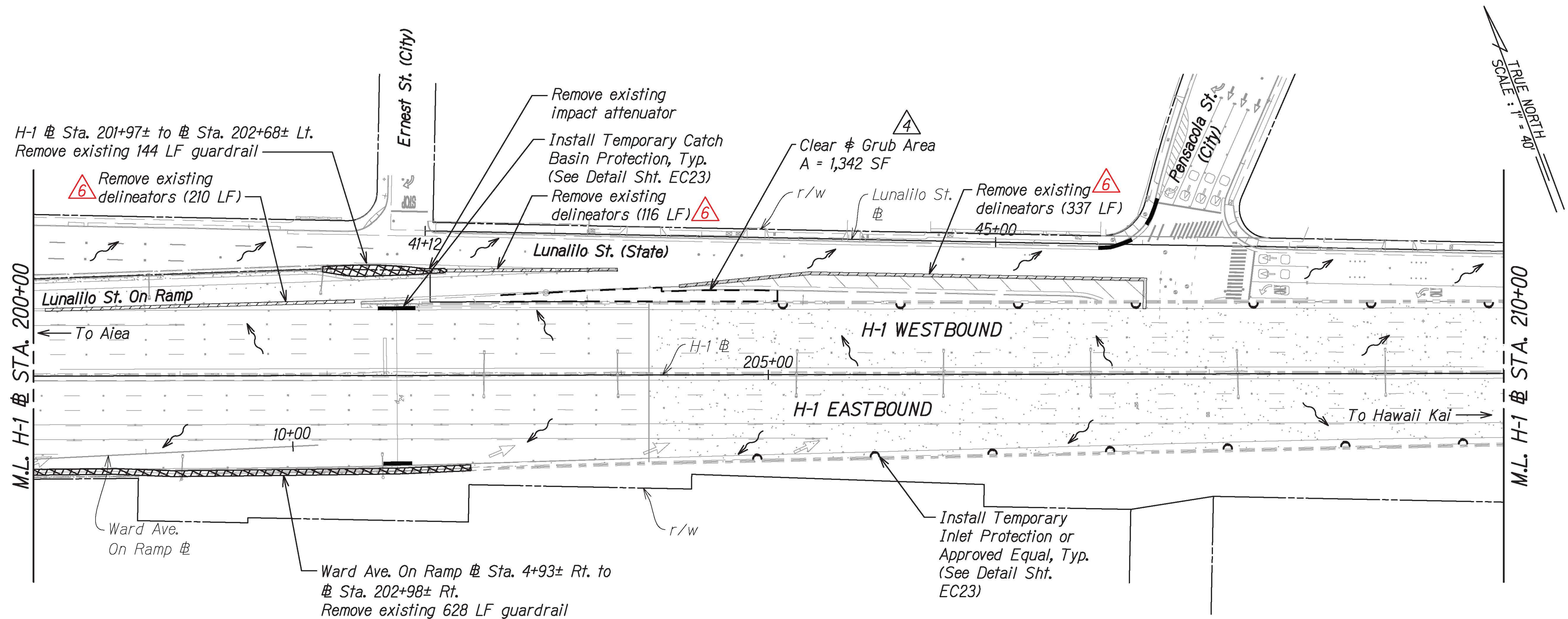


FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-HI-1(279)	2021	ADD. 15	304



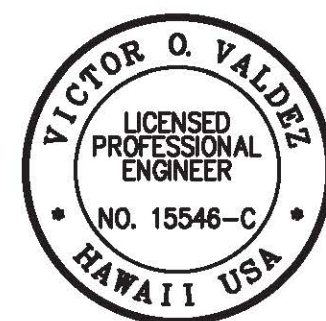
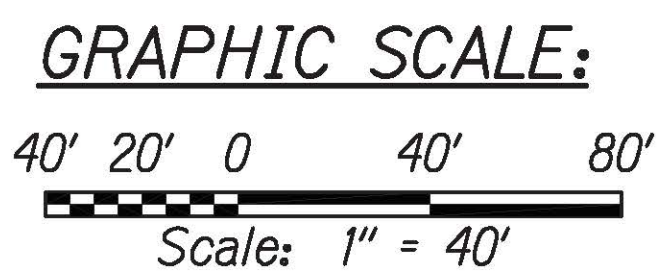
TRUE NORTH
SCALE: 1" = 40'

LEGEND:

- Catch Basin Protection
- Flow Arrow
- Snake Bags or Approved Equal
- Demolish Existing Guardrails or Impact Attenuator
- Limits of Clear ϕ Grub Δ
- Remove Existing Delineators Δ

NOTES:

- Sediment and Erosion Control BMP measures shown in the Contract Documents are minimum BMPs requirements and do not constitute an acceptable and/or complete Sediment and Erosion Control Plan. The Contractor shall incorporate additional BMPs based upon their means and methods considering site conditions and construction sequence in accordance with the Contract Documents including applicable permit document requirements. Cost shall be included in Pay Item 209.0100, Installation, Maintenance, Monitoring, and Removal of BMP.
- The Contractor shall take proper precautions and make necessary measures to ensure compliance to all applicable but not limited to Federal, State, and HDOT guidelines.
- Limits of milling and roadway pavement reconstructions, including on and off ramps are shown in the Roadway Plan R1 - R23.
- Traffic sign relocations and any other sign-related works resulting from the proposed improvements are shown in the Pavement Marking and Signing Plans M2 - M24.
- The Contractor shall only remove existing bushes and vegetation that may hinder construction work for this project related activities/phases and within the right-of-way. The Contractor shall be responsible to protect all open bare areas during all phases of construction to prevent erosion. Best Management Practices shall not be removed until final stabilization is complete for that phase. Bushes and vegetation shall be restored to pre-construction condition prior to final acceptance.

