## GENERAL NOTES FOR TRAFFIC CONTROL PLAN (FOR STATE RIGHT-OF-WAY)

- 1. Only Traffic Control Plans for major construction activities are shown. The Contractor shall develop his own Traffic Control Plans in accordance with Section 645 of the Special Provisions or the current US Federal Highways Administration "Manual on Uniform Control Devices, Part 6-Temporary Traffic Control" (MUTCD 2009) for activities to complete work not covered by the Traffic Control Plans for the sites listed in the "Traffic Control Schedule" table. The Contractor shall follow the more stringent guidelines. The Contractor shall submit the Traffic Control Plans to the Engineer for approval. Payment for development and implementation of the Traffic Control Plans shall be considered incidental to the various contract items.
- 2. 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 Work Zone Traffic Control. For restrictions on lane closures, detours, construction work during peak hours, and other requirements regarding maintaining vehicular and pedestrian traffic, see Section 107.06 Contractor Duty Regarding Public Convenience, and Section 645 Work Zone Traffic Control.
- 3. Sites requiring lane closures are as indicated in the plans. Additional lane closures are prohibited unless otherwise approved by the Engineer. Fees for unauthorized lane closures shall be borne by the Contractor, in accordance with Section 108-Prosecution and Progress of the Special Provisions.
- 4. The Contractor shall make minor adjustments at intersections, driveways, bridges, structures, etc. to fit field conditions.
- 5. Cones or delineators shall be extended to a point where they are visible to approaching traffic.
- 6. 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. Likewise, removal of traffic control should begin with the device closest to the work area and progressively away from the work area.
- 7. Regulatory and warning signs within the construction zone that are in conflict with the traffic plans shall be removed or covered.
- 8. Flaggers and/or police officers shall be in sight of each other or in direct communications at all times.
- 9. 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 HDOT's Traffic Control Plans.
- 10. All traffic lanes shall be a minimum of 11 feet wide.
- 11. All signs shall be promptly removed or covered whenever the message is not applicable or not in use.
- 12. 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).
- 13. 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.
- 4. Replace permanent pavement markings and traffic signs upon completion of each phase of work. Temporary pavement markings and traffic signs shall be used in the interim.

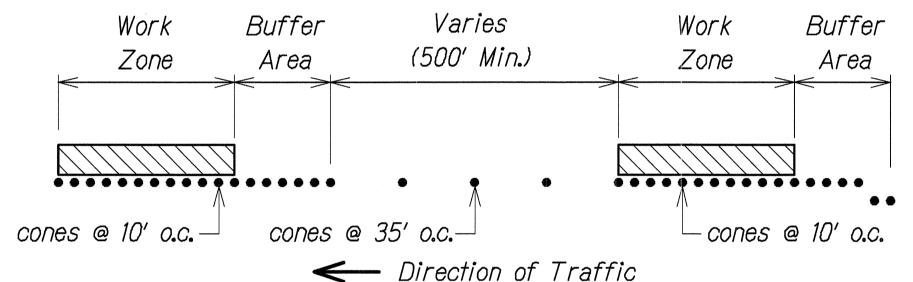
## GENERAL NOTES FOR TRAFFIC CONTROL PLAN (FOR STATE RIGHT-OF-WAY) (CONT.)

- 15. 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.
- 16. The locations of pavement markings, signs, and delineators used in the Traffic Control shall be as shown on the plans, Contractor's approved Traffic Control Plans, and/or as determined in the field by the Engineer.
- 17. Damage to signs, temporary pavement markers, and delineators caused by the public or Contractor's negligence shall be repaired or replaced by the Contractor at the Contractor's expense.
- 18. Signs for night work shall be retroreflective and shall be mounted with a Type B high intensity flasher.
- 19. Work zone limits shown for each traffic control phase encompass all work items to be completed in that particular phase. The length of the work zone may be reduced to accommodate the Contractor's actual work zone for that time period, provided it has been accepted by the Engineer, and all tangents, tapers, and buffer lengths are maintained.
- 20. The Contractor is responsible for providing all sign supports and/or posts for construction warning signs.
- 21. For intermittent work zones within a particular traffic control phase, only cones along the actual work zone need to be placed at 10' o.c. The intermittent work zone shall include a 220' buffer area along the leading edge of traffic flow. All other traffic control cones can be placed at 35' o.c. See typical detail below.

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-O-06-15M	2015	58	71

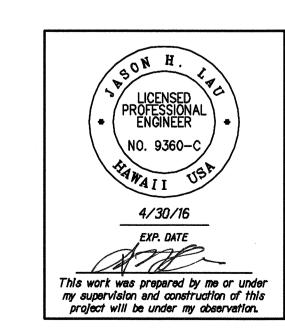
TRAFFIC CONTROL SCHEDULE						
Section 645.05	Site					
Figure 7	PID 446*, 450A, 224, 301161					

\*Figure 7 shall apply for PID 446 for TC along Interstate H-2 only.



