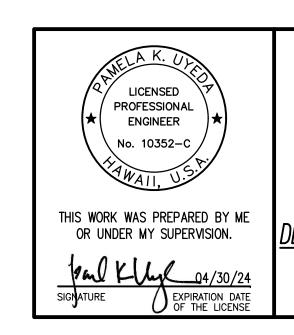
GENERAL NOTES FOR TRAFFIC CONTROL PLAN (STATE R/W):

- 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 acceptance. Payment for development and implementation of the Traffic Control Plans shall be included in the various traffic control pay items.
- 2. All lane closures and traffic pattern changes (detours) not shown on the plan shall be submitted to the Engineer for acceptance 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 Subsection 107.03 - Working Hours; Night Work and Section 645-Work Zone Traffic Control.
- 3. 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.
- 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.
- Flaggers and/or police officers shall be in sight of each other or in direct communications at all times. Flaggers and/or police officers working at night shall be illuminated as required by the MUTCD.
- 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 10 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).
- 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. 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.
- 14. Damage to signs, pavement markers, and delineators caused by the Contractor's negligence shall be repaired or replaced by the Contractor as directed by the Engineer at no cost to the State.
- Signs for night work shall be retroreflective and shall be mounted with a Type B high intensity flasher. The sign and flasher will be paid under the various traffic control pay items.
- 16. The Contractor shall provide all sign supports, barrier mounting brackets, and/or posts for construction warning signs.

| FED. ROAD DIST. NO. | STATE | FEDERAL AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|------------------------|-------|--------------------------|----------------|--------------|-----------------|
| HAWAII | HAW. | NH-0300(205) | 2024 | <i>3</i> 7 | 197 |

- 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). Steel plates shall not be allowed in the travelway for posted speeds in excess of 35 mph.
- 18. 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.
- 19. The Contractor shall provide and maintain four (4) portable message boards in addition to those shown on the traffic control plans to provide advanced warning of the lane closures. The message boards' location to be determined by the Engineer for each construction phase. Message boards shall display closure dates and times and shall be operational 24 hours a day for three (3) days prior to each lane closure. The Contractor shall provide appropriate traffic control devices (barricades, cones, etc.) to protect the message boards. Installation, Maintenance, and removal of message boards shall be paid under the various traffic control pay items.
- 20. The Contractor shall furnish, install, maintain, and remove all traffic control devices shown on the traffic control plans.
- 21. Contractor shall protect all areas below when working on sign structures above, including public streets, service roads, parking lots, private properties, and pedestrian walkways.
- 22. Contractor shall provide MASH TL-3 compliant positive protection barriers and Terminal Impact Attentuators for locations and durations that existing concrete barriers or metal guardrails are removed. Payment shall be considered incidental to the various traffic control pay items.
- 23. Type II barricades shall have Type B steady burn amber warning lights unless otherwise noted.
- 24. Regulatory and Warning Signs within the construction zone that are in conflict with the traffic control plans shall be removed or covered.
- 25. Contractor shall provide towing services to remove disabled vehicles from the roadway during lane closures. Towed vehicles shall be moved to a location outside the work zone where there is curbside parking. Motorists shall not be charged for this service. The Contractor shall retain the services of at least three (3) tow trucks to enhance response times. Payment shall be considered incidental to the various traffic control phases.
- 26. All delineators used for night work shall have a 3" wide retroreflective band.
- 27. Contractor shall install advisory signs at each work location. Payment shall be considered incidental to the various traffic control phases.



STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION

TRAFFIC CONTROL NOTES

INTERSTATE ROUTE H-1 AND H-201 DESTINATION SIGN UPGRADE/REPLACEMENT, PHASE 3E FAP NO. NH-0300(205)

Scale: None

SHEET No. TC-1 OF 85 SHEETS

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Date: Oct. 2023

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QUANTITI ORIGINAL PLAN NOTE BOOK

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GENERAL NOTES FOR TRAFFIC CONTROL PLAN (CITY R/W):

- 1. The Permittee shall make minor adjustments at intersections, driveways, bridges, structures, etc. to fit field conditions.
- 2. Cones or delineators shall be extended to a point where they are visible to approaching traffic.
- 3. Traffic control devices shall be installed such that the 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 Permitee 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 Permitee shall remove all traffic control devices no longer needed to permit free and safe passage of public traffic. Removal shall be in 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 kept spaced at a maximum distance of 20 feet apart. A minimum of six channelizing devices shall be used for each taper length.
- 13. Driveways shall be kept open unless the owners of the property using the driveway are otherwise provided for satisfactorily. Further, the Permitee shall control traffic going into and out of driveways.
- 14. Buffer and taper area on approach to any work area shall be kept clear of vehicles and equipment.
- 15. A high level warning device (flag tree) shall be installed on approach to all work areas.
- 16. "No Parking" signs shall be posted within any work area and for the buffer and taper areas approaching the work area.
- 17. Where an accessible pedestrian route is closed or blocked during construction, Contractor shall provide temporary accessible pedestrian route.
- 18. Traffic control plans are approved for work on any City street area only for the hours shown on the construction phasing plans.

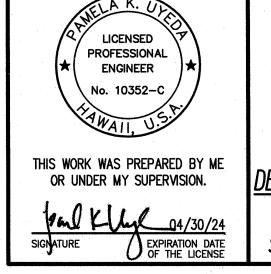
| FED. ROAD DIST. NO. | STATE | FEDERAL AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|------------------------|-------|--------------------------|----------------|--------------|-----------------|
| HAWAII | HAW. | NH-0300(205) | 2024 | 38 | 197 |

19. At no time outside of the hours shown in the construction phasing plans shall any lanes be obstructed either temporarily or momentarily that prevents the free movement of traffic by any equipment, vehicle, traffic control device, signage or person controlled by the Contractor. Non-compliance will result in the immediate revocation of the street usage permit. DTS will cause all construction activities to cease. Contractor may apply for a new street usage permit only after meeting with DTS. There will be no extension of contract time or compensation granted due to delays in the application and in the obtaining of a new street usage permit.

APPROVED:

TRAFFIC REVIEW BRANCH, DPP 4 DATE

(FOR WORK WITHIN CITY R-O-W)



TRAFFIC CONTROL NOTES

STATE OF HAWAII

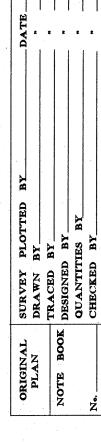
DEPARTMENT OF TRANSPORTATION

<u>INTERSTATE ROUTE H-1 AND H-201</u> DESTINATION SIGN UPGRADE/REPLACEMENT, PHASE 3B

FAP NO. NH-0300(205)

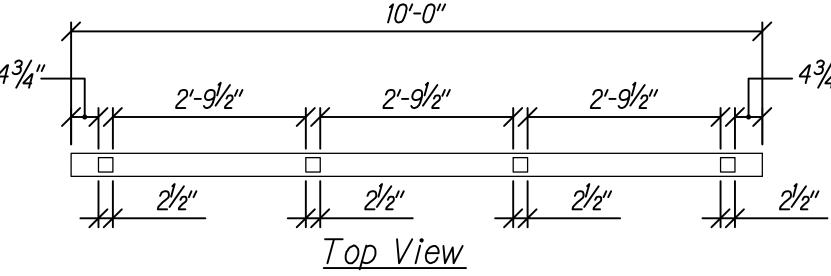
Scale: None Date: Oct. 2023

SHEET No. TC-2 OF 85 SHEETS



SIGNING NOTES:

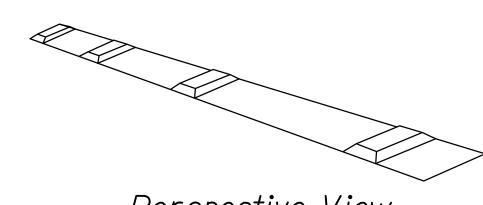
- 1. All sign panels shall conform to Section 630, 631 and 632 of the specifications, DOT standard plans, and the latest editions and amendments of the following FHWA publications: "Manual on Uniform Traffic Control Devices for Streets and Highways", "Standard Highway Signs" and "Standard Alphabets for Highway Signs".
- 2. For Miscellaneous Sign Details, see Standard Plan TE-01 to
- 3. Existing Signs to be removed shall be disposed of by the Contractor. Removal of signs shall also include the removal of post and foundation to a minimum height of 1-foot below the ground. Payment for the removal of such signs shall be incidental to the various contract items.
- 4. The Contractor shall backfill all holes, depressions and pits left by the removal of the existing signs with embankment material.
- 5. The cost of trimming existing vegetation for installation of signs to provide a clear view of the sign(s) shall be considered incidental to the sign(s).
- 6. Existing signs that are to be replaced shall not be removed until new signs are installed as replacements, or the messages are no longer necessary.
- 7. Final locations of all signs shall be approved by the Engineer prior to any installation work.
- 8. 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 posts as designated on these plans shall be incidental to the various signing items.
- 9. All existing sign post(s) to remain within the sidewalk area shall meet the minimum clear width of 48 inches from the sidewalk edge. Where necessary, the existing sign post(s) shall be relocated to meet the minimum clear width. This work shall not be paid for separately but shall be considered incidental to the various contract items.
- 10. Backing for all new regulatory and warning signs shall not be spliced.
- 11. Remove and install signs in such a manner that it will not endanger the public (e.g. falling tools, debris, material, etc.)



Lane Line

Profiles placed on 36" o.c.

365 mil height (min.), including 100-125 mil baseline. Width equal to approximately baseline width.



Perspective View

PROFILED THERMOPLASTIC STRIPING

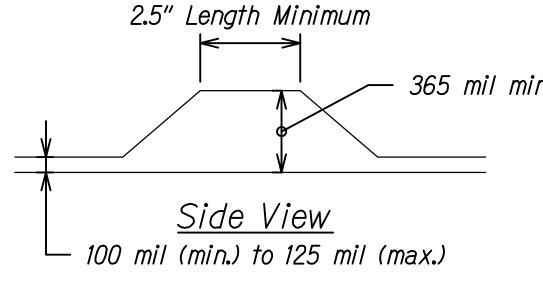
PAVEMENT MARKING NOTES:

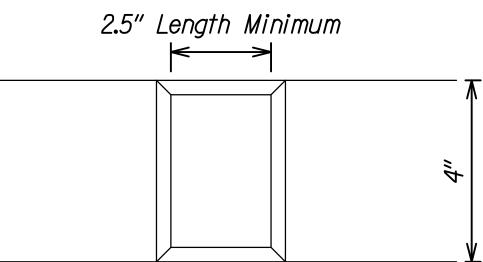
- schematically. For exact location of markers in relation to stripe, see Standard Plans T-7, T-8, T-9 \& T-10.
- 2. Removal of existing pavement markings shall be considered incidental to the various contract
- 3. Layout of pavement markings and striping shall be done by the Contractor and approved by the Engineer prior to any installation work.
- 4. Existing pavement markings not incorporated in the final traffic pattern shall be removed as directed by the Engineer. The costs shall be incidental to the various pavement marking
- 5. Raised pavement markers shall not be installed within crosswalks.
- legend or plans.
- . All preformed pavement marking tapes over existing pavement shall be applied with an approved primer as recommended by the tape's stage prior to tape application.
- 8. Contractor shall verify locations of fire hydrants prior to installation of Type F Raised Pavement' Markers.

<u>LEGEND</u>

8" Solid Yellow Stripe with Type H RPMs @ 40'-0" o.c. (Thermoplastic Extrusion)

4" White Profiled Thermoplastic Stripe, 10' long



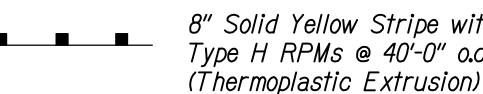


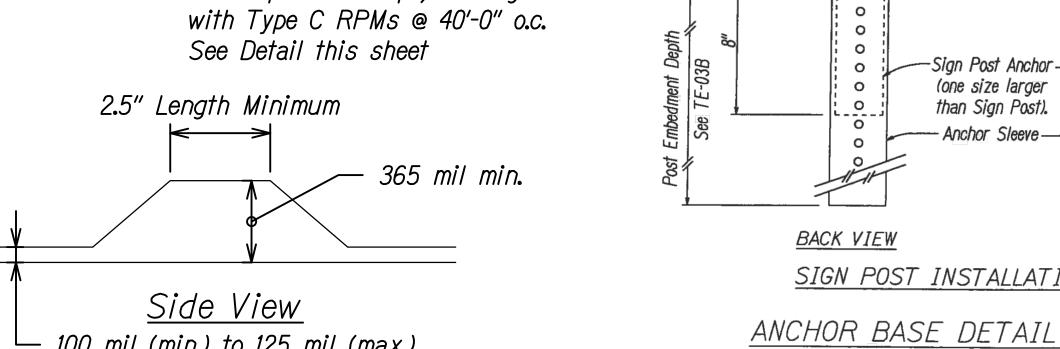
Top View

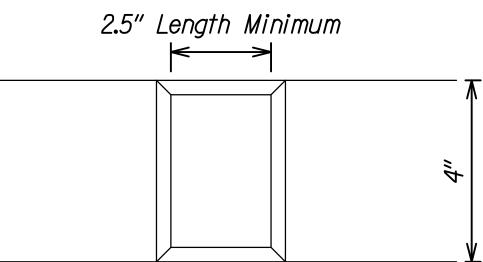
Not to Scale

1. Location of pavement markers is shown

- 6. All pavement striping shall be as noted on the
- manufacturer and as approved by the Engineer. The primer shall be allowed to dry to the tacky







GENERAL NOTES

1. Design Specifications:

(A) Design shall conform w/ the latest AASHTO Standard Specifications for the Structural Supports for Highway Signs, Luminaires & Traffic Signals and its interim supplements and modifications by the Highways Division, Department of Transportation State of Hawaii.

FISCAL YEAR

FEDERAL AID

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SHEET NO.

39

TOTAL SHEETS

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(B) Latest HDOT Memorandum with subject title "Design Criteria for Bridges and Structures."

FED. ROAD DIST. NO.

2. Loads:

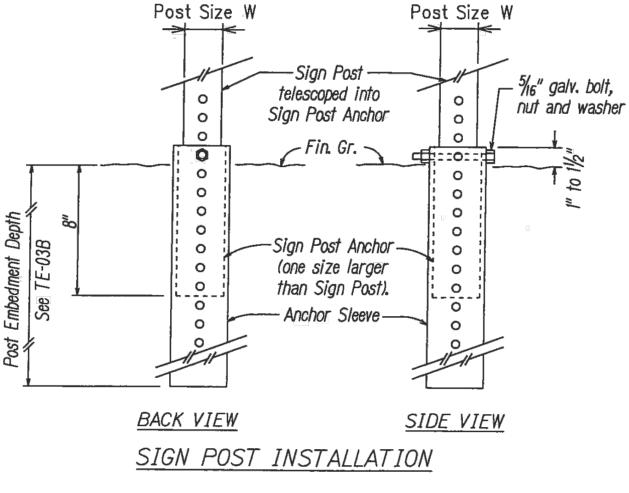
- (A) Basic Wind Speed: 105 mph.
- (B) Recurrence Interval of 10 years.

3. Materials:

- (A) Post shall conform to the Standard Specifications.
- (B) All connection bolts shall be AASHTO M164 bolts and anchor bolts shall be AASHTO M314-105 bolt.
- (C) Lap splice nuts and bolts shall be M180, with an ultimate tensile strength of 180 ksi, min.
- (D) Aluminum members and surfaces in contact with structural steel shall be isolated with neoprene material as approved by the Engineer.

4. General:

- (A) See General Notes on B-01, TE-01, and TE-03B for additional information.
- (B) All posts shall be 12 gage unless otherwise specified or shown on the plans.
- (C) Square tube posts shall be perforated with 1/16" be holes, 1" o.c., 4 sides, along entire length of post.
- (D) All accessories, fittings and stiffener details (as required) shall be submitted to the Engineer for approval 20 days prior to installation.
- (E) Alternate designs in accordance with the plans and specifications shall use the Service Load Design Method and shall be stamped
- by a registered structural engineer of the State of Hawaii
- and submitted to the Engineer for approval. (F) All sign support posts shall be outside of the clear zone or shielded
- by an appropriate traffic barrier system. The traffic barrier system shall be submitted to the Engineer for his approval.
- (G) The Contractor shall use templates while installing the anchor bolts. Anchor bolts shall be vertical.
- (H) Excavation and backfill shall be considered incidental to the cost of the sign foundation.



"A" or "A," less than 60"

required when D is

greater than 24"

See General Notes.

NOTE: Frame stiffeners are

Sign Post Anchor

"A" or "A," less than 36"

"A" or "A₁"

Greater than 36" and less than 48"

Greater than 48"

Less than 36"

"C" | "C,"

12" 24"

TYPICAL INSTALLATION

TOP VIEW

LICENSED **PROFESSIONAL ENGINEER** No. 10352-C THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

EXPIRATION DATE OF THE LICENSE

paul Klyl 04/30/24

MARKINGS NOTES ♦ LEGEND INTERSTATE ROUTE H-1 AND H-201 DESTINATION SIGN UPGRADE/REPLACEMENT, PHASE 3B

STATE OF HAWAII **DEPARTMENT OF TRANSPORTATION**

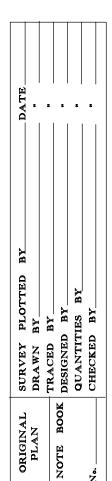
SIGNING AND PAVEMENT

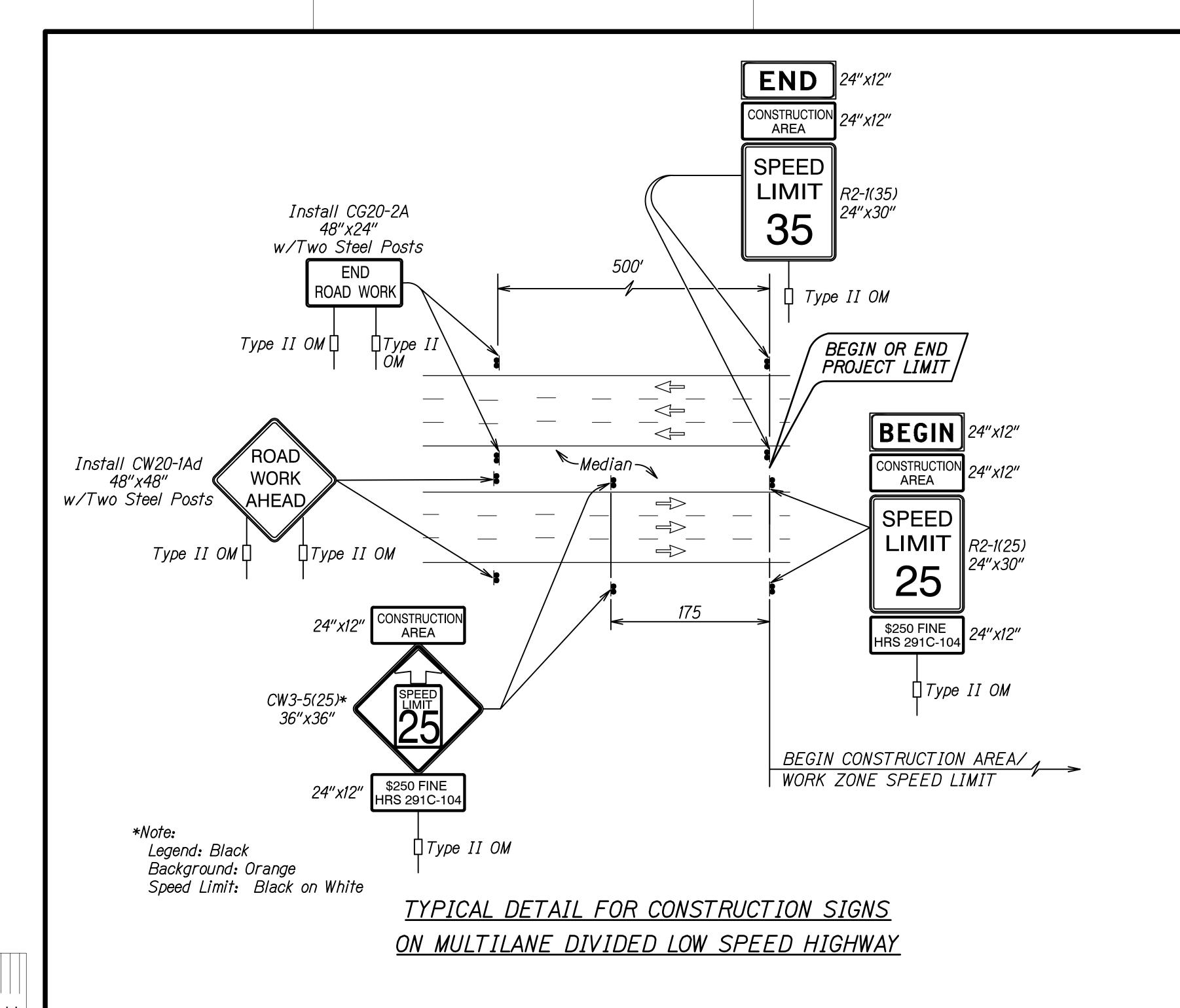
FAP NO. NH-0300(205) Scale: None

SHEET No. TC-3 OF 85 SHEETS

39

Date: Oct. 2023





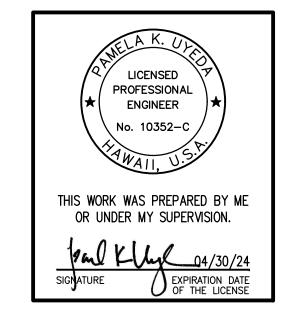
FED. ROAD DIST. NO. STATE FEDERAL AID PROJ. NO. FISCAL YEAR NO. SHEETS

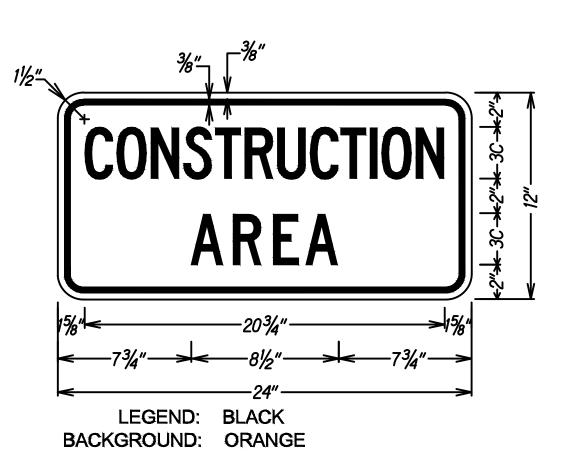
HAWAII HAW. NH-0300(205) 2024 40 197

Work Zone Notes:

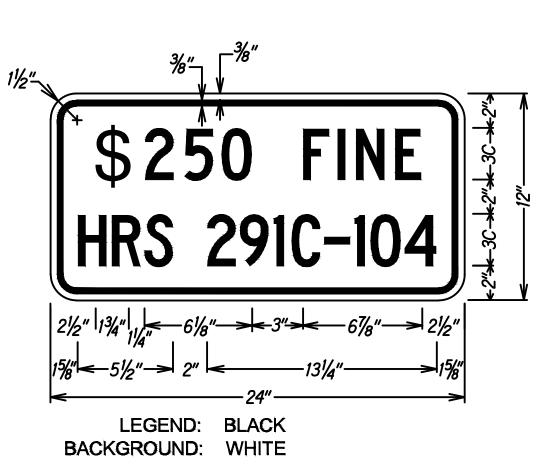
- 1. This Work Zone Sign Plan is intended for use on long-term stationary work zones/construction phases (3 days or more). All work zones or construction phases less than 3 days duration will use Traffic Control Plans shown in Section 645 of the Special Provisions.
- 2. All existing regulatory speed 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 included in the various traffic control pay 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 included in the various traffic control pay items. Sign covers shall be commercially manufactured and HDOT approved. Sign covers shall not allow any portion of the sign being covered to be visible. If the sign has more than one side, cover shall completely cover each side. "Homemade" or "field made" covers shall not be used or accepted.
- 8. All signs and markers shown shall be paid under the various traffic control pay items.

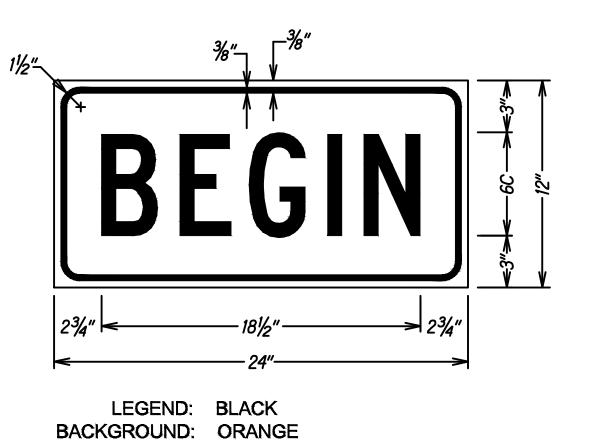
| | TABLE I GUIDELINE FOR ADVANCE PLACEMENT OF SPEED REDUCTION SIGN CW3-5(XX), CONSTRUCTION AREA SPEED LIMIT | | | | | |
|-----------------------------------|--|---|--|--|--|--|
| EXISTING POSTED SPEED LIMIT (MPH) | XX-NEW CONSTRUCTION AREA SPEED LIMIT (MPH) | D-REDUCED SPEED LIMIT SIGN SPACING TO FIRST CONSTRUCTION AREA SPEED LIMIT SIGN (FEET) | | | | |
| ≤25 | EXIST. SPEED LIMIT TO REMAIN | | | | | |
| 30 | 25 | 100 | | | | |
| 35 | 25 | 175 | | | | |
| 40 | 30 | 175 | | | | |

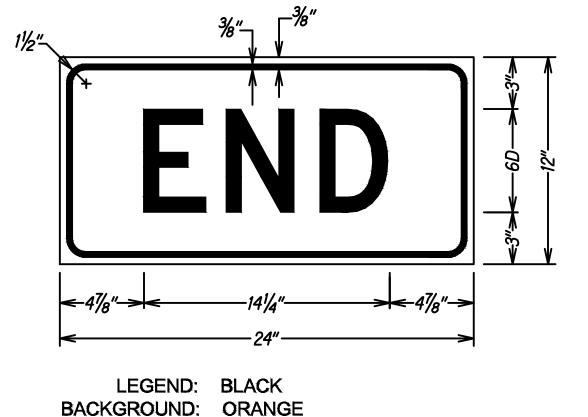




SURVEY PLOT
DRAWN BY____
TRACED BY___
DESIGNED BY__
QUANTITIES
CHECKED BY_





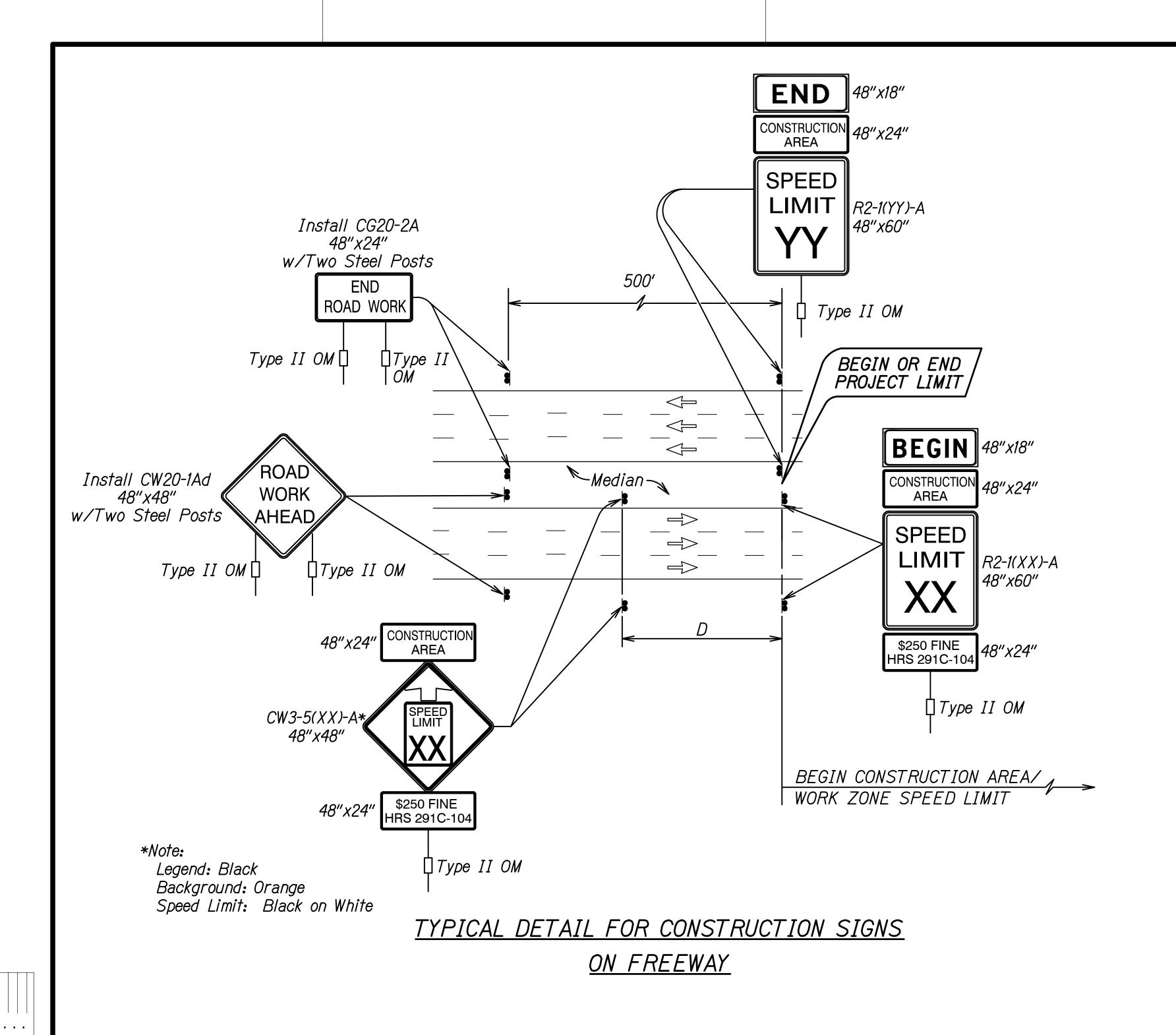


DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

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

INTERSTATE ROUTE H-1 AND H-201
DESTINATION SIGN UPGRADE/REPLACEMENT, PHASE 3B
FAP NO. NH-0300(205)
Scale: None Date: Oct. 2023

SHEET No. TC-4 OF 85 SHEETS

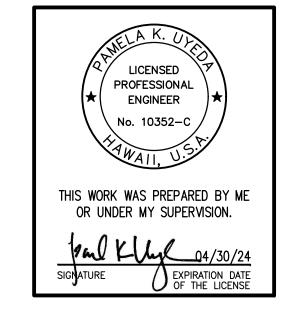


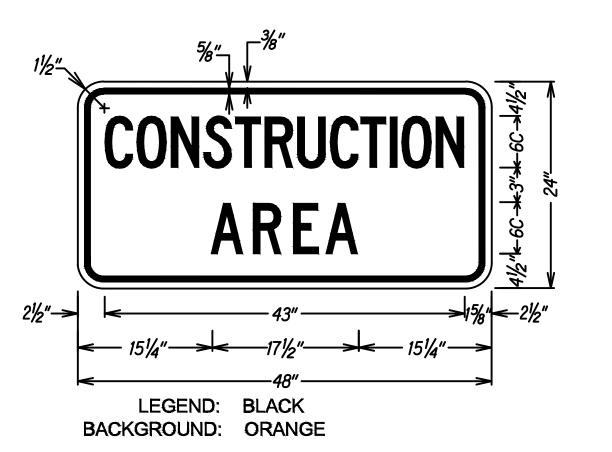
FED. ROAD
DIST. NO.STATEFEDERAL AID
PROJ. NO.FISCAL
YEARSHEET
NO.TOTAL
SHEETSHAWAIIHAW.NH-0300(205)202441197

Work Zone Notes:

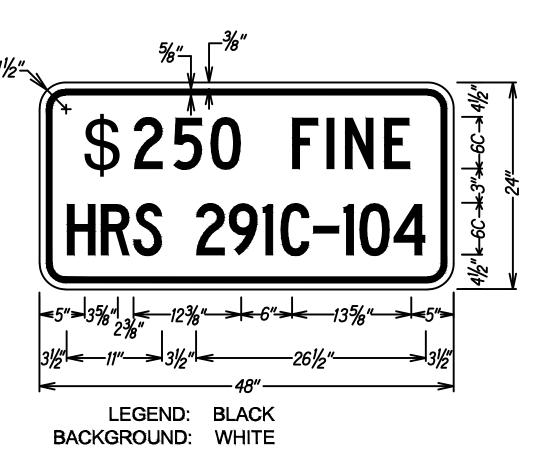
- 1. This Work Zone Sign Plan is intended for use on long-term stationary work zones/construction phases (3 Days or more). All work zones or construction phases less than 3 days duration will use Traffic Control Plans shown in Section 645 of the Special Provisions.
- 2. All existing regulatory speed limit signs within the work zone/project limits shall be covered and work zone speed limit sign assemblies (R2-1(XX)-A and CW3-5(XX)-A with "CONSTRUCTION AREA" and "\$250 FINE HRS 291C-104" Supplemental Signs) shall be displayed during lane closure hours.
- 3. Upon the 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.
- 4. Construction signs shall be installed on both the approaching and trailing ends of each work zone.
- 5. Each construction sign shall have a minimum of two (2) Type II OM. Installation of each Type II OM shall be considered incidental to the various traffic control pay items.
- 6. 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.
- 7. 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 the various traffic control pay items.

