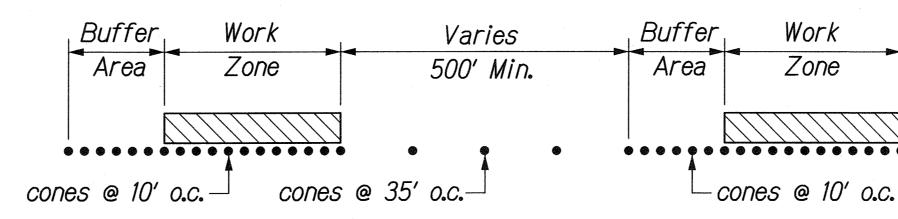
# GENERAL NOTES FOR TRAFFIC CONTROL PLAN

- 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 for activities to complete work not covered by the Traffic Control Plans. 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-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, and Section 645-Traffic Control.
- 3. The Contractor shall make minor adjustments at intersections, driveways, bridges, structures, etc. to fit field conditions.
- 4. Cones or delineators shall be extended to a point where they are visible to approaching traffic.
- 5. 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.
- 6. Flaggers and/or police officers shall be in sight of each other or in direct communications at all times.
- 7. 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.
- 8. All traffic lanes shall be minimum of 11 feet wide.
- 9. All signs shall be promptly removed or covered whenever the message is not applicable or not in use.
- 10. 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).
- 11. 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.
- 12. 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.
- 13. 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, wether or not shown on the Traffic Control Plans shall be considered incidental to the various contract items.

- 14. 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.
- 15. 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.
- 16. Signs for night work shall be retroreflective and shall be mounted with a Type B high intensity flasher.
- 17. Steel plates for covering trenches shall have a skid resistant surface. The skid resistant surface shall be maintained throughout its use. Steel plates shall be installed in such a manner as to minimize movement from its intended location and minimize noise when traffic crosses over it (i.e., steel plates shall not generate any noise impact). Payment for steel plates shall be considered incidental to the various contract items. Steel plates will not be allowed in the travelway for posted speeds in excess of 35 mph.
- 18. 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.
- 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. 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.



# TYPICAL CONE SPACING FOR INTERMITTENT WORK ZONE Not to Scale

- 21. The Contractor is responsible for providing all sign supports and/or posts for construction warning signs.
- 22. If existing loop detectors are damaged during construction, temporary microwave detectors shall be installed at the intersection.

FED. ROAD	STATE	FEDERAL AID	FISCAL	SHEET	TOTAL
DIST. NO.		PROJ. NO.	YEAR	NO.	SHEETS
HAWAII	HAW.	CMAQ-076-1(9)	2006	123	160

## LEGEND:

↑ Portable Arrow Board

Sign

Existing Sign

← Direction of Traffic

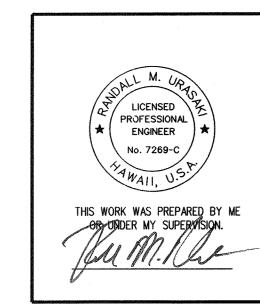
⊢ Type II Barricade (24" wide) with steady burn amber lamps.

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

Portable Concrete Barrier
See Details on Sht. R1-36 and R1-37

Crash Cushion

Flagman



DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

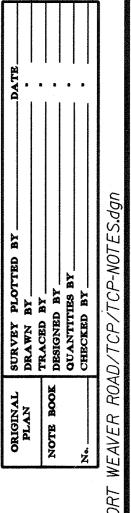
TRAFFIC CONTROL NOTES AND LEGEND

FORT WEAVER ROAD WIDENING VICINITY OF AAWA DRIVE TO GEIGER ROAD

Scale: None

Date: Sept. 20, 2007

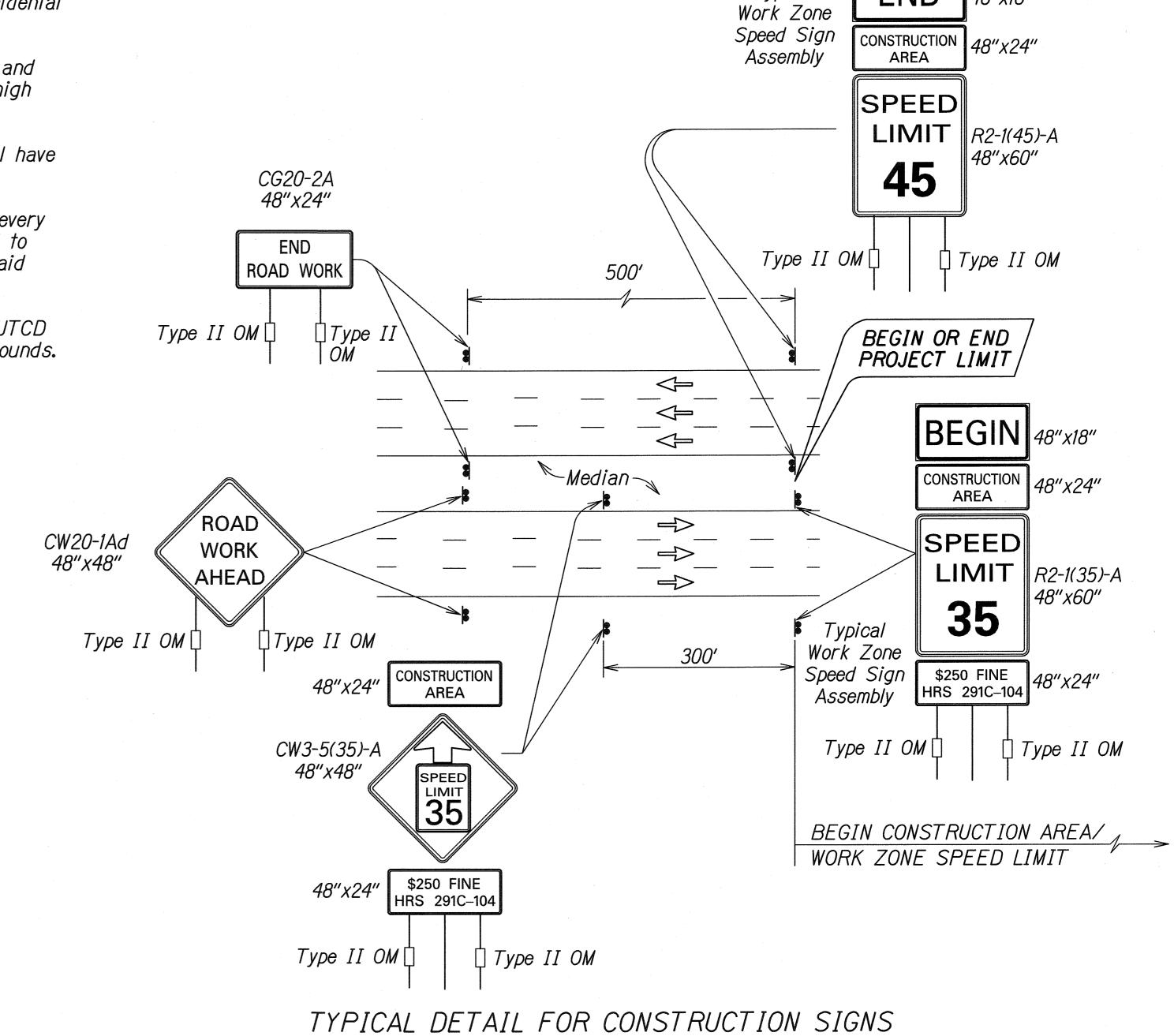
SHEET No. TCI-I OF 25 SHEETS



## 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. 645,1000-Traffic Control.
- 5. All work zone speed sign assembly shall be mounted on three (3) 4.00 lbs./ft. galvanized 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. 645.1000-Traffic Control.
- 7. All work zone signs shall have the project number and Contractor's name on the back of the sign in 11/2" high letters, black paint.
- 8. All traffic cones, delineators, and barrels, etc. shall have retroreflective bands.
- 9. Provide 2 off duty police officers and vehicles at every on-ramp and off-ramp. Payment shall be incidental to Item No. 645.1000-Traffic Control and will not be paid under additional police officers (F.A.).
- 10. All cones shall be retroreflective as required by MUTCD and be a min. of 28" high \( \phi \) weigh a minimum 10 pounds.



FED. ROAD DIST. NO.

Typical

STATE

**END** 

FEDERAL AID

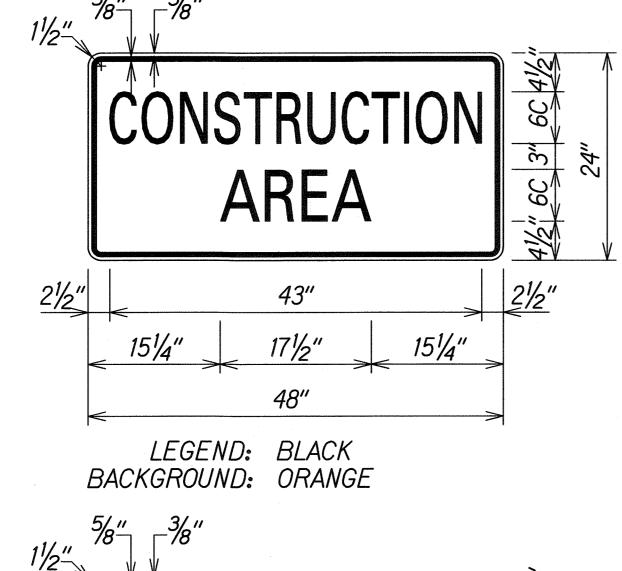
PROJ. NO.

