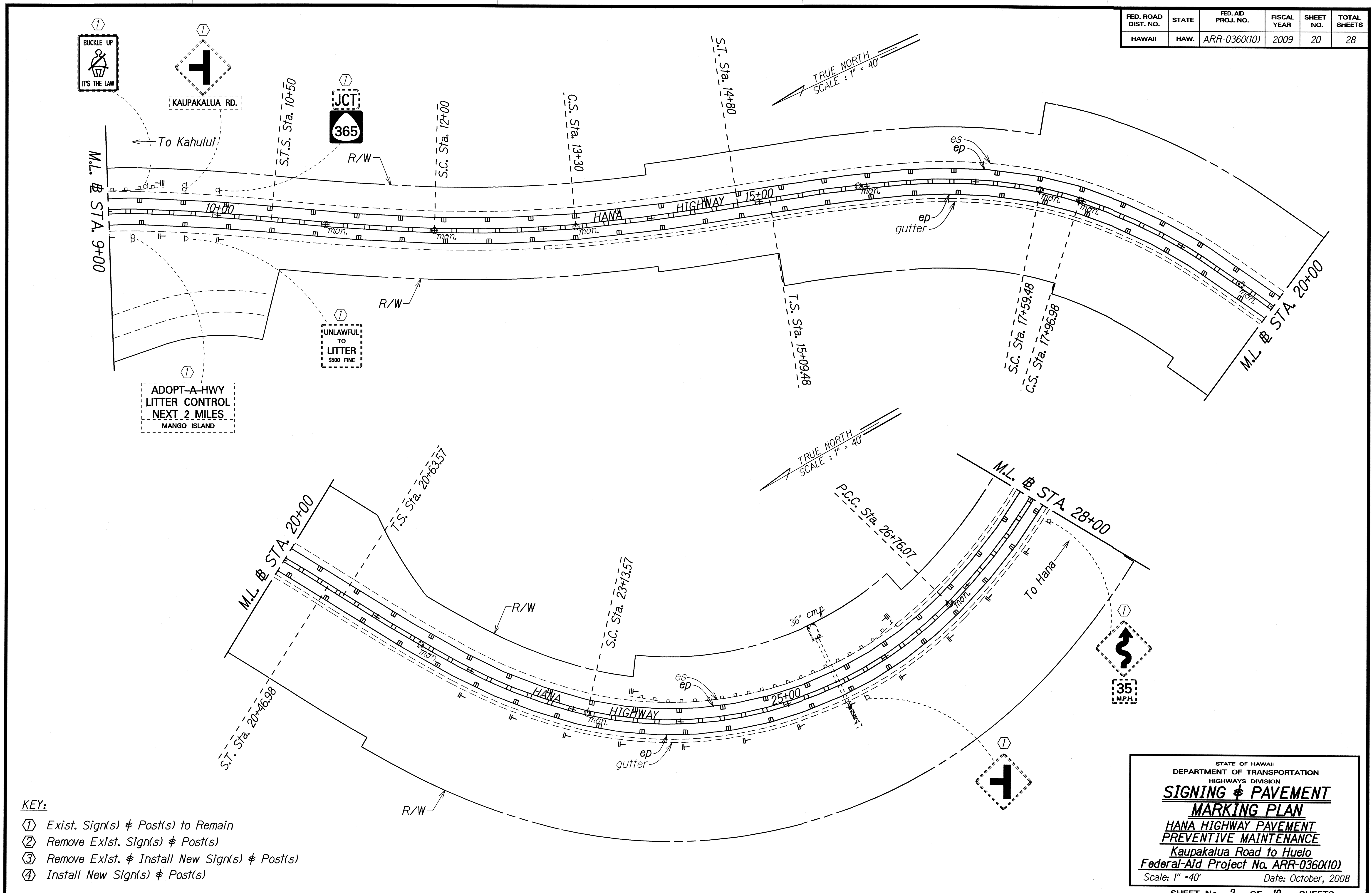
STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**SIGNING & PAVEMENT MARKING PLAN**

HANA HIGHWAY PAVEMENT PREVENTIVE MAINTENANCE  
Kaupakalua Road to Huelo  
Federal-Aid Project No. ARR-0360(10)  
Scale: 1" = 40' Date: October, 2008

SHEET No. 1 OF 10 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	ARR-0360(10)	2009	20	28



ORIGINAL PLAN	DATE	
SURVEY PLOTTED BY		
DRAWN BY		
TRACED BY		
DESIGNED BY		
CHECKED BY		

**KEY:**

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- ③ Remove Exist. & Install New Sign(s) & Post(s)
- ④ Install New Sign(s) & Post(s)