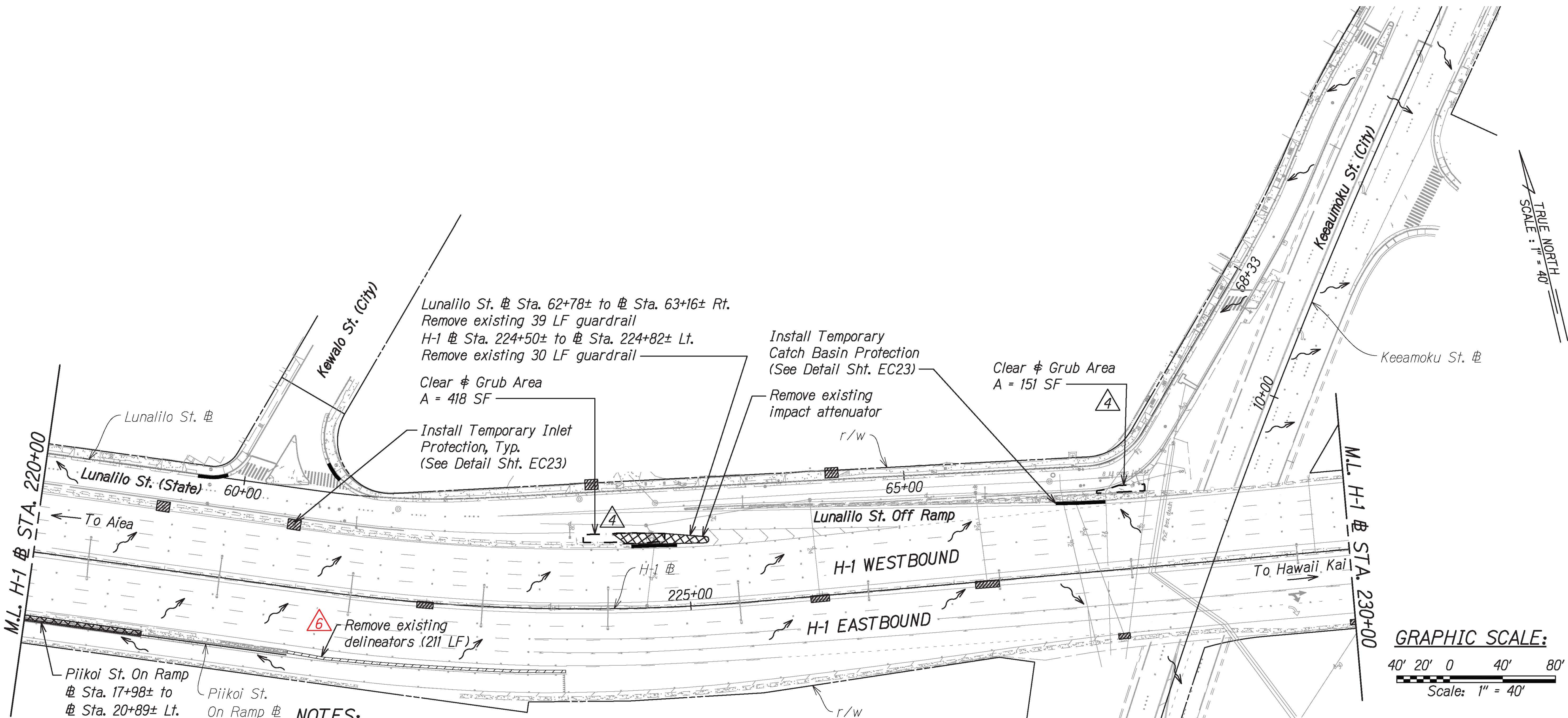


THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION

SIGNATURE: [Signature] EXPIRATION DATE OF THE LICENSE: 04/30/22

7/21/21	Δ Added Removal of Existing Delineators
7/14/21	Δ Added Clear ϕ Grub Limits
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
DEMOLITION AND EROSION CONTROL	
INTERSTATE ROUTE H-1 RESURFACING Miller Pedestrian Overpass to Kapiolani Interchange Federal-Aid Project No. NH-HI-1(279)	
Scale: 1" = 40'	Date: August 2021
SHEET No. EC4 OF 23 SHEETS	

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-HI-1(279)	2021	ADD. 17	304

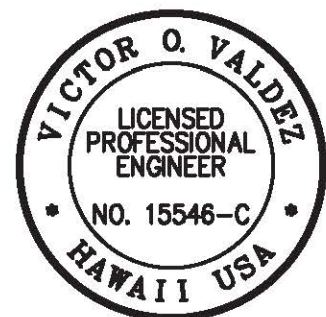


LEGEND:

- Catch Basin Protection
- Flow Arrow
- Inlet Protection
- Demolish Existing Guardrail or Impact Attenuator
- Limits of Clear & Grub
- Remove Existing Delineators

NOTES:

- Sediment and Erosion Control BMP measures shown in the Contract Documents are minimum BMPs requirements and do not constitute an acceptable and/or complete Sediment and Erosion Control Plan. The Contractor shall incorporate additional BMPs based upon their means and methods considering site conditions and construction sequence in accordance with the Contract Documents including applicable permit document requirements. Cost shall be included in Pay Item 209.0100, Installation, Maintenance, Monitoring, and Removal of BMP.
- The Contractor shall take proper precautions and make necessary measures to ensure compliance to all applicable but not limited to Federal, State, and HDOT guidelines.
- Limits of milling and roadway pavement reconstructions, including on and off ramps are shown in the Roadway Plan R1 - R23.
- Traffic sign relocations and any other sign-related works resulting from the proposed improvements are shown in the Pavement Marking and Signing Plans M2 - M24.
- The Contractor shall only remove existing bushes and vegetation that may hinder construction work for this project related activities/phases and within the right-of-way. The Contractor shall be responsible to protect all open bare areas during all phases of construction to prevent erosion. Best Management Practices shall not be removed until final stabilization is complete for that phase. Bushes and vegetation shall be restored to pre-construction condition prior to final acceptance.



