
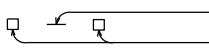
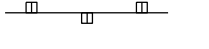



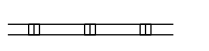


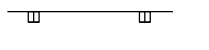

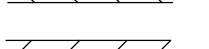


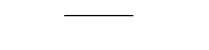
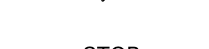

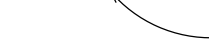


FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	901A-01-19	2020	ADD. 52	167

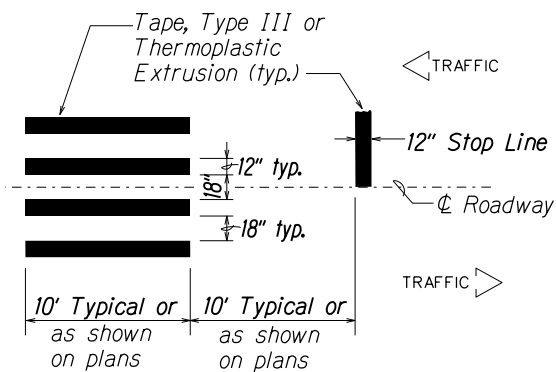
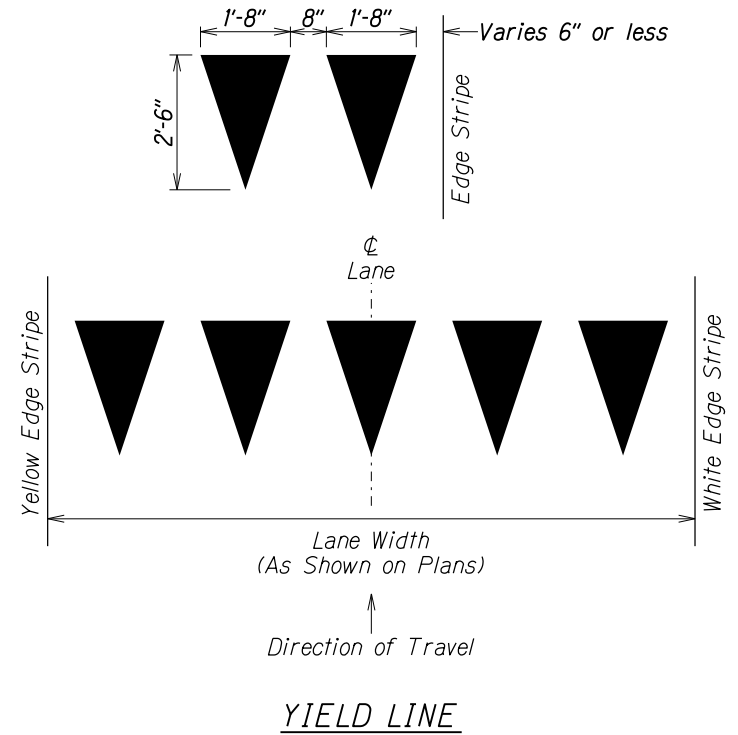
LEGEND

-  10' White Profiled Thermoplastic Stripe
Type C Raised Pavement Markers @ 40'-0" o.c.
-  10' Yellow Profiled Thermoplastic Stripe
Type D Raised Pavement Markers @ 40'-0" o.c.
-  8" White Stripe with Type C Raised Pavement Markers @ 20'-0" o.c. (Tape, Type I or Thermoplastic Extrusion)
-  4" Double Solid Yellow with Type D Raised Pavement Markers @ 20'-0" o.c. (Tape, Type I or Thermoplastic Extrusion))
-  4" Double Solid Yellow Stripes with Type H Raised Pavement Markers @ 20'-0" o.c. (Tape, Type II or Thermoplastic Extrusion))
-  6" Yellow Edge Stripe with Type H Raised Pavement Markers @ 40'-0" o.c. (Tape, Type II or Thermoplastic Extrusion))
-  4" Double Solid White Stripes with Type C Raised Pavement Markers @ 20'-0" o.c. (Tape, Type I or Thermoplastic Extrusion)
-  Lane Change Restriction Marking
10' White Profiled Thermoplastic Stripe
Type C Raised Pavement Markers @ 20'-0" o.c.
4" White Stripe (Tape, Type I or Thermoplastic Extrusion)
-  6" or 8" White Edge Stripe with Type C Raised Pavement Markers @ 40'-0" o.c. (Tape, Type II or Thermoplastic Extrusion)
-  4" White Guide Lines (Tape, Type III or Thermoplastic Extrusion except for bus bays)
-  Transverse Median Marking (Tape, Type II or Thermoplastic Extrusion)
-  Transverse Shoulder Marking (Tape, Type II or Thermoplastic Extrusion)
-  Channelizing Island or Deceleration Lane Gore (Tape, Type II or Thermoplastic Extrusion)
-  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 (Tape, Type III or Thermoplastic Extrusion)
-  Pavement Arrow (Tape, Type III or Thermoplastic Extrusion)
-  STOP
Pavement Word (Tape, Type III or Thermoplastic Extrusion)
-  10' Yellow Profiled Thermoplastic Stripe
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 (Tape, Type I or Thermoplastic Extrusion)
-  Extension of Edge Line, 4" Wide x 2'-0" Long White Stripe @ 10'-0" o.c. w/Type C Markers @ 40'-0" o.c. (Tape, Type III or Thermoplastic Extrusion)

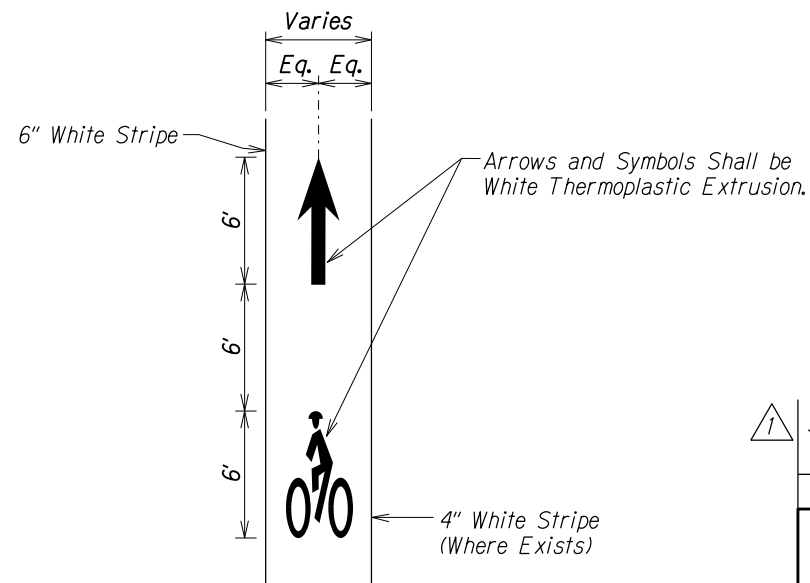
NOTES

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 posts 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. All pedestrian warning signs with supplemental sign shall be on a fluorescent yellow-green retroreflective background with a black legend and border.

LEGEND: 




CROSSWALK STRIPING DETAIL
Not to Scale



BIKE LANE PAVEMENT MARKING DETAIL
Not to Scale

SURVEY PLOTTED BY	DATE
DESIGNED BY	
DESIGNED BY	
QUANTITY BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
40' High Resolution	

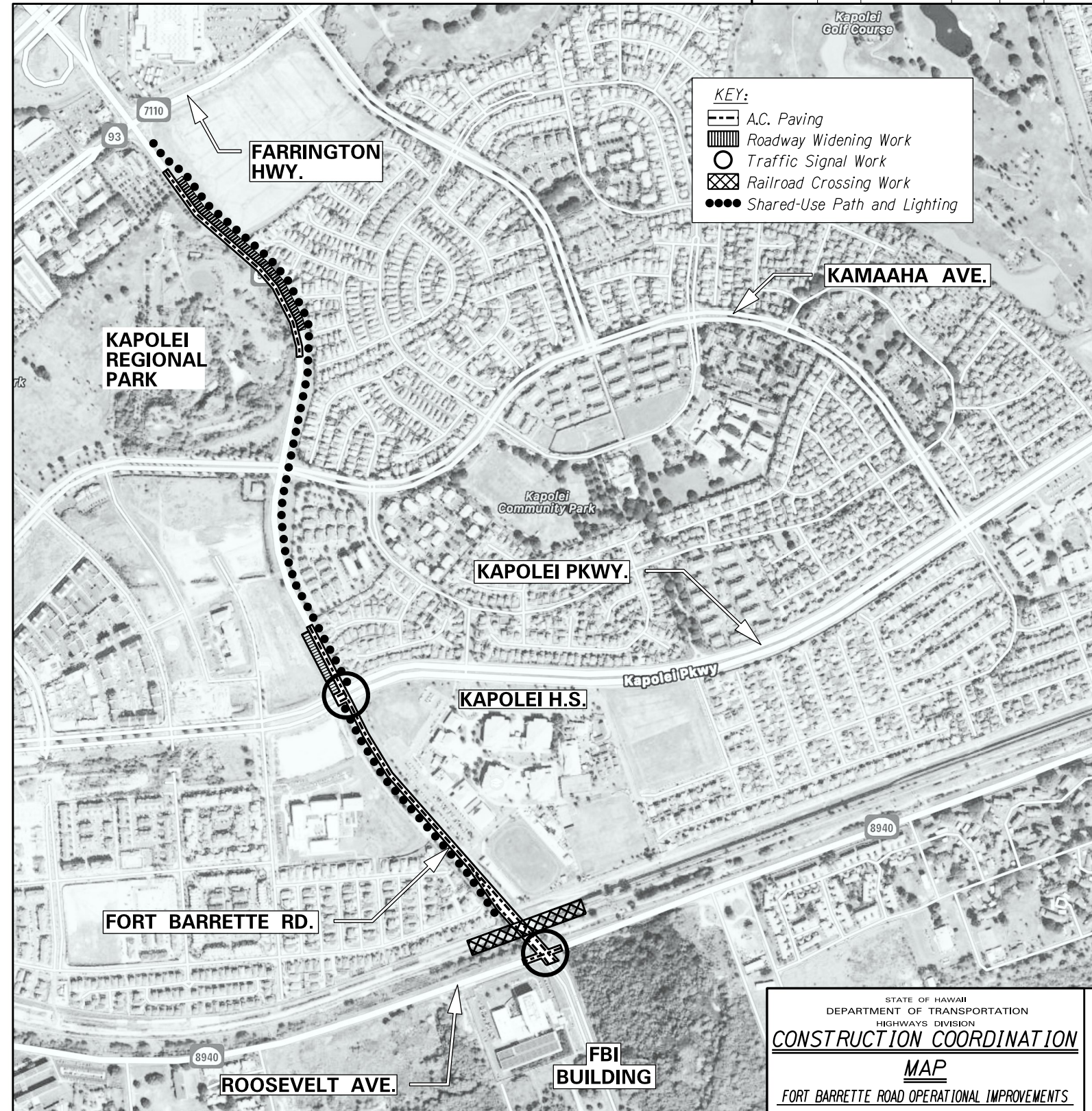
	3/3/20	REVISED TITLE BLOCK AND DELETED LEGEND
DATE	REVISION	
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION		
PAVEMENT MARKING		
LEGEND, NOTES & DETAILS		
FORT BARRETTE ROAD OPERATIONAL IMPROVEMENTS		
Roosevelt Avenue to Farrington Highway		
PROJECT NO. 901A-01-19		
Scale: As Noted	Date: Feb, 2020	
SHEET No. 71 OF 13 SHEETS		

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	901A-01-19	2020	ADD. 52S-1	167

**TRAFFIC CONTROL NOTES FOR CONSTRUCTION COORDINATION
FORT BARRETTE ROAD OPERATIONAL IMPROVEMENTS, 901A-01-19**

- Lane closures will be allowed only from 7:30 a.m. to 2:00 p.m. Monday through Friday.
- In addition to A.C. paving and restriping work, this project also includes:
 - Roadway widening (vicinity of Kapolei Regional Park, Kapolei Parkway intersection)
 - Traffic signal modifications (Kapolei Parkway)
 - Upgrade railroad crossing (North of Roosevelt Ave.)
 - New traffic signal installation (Roosevelt Ave. intersection)
 - Shared-use path and lighting (entire project length)
- The Contractor shall coordinate his work to minimize impacts to existing traffic patterns. Multiple lane-closures shall require approval by the Engineer. If approved, multiple lane-closures shall be implemented with adequate traffic queue storage for each lane-closure location. The Engineer may suspend multiple lane-closures if cumulative work zone traffic delays exceeded 30 minutes.
- Per Standard Specs Sec. 645.03 Construction, the Contractor shall submit site-specific Traffic Control Plan (TCP) to the Engineer for acceptance at least 15 working days before work starts.
- If excess traffic delays (equal to or above 30 minutes) are observed in the field by the Engineer, the Contractor shall take corrective measures and a modified TCP be submitted to the Engineer for acceptance at least 15 working days before such work could resume.
- If lane shift or change to existing traffic patterns must be implemented beyond normal work hours, all conflicting pavement markings shall be removed, and temporary markings shall be installed before traffic patterns are changed. After completion of the work, temporary markings shall be removed, and normal traffic patterns restored.
- The Contractor shall coordinate with nearby Kapolei High School (KHS) administration staff, (808) 305-8000, when working between Roosevelt Ave. and Kapolei Parkway. This coordination shall include, but not limited to, maintaining access to school ground during special events at KHS.
- The Contractor shall coordinate all work with the Hawaiian Railway Society (HRS), (808) 681-5461, when working adjacent to or within the railroad R.O.W.
- The Contractor shall notify the Department of Transportation Services (DTS), Public Transit Division, (808) 768-8396, and the Oahu Transit Services, Inc. Bus Operations, (808) 848-4578, or (808) 852-6016, and Paratransit Operations, (808) 454-5041, or (808) 454-5020, of any closure of street, sidewalk or bus stop at least two (2) weeks prior to starting construction operations.
- The Contractor shall notify the Traffic Signals and Technology Division, Department of Transportation Services (DTS), (808) 768-8388, three (3) days prior to commencing work on the existing and new traffic signal systems.
- The Contractor shall notify the Hawaii Housing Finance and Development Corp. (HHFDC), (808) 587-0620, when working in the vicinity of Kapolei Parkway and Kamaaha Ave. intersections, which are main access roads for the Villages of Kapolei maintained by HHFDC.
- The Contractor shall notify the Hawaii Community Development Authority (HCDA), (808) 594-0300, when working outside of HDOT R.O.W. in the vicinity of Enterprise Street, which is the main access road to nearby Kalaeloa Airport maintained by HCDA.
- The Contractor shall notify the Hawaii FBI Headquarters, (808) 566-4300, when working in the vicinity of Roosevelt Ave. intersection for access coordination to the facility.
- Maintain abutting owners' existing access until replacement access is usable. Obtain permission from abutting owners, including conditions for closing existing access. Submit copy of agreement with abutting owners before beginning work in the affected area.
- Per Standard Specs Sec. 645.03(F) Lane Closures, before scheduling work, submit requests for detours and lane closures as follows:
 - Detours - 8 weeks before implementing detours.
 - Lane closures - 6 weeks before implementing lane closures.

Detours or lane closures will not be allowed before the Engineer accepts detour or lane closure requests.



1	3/3/20	ADDED NEW PLAN SHEET
	DATE	REVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CONSTRUCTION COORDINATION

MAP

FORT BARRETTE ROAD OPERATIONAL IMPROVEMENTS

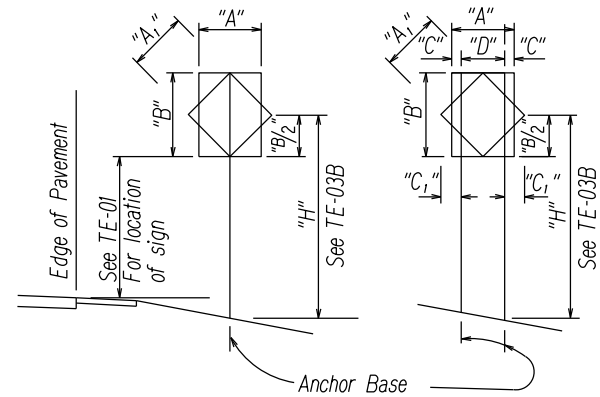
Roosevelt Avenue to Farrington Highway

PROJECT NO. 901A-01-19
Scale: N.T.S. Date: Feb, 2020

SHEET No. T1A OF 13 SHEETS

SURVEY PLOTTED BY	DATE	X
DESIGNED BY		
NOTED BY		
QUANTITIES BY		
CHECKED BY		

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	901A-01-19	2020	ADD. 53	167



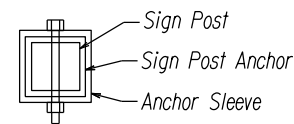
1 - POST
"A" or "A₁" less than 36"

2 - POST
"A" or "A₁" less than 60"

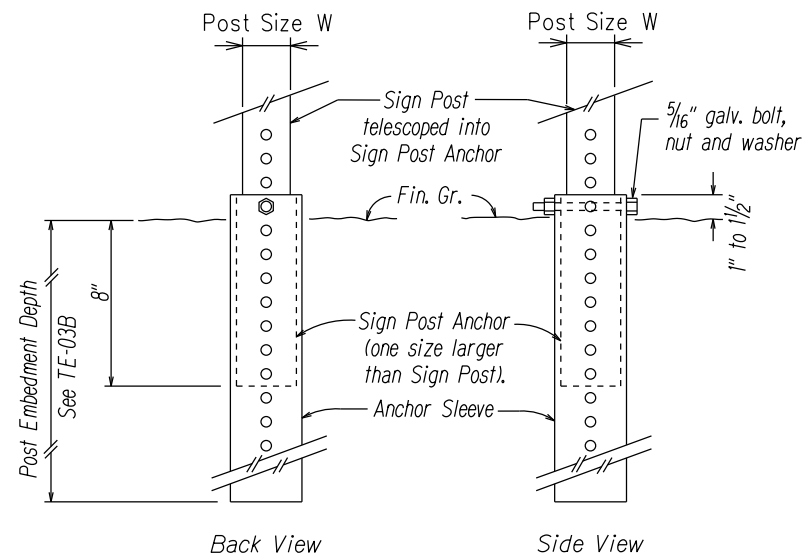
"A" or "A ₁ "	"C"	"C ₁ "
Less than 36"	6"	-
Greater than 36" and less than 48"	9"	19"
Greater than 48"	12"	24"

NOTE: Frame stiffeners are required when D is greater than 24"
See General Notes.

TYPICAL INSTALLATION



TOP VIEW



Back View

Side View

SIGN POST INSTALLATION

ANCHOR BASE DETAIL

Not to Scale

GENERAL NOTES

1. Design Specifications:

(A) "Traffic Signal Supports and Foundations design shall conform with the AASHTO LRFD Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals, 1st Edition, with latest Interim Revisions and as modified by HDOT Memorandum with subject title, "Changes to Design Criteria for Bridges and Structures" (Letter No. HWY-DB 2.5098) dated January 8, 2018."

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 square tube posts shall be 12 gauge unless otherwise specified or shown on the plans.
(C) Square tube posts shall be perforated with 7/16" ϕ 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 without break away anchor base 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.

SURVEY PLOTTED BY	DATE	X
DESIGNED BY		
DESIGNED BY		
QUANTITIES BY		
CHECKED BY		
ORIGINAL PLAN		
NOTE BOOK		
DATE		

3/3/20 REVISED TITLE BLOCK
DATE REVISION

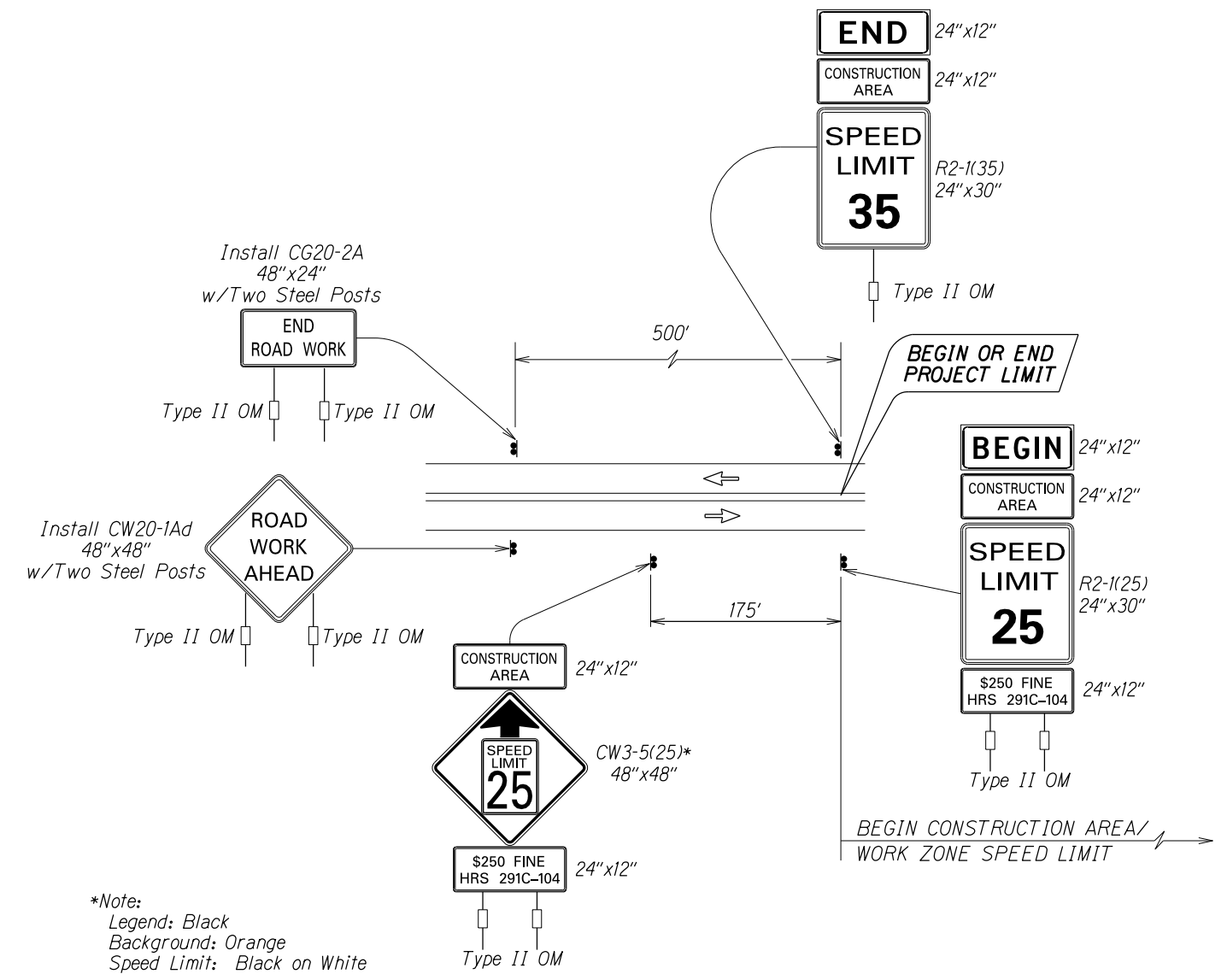
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
GALVANIZED SQUARE TUBE
SIGN POST MOUNTING
FORT BARRETTE ROAD OPERATIONAL IMPROVEMENTS
Roosevelt Avenue to Farrington Highway
PROJECT NO. 901A-01-19

Scale: Not to Scale Date: Feb, 2020

SHEET No. T2 OF 13 SHEETS

ADD. 53

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	901A-01-19	2020	ADD. 54	167

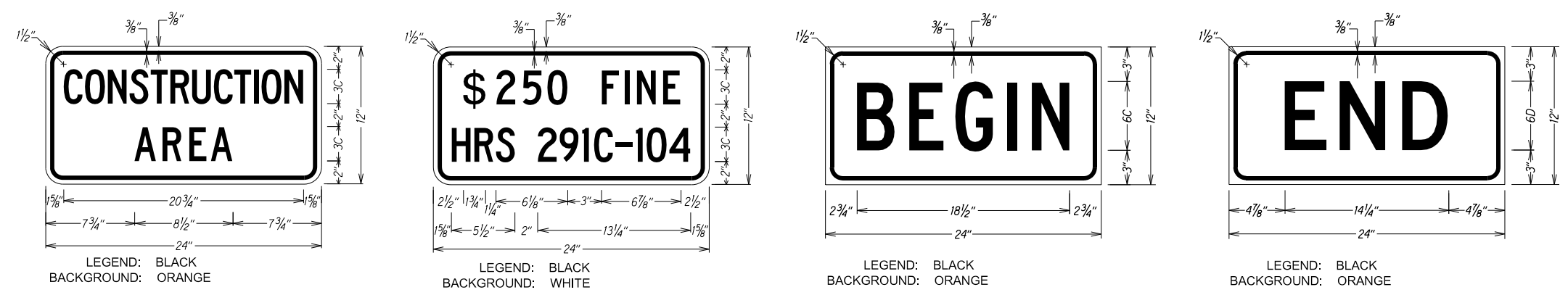


Work Zone Notes:

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 Standard Specifications and/or 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. 645.0100 - Traffic Control.
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. 645.0100 - Traffic Control.

*Note:
 Legend: Black
 Background: Orange
 Speed Limit: Black on White

**TYPICAL DETAIL FOR CONSTRUCTION SIGNS
 ON TWO LANE OR MULTILANE UNDIVIDED LOW SPEED HIGHWAY**
 Not to Scale



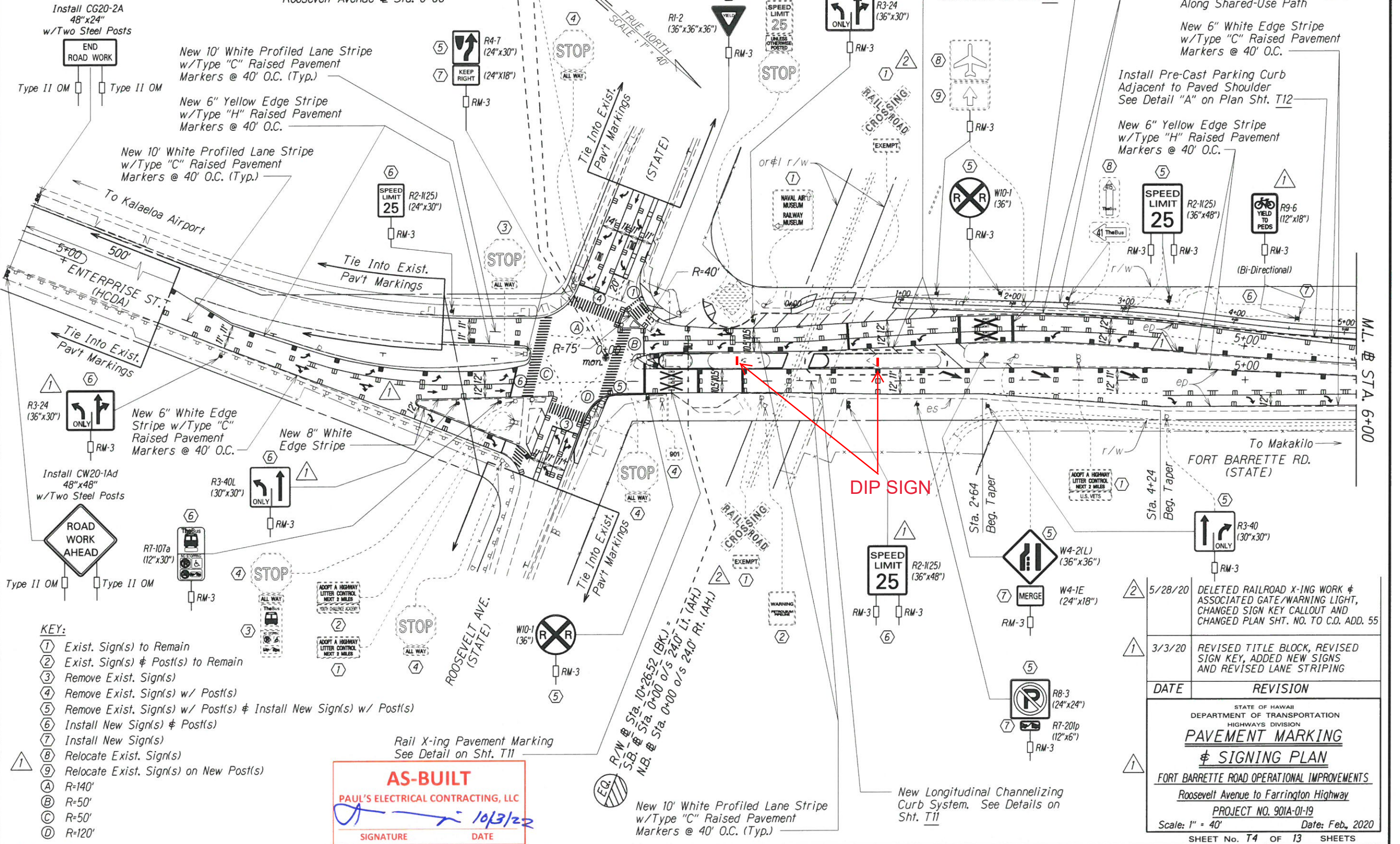
SURVEY PLOTTED BY	DATE	
DESIGNED BY		
DESIGNED BY		
QUANTITIES BY		
CHECKED BY		
ORIGINAL PLAN		
NOTE BOOK		
DATE		

1	3/3/20	REVISED TITLE BLOCK
	DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION		
LOW SPEED UNDIVIDED HIGHWAY		
WORK ZONE SIGNING PLAN, NOTES & DETAILS		
FORT BARRETTE ROAD OPERATIONAL IMPROVEMENTS		
Roosevelt Avenue to Farrington Highway		
PROJECT NO. 901A-01-19		
Scale: Not to Scale		Date: Feb, 2020
SHEET No. T3 OF 13 SHEETS		

ASBUILT DRAWINGS

Roosevelt Avenue @ Sta. -0+3.20 =
 Fort Barrette Road R/W @ Sta. 9+53.74
 Enterprise Street @ Sta. 0+00 =
 Roosevelt Avenue @ Sta. 0+00

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	901A-01-19	2020	C.O. ADD. 55	167



- KEY:**
- ① Exist. Sign(s) to Remain
 - ② Exist. Sign(s) & Post(s) to Remain
 - ③ Remove Exist. Sign(s)
 - ④ Remove Exist. Sign(s) w/ Post(s)
 - ⑤ Remove Exist. Sign(s) w/ Post(s) & Install New Sign(s) w/ Post(s)
 - ⑥ Install New Sign(s) & Post(s)
 - ⑦ Install New Sign(s)
 - ⑧ Relocate Exist. Sign(s)
 - ⑨ Relocate Exist. Sign(s) on New Post(s)
 - (A) R=140'
 - (B) R=50'
 - (C) R=50'
 - (D) R=120'

AS-BUILT
 PAUL'S ELECTRICAL CONTRACTING, LLC
 SIGNATURE: [Signature]
 DATE: 10/3/22

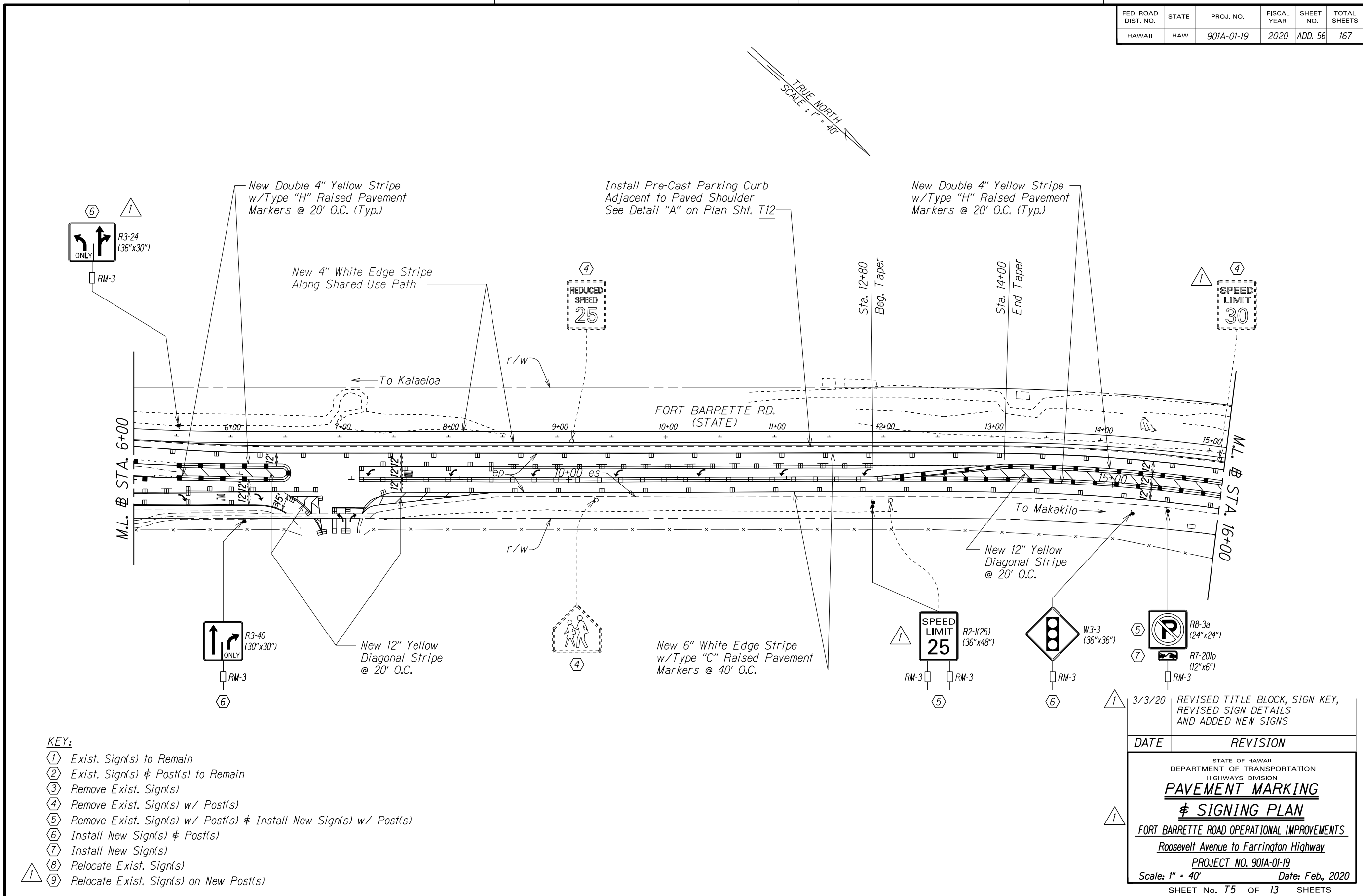
DATE	REVISION
5/28/20	DELETED RAILROAD X-ING WORK & ASSOCIATED GATE/WARNING LIGHT, CHANGED SIGN KEY CALLOUT AND CHANGED PLAN SHT. NO. TO C.O. ADD. 55
3/3/20	REVISED TITLE BLOCK, REVISED SIGN KEY, ADDED NEW SIGNS AND REVISED LANE STRIPING