TYPICAL CONE SPACING FOR INTERMITTENT
WORK ZONE

Not to Scale



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TRAFFIC CONTROL NOTES

CENTRAL OAHU BEST MANAGEMENT PRACTICES

ERODED SLOPE REPAIRS, PHASE 2

Project No. HWY-0-06-15M

Scale: None Date: May 2015

SHEET No. TC-01 OF 14 SHEETS

# GENERAL NOTES FOR TRAFFIC CONTROL PLAN (FOR CITY AND COUNTY ROADS)

- 1. The permitee shall make minor adjustments at intersections, driveways, bridges, structures, etc., to fit field conditions.
- 2. Cones or delineators shall be extended to point where they are visible to approaching traffic.
- 3. Traffic control devices shall be installed such that he sign or device farthest from the work area is 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.
- 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 permittee shall install a flashing arrow signal as shown on the traffic control plans.
- 7. All traffic lanes shall be a minimum of 10 feet wide.
- 8. All construction warning signs shall be promptly removed or covered whenever the message is not applicable or not in use.
- 9. 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).
- 10. Lane closure shall be limited only to the extent of accomplishing each day's work. As soon as each day's 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. Existing faded or obliterated pavement markings that are necessary for safe traffic flow in the construction area shall be replaced with temporary or permanent markings before opening the roadway to public traffic each day.
- 11. Permanent pavement markings and traffic signs shall be replaced upon completion of each phase of work.
- 12. Cones and delineators shall be spaced at a maximum distance of 20 feet apart. A minimum of six channelizing devices shall be used for each taper length.
- 13. Buffer and taper area on approach to any work area shall be kept clear of vehicles and equipment.
- 13. Driveways shall be kept open unless the owners of the property using the driveway are otherwise provided for satisfactorily. Further, the permittee shall control traffic going in and out of driveways.
- 14. A high level warning device (flag tree) shall be installed on approach to all work areas.
- 15. "No parking" signs shall be posted within any work area and for the buffer and taper areas approaching the work area.
- 16. Traffic Control Plans are approved for work on any city street area only between the hours of 08:30 A.M. and 03:30 P.M. (Monday-Friday).

## <u>LEGEND</u>

▶ Sig

Existing Sign

← Direction of Traffic

• • • Cones with Retroreflective bands (All cones in work area shall be 28" high).

Work Area

∃ Type 2 Barricade

Water-filled Barricade

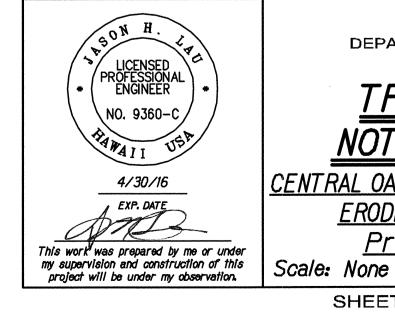
**⊗** Police Officer

FED. ROAD<br/>DIST. NO.STATEPROJ. NO.FISCAL<br/>YEARSHEET<br/>NO.TOTAL<br/>SHEETSHAWAIIHAW.HWY-O-06-15M20155971

APPROVED:

CHIEF, TRAFFIC REVIEW BRANCH, DPP ~~ (FOR WORK WITHIN CITY R/W ONLY)





STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TRAFFIC CONTROL NOTES AND LEGEND