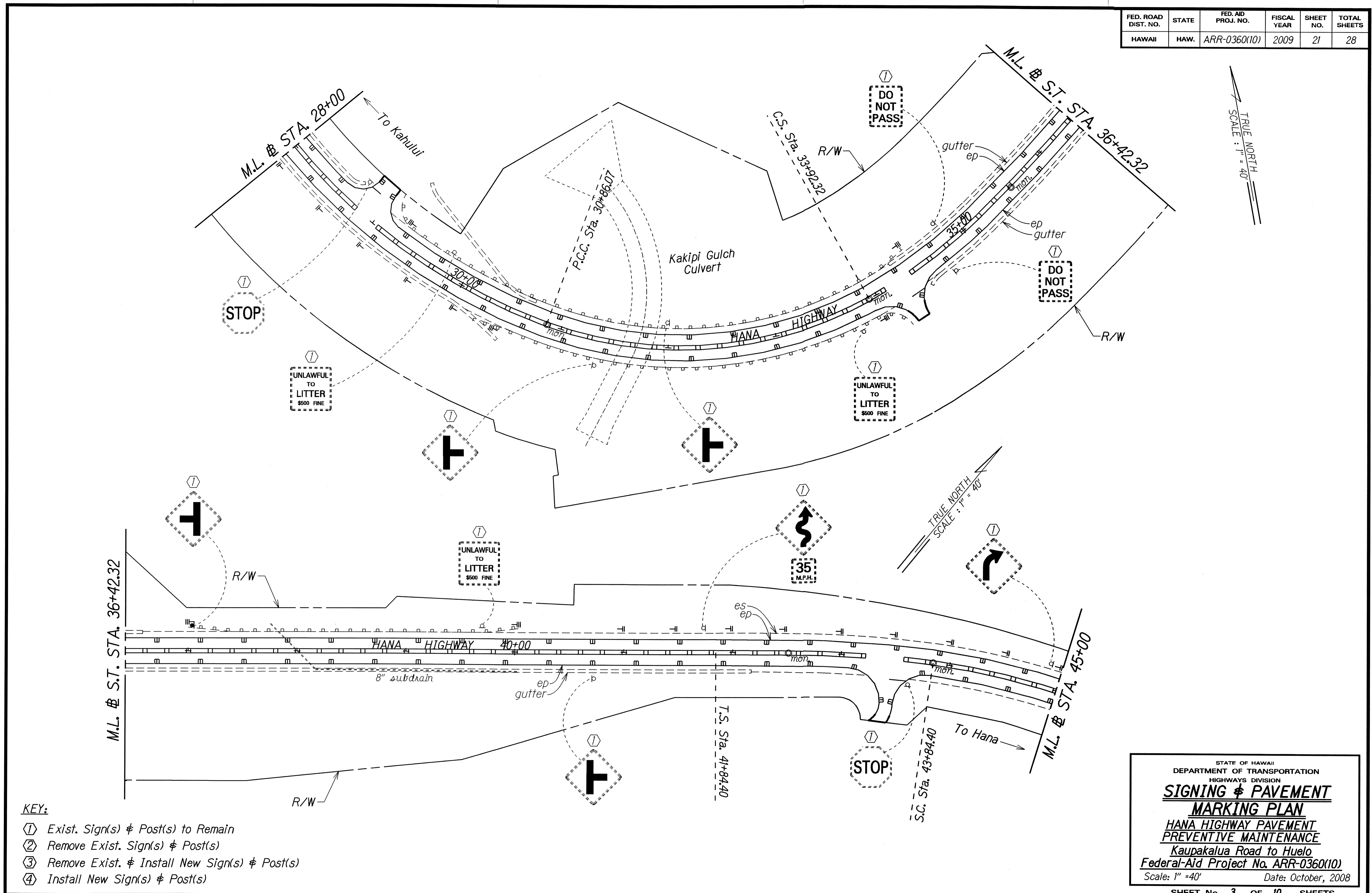
STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**SIGNING & PAVEMENT  
MARKING PLAN**

**HANA HIGHWAY PAVEMENT  
PREVENTIVE MAINTENANCE**  
Kaupakalua Road to Huelo  
Federal-Aid Project No. ARR-0360(10)  
Scale: 1" = 40'      Date: October, 2008

SHEET No. 2 OF 10 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	ARR-0360(10)	2009	21	28



**KEY:**

- ① Exist. Sign(s) & Post(s) to Remain
- ② Remove Exist. Sign(s) & Post(s)
- ③ Remove Exist. & Install New Sign(s) & Post(s)
- ④ Install New Sign(s) & Post(s)

SURVEY PLOTTED BY	DATE
DRAWN BY	11/08
TRACED BY	
NOTED BY	
QUANTITIES BY	
CHECKED BY	

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**SIGNING & PAVEMENT  
MARKING PLAN**