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
PAVEMENT MARKING & SIGNING PLAN
 FORT BARRETTE ROAD OPERATIONAL IMPROVEMENTS
 Roosevelt Avenue to Farrington Highway
 PROJECT NO. 901A-01-19
 Scale: 1" = 40' Date: Feb., 2020
 SHEET No. T4 OF 13 SHEETS

"AS-BUILT"

C.O. ADD. 55

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	901A-01-19	2020	ADD. 56	167



SURVEY PLOTTED BY	DATE	
DESIGNED BY		
QUANTITIES BY		
CHECKED BY		
ORIGINAL PLAN		
NOTE BOOK		
4/2/2020		

- KEY:**
- ① Exist. Sign(s) to Remain
 - ② Exist. Sign(s) & Post(s) to Remain
 - ③ Remove Exist. Sign(s)
 - ④ Remove Exist. Sign(s) w/ Post(s)
 - ⑤ Remove Exist. Sign(s) w/ Post(s) & Install New Sign(s) w/ Post(s)
 - ⑥ Install New Sign(s) & Post(s)
 - ⑦ Install New Sign(s)
 - ⑧ Relocate Exist. Sign(s)
 - ⑨ Relocate Exist. Sign(s) on New Post(s)

DATE	REVISION
3/3/20	REVISED TITLE BLOCK, SIGN KEY, REVISED SIGN DETAILS AND ADDED NEW SIGNS

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PAVEMENT MARKING
& SIGNING PLAN

FORT BARRETTE ROAD OPERATIONAL IMPROVEMENTS
Roosevelt Avenue to Farrington Highway
PROJECT NO. 901A-01-19
Scale: 1" = 40' Date: Feb, 2020

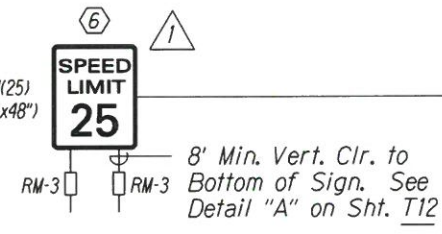
SHEET No. 75 OF 13 SHEETS

ASBUILT DRAWINGS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	901A-01-19	2020	C.O. ADD. 57	167

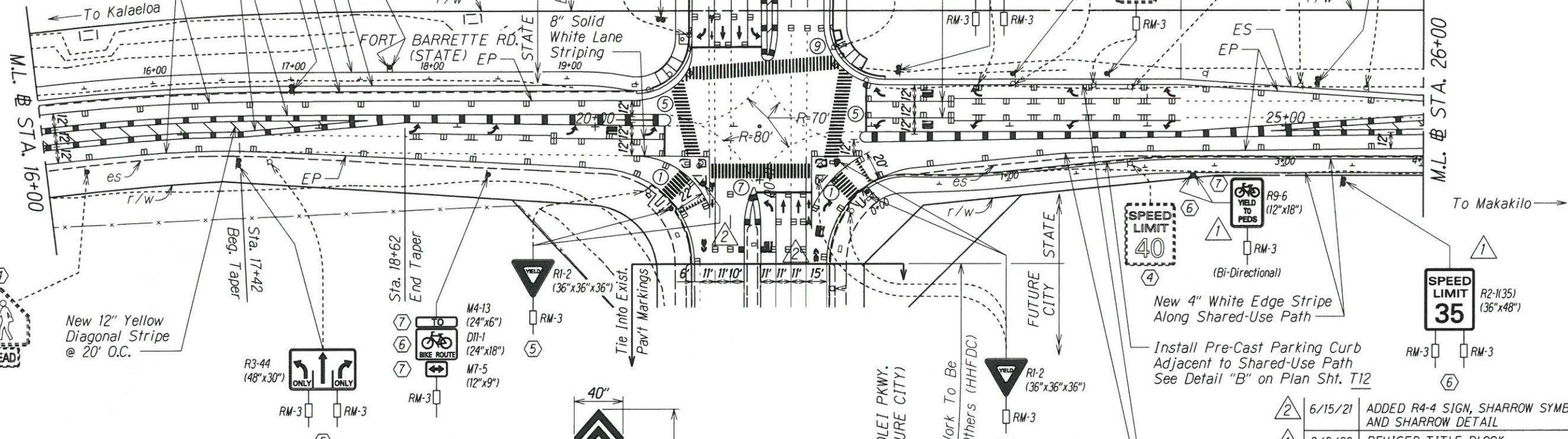
New 4" White Edge Stripe Along Shared-Use Path

Install Pre-Cast Parking Curb Adjacent to Paved Shoulder See Detail "A" on Plan Sht. T12



New Double 4" Yellow Stripe w/Type "H" Raised Pavement Markers @ 20' O.C. (Typ.)

New 6" White Edge Stripe w/Type "C" Raised Pavement Markers @ 40' O.C.



New 12" Yellow Diagonal Stripe @ 20' O.C.

New 4" White Edge Stripe Along Shared-Use Path

Install Pre-Cast Parking Curb Adjacent to Shared-Use Path See Detail "B" on Plan Sht. T12

New 6" White Edge Stripe w/Type "C" Raised Pavement Markers @ 40' O.C.

- KEY:
- ① Exist. Sign(s)
 - ② Exist. Sign(s)
 - ③ Remove Exist.
 - ④ Remove Exist.
 - ⑤ Remove Exist.
 - ⑥ Install New Sign
 - ⑦ Install New Sign
 - ⑧ Relocate Exist.
 - ⑨ Relocate Exist. Sign(s) on New Post(s)

AS-BUILT

PAUL'S ELECTRICAL CONTRACTING, LLC

SIGNATURE

10/3/22

DATE



APPROVED:

CHIEF, TRAFFIC REVIEW BRANCH, DPP
(For Work within Proposed City R.O.W.)

Date

DATE	REVISION
6/15/21	ADDED R4-4 SIGN, SHARROW SYMBOLS AND SHARROW DETAIL
3/3/20	REVISED TITLE BLOCK, REVISED SIGN KEY AND SIGNS DETAILS

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PAVEMENT MARKING

& SIGNING PLAN

FORT BARRRETTE ROAD OPERATIONAL IMPROVEMENTS
Roosevelt Avenue to Farrington Highway

PROJECT NO. 901A-01-19
Scale: 1" = 40' Date: Feb., 2020

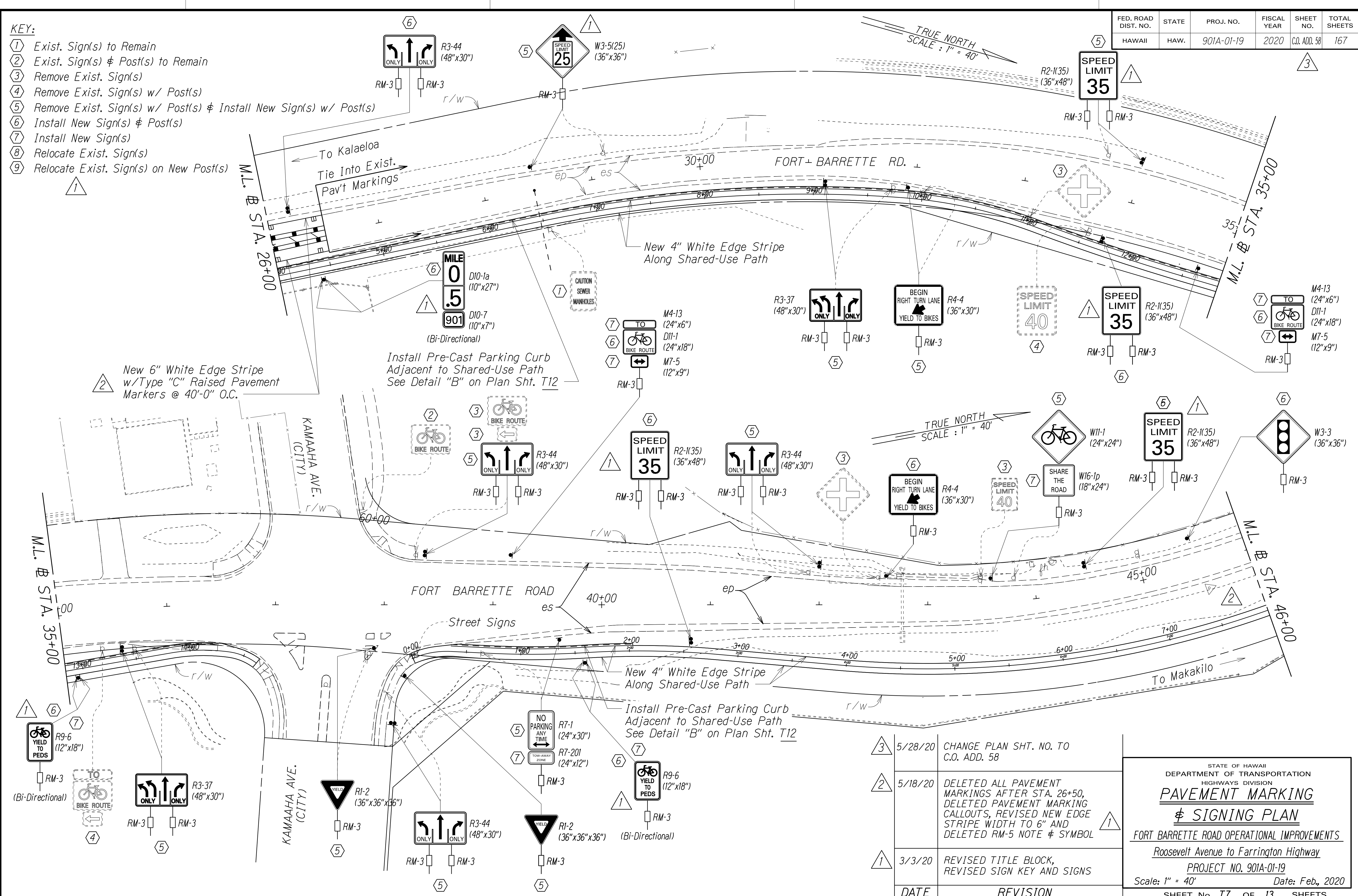
SHEET No. T6 OF 13 SHEETS

"AS-BUILT"

C.O. ADD. 57

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	901A-01-19	2020	C.O. ADD. 58	167

- KEY:**
- ① Exist. Sign(s) to Remain
 - ② Exist. Sign(s) & Post(s) to Remain
 - ③ Remove Exist. Sign(s)
 - ④ Remove Exist. Sign(s) w/ Post(s)
 - ⑤ Remove Exist. Sign(s) w/ Post(s) & Install New Sign(s) w/ Post(s)
 - ⑥ Install New Sign(s) & Post(s)
 - ⑦ Install New Sign(s)
 - ⑧ Relocate Exist. Sign(s)
 - ⑨ Relocate Exist. Sign(s) on New Post(s)



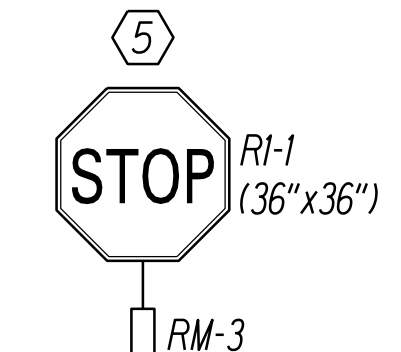
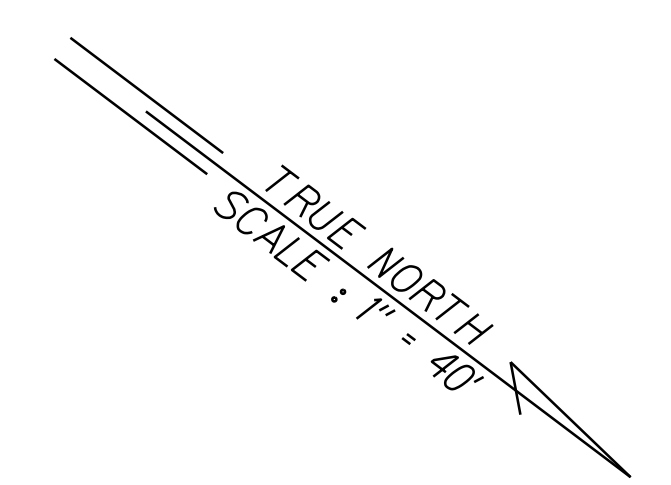
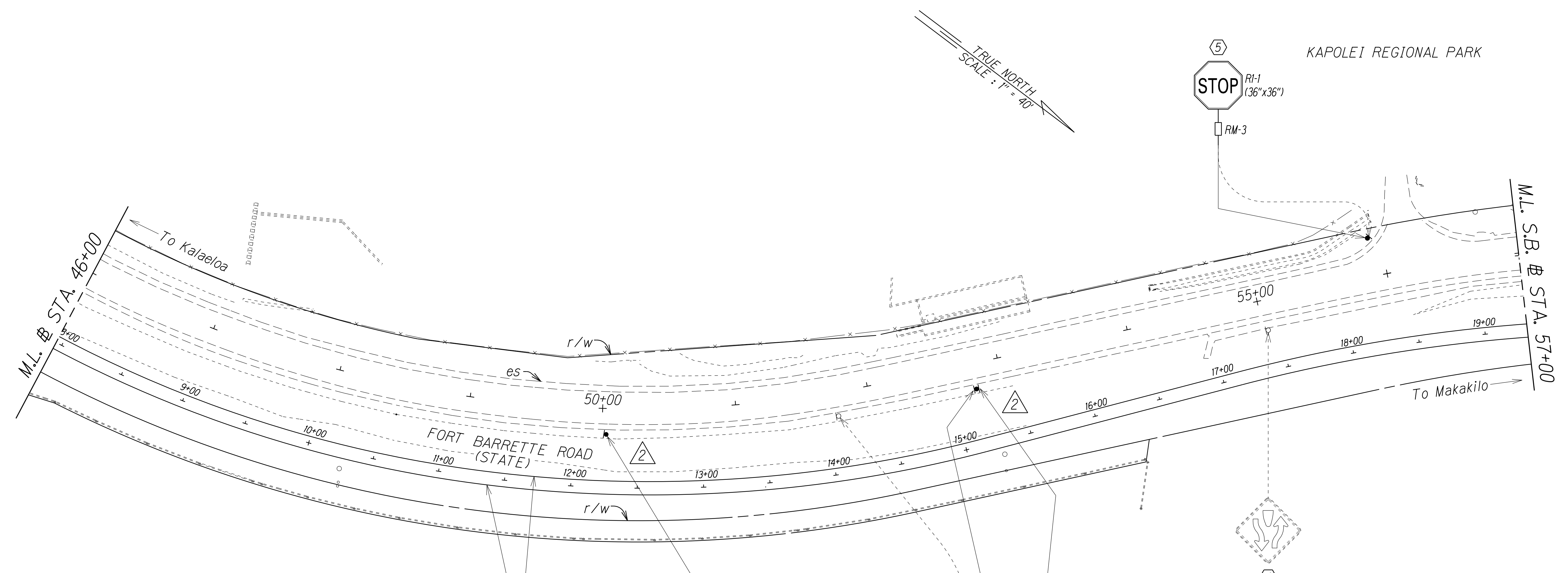
SURVEY PLOTTED BY: _____ DATE: _____
 DRAWN BY: _____
 TRACED BY: _____
 DESIGNED BY: _____
 CHECKED BY: _____

DATE	REVISION
5/28/20	CHANGE PLAN SHT. NO. TO C.O. ADD. 58
5/18/20	DELETED ALL PAVEMENT MARKINGS AFTER STA. 26+50, DELETED PAVEMENT MARKING CALLOUTS, REVISED NEW EDGE STRIPE WIDTH TO 6" AND DELETED RM-5 NOTE & SYMBOL
3/3/20	REVISED TITLE BLOCK, REVISED SIGN KEY AND SIGNS

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
PAVEMENT MARKING
 & **SIGNING PLAN**
 FORT BARRETTE ROAD OPERATIONAL IMPROVEMENTS
 Roosevelt Avenue to Farrington Highway
 PROJECT NO. 901A-01-19
 Scale: 1" = 40' Date: Feb., 2020
 SHEET No. T7 OF 13 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	901A-01-19	2020	C.O. ADD. 59	167

3

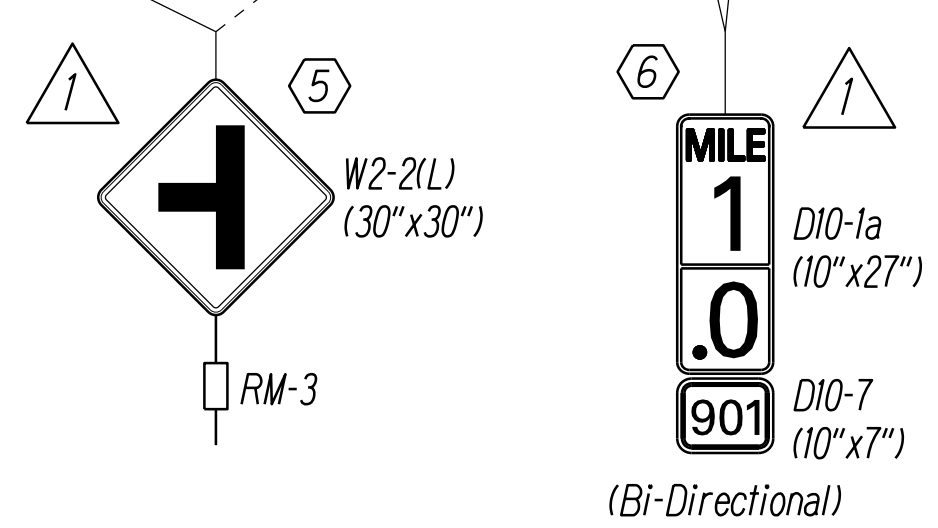


KAPOLEI REGIONAL PARK

M.L. # STA. 46+00
To Kalaheo

M.L. S.B. # STA. 57+00
To Makakilo

- KEY:**
- ① Exist. Sign(s) to Remain
 - ② Exist. Sign(s) & Post(s) to Remain
 - ③ Remove Exist. Sign(s)
 - ④ Remove Exist. Sign(s) w/ Post(s)
 - ⑤ Remove Exist. Sign(s) w/ Post(s) & Install New Sign(s) w/ Post(s)
 - ⑥ Install New Sign(s) & Post(s)
 - ⑦ Install New Sign(s)
 - ⑧ Relocate Exist. Sign(s)
 - ⑨ Relocate Exist. Sign(s) on New Post(s)



DATE	REVISION
5/28/20	CHANGED PLAN SHT. NO. TO C.O. ADD. 59
5/18/20	DELETED ALL PAVEMENT MARKINGS, DELETED PAVEMENT MARKING CALLOUTS, RELOCATED SIGNS AND DELETED RM-5 NOTE & SYMBOLS
3/3/20	REVISED TITLE BLOCK, REVISED SIGN KEY AND SIGNS

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PAVEMENT MARKING
& SIGNING PLAN

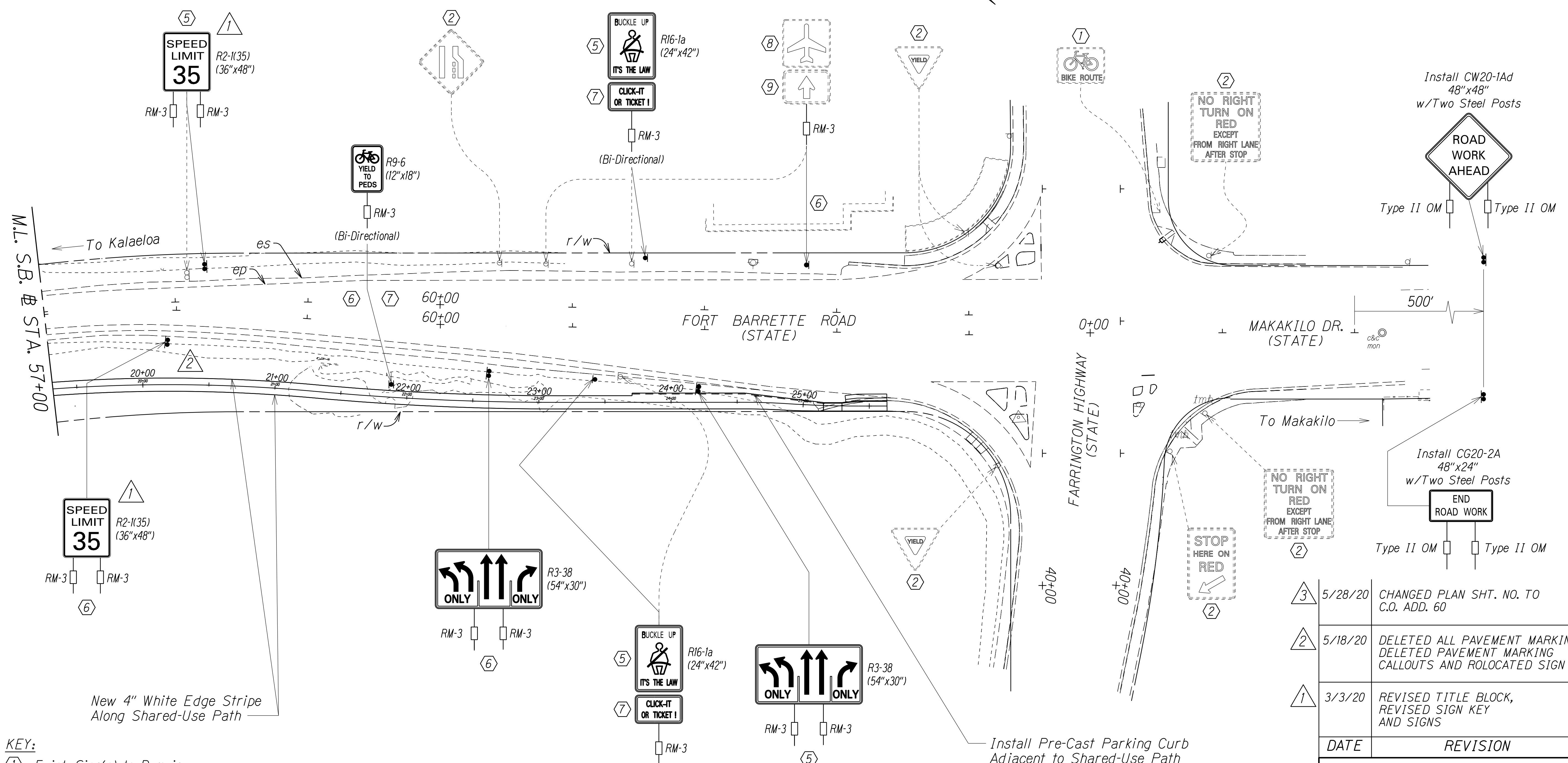
FORT BARRETTE ROAD OPERATIONAL IMPROVEMENTS
Roosevelt Avenue to Farrington Highway
PROJECT NO. 901A-01-19
Scale: 1" = 40' Date: Feb., 2020

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

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	901A-01-19	2020	C.O. ADD. 60	167

3

TRUE NORTH
SCALE: 1" = 40'



KEY:

- ① Exist. Sign(s) to Remain
- ② Exist. Sign(s) & Post(s) to Remain
- ③ Remove Exist. Sign(s)
- ④ Remove Exist. Sign(s) w/ Post(s)
- ⑤ Remove Exist. Sign(s) w/ Post(s) & Install New Sign(s) w/ Post(s)
- ⑥ Install New Sign(s) & Post(s)
- ⑦ Install New Sign(s)
- ⑧ Relocate Exist. Sign(s)
- ⑨ Relocate Exist. Sign(s) on New Post(s)

SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
CHECKED BY	

DATE	REVISION
5/28/20	CHANGED PLAN SHT. NO. TO C.O. ADD. 60
5/18/20	DELETED ALL PAVEMENT MARKINGS, DELETED PAVEMENT MARKING CALLOUTS AND ROLOCATED SIGN
3/3/20	REVISED TITLE BLOCK, REVISED SIGN KEY AND SIGNS

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PAVEMENT MARKING
& SIGNING PLAN

FORT BARRETTE ROAD OPERATIONAL IMPROVEMENTS
Roosevelt Avenue to Farrington Highway
PROJECT NO. 901A-01-19
Scale: 1" = 40' Date: Feb., 2020

Install Pre-Cast Parking Curb Adjacent to Shared-Use Path See Detail "B" on Plan Sht. T12

HIGHWAY LIGHTING NOTES

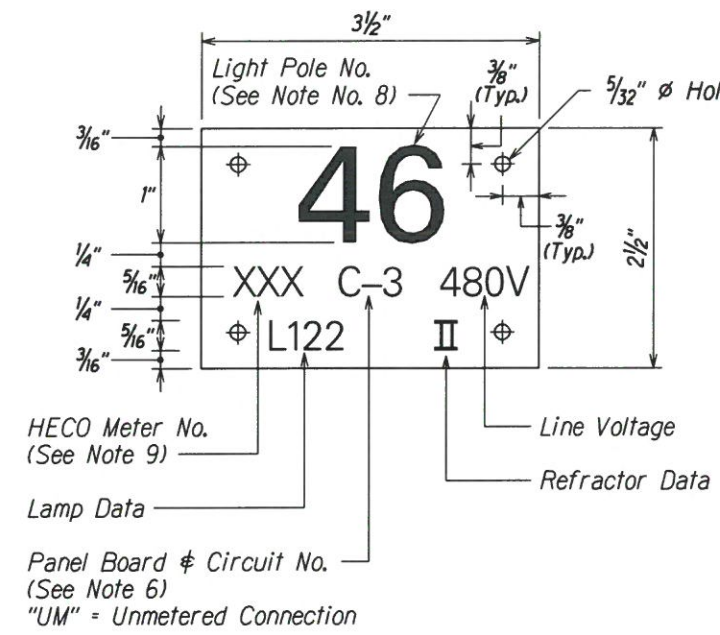
- Contractor to energize highway lights a minimum of six (6) hours for Final Inspection and Acceptance. Contractor to assume costs.
- Contractor shall have one set of approved plans at the job site at all times during the construction work.
- All neutral conductors shall have solid white insulation. Any other method of identification is unacceptable.
- Contractor shall not backfill trenches until work is approved by the Engineer.
- The Contractor shall inform the inspector of all concrete pours at least two (2) working days in advance. Concrete shall not be poured until approval is granted by the inspector.
- All work shall be done by a duly licensed electrician.
- Trench dirt and material will not be allowed to be stored on roadway or shoulder.
- Temporary trench patches shall match grade.
- Engineer to determine salvageable material. Deliver all salvageable material to the baseyard as directed by the Engineer. Remaining material shall be Contractor's property.
- The Contractor shall be responsible for any damages to existing highway lighting facilities and damages shall be repaired by the Contractor at his cost with no additional cost to the State.
- Contractor shall field verify the existing lighting electrical circuit for line voltage and phases prior to the start of lighting electrical work.
- Should the existing lighting electrical circuit be different from the plan, the Contractor shall report the findings to the Engineer for corrective actions.
- After completion of electrical work, the Contractor shall provide all relevant lighting electrical circuit information to the Engineer for As-Built plan record.

DEMOLITION & CONSTRUCTION NOTES

- The Contractor shall verify all existing circuit wiring prior to any demolition work.
- Existing highway lighting system shall remain operational during non daylight hours until New highway lighting system is operational. Contractor shall provide temporary lighting if the existing highway lights are de-energized before the new highway lights are operational. Temporary work shall be coordinated with and shall be acceptable to the Engineer. Temporary highway lighting system will not be paid for separately, but considered incidental to the Various Contract Items.
- All conduits shall not be paid for separately but shall be considered incidental to the various contract items.
- Make directional changes in the conduits, such as bends and changes to clear obstructions with curved segments using accepted deflection couplings or with short lengths of straight ducts and couplings. The deflection angle between two adjacent lengths of ducts shall not exceed 6". The bends shall not have a radius of less than 12 times the nominal size of the conduit. The Contractor may use factory-made ells.

ELECTRICAL SYMBOLS

- ⊕ Existing utility pole with street light
- ⊕ Existing utility pole with street light to be removed
- New utility pole with street light
- Existing Street Light Pullbox
- *— OH/SL —* Existing overhead street light circuit to be removed
- OH/SL — New overhead street light circuit



NOTES

- Use 3-Ply Laminated Flexible Plastic Black-White-Black Thickness: Black Cap Sheet-0.010", White Base Sheet-0.052", Black Base Sheet-0.010".
- Light Pole Number Size shall be 1" High and Engraved 1/8" Wide, White in Color (Number as Required).
- Nomenclature Size Shall be 5/16" High and Engraved 1/32" Wide, White in Color (HECO Meter Number Panel Board and Circuit Number, Line Voltage, Lamp Data and Refractor Data as Required).
- Attach to Aluminum and Steel Post with No. 8 Stainless Steel, 1/2" Long Drive Screws in 1/8" Drill Hole. Attach to Wood Poles with 4D Aluminum Nail.
- Numbers are Inscribed by Cutting Through "Black Cap Sheet" to Expose "White Letters".
- Nomenclature Required for Systems with Two or More Circuits (Letter Indicates Panel Board, Number Indicates Circuit).
- For Light Poles Installed on Ramp, Assign Numbers to Include Ramp I.D. and Light Number. Legend May Be Less Than One (1) Inch in Height.
- Light Numbers Shall Be Obtained from the State. Use an Alphabet Suffix to Designate Lights Mounted on the Same Pole (E.G. 123A & 123B).
- For Non-Metered System, Call Out the Contract Number.