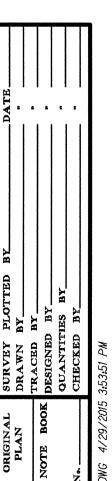
CENTRAL OAHU BEST MANAGEMENT PRACTICES

ERODED SLOPE REPAIRS, PHASE 2

Project No. HWY-O-06-15M

Scale: None Date: May 2015

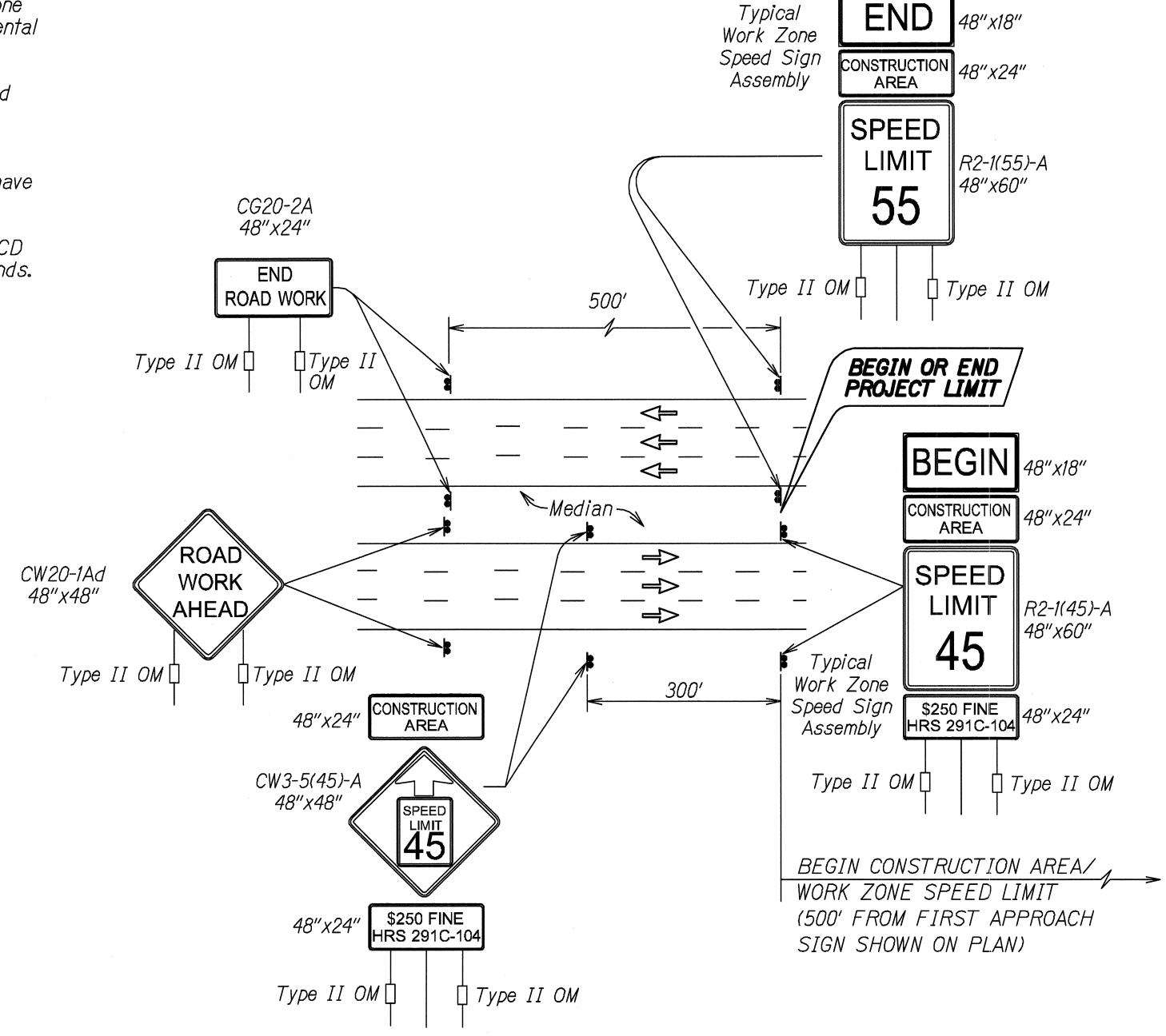
SHEET No. TC-02 OF 14 SHEETS



### Work Zone Note:

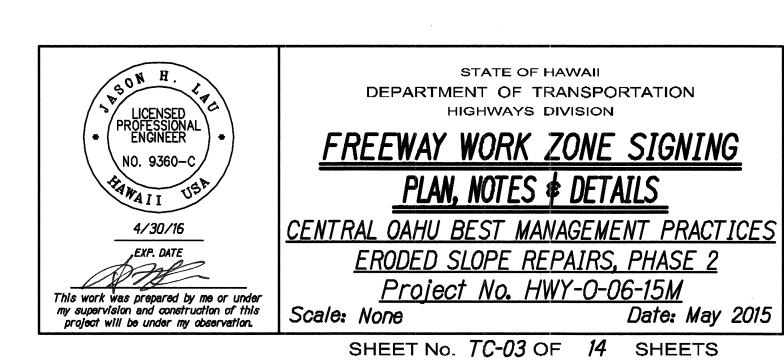
- 1. All existing regulatory speed limit signs within the work zone/project limits shall be covered and work zone speed limit sign assemblies (R2-1(45)-A and R2-5b(45)-A with "CONSTRUCTION AREA" and "\$250 FINE HRS 291C-104" Supplemental Signs) shall be displayed during lane closure hours.
- 2. Upon removal of the lane closure, all work zone speed limit signs shall be covered and existing speed limit signs within the work zone/project limits shall be restored.
- 3. Construction signs shall be installed on both the approaching and trailing ends of each work zone.
- 4. Each construction 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.
- 5. All work zone speed sign assembly shall be mounted on three (3) 4.00 lbs./ft. galvanizéd flanged channel sign posts with a sign clearance height of five (5) feet. Sign stiffeners as specified by Standard Plan Sheet TE-02 shall be installed as needed or as directed by the Engineer.

- 6. The daily covering and uncovering of existing regulatory speed limit signs along with the installation; maintenance, removal and daily covering and uncovering of work zone speed limit sign assemblies shall be considered incidental to Item No. 645.0100 - Traffic Control.
- 7. All work zone signs shall have the project number and Contractor's name on the back of the sign in 1/2" high letters, black paint.
- 8. All traffic cones, delineators, and barrels, etc. shall have retroreflective bands.
- 9. All cones shall be retroreflective as required by MUTCD and be a min. of 28" high ¢ weigh a minimum 10 pounds.