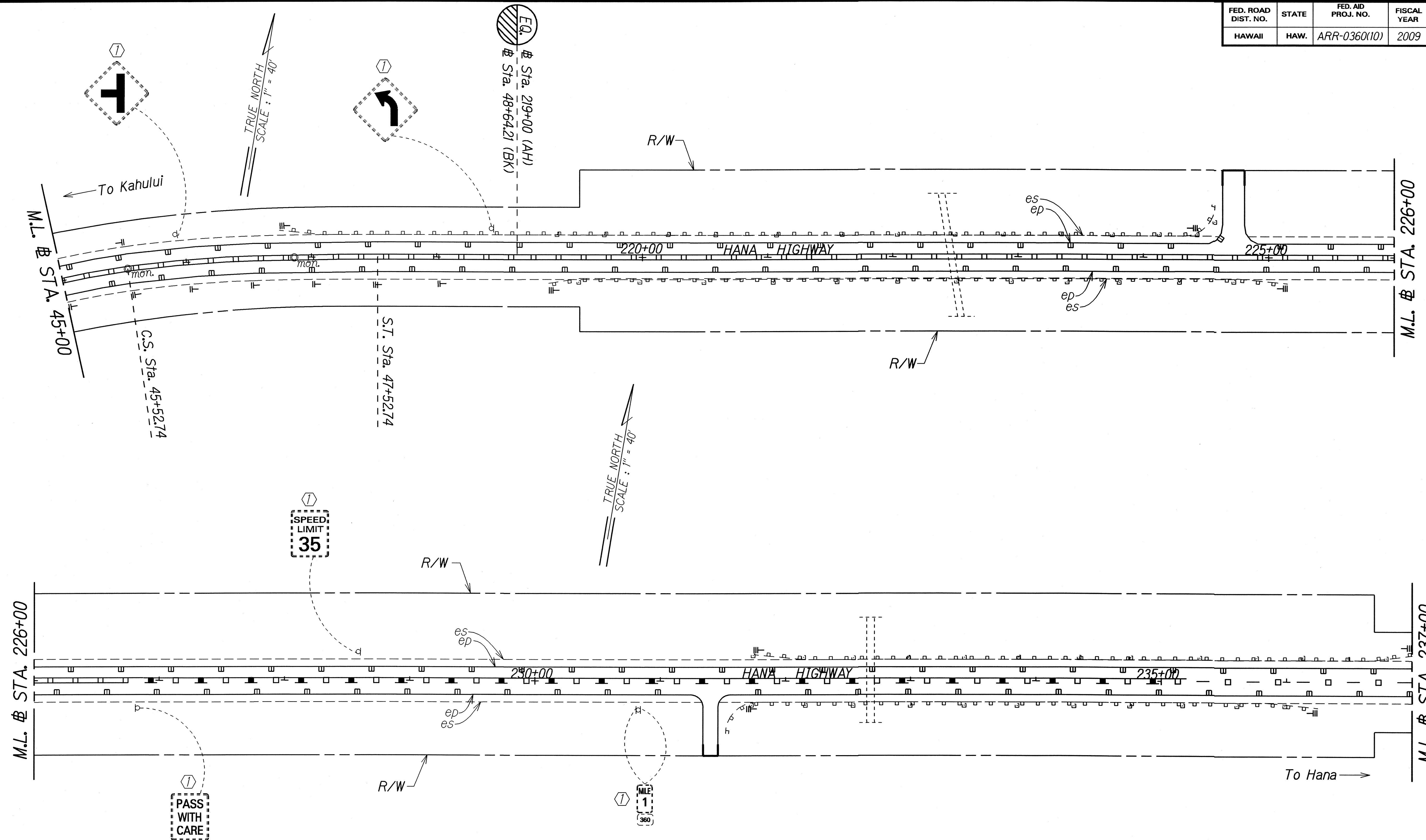
**HANA HIGHWAY PAVEMENT  
PREVENTIVE MAINTENANCE**

*Kaupakalua Road to Huelo*  
Federal-Aid Project No. ARR-0360(10)

Scale: 1" = 40'      Date: October, 2008

SHEET No. 3 OF 10 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	ARR-0360(10)	2009	22	28