ORIGINAL PLAN	DATE
SURVEY PLOTTED BY	
DRAWN BY	
TRACED BY	
REVISIONS BY	
QUANTITIES BY	
CHECKED BY	

AS-BUILT

PAUL'S ELECTRICAL CONTRACTING, LLC

10/3/22

SIGNATURE DATE


LIGHT POLE TAG DETAIL
Not to Scale

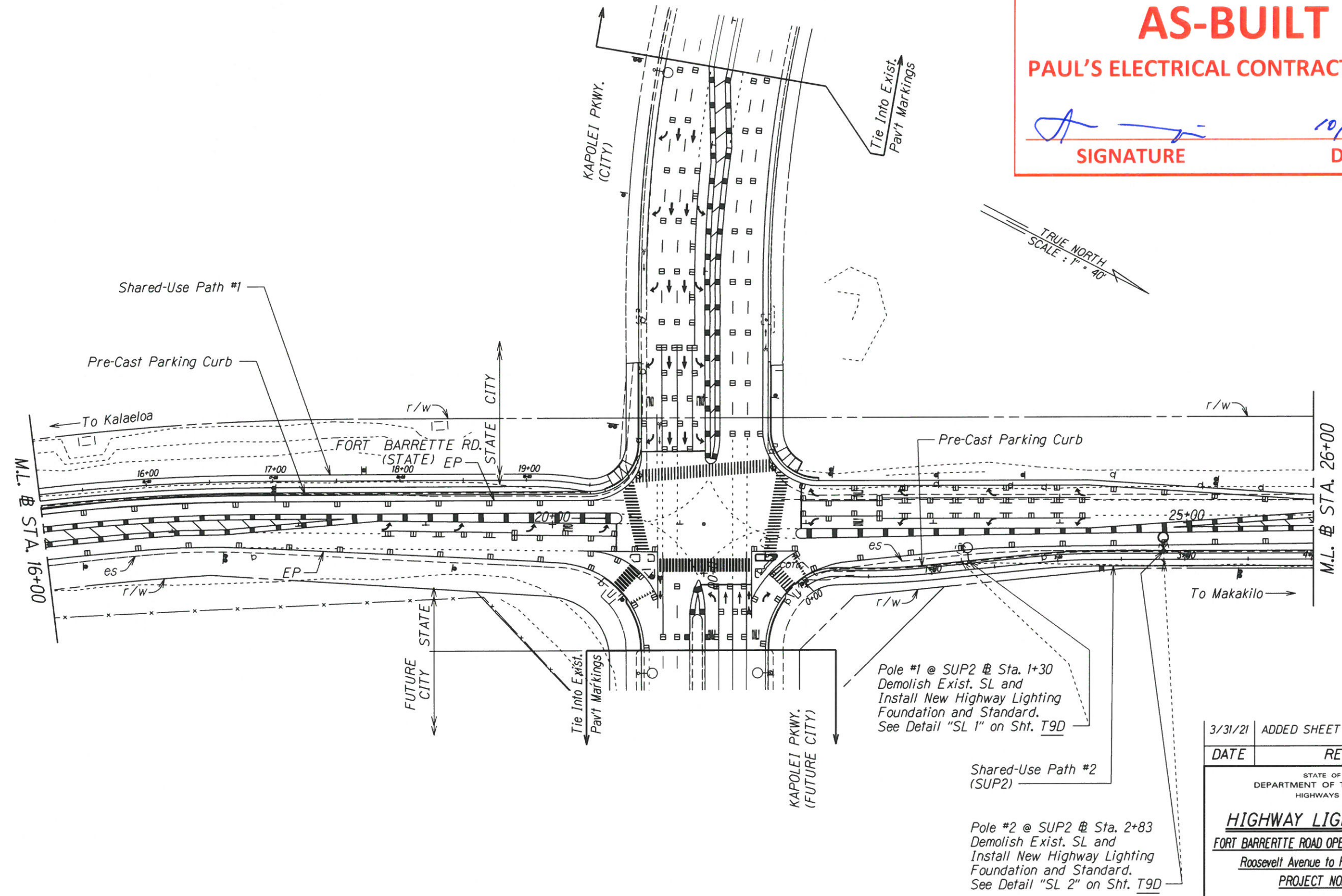
3/31/21	ADDED SHEET
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
HIGHWAY LIGHTING NOTES	
FORT BARRERTE ROAD OPERATIONAL IMPROVEMENTS	
Roosevelt Avenue to Farrington Highway	
PROJECT NO. 901A-01-19	
Scale: 1" = 40'	Date: Mar., 2021
SHEET No. T9A OF SHEETS	

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	901A-01-19	2020	C.O. 60S-2	167

ASBUILT DRAWINGS

AS-BUILT
PAUL'S ELECTRICAL CONTRACTING, LLC


10/3/22
 SIGNATURE DATE



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

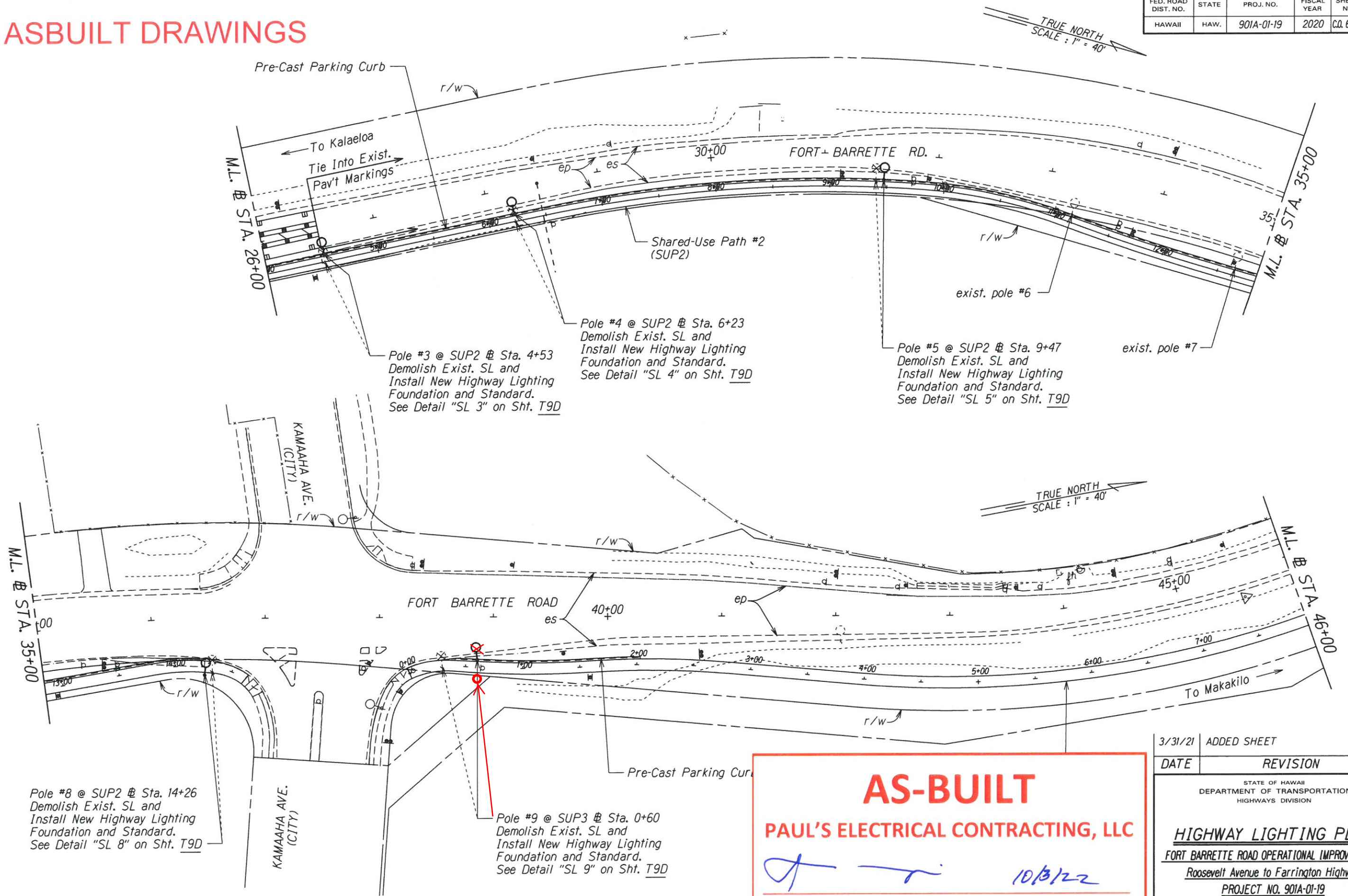
3/31/21	ADDED SHEET
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
HIGHWAY LIGHTING PLAN FORT BARRERTE ROAD OPERATIONAL IMPROVEMENTS Roosevelt Avenue to Farrington Highway PROJECT NO. 901A-01-19	
Scale: 1" = 40'	Date: Mar., 2021
SHEET No. T9B OF SHEETS	

"AS-BUILT"

C.O. 60S-2

ASBUILT DRAWINGS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	901A-01-19	2020	C.O. 60S-3	167



TRUE NORTH
SCALE: 1" = 40'

TRUE NORTH
SCALE: 1" = 40'

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

Pole #8 @ SUP2 @ Sta. 14+26
Demolish Exist. SL and
Install New Highway Lighting
Foundation and Standard.
See Detail "SL 8" on Sht. T9D

Pole #9 @ SUP3 @ Sta. 0+60
Demolish Exist. SL and
Install New Highway Lighting
Foundation and Standard.
See Detail "SL 9" on Sht. T9D

AS-BUILT

PAUL'S ELECTRICAL CONTRACTING, LLC

SIGNATURE

10/13/22

DATE

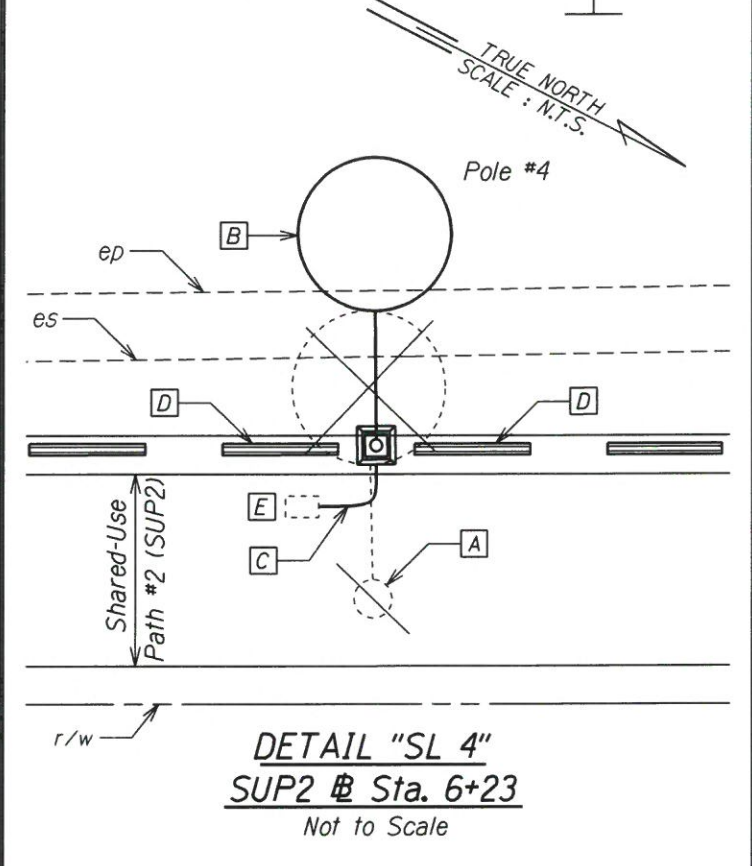
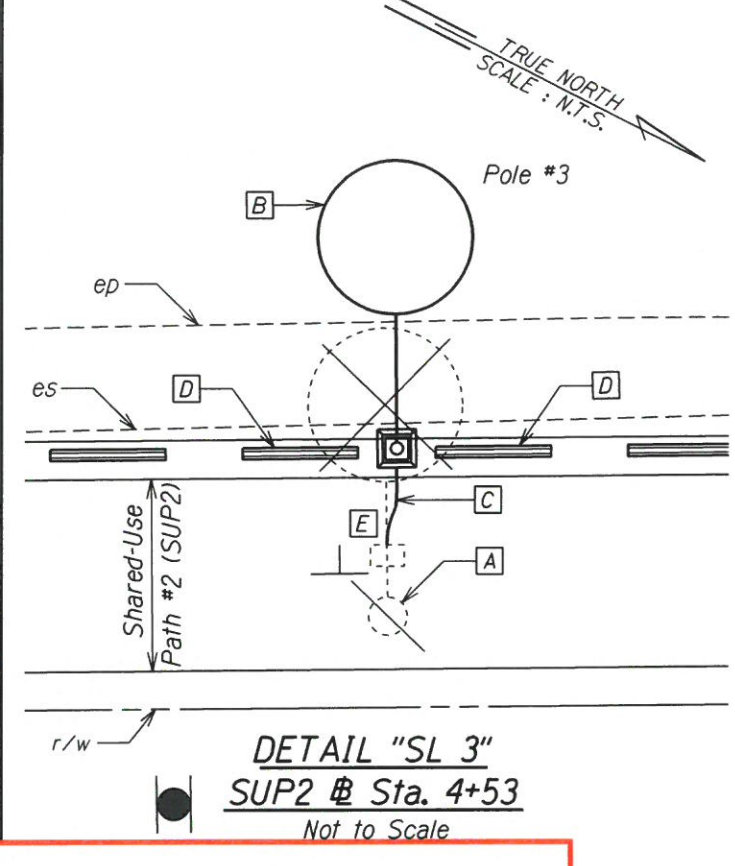
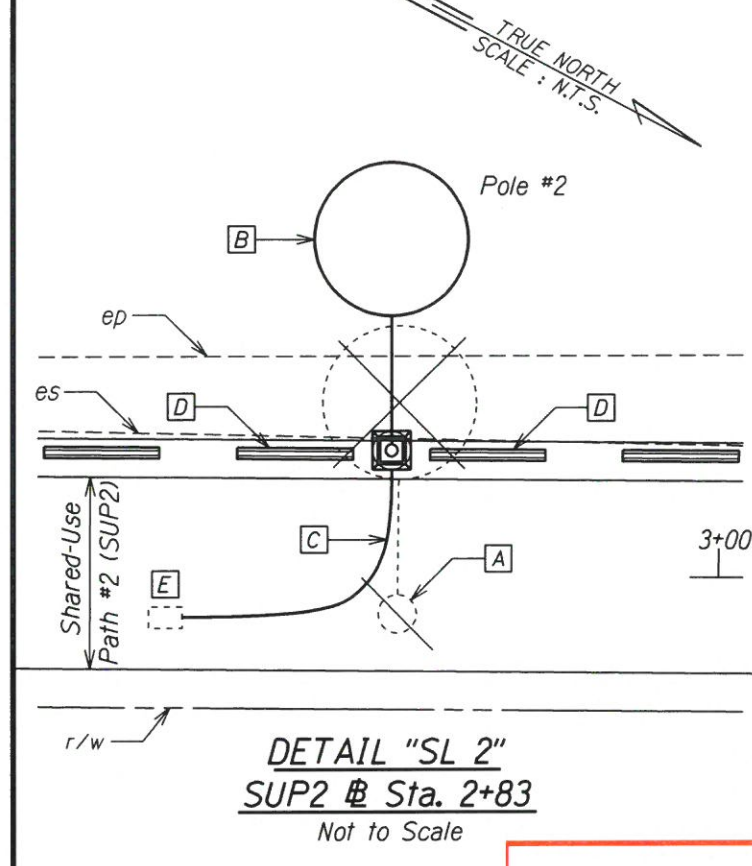
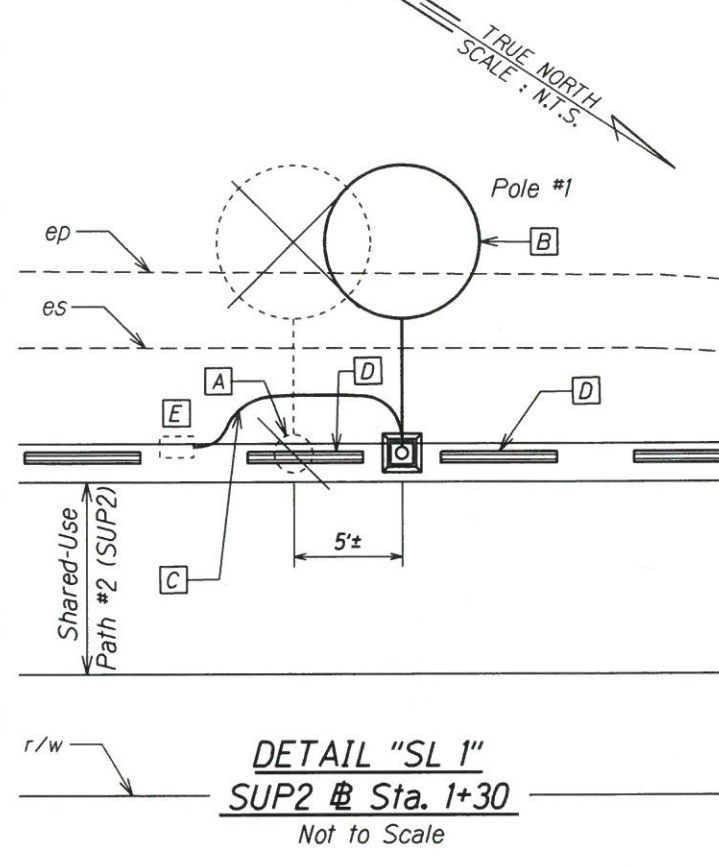
3/31/21	ADDED SHEET
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
HIGHWAY LIGHTING PLAN	
FORT BARRETTE ROAD OPERATIONAL IMPROVEMENTS	
Roosevelt Avenue to Farrington Highway	
PROJECT NO. 901A-01-19	
Scale: 1" = 40'	Date: Mar., 2021
SHEET No. T9C OF SHEETS	

"AS-BUILT"

C.O. 60S-3

ASBUILT DRAWINGS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	901A-01-19	2020	C.O. 60S-4	167

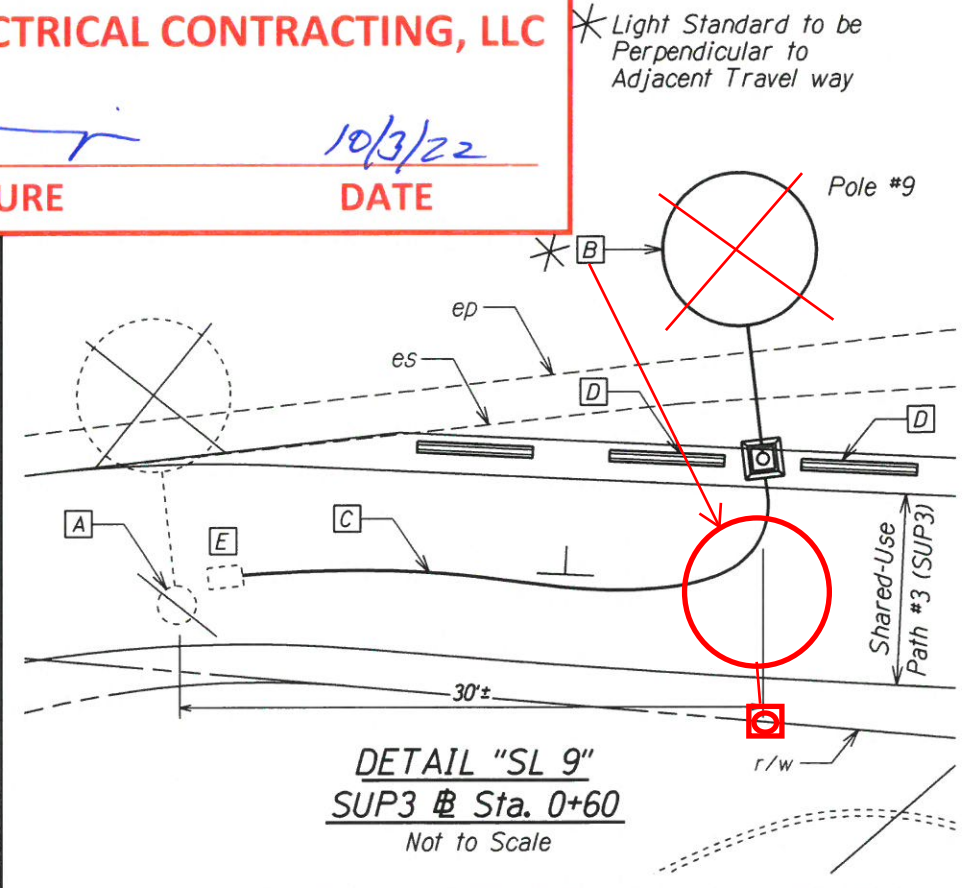
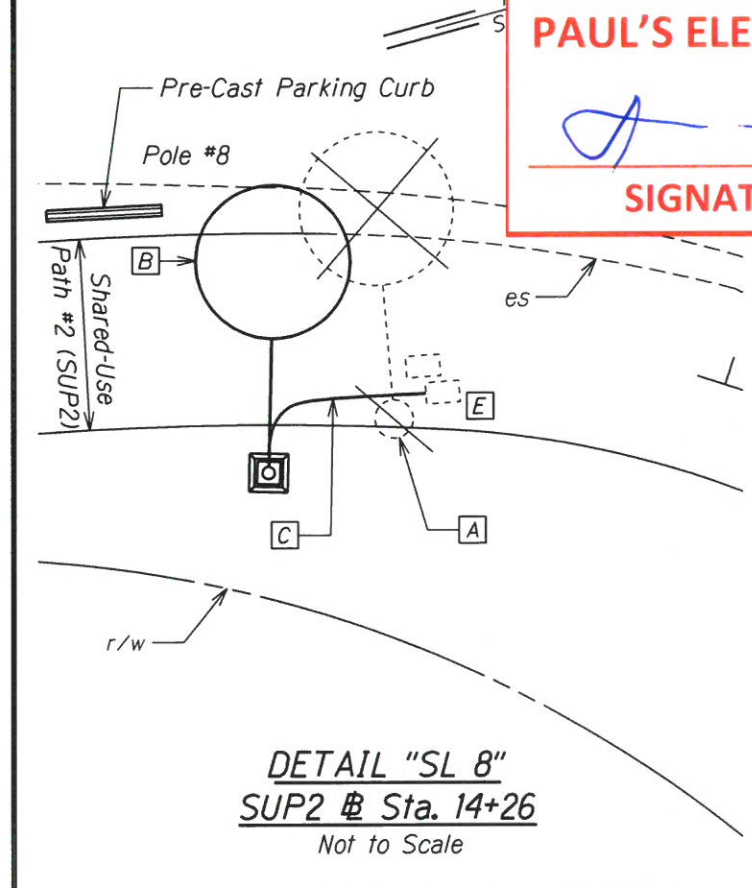
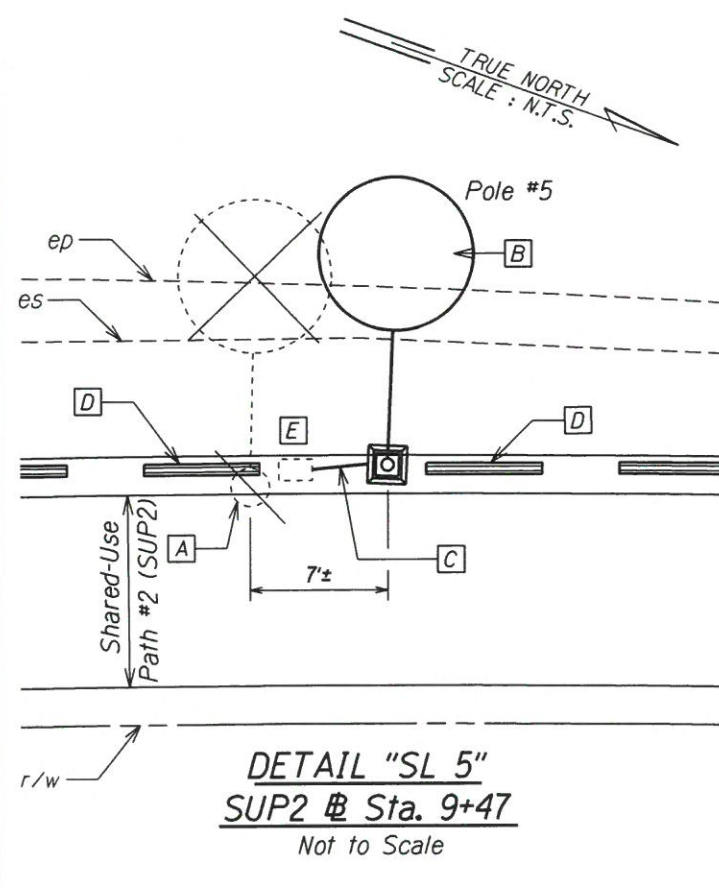


AS-BUILT
PAUL'S ELECTRICAL CONTRACTING, LLC

[Signature]
SIGNATURE

10/3/22
DATE

* Light Standard to be Perpendicular to Adjacent Travel way



- SL NOTES:**
- [A] Remove Exist. SL & Demolish Exist. Foundation to 12" Below SUP Finish Grade.
 - [B] Install New SL Foundation & Standard See Shts. T9E & T9F for Details.
 - [C] New Underground 1-2"Ø PVC Conduit (Sch. 80, Direct-Buried). Install New Wiring to Complete SL Circuit (3-#6 RHW-USE & 1-#6 Gnd).
 - [D] Adjust Parking Curb Spacing as Necessary
 - [E] Exist. SL Pullbox

3/31/21	ADDED SHEET
DATE	REVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

HIGHWAY LIGHTING PLAN
FORT BARRERTE ROAD OPERATIONAL IMPROVEMENTS
Roosevelt Avenue to Farrington Highway
PROJECT NO. 901A-01-19
Scale: N.T.S. Date: Mar., 2021

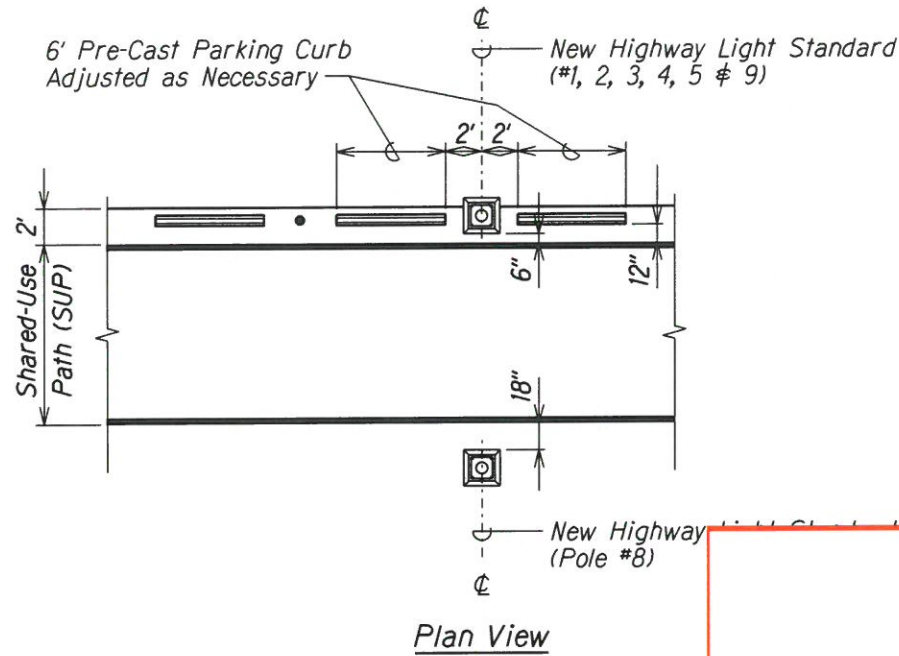
SHEET No. T9D OF SHEETS

SURVEY PLOTTED BY	DATE
DRAWN BY	
NOTES BOOK	
QUANTITY BY	
CHECKED BY	

"AS-BUILT"

C.O. 60S-4

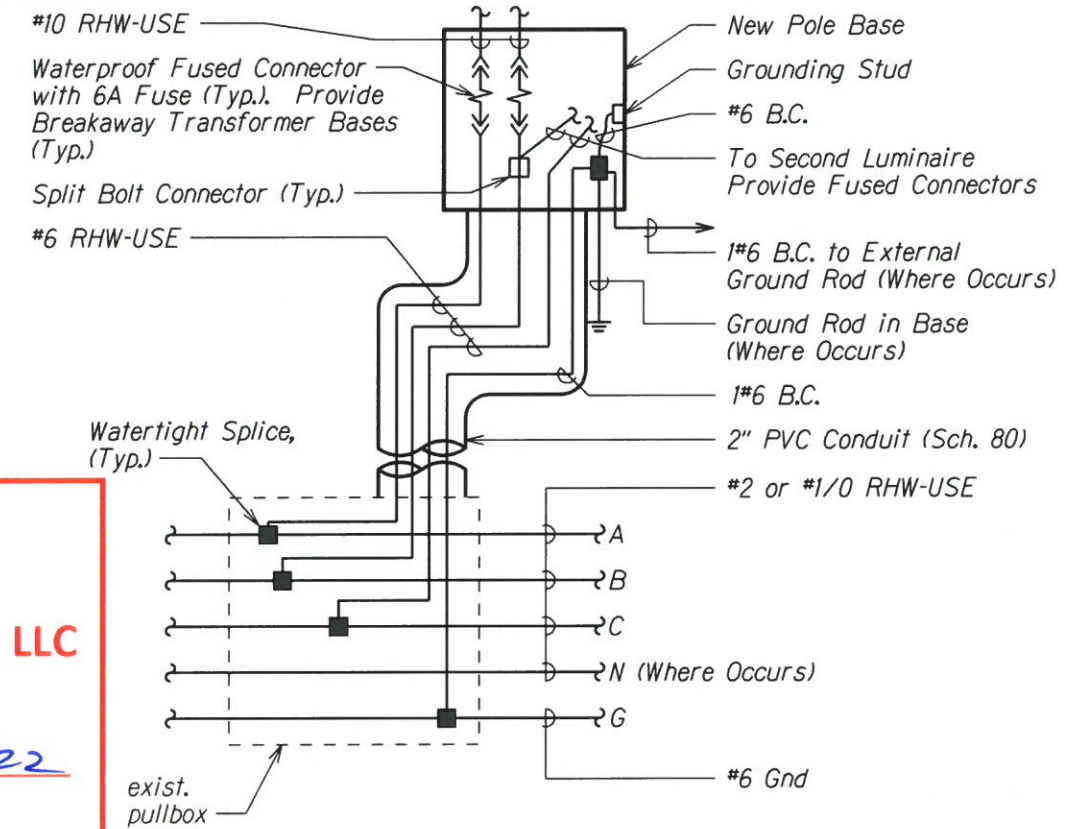
ASBUILT DRAWINGS



AS-BUILT
PAUL'S ELECTRICAL CONTRACTING, LLC

[Signature]
SIGNATURE

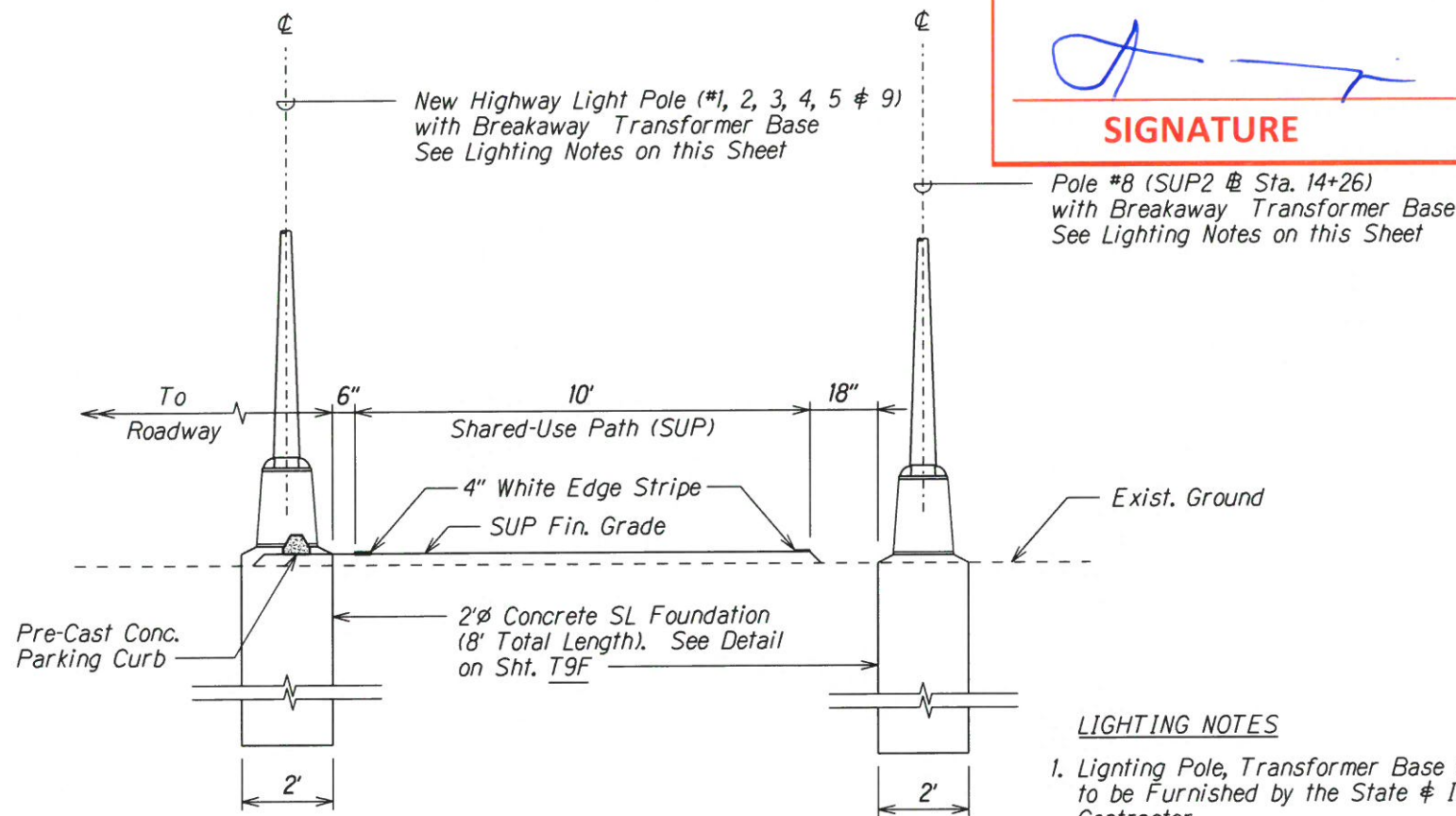
10/10/22
DATE



WIRING CONNECTION DIAGRAM - HIGHWAY LIGHTING STANDARD WHERE PULLBOX INSTALLED
 Not to Scale

LIGHTING ELECTRICAL WIRING NOTES

1. The wiring diagram shown in the plan is for a three-phase electrical circuit.
2. Contractor shall field verify the existing lighting electrical circuit for line voltage and phases prior to the start of lighting electrical work.
3. Should the existing lighting electrical circuit be different from the plan, the Contractor shall report the findings to the Engineer for corrective actions.
4. After completion of electrical work, the Contractor shall provide all relevant lighting electrical circuit information to the Engineer for As-Built plan record.