# TYPICAL DETAIL FOR CONSTRUCTION SIGNS ON HIGH SPEED HIGHWAY

(APPLIES TO PID 239, 446, 450A)



FED. ROAD DIST. NO.

HAWAII

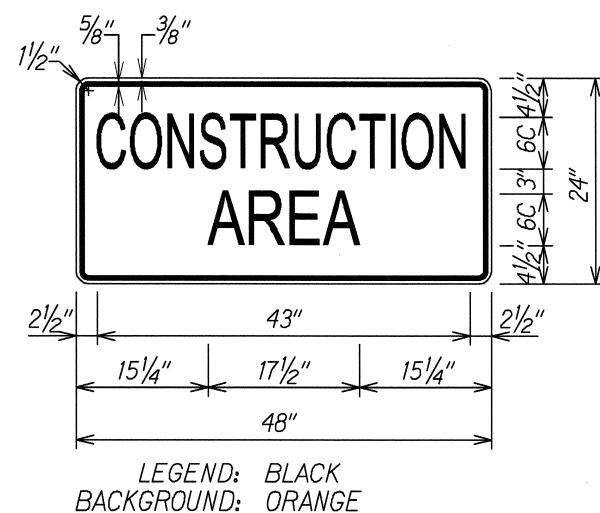
FISCAL YEAR

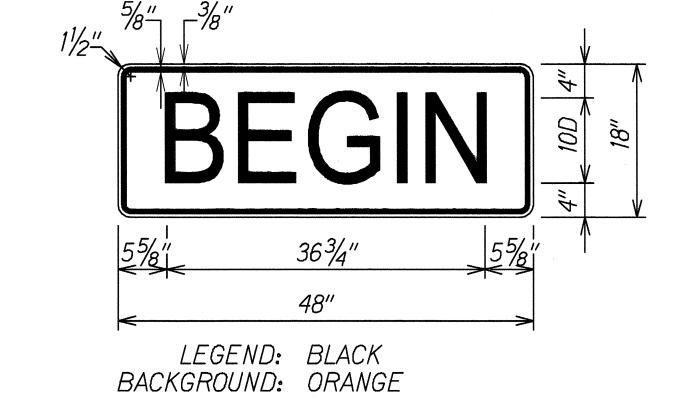
2015

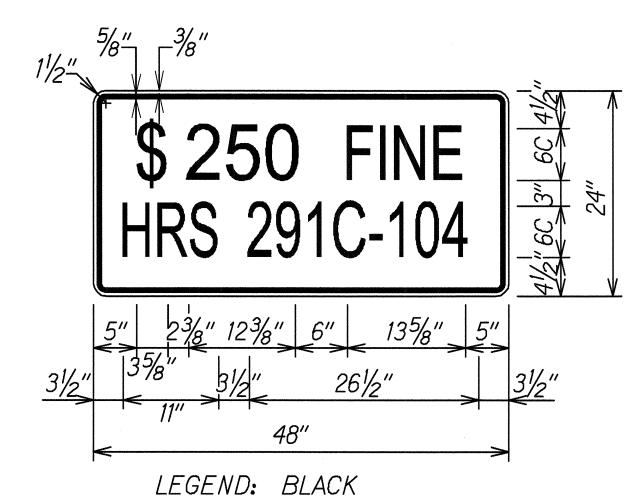
60

PROJ. NO.