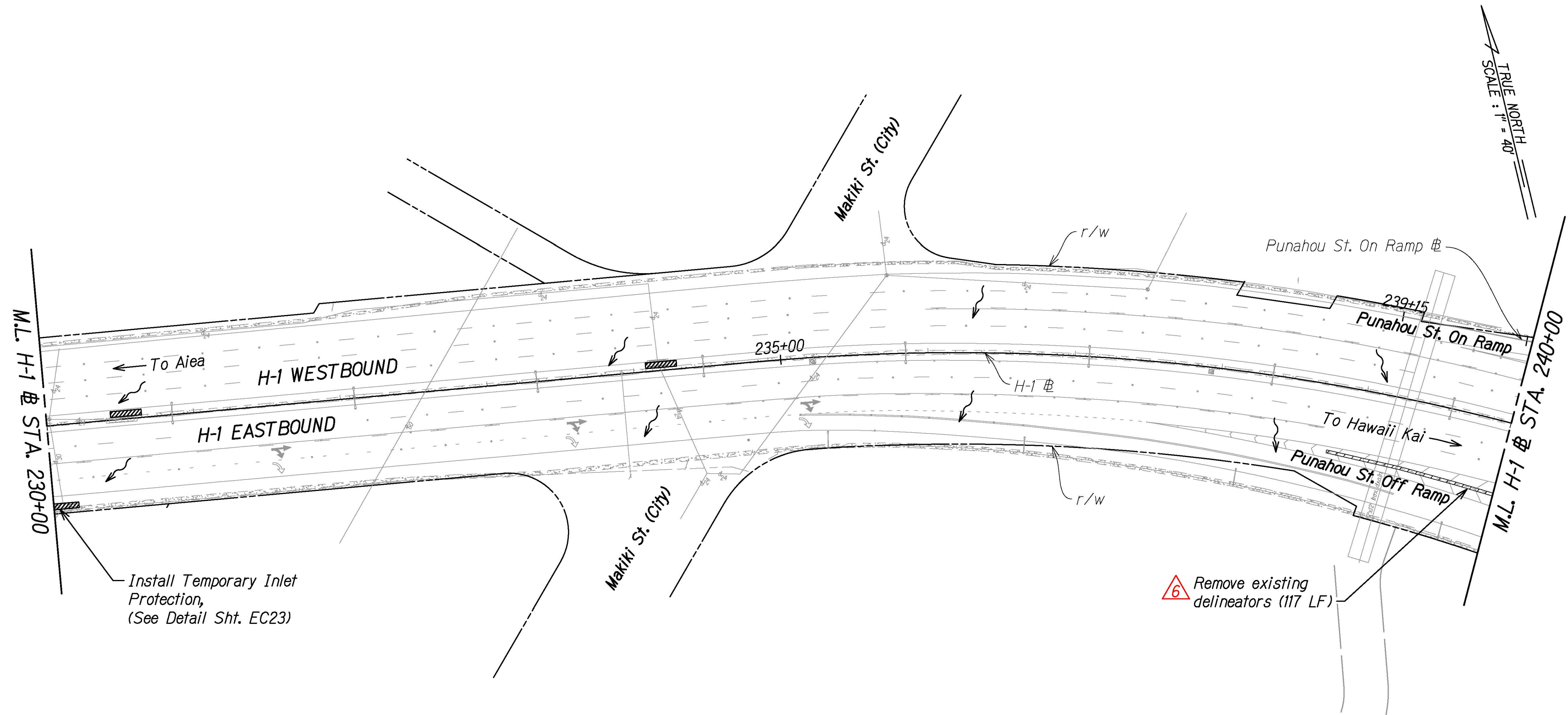
THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION

[Signature] 04/30/22
SIGNATURE EXPIRATION DATE
OF THE LICENSE

7/21/21	Added Removal of Existing Delineators
7/14/21	Added Clear & Grub Limits
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
DEMOLITION AND EROSION CONTROL	
INTERSTATE ROUTE H-1 RESURFACING	
Miller Pedestrian Overpass to Kapiolani Interchange	
Federal-Aid Project No. NH-HI-1(279)	
Scale: 1" = 40'	Date: August 2021
SHEET No. EC6 OF 23 SHEETS	

G:\CIVIL_3D PROJECTS\2016_2022\DOT-HWYS H1 RESURFACING - MILLER TO KAPITANI CIVIL DRAWINGS\EC5-EC8 DEMO AND EC PLAN.DWG 7/21/2021 10:25 PM

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-HI-1(279)	2021	ADD. 18	304



LEGEND:

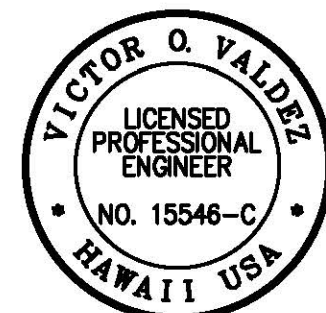
- Flow Arrow
- Inlet Protection
- Remove Existing Delineators

NOTES:

- Sediment and Erosion Control BMP measures shown in the Contract Documents are minimum BMPs requirements and do not constitute an acceptable and/or complete Sediment and Erosion Control Plan. The Contractor shall incorporate additional BMPs based upon their means and methods considering site conditions and construction sequence in accordance with the Contract Documents including applicable permit document requirements. Cost shall be included in Pay Item 209.0100, Installation, Maintenance, Monitoring, and Removal of BMP.
- The Contractor shall take proper precautions and make necessary measures to ensure compliance to all applicable but not limited to Federal, State, and HDOT guidelines.
- Limits of milling and roadway pavement reconstructions, including on and off ramps are shown in the Roadway Plan R1 - R23.
- Traffic sign relocations and any other sign-related works resulting from the proposed improvements are shown in the Pavement Marking and Signing Plans M2 - M24.
- The Contractor shall only remove existing bushes and vegetation that may hinder construction work for this project related activities/phases and within the right-of-way. The Contractor shall be responsible to protect all open bare areas during all phases of construction to prevent erosion. Best Management Practices shall not be removed until final stabilization is complete for that phase. Bushes and vegetation shall be restored to pre-construction condition prior to final acceptance.