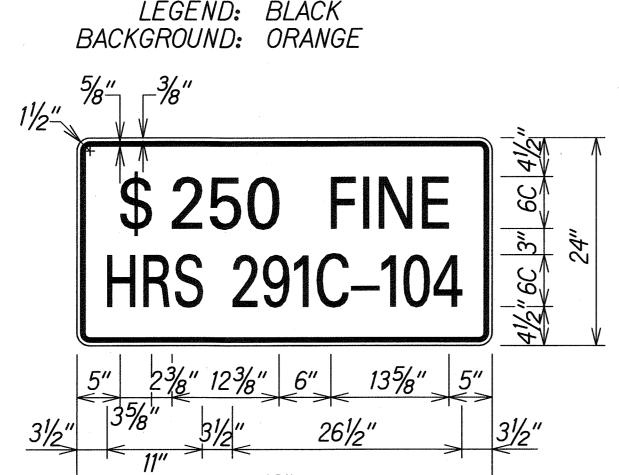
HAW. CMAQ-076-1(9) 2006 124

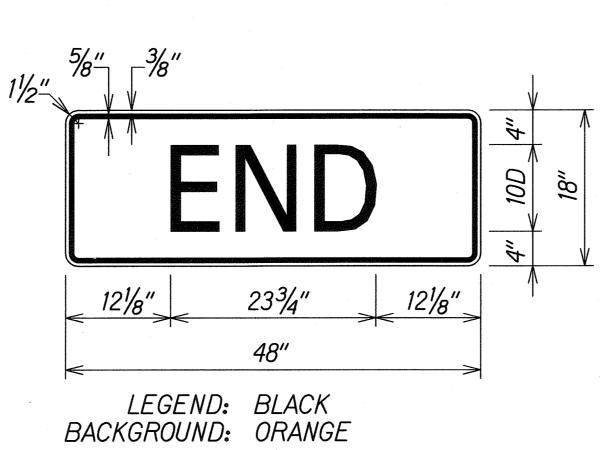
48"x18"

SHEET TOTAL

**FISCAL** 



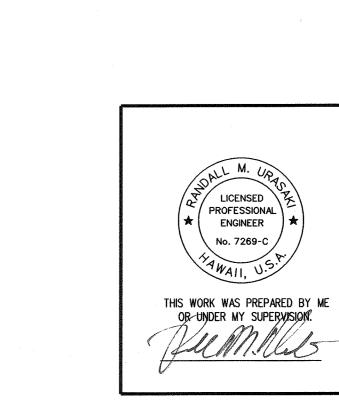




*36¾*"

LEGEND: BLACK

BACKGROUND: ORANGE



**DEPARTMENT OF TRANSPORTATION** HIGHWAYS DIVISION

WORK ZONE SIGNING PLAN, NOTES & DETAILS

FORT WEAVER ROAD WIDENING VICINITY OF AAWA DRIVE TO GEIGER ROAD

Scale: None

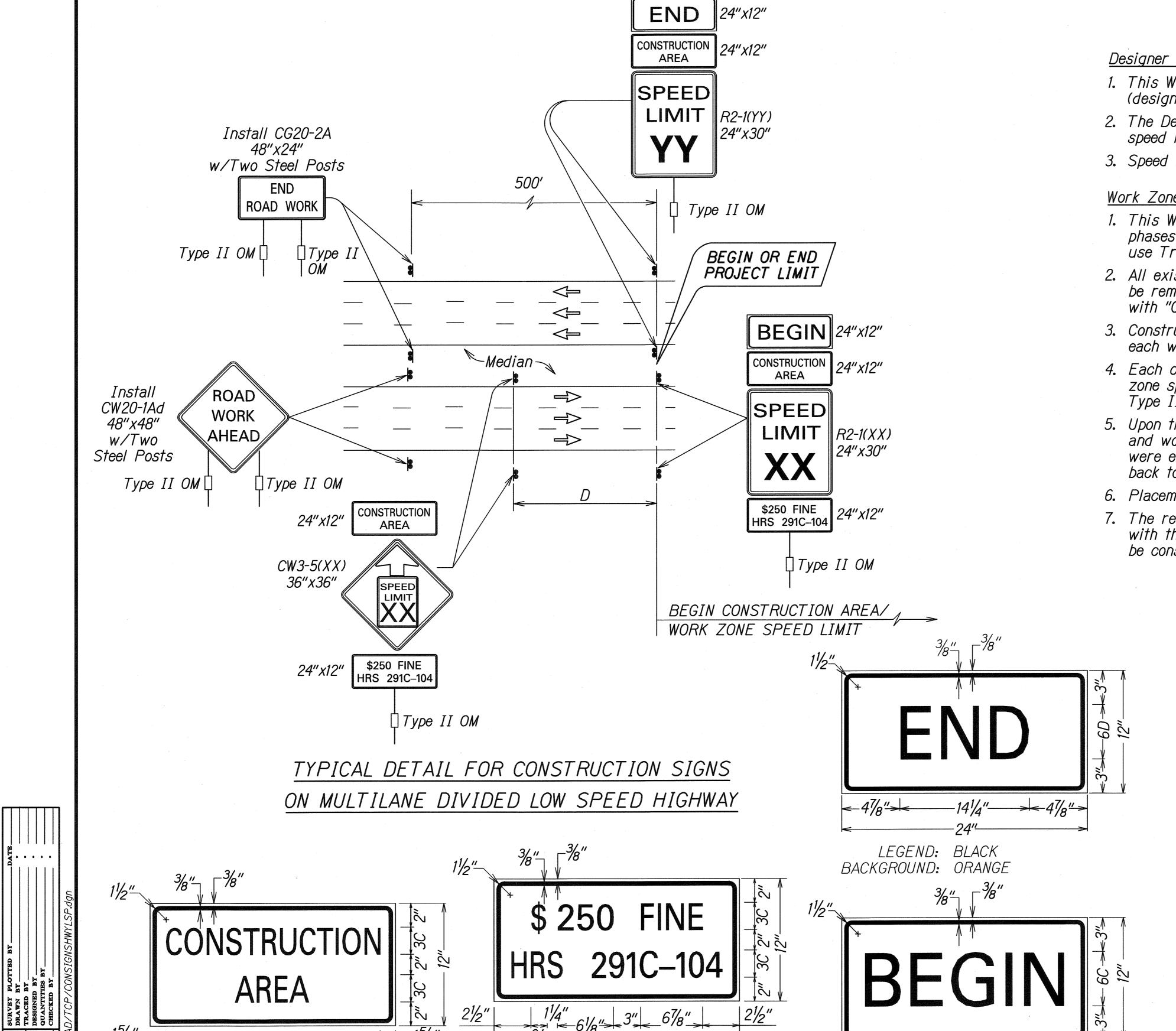
Date: Sept. 20, 2007 SHEET No. TCI-2 OF 25 SHEETS

124

LEGEND: BLACK

BACKGROUND: WHITE

ORIGINAL SURVEY PLOTTED DRAWN BY TRACED BY OVANTITIES BY CHECKED BY CHECKED BY



23/4"

181/2"

LEGEND: BLACK

BACKGROUND: ORANGE

21/2"

LEGEND: BLACK

BACKGROUND: WHITE

15/8"

LEGEND: BLACK

BACKGROUND: ORANGE

FISCAL SHEET TOTAL YEAR NO. SHEETS FEDERAL AID PROJ. NO. FED. ROAD DIST. NO. HAW. CMAQ-076-1(9) 2006 125

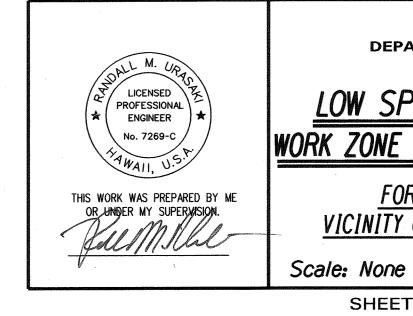
#### Designer Note:

- 1. This Work Zone Signing Plan shall be used only for low speed highways (design speeds of 45 mph or less).
- 2. The Designer shall replace all XX, YY & D references with appropriate speed limit as indicated in Table I.
- 3. Speed Limit YY shall be the existing posted speed.

### 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(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 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 Item No. 621.7100, Construction Sign with Posts.

TABLE I GUIDELINE FOR ADVANCE PLACEMENT OF SPEED REDUCTION SIGN R2–5b(XX)–A, 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)			
<b>≤</b> 25	EXIST. SPEED LIMIT TO REMAIN				
30	25	100			
35	25	175			
40	30	175			