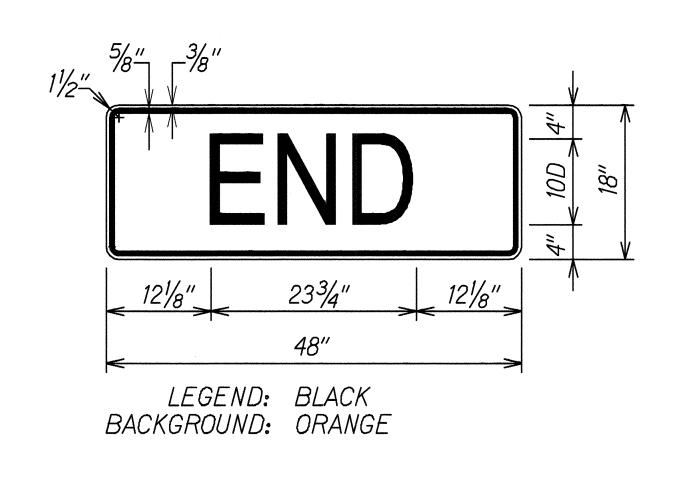
HAW. HWY-O-06-15M



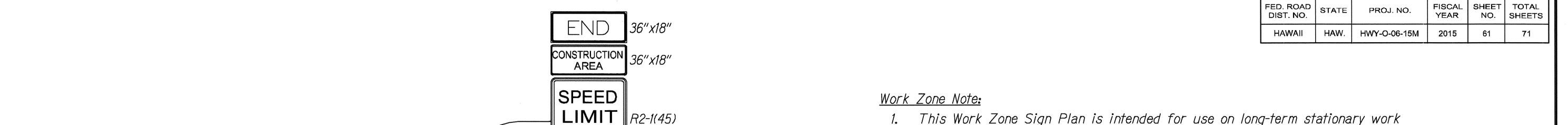


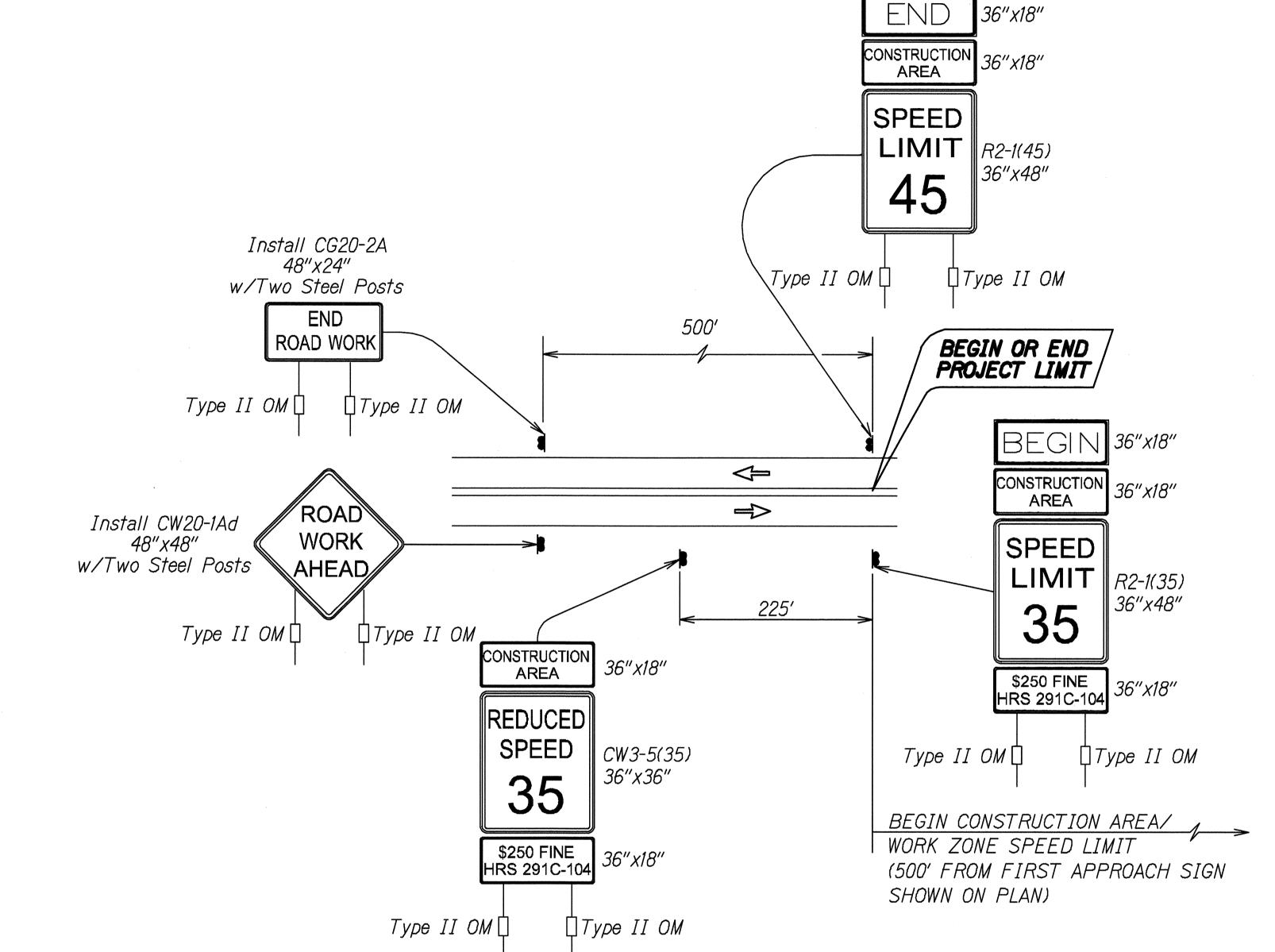


BACKGROUND: WHITE

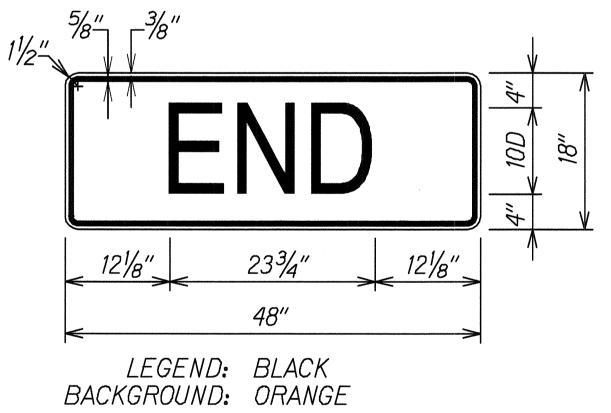


Date: May 2015

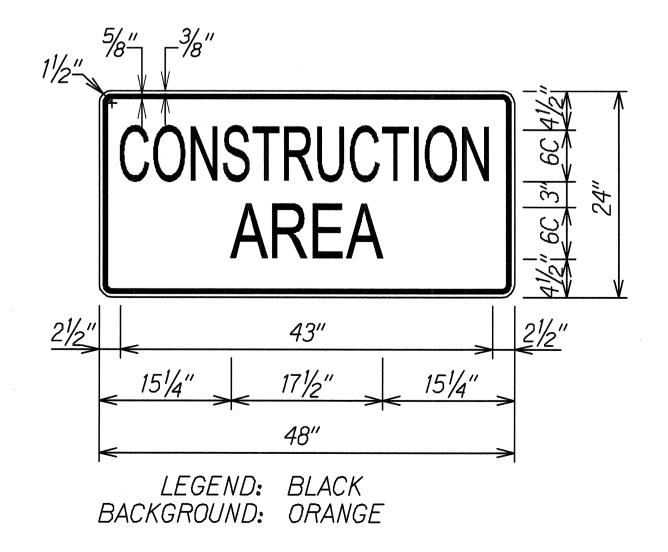


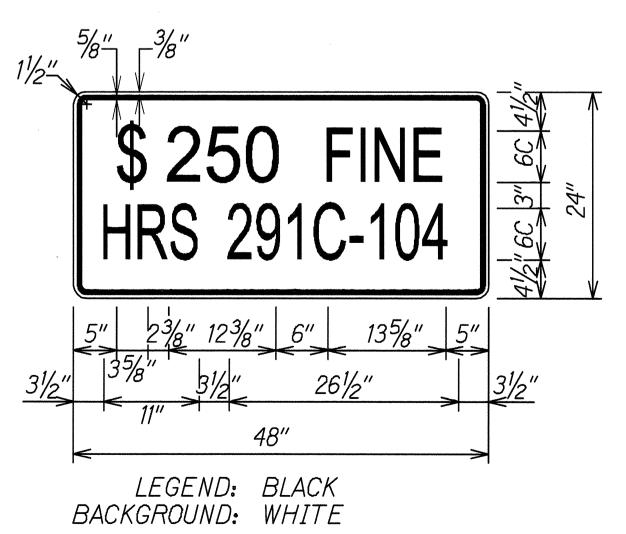


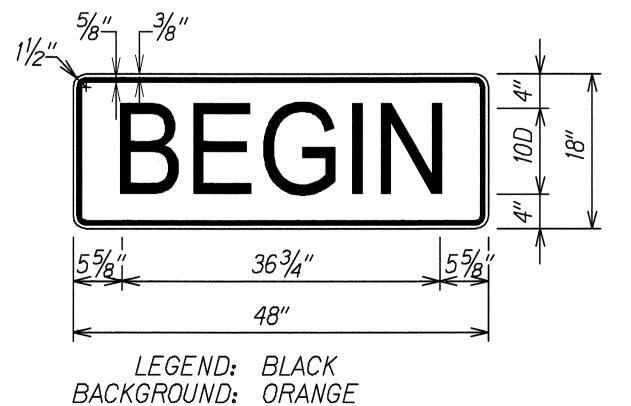
- 1. This Work Zone Sign Plan is intended for use on long-term stationary work zones/construction phases (3 days or more). All work zones or construction phases less than 3 days duration will use Traffic Control Plans shown in Section 645 of the Standard Specifications.
- 2. All existing regulatory speed limit signs with posts within the work zone/project limits shall be removed and replaced with work zone speed limit sign assemblies (R2-1(35) and R2-5b(35) 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 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 the various contract items.
- 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 the various contract items.



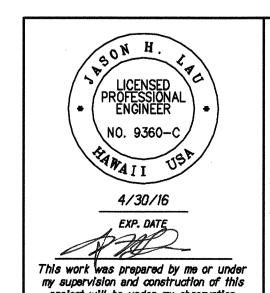
# TYPICAL DETAIL FOR CONSTRUCTION SIGNS ON TWO LANE OR MULTILANE UNDIVIDED HIGH SPEED HIGHWAY







(APPLIES TO PID 150)