ORIGINAL PLAN	DATE
NOTED BY	DATE
CHECKED BY	DATE

**KEY:**

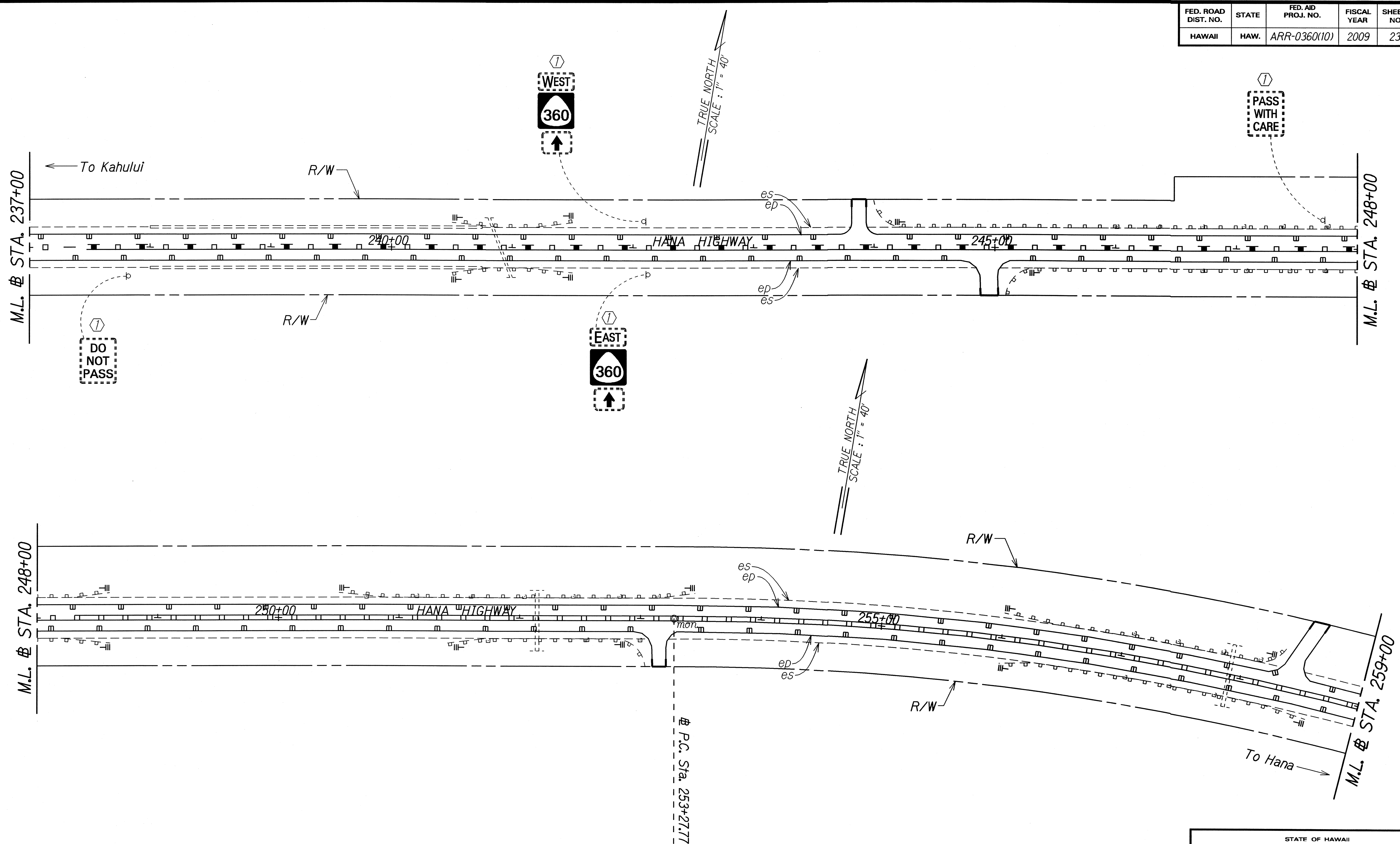
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- ② Remove Exist. Sign(s) & Post(s)
- ③ Remove Exist. & Install New Sign(s) & Post(s)
- ④ Install New Sign(s) & Post(s)

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**SIGNING & PAVEMENT  
MARKING PLAN**

**HANA HIGHWAY PAVEMENT  
PREVENTIVE MAINTENANCE**  
Kaupakalua Road to Huelo  
Federal-Aid Project No. ARR-0360(10)  
Scale: 1" = 40' Date: October, 2008

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	ARR-0360(10)	2009	23	28



ORIGINAL PLAN	DATE
SURVEY PLOTTED BY	11/08
DRAWN BY	
TRACED BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	

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STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