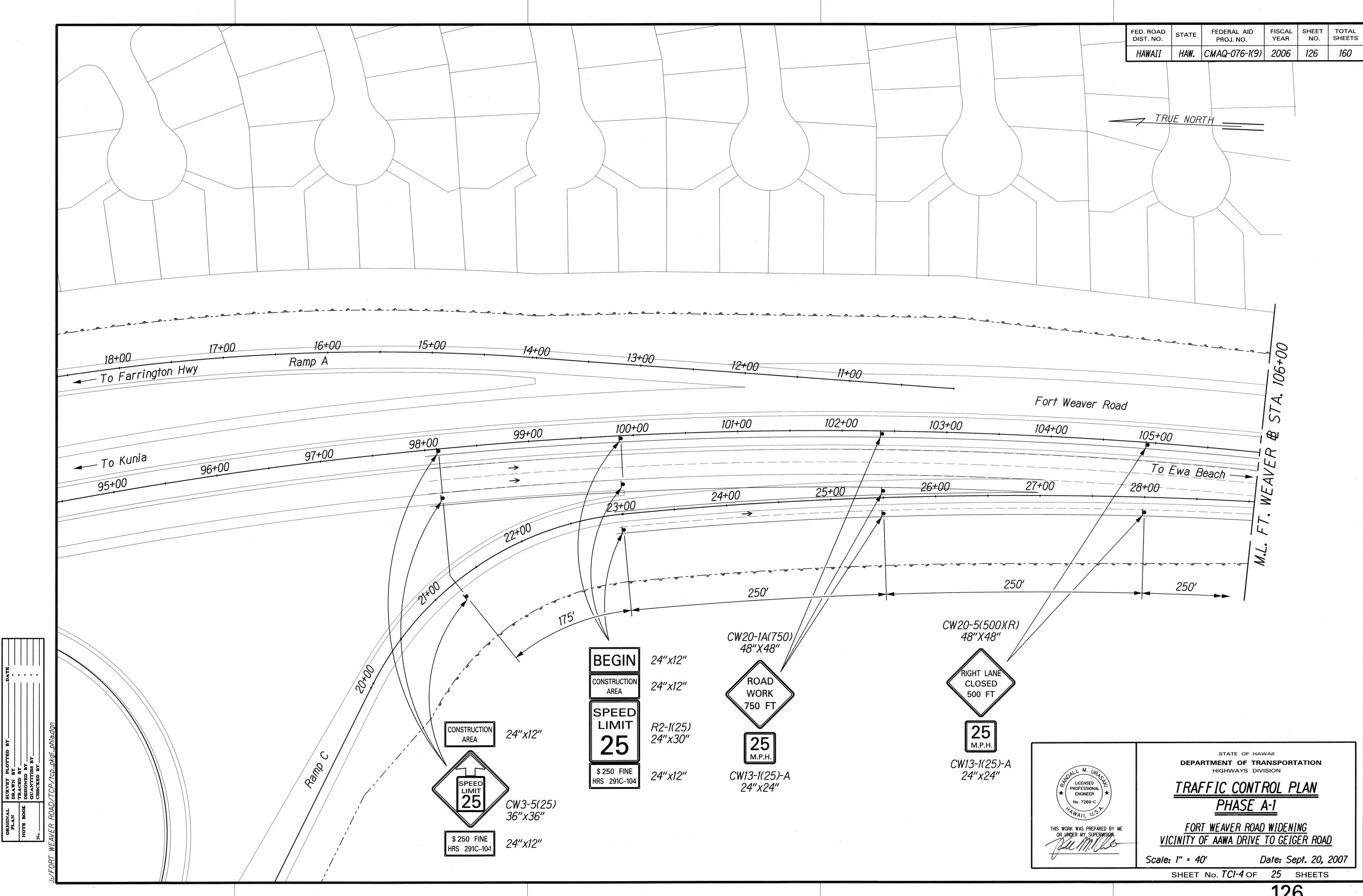


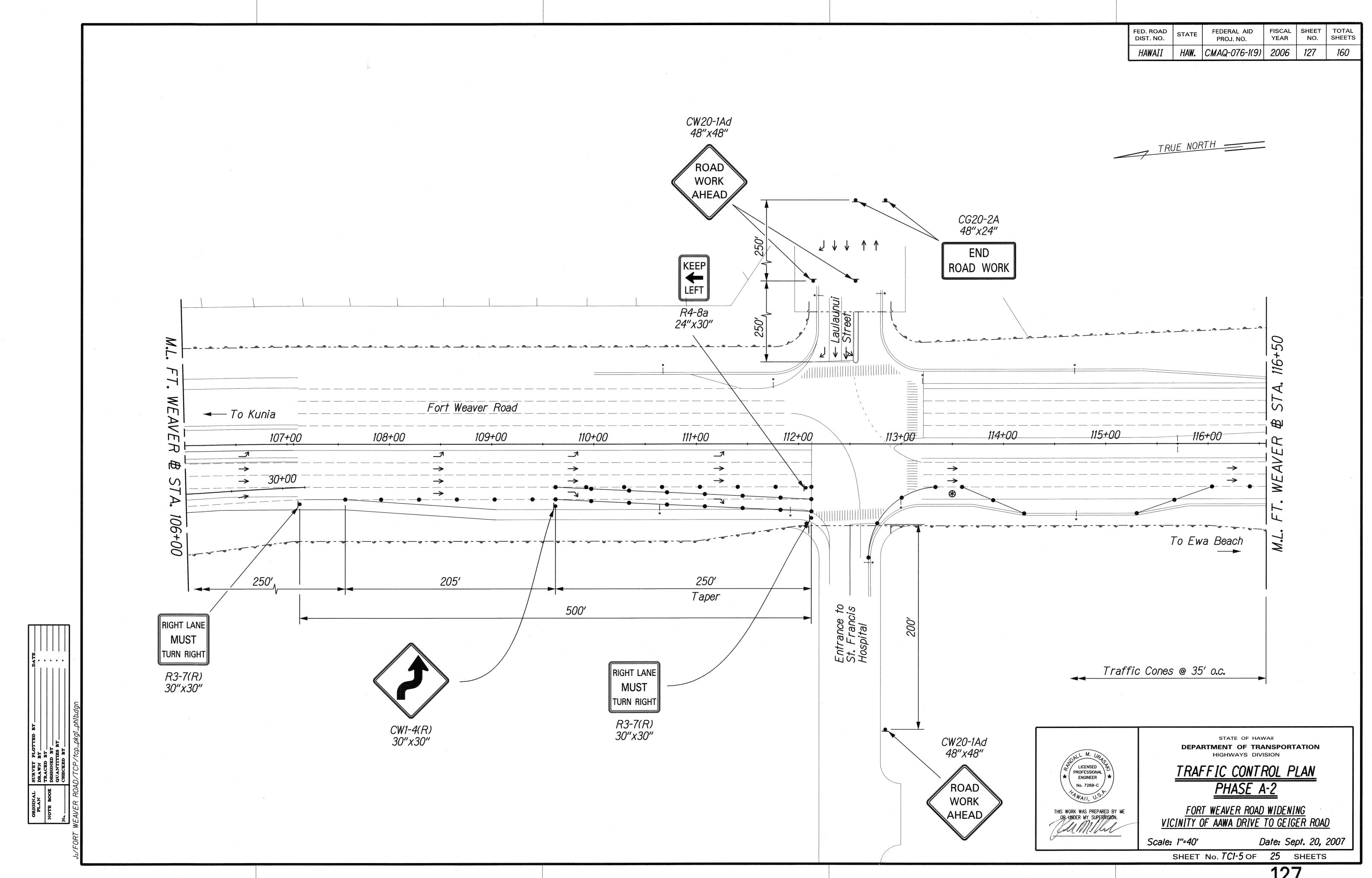
STATE OF HAWAII **DEPARTMENT OF TRANSPORTATION** HIGHWAYS DIVISION

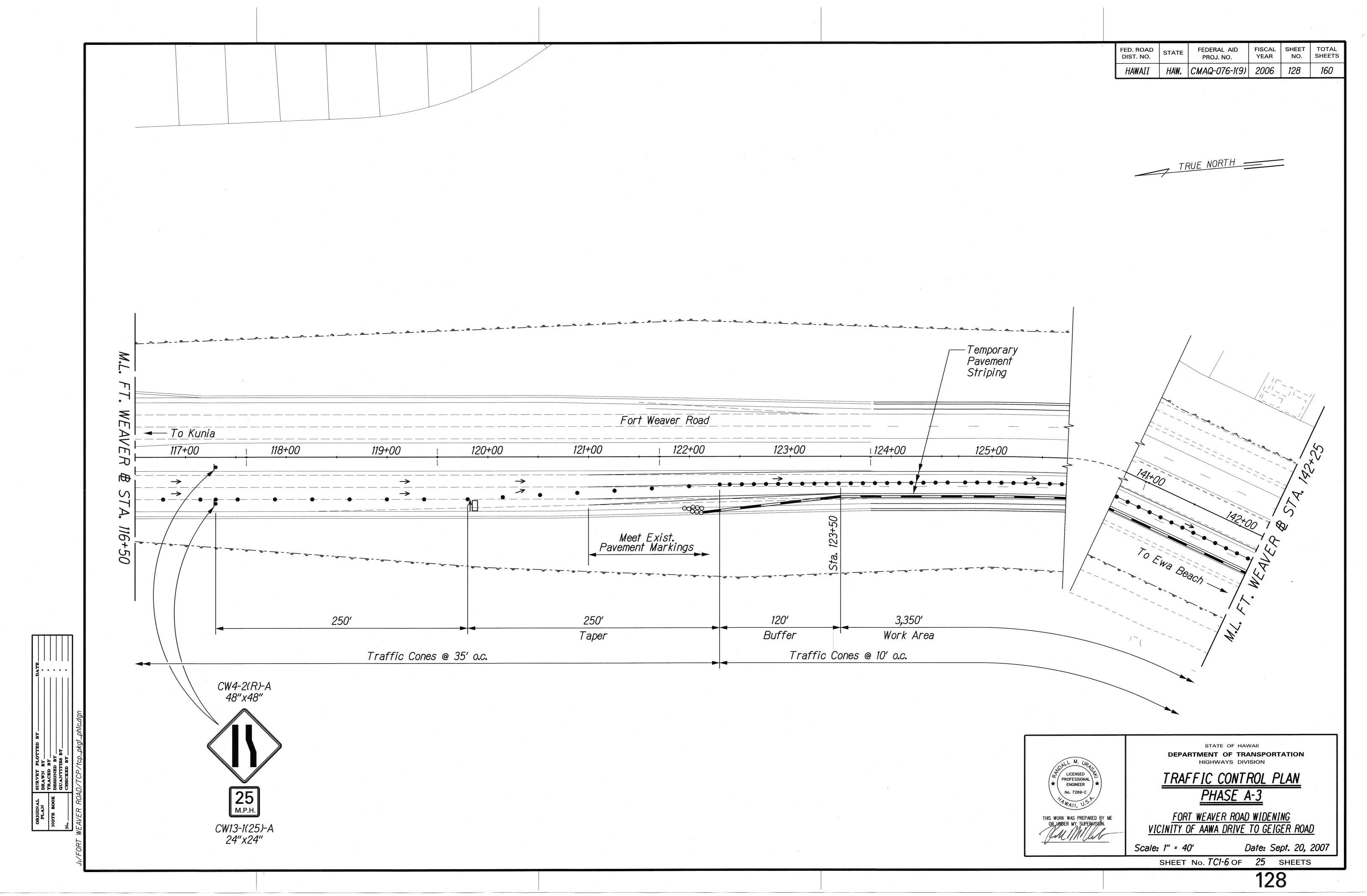
LOW SPEED DIVIDED HIGHWAY WORK ZONE SIGNING PLAN, NOTES&DETAILS