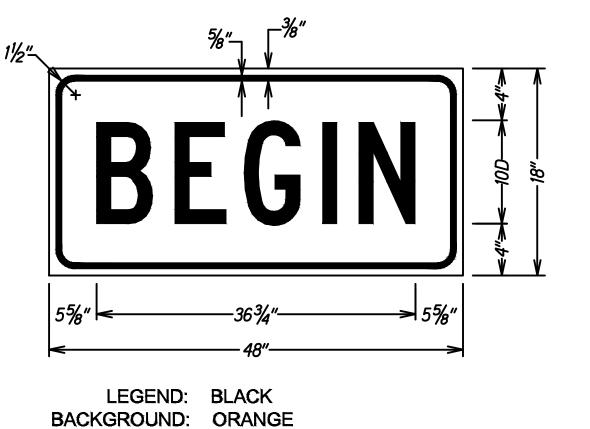
TABLE I GUIDELINE FOR ADVANCE PLACEMENT OF SPEED REDUCTION SIGN CW3-5(XX)-A, CONSTRUCTION AREA SPEED LIMIT XX-NEW D-REDUCED SPEED LIMIT **EXISTING POSTED CONSTRUCTION** SIGN SPACING TO FIRST CONSTRUCTION AREA SPEED LIMIT **AREA** SPEED LIMIT SIGN (MPH) SPEED LIMIT (FEET) (MPH) 175 30 225 45 35 225 50 40 300 **55** 45 **50** 300 **60**