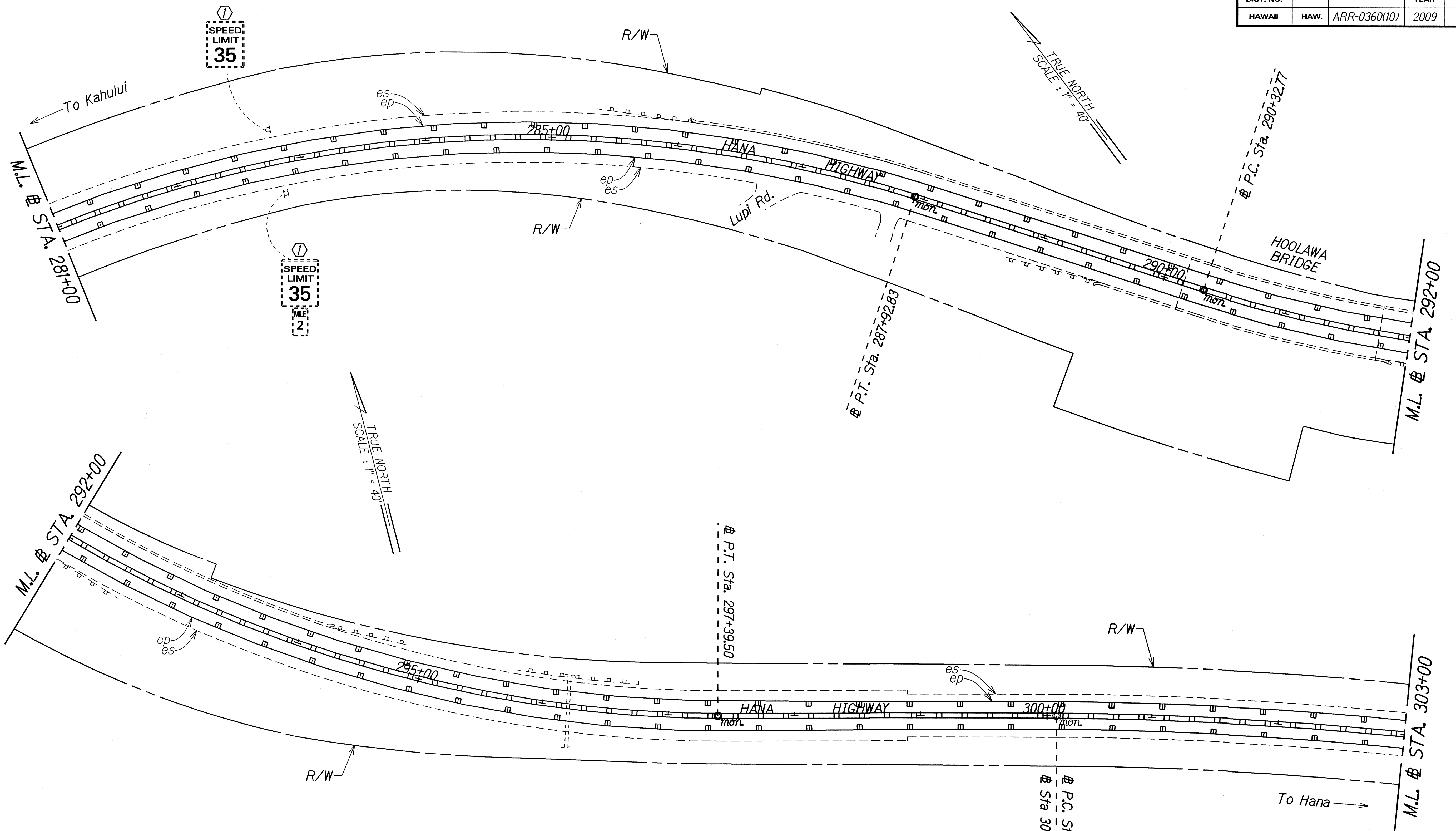
**SIGNING & PAVEMENT  
MARKING PLAN**

**HANA HIGHWAY PAVEMENT  
PREVENTIVE MAINTENANCE**  
Kaupakalua Road to Huelo  
Federal-Aid Project No. ARR-0360(10)  
Scale: 1" = 40'      Date: October, 2008

SHEET No. 5 OF 10 SHEETS



FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	ARR-0360(10)	2009	25	28



**KEY:**

- ① Exist. Sign(s) & Post(s) to Remain
- ② Remove Exist. Sign(s) & Post(s)
- ③ Remove Exist. & Install New Sign(s) & Post(s)
- ④ Install New Sign(s) & Post(s)