LIGHTING NOTES

1. Lighting Pole, Transformer Base & Pole Arm to be Furnished by the State & Installed by Contractor.
2. Contractor Shall Salvage Exist. Lighting Fixture (i.e., Luminaire w/Node & LED Lamp) and Reinstall onto New Light Pole Arm.

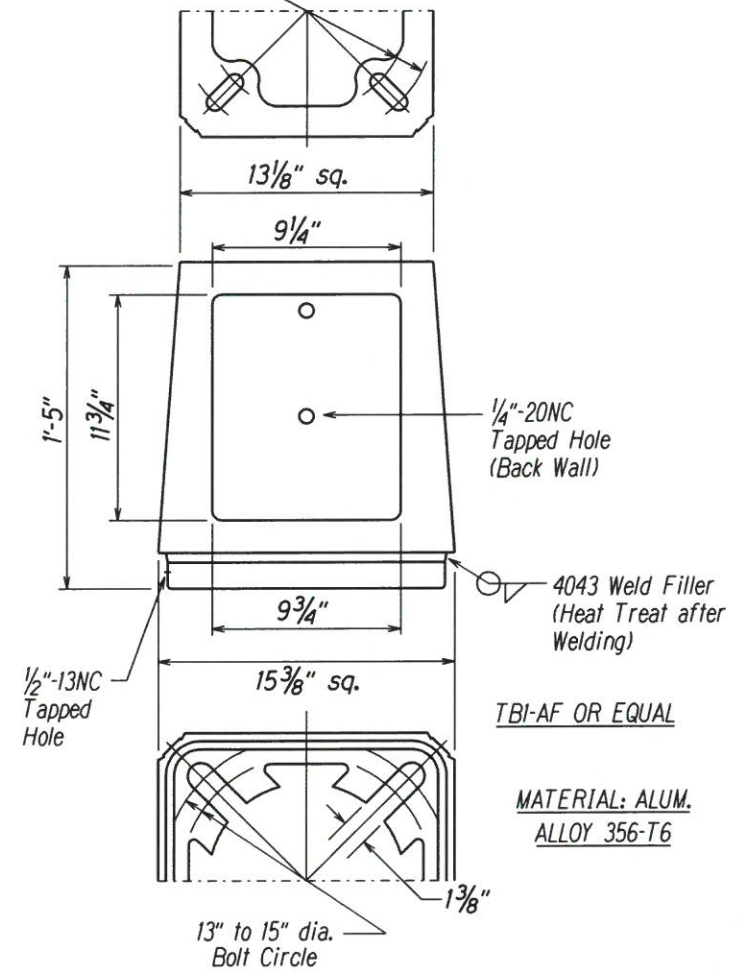
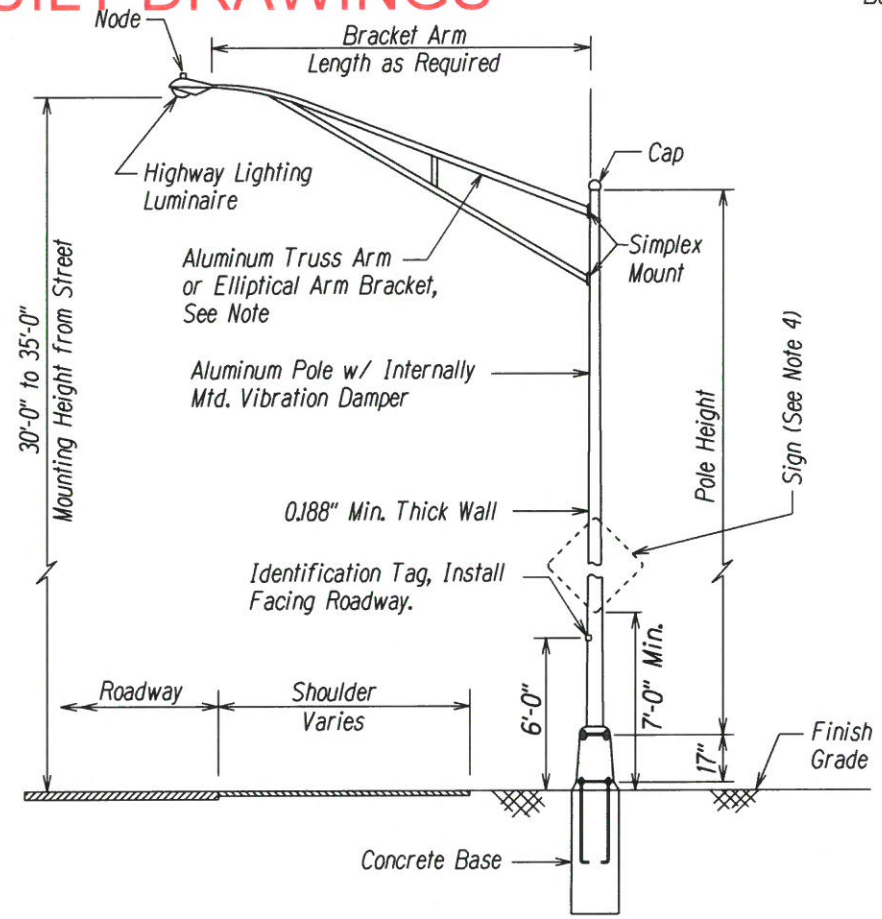
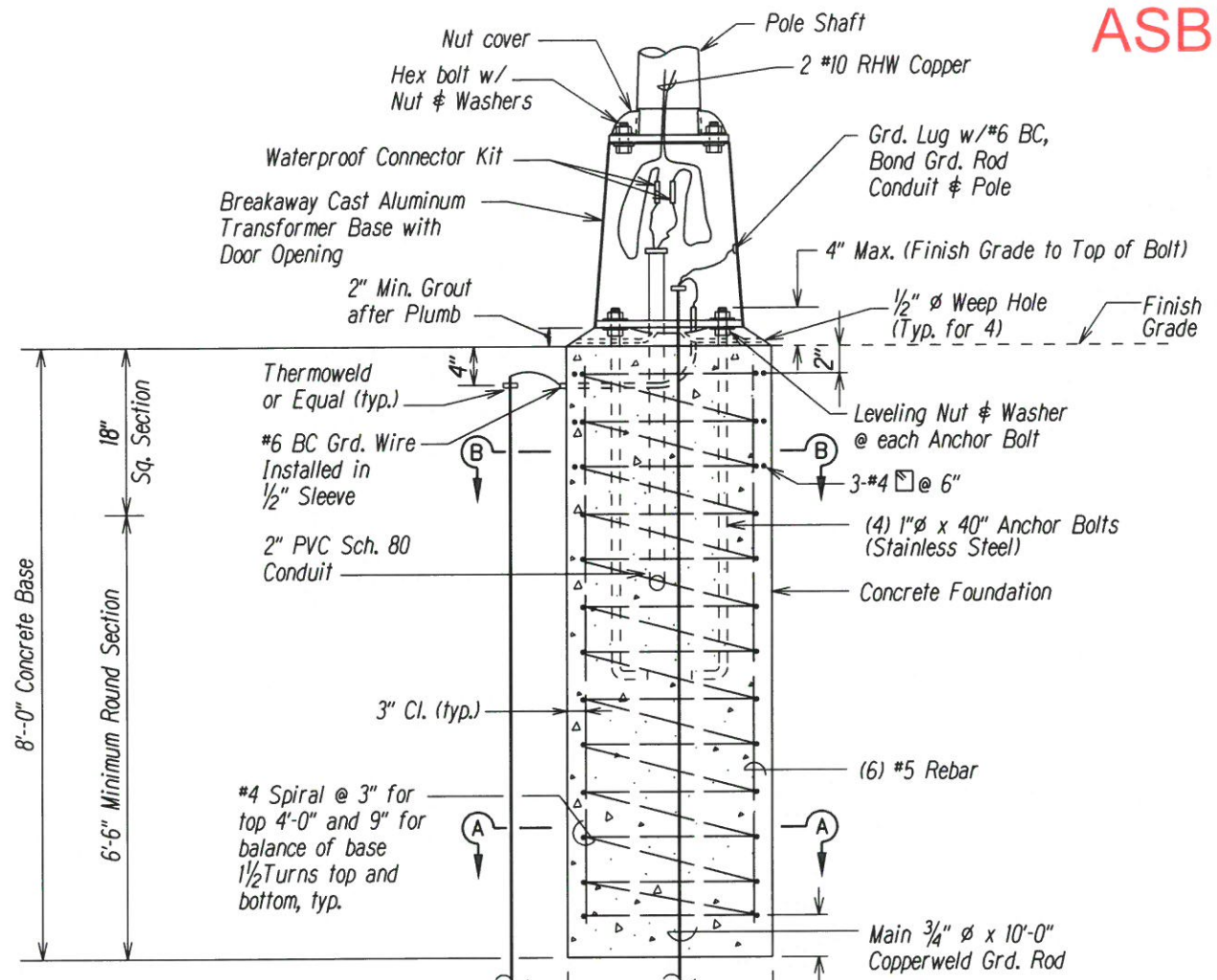
NEW LIGHTING STANDARD ALONG SHARED-USE PATH
 Not to Scale

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

3/31/21	ADDED SHEET
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION HIGHWAY LIGHTING MISCELLANEOUS DETAILS FORT BARRETTE ROAD OPERATIONAL IMPROVEMENTS Roosevelt Avenue to Farrington Highway PROJECT NO. 901A-01-19 Scale: Not to Scale Date: Mar., 2021 SHEET No. T9E OF SHEETS	

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	901A-01-19	2020	C.O. 60S-6	167

ASBUILT DRAWINGS



NOTE:
For 4' to 8' Arm, Use Elliptical Bracket Arm
For 10' to 15' arm, Use Truss Bracket Arm

AS-BUILT
PAUL'S ELECTRICAL CONTRACTING, LLC

[Signature]
SIGNATURE

10/3/22
DATE

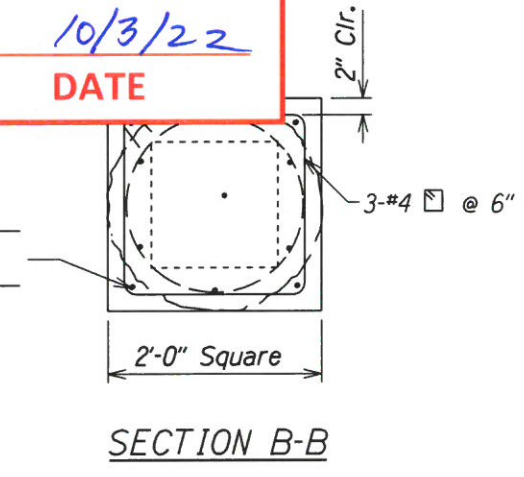
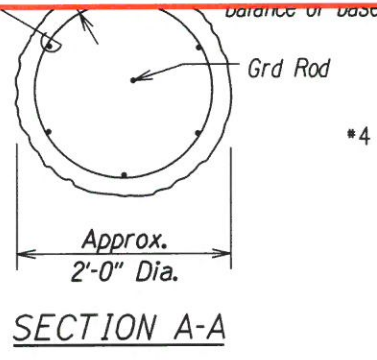
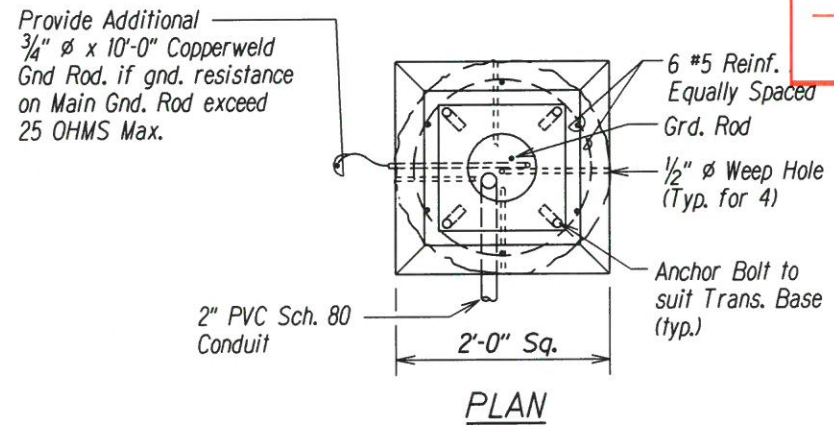
- BASE SUPPLIED WITH:**
1. Door and 1/4"-20NC S.S. Screw
 2. Eight 1" Washers 1/2" Thick x 2 3/4" O.D. (Washers Mechanical Galvanized per ASTM B454)
 3. Four 1"-8NC x 3 3/4" Long Galvanized Steel Hex. Hd. Bolts
 4. Four 1"-8NC Galvanized Steel Hex. Nuts
 5. Four 1" Galvanized Steel Lock Washers
 6. Four 1" x 2" O.D. Galvanized Steel Flatwashers
 7. Transformer Base shall be Breakaway Type.

TRANSFORMER BASE DETAIL

Not to Scale

3/31/21	ADDED SHEET
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION HIGHWAY LIGHTING MISCELLANEOUS DETAILS FORT BARRETTE ROAD OPERATIONAL IMPROVEMENTS Roosevelt Avenue to Farrington Highway PROJECT NO. 901A-01-19 Scale: Not to Scale Date: Mar., 2021 SHEET No. T9F OF SHEETS	

DATE: _____
DRAWN BY: _____
DESIGNED BY: _____
CHECKED BY: _____
ORIGINAL PLAN: _____
NOTES: _____

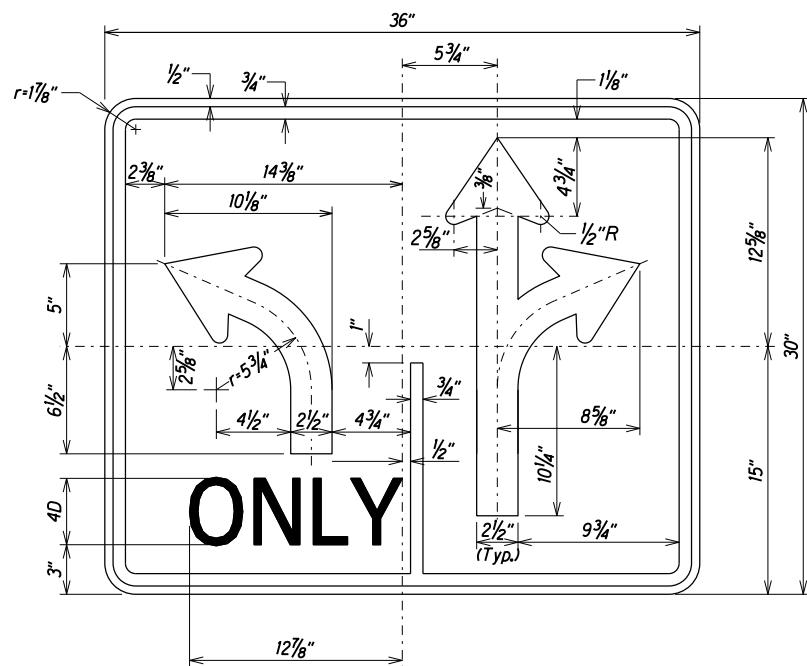



TYPICAL CONCRETE FOUNDATION AND TRANSFORMER BASE DETAIL
Not to Scale

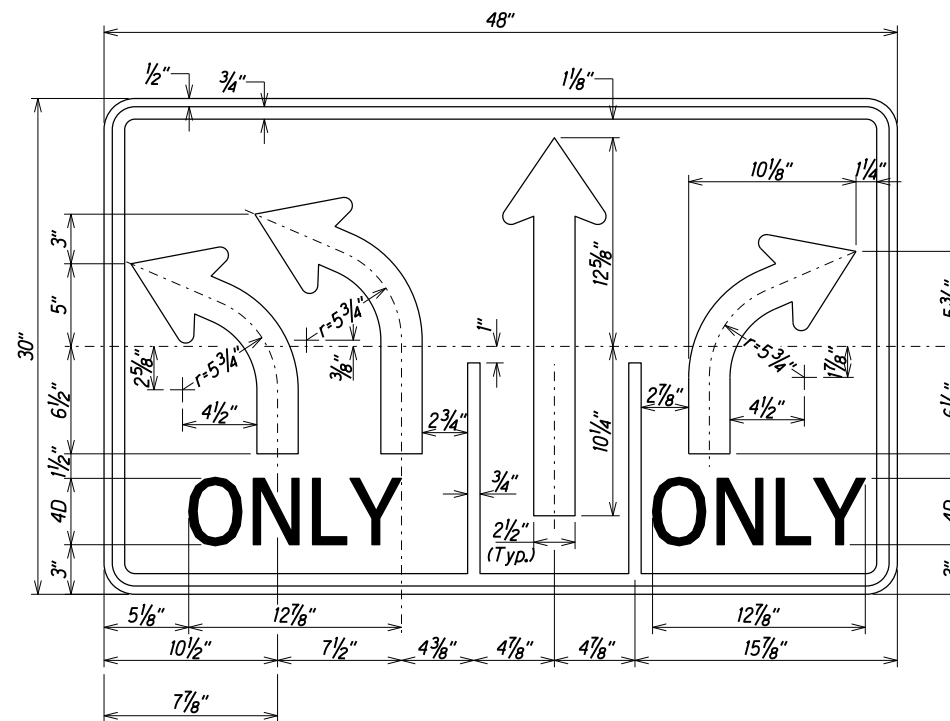
"AS-BUILT"

C.O. 60S-6

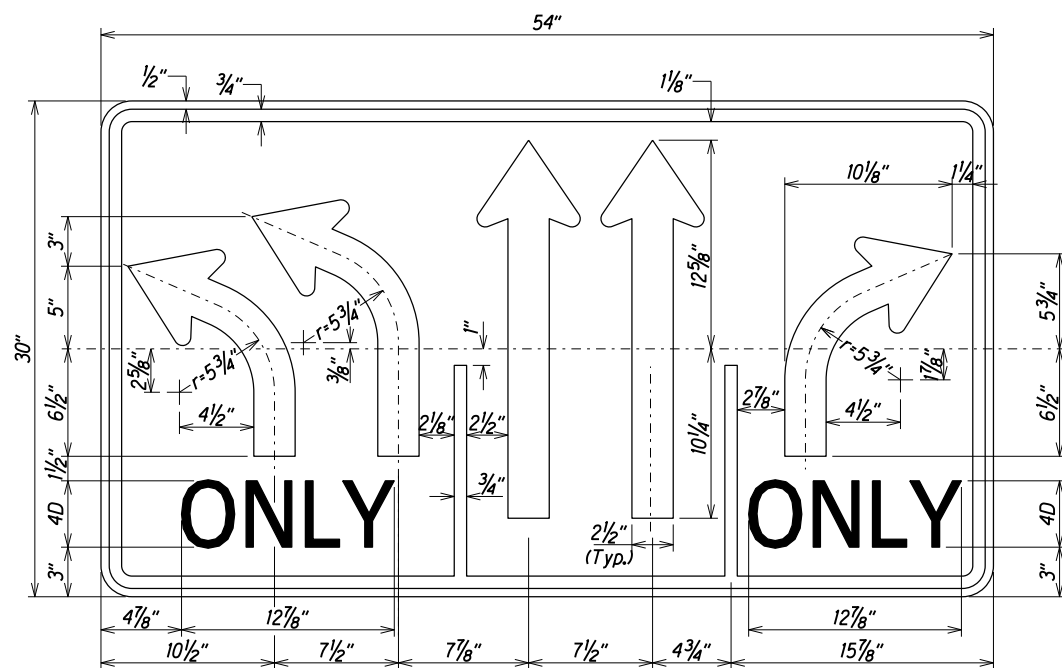
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	901A-01-19	2020	ADD. 61	167



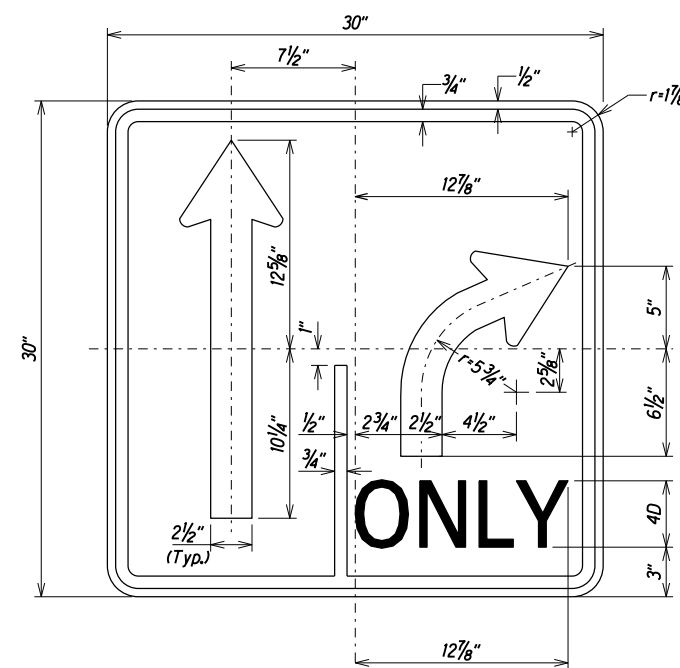
R3-24 
Not to Scale



R3-37
Not to Scale



R3-38
Not to Scale



R3-40
Not to Scale

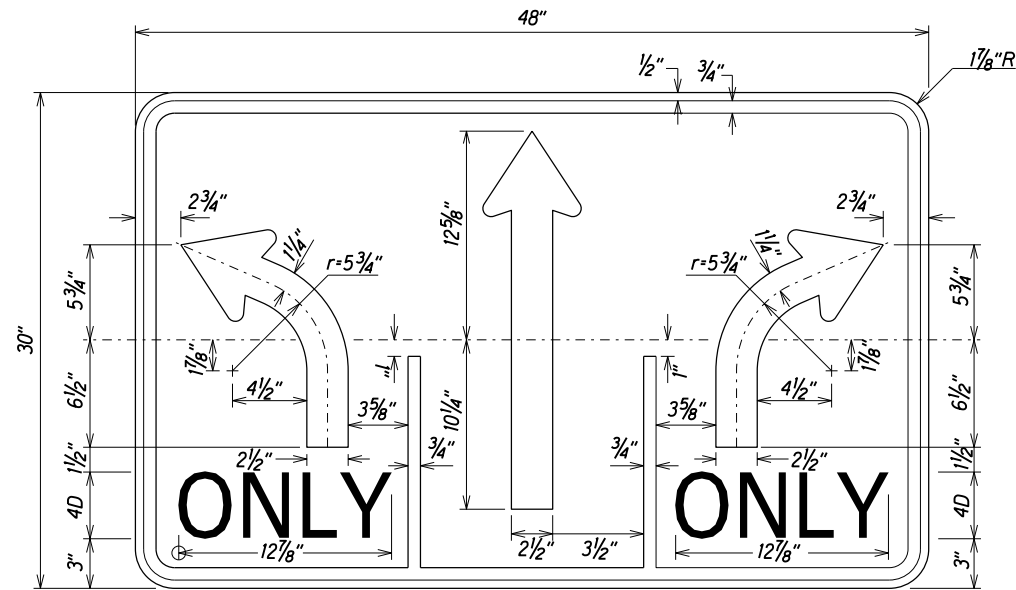
NOTE:
1. Sign R3-40L is a mirrored variation of sign R3-40. Plate and arrow details shall conform to sign R3-40.

SURVEY PLOTTED BY	DATE
DESIGNED BY	
NOTED BY	
QUANTITIES BY	
CHECKED BY	

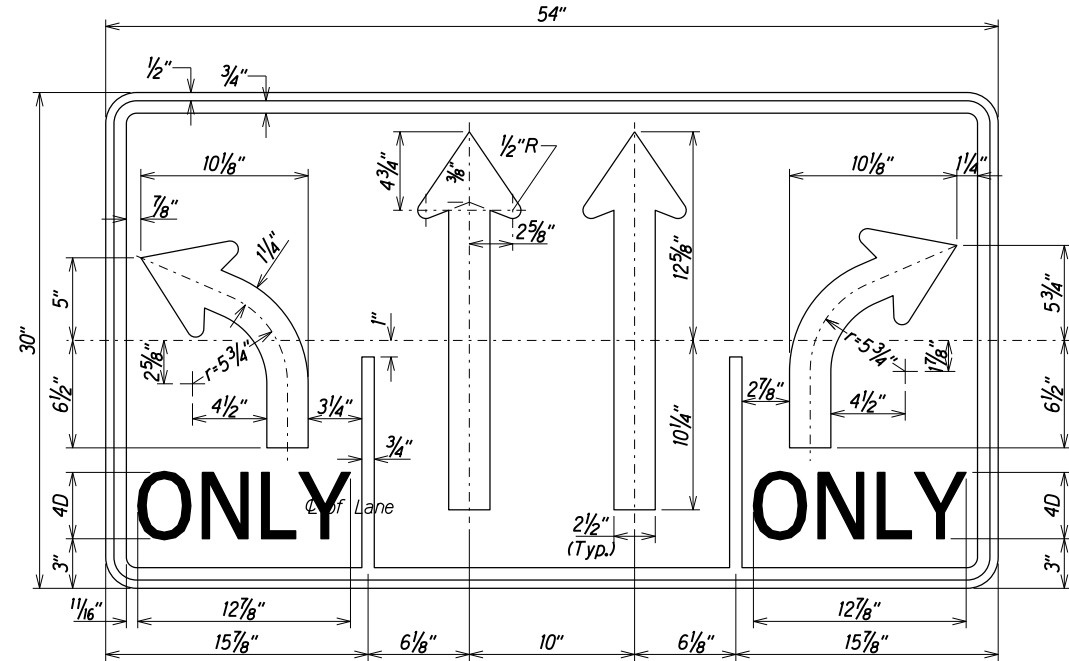
	3/3/20	REVISED TITLE BLOCK AND ADDED SIGN DETAILS
DATE		REVISION

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
MISCELLANEOUS SIGN	
DETAILS	
FORT BARRETTE ROAD OPERATIONAL IMPROVEMENTS Roosevelt Avenue to Farrington Highway PROJECT NO. 901A-01-19 Scale: Not to Scale Date: Feb, 2020	

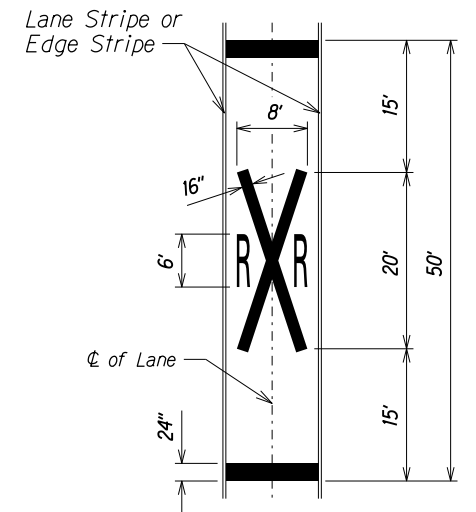
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	901A-01-19	2020	ADD. 62	167



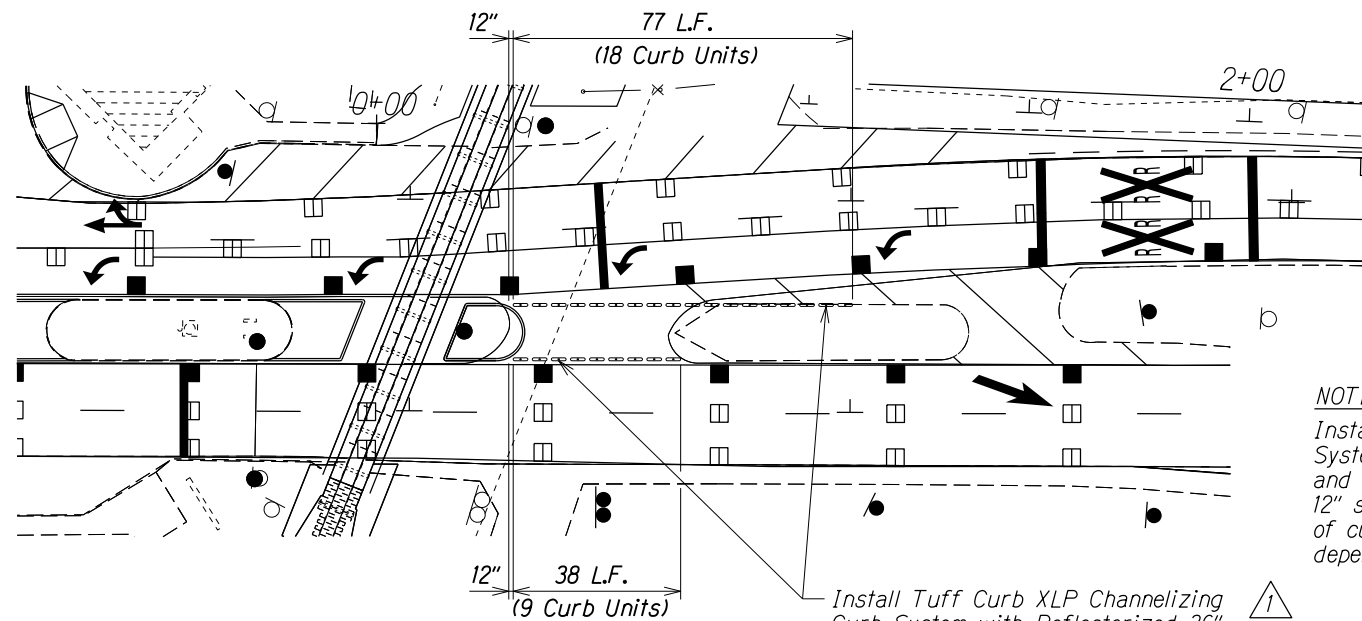
R3-44
Not to Scale



R3-45
Not to Scale

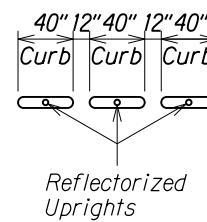


RAIL X-ING PAVEMENT MARKING DETAILS
Not to Scale



LONGITUDINAL CHANNELIZING CURB SYSTEM DETAIL
Not to Scale

NOTE:
Install new Longitudinal Channelizing Curb System with Reflectorized Uprights. Curbs and uprights shall be white. Provide a 12" space between each curb unit. Amount of curb units and uprights used is dependent on type of curb system installed.