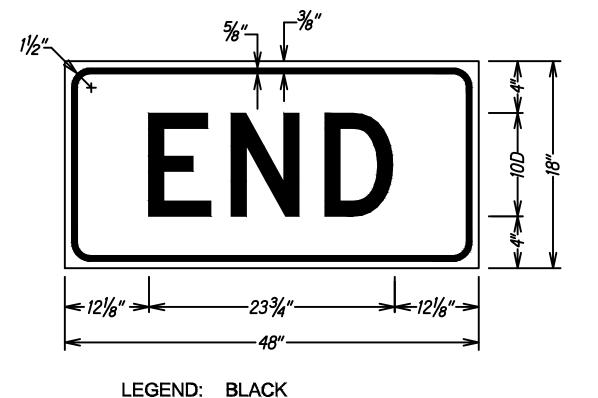




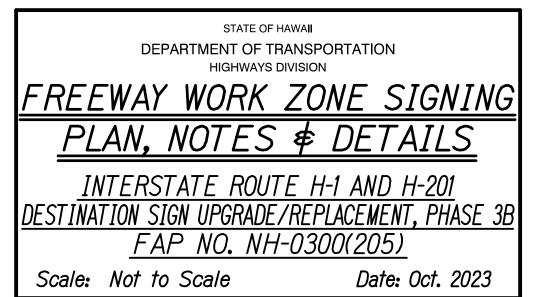
SURVEY PLOT
DRAWN BY
TRACED BY
DESIGNED BY
QUANTITIES 1
CHECKED BY



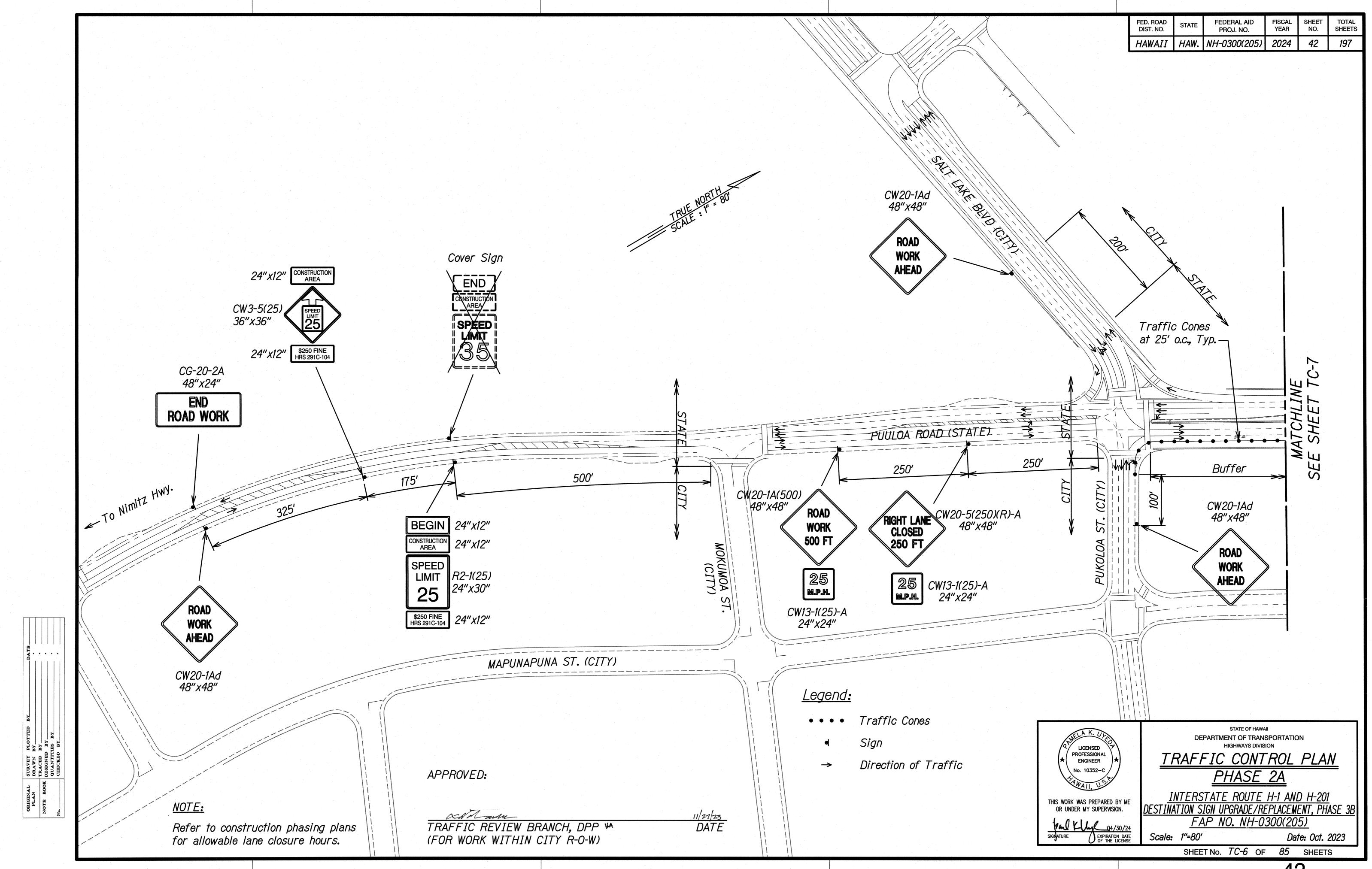


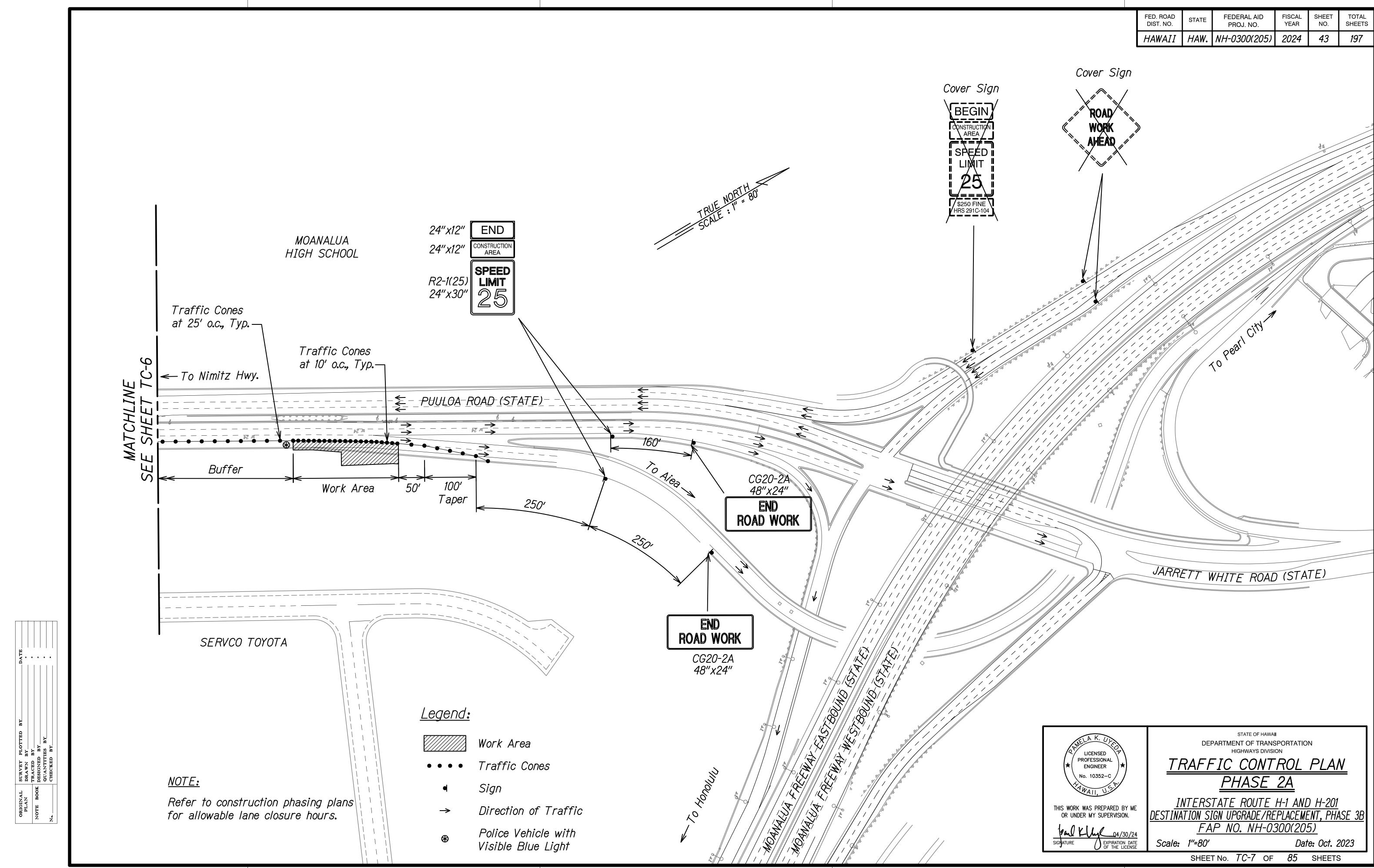


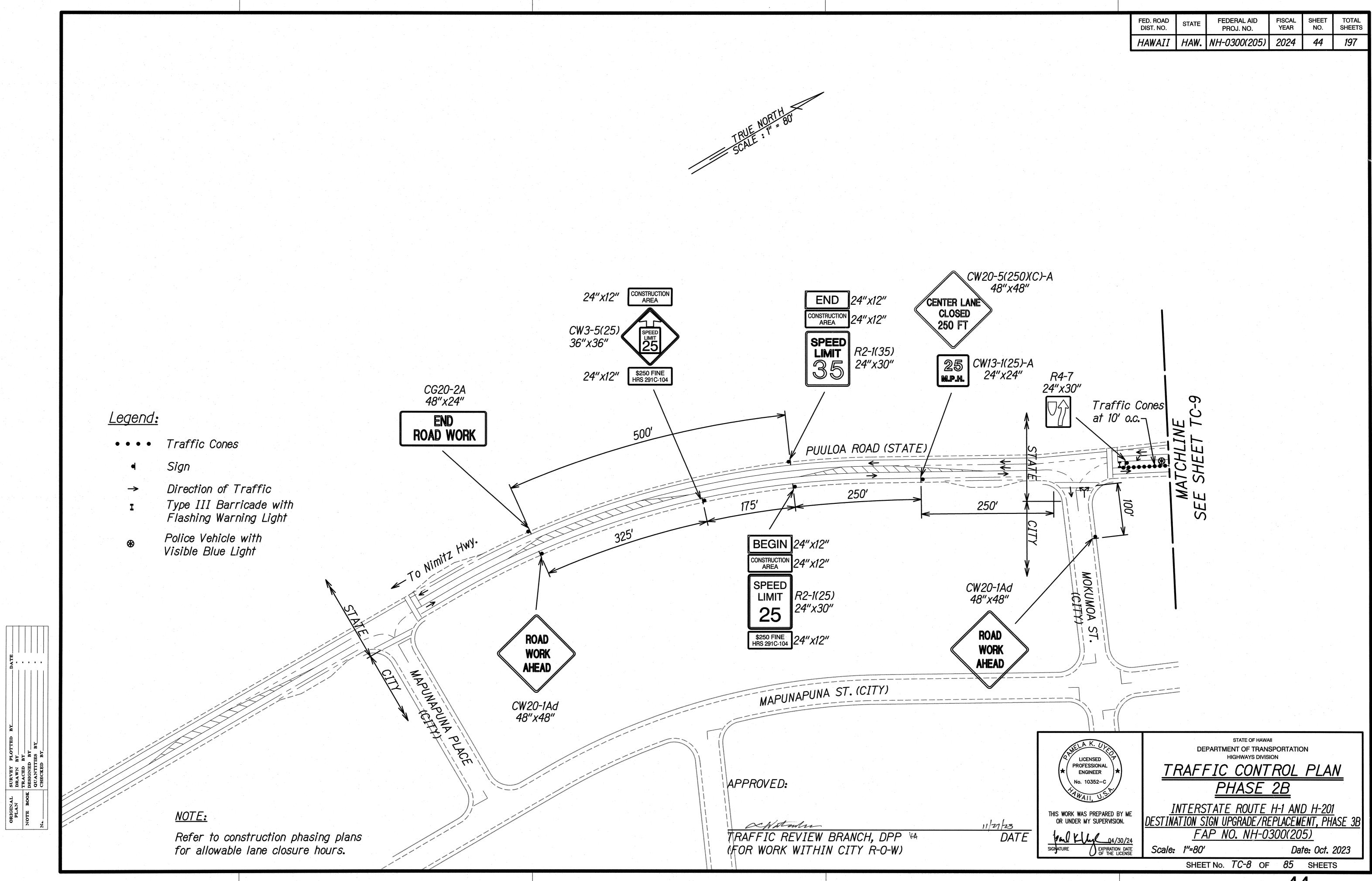
BACKGROUND: ORANGE

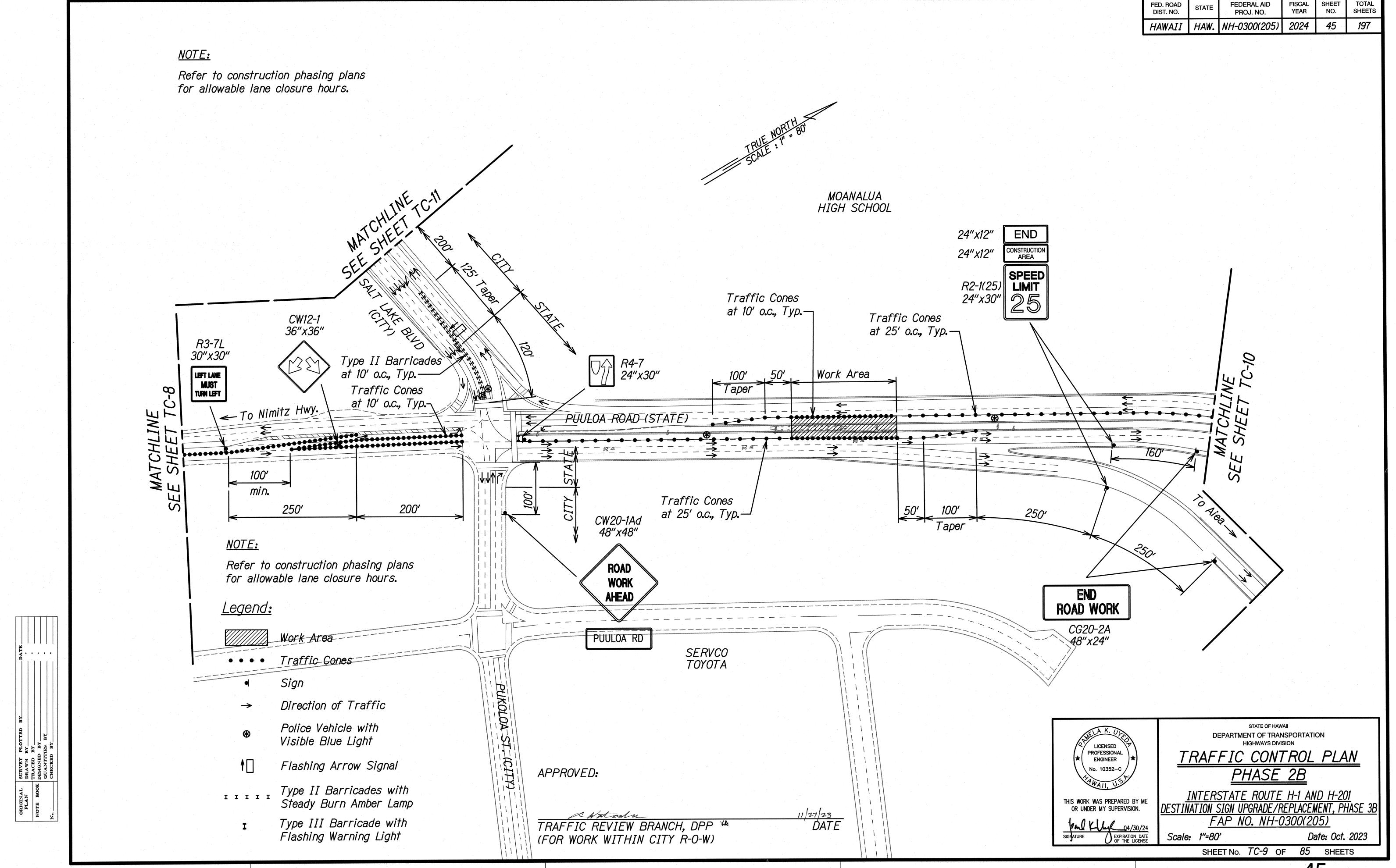


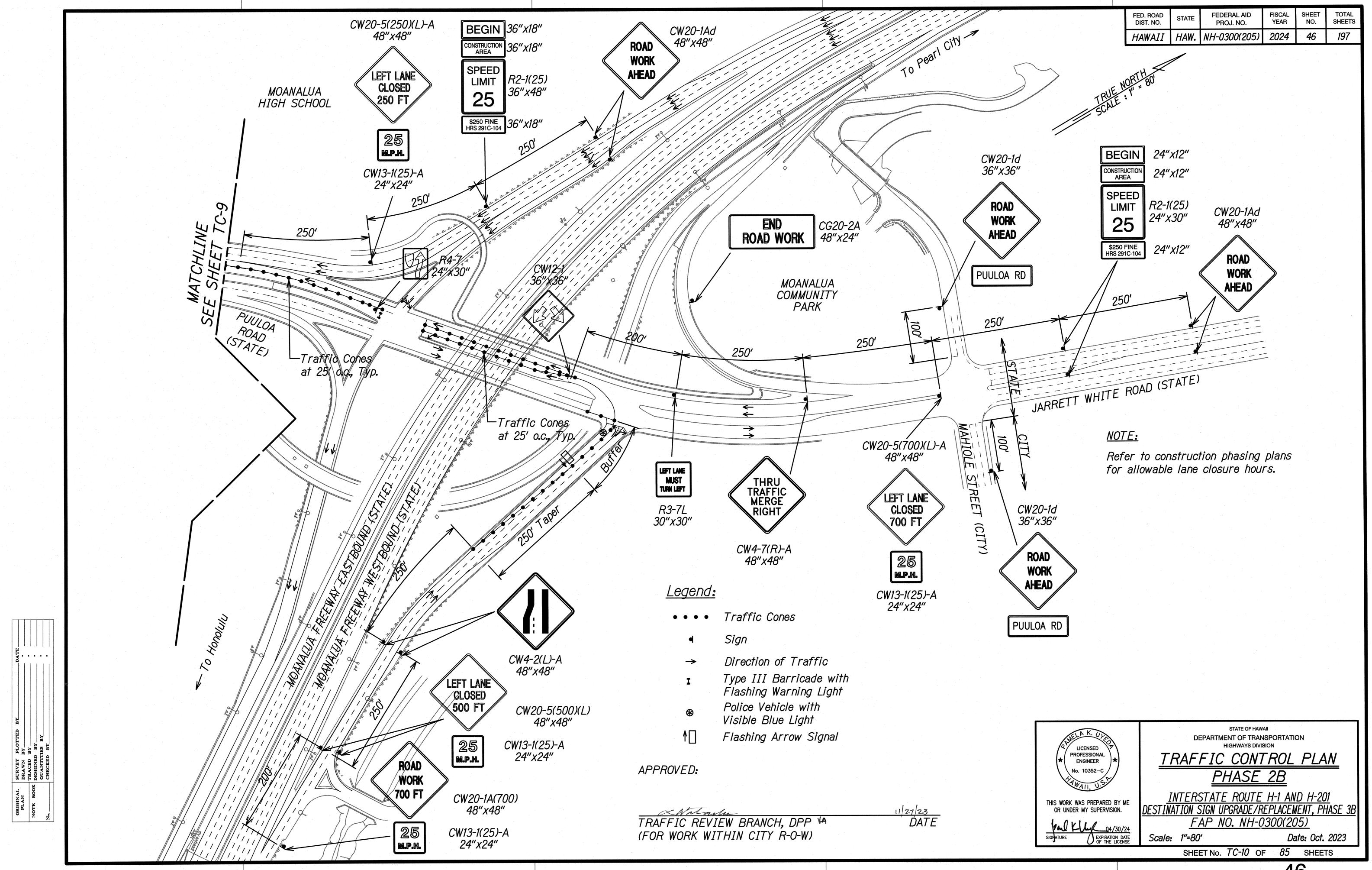
SHEET No. TC-5 OF 85 SHEETS

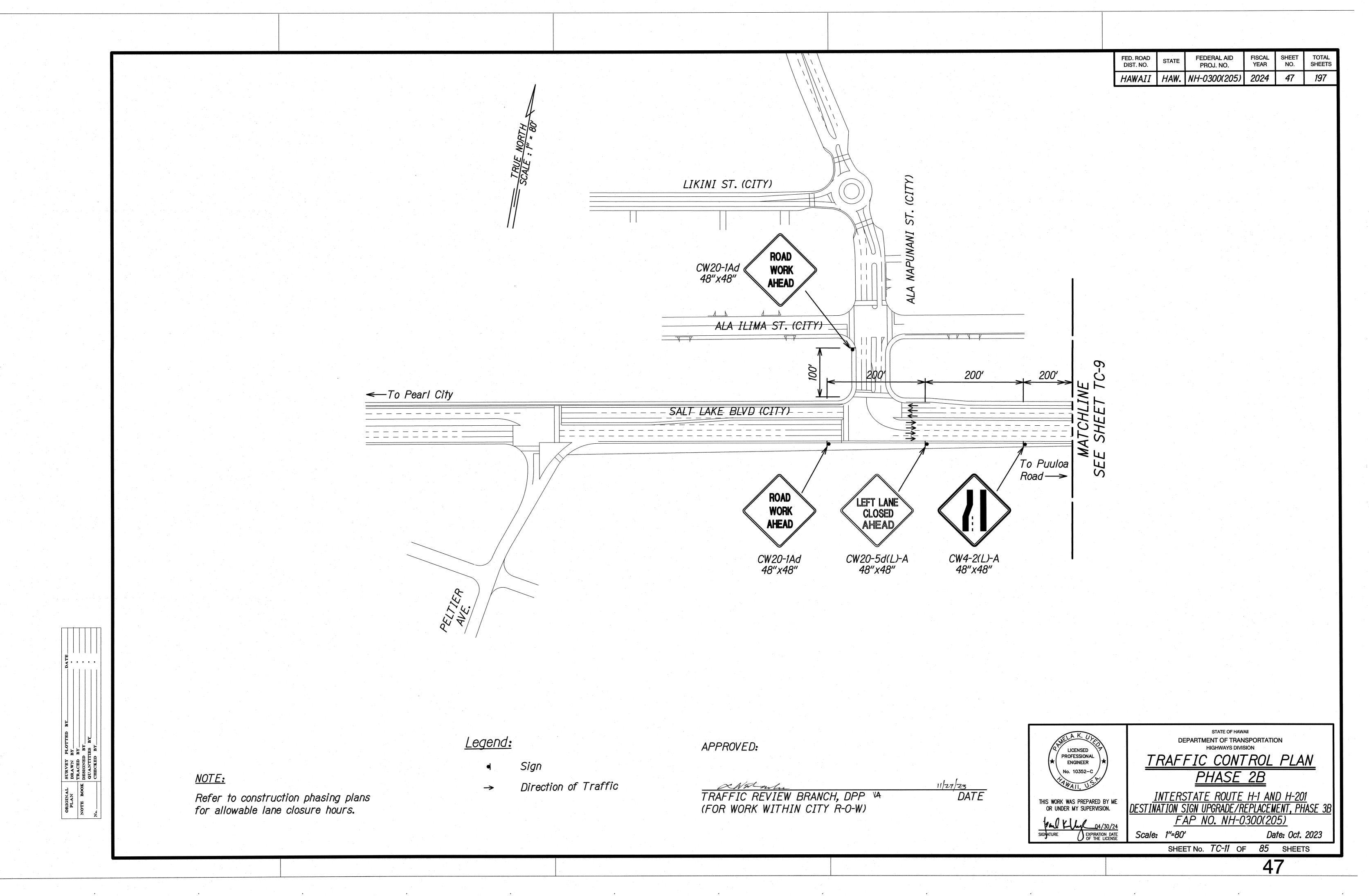


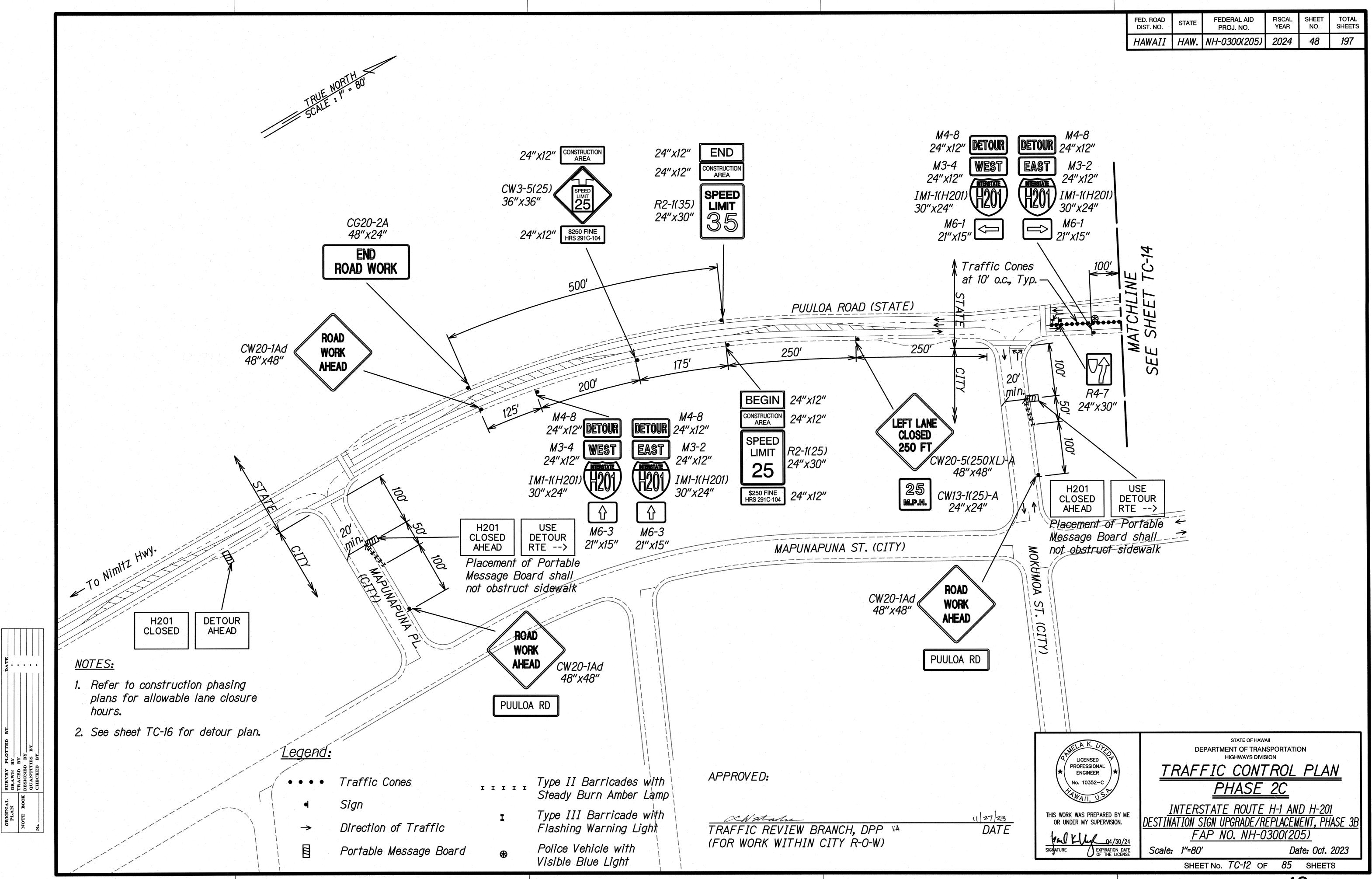