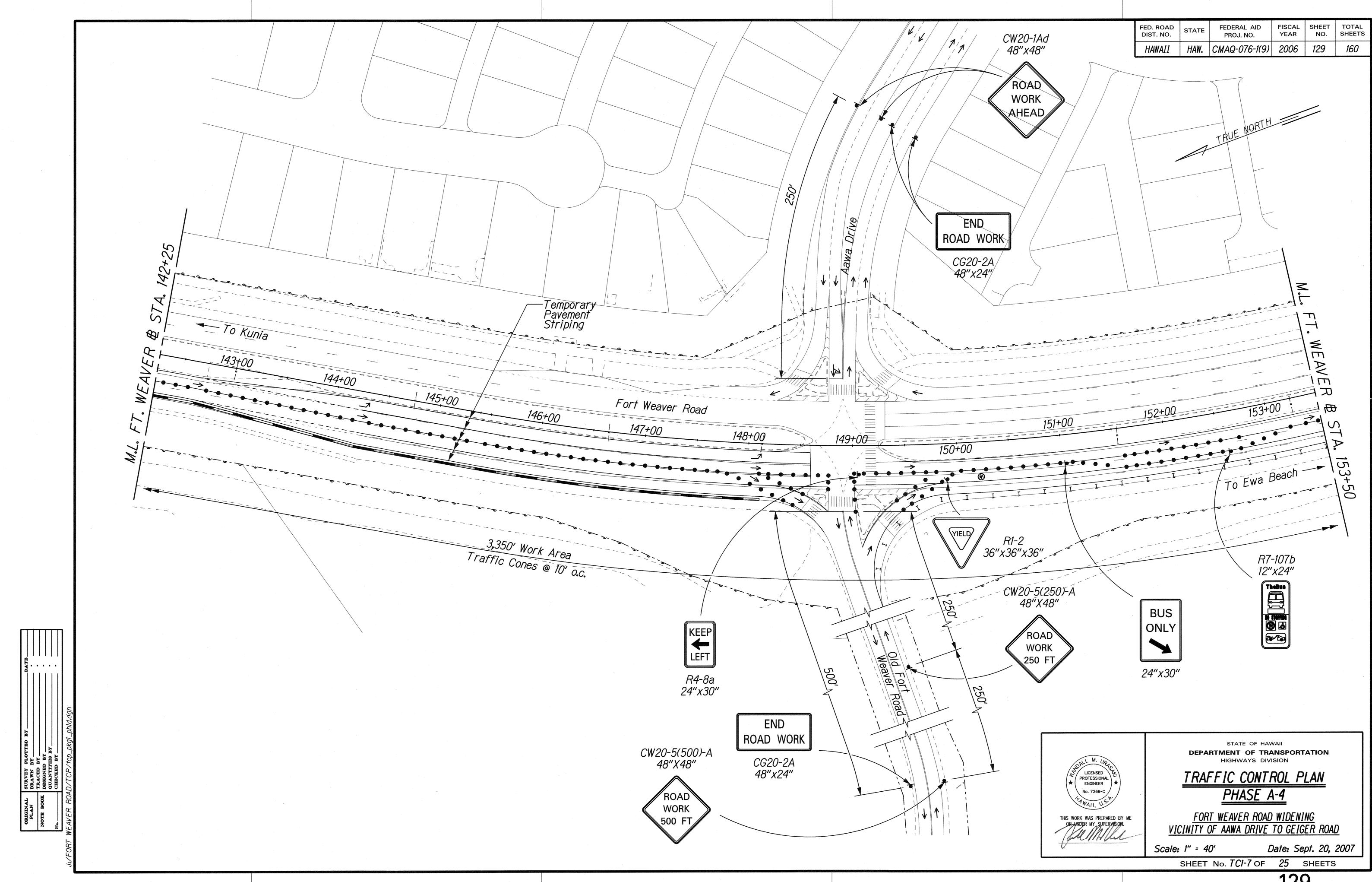
> FORT WEAVER ROAD WIDENING VICINITY OF AAWA DRIVE TO GEIGER ROAD

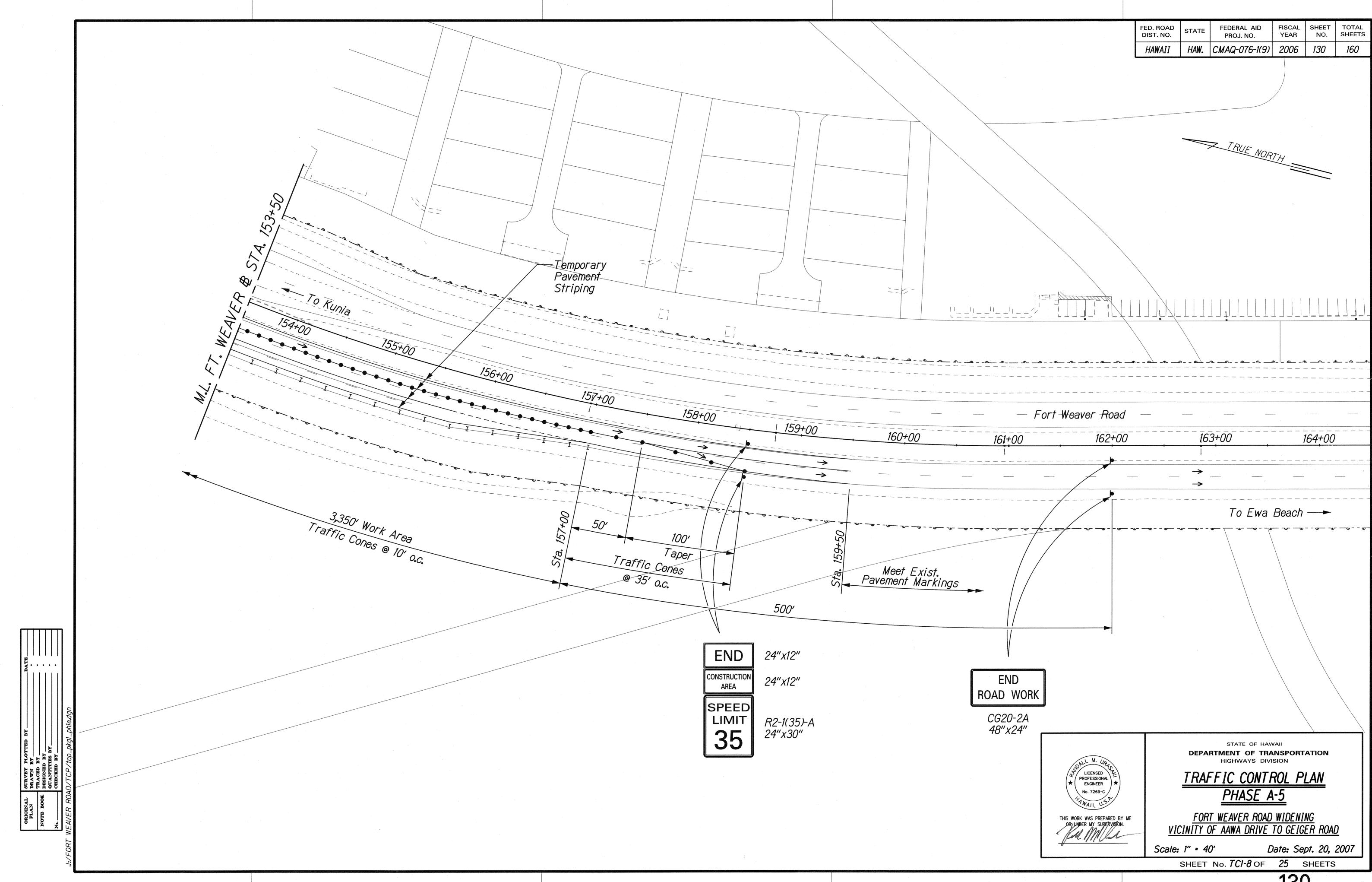
Date: Sept. 20, 2007 SHEET No. TC1-3 OF 25 SHEETS