ORIGINAL PLAN	DATE	SCALE
SURVEY PLOTTED BY		
DRAWN BY		
DESIGNED BY		
CHECKED BY		

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

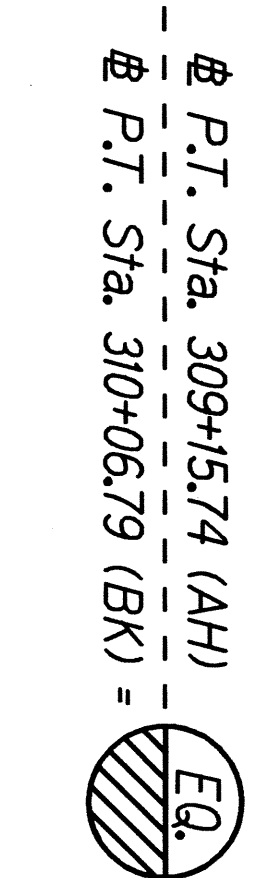
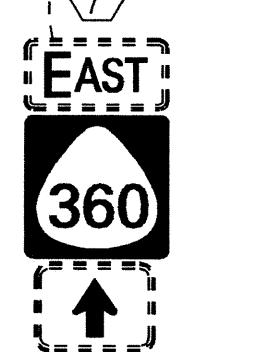
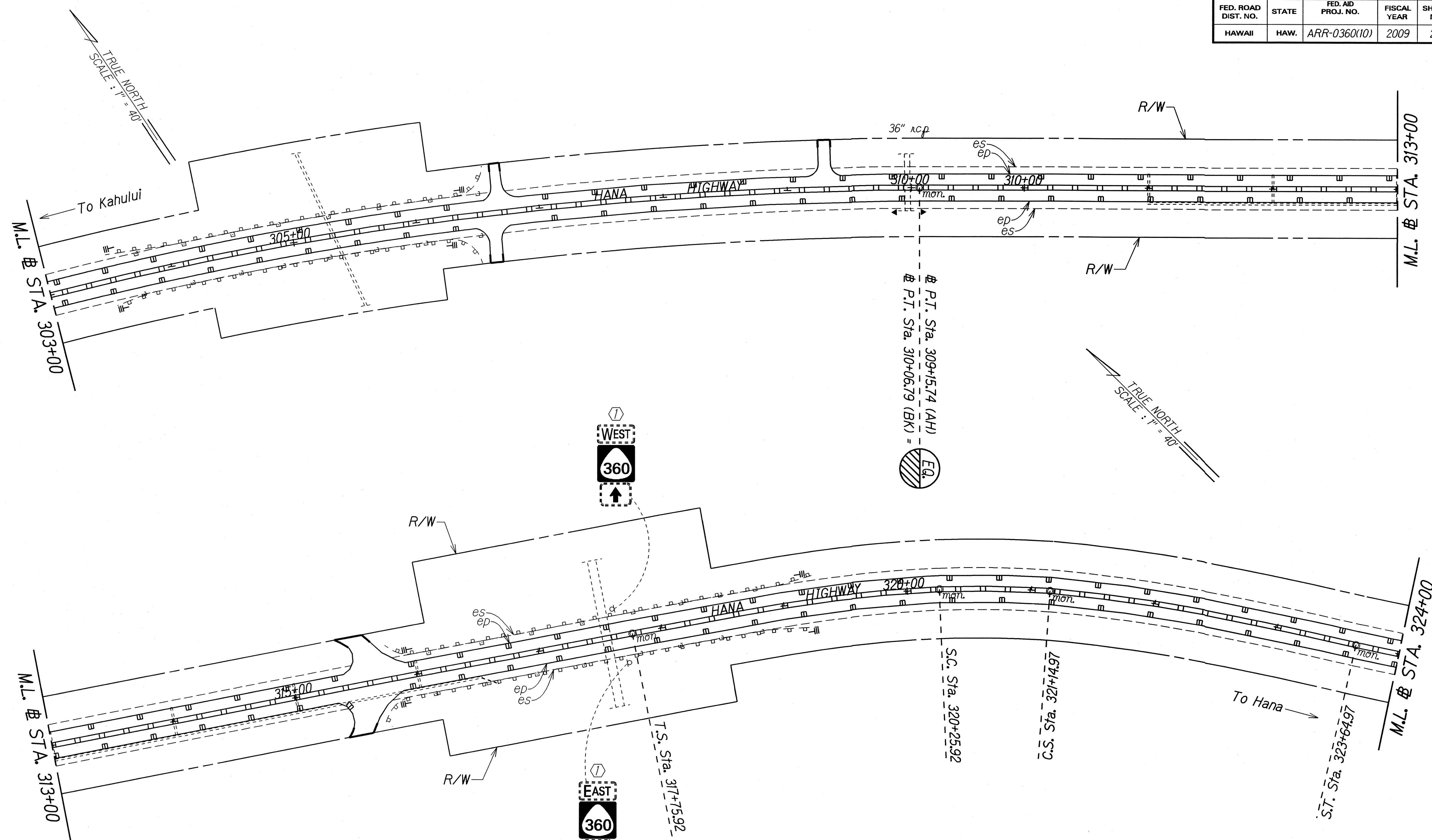
**SIGNING & PAVEMENT  
MARKING PLAN**

**HANA HIGHWAY PAVEMENT  
PREVENTIVE MAINTENANCE**

Kaupakalua Road to Huelo  
Federal-Aid Project No. ARR-0360(10)

Scale: 1" = 40'      Date: October, 2008

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	ARR-0360(10)	2009	26	28



ORIGINAL PLAN	DATE
SURVEY PLOTTED BY	
DRAWN BY	
NOTED BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	

- KEY:**
- ① Exist. Sign(s) & Post(s) to Remain
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STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