GRAPHIC SCALE:

40' 20' 0 40' 80'
Scale: 1" = 40'



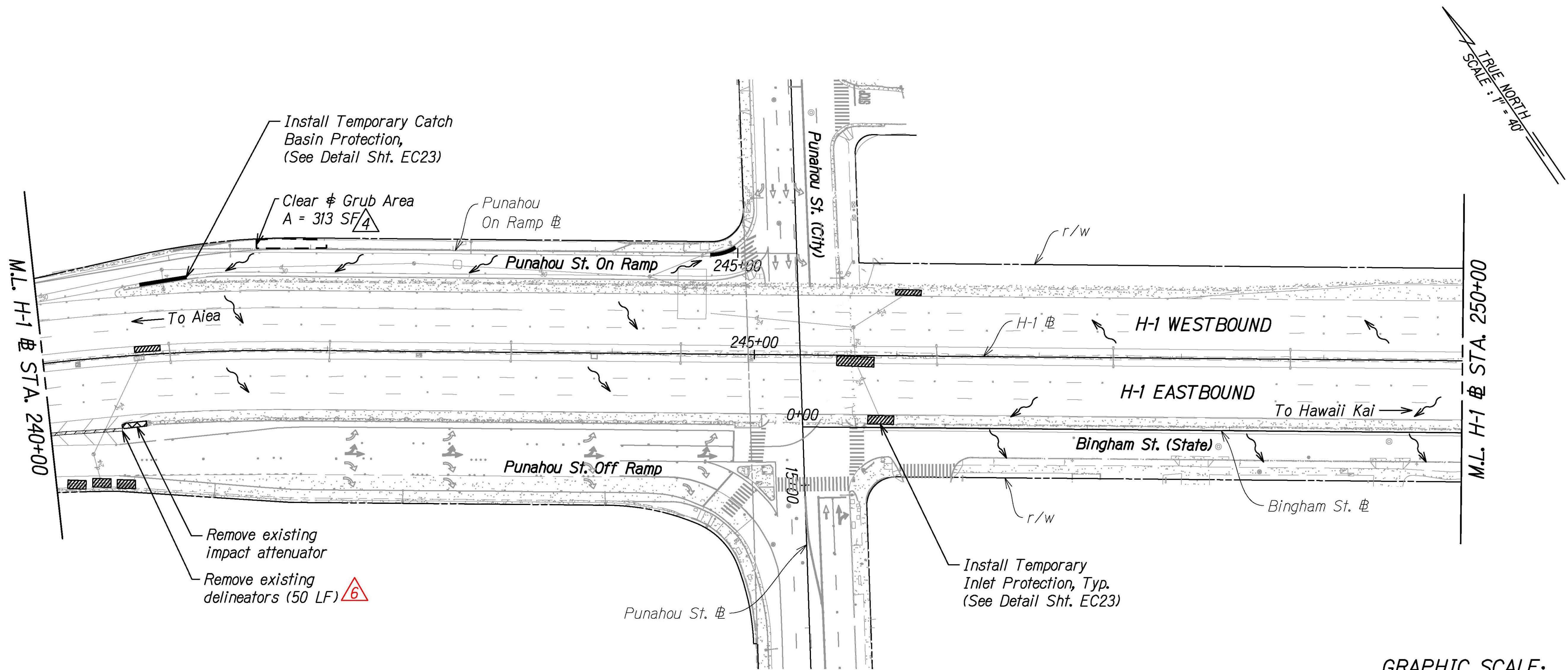
THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION

SIGNATURE EXPIRATION DATE
04/30/22
OF THE LICENSE

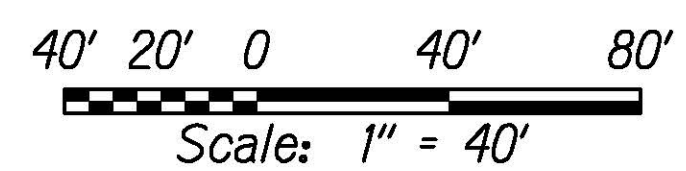
7/21/21	Added Removal of Existing Delineators
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
DEMOLITION AND EROSION CONTROL	
INTERSTATE ROUTE H-1 RESURFACING	
Miller Pedestrian Overpass to Kapiolani Interchange	
Federal-Aid Project No. NH-HI-1(279)	
Scale: 1" = 40'	Date: August 2021

SHEET No. EC7 OF 23 SHEETS

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-HI-1(279)	2021	ADD. 19	304



GRAPHIC SCALE:

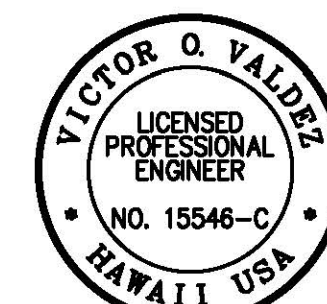


LEGEND:

- Catch Basin Protection
- Flow Arrow
- Inlet Protection
- Remove Impact Attenuator
- Limits of Clear & Grub 4
- Remove Existing Delineators 6

NOTES:

- Sediment and Erosion Control BMP measures shown in the Contract Documents are minimum BMPs requirements and do not constitute an acceptable and/or complete Sediment and Erosion Control Plan. The Contractor shall incorporate additional BMPs based upon their means and methods considering site conditions and construction sequence in accordance with the Contract Documents including applicable permit document requirements. Cost shall be included in Pay Item 209.0100, Installation, Maintenance, Monitoring, and Removal of BMP.
- The Contractor shall take proper precautions and make necessary measures to ensure compliance to all applicable but not limited to Federal, State, and HDOT guidelines.
- Limits of milling and roadway pavement reconstructions, including on and off ramps are shown in the Roadway Plan R1 - R23.
- Traffic sign relocations and any other sign-related works resulting from the proposed improvements are shown in the Pavement Marking and Signing Plans M2 - M24.
- The Contractor shall only remove existing bushes and vegetation that may hinder construction work for this project related activities/phases and within the right-of-way. The Contractor shall be responsible to protect all open bare areas during all phases of construction to prevent erosion. Best Management Practices shall not be removed until final stabilization is complete for that phase. Bushes and vegetation shall be restored to pre-construction condition prior to final acceptance.