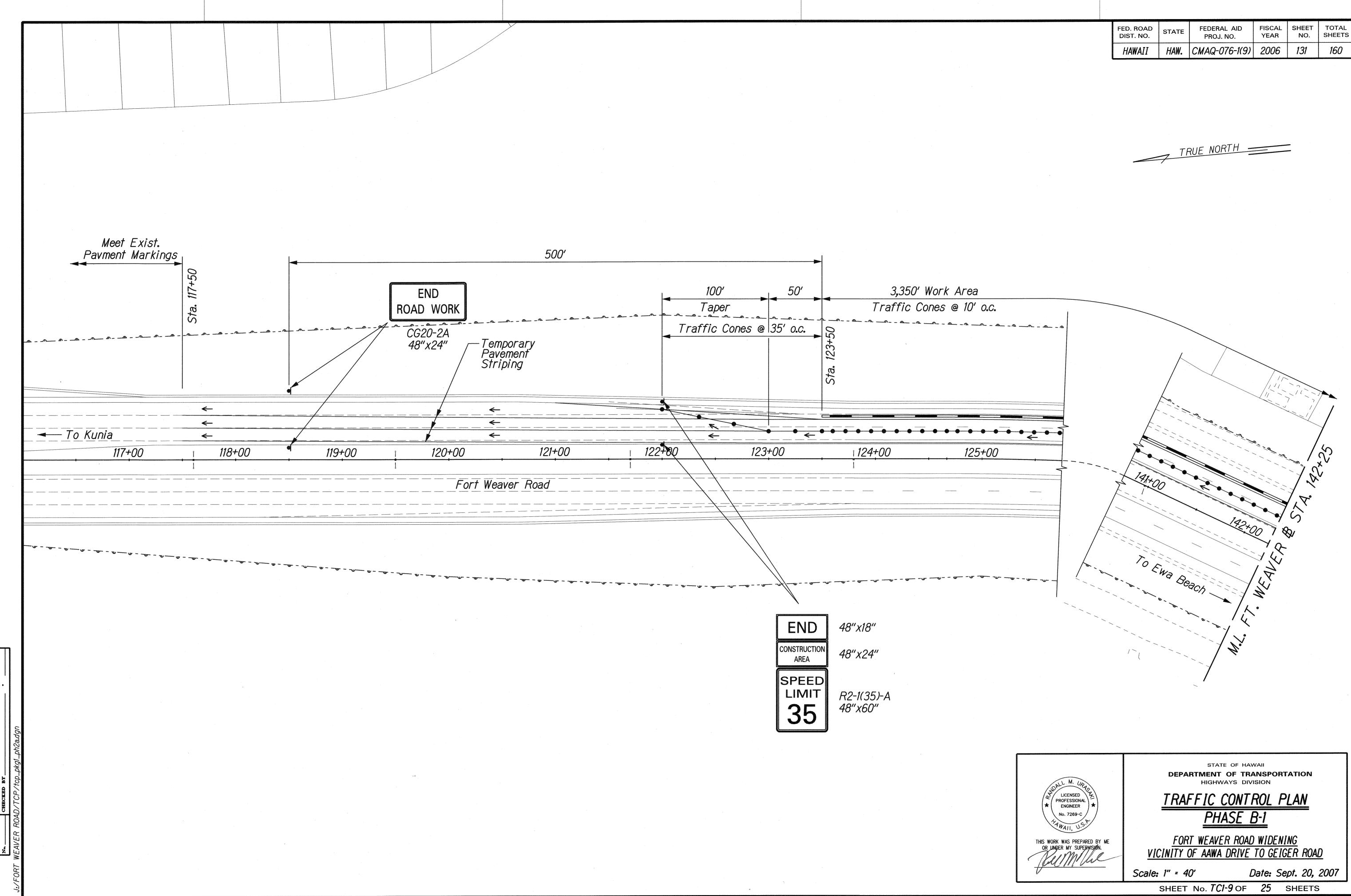


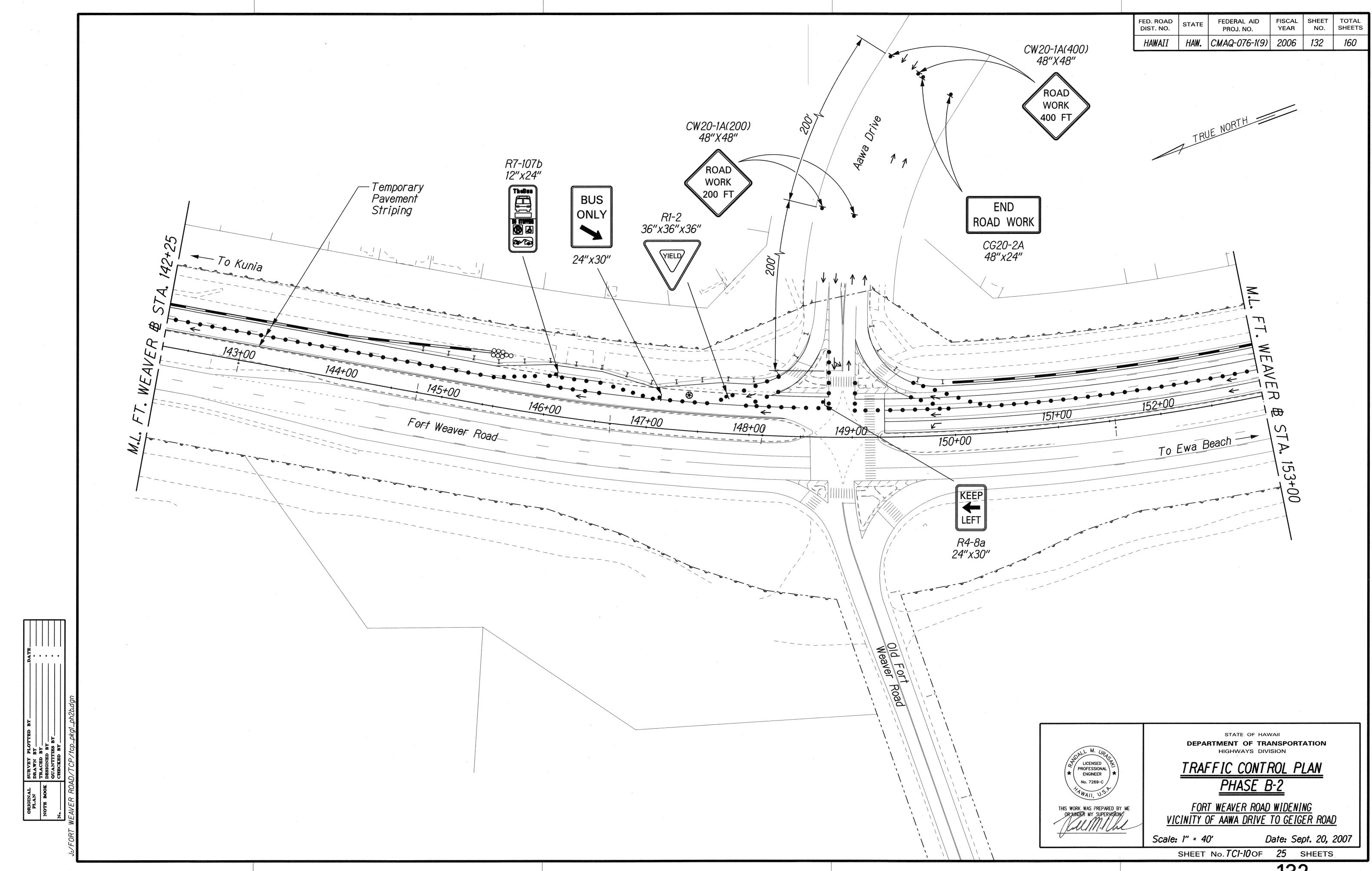


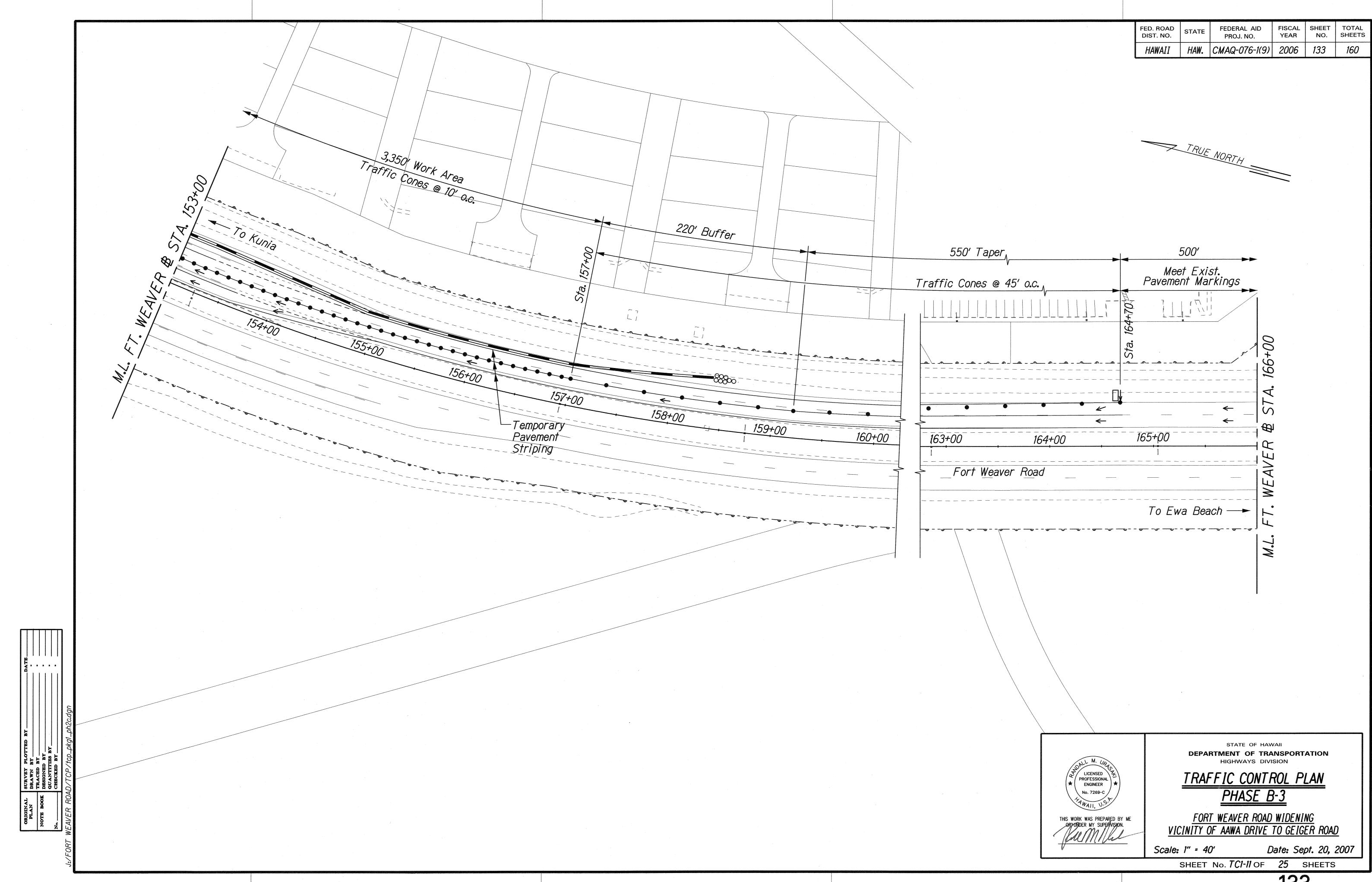