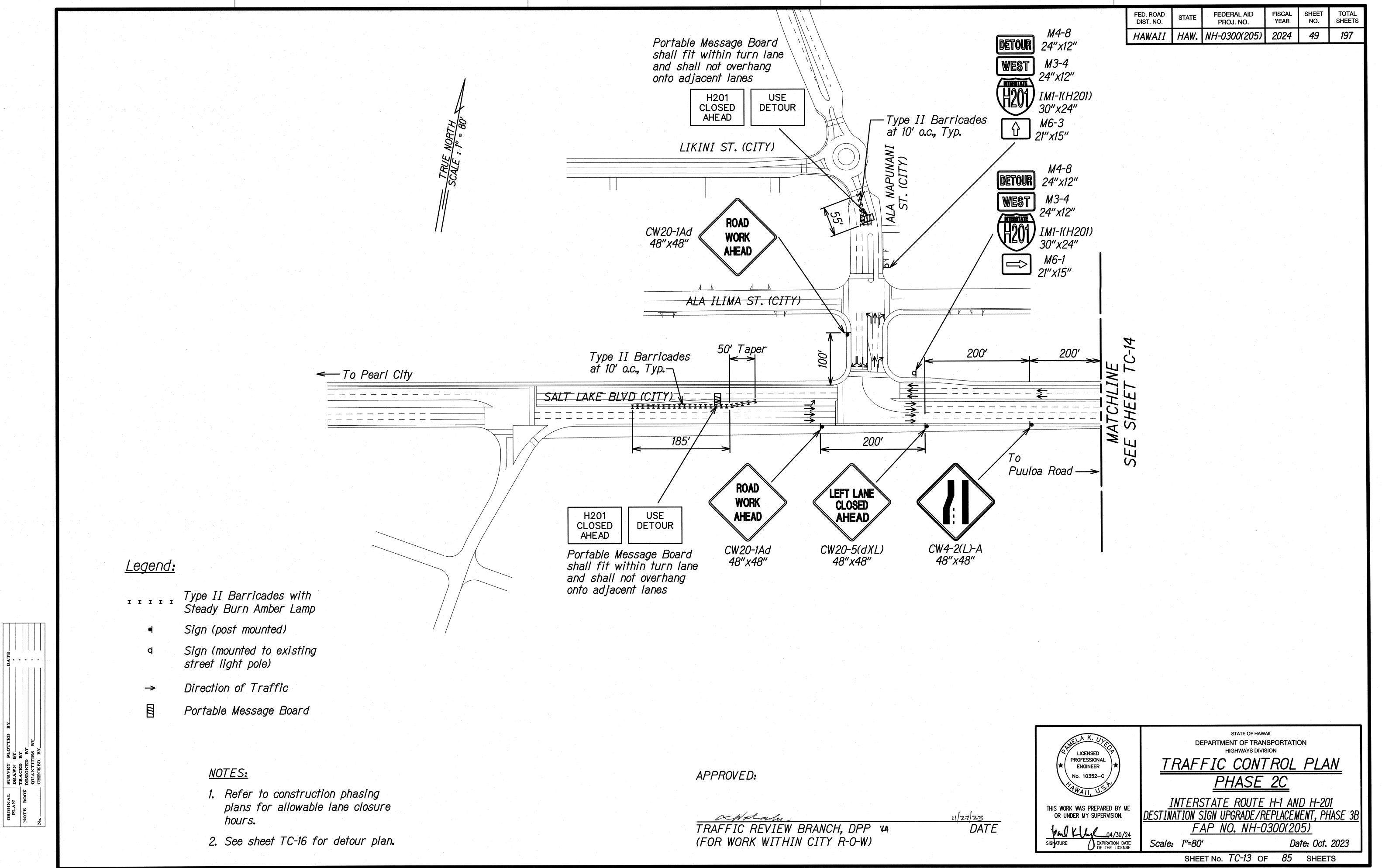


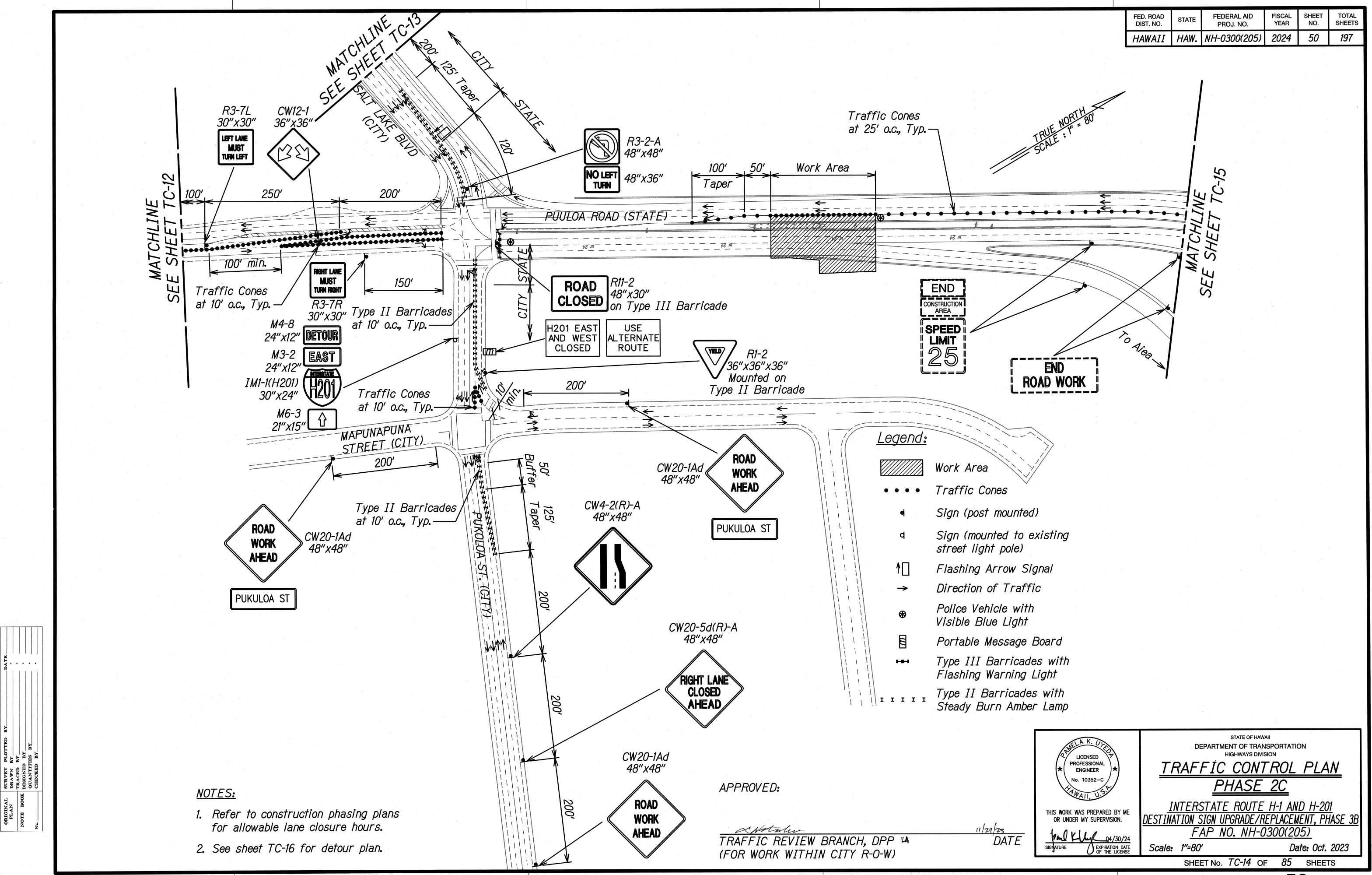


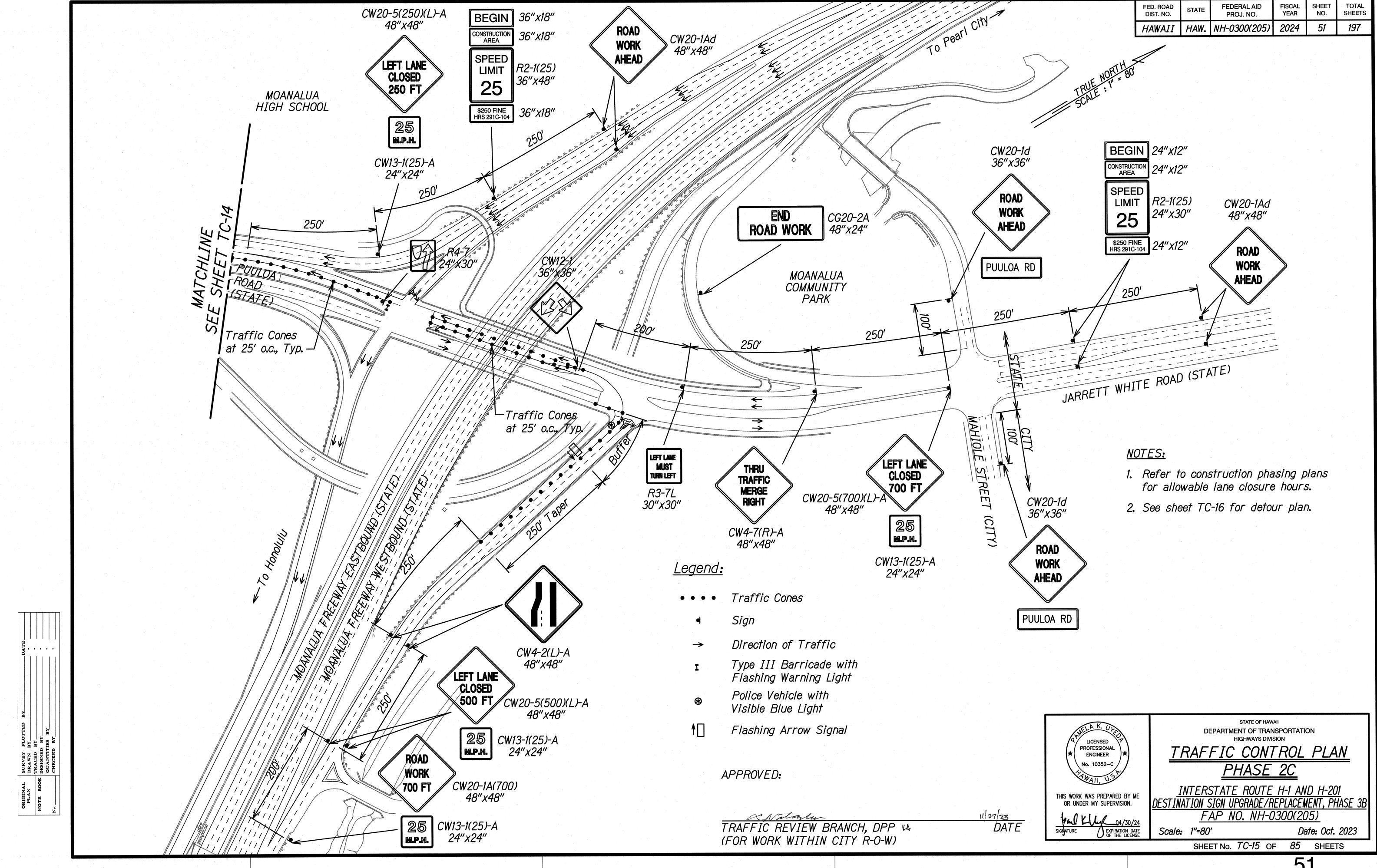


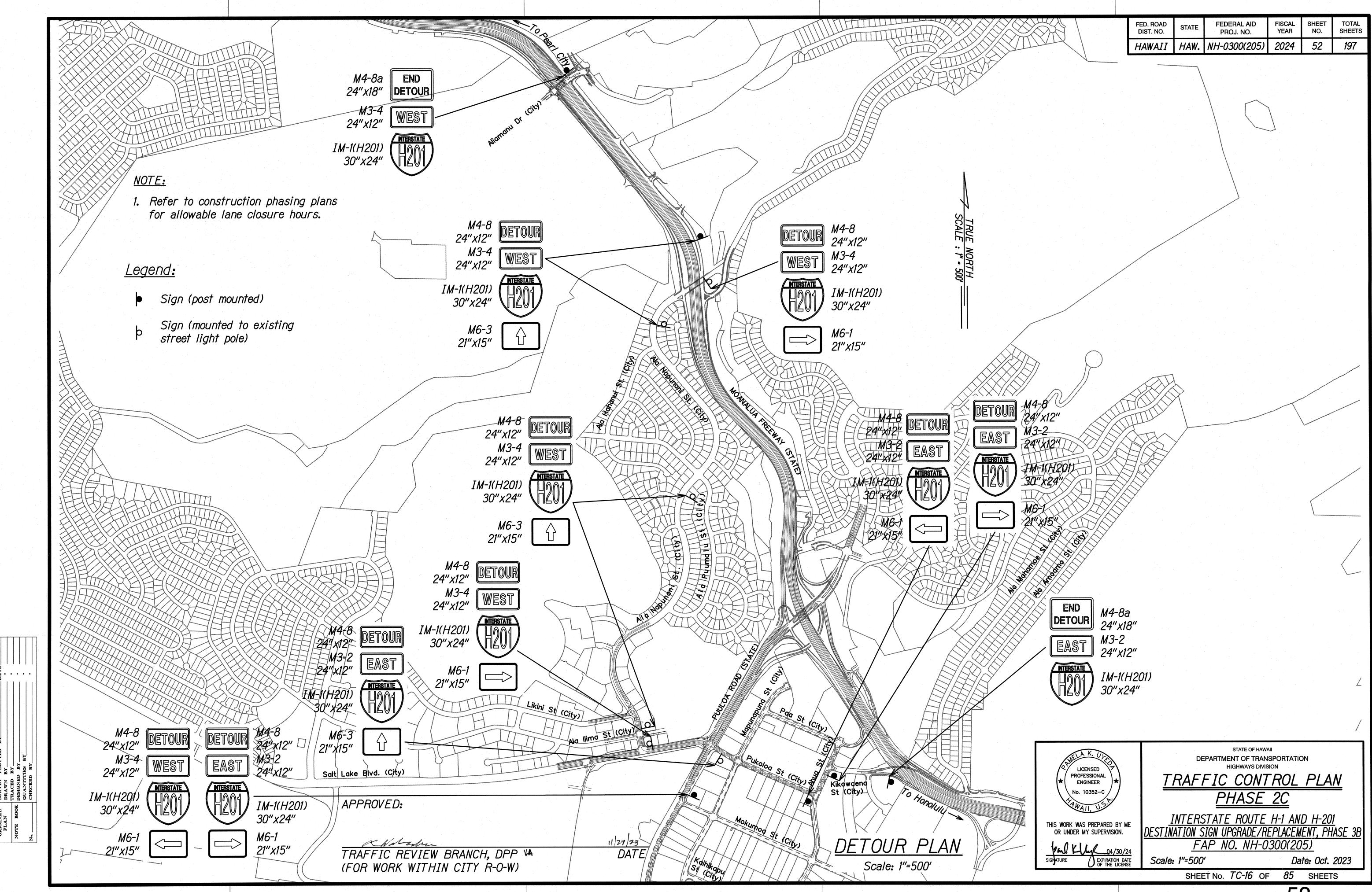


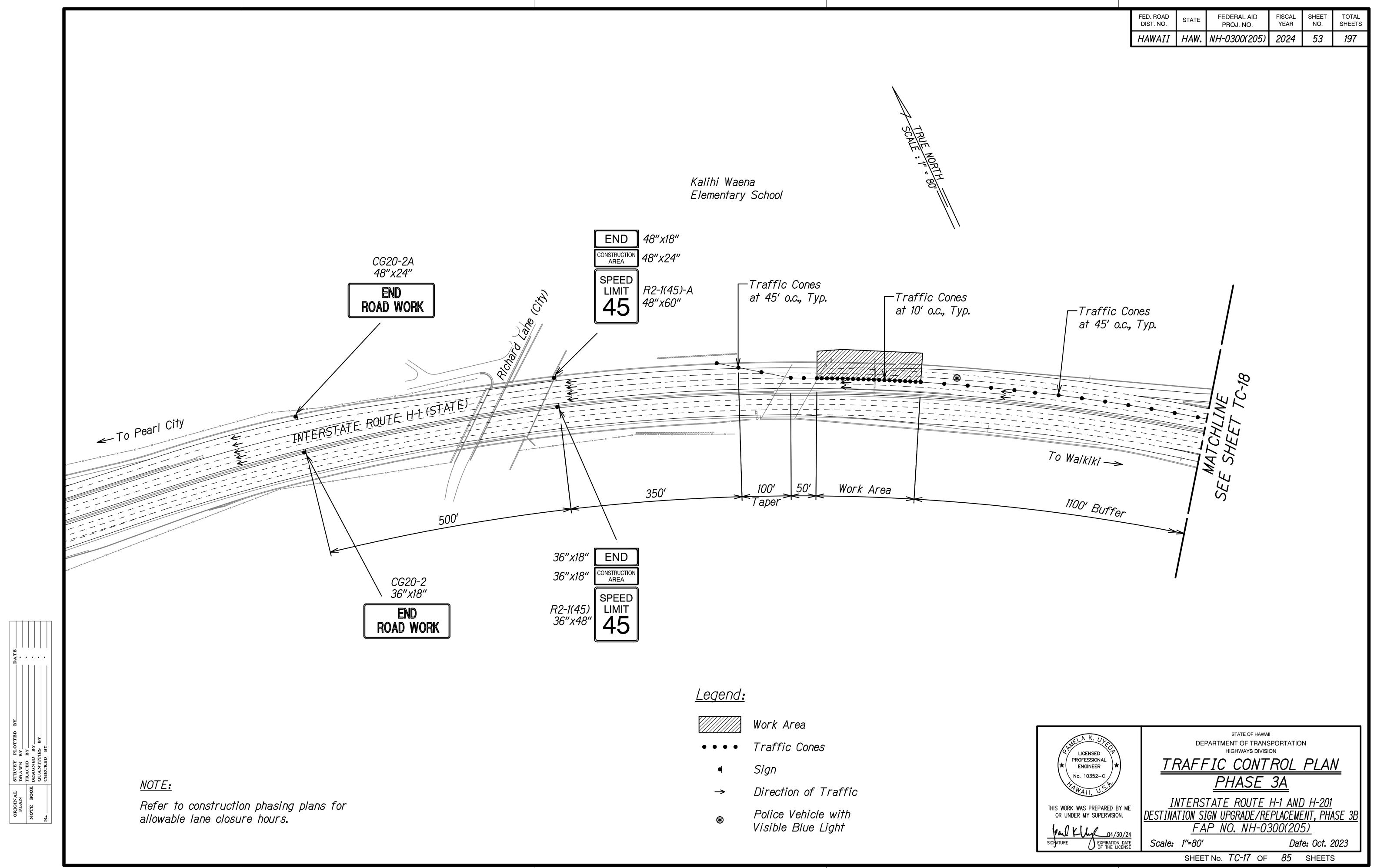


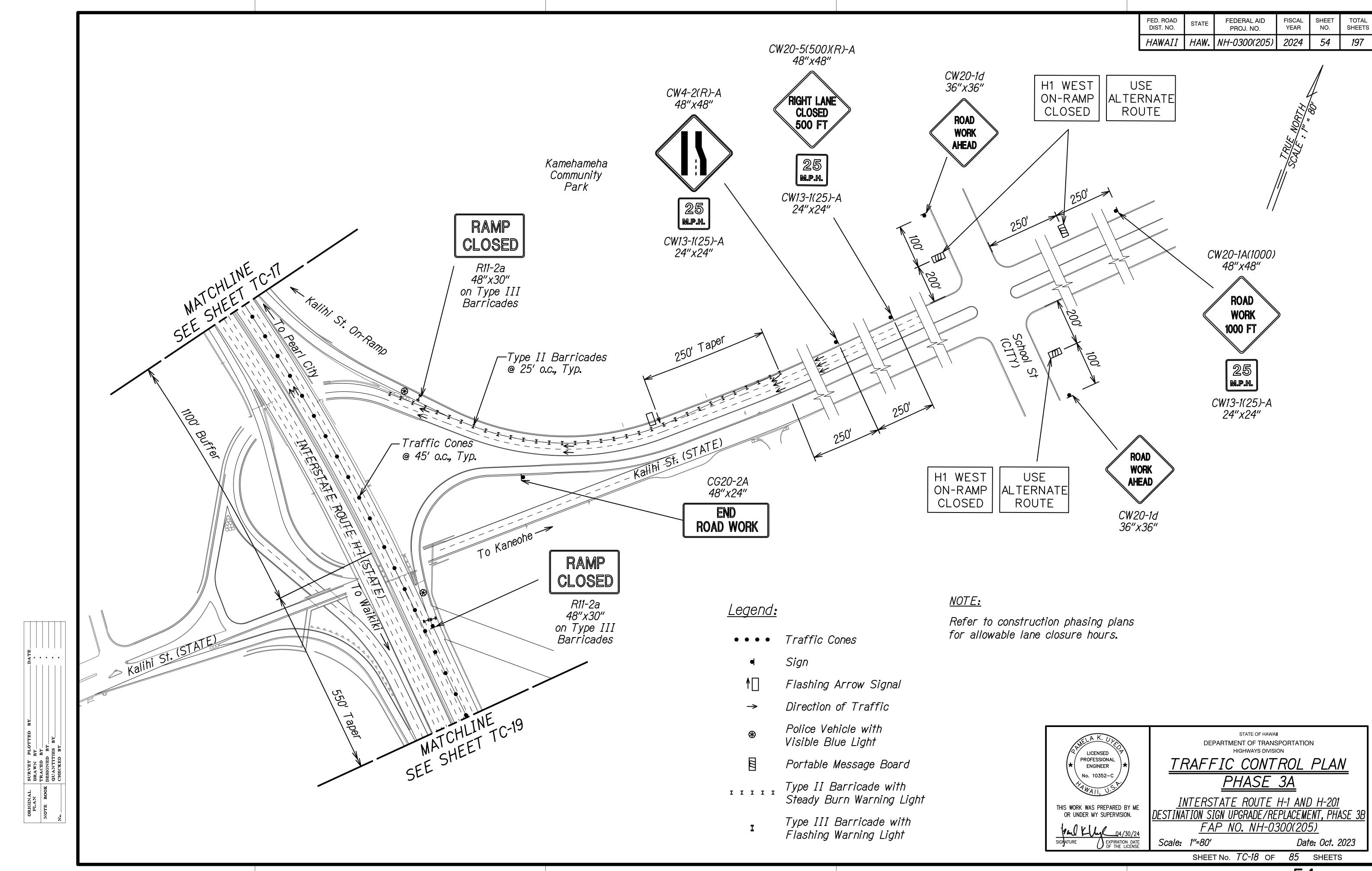


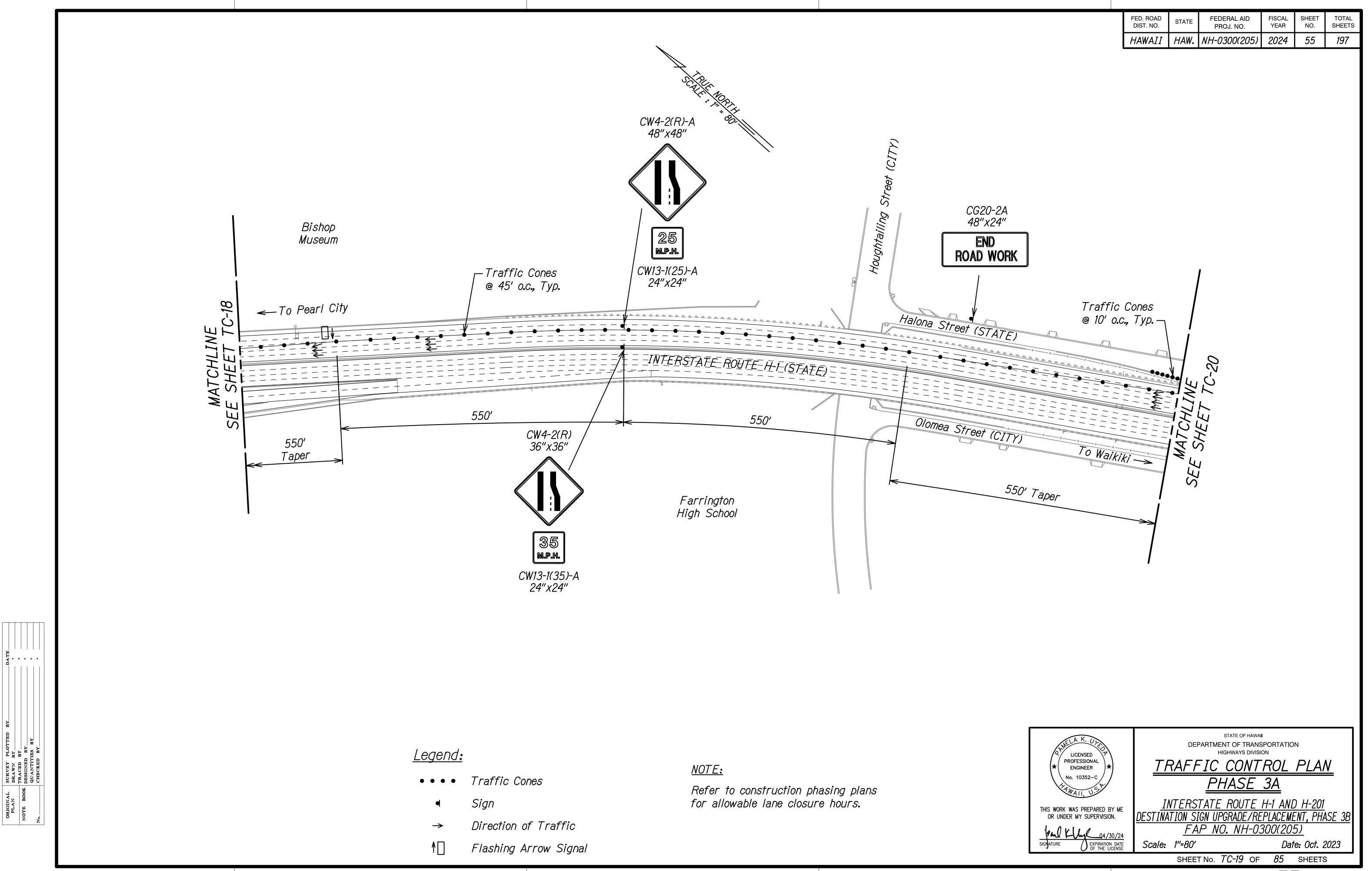


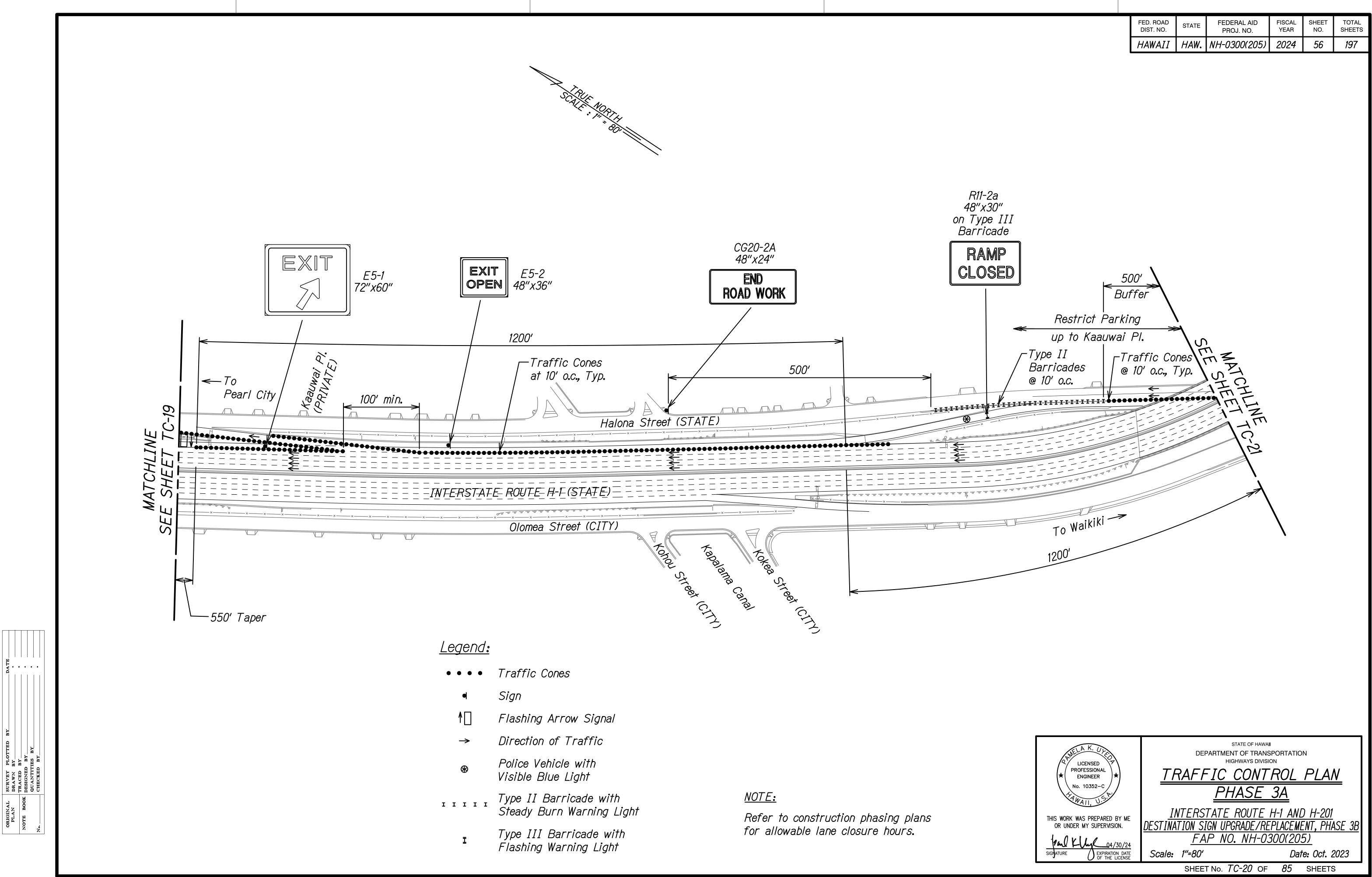


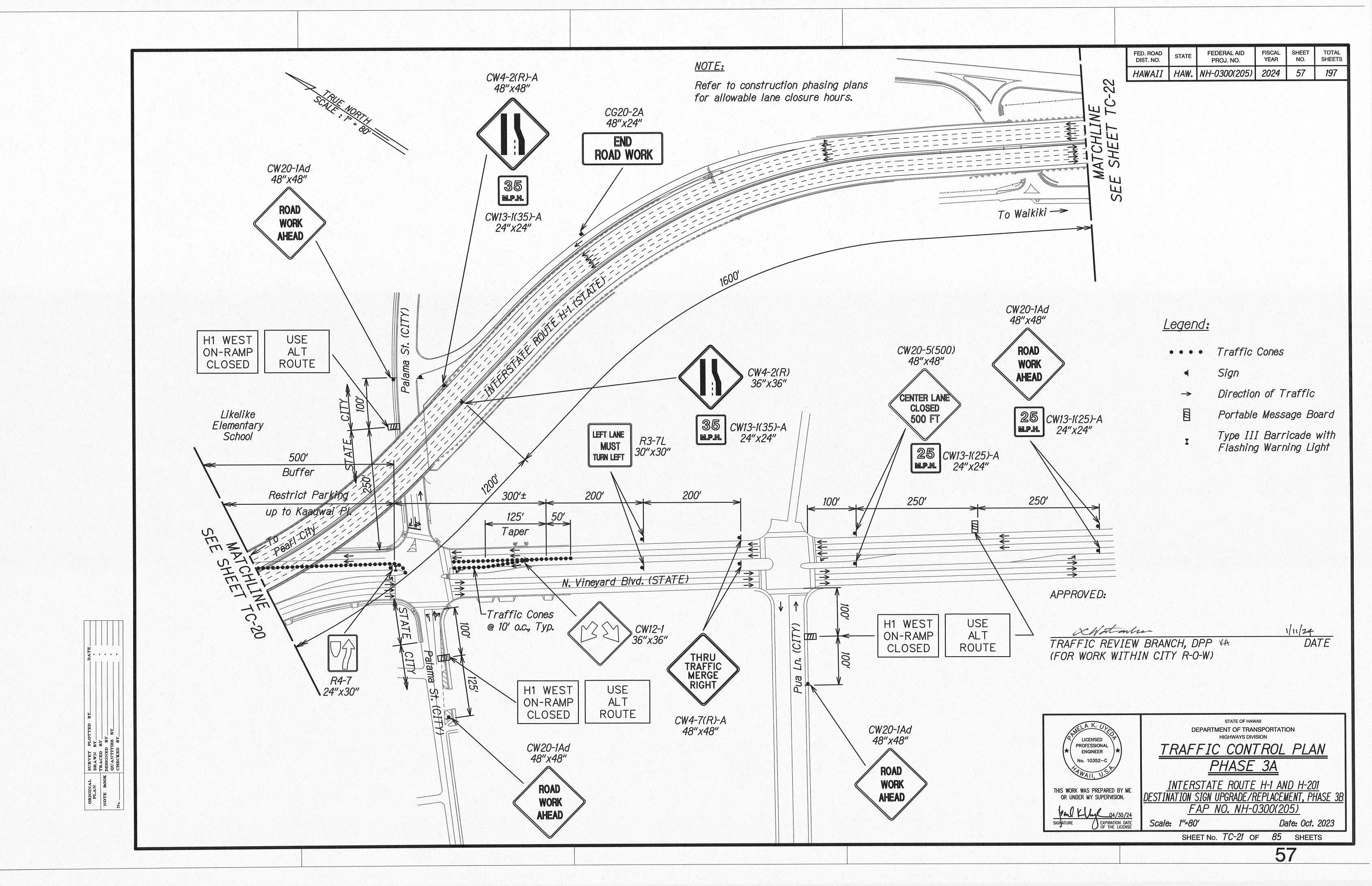


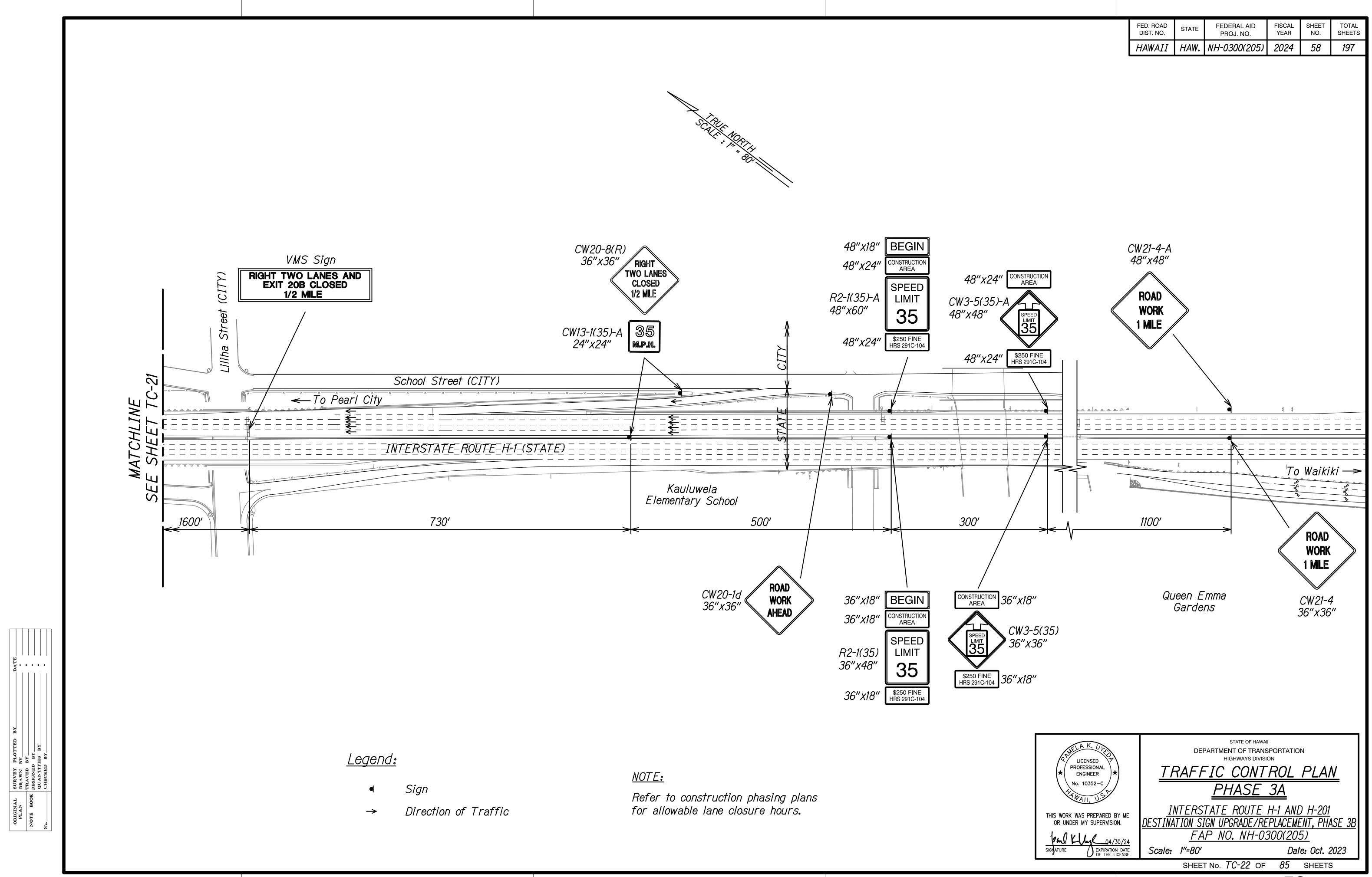


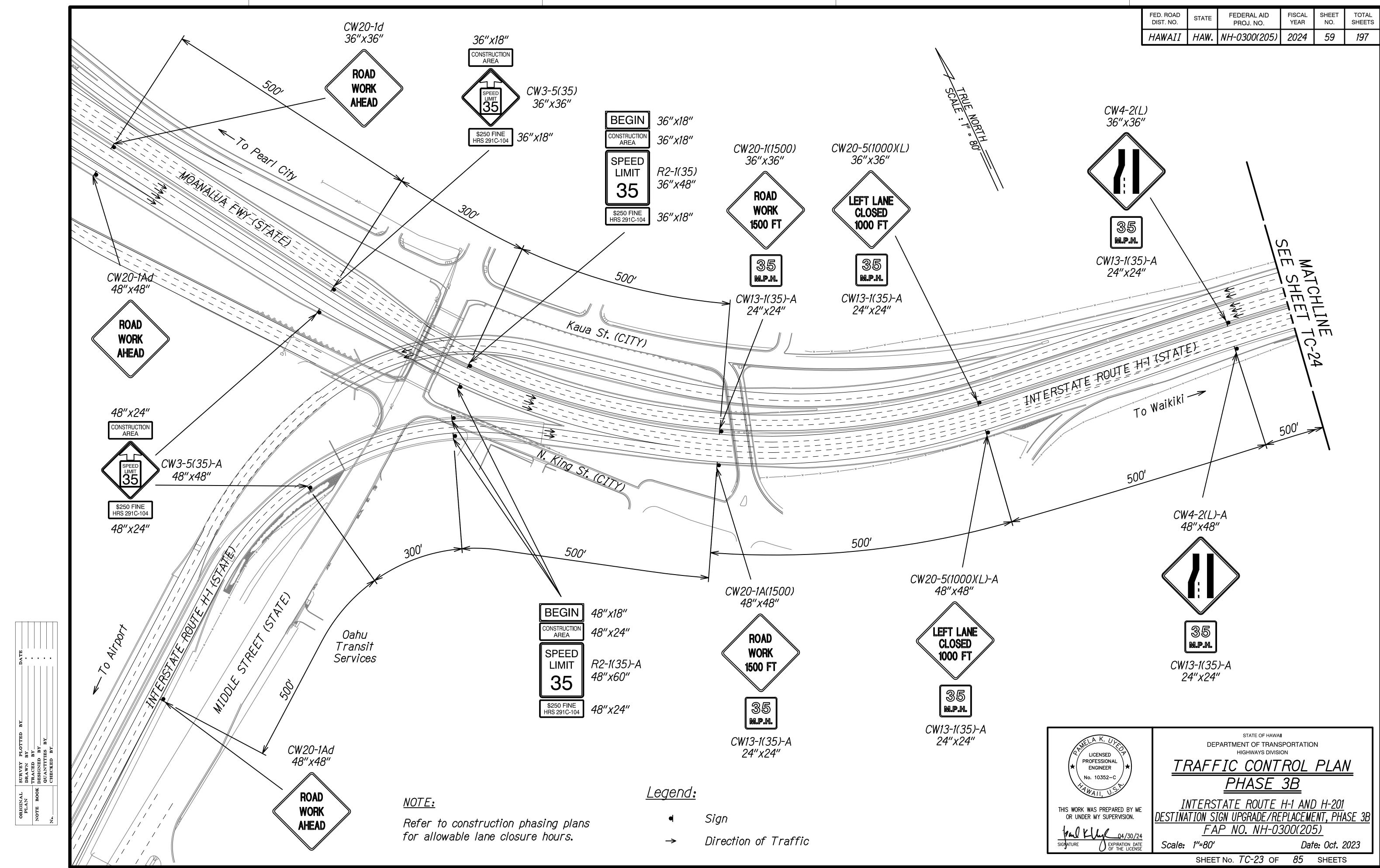


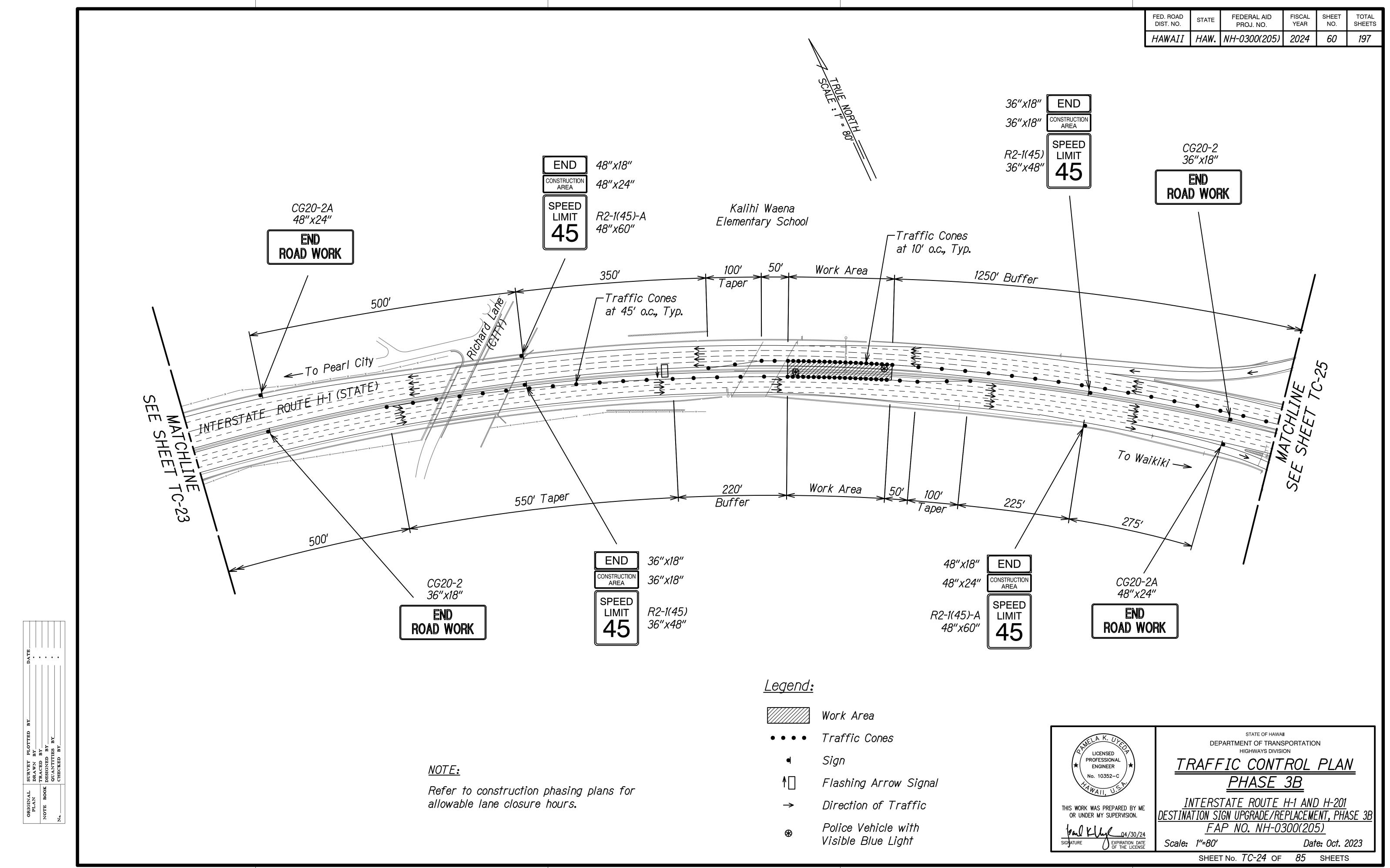