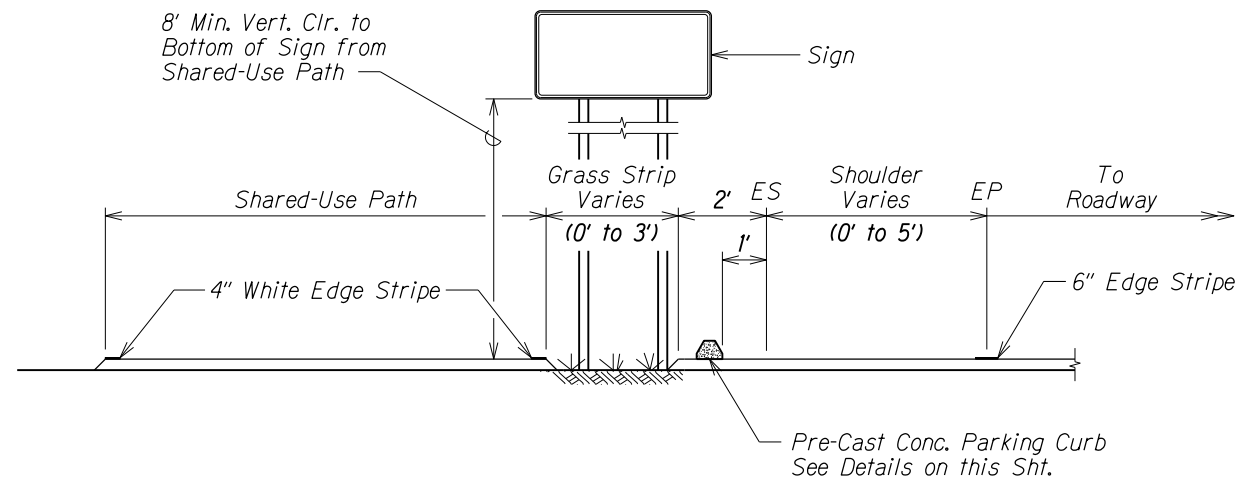
Install Tuff Curb XLP Channelizing Curb System with Reflectorized 36" Tall Uprights. (Yellow, 27 Curb Units Total)

SURVEY PLOTTED BY	DATE
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
48" x 36" (1:200)	

1	3/3/20	REVISED TITLE BLOCK AND REVISED CALLOUT
DATE		REVISION

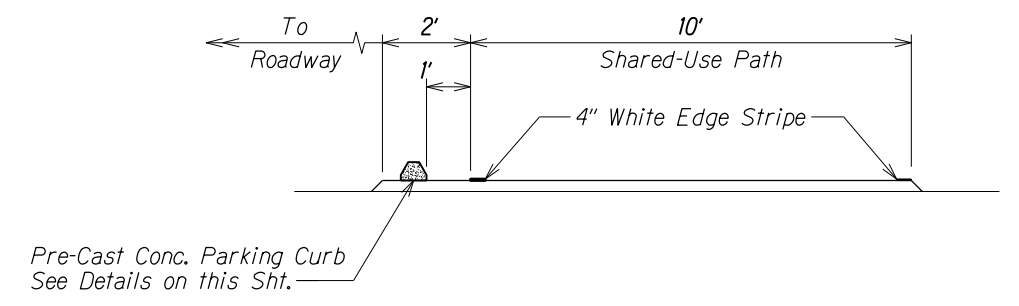
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
MISCELLANEOUS DETAILS	
FORT BARRETTE ROAD OPERATIONAL IMPROVEMENTS	
Roosevelt Avenue to Farrington Highway	
PROJECT NO. 901A-01-19	Date: Feb, 2020
Scale: Not to Scale	SHEET No. 111 OF 13 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	901A-01-19	2020	ADD. 63	167



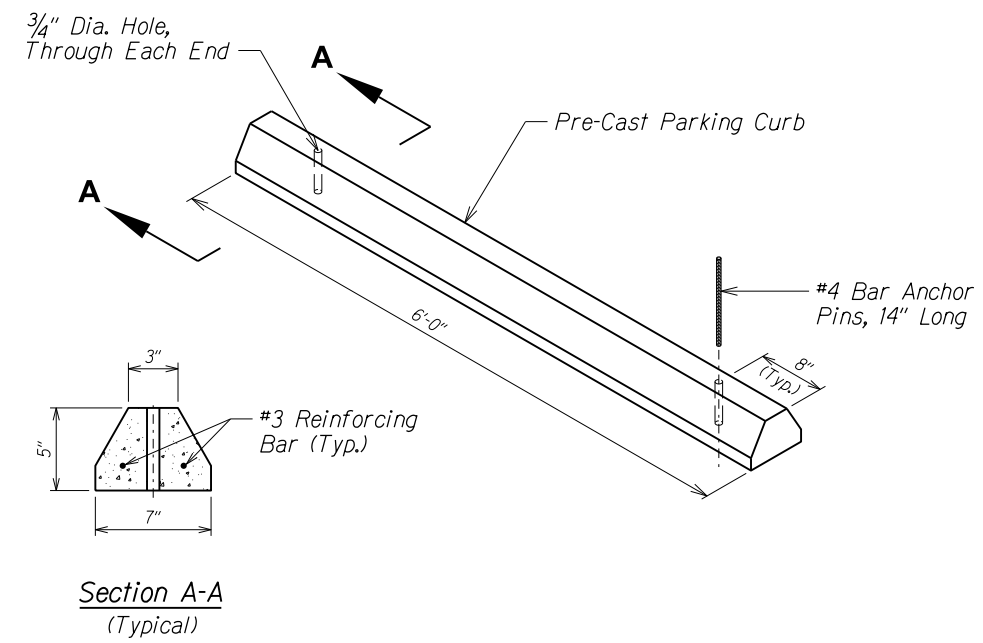
PARKING CURB ADJACENT TO PAVED SHOULDER (DETAIL "A")

Not to Scale



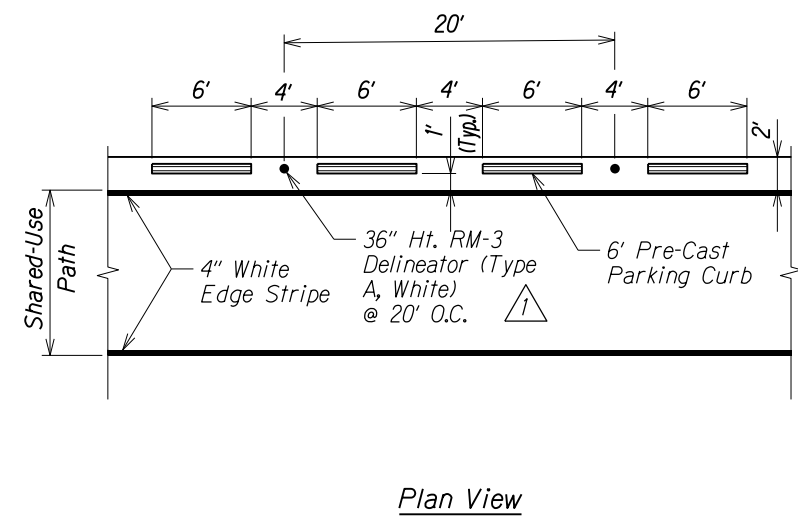
PARKING CURB ALONG SHARED-USE PATH (DETAIL "B")

Not to Scale



PRE-CAST CONCRETE PARKING CURB DETAIL

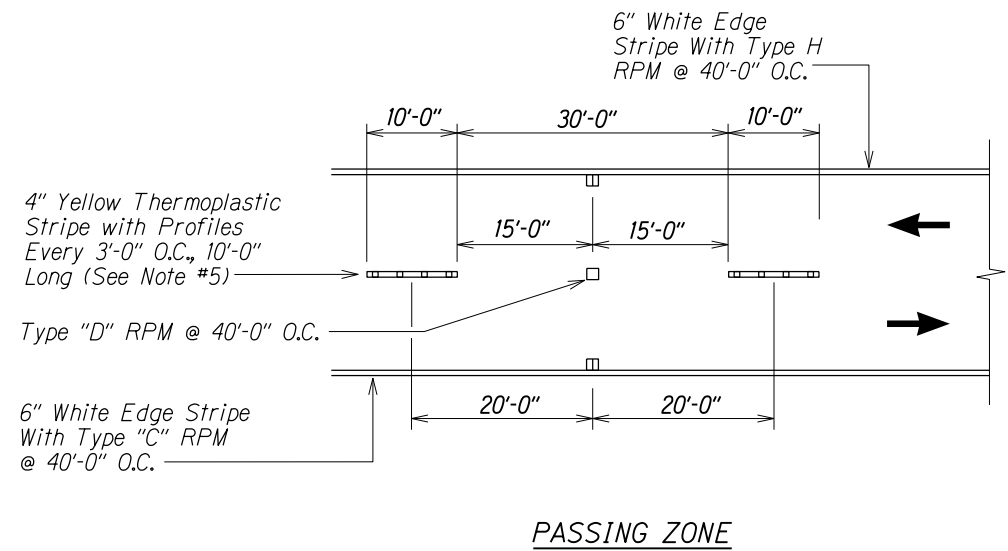
Not to Scale



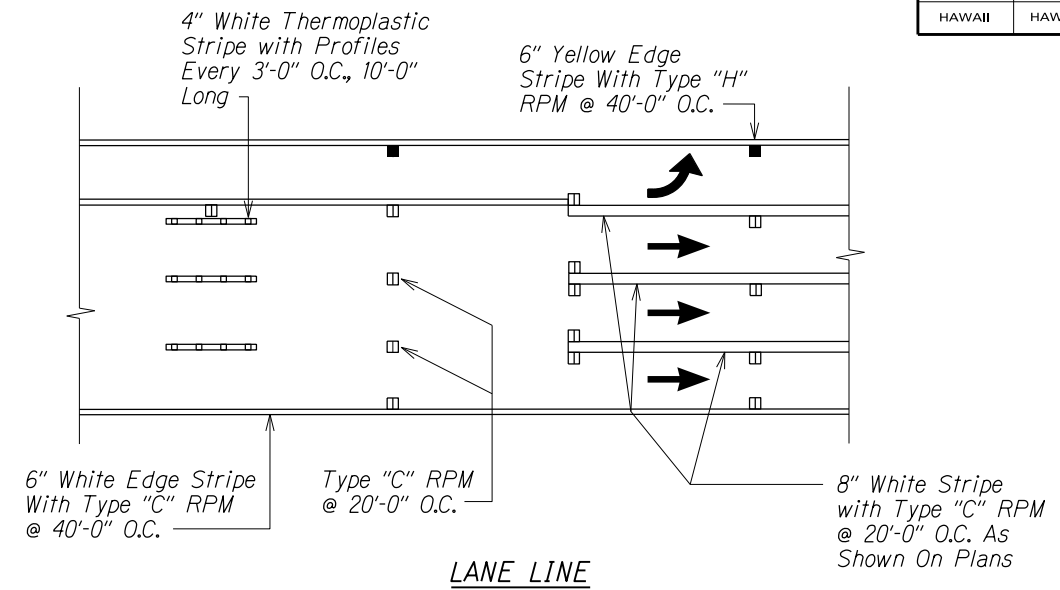
SURVEY PLOTTED BY	DATE	X
DESIGNED BY		
QUANTITIES BY		
CHECKED BY		
ORIGINAL PLAN		
NOTE BOOK		
DATE		

1	3/3/20	REVISED TITLE BLOCK AND REVISED CALLOUT
DATE	REVISION	
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION		
MISCELLANEOUS		
DETAILS		
FORT BARRETTE ROAD OPERATIONAL IMPROVEMENTS		
Roosevelt Avenue to Farrington Highway		
PROJECT NO. 901A-01-19		
Scale: Not to Scale Date: Feb, 2020		
SHEET No. T12 OF 13 SHEETS		

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	901A-01-19	2020	ADD. 64	167

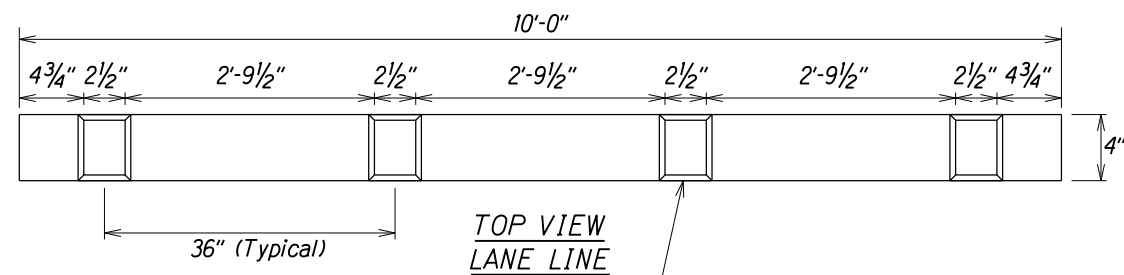


PASSING ZONE

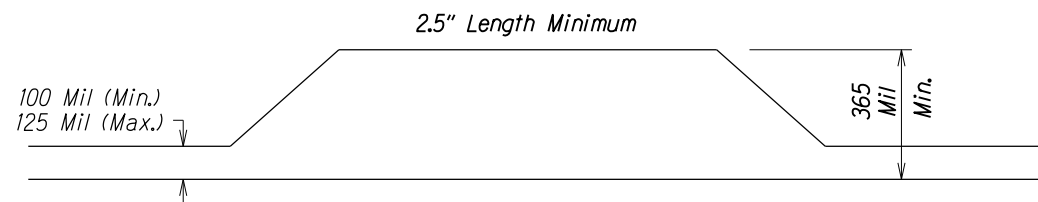


LANE LINE

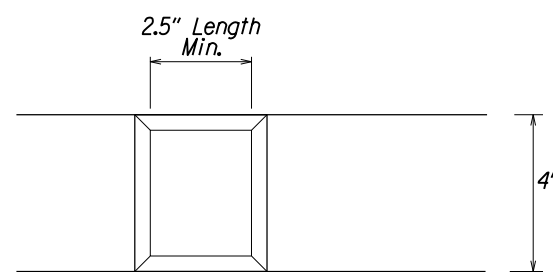
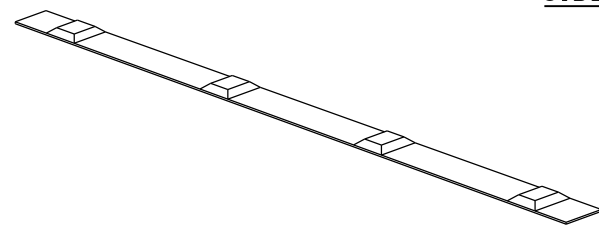
DETAIL
Not To Scale



Profiles Placed on 36" O.C.
365 Mil. Height, including 100 Mil. Baseline.
Width Equal to Approximately Baseline Width



SIDE VIEW



TOP VIEW

PROFILED THERMOPLASTIC STRIPING

Not to Scale

NOTES:

1. The thermoplastic material shall be a alkyd-based compound formulated for profiled pavement marking. See specs subsection 629.03 for additional requirements
2. The Engineer will include the longitudinal gaps for skip striping, up to thirty (30) feet long, in the measurement for payment.
3. Install white profiled thermoplastic stripes as lane line.
4. Install yellow profiled thermoplastic stripes for centerline passing zone.
5. In areas with centerline milled rumble strips, install standard yellow thermoplastic stripes without raised profiles

SURVEY PLOTTED BY	DATE
DESIGNED BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
4/16/19 (1000000)	

1	3/3/20	REVISED TITLE BLOCK
	DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION PROFILED PAVEMENT MARKING <u>DETAILS</u> FORT BARRETTE ROAD OPERATIONAL IMPROVEMENTS Roosevelt Avenue to Farrington Highway PROJECT NO. 901A-01-19 Scale: Not to Scale Date: Feb, 2020 SHEET No. T13 OF 13 SHEETS		

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	901A-01-19	2020	C.O. ADD. 64S-1	167

ASBUILT DRAWINGS

SIGNS AND MARKING NOTES:

- All traffic sign and pavement marking installations shall be done in accordance with "Manual on Uniform Traffic Control Devices for Streets and Highways," 2009 Edition, as amended, the latest specifications from the Traffic Review Branch, Department of Planning and Permitting, and as shown on the plans.
- Contractor shall notify and coordinate work with the Civil Engineering Branch, Department of Planning and Permitting, one (1) week in advance of commencing work at 768-8084.
- Contractor shall submit material brochures for all signs and paint materials to the Civil Engineering Branch, Department of Planning and Permitting.
- The signing and/or striping Contractor shall keep one (1) set of Approved Plans at the project site at all times during construction work.
- Contractor shall paint temporary guidelines and outline of arrows, legends and crosswalk with two inches (2") wide brushed line on the day the roadway is opened to traffic. These markings must be approved by the inspector from the Civil Engineering Branch, Department of Planning and Permitting.
- Contractor shall notify the Civil Engineering Branch, Department of Planning and Permitting at 768-8084, three (3) days in advance of final inspection.
- Contractor shall meet with the Inspector from the Civil Engineering Branch, Department of Planning and Permitting during the Final Inspection.
- Within ten (10) days following notification of award of contract, the Contractor shall submit to the Department of Planning and Permitting (Phone: 768-8084) for approval, a list of any signing and pavement marking material which he proposes to install. The list shall be complete as to the name of manufacturer, catalog number, and shall be supplemented with material brochures.
- Upon final inspection of the project, the Contractor shall submit a letter of certification for all Traffic Signing and Pavement Marking Materials installed
- Signs shall be attached to brackets with 5/16" Zinc Plated Steel Bolts, Nuts and Washers. Signs 48" wide or larger than 10 Sq. Ft. in area shall be mounted on two - 2" Galv. Pipe post. The sign shall be installed with at least one (1) foot clearance from the sign edge to the curb face.
- All Traffic signs shall be reflectorized.
- Raised pavement markers shall be installed in accordance with the Department of Planning and Permitting Standards.
- Location of "Stop" sign:
 - Install "Stop" sign at curb tangent point.
 - Install "Stop" sign on metal street light standard if a standard is located within 10 feet of curb return.
 - Install "Stop" sign in front of utility pole if a pole is located within 10 feet of curb return.

- Pavement work and symbol markings shall be in accordance with the Department of Planning and Permitting Standards.
- The Contractor shall use thermoplastic material, approved by the Civil Engineering Branch, Department of Planning and Permitting, for all crosswalks, stop bars, pavement arrows, center lines, lane lines, arc lines, channelized traffic island and legends.


11. Hawaii Department of Transportation Highways Division, Oahu District, Construction Section shall ensure that the Contractor installs the construction traffic control devices in accordance with the MUTCD and the Hawaii Administration Rules as specified in traffic not #2.

TRAFFIC NOTES FOR WORK ON CITY & COUNTY STREETS:

- A permit shall be obtained from the Department of Transportation Services before work on any portion of a public street or highway may begin. Construction Traffic Control Plans approved by the Department of Transportation Services and/or the Department of Planning and Permitting must be provided when applying for the permit.
- The Contractor shall provide, install and maintain all necessary signs and other protective facilities, which shall conform with the "Hawaii Administration Rules Governing the use of Traffic Control Devices at Work Sites on or adjacent to Public Streets and Highways" adopted by the Director of Transportation, and the current U.S. Federal Highways Administration's "Manual on Uniform Traffic Control Devices for Street and Highways, Part VI - Traffic Control Devices for Street and Highway Construction and Maintenance Operations."
- Work on an city street area may be performed only between the hours of 8:30 A.M. to 3:30 P.M., Monday through Friday, unless otherwise permitted by the Department of Transportation Services.
- During working hours, the Contractor shall provide for through traffic. During non-working hours, all trenches shall be covered with a safe non-skid bridging material and all lanes shall be open to Traffic.

As required by the Department of Transportation Services, The Contractor shall provide off-duty police officers to control the flow of traffic.
- Where pedestrian walkways exist, they shall be maintained in passable condition or other facilities for pedestrians shall be provided. Passage between walkways at intersections shall likewise be provided.
- Driveways shall be kept open unless the owners of the property using these rights-of-way are otherwise provided fro satisfactorily.
- Contractor shall reference to the approval of the Department of Transportation Services and the Department of Planning and Permitting, all existing traffic signs, posts and pavement markings prior to the commencement of construction. The Contractor shall replace or repair all traffic sign, posts and pavement markings disturbed by his activities.
- The Contractor shall notify the Department of Planning and Permitting at 768-8084 one (1) week prior to any work to be done on signs, post and pavement markings.
- No equipment shall be stored within street rights-of-way except at locations designated in writing and approved by the Department of Transportation Services.

AS-BUILT
PAUL'S ELECTRICAL CONTRACTING, LLC

 10/3/22

SIGNATURE DATE

**FOR USE WITHIN
CITY R.O.W. ONLY**

3	6/15/21	REVISED TRAFFIC NOTES FOR WORK ON CITY & COUNTY STREETS #11
2	4/07/20	ADDED CITY APPROVAL BLOCK
1	3/24/20	ADDED NEW PLAN SHEET

DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION CITY AND COUNTY OF HONOLULU GENERAL NOTES FORT BARRETTE ROAD OPERATIONAL IMPROVEMENTS Roosevelt Avenue to Farrington Highway PROJECT NO. 901A-01-19 Scale: Not to Scale Date: Feb., 2020 SHEET No. T13A OF 13 SHEETS	

2 APPROVED:

CHIEF, TRAFFIC REVIEW BRANCH, DPP
(For Work within Proposed City R.O.W.)

Date

"AS-BUILT"

C.O. ADD. 64S-1

ORIGINAL PLAN	DATE
SURVEY PLATTED BY	
DRAWN BY	
DESIGNED BY	
CHECKED BY	
DATE	

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	901A-01-19	2020	C.O. ADD. 64S-2	167

ASBUILT DRAWINGS

GENERAL NOTES FOR TRAFFIC CONTROL PLAN:


- The Permittee shall make minor adjustments at intersections, driveways, bridges, structures, etc., to fit field conditions.
- Cones or delineators shall be extended to point where they are visible to approaching traffic.
- Traffic control devices shall be installed such that the sign or device farthest from the work area is placed first. The others shall then be placed progressively toward the work area.
- Regulatory and warning signs within the construction zone that are in conflict with the traffic control plans shall be removed or covered.
- flaggers and/or police officers shall be in sight of each other or in direct communication at all times.
- When required by the issuing office, the permittee shall install a flashing arrow signal as shown on the Traffic Control Plans.
- All traffic lanes shall be a minimum of 10 feet wide.
- All construction warning signs shall be promptly removed or covered whenever the message is not applicable or not in use.
- The backs of all signs used for traffic control shall be appropriately covered to preclude the display of inapplicable sign messages (i.e., when signs have message on both faces).
- 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.
- Permanent pavement markings and traffic signs shall be replaced upon completion of each phase of work.
- 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.
- 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 into and out of driveways.
- buffer and taper area on approach to any work area shall be kept clear of vehicles and equipment.
- A high-level warning device (flag tree) shall be installed on approach to all work areas.
- "No Parking" signs shall be posted within any work area and for the buffer and taper areas approaching the work area.
- 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).
- Contractor shall submit Site-Specific TCPS to the Engineer for acceptance prior to start of work, including work in C&C R.O.W. △

MECHANICAL/ELECTRICAL DIVISION NOTES:

- The Contractor shall notify the joint pole committee two (2) weeks in advance of any relocation of utility pole(s) that may be necessary.
- The Contractor shall notify the Mechanical/Electrical Division Department of Design and Construction, three (3) working days prior to commencing work on the street lighting system. (Phone: 768-8431)
- The street lighting system shall be kept operational during construction. Any relocation required shall be approved by the Mechanical/Electrical Division, Department of Design and Construction, and paid for by the Contractor.
- The locations of the existing underground street light facilities shown on the plans are from existing plans and are approximate only. The Contractor shall exercise caution when construction crosses or is in close proximity to the existing street light facilities. The Contractor shall be responsible for any damages to the existing street lighting facilities. Any and all damages to these facilities shall be repaired by the Contractor at his cost in accordance with the requirements of the City and County of Honolulu.
- The Contractor shall be responsible for any damages to the city's existing communications fiber optic cable system. Any and all damages to these facilities shall be repaired by the Contractor at his cost in accordance with the requirements of the City and County of Honolulu.

AS-BUILT

PAUL'S ELECTRICAL CONTRACTING, LLC



SIGNATURE

10/3/22

DATE

**FOR USE WITHIN
CITY R.O.W. ONLY**

△3	6/15/21	ADDED GENERAL NOTE #18
△2	4/07/20	ADDED CITY APPROVAL BLOCK
△1	3/24/20	ADDED NEW PLAN SHEET
DATE	REVISION	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
CITY AND COUNTY OF HONOLULU

GENERAL NOTES

FORT BARRETTE ROAD OPERATIONAL IMPROVEMENTS

Roosevelt Avenue to Farrington Highway

PROJECT NO. 901A-01-19

Scale: Not to Scale Date: Feb, 2020

SHEET No. T13B OF 13 SHEETS

△2 **APPROVED:**

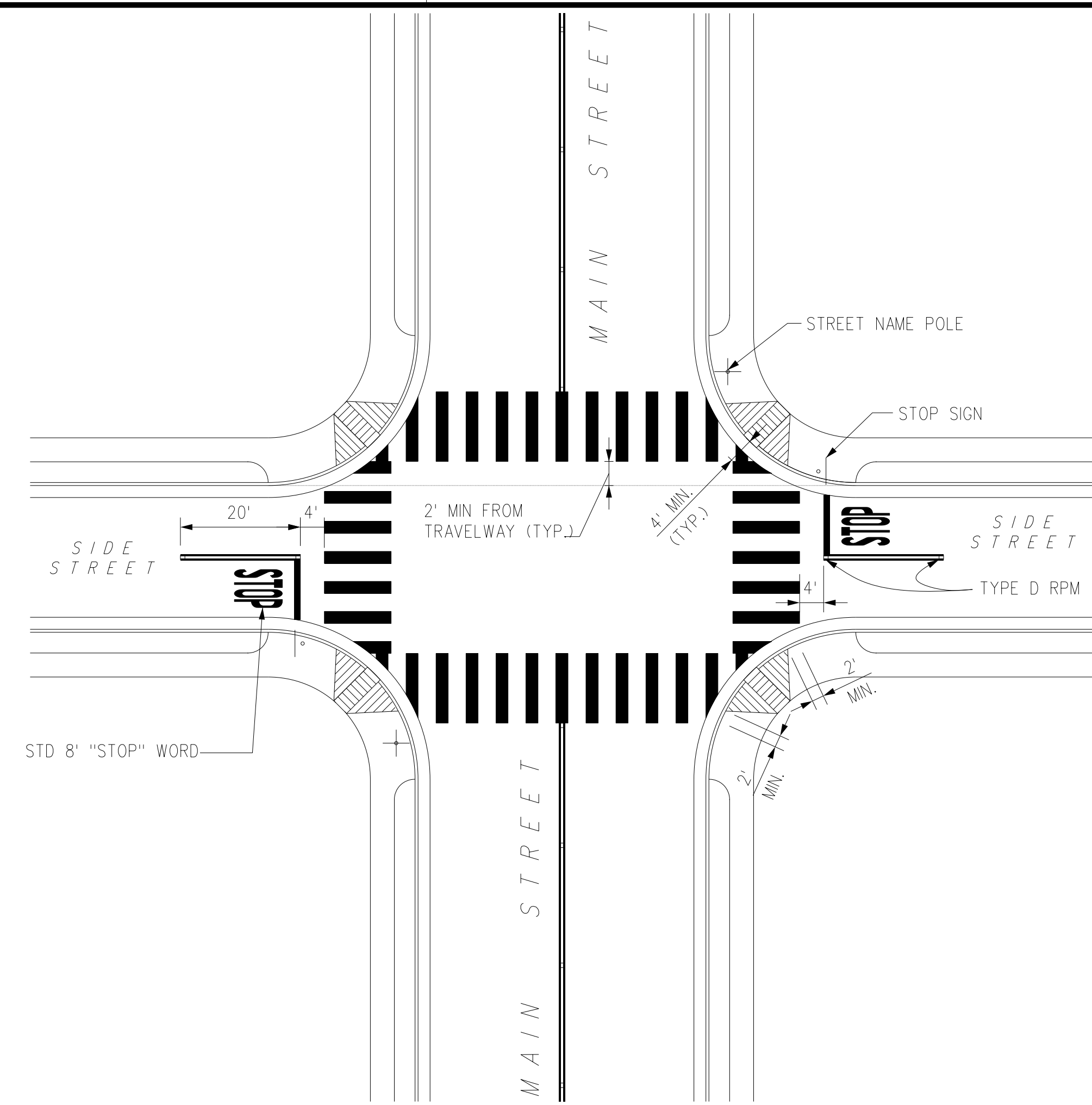
CHIEF, TRAFFIC REVIEW BRANCH, DPP Date
(For Work within Proposed City R.O.W.)

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

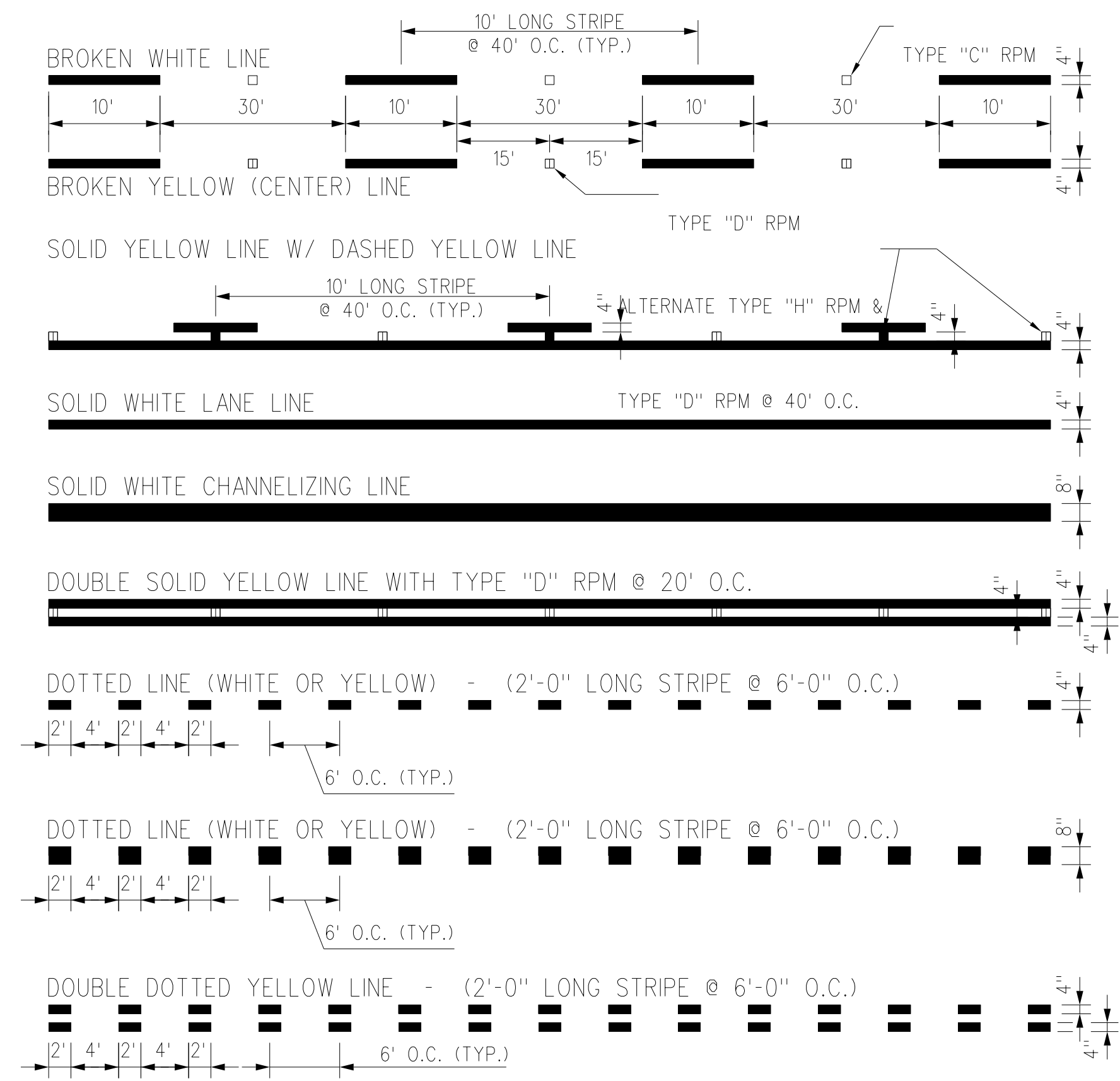
"AS-BUILT"

C.O. ADD. 64S-2

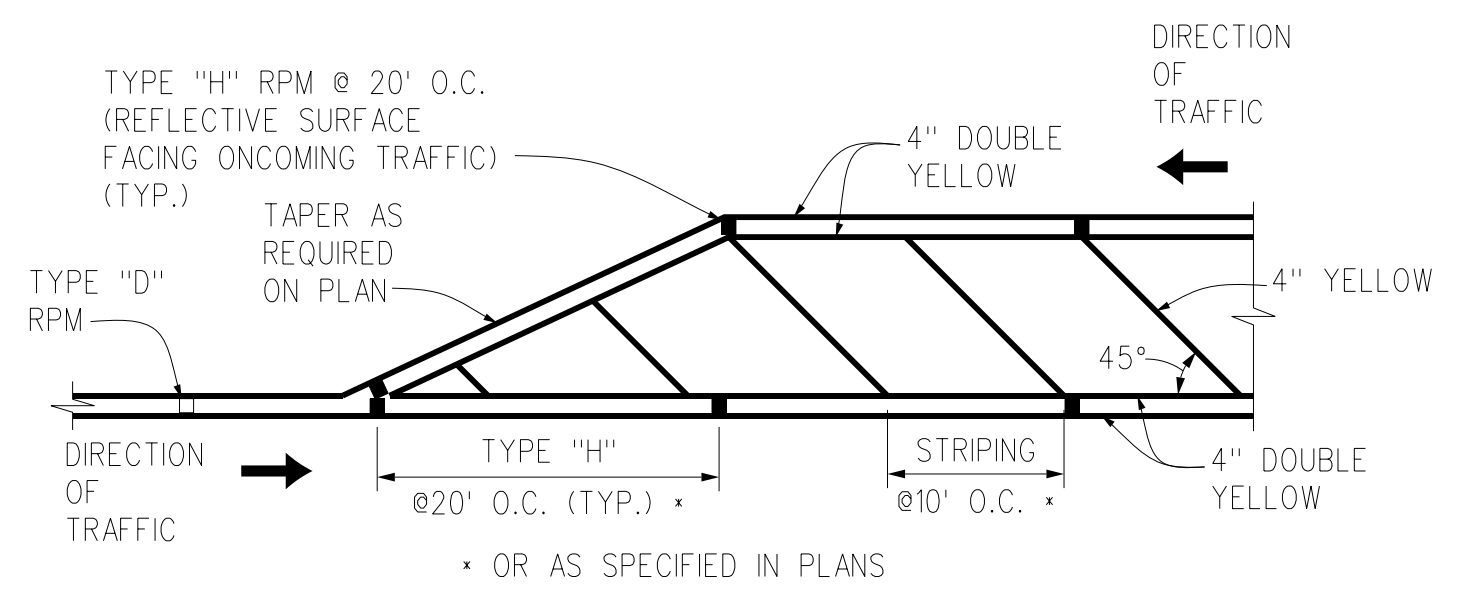
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	901A-01-19	2020	ADD. 64S-3	167