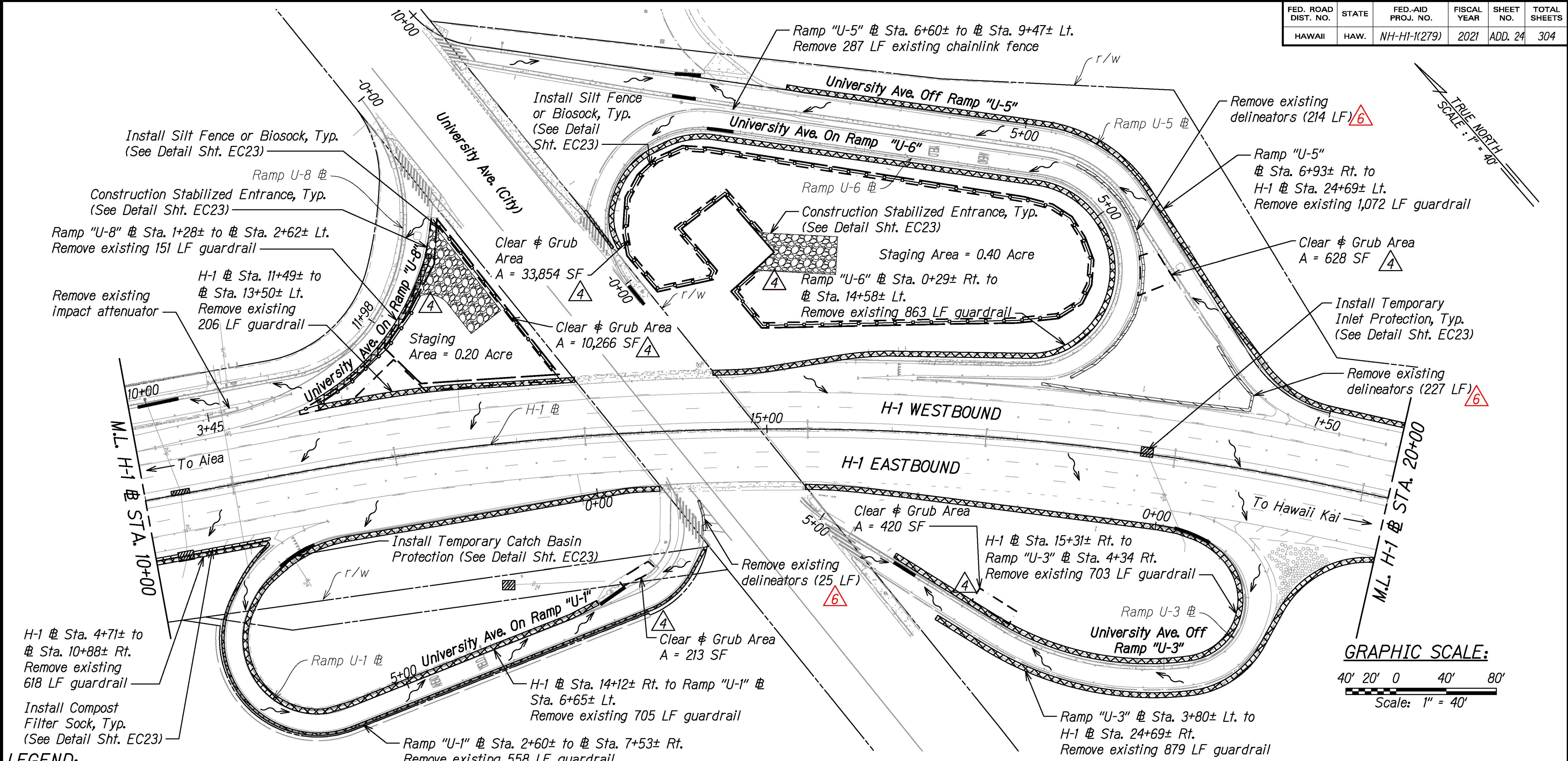


THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION

SIGNATURE: [Signature] EXPIRATION DATE OF THE LICENSE: 04/30/22

7/21/21	Added Removal of Existing Delineators
7/14/21	Added Clear & Grub Limits
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
DEMOLITION AND EROSION CONTROL	
INTERSTATE ROUTE H-1 RESURFACING	
Miller Pedestrian Overpass to Kapiolani Interchange	
Federal-Aid Project No. NH-HI-1(279)	
Scale: 1" = 40'	Date: August 2021
SHEET No. EC8 OF 23 SHEETS	

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-HI-1(279)	2021	ADD. 24	304

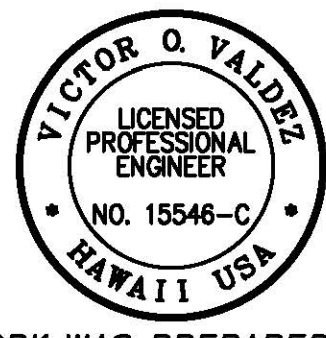


LEGEND:

- Catch Basin Protection
- Flow Arrow
- Inlet Protection
- Filter Socks
- Demolish Existing Guardrail or Impact Attenuator
- Silt Fence
- Limits of Clear & Grub
- Remove Existing Delineators

NOTES:

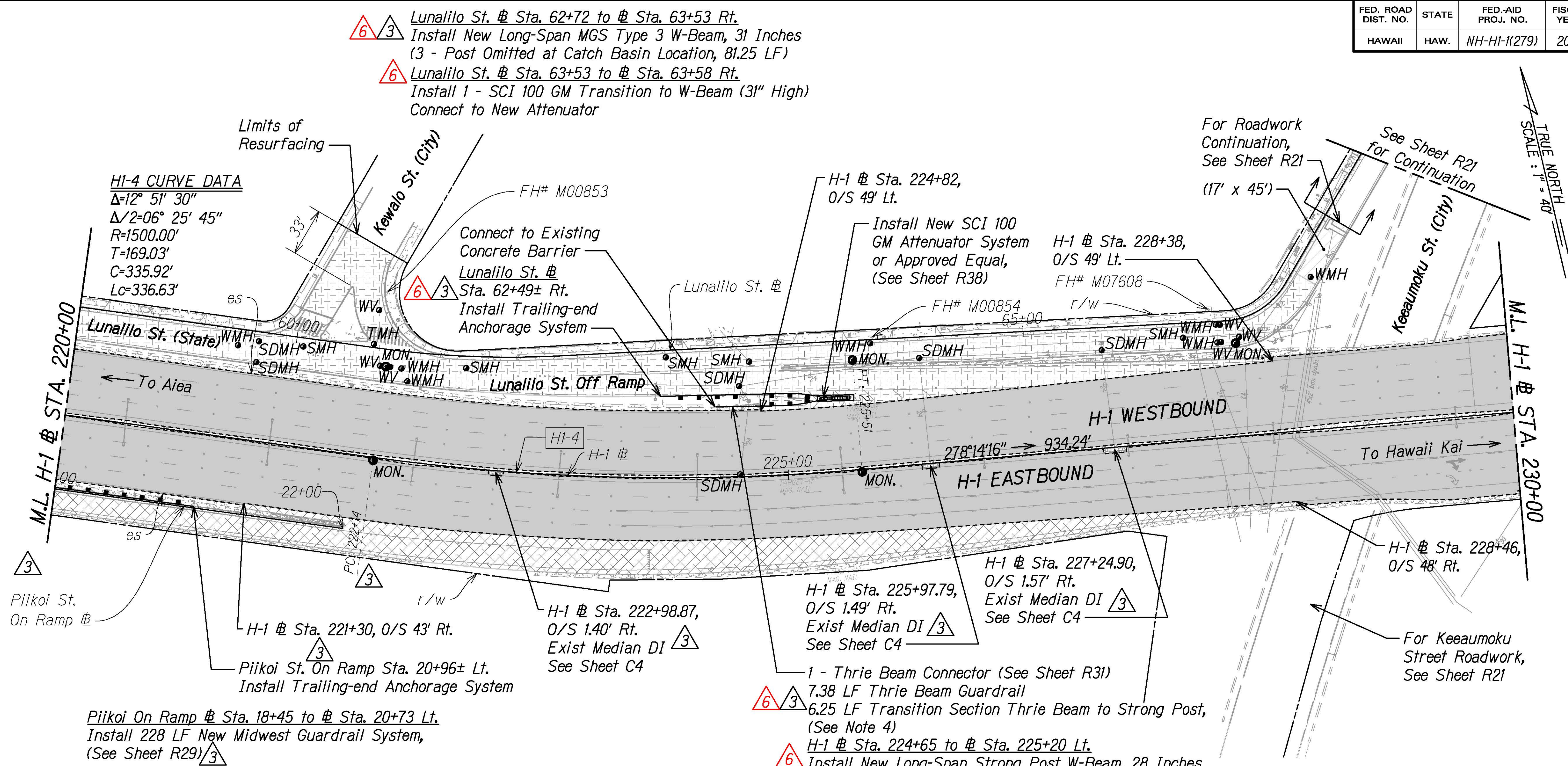
- Sediment and Erosion Control BMP measures shown in the Contract Documents are minimum BMPs requirements and do not constitute an acceptable and/or complete Sediment and Erosion Control Plan. The Contractor shall incorporate additional BMPs based upon their means and methods considering site conditions and construction sequence in accordance with the Contract Documents including applicable permit document requirements. Cost shall be included in Pay Item 209.0100, Installation, Maintenance, Monitoring, and Removal of BMP.
- The Contractor shall take proper precautions and make necessary measures to ensure compliance to all applicable but not limited to Federal, State, and HDOT guidelines.
- Limits of milling and roadway pavement reconstructions, including on and off ramps are shown in the Roadway Plan R1 - R23.
- Traffic sign relocations and any other sign-related works resulting from the proposed improvements are shown in the Pavement Marking and Signing Plans M2 - M24.
- The Contractor shall only remove existing bushes and vegetation that may hinder construction work for this project related activities/phases and within the right-of-way. The Contractor shall be responsible to protect all open bare areas during all phases of construction to prevent erosion. Best Management Practices shall not be removed until final stabilization is complete for that phase. Bushes and vegetation shall be restored to pre-construction condition prior to final acceptance.



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE: [Signature] EXPIRATION DATE OF THE LICENSE: 04/30/22

7/21/21	Added Removal of Existing Delineators
7/14/21	Added Clear & Grub Limits, Revised Construction Entrances & Silt Fence
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
DEMOLITION AND EROSION CONTROL	
INTERSTATE ROUTE H-1 RESURFACING Miller Pedestrian Overpass to Kapiolani Interchange Federal-Aid Project No. NH-HI-1(279)	
Scale: 1" = 40' Date: August 2021	
SHEET No. EC13 OF 23 SHEETS	

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-HI-1(279)	2021	ADD. 61	304



HI-4 CURVE DATA
Δ=12° 51' 30"
Δ/2=06° 25' 45"
R=1500.00'
T=169.03'
C=335.92'
Lc=336.63'

LEGEND:

- Resurfacing Limits:
8" Cold Plane
2" SMA
2" HMA (Mix IV)
4" HMA Conc. Base
- Resurfacing Limits:
4" Cold Plane
3.4" PMA
- Resurfacing Limits:
3.5" Cold Plane
3.5" PMA
- Bench Mark

NOTES:

- If the underlying cement-treated base or other obstructions are found such that the full thickness of the pavement section is affected, the 2" HMA Mix IV should be replaced with 2" PMA, and the thickness of the ACB should be adjusted appropriately to achieve finish grade.
- The Contractor shall inspect and clean all drain culverts including downspouts on the Piikoi Viaduct within the project limits and shall be paid under Item No. 603.0100 Clean Existing Culverts, as directed by the Engineer.
- For Thrie Beam Connection to Existing Concrete Barrier, See Sheet R36A.
- For Full Guardrail System Upgrade Description, See Sheets R24 to R27B. For Details, See Sheets R28 to R36A.
- The Contractor shall survey and stake out the roadway work in accordance with Section 105.10 Construction Stakes, Lines and Grades from the HDOT Standard Specifications.