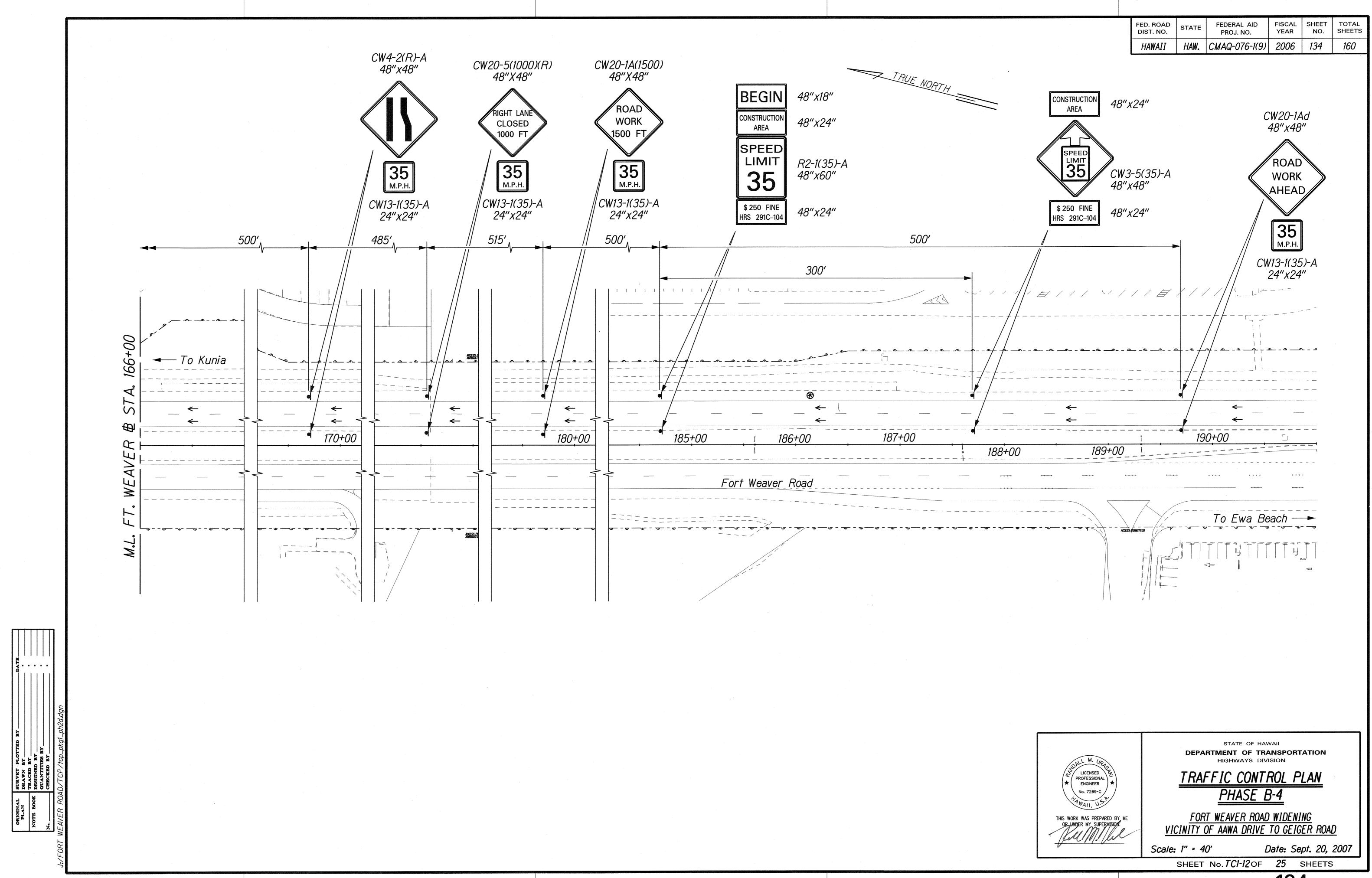


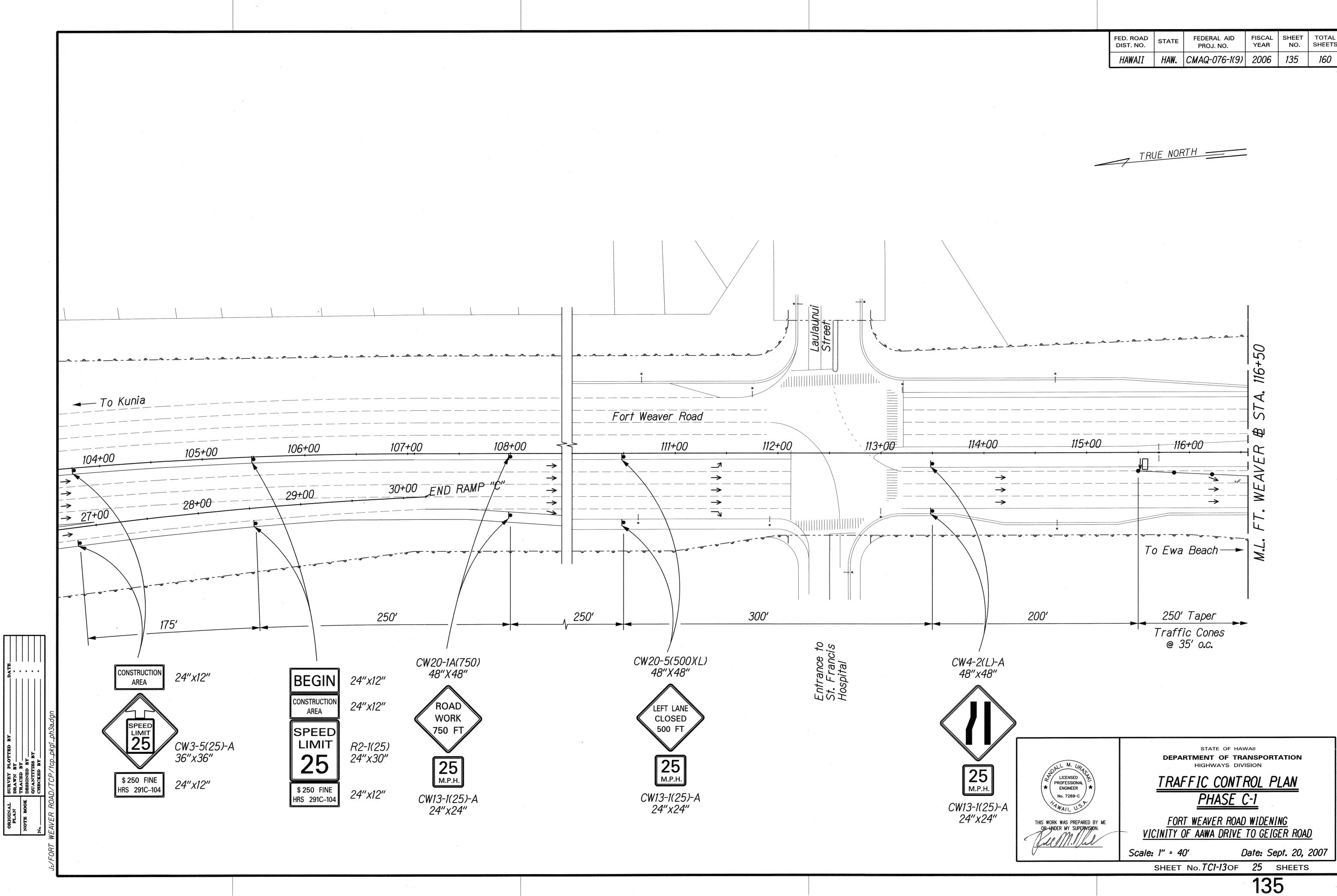


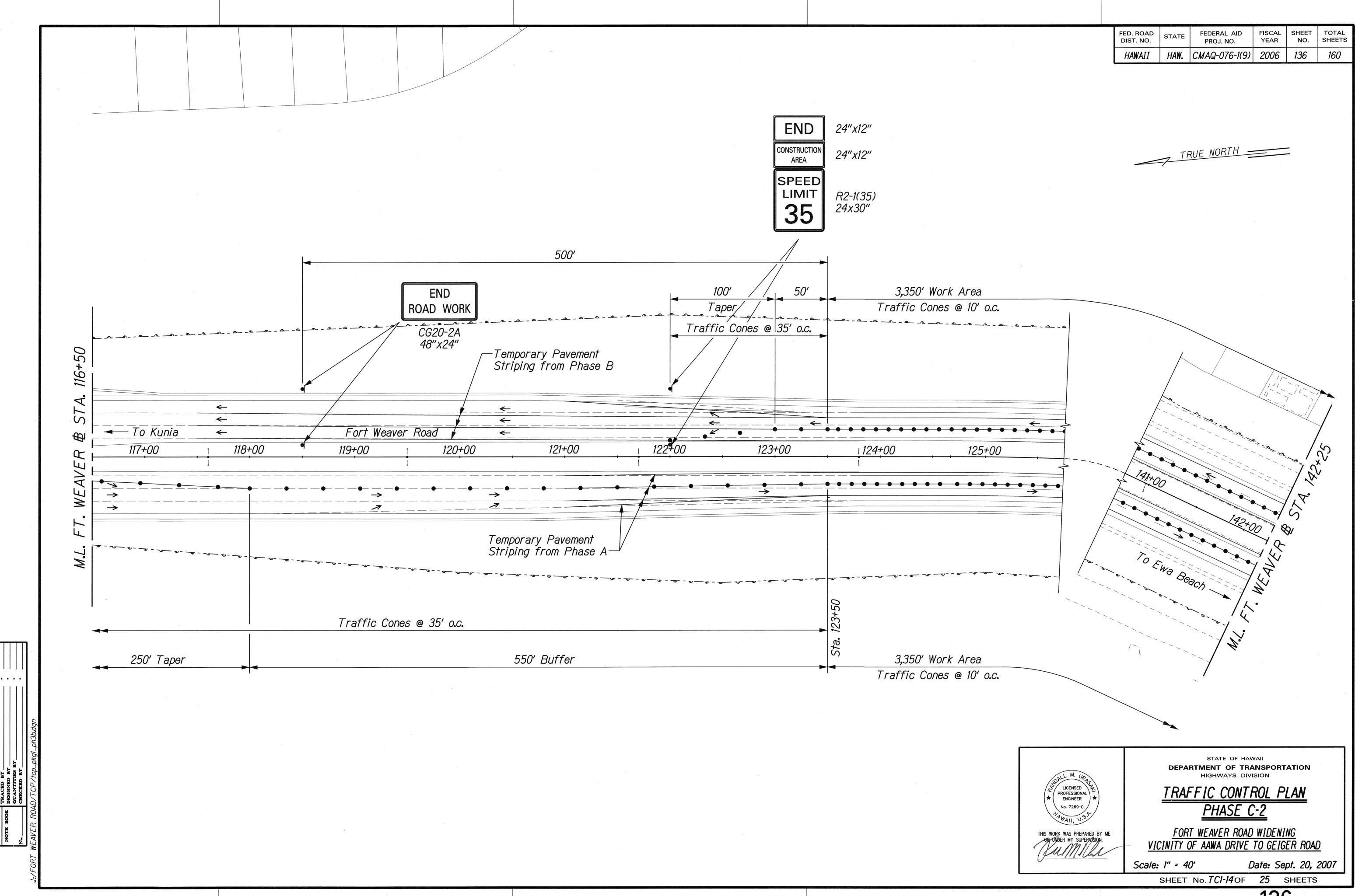