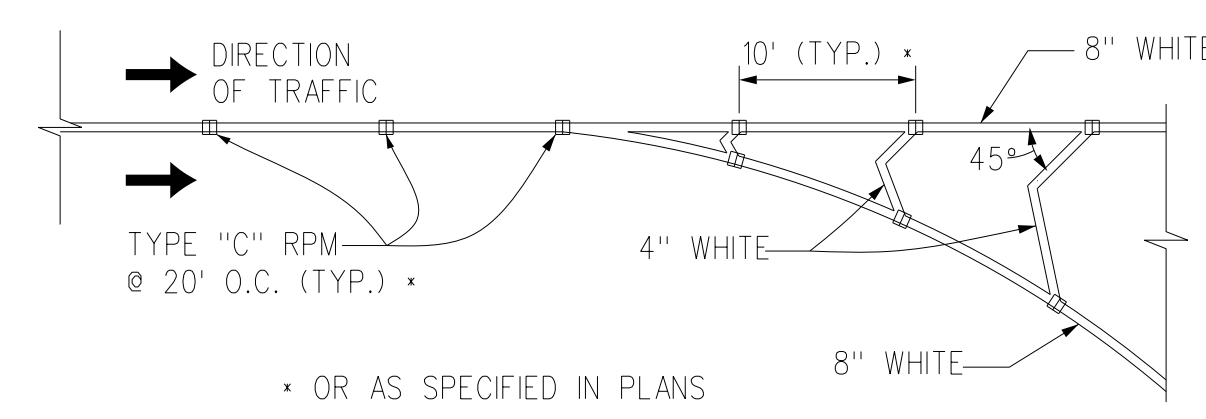
TYPICAL INTERSECTION SIGNING AND PAVEMENT MARKINGS WITH CROSSWALKS
NOT TO SCALE



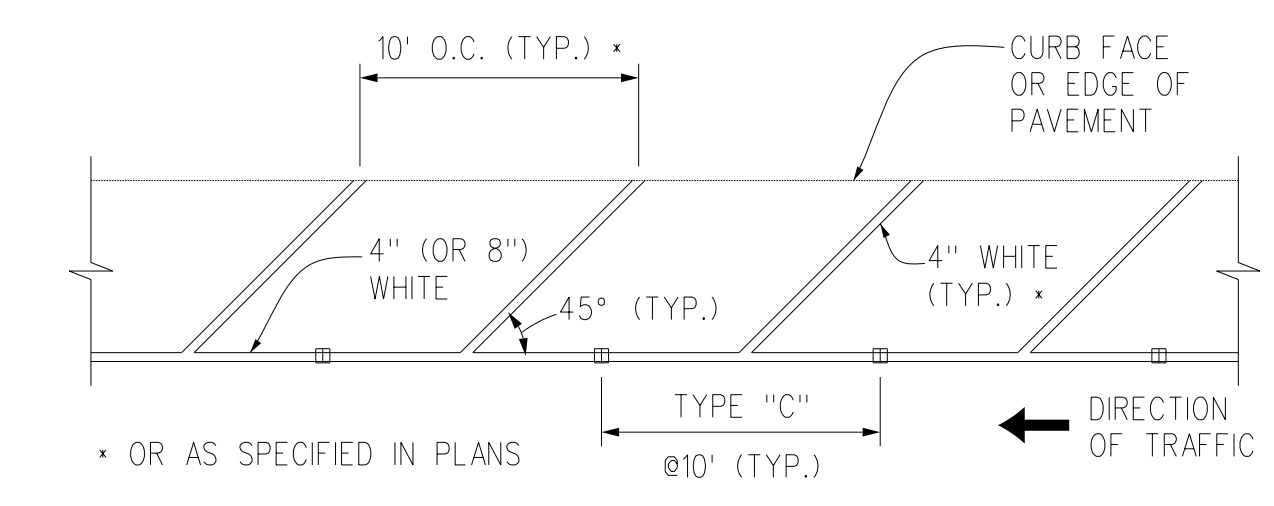
TYPICAL PAVEMENT MARKINGS - TYPES OF LONGITUDINAL LINES
NOT TO SCALE



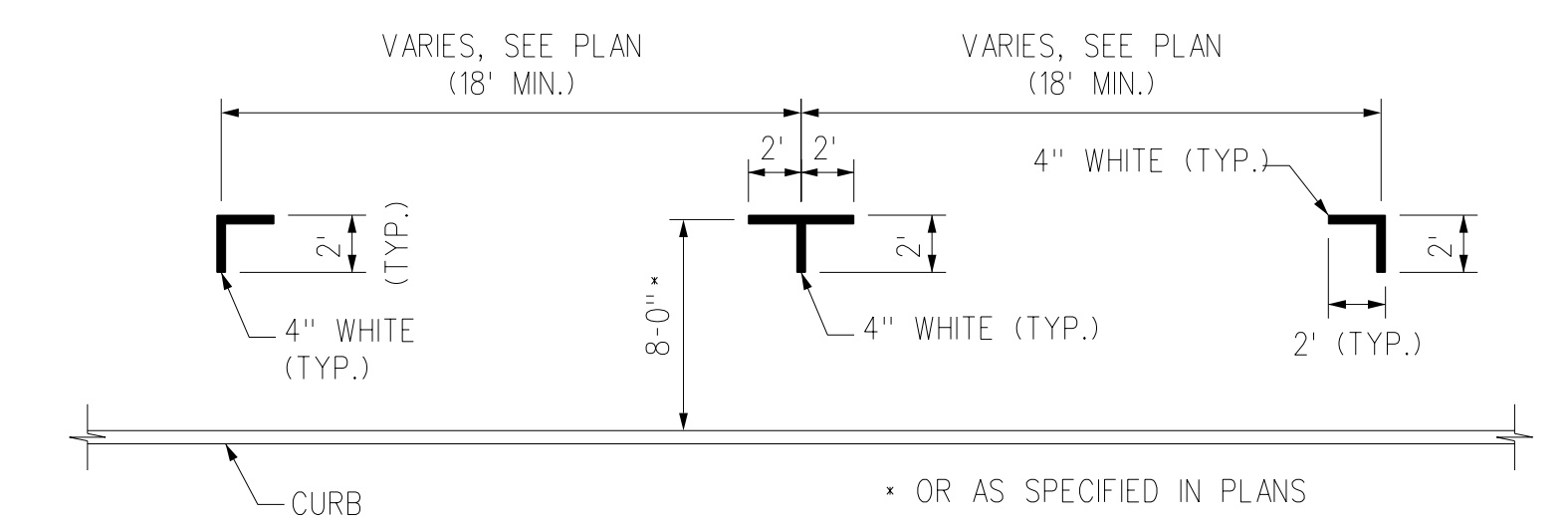
TRANSVERSE MEDIAN STRIPING DETAIL
NOT TO SCALE



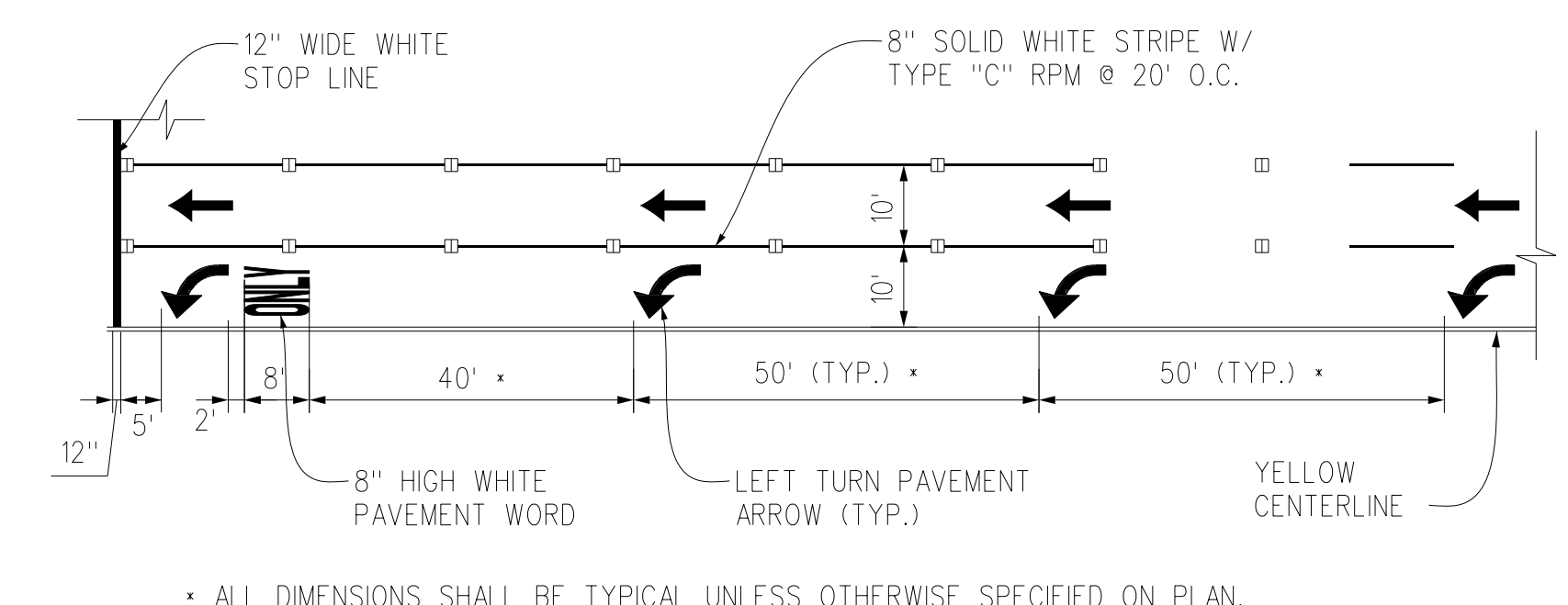
CHANNELIZING ISLAND STRIPING DETAIL
NOT TO SCALE



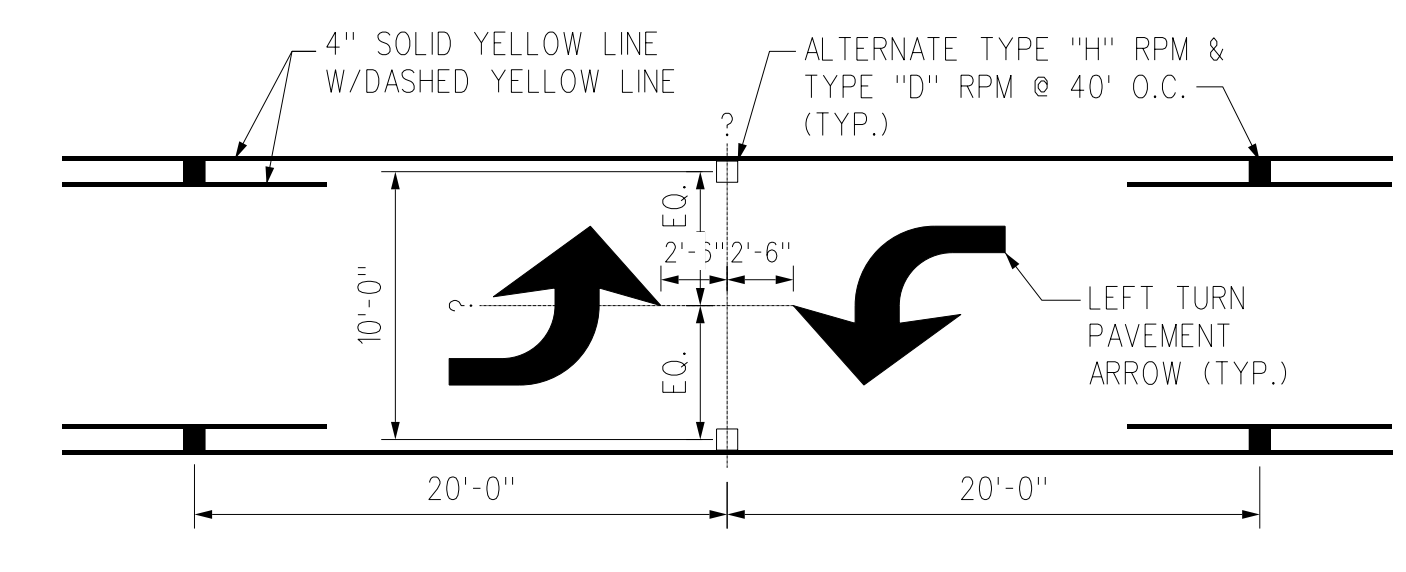
TRANSVERSE SHOULDER STRIPING DETAIL
NOT TO SCALE



PARKING STALL PAVEMENT MARKINGS
NOT TO SCALE



TYPICAL TURN LANE STRIPING
NOT TO SCALE



TWO-WAY LEFT TURN PAVEMENT ARROWS
NOT TO SCALE

**FOR USE WITHIN
CITY R.O.W. ONLY**

APPROVED:

CHIEF, TRAFFIC REVIEW BRANCH, DPP
(For Work within Proposed City R.O.W.)

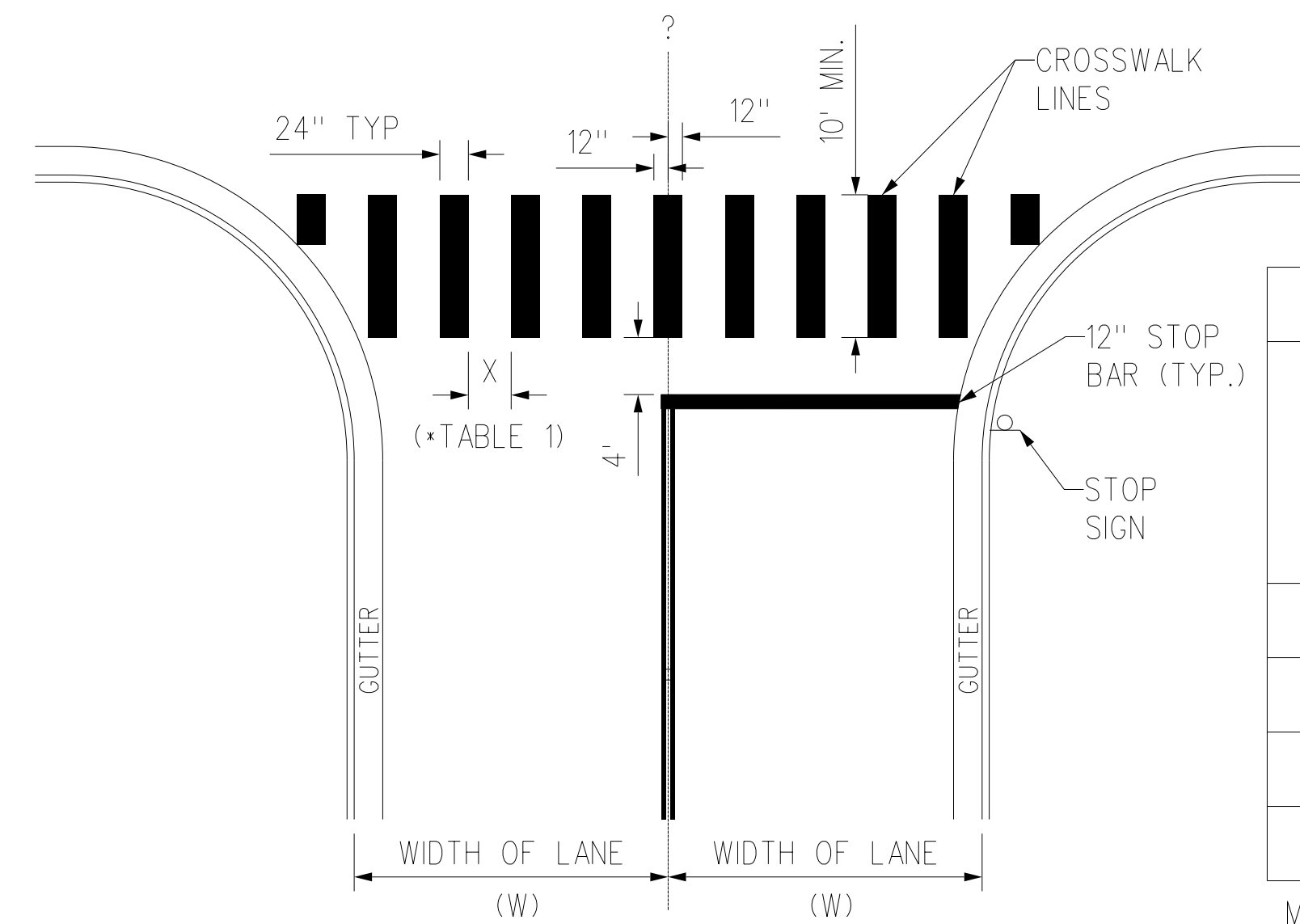
Date

DATE	REVISION
4/07/20	ADDED CITY APPROVAL BLOCK
3/24/20	ADDED NEW PLAN SHEET

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
CITY AND COUNTY OF HONOLULU
PAVEMENT MARKING NOTES AND DETAILS
FORT BARRETTE ROAD OPERATIONAL IMPROVEMENTS
Roosevelt Avenue to Farrington Highway
PROJECT NO. 901A-01-19
Scale: Not to Scale Date: Feb., 2020
SHEET No. 713C OF 13 SHEETS

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

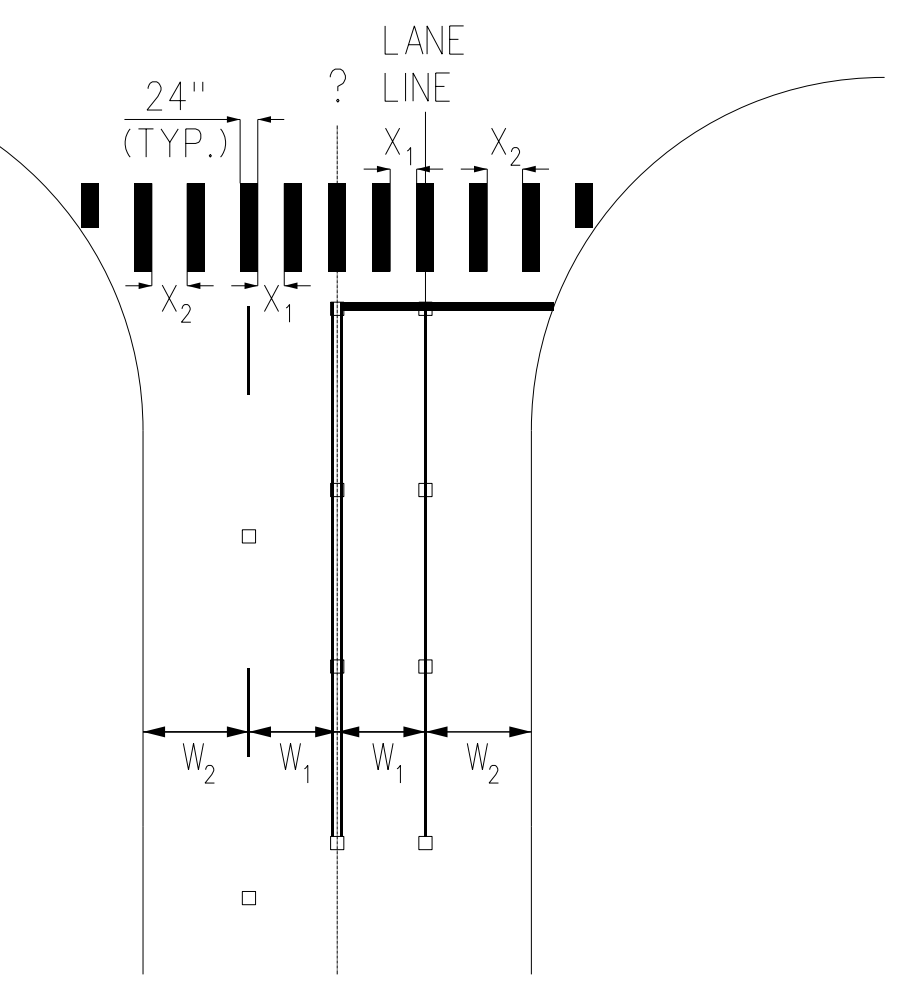
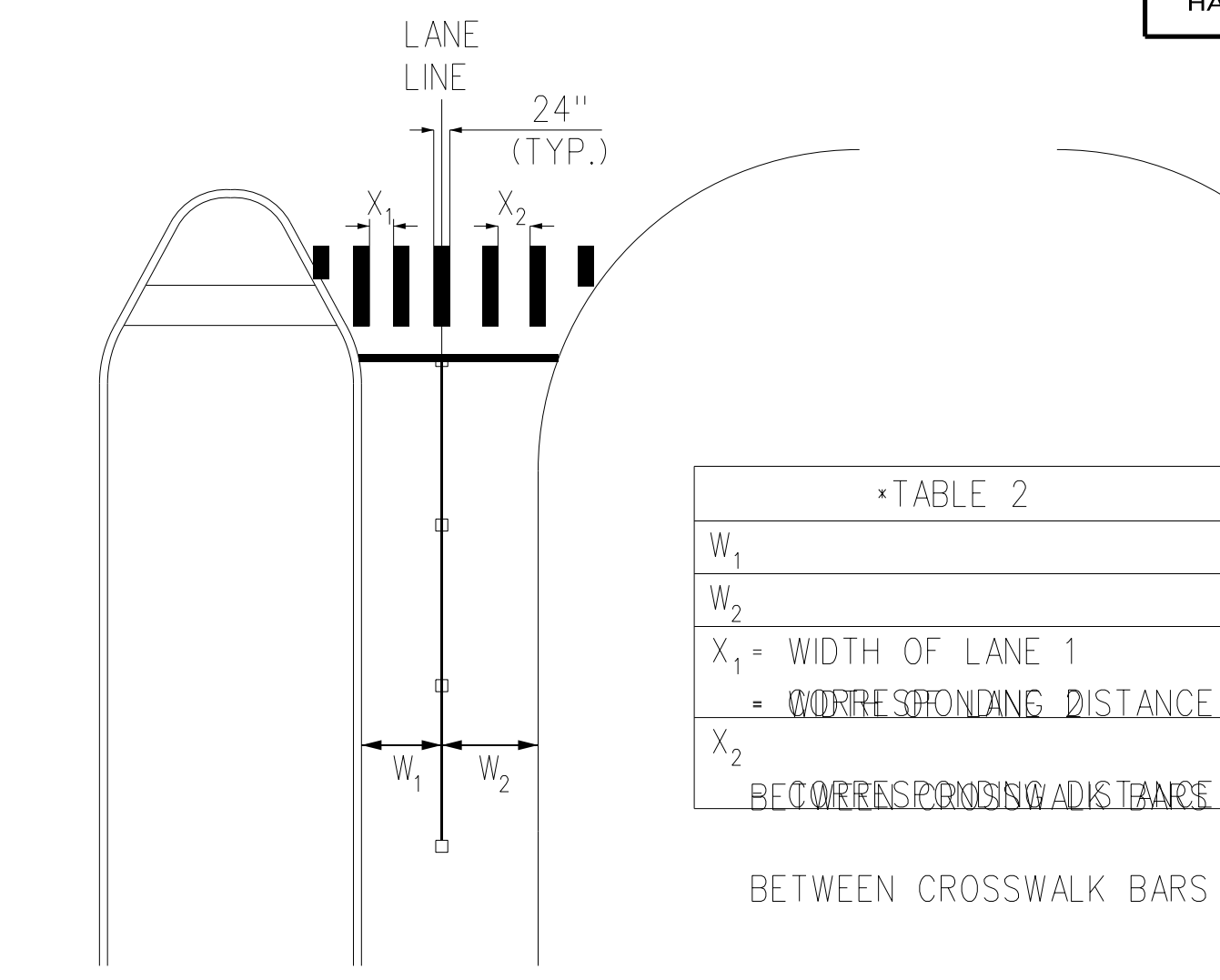
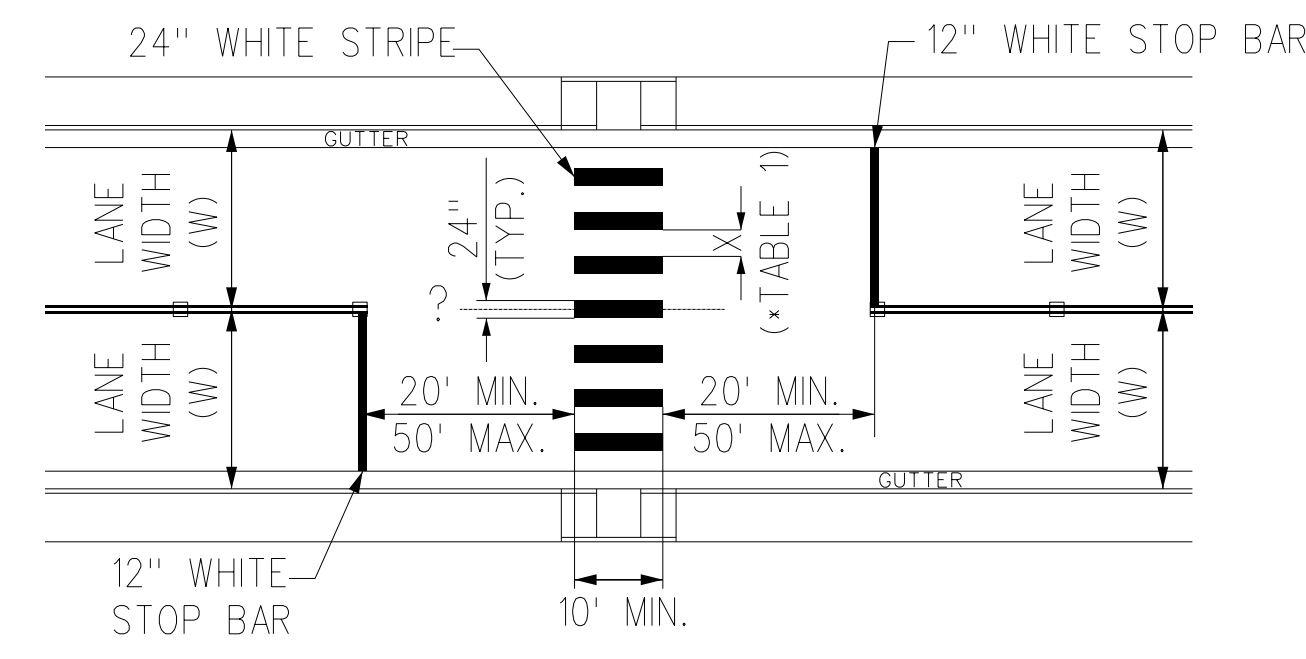
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	901A-01-19	2020	ADD. 64S-4	167



*TABLE 1

LANE WIDTH (W)	X (DISTANCE BETWEEN CROSSWALK BARS)
<12'	3'
12'-14'	4'
15'-17'	5'
>17'	3'

MAX X = 5'



*TABLE 2

W_1
W_2
X_1 = WIDTH OF LANE 1
X_2 = WIDTH OF SPACING DISTANCE BETWEEN CROSSWALK BARS

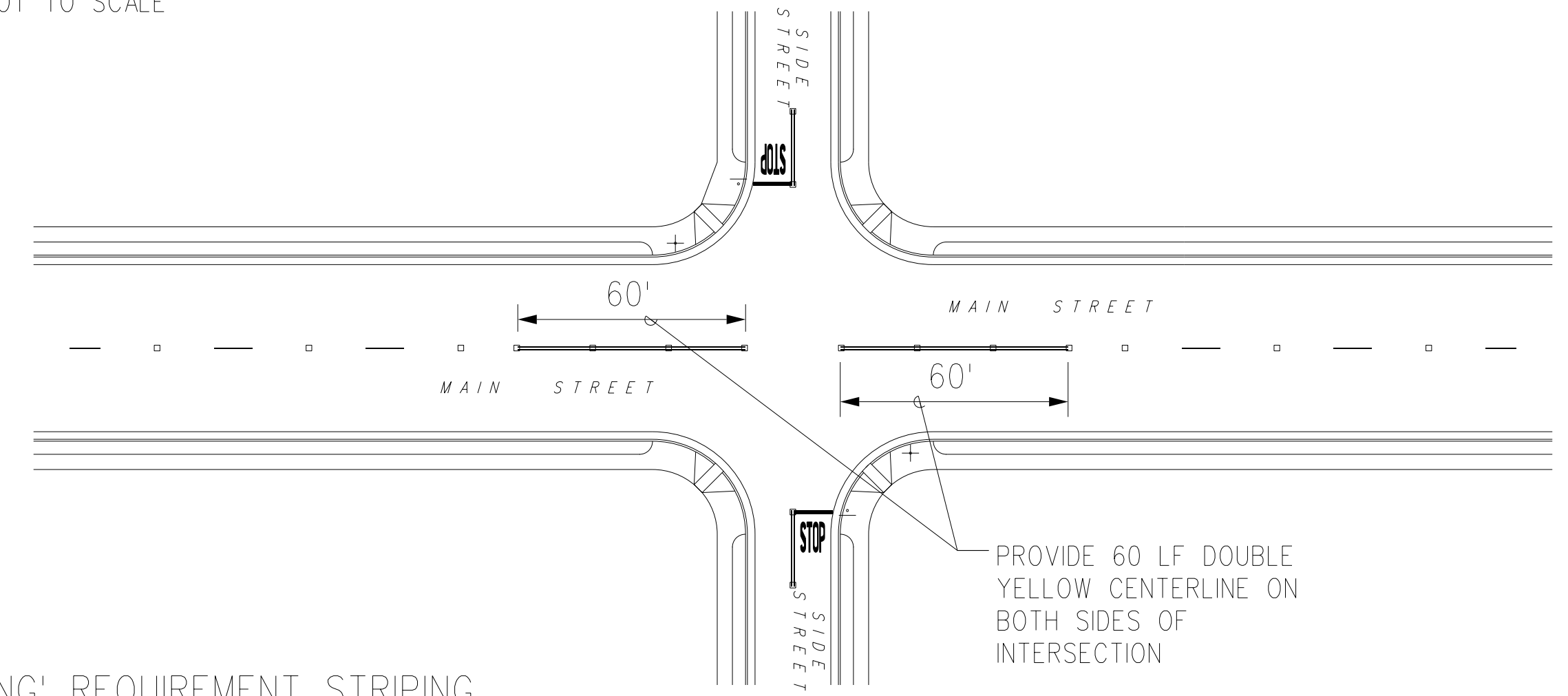
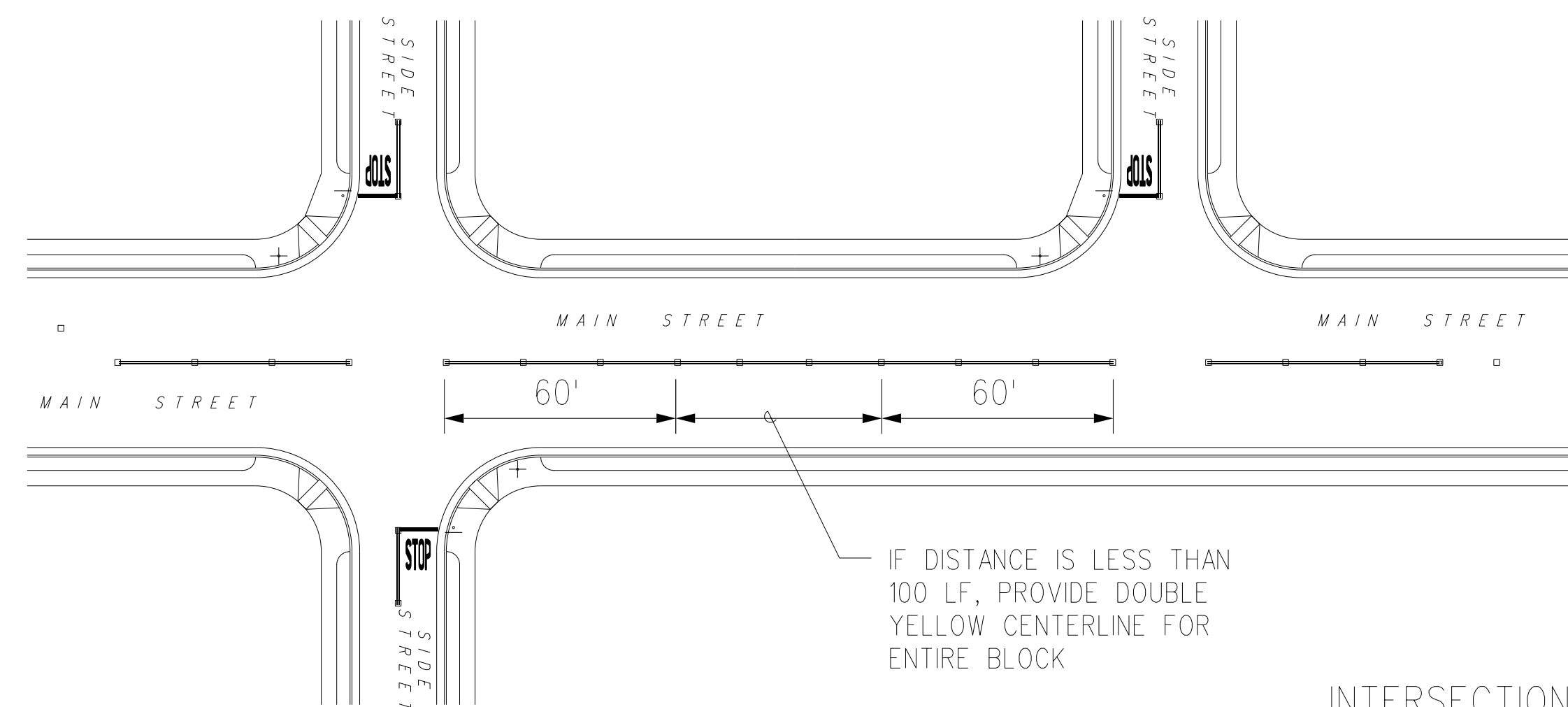
CONTROLLED INTERSECTION CROSSWALK DETAIL