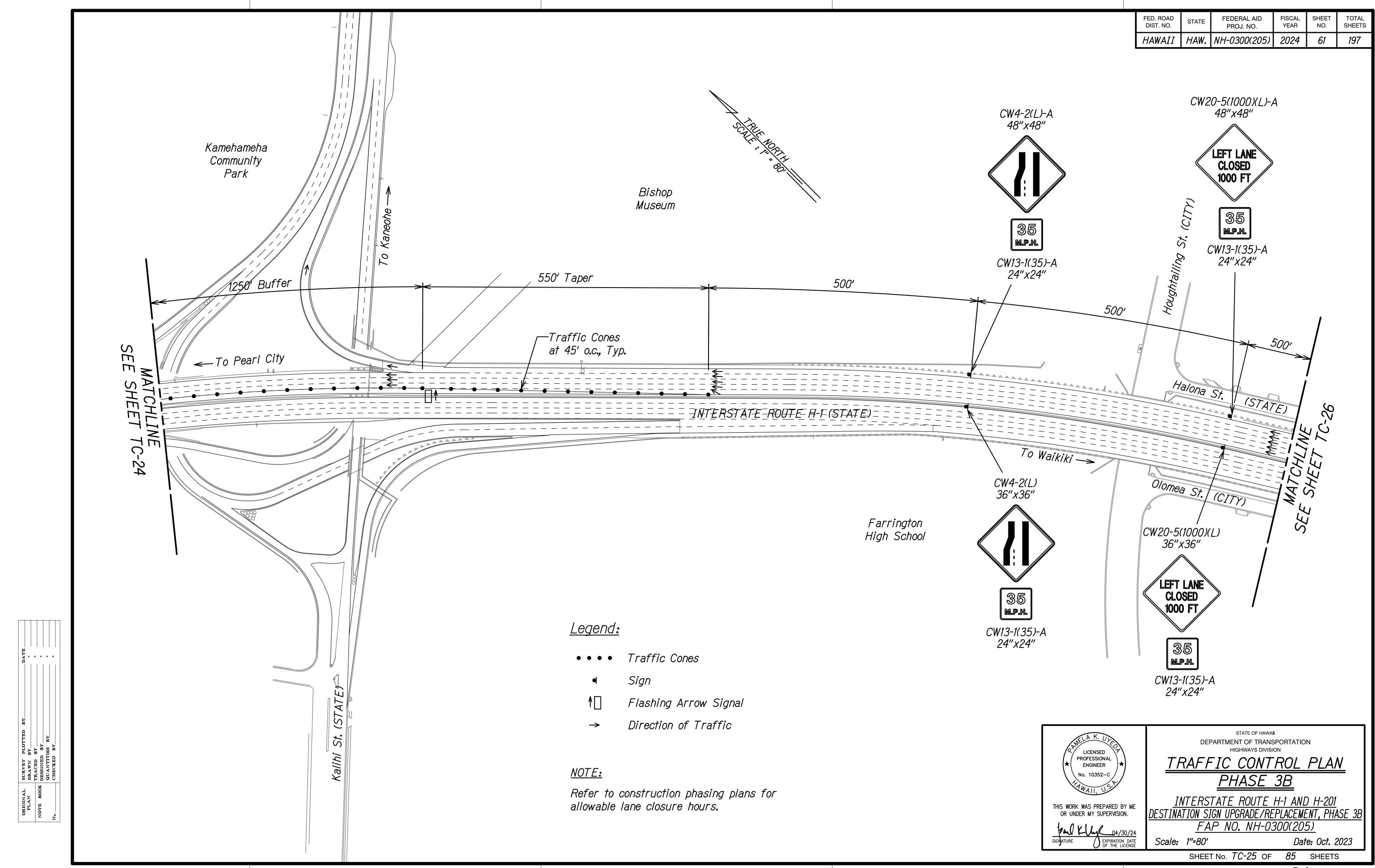


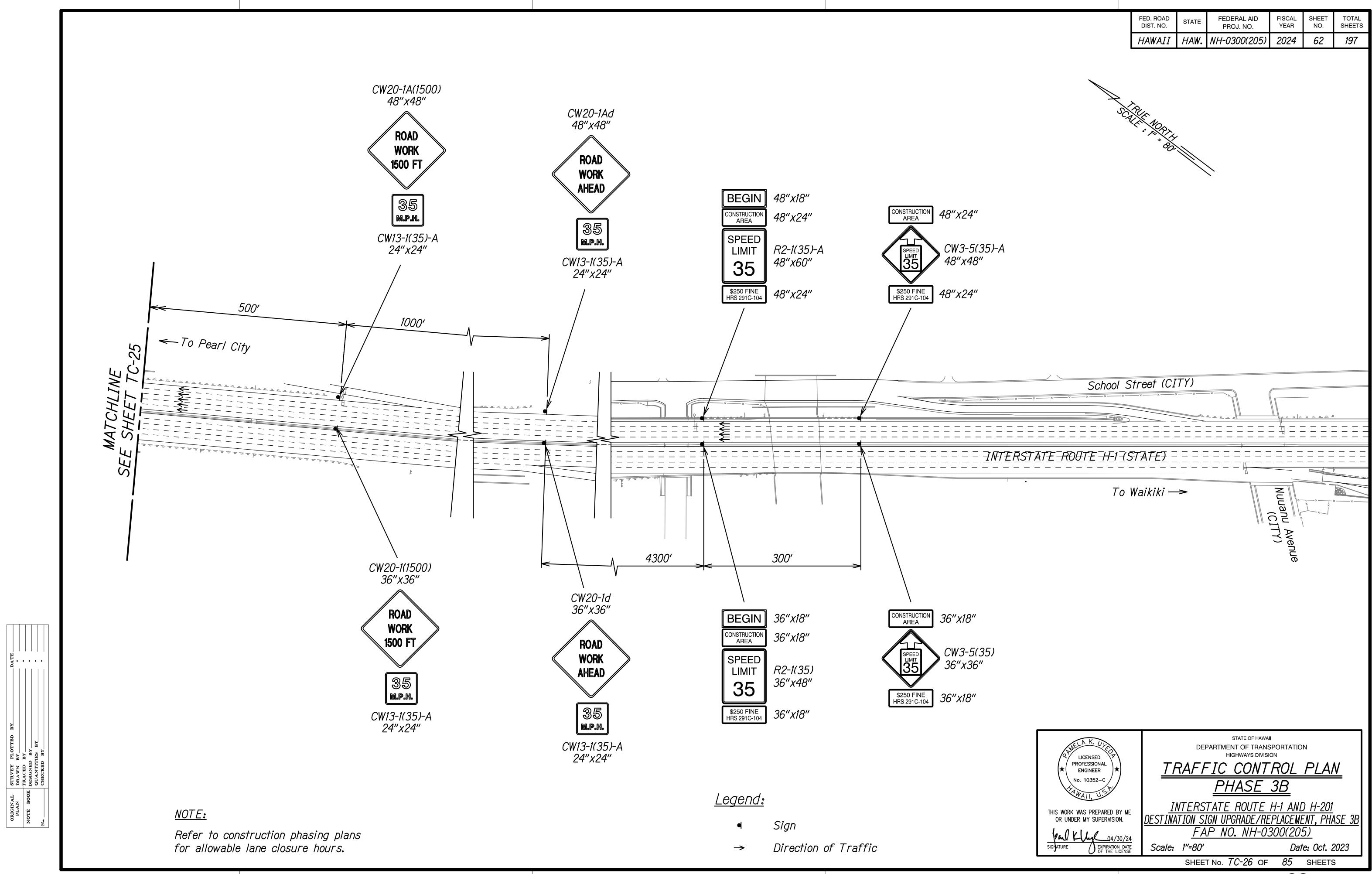


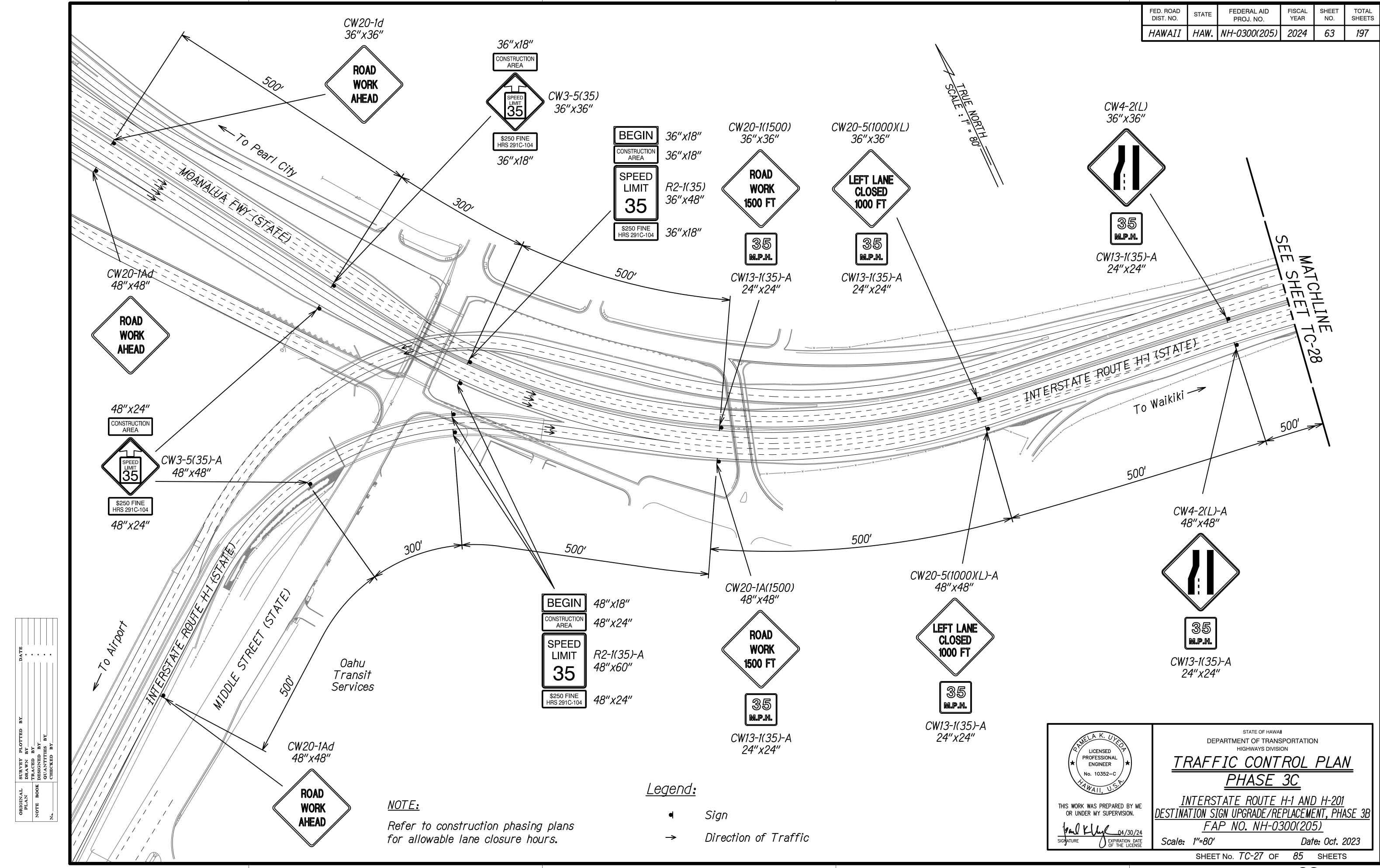


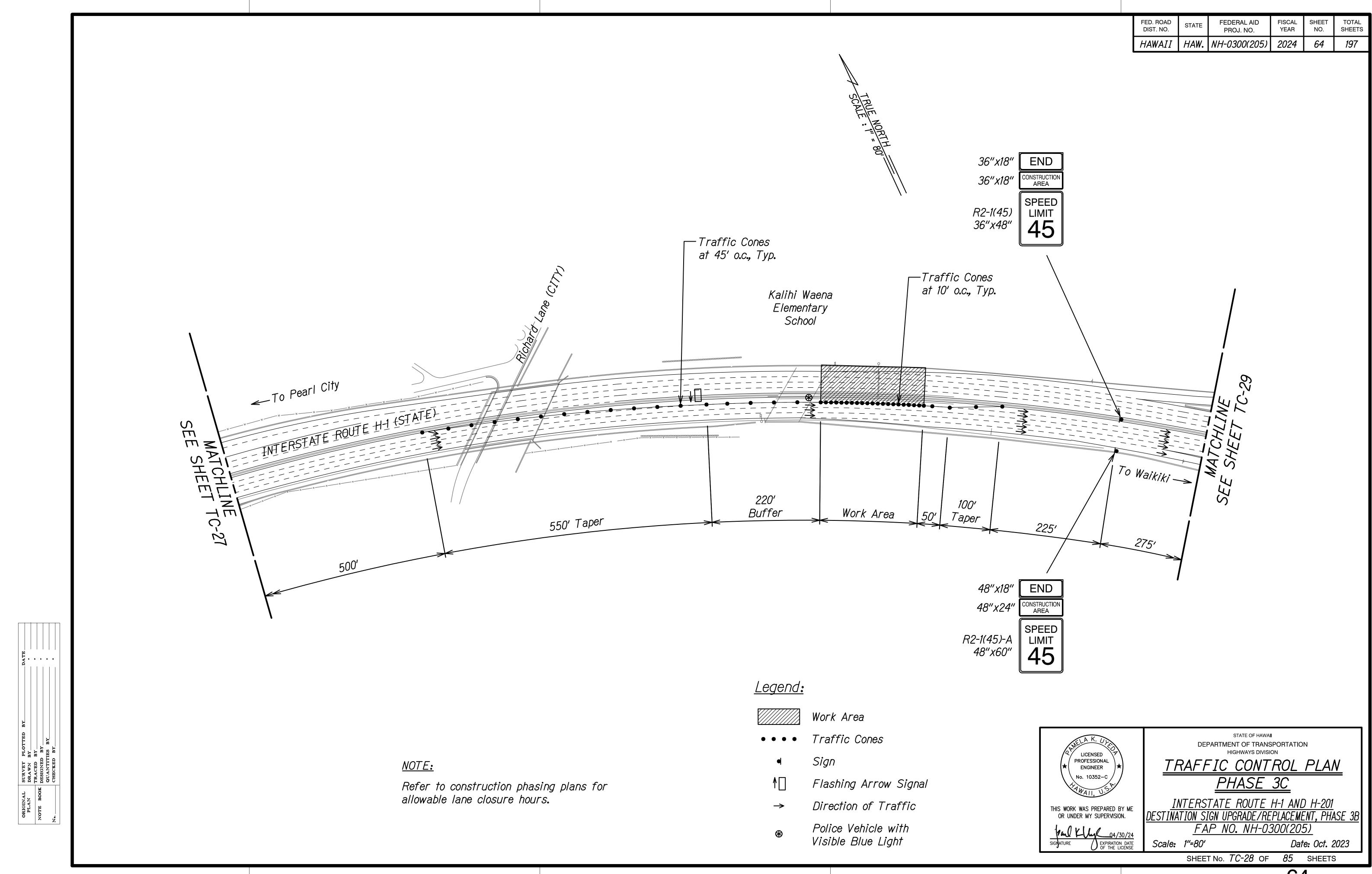


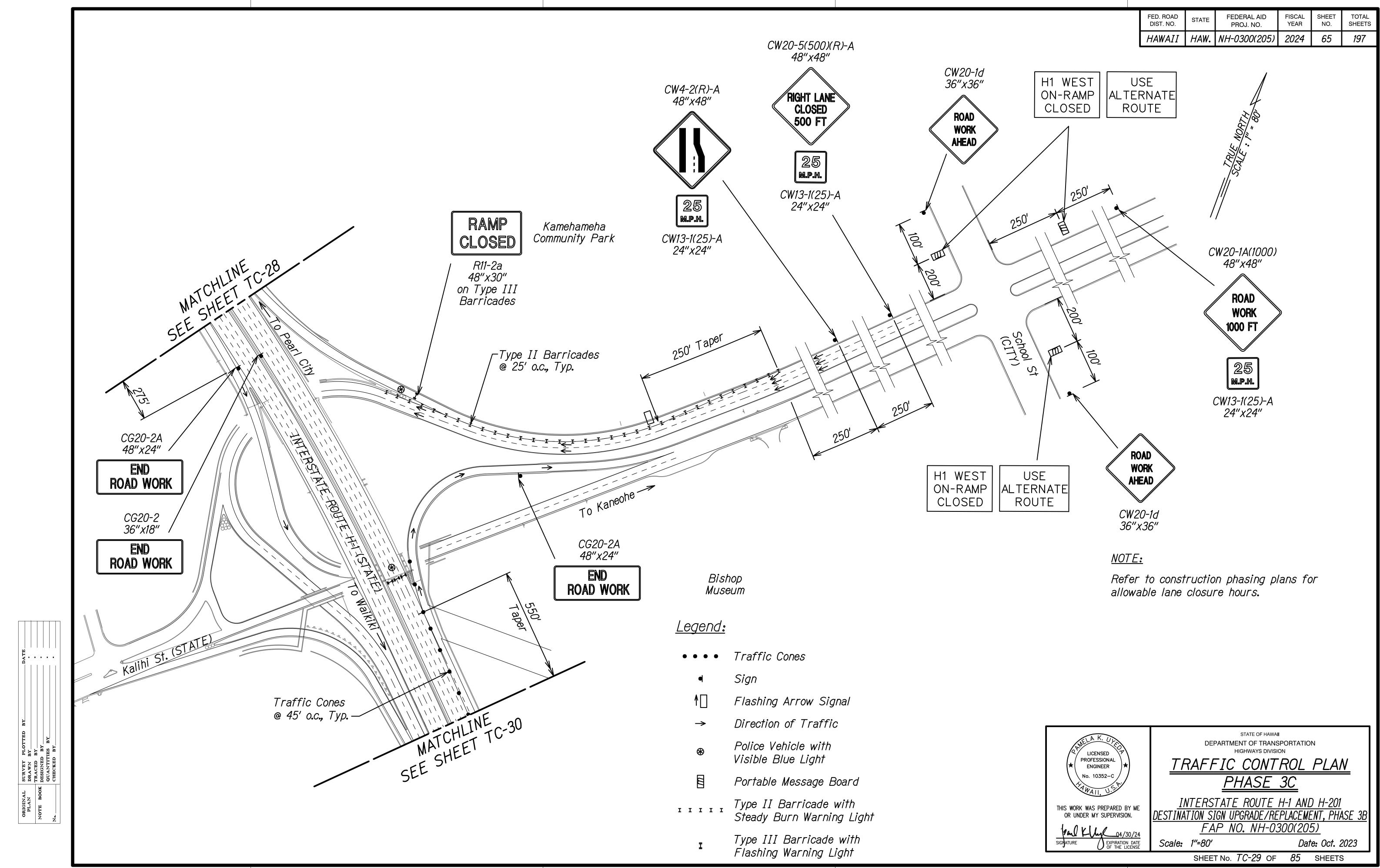


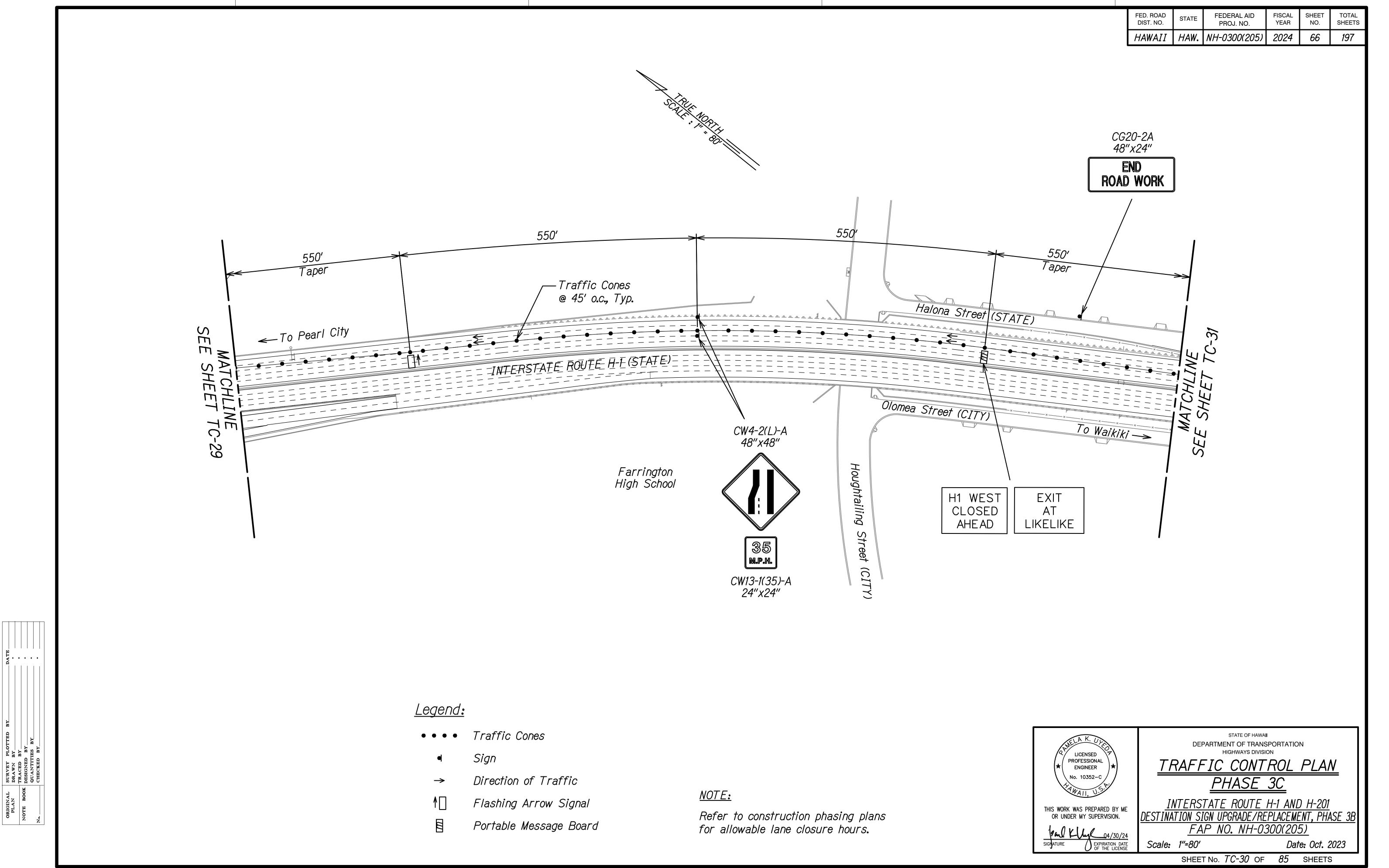


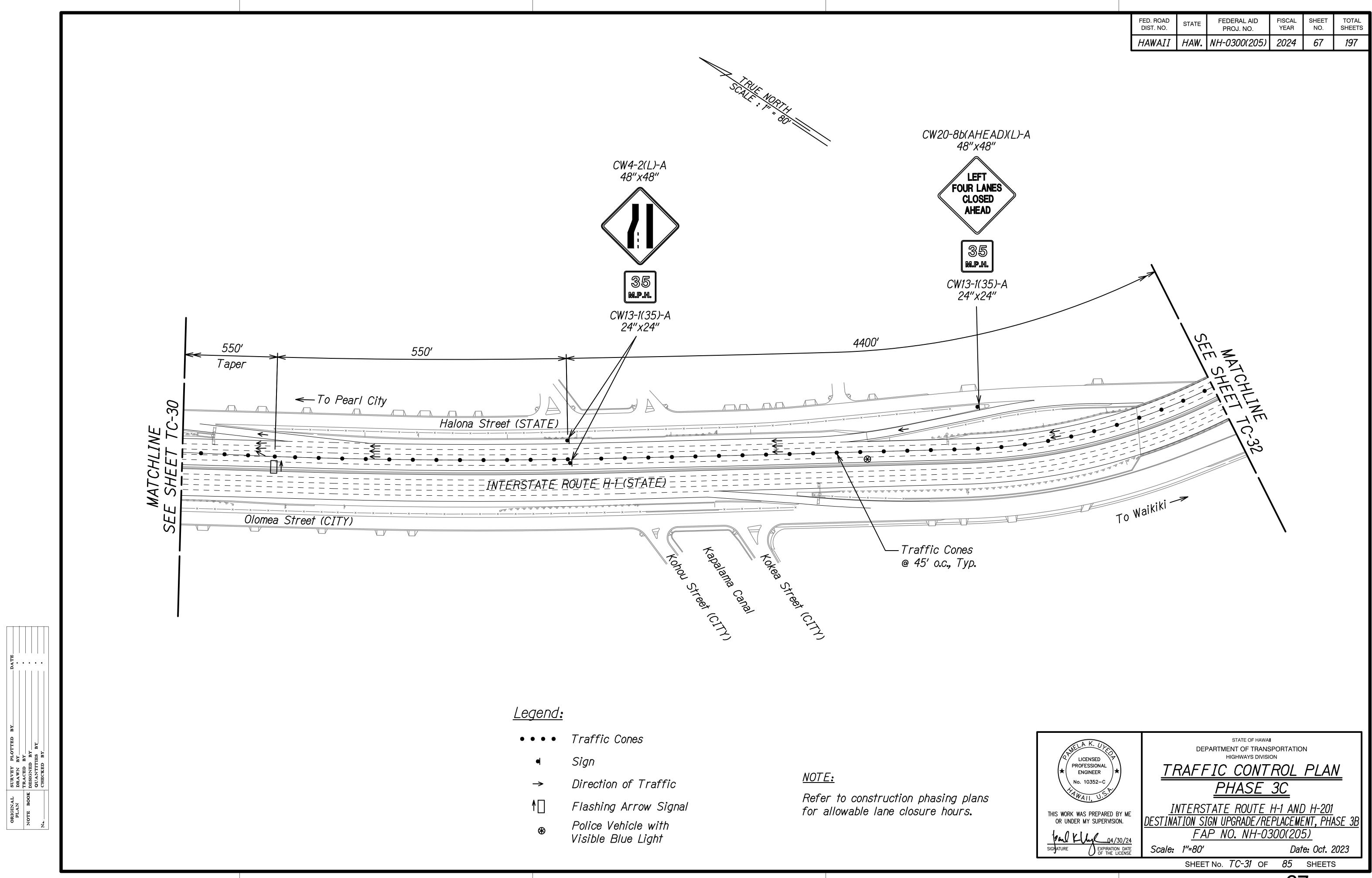


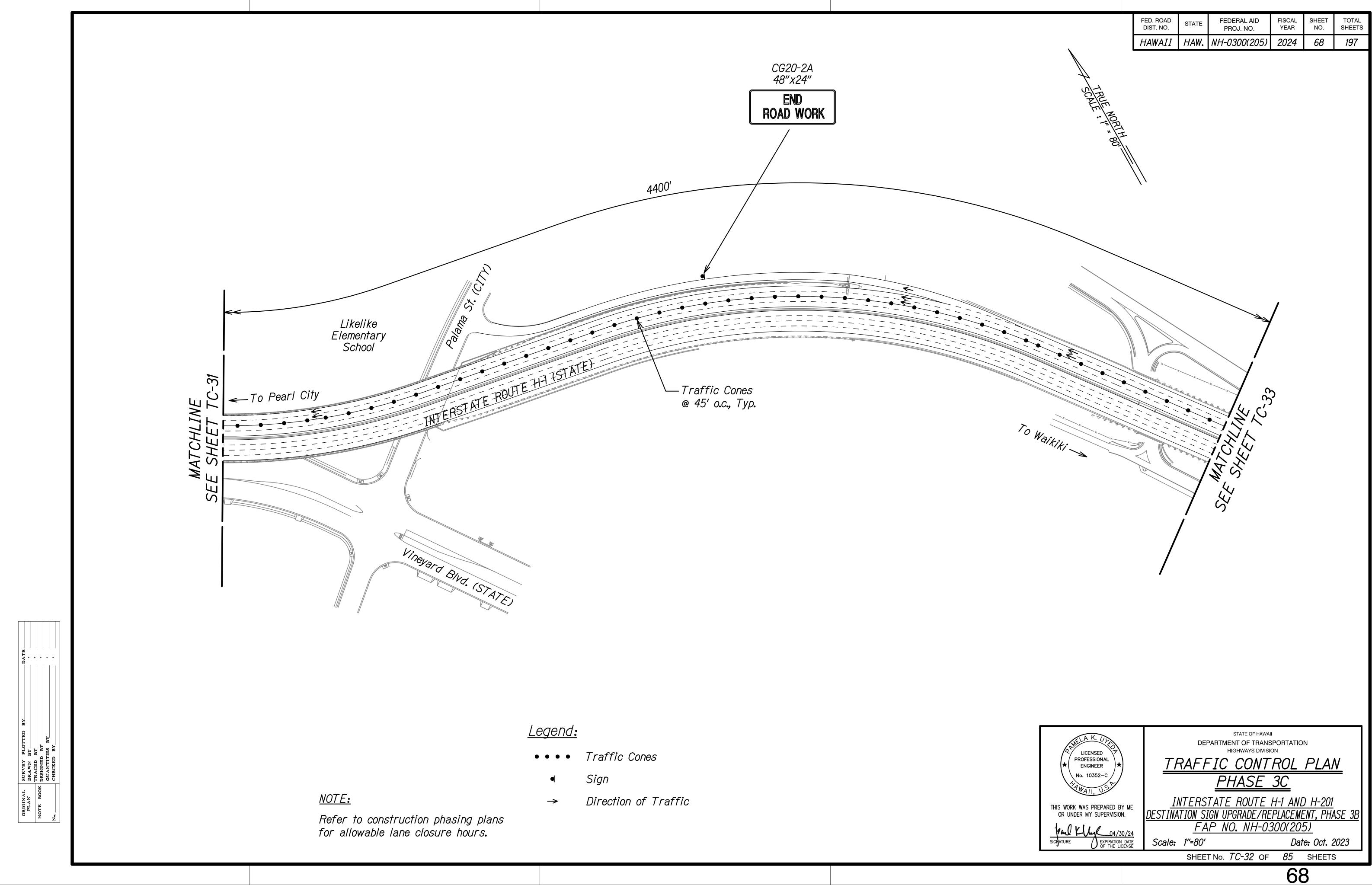


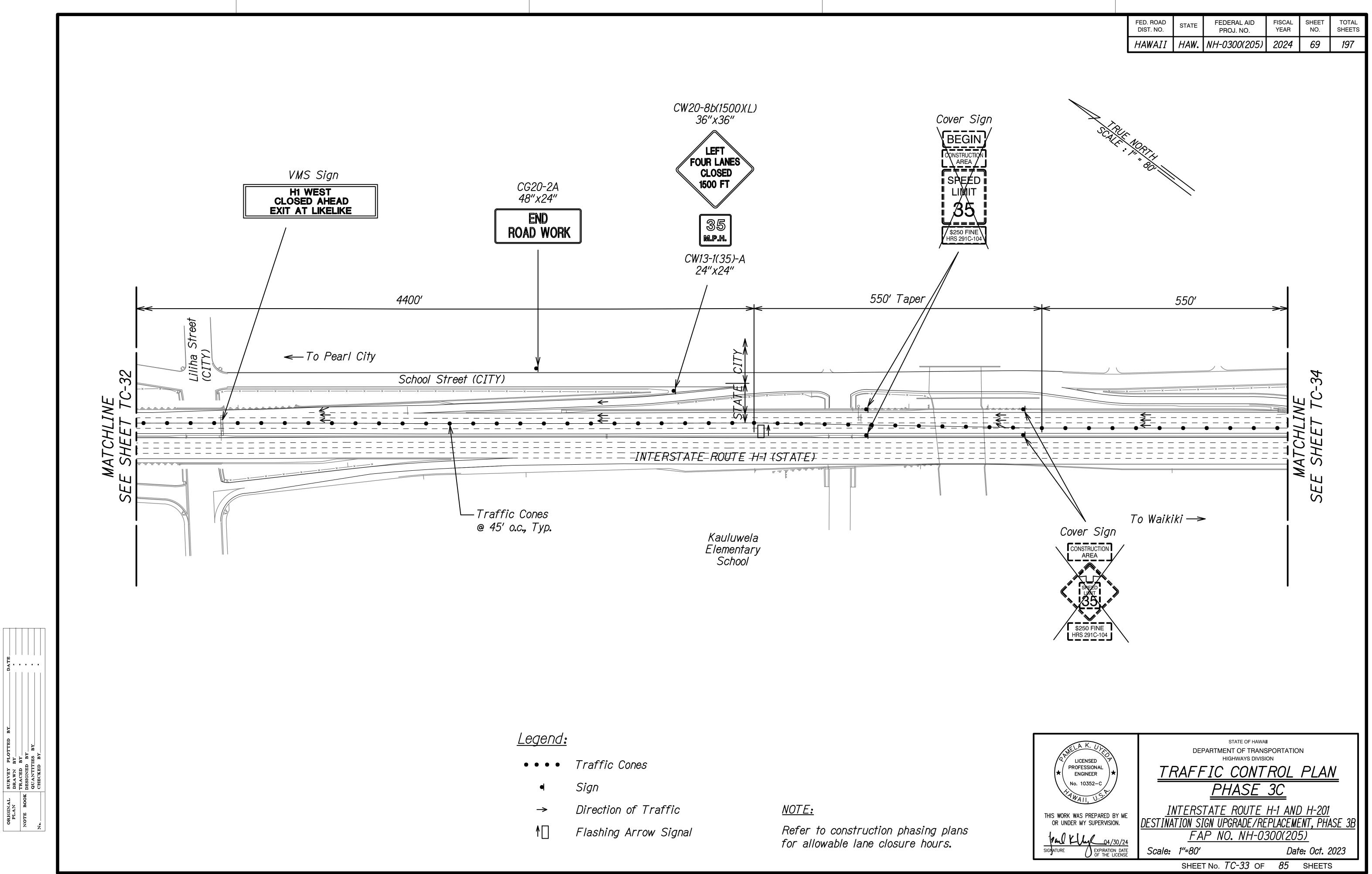


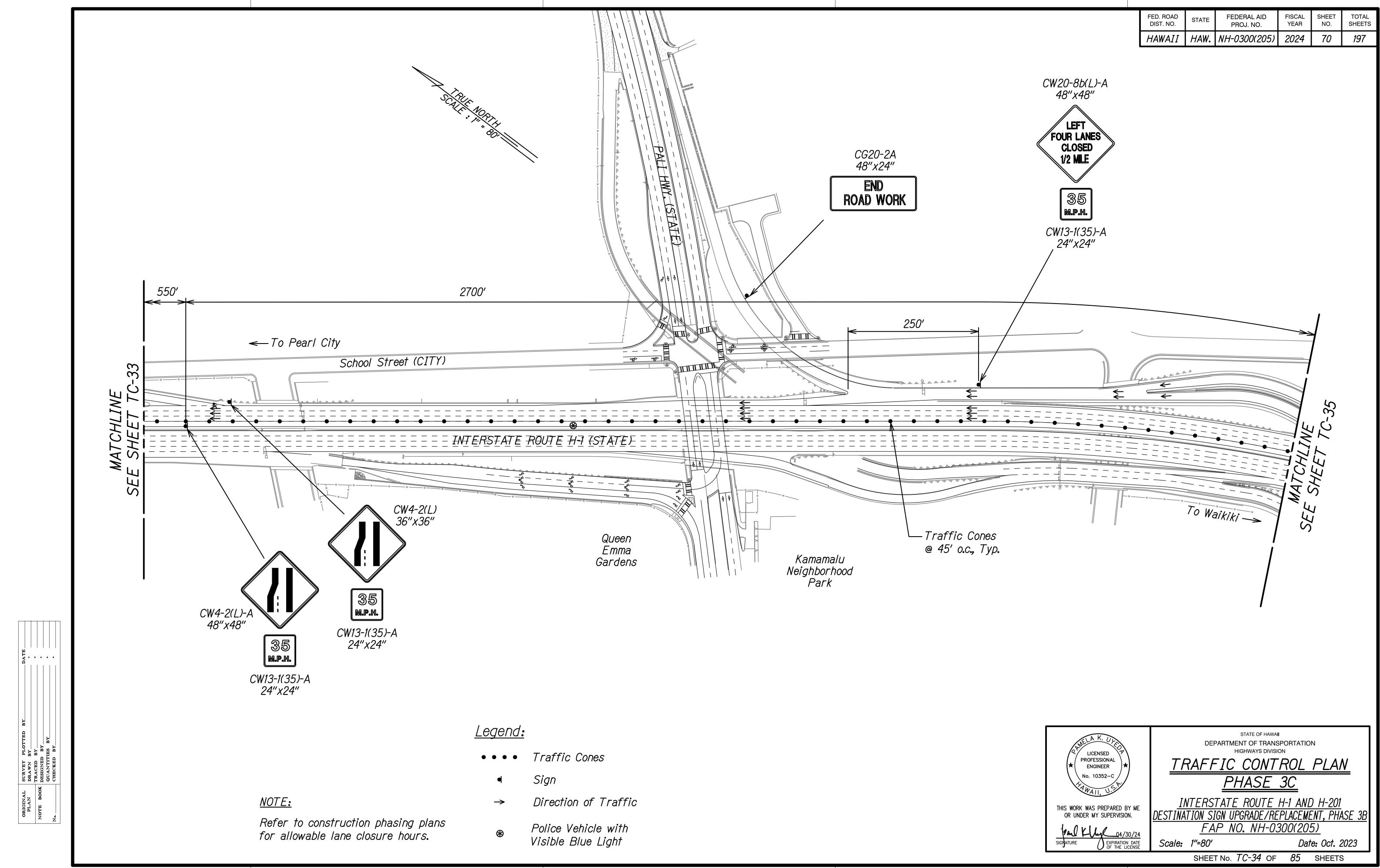


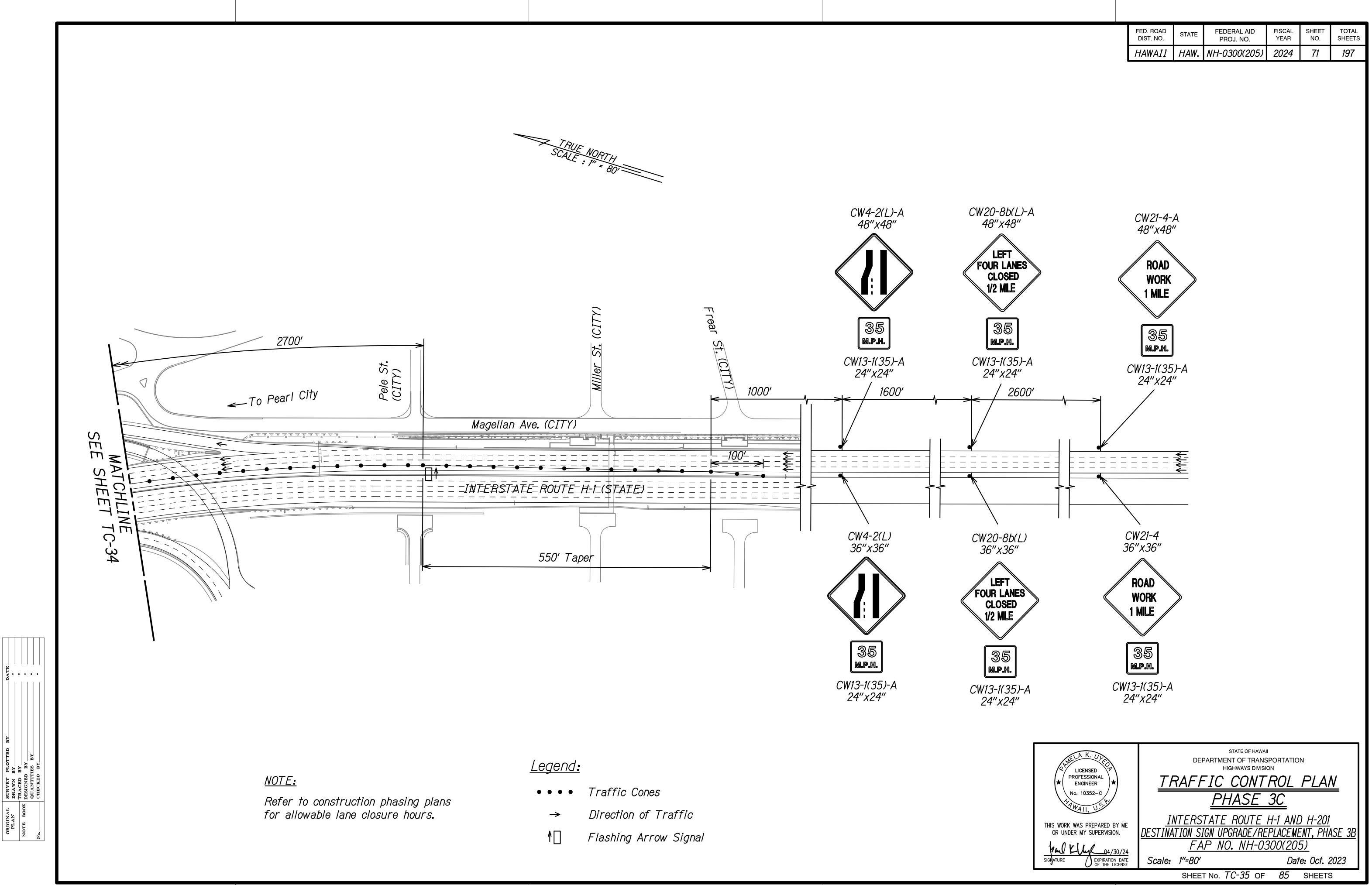