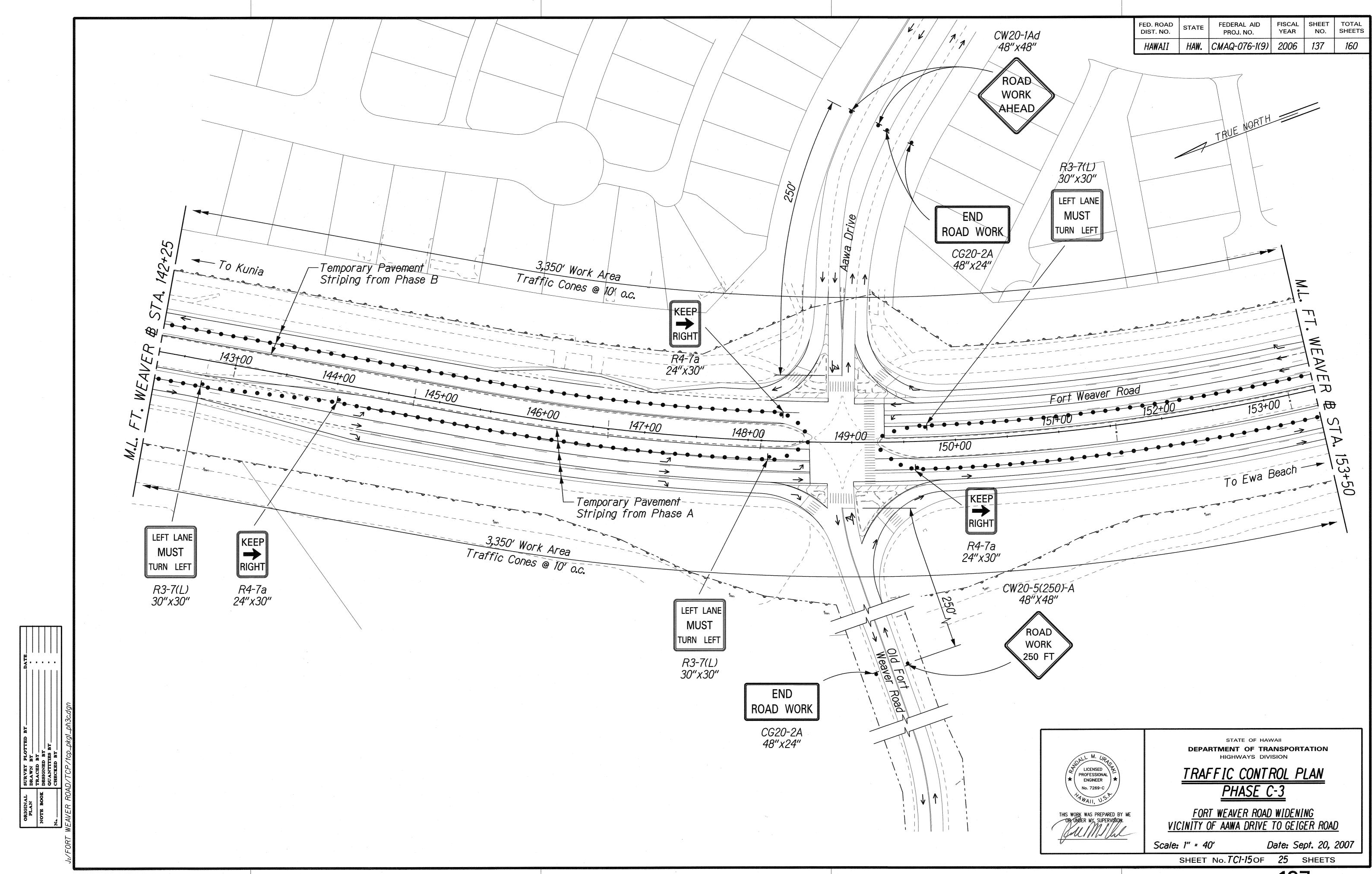


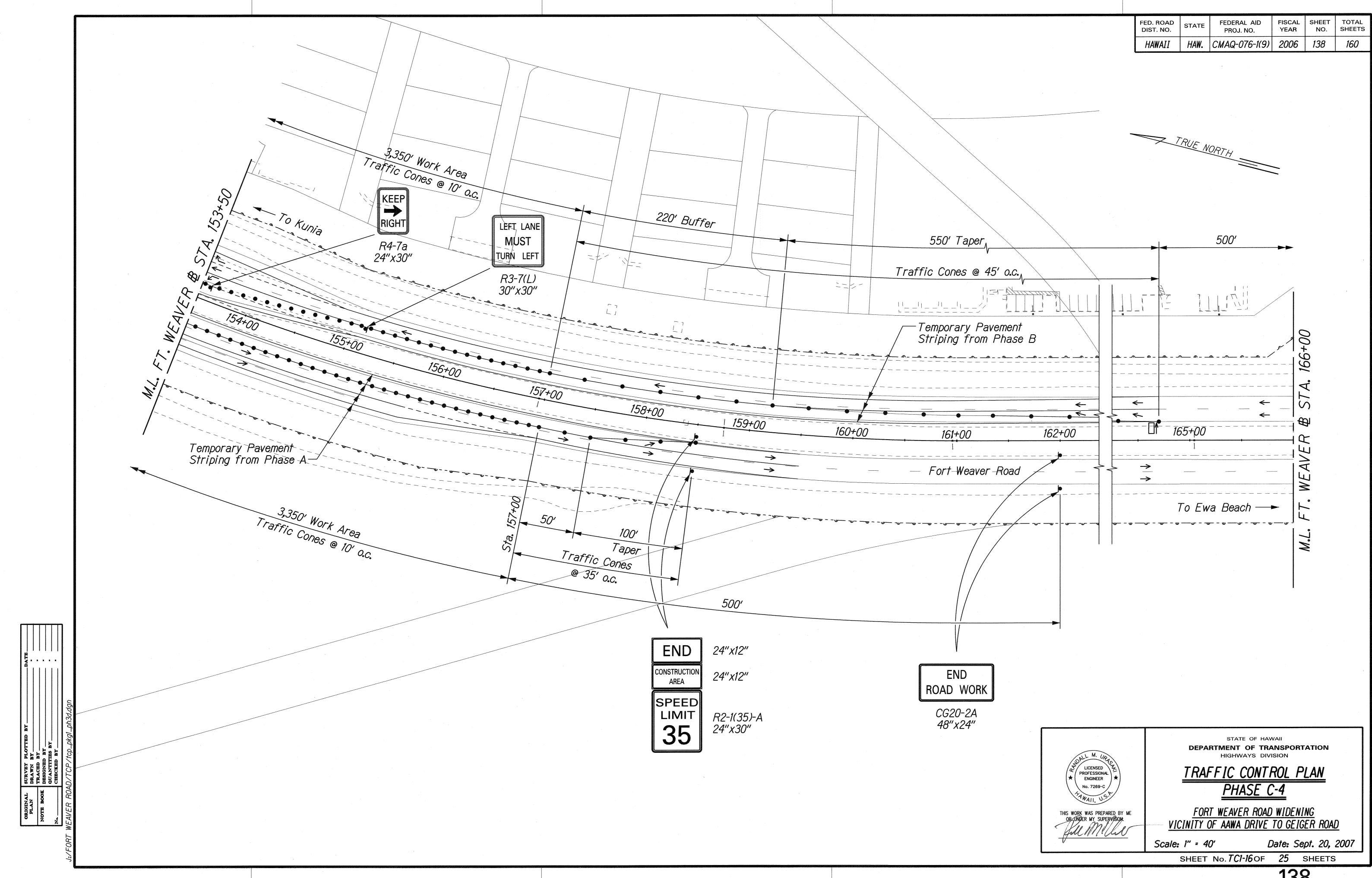


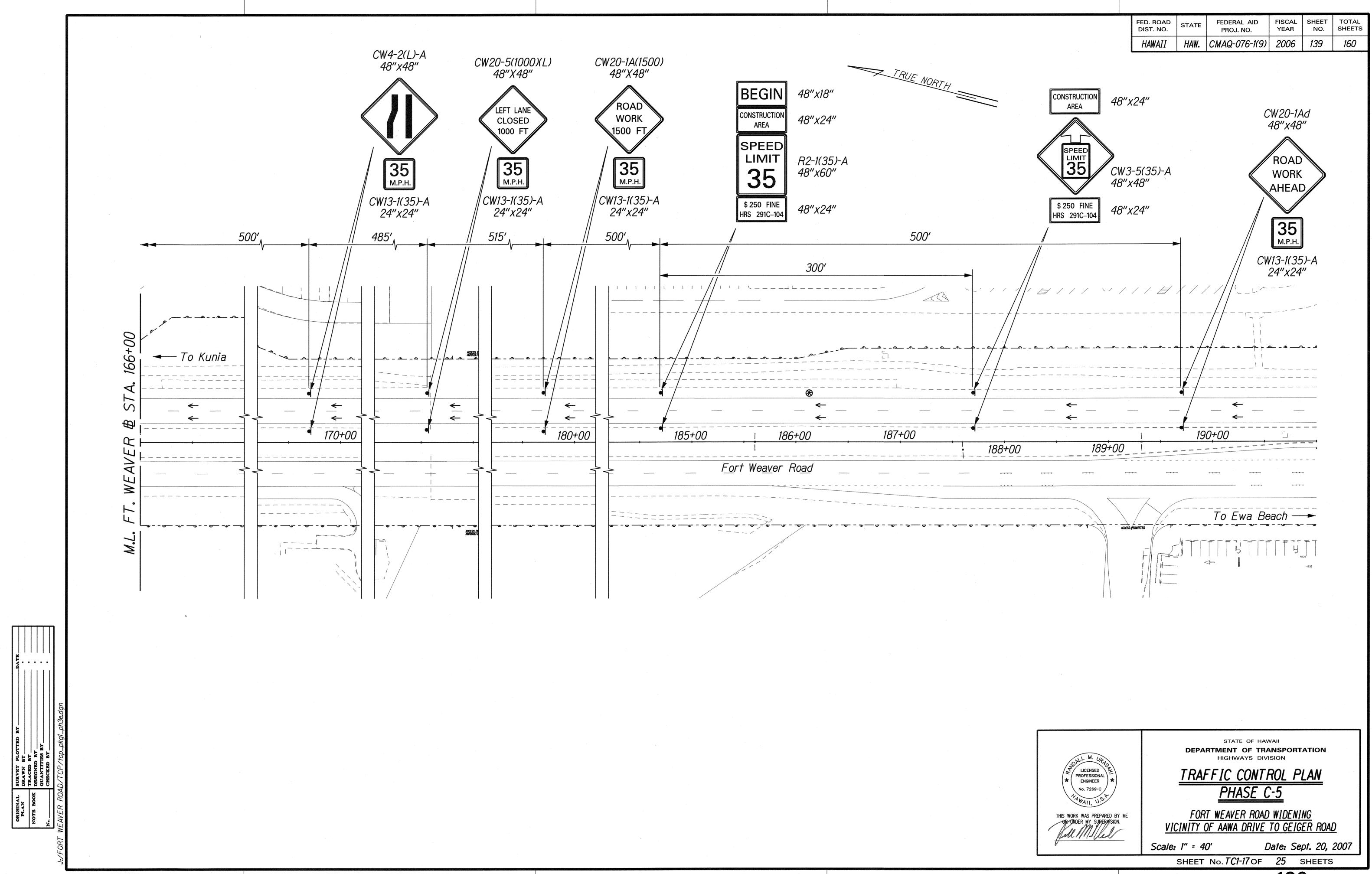


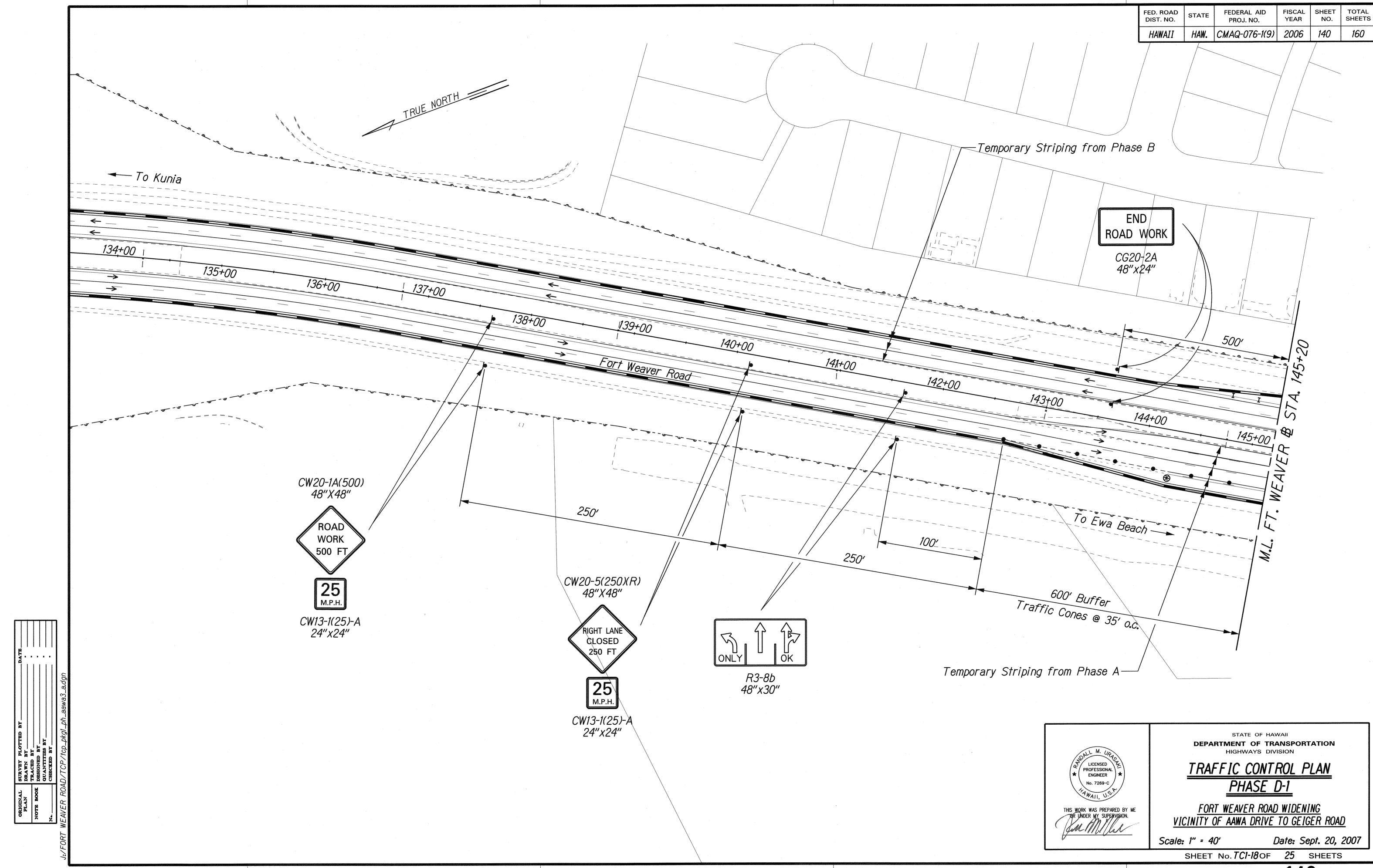