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

HIGH SPEED UNDIVIDED HIGHWAY
WORK ZONE SIGNING PLAN, NOTES & DETAILS

CENTRAL OAHU BEST MANAGEMENT PRACTICES

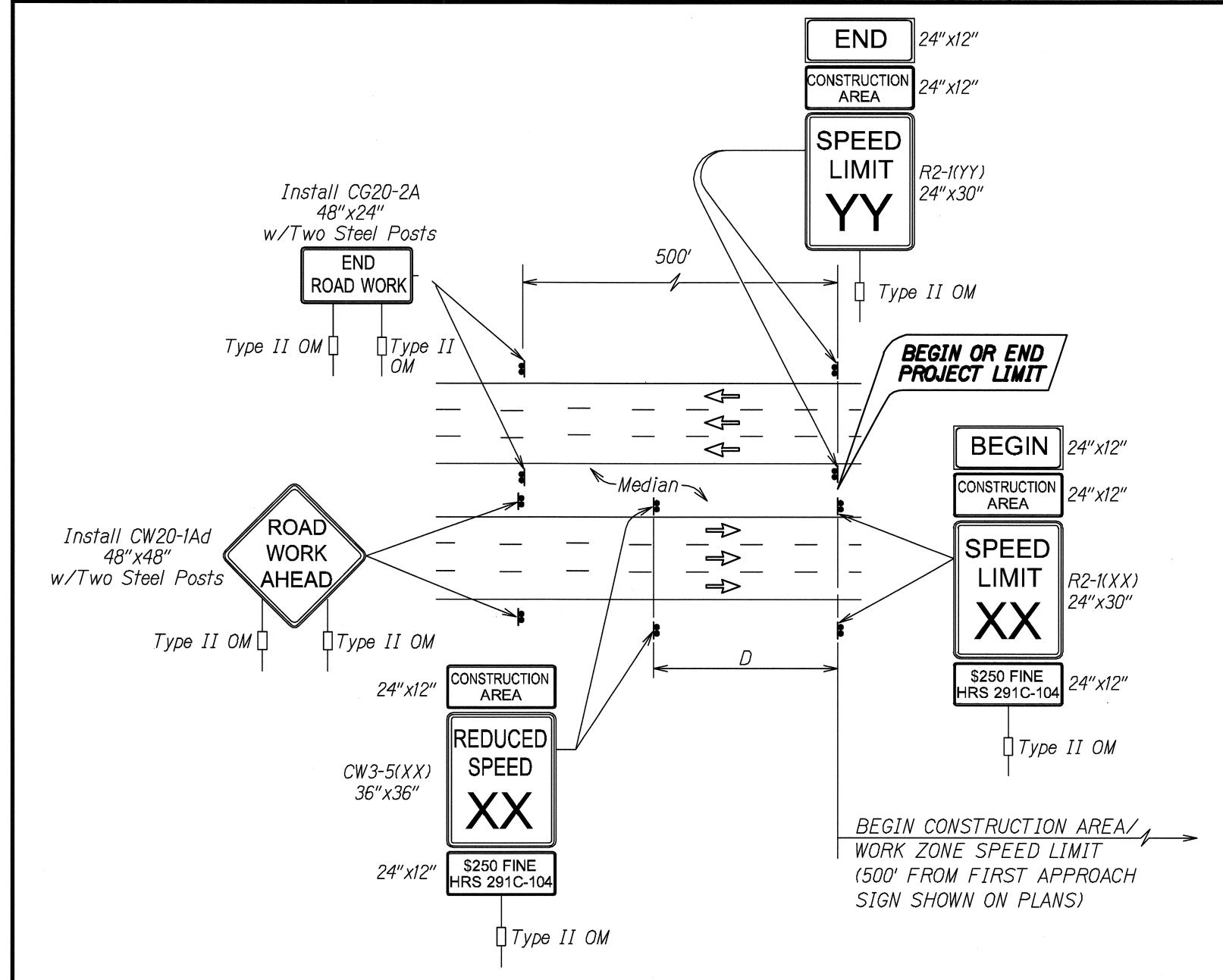
ERODED SLOPE REPAIRS, PHASE 2

Project No. HWY-O-06-15M

Scale: None Date: May 2015

SHEET No. TC-04 OF 14 SHEETS

7. 10 07 OF 17 3H



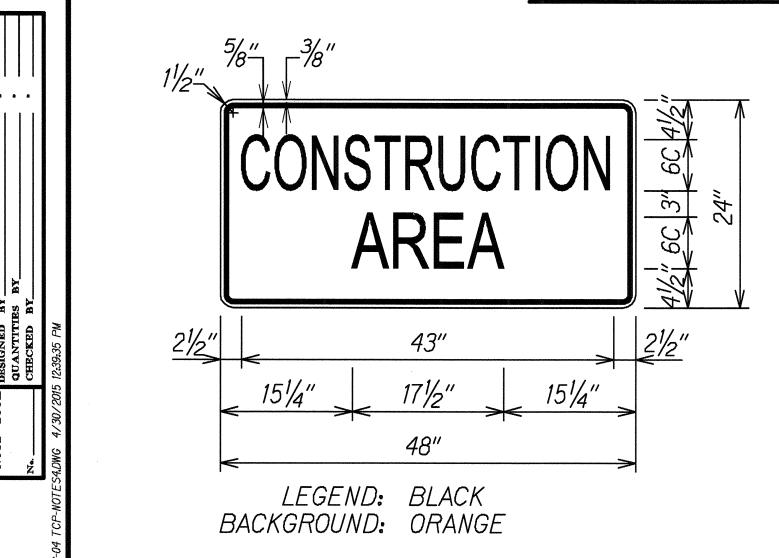
# FED. ROAD<br/>DIST. NO.STATEPROJ. NO.FISCAL<br/>YEARSHEET<br/>NO.TOTAL<br/>SHEETSHAWAIIHAW.HWY-O-06-15M20156271