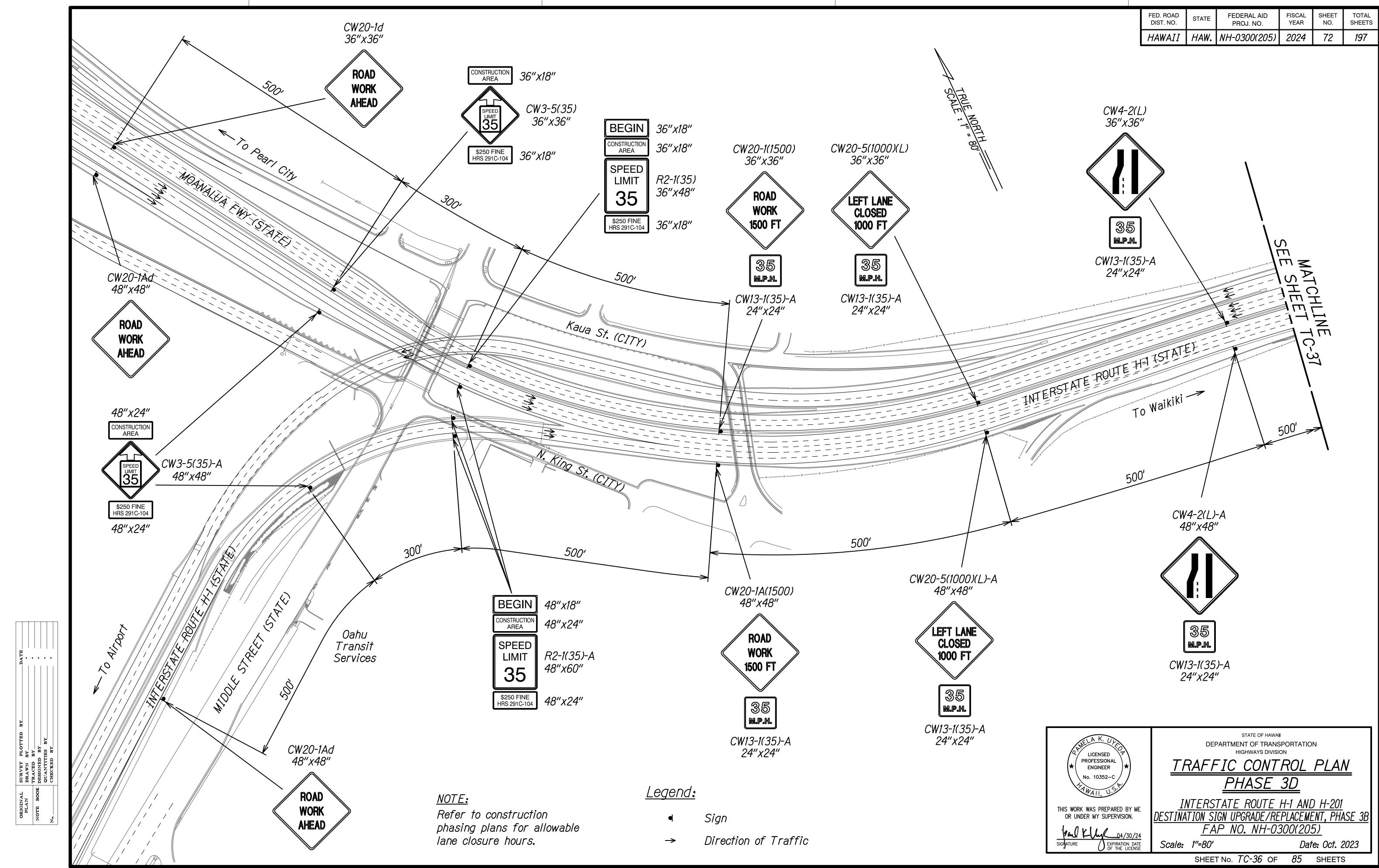


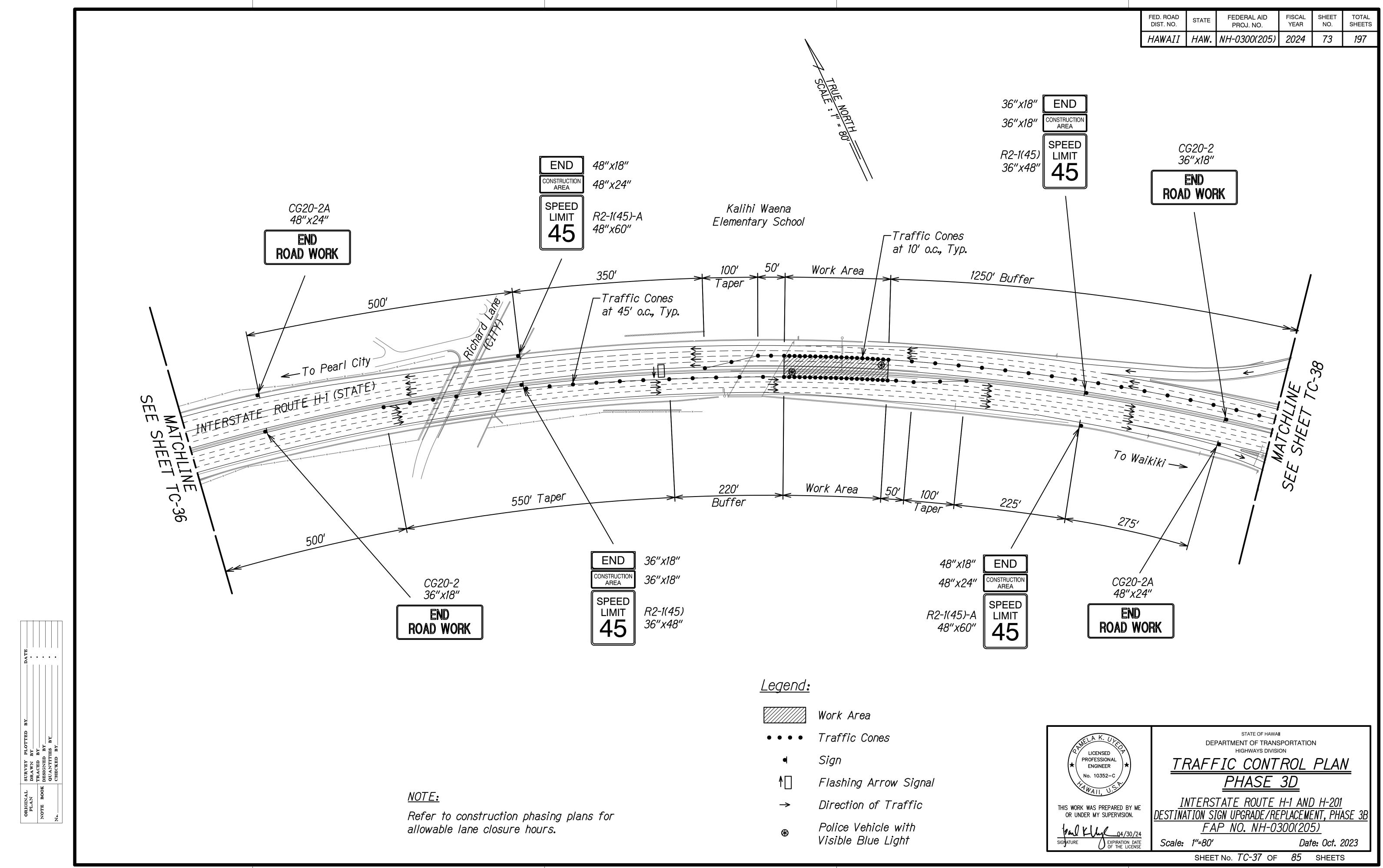


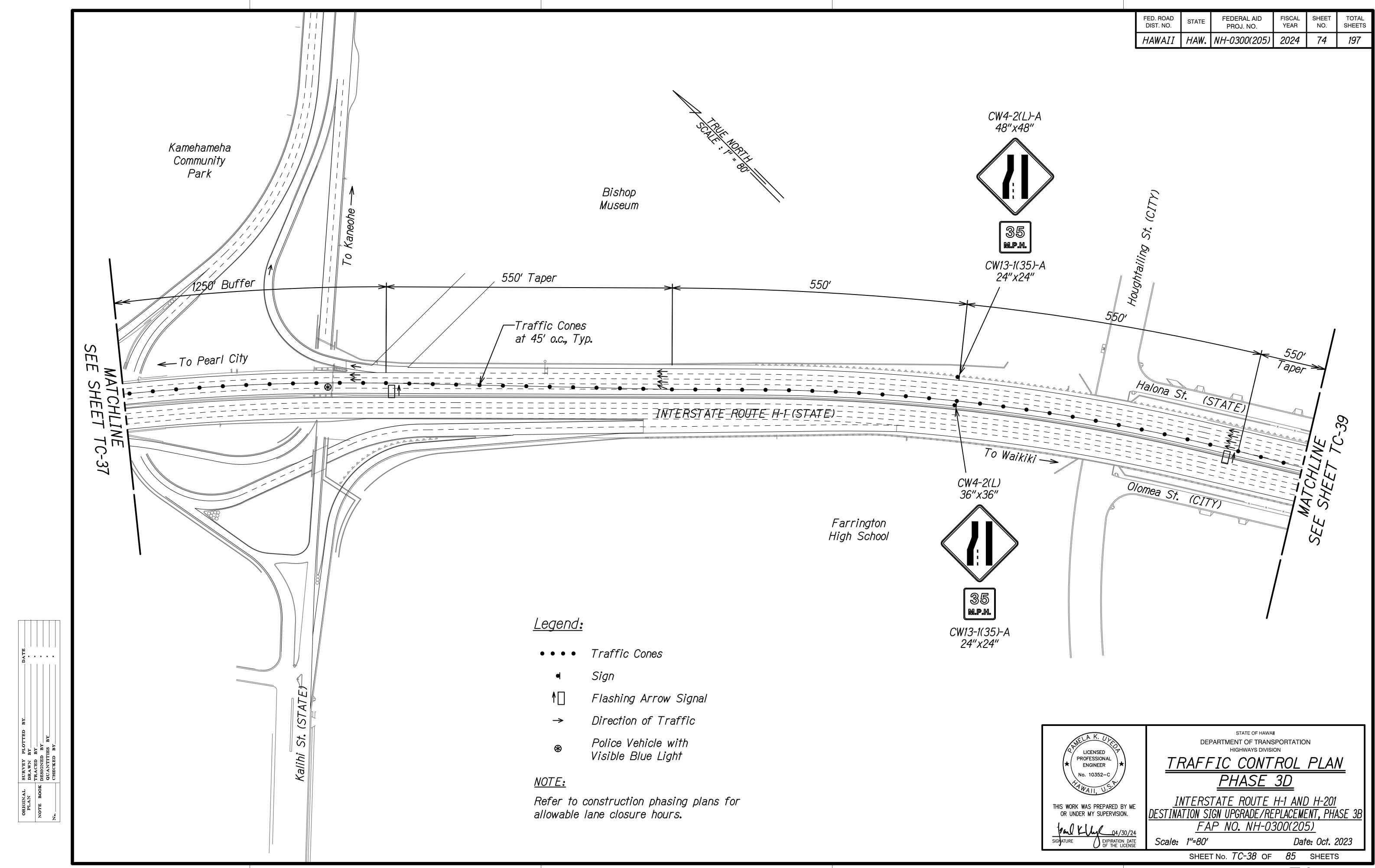


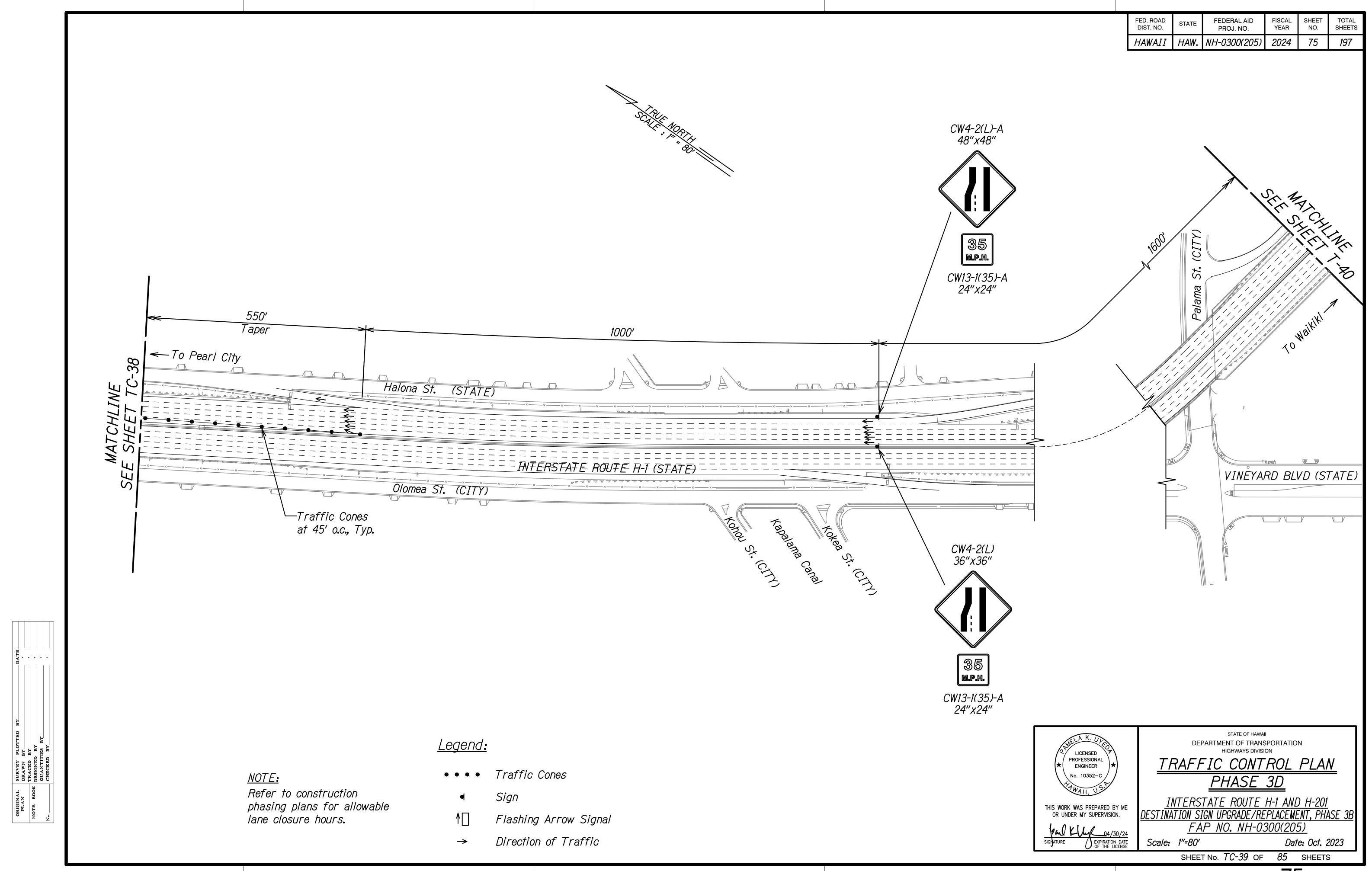


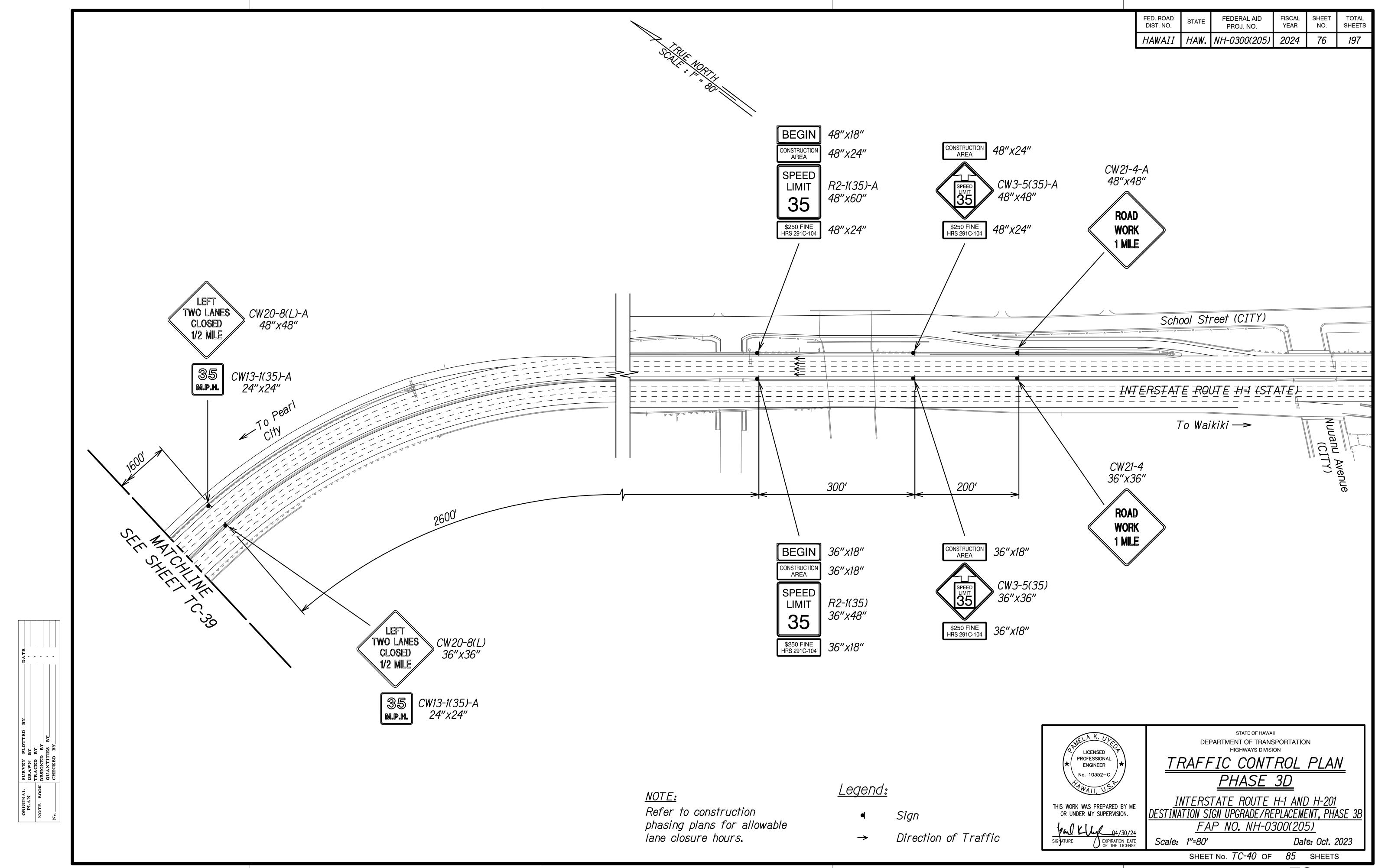


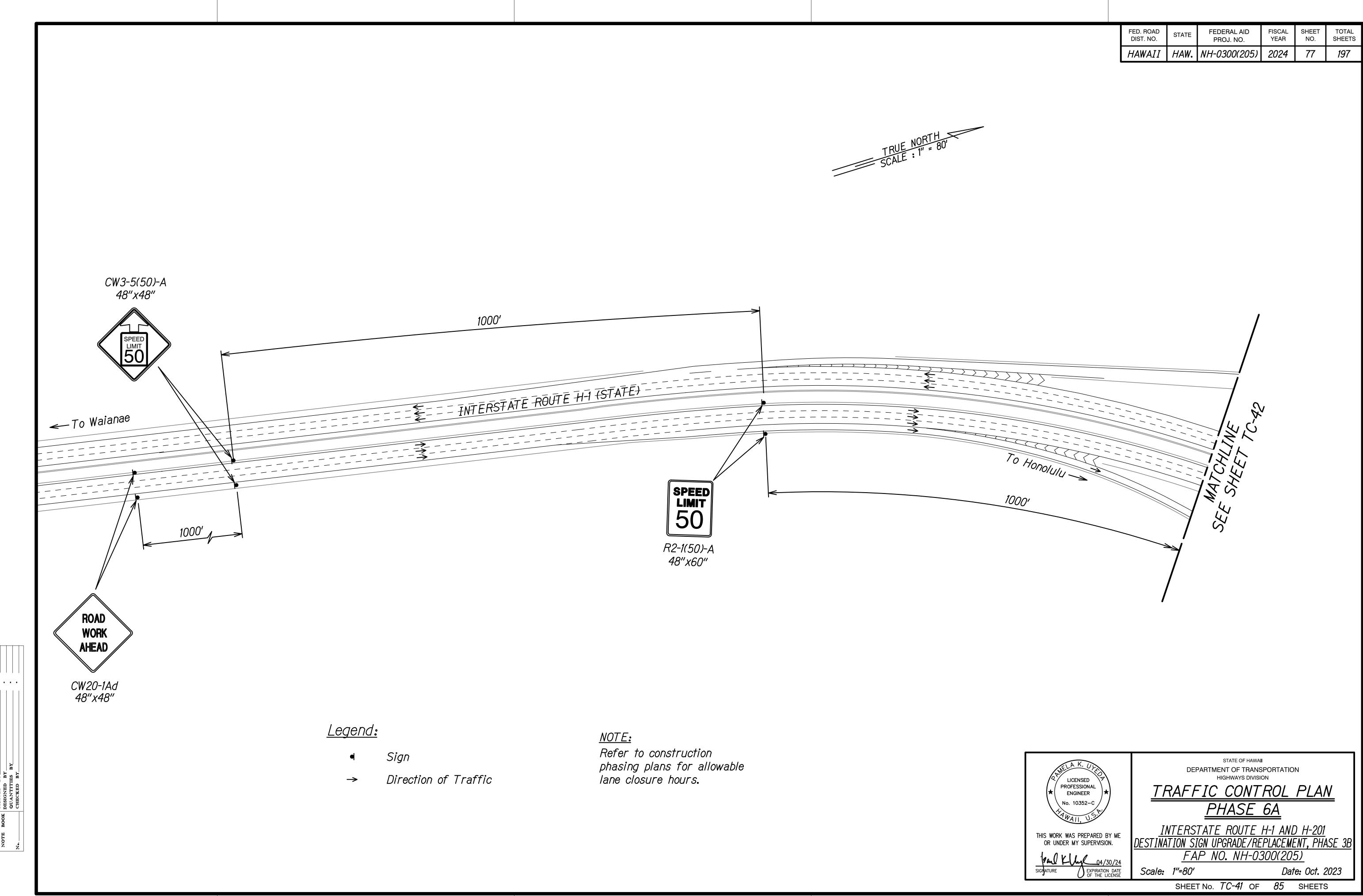


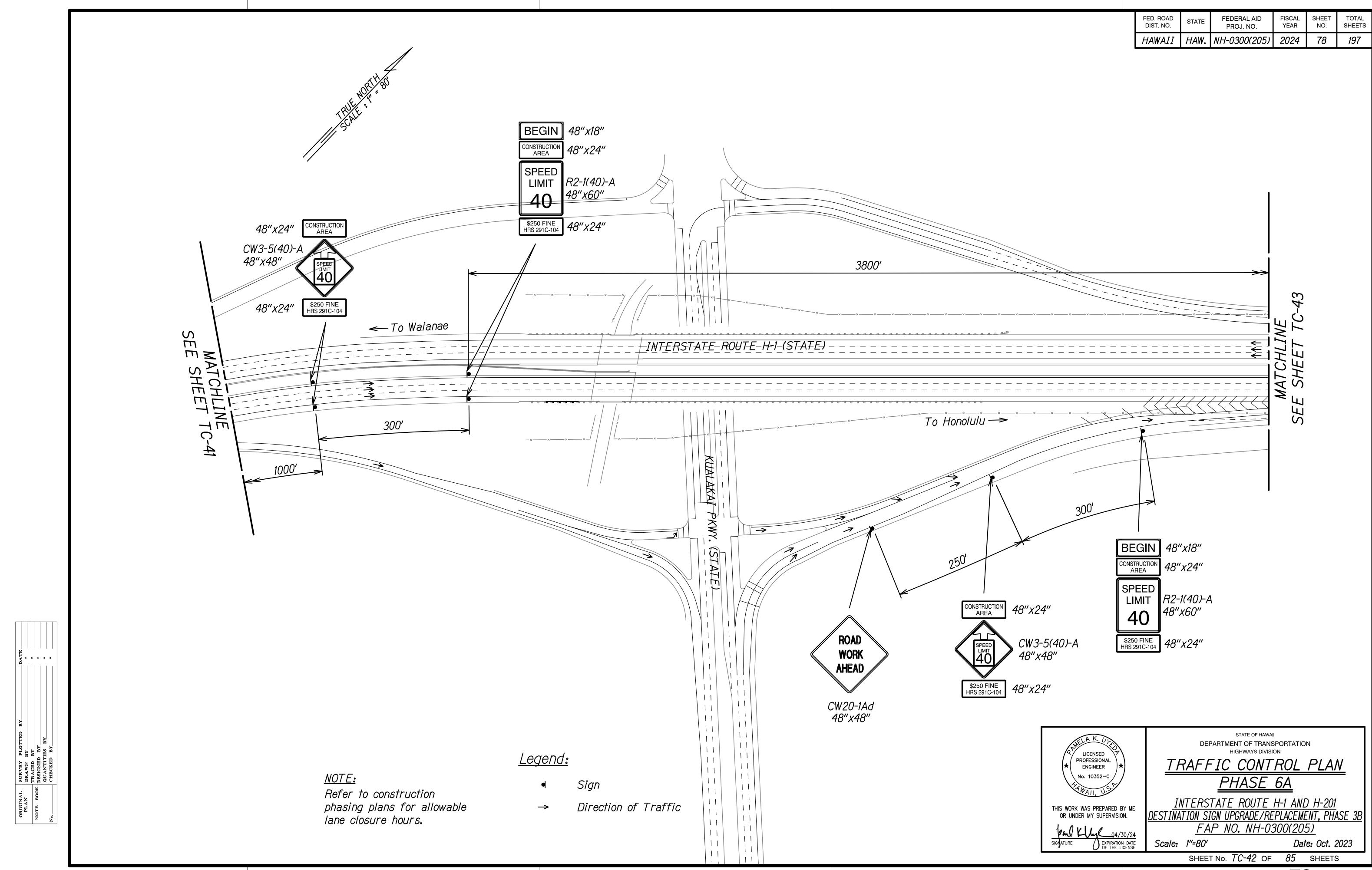


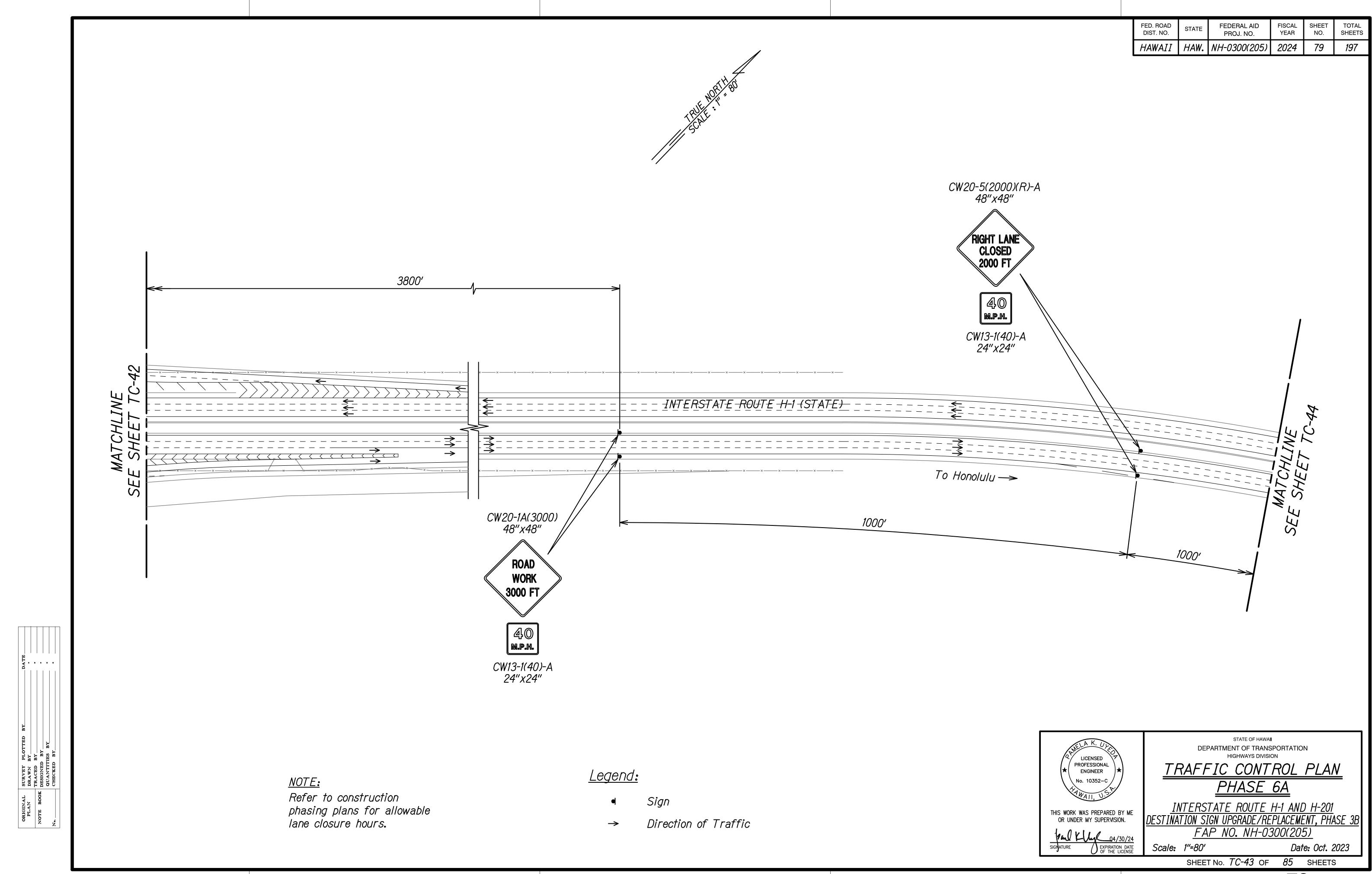


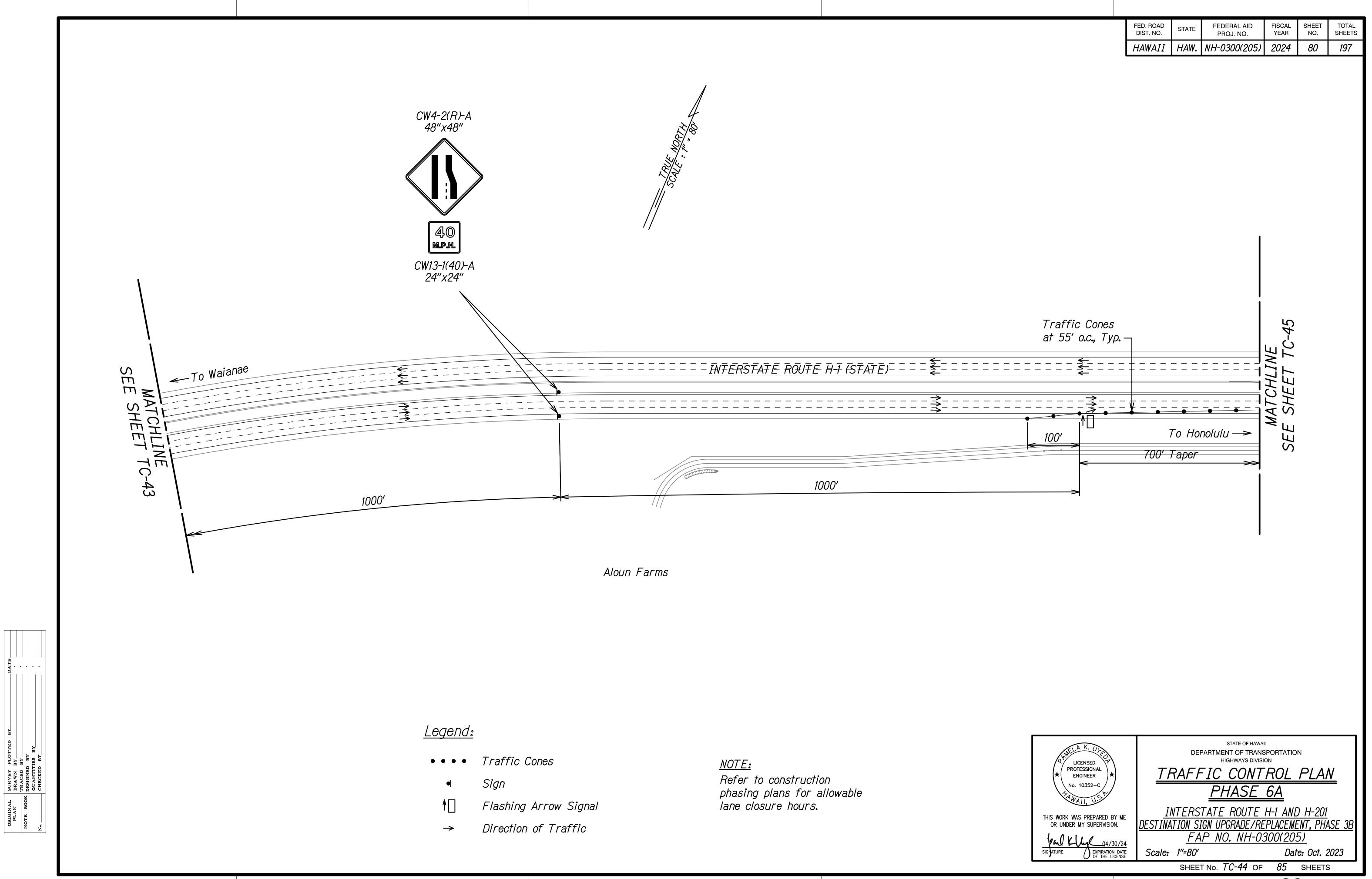


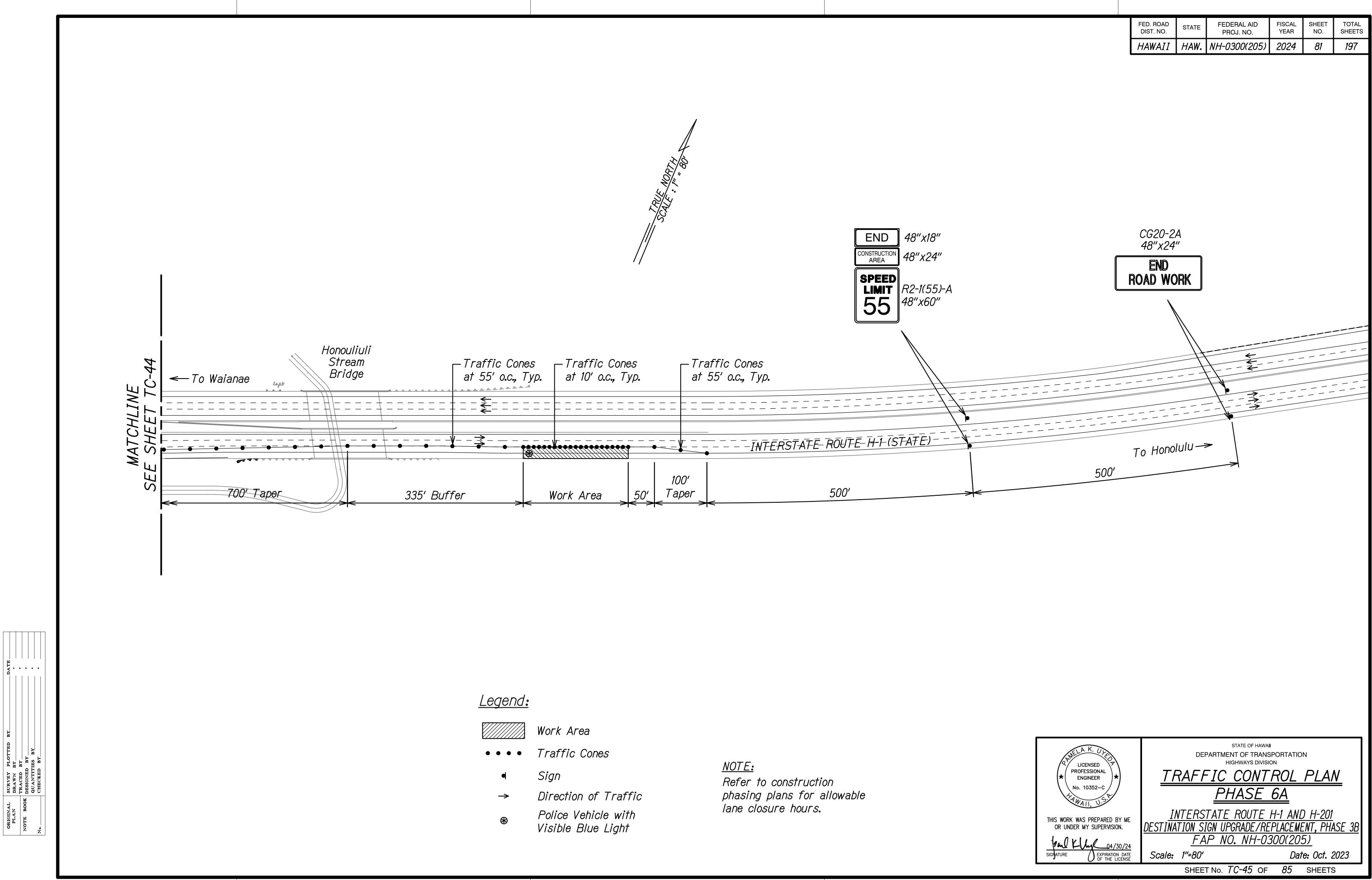


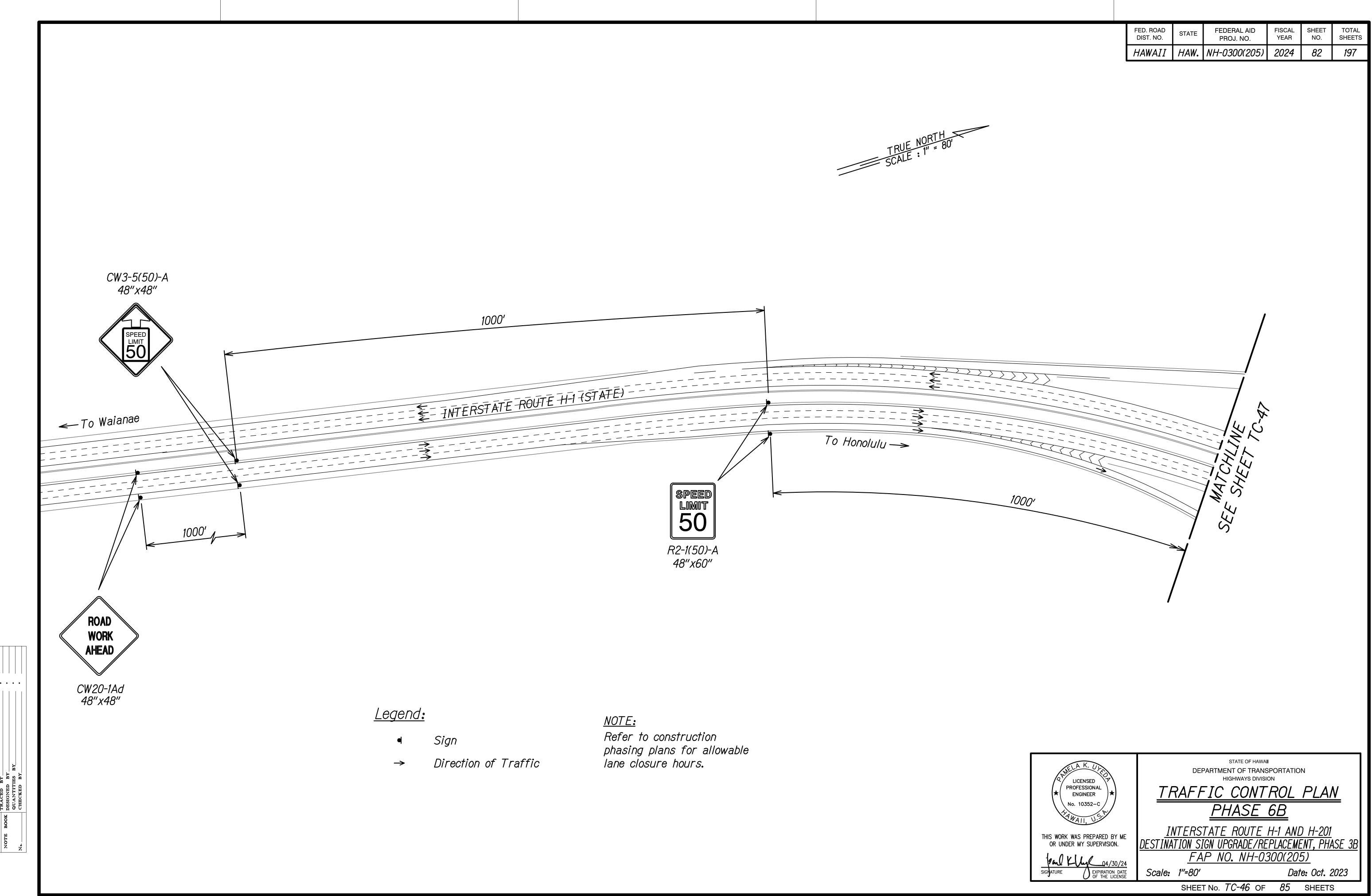


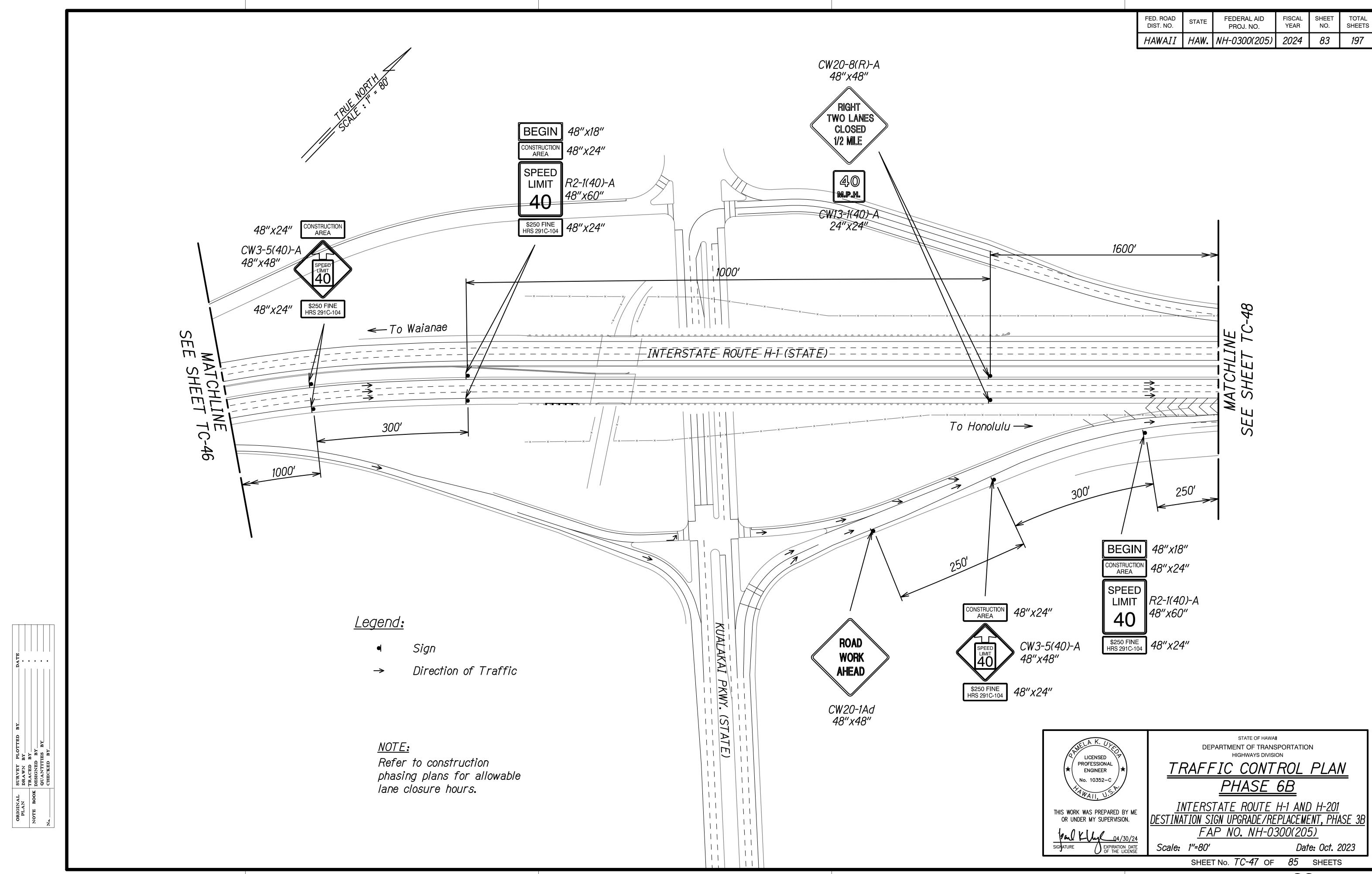