APPROVED: [Signature]

MANAGER AND CHIEF ENGINEER, BWS
(For Work Affecting BWS Facilities in
City/State R/W and BWS Easements Only)

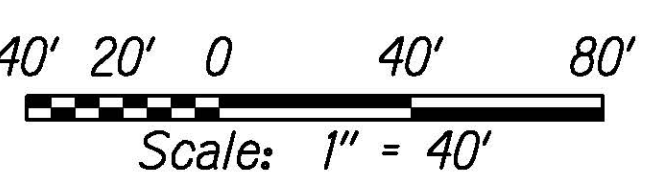
DATE



THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION

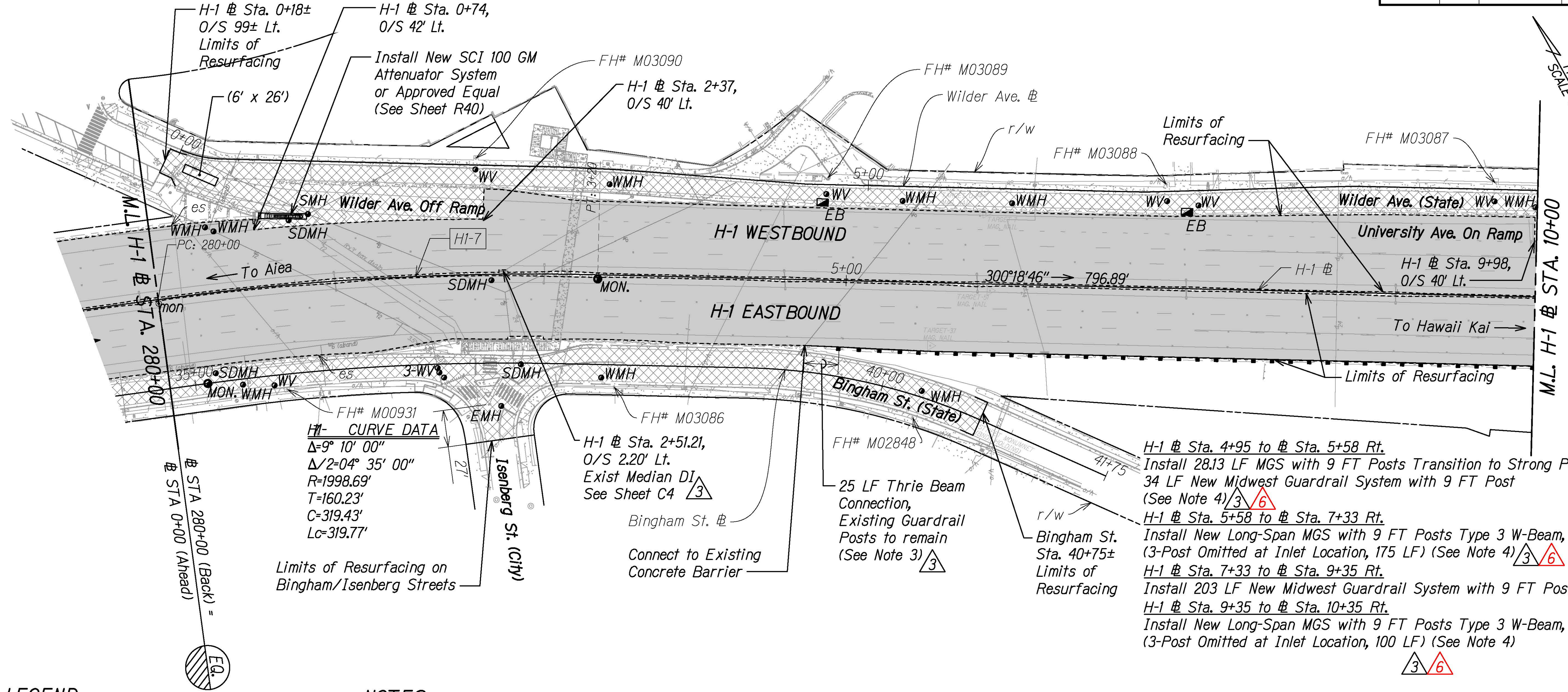
SIGNATURE
EXPIRATION DATE OF THE LICENSE

GRAPHIC SCALE:



7/21/21	Revised Guardrails and Moved Attenuator
7/9/21	BWS Tracings, Revised Guardrails Resurfacing Limits and Pav't Section, Added Exist. Median DI label
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
ROADWAY PLAN	
INTERSTATE ROUTE H-1 RESURFACING Miller Pedestrian Overpass to Kapiolani Interchange Federal-Aid Project No. NH-HI-1(279)	
Scale: 1" = 40'	Date: August 2021
SHEET No. R6 OF 41 SHEETS	

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-HI-1(279)	2021	ADD. 67	304



LEGEND:

- Pavement Reconstruction Area
See A.C. Weakened Pavement Repair Schedule on Sheet C16
- Resurfacing Limits:
8" Cold Plane
2" SMA
2" HMA (Mix IV)
4" HMA Conc. Base
- Resurfacing Limits:
2" Cold Plane
2" PMA
- Bench Mark

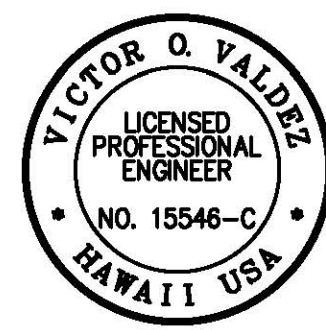
NOTES:

- If the underlying cement-treated base or other obstructions are found such that the full thickness of the pavement section is affected, the 2" HMA Mix IV should be replaced with 2" PMA, and the thickness of the ACB should be adjusted appropriately to achieve finish grade.
- The Contractor shall inspect and clean all drain culverts within the project limits and shall be paid under Item No. 603.0100 Clean Existing Culverts, as directed by the Engineer.
- For Thrie Beam Connection to Existing Concrete Barrier, See Sheet R36A.
- For Full Guardrail System Upgrade Description, See Sheets R24 to R27B. For Details, See Sheets R28 to R36A.
- For Pavement Elevations, See Sheet GR1 to GR21.
- The Contractor shall survey and stake out the roadway work in accordance with Section 105.10 Construction Stakes, Lines and Grades from the HDOT Standard Specifications.