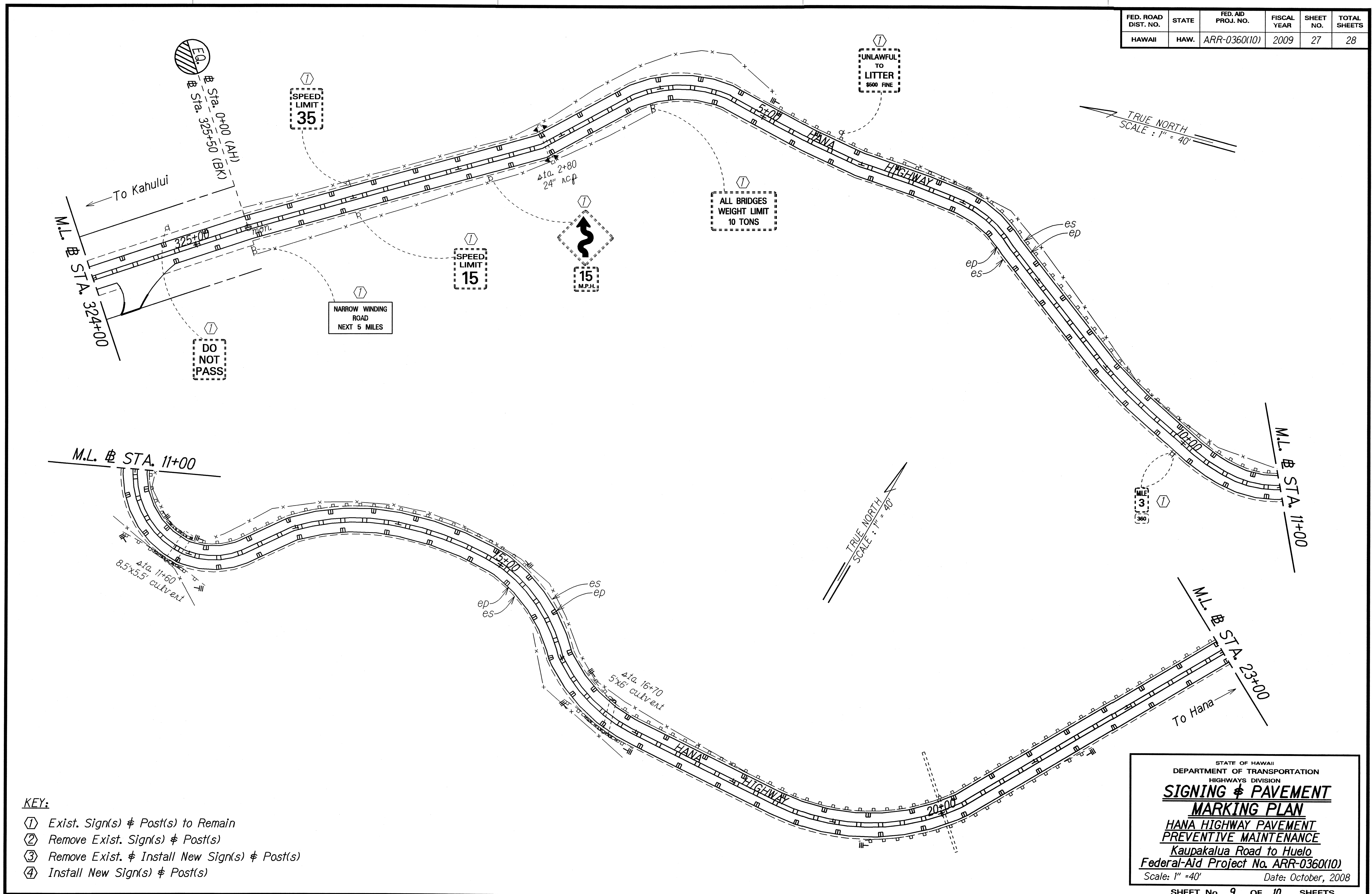
**SIGNING & PAVEMENT  
MARKING PLAN**

**HANA HIGHWAY PAVEMENT  
PREVENTIVE MAINTENANCE**

Kaupakalua Road to Huelo  
Federal-Aid Project No. ARR-0360(10)

Scale: 1" = 40'      Date: October, 2008

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	ARR-0360(10)	2009	27	28



SURVEY PLOTTED BY	DATE
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TRACED BY	
NOTE BOOK	
QUANTITIES BY	
CHECKED BY	

**KEY:**

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STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