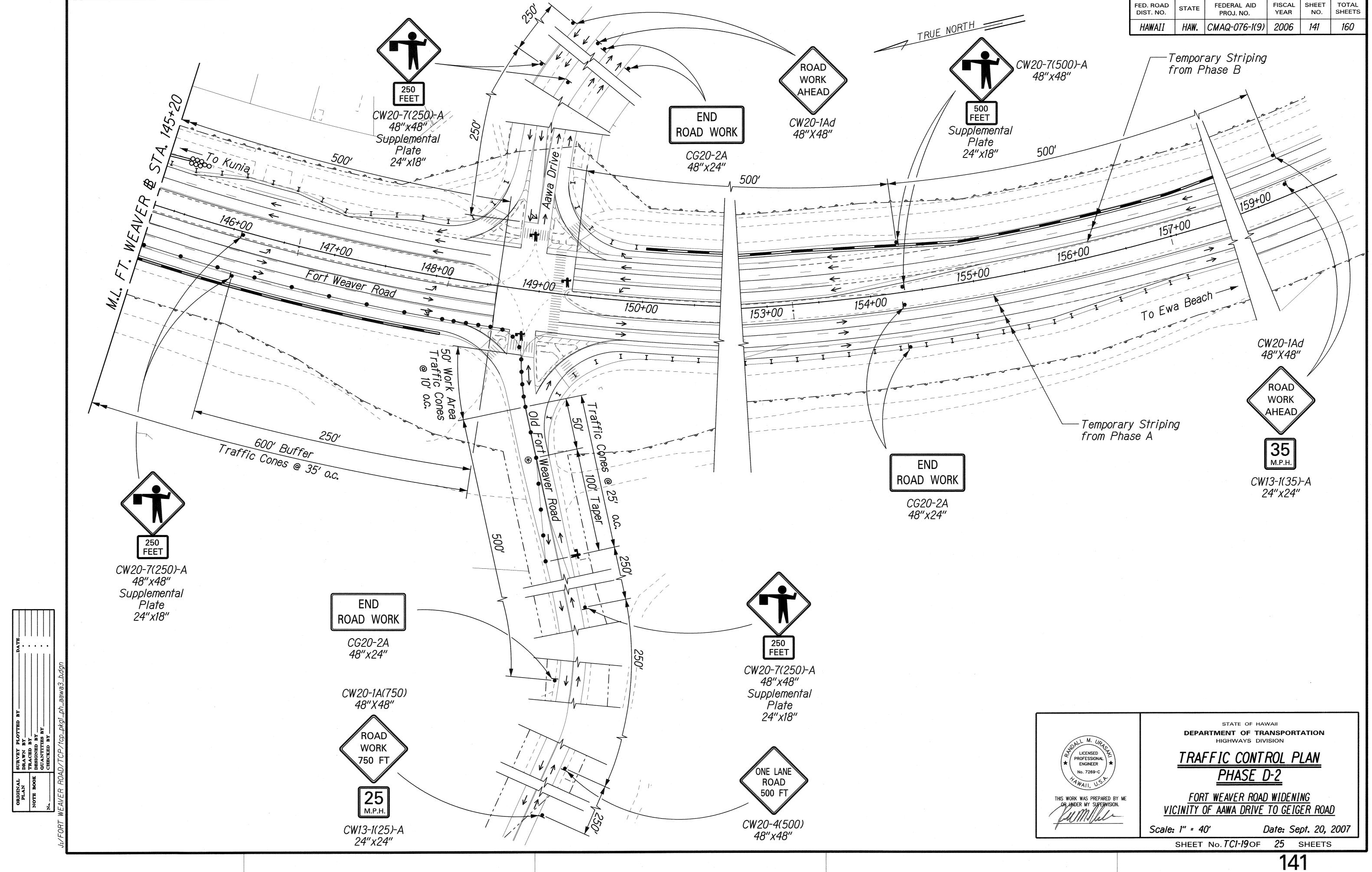












FEDERAL AID

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