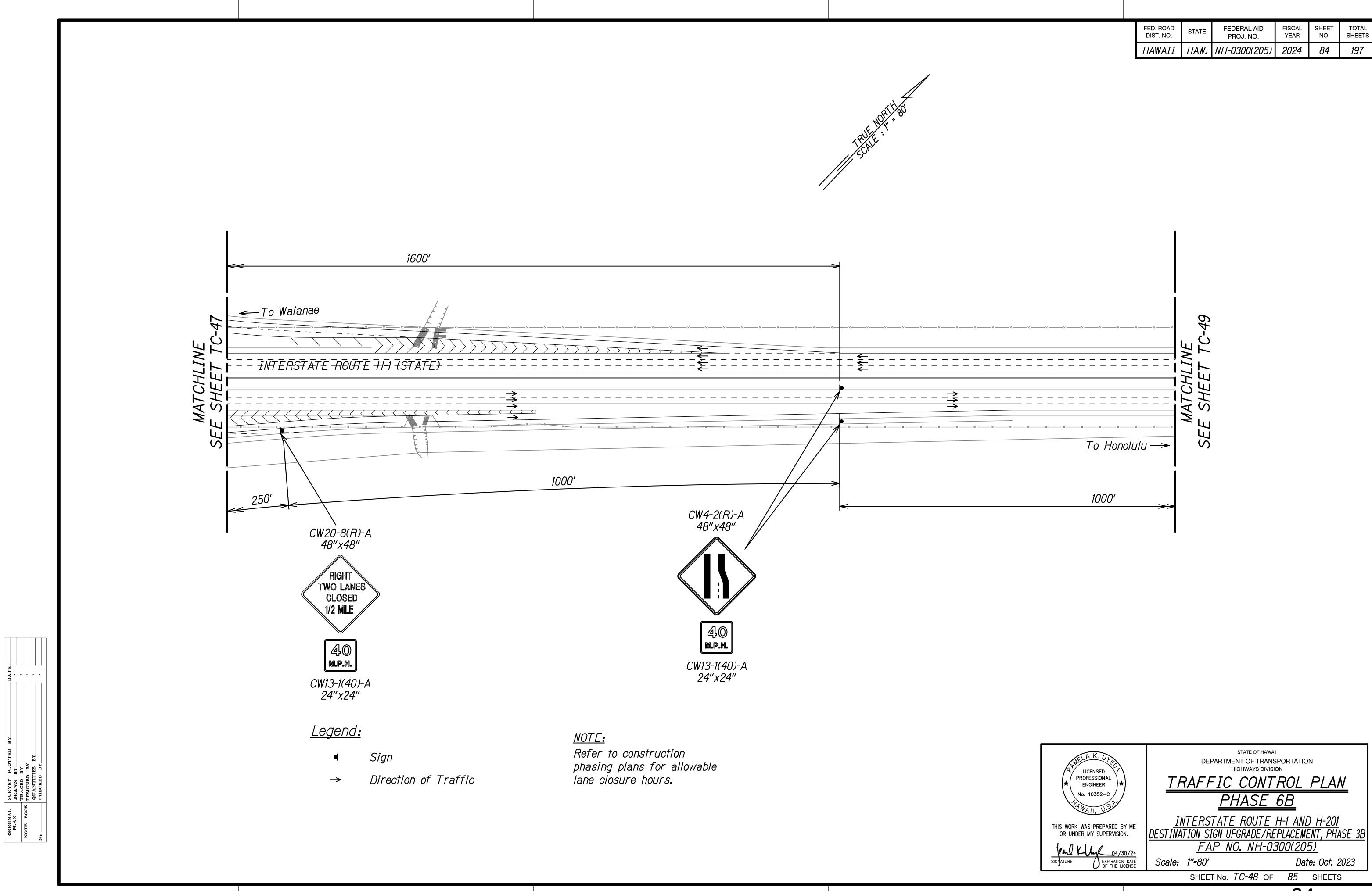


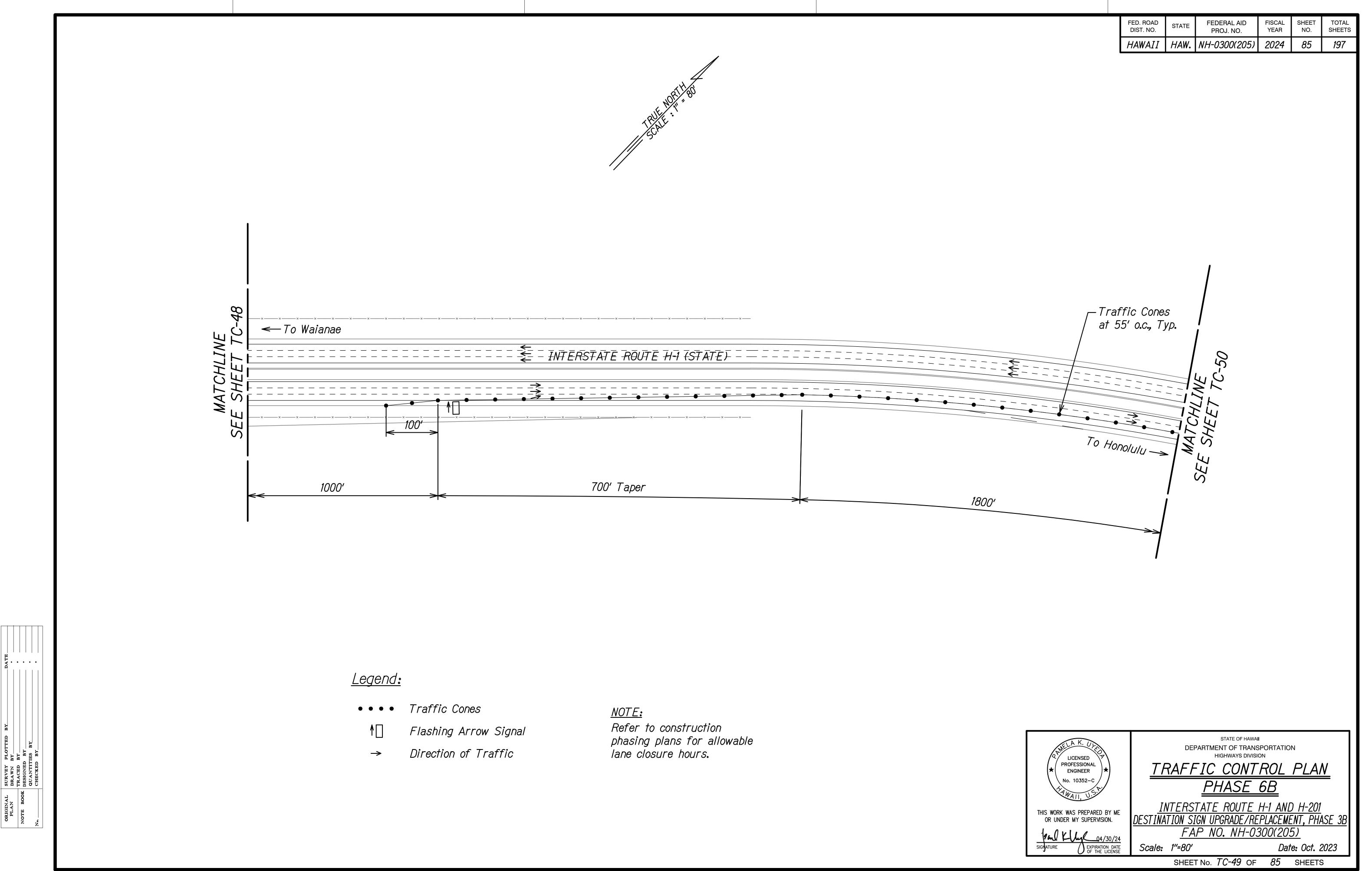


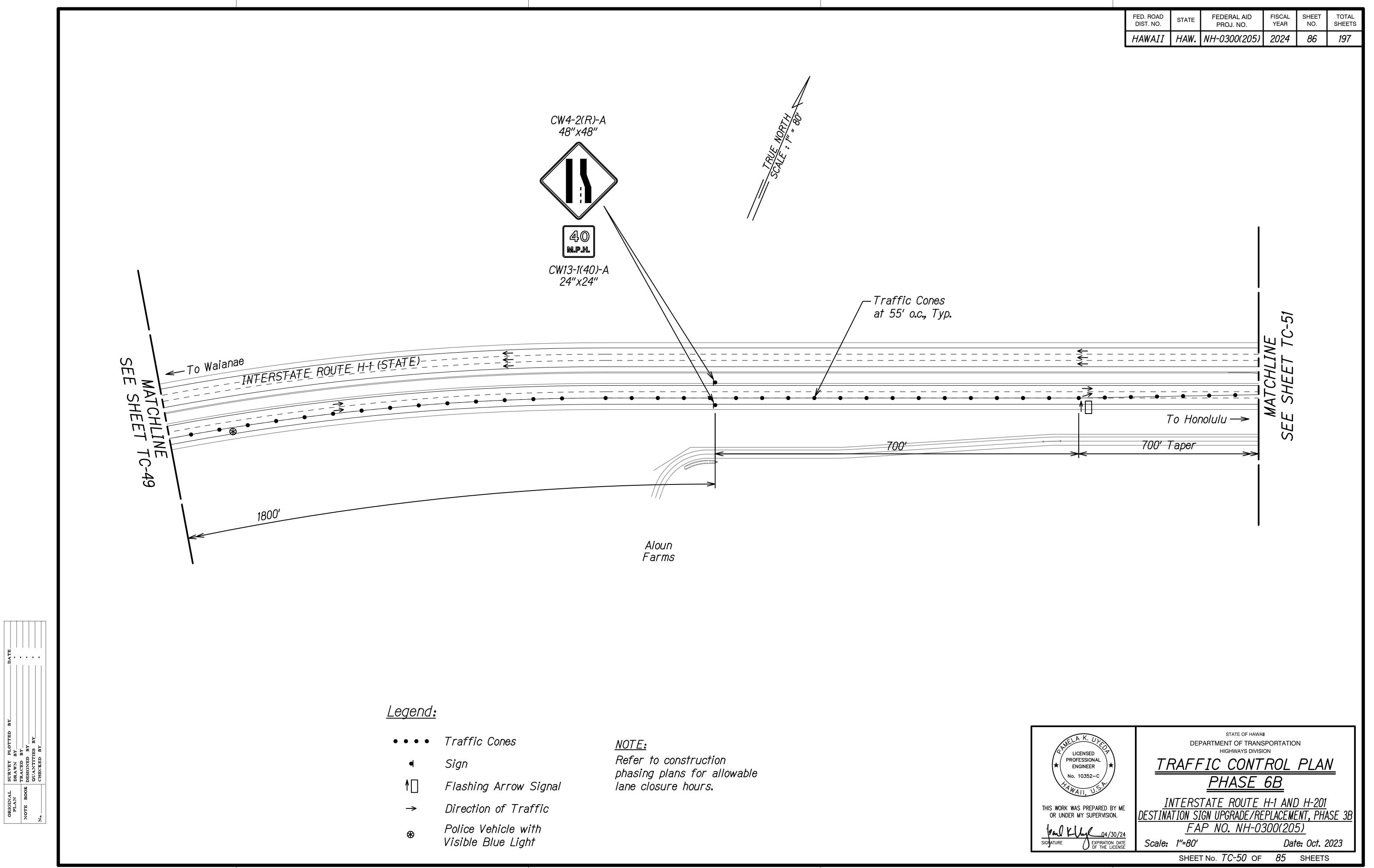


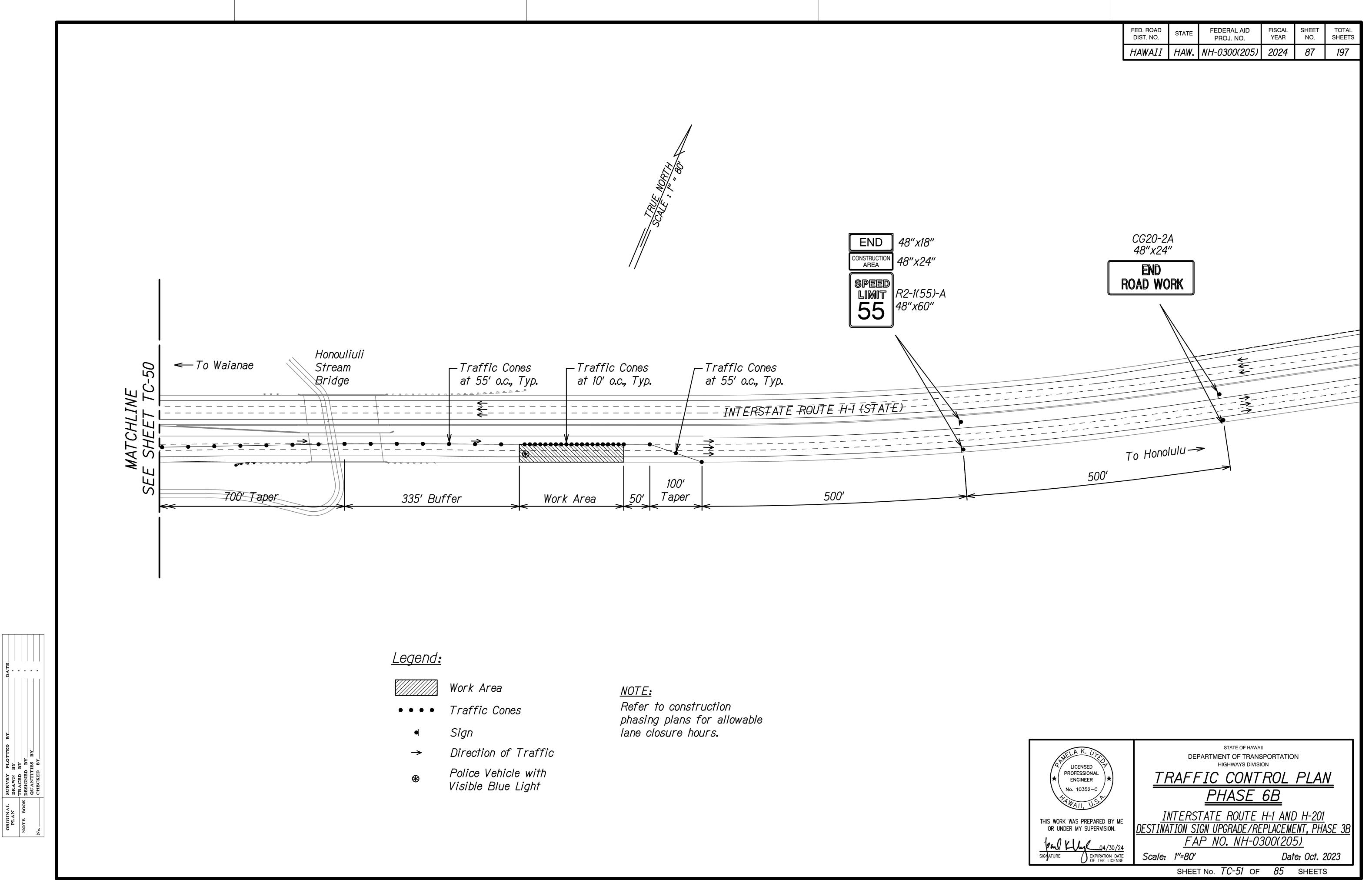


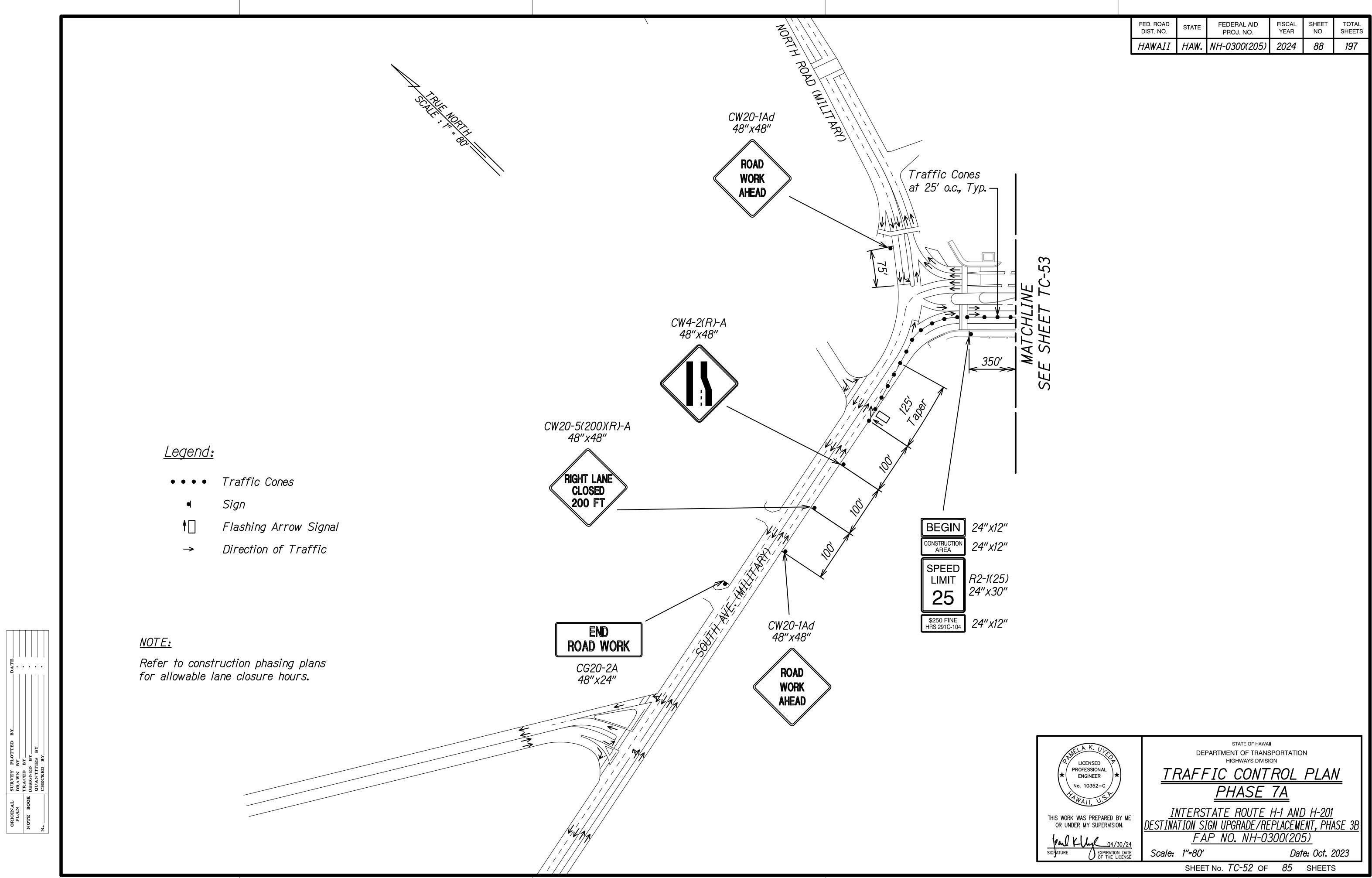


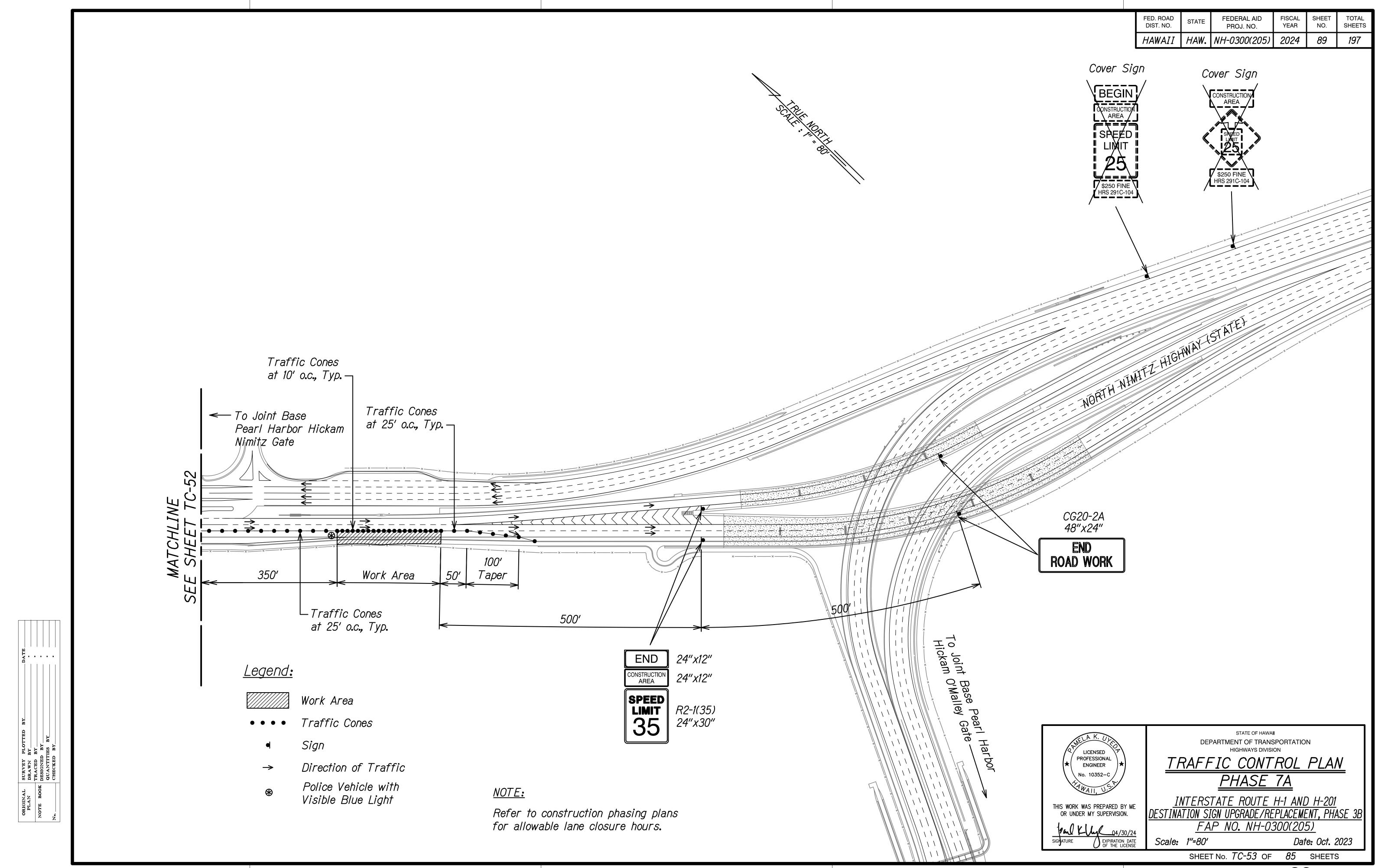


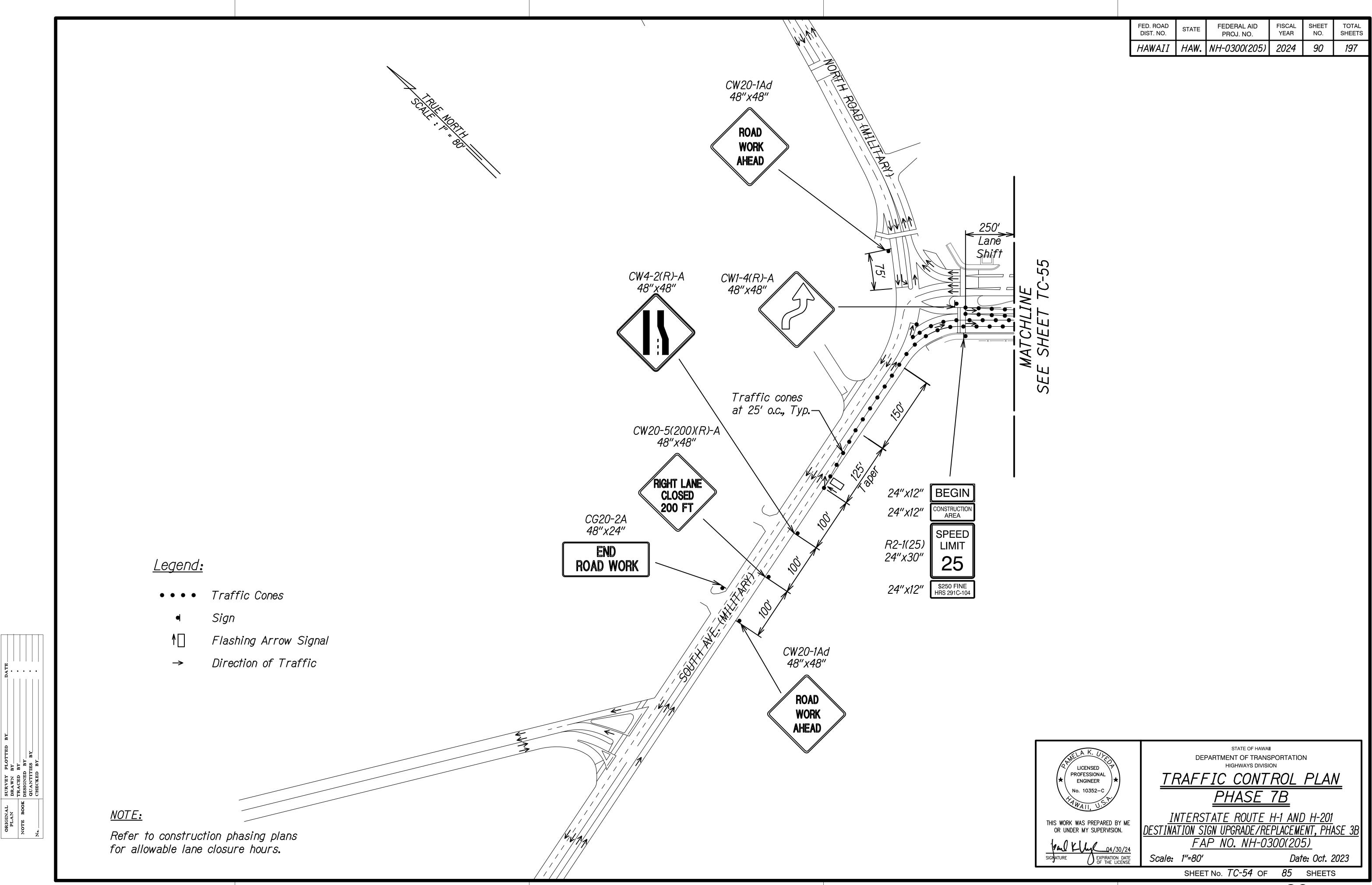


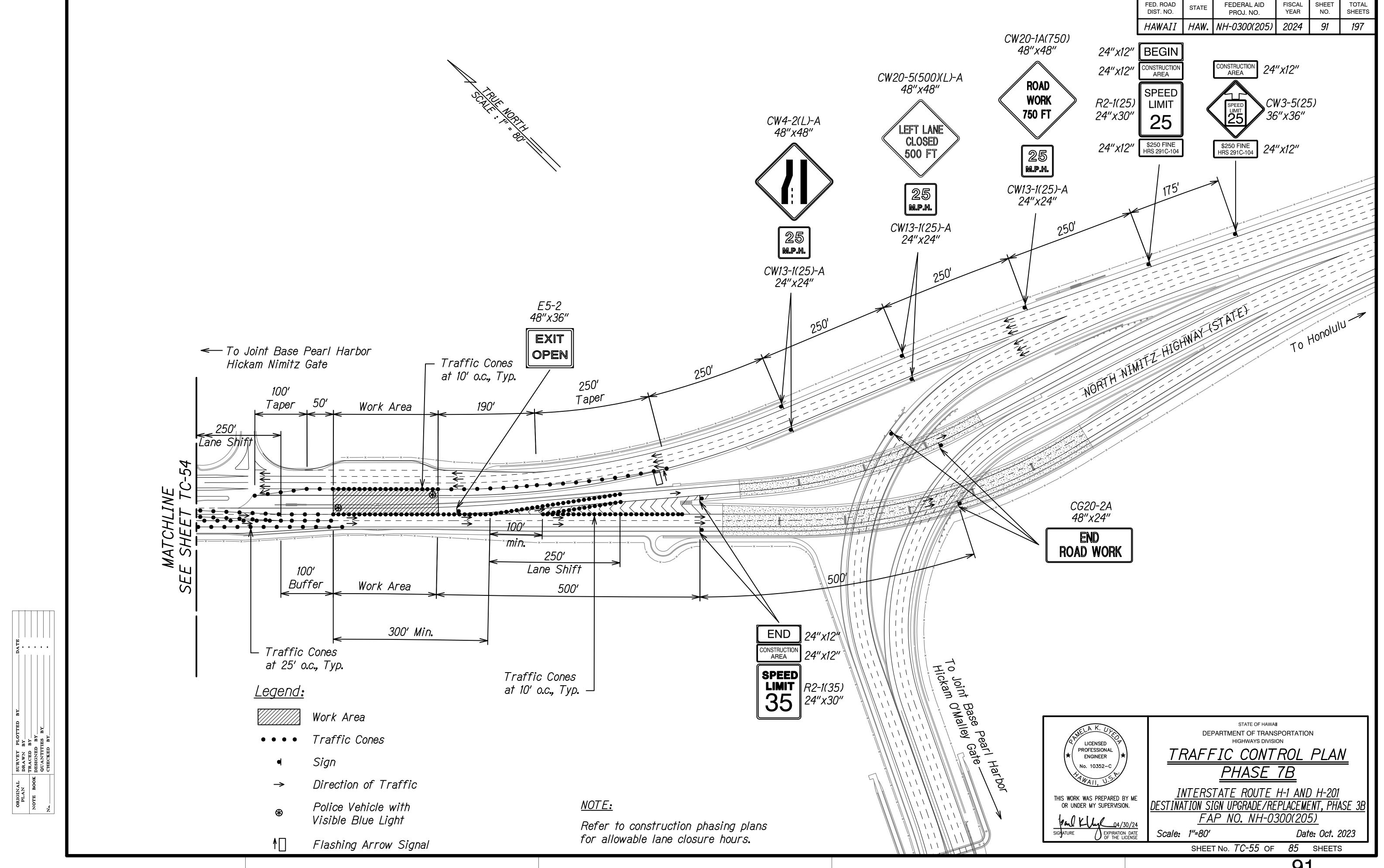




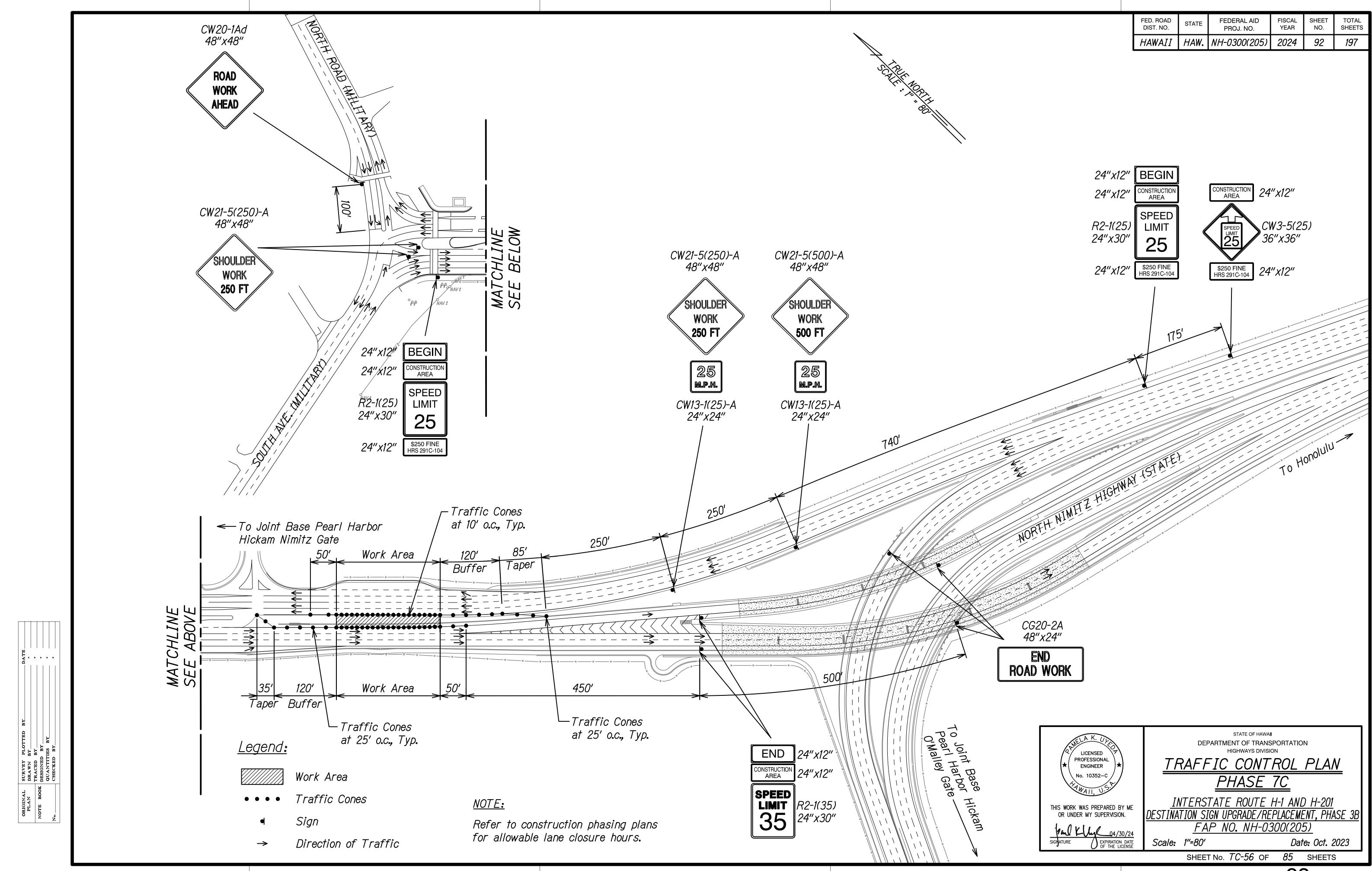


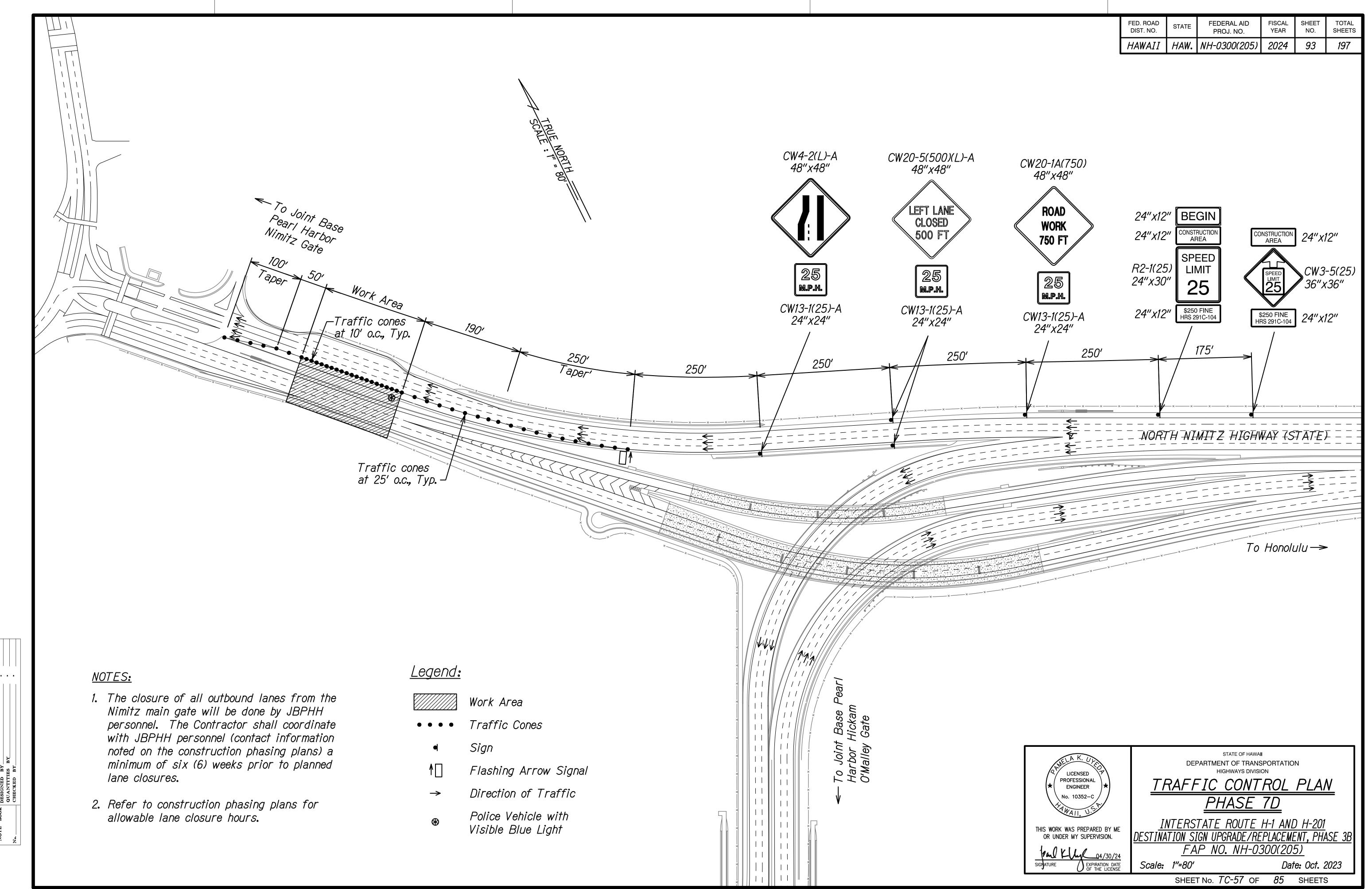


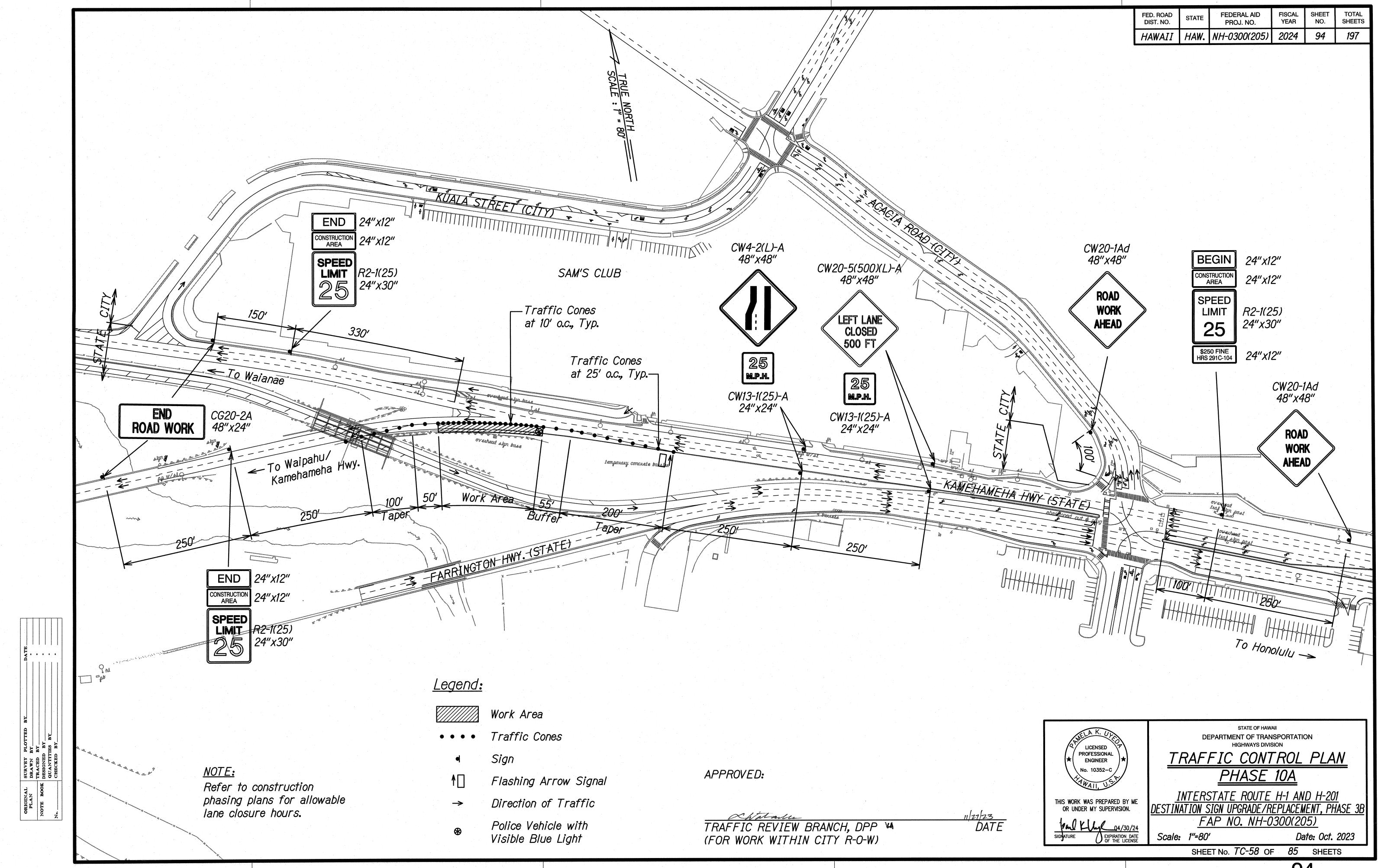