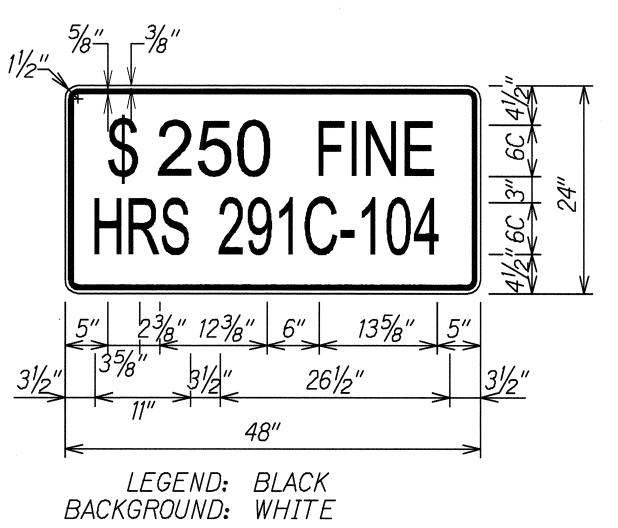
#### Work Zone Note:

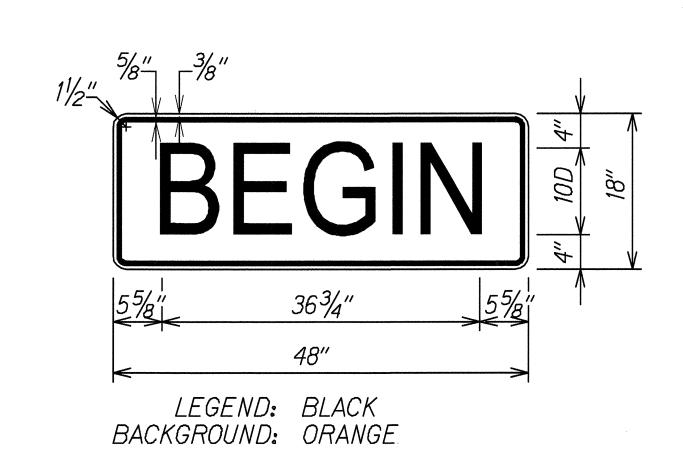
- 1. This Work Zone Sign Plan is intended for use on long-term stationary work zones/construction phases (3 days or more). All work zones or construction phases less than 3 days duration will use Traffic Control Plans shown in Section 645 of the Standard Specifications.
- 2. All existing regulatory speed 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 the various contract items.
- 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 imits 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 the various contract items.

TABLE 1 GUIDELINE FOR ADVANCE PLACEMENT OF SPEED REDUCTION SIGN R2-5b(XX)-A, CONSTRUCTION AREA SPEED LIMIT						
YY-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)				
<i>&lt;25</i>	EXIST. SPEED LIMIT TO REMAIN					
30	25	100				
35	25	175				
40	· <i>30</i>	175				

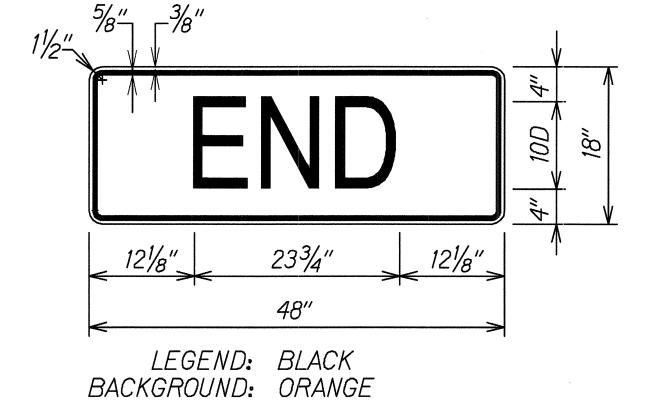
# TYPICAL DETAIL FOR CONSTRUCTION SIGNS ON MULTILANE DIVIDED LOW SPEED HIGHWAY

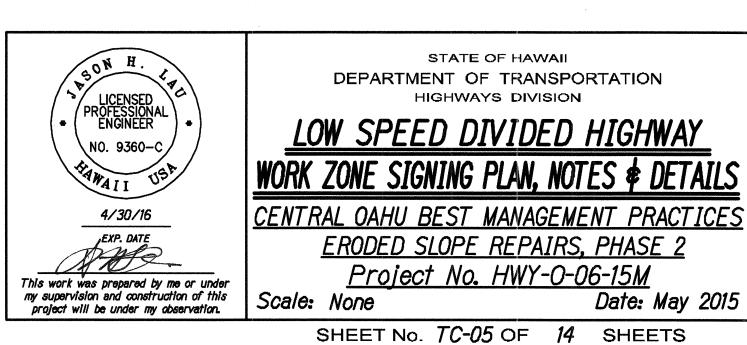






(APPLIES TO PID 301161, 987, 988)





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