MID-BLOCK CROSSWALK DETAIL

TYPICAL MEDIAN MULTILANE

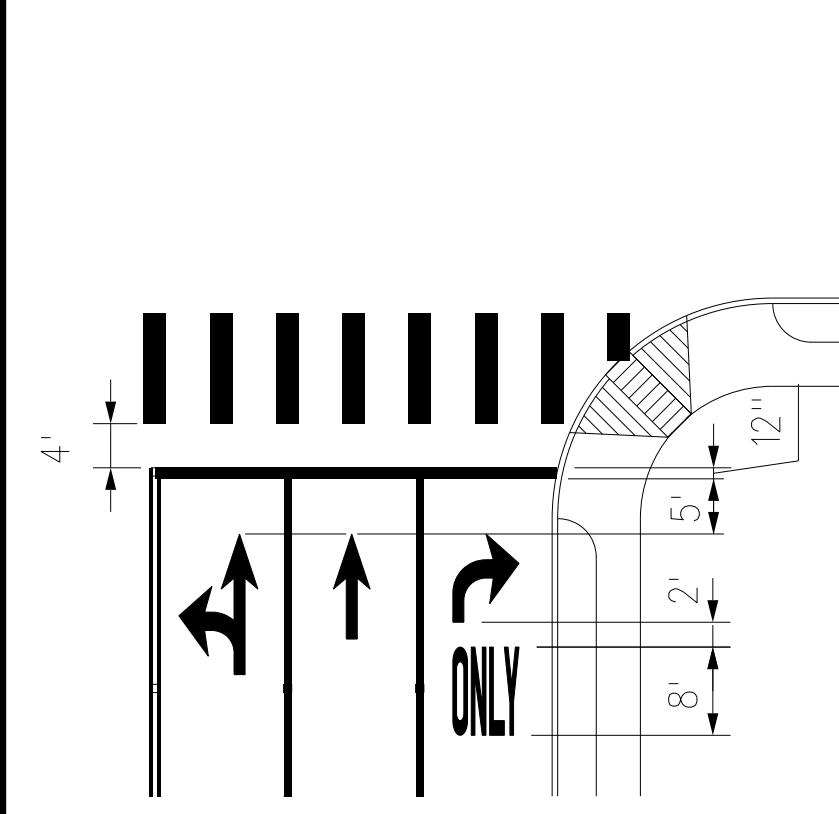
NON-MEDIAN ? MULTILANE

CROSSWALK STRIPING DETAILS
NOT TO SCALE

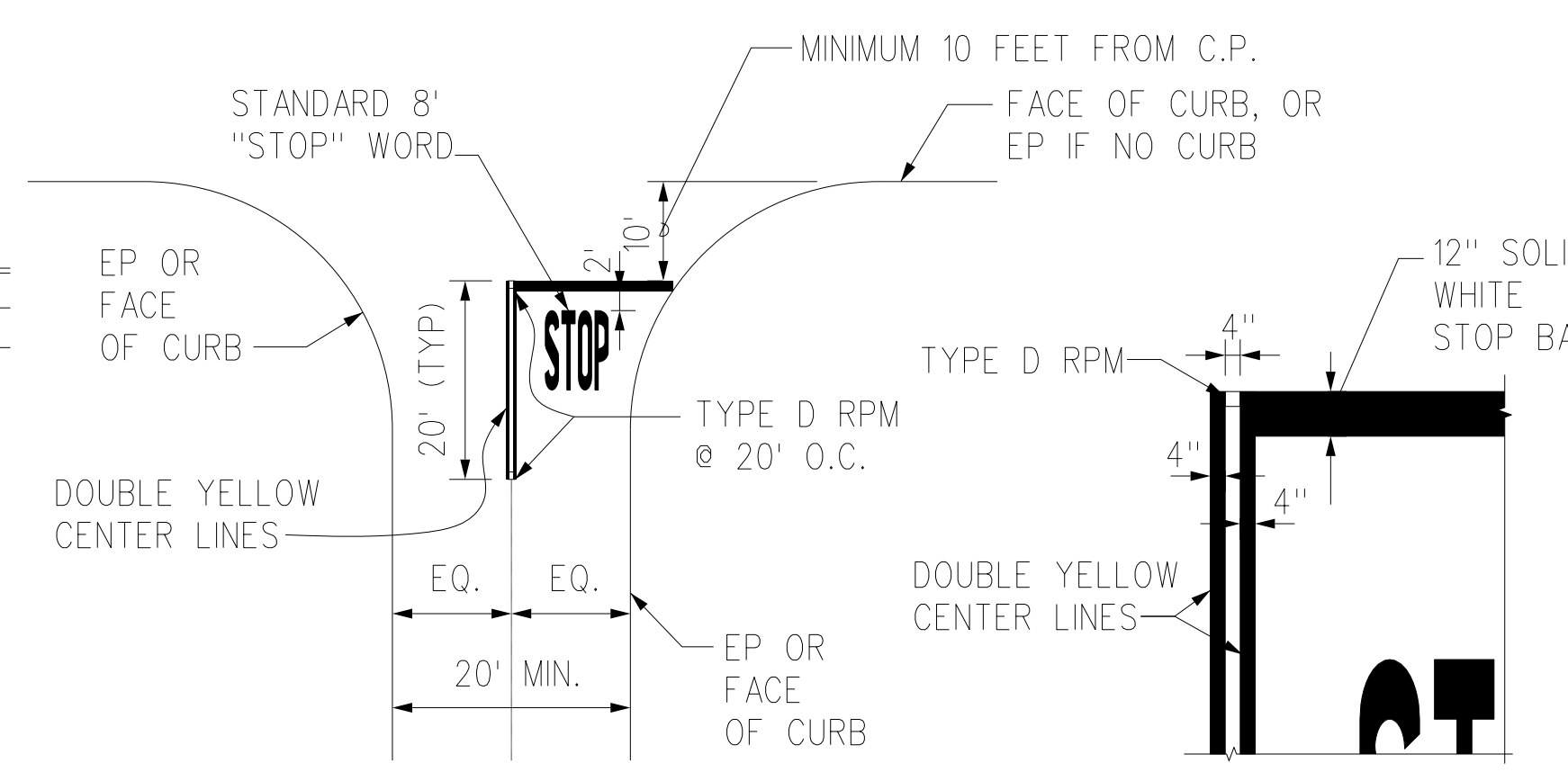


INTERSECTION 'NO PASSING' REQUIREMENT STRIPING
NOT TO SCALE

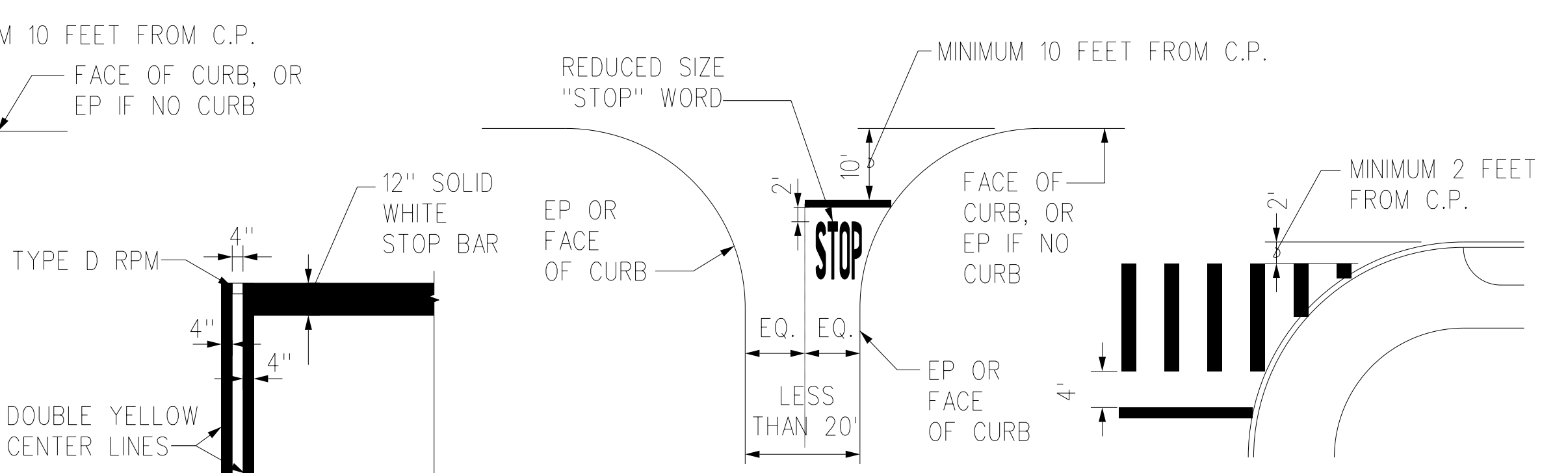
FOR USE WITHIN CITY R.O.W. ONLY



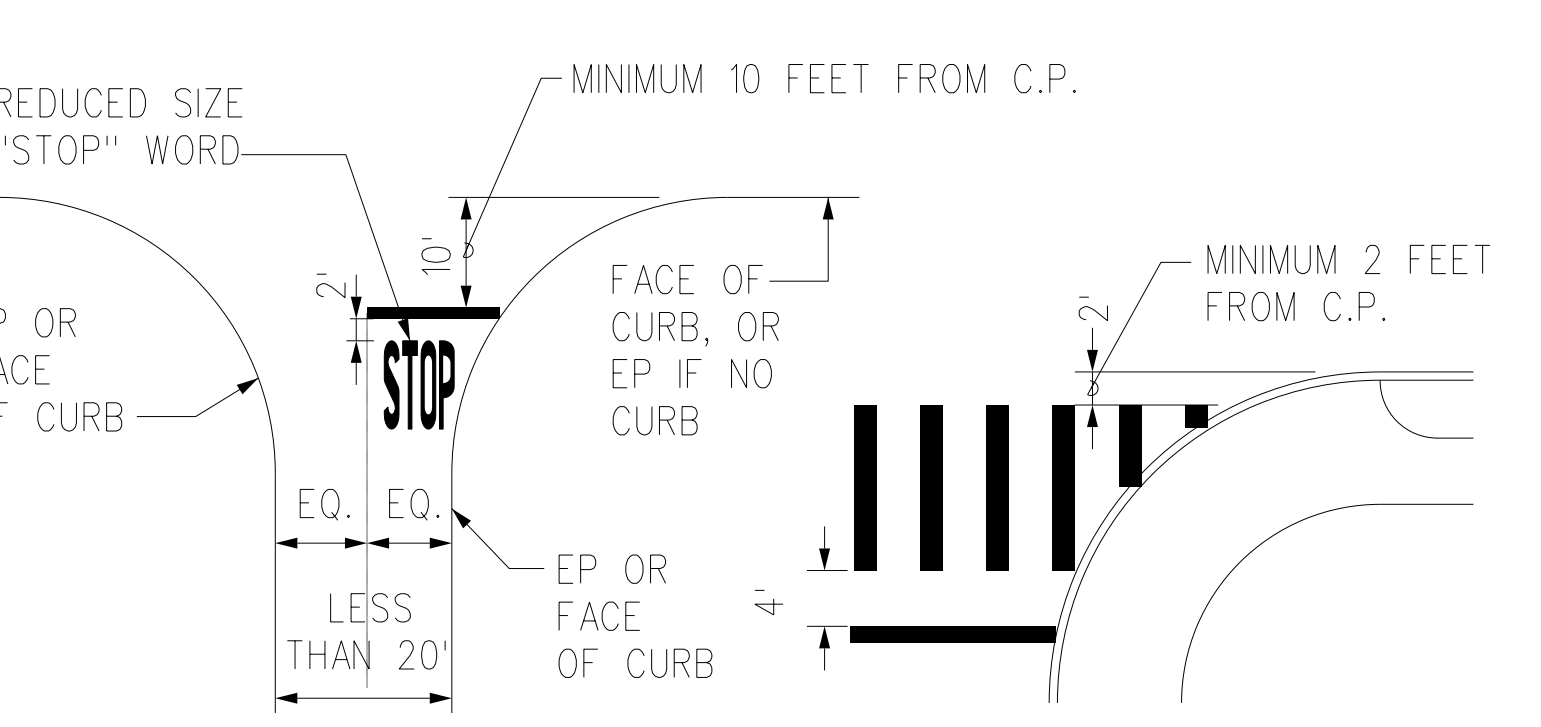
TYPICAL LANE ARROW MARKINGS



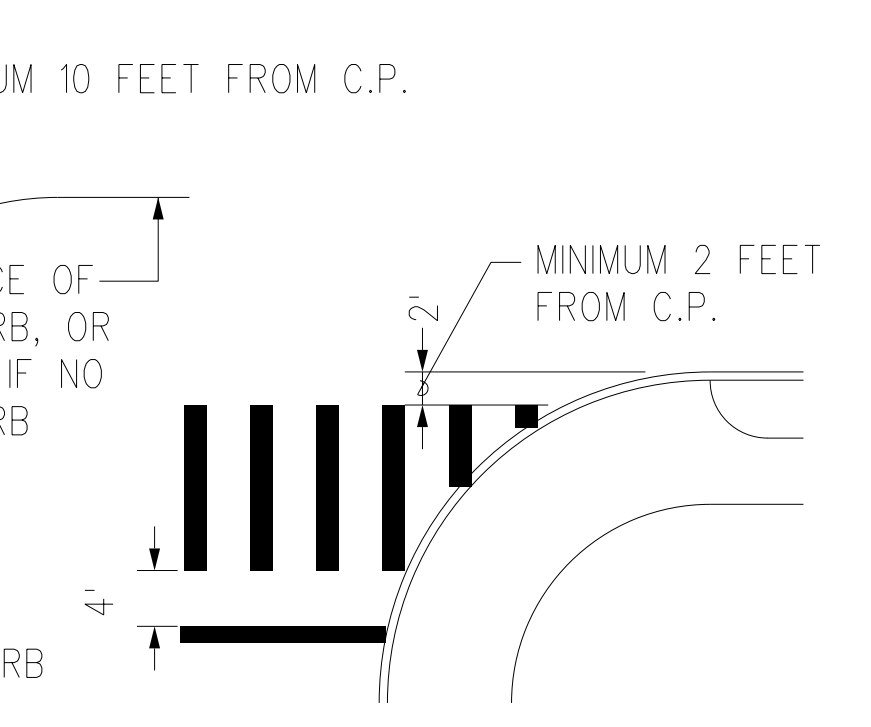
TYPICAL INTERSECTION PAVEMENT MARKINGS (MIN 20' WIDTH)



TYPICAL STOP BAR DETAILS
NOT TO SCALE



TYPICAL INTERSECTION PAVEMENT MARKINGS (LESS THAN 20' WIDTH)



STANDARD CROSSWALK WITH STOP BAR AT LOCATION WITH NO CURB RAMP

APPROVED:

CHIEF, TRAFFIC REVIEW BRANCH, DPP
(For Work within Proposed City R.O.W.)

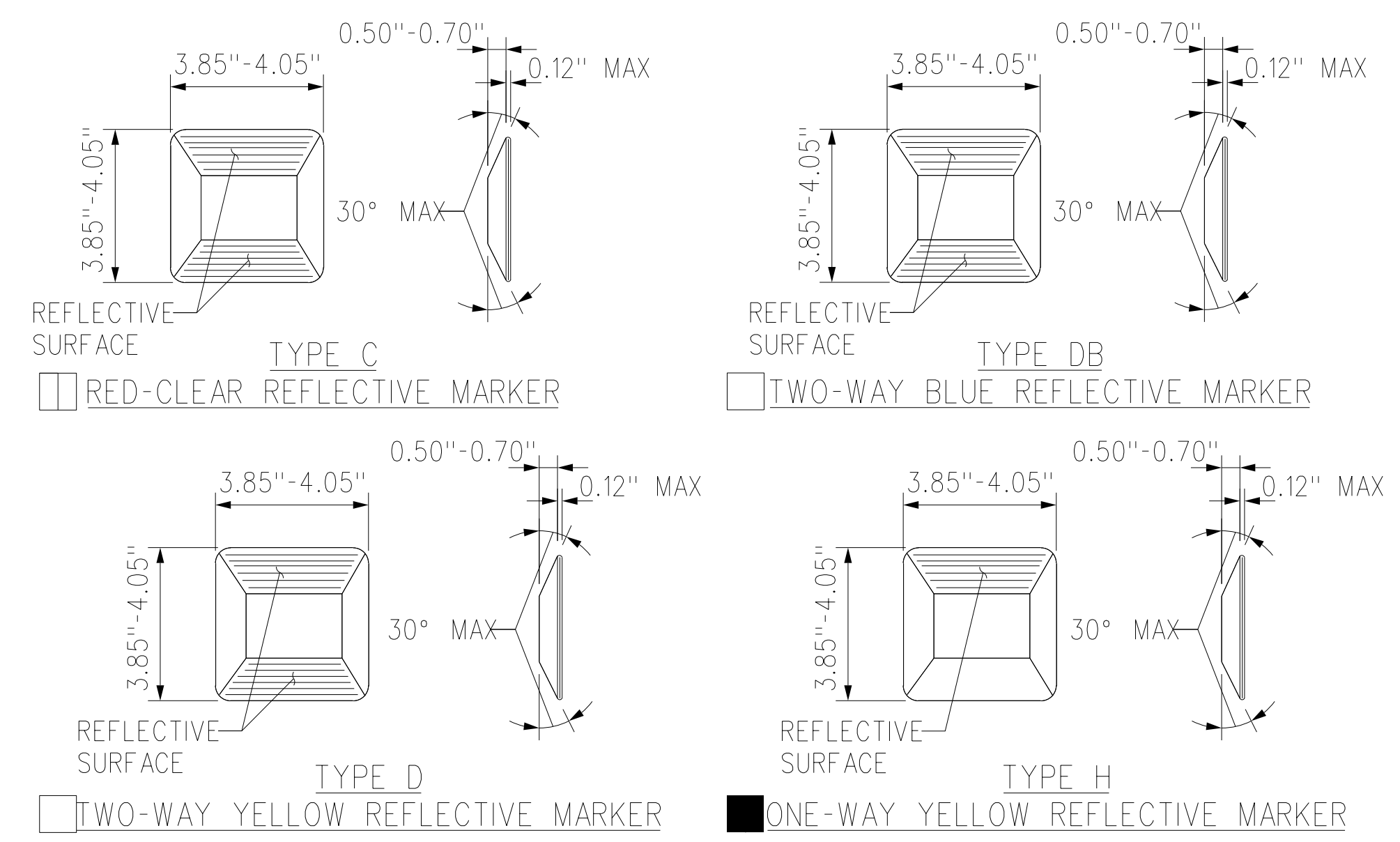
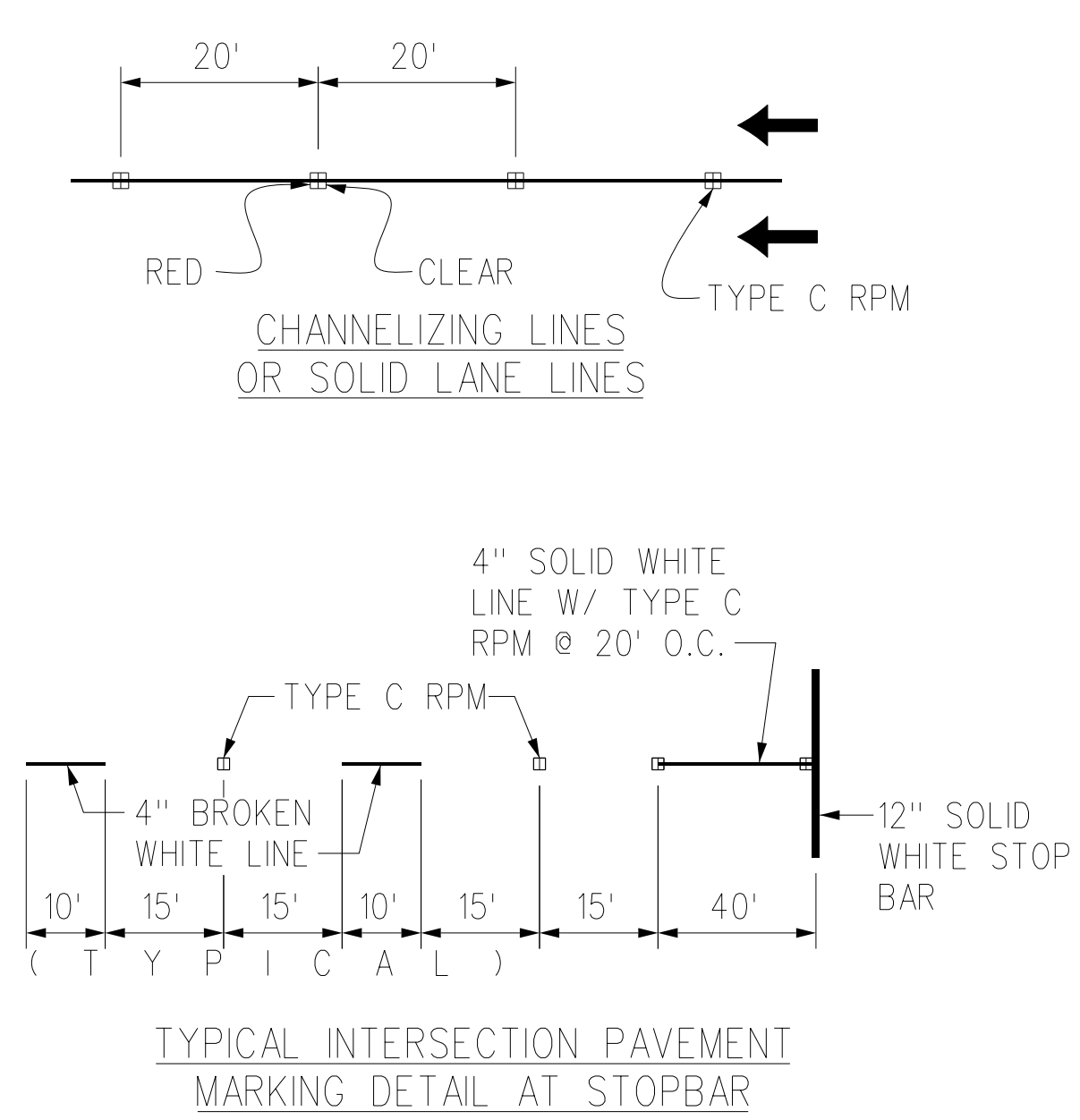
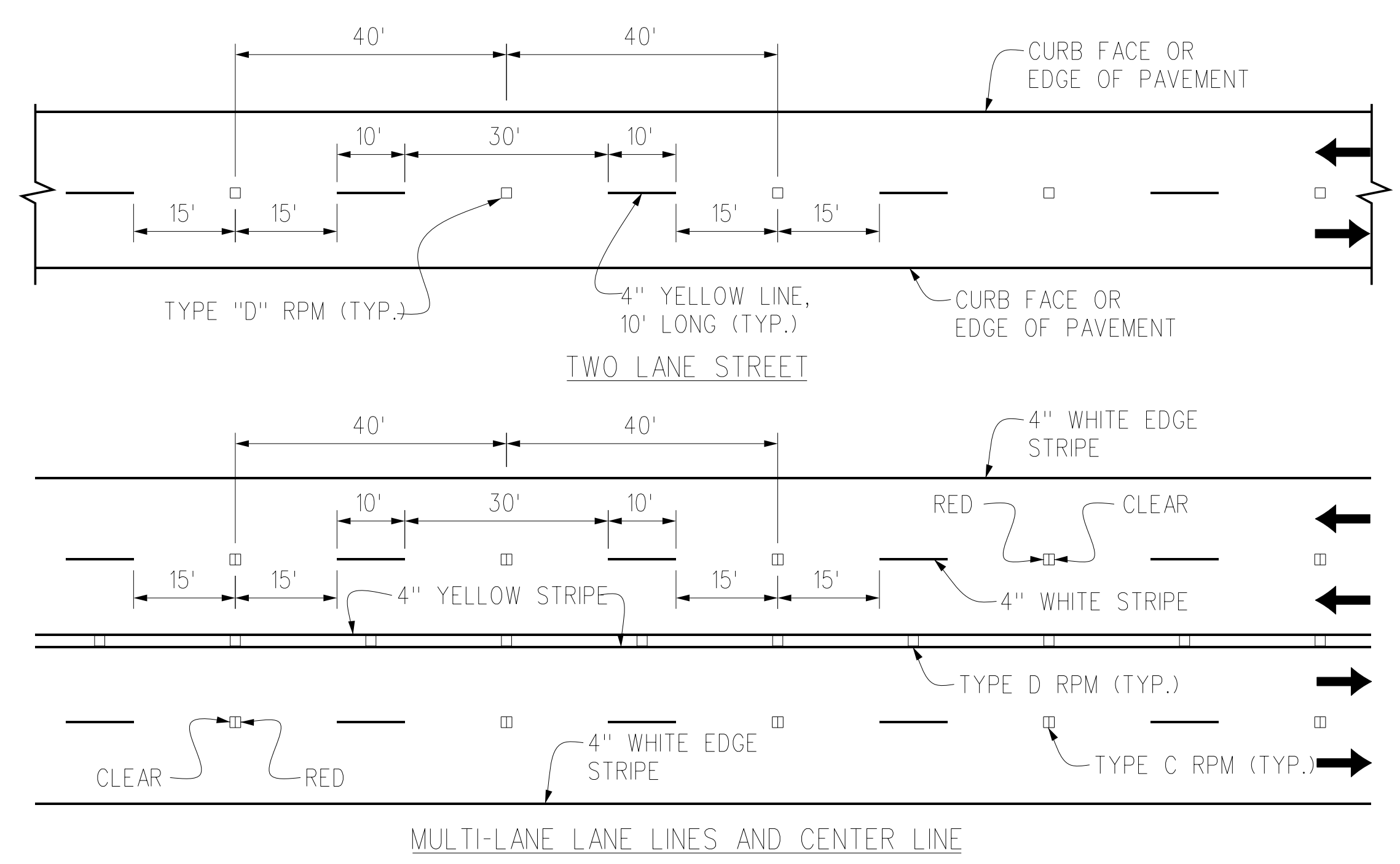
Date

ORIGINAL PLAN
NOTE BOOK
DATE: 1/15/20
DRAWN BY: [Signature]
DESIGNED BY: [Signature]
CHECKED BY: [Signature]

DATE	REVISION
4/07/20	ADDED CITY APPROVAL BLOCK
3/24/20	ADDED NEW PLAN SHEET

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
CITY AND COUNTY OF HONOLULU
PAVEMENT MARKING DETAILS
FORT BARRETTE ROAD OPERATIONAL IMPROVEMENTS
Roosevelt Avenue to Farrington Highway
PROJECT NO. 901A-01-19
Scale: Not to Scale Date: Feb, 2020
SHEET No. T13D OF 13 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	901A-01-19	2020	ADD. 64S-5	167