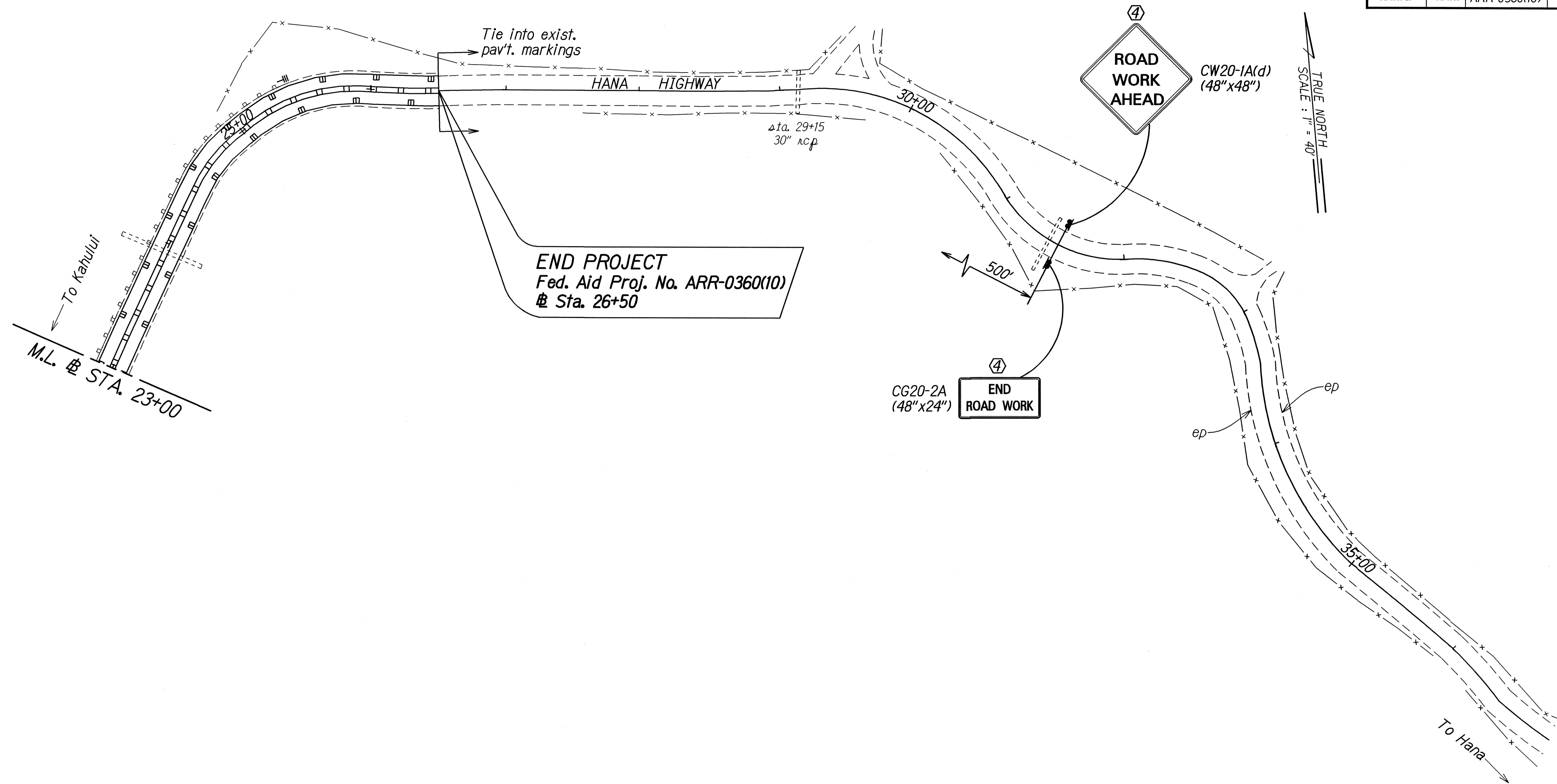
**SIGNING & PAVEMENT  
MARKING PLAN**

**HANA HIGHWAY PAVEMENT  
PREVENTIVE MAINTENANCE**

Kaupakalua Road to Huelo  
Federal-Aid Project No. ARR-0360(10)  
Scale: 1" = 40'      Date: October, 2008

SHEET No. 9 OF 10 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	ARR-0360(10)	2009	28	28



**END PROJECT**  
 Fed. Aid Proj. No. ARR-0360(10)  
 @ Sta. 26+50

CG20-2A  
 (48"x24")  
**END ROAD WORK**

**ROAD WORK AHEAD**  
 CW20-1A(d)  
 (48"x48")

- KEY:**
- ① Exist. Sign(s) & Post(s) to Remain
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SURVEY PLOTTED BY	DATE
DRAWN BY	11/08
TRACED BY	
NOTE BOOK	
DESIGNED BY	
CHECKED BY	

STATE OF HAWAII  
 DEPARTMENT OF TRANSPORTATION  
 HIGHWAYS DIVISION  
**SIGNING & PAVEMENT MARKING PLAN**  
 HANA HIGHWAY PAVEMENT PREVENTIVE MAINTENANCE  
 Kaupakalua Road to Huelo  
 Federal-Aid Project No. ARR-0360(10)  
 Scale: 1" = 40' Date: October, 2008