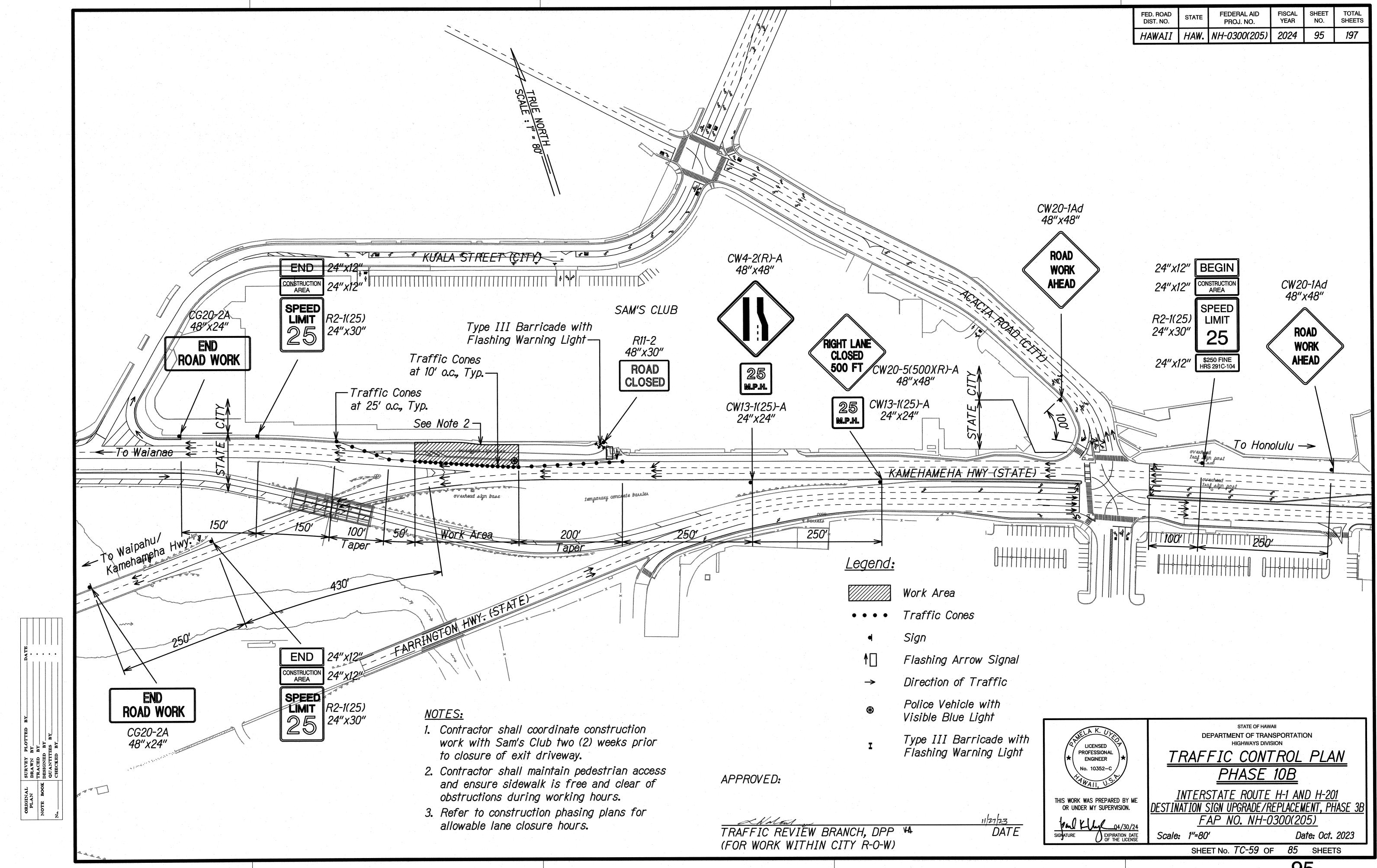


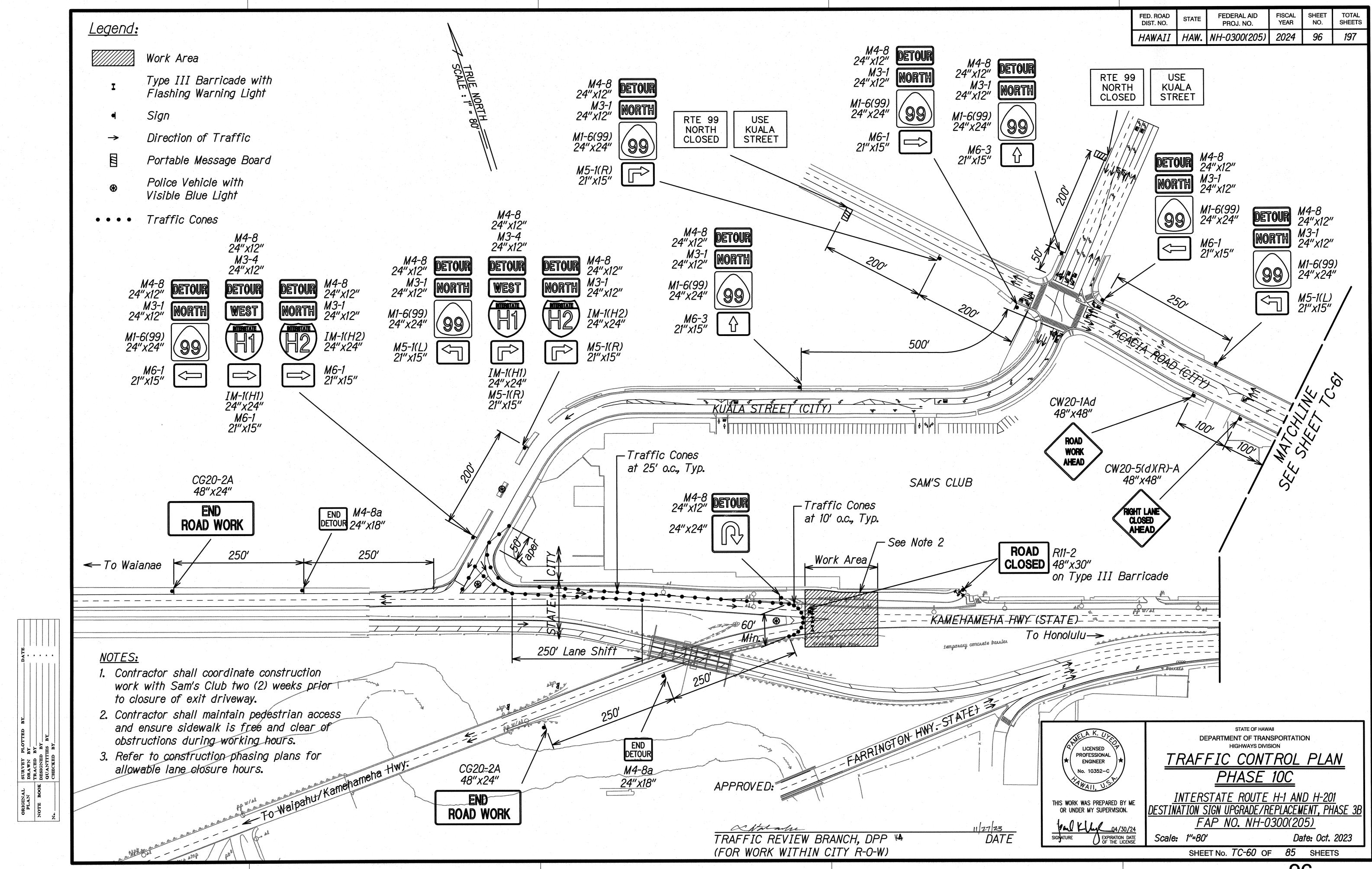
FISCAL YEAR

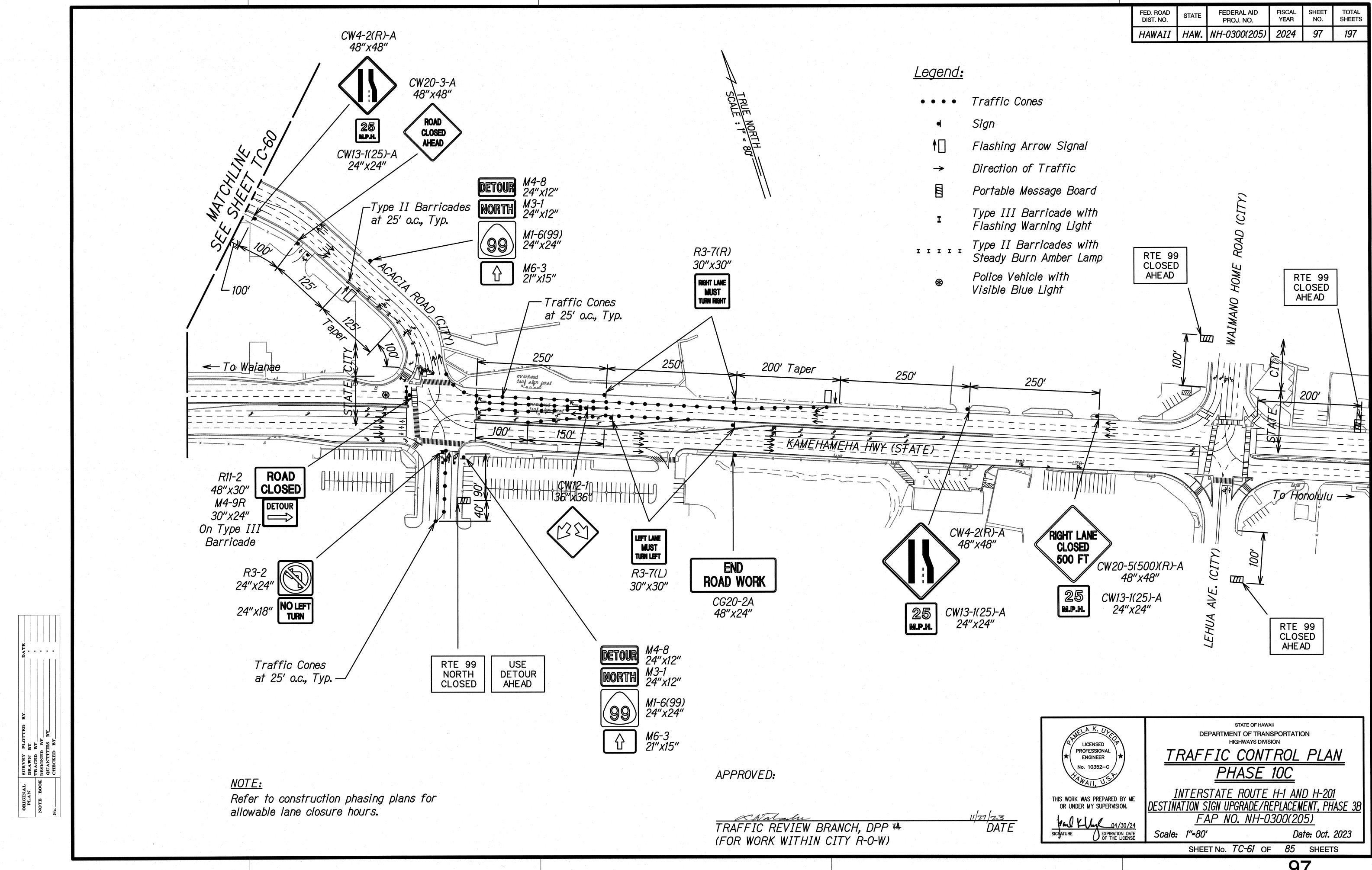


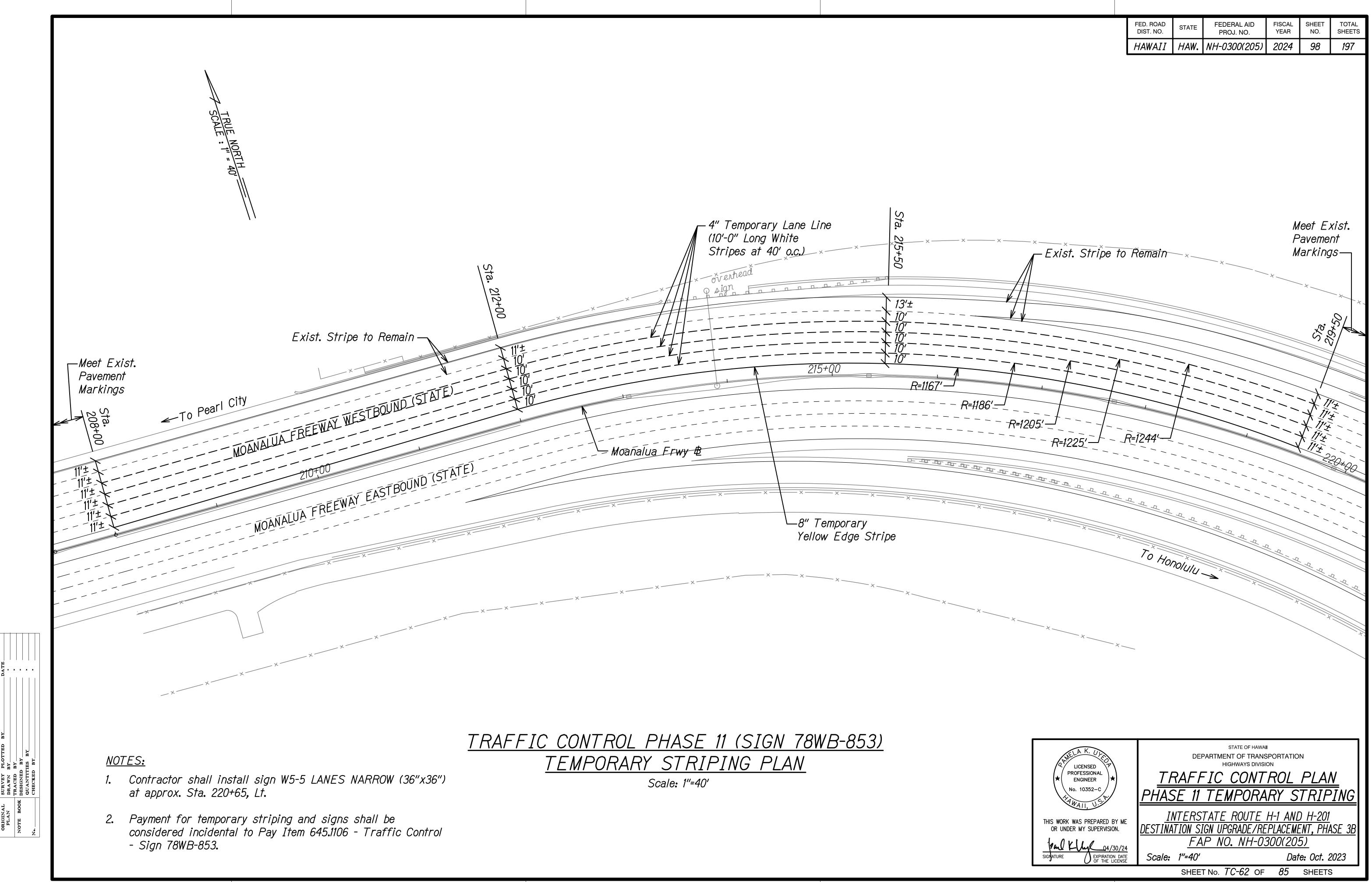


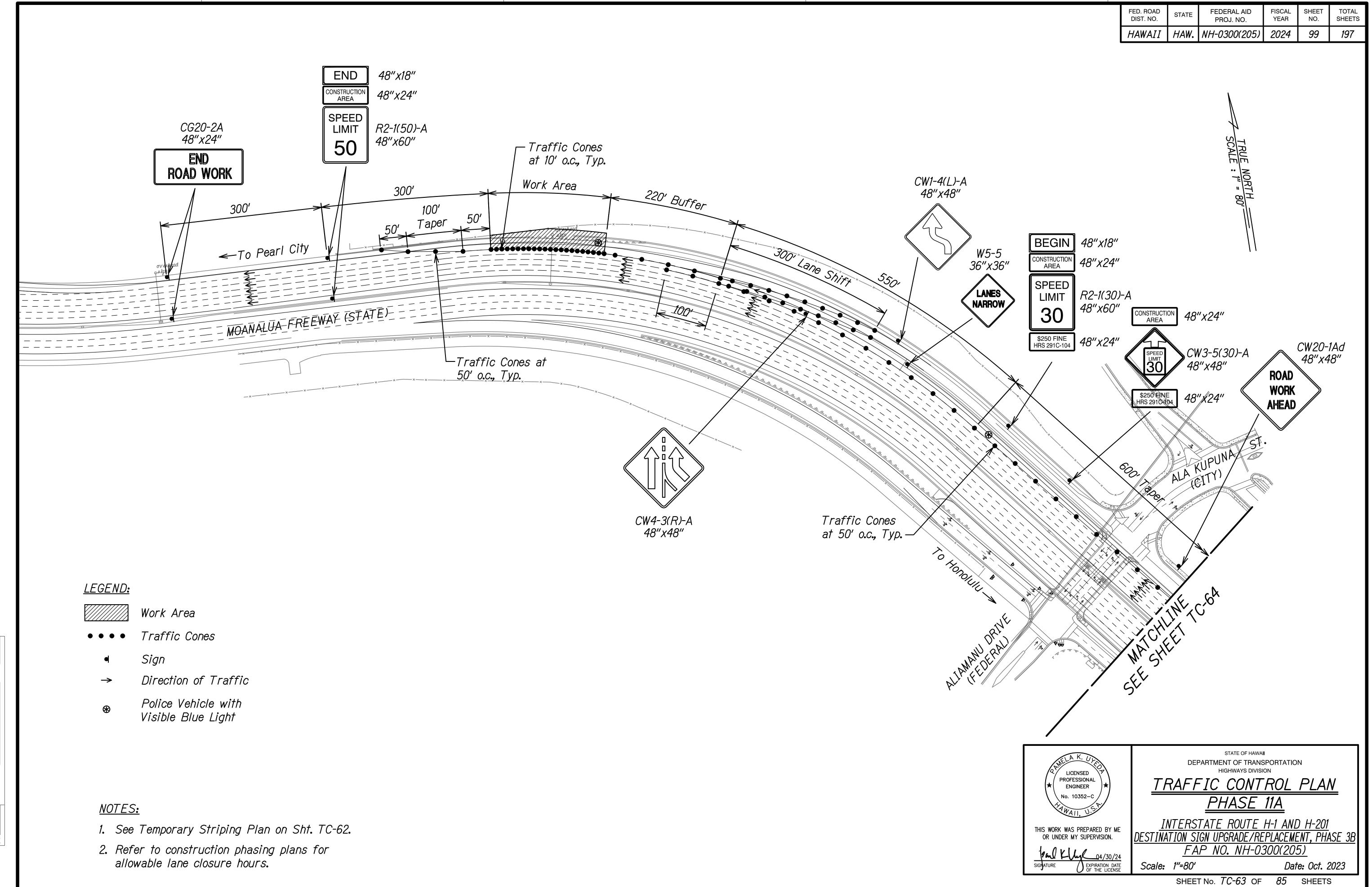












 ORIGINAL
 SURVEY
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 PLAN
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 BY

 NOTE
 BOOK
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 BY

 QUANTITIES
 BY

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