TYPICAL INSTALLATION DETAILS OF RAISED PAVEMENT MARKERS
NOT TO SCALE

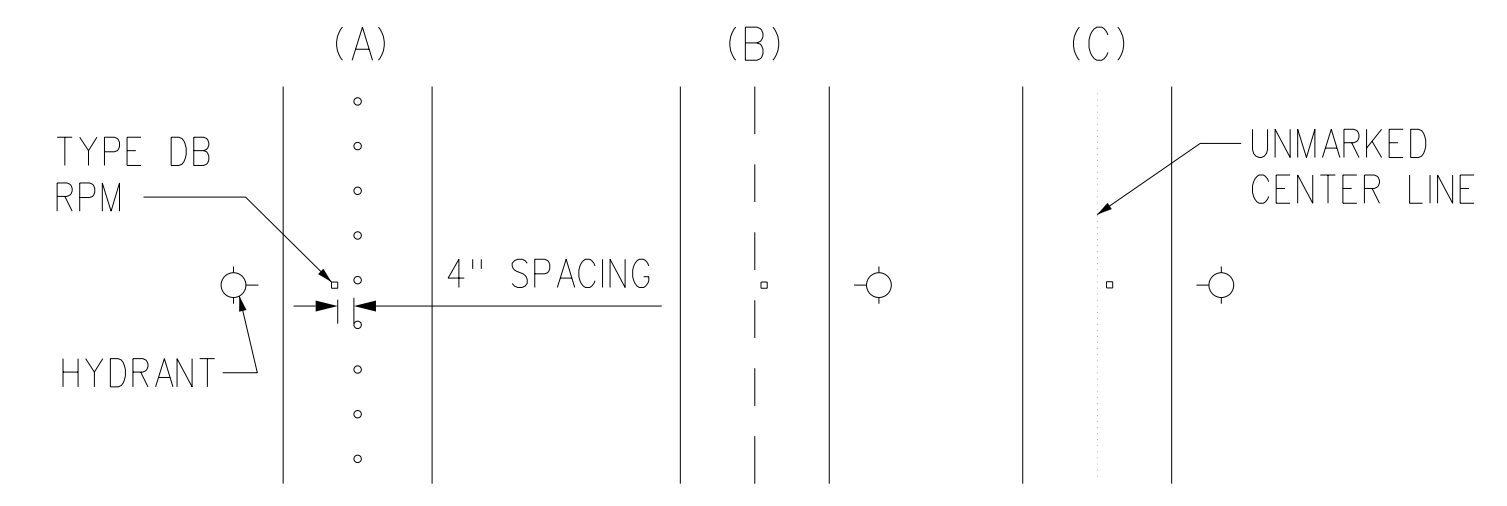


FIGURE 1
TWO LANE STREET

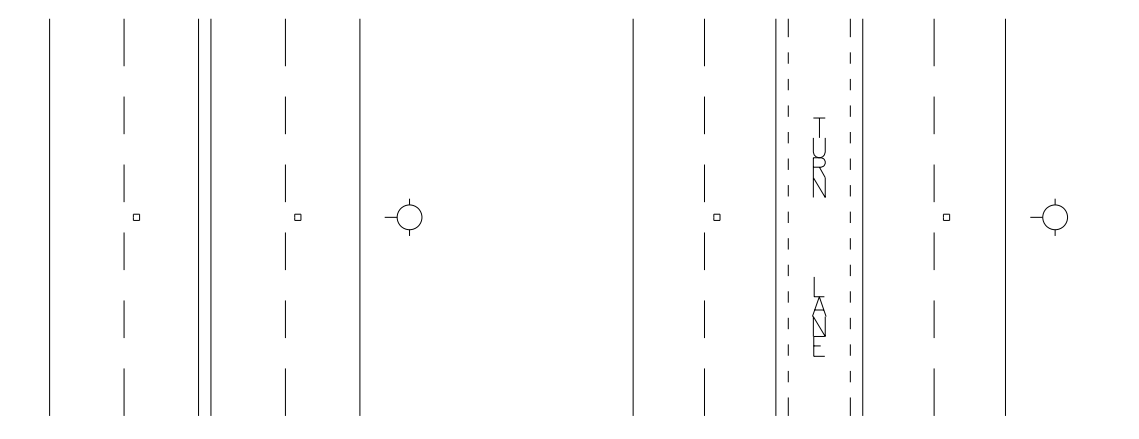


FIGURE 2
DIVIDED STREET

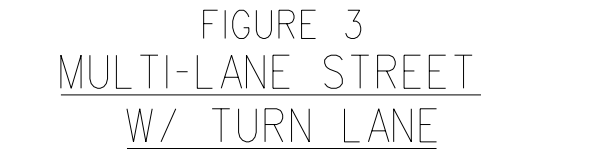


FIGURE 3
MULTI-LANE STREET W/ TURN LANE

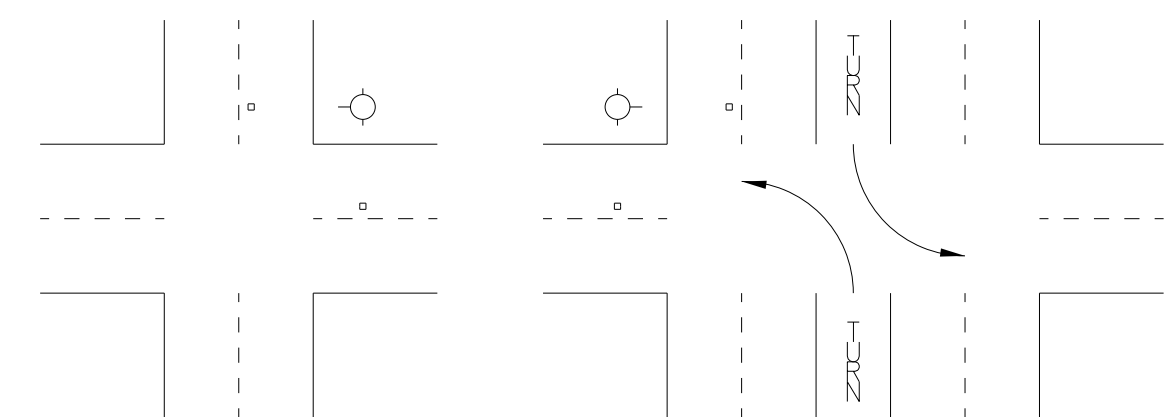


FIGURE 4
TWO LANE STREET AT INTERSECTION



FIGURE 5
FOUR LANE STREET W/ TURN LANE AT INTERSECTION

HYDRANT MARKER LOCATION FOR STREETS
NOT TO SCALE

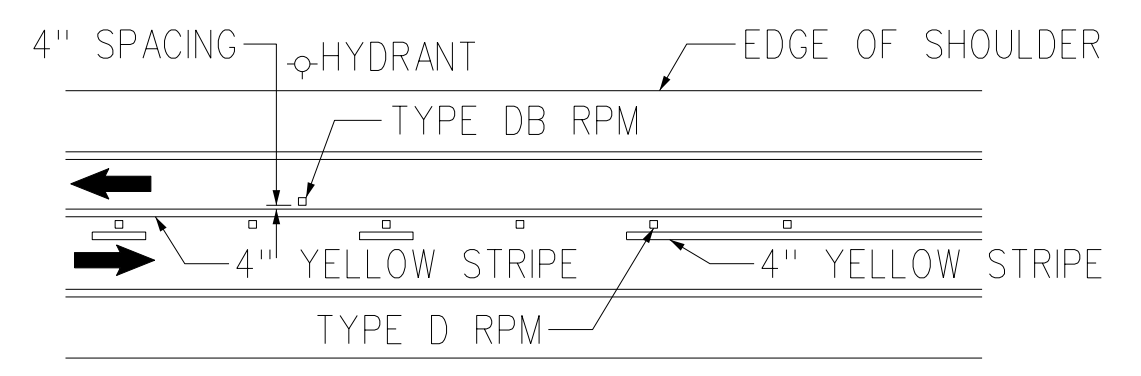


DIAGRAM A: TWO LANE HIGHWAY

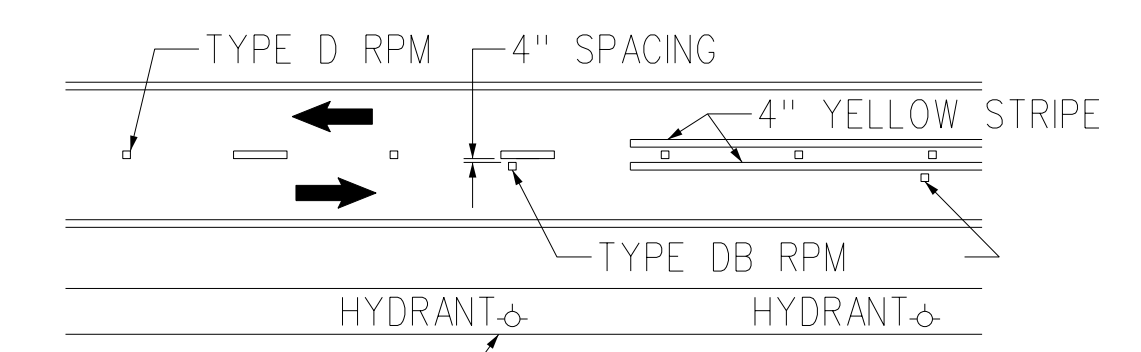


DIAGRAM B: TWO LANE HIGHWAY

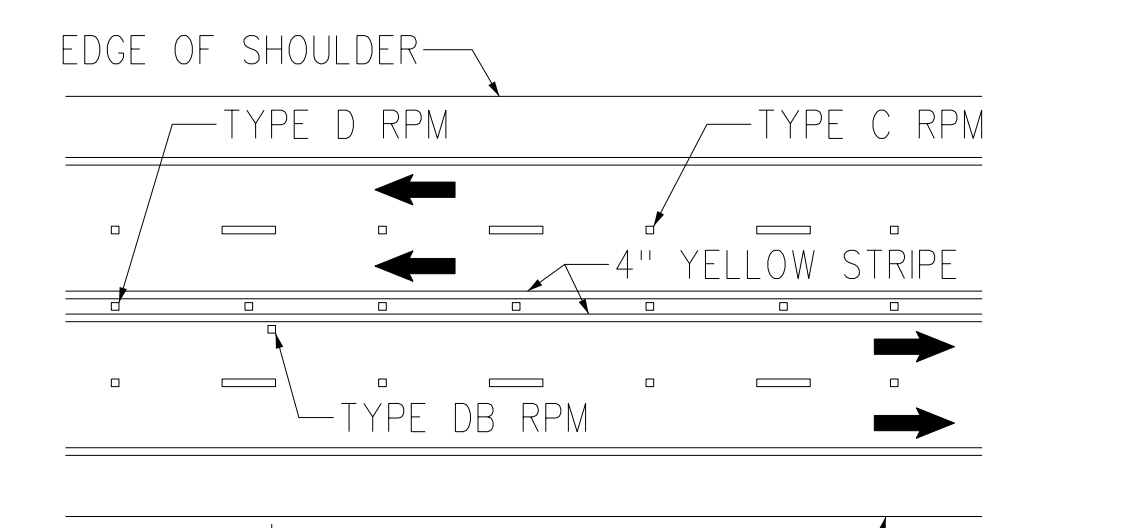


DIAGRAM C: MULTI-LANE HIGHWAY

HYDRANT MARKER LOCATION FOR HIGHWAYS
NOT TO SCALE

FOR USE WITHIN CITY R.O.W. ONLY

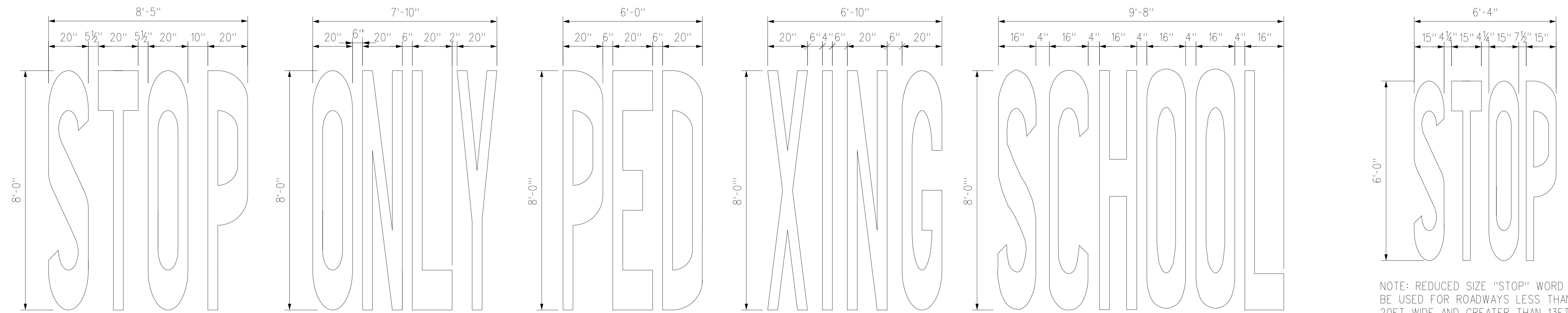
2	4/07/20	ADDED CITY APPROVAL BLOCK
1	3/24/20	ADDED NEW PLAN SHEET
DATE	REVISION	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
CITY AND COUNTY OF HONOLULU
PAVEMENT MARKING DETAILS
FORT BARRETTE ROAD OPERATIONAL IMPROVEMENTS
Roosevelt Avenue to Farrington Highway
PROJECT NO. 901A-01-19
Scale: Not to Scale Date: Feb, 2020
SHEET No. 113E OF 13 SHEETS

2 APPROVED: _____ Date _____
CHIEF, TRAFFIC REVIEW BRANCH, DPP
(For Work within Proposed City R.O.W.)

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

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	901A-01-19	2020	ADD. 64S-6	167

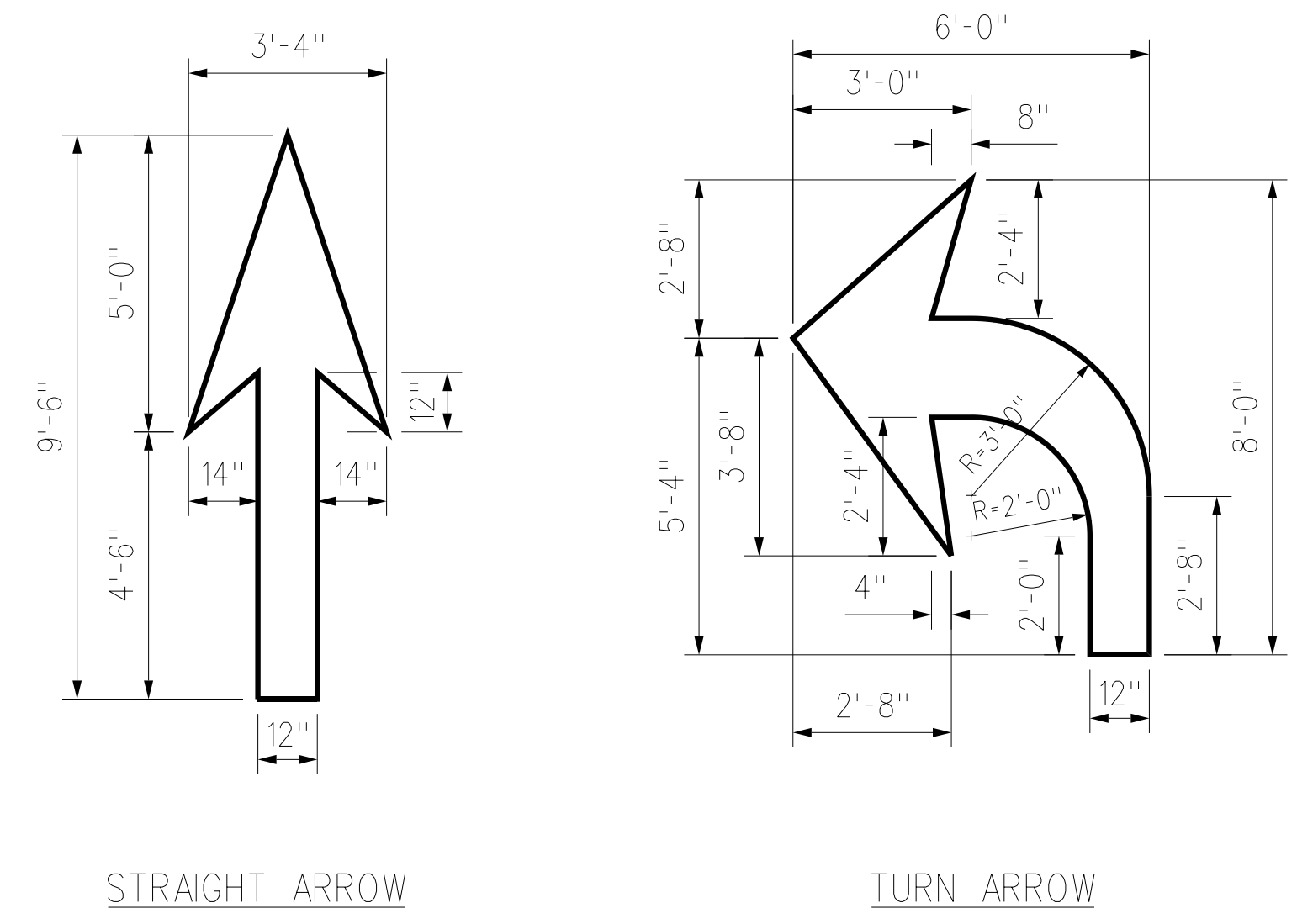


NOTE: PAVEMENT ALPHABETS SHALL CONFORM TO THE LATEST EDITION OF THE FEDERAL HIGHWAY ADMINISTRATION PUBLICATION "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AND THE CITY & COUNTY OF HONOLULU PUBLICATION, "TRAFFIC STANDARDS MANUAL, DEPARTMENT OF TRANSPORTATION SERVICES" AND ITS AMENDMENTS.

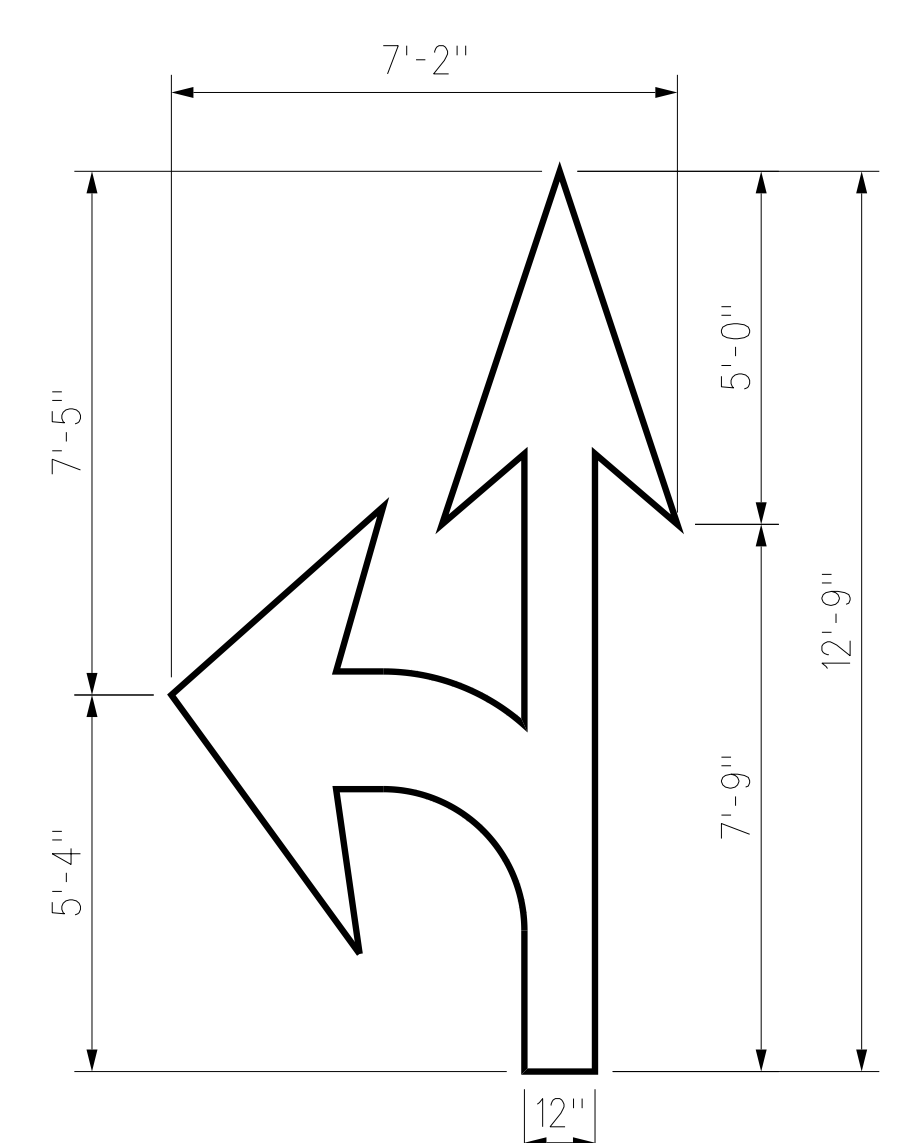
NOTE: REDUCED SIZE "STOP" WORD SHALL BE USED FOR ROADWAYS LESS THAN 20FT WIDE AND GREATER THAN 13FT WIDE.

REDUCED SIZE "STOP" WORD NOT TO SCALE

STANDARD 8'-0" PAVEMENT WORDS
NOT TO SCALE

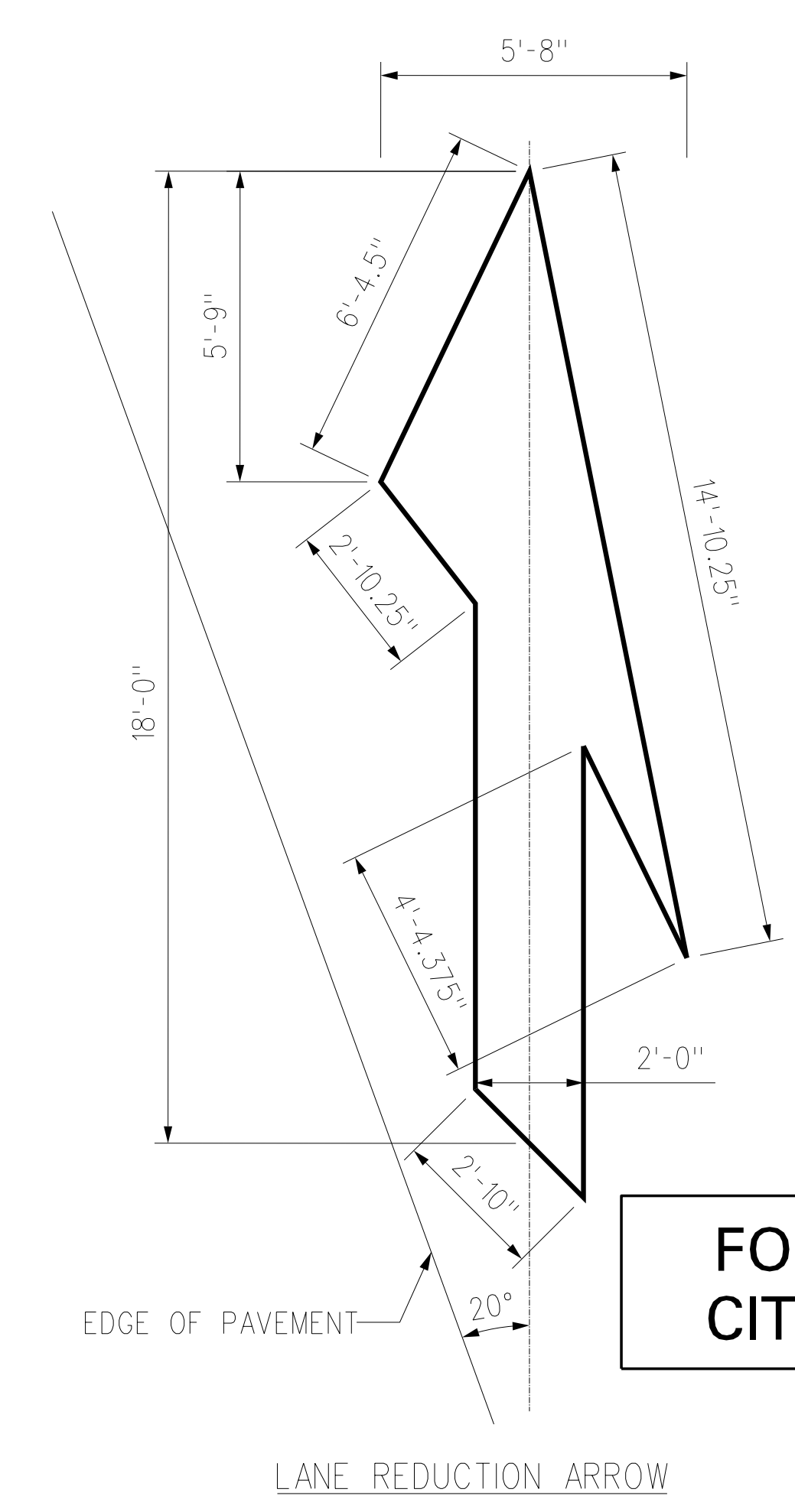


STRAIGHT ARROW TURN ARROW



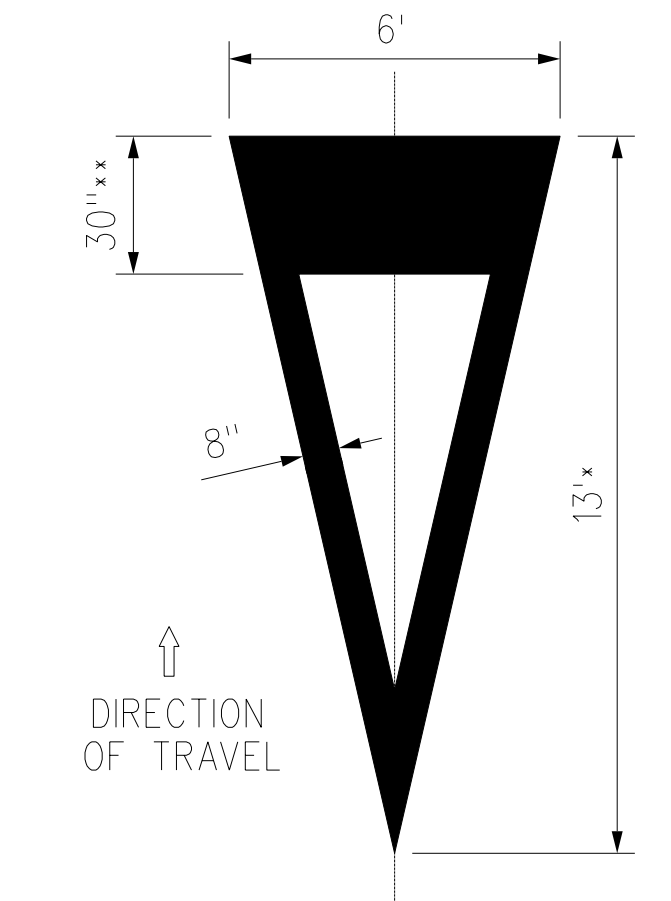
NOTE: SEE STRAIGHT AND TURN ARROWS FOR DETAILED DIMENSIONS.

TYPICAL PAVEMENT ARROWS
NOT TO SCALE



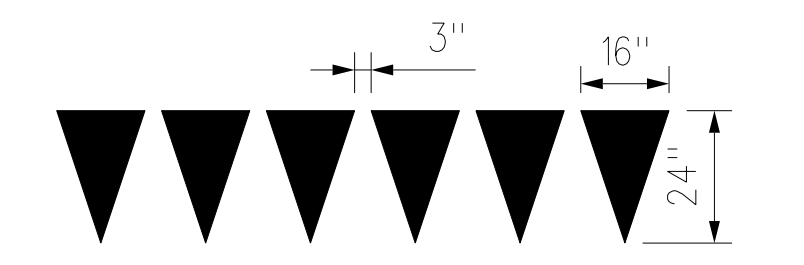
FOR USE WITHIN CITY R.O.W. ONLY

LANE REDUCTION ARROW



* 20' FOR SPEED LIMIT 45 MPH OR GREATER
** 36" FOR SPEED LIMIT 45 MPH OR GREATER

YIELD AHEAD TRIANGLE SYMBOL



YIELD LINE LAYOUT

TYPICAL YIELD LINE/ARROW DETAILS
NOT TO SCALE

2 APPROVED:

CHIEF, TRAFFIC REVIEW BRANCH, DPP
(For Work within Proposed City R.O.W.)

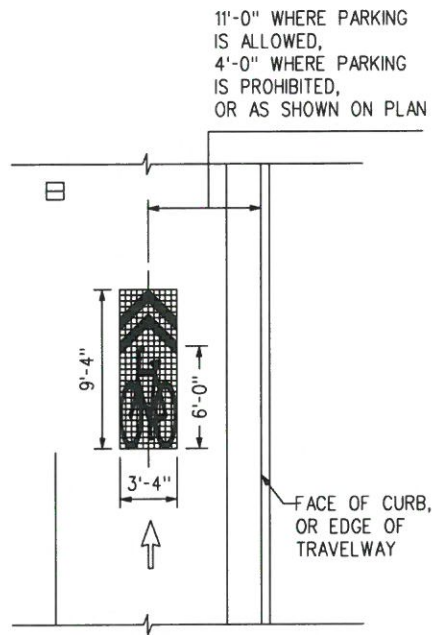
DATE	REVISION
4/07/20	ADDED CITY APPROVAL BLOCK
3/24/20	ADDED NEW PLAN SHEET

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
CITY AND COUNTY OF HONOLULU
PAVEMENT MARKING DETAILS
FORT BARRETTE ROAD OPERATIONAL IMPROVEMENTS
Roosevelt Avenue to Farrington Highway
PROJECT NO. 901A-01-19
Scale: Not to Scale Date: Feb., 2020
SHEET No. T13F OF 13 SHEETS

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

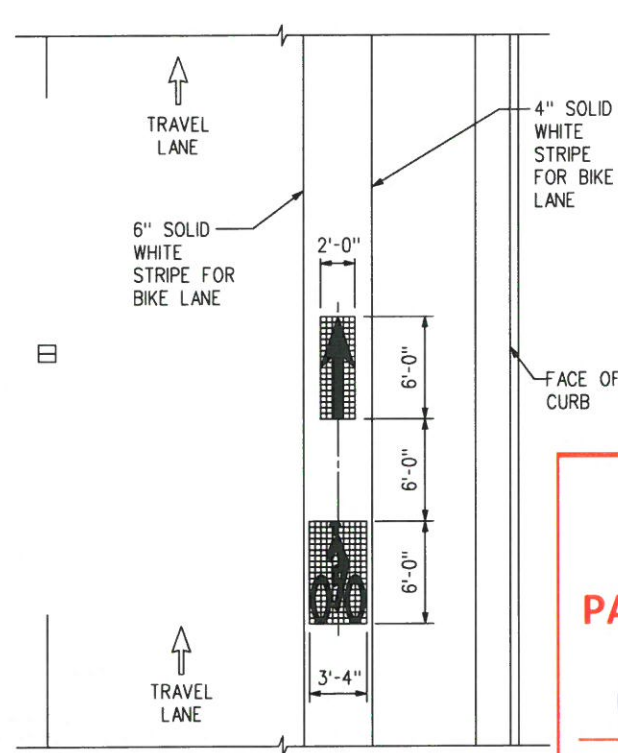
ASBUILT DRAWINGS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	901A-01-19	2020	C.O. ADD. 64S-7	167

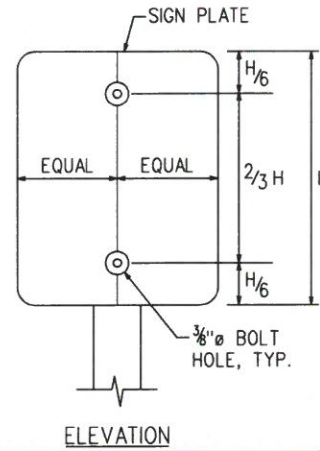


NOTE:
THE SHARED LANE MARKING SHALL BE PLACED IMMEDIATELY AFTER AN INTERSECTION AND SPACED AT INTERVALS NOT GREATER THAN 250 FEET THEREAFTER.

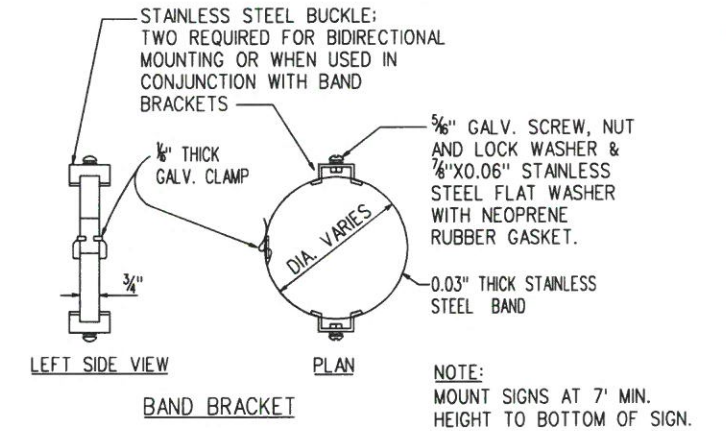
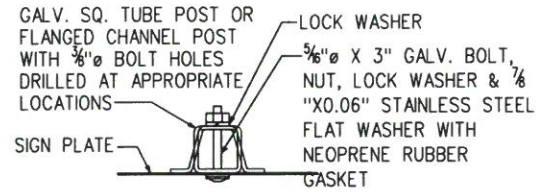
SHARED LANE MARKING
NOT TO SCALE



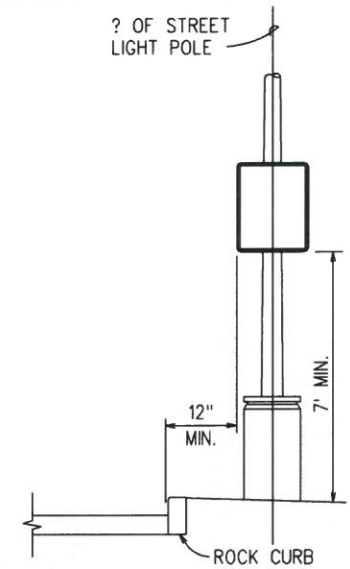
HELMETED BICYCLIST SYMBOL & ARROW
NOT TO SCALE



H = HEIGHT OF SIGN PANEL;
IF $2/3 H > 2'$, INSTALL ONE SET OF SIGN PANEL FASTENING HARDWARE FOR EVERY 18" INCREMENT OF $2/3 H$ IN EQUAL SPACING.



NEW SIGN ON EXISTING STREET LIGHT POLE MOUNTING DETAIL
NOT TO SCALE



HEIGHT AND LATERAL LOCATION OF SIGN
NOT TO SCALE

AS-BUILT
PAUL'S ELECTRICAL CONTRACTING, LLC

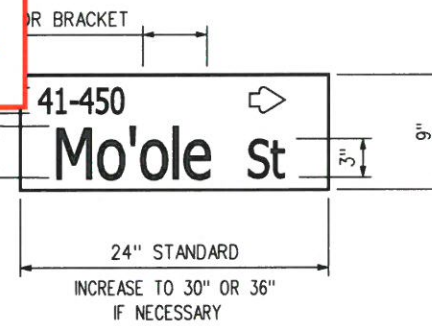
[Signature]

SIGNATURE

10/3/22

DATE

- KEEP INSIDE OF 2-1/4" ANCHOR POST FREE FROM IMPEDIMENTS THAT MAY PREVENT PROPER SEATING OF 2" SIGN POST.
- SQUARE TUBING SIGN POST SHALL BE TELESCOPING TYPE WITH 7/16" DIA. HOLES AT 1" O.C. ON FOUR SIDES.
- USE 5/16" X 2-3/4" BOLTS TO SECURE SQUARE TUBING POST ONTO THE 2-1/4" SQUARE TUBE ANCHOR POST.
- VERIFY EXISTENCE AND LOCATION OF EXISTING UNDERGROUND UTILITIES PRIOR TO INSTALLATION.
- MINIMUM BURY DEPTH FOR THE 2-1/4" ANCHOR POST (WITHOUT CONCRETE FOOTING) SHALL BE AS FOLLOWS:
4'-0" MIN. AT POOR SOIL CONDITIONS
2'-6" MIN. AT ROCKY CONDITIONS



STREET NAME SIGN DETAIL
NOT TO SCALE

STREET NAME SIGN NOTES:

- REFERENCE STANDARD DETAILS T-1 AND T-14 FOR STREET NAME SIGN INSTALLATION. SEE STREET NAME SIGN DETAIL THIS SHEET.
- SUBMIT SHOP DRAWINGS OF STREET NAME SIGNS AND CONNECTION DETAILS PRIOR TO FABRICATION OF SIGNS.

FOR USE WITHIN CITY R.O.W. ONLY

APPROVED:

CHIEF, TRAFFIC REVIEW BRANCH, DPP
(For Work within Proposed City R.O.W.)

Date

DATE	REVISION
3/24/20	ADDED NEW PLAN SHEET
4/07/20	ADDED CITY APPROVAL BLOCK
6/08/21	ADDED SIGN INSTALLATION DETAIL

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
CITY AND COUNTY OF HONOLULU
PAVEMENT MARKING DETAILS
FORT BARRETTE ROAD OPERATIONAL IMPROVEMENTS
Roosevelt Avenue to Farrington Highway
PROJECT NO. 901A-01-19
Scale: Not to Scale Date: Feb, 2020
SHEET No. T13G OF 13 SHEETS

DESIGNED BY	DATE
DRAWN BY	
CHECKED BY	
APPROVED BY	

INSTALLATION OF NEW SIGN POST WITH ANCHOR POST
NOT TO SCALE

INSTALLATION OF NEW SIGN POST WITH CONCRETE FOOTING
NOT TO SCALE

"AS-BUILT"

C.O. ADD. 64S-7