APPROVED:

MANAGER AND CHIEF ENGINEER, BWS
(For Work Affecting BWS Facilities in
City/State R/W and BWS Easements Only)

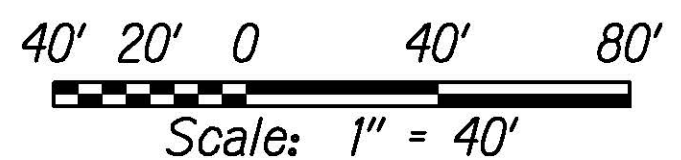
DATE



THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION

SIGNATURE EXPIRATION DATE
04/30/22 OF THE LICENSE

GRAPHIC SCALE:



7/21/21	Revised Guardrails
7/9/21	BWS Tracings and Revised Guardrails Added Exist. Median DI label
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
ROADWAY PLAN	
INTERSTATE ROUTE H-1 RESURFACING	
Miller Pedestrian Overpass to Kapiolani Interchange	
Federal-Aid Project No. NH-HI-1(279)	
Scale: 1" = 40'	Date: August 2021
SHEET No. R12 OF 41 SHEETS	

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-HI-1(279)	2021	ADD. 68	304

LEGEND:

- Resurfacing Limits:
8" Cold Plane
2" SMA
2" HMA (Mix IV)
4" HMA Conc. Base
- Resurfacing Limits:
4" Cold Plane
4" PMA
- Resurfacing Limits:
2" Cold Plane
2" PMA
- Resurfacing Limits:
2" Cold Plane
2" PMA

Bench Mark

H-1 WB Sta. 18+41± = Ramp "U-5" Sta. 1+50±

H-1 WB Sta. 18+51, O/S 42' Lt.

H-1 Sta. 19+89, O/S 42' Lt.

H-1 Sta. 19+71, O/S 42' Rt.

H-1 Sta. 18+28, O/S 42' Rt.

H-1 Sta. 18+14, O/S 42' Rt.

H-1 Sta. 16+18, O/S 41' Lt.

H-1 Sta. 14+74, O/S 42' Lt.

H-1 WB Sta. 17+18± = Ramp "U-6" Sta. 6+44±

H-1 WB Sta. 17+18± = Ramp "U-6" Sta. 6+44±

H-1 WB Sta. 17+18± = Ramp "U-6" Sta. 6+44±

H-1 WB Sta. 17+18± = Ramp "U-6" Sta. 6+44±

H-1 WB Sta. 17+18± = Ramp "U-6" Sta. 6+44±

H-1 WB Sta. 17+18± = Ramp "U-6" Sta. 6+44±

H-1 WB Sta. 17+18± = Ramp "U-6" Sta. 6+44±

H-1 WB Sta. 17+18± = Ramp "U-6" Sta. 6+44±

H-1 WB Sta. 17+18± = Ramp "U-6" Sta. 6+44±

H-1 WB Sta. 17+18± = Ramp "U-6" Sta. 6+44±

H-1 WB Sta. 17+18± = Ramp "U-6" Sta. 6+44±

H-1 WB Sta. 17+18± = Ramp "U-6" Sta. 6+44±

H-1 WB Sta. 17+18± = Ramp "U-6" Sta. 6+44±

H-1 WB Sta. 17+18± = Ramp "U-6" Sta. 6+44±

H-1 WB Sta. 17+18± = Ramp "U-6" Sta. 6+44±

H-1 WB Sta. 17+18± = Ramp "U-6" Sta. 6+44±

H-1 WB Sta. 17+18± = Ramp "U-6" Sta. 6+44±

H-1 WB Sta. 17+18± = Ramp "U-6" Sta. 6+44±

H-1 WB Sta. 17+18± = Ramp "U-6" Sta. 6+44±

H-1 WB Sta. 17+18± = Ramp "U-6" Sta. 6+44±

H-1 WB Sta. 17+18± = Ramp "U-6" Sta. 6+44±

H-1 WB Sta. 17+18± = Ramp "U-6" Sta. 6+44±

H-1 WB Sta. 17+18± = Ramp "U-6" Sta. 6+44±

H-1 WB Sta. 17+18± = Ramp "U-6" Sta. 6+44±

H-1 WB Sta. 17+18± = Ramp "U-6" Sta. 6+44±

H-1 WB Sta. 17+18± = Ramp "U-6" Sta. 6+44±

H-1 WB Sta. 17+18± = Ramp "U-6" Sta. 6+44±

H-1 WB Sta. 17+18± = Ramp "U-6" Sta. 6+44±

H-1 WB Sta. 17+18± = Ramp "U-6" Sta. 6+44±

H-1 WB Sta. 17+18± = Ramp "U-6" Sta. 6+44±

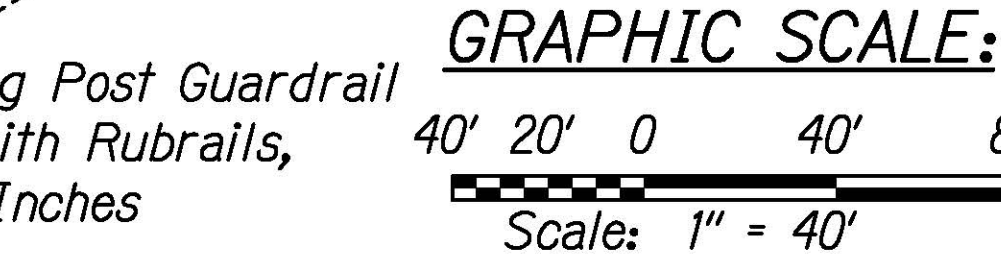
H-1 WB Sta. 17+18± = Ramp "U-6" Sta. 6+44±

H-1 WB Sta. 17+18± = Ramp "U-6" Sta. 6+44±

H-1 WB Sta. 17+18± = Ramp "U-6" Sta. 6+44±

H-1 WB Sta. 17+18± = Ramp "U-6" Sta. 6+44±

H-1 WB Sta. 17+18± = Ramp "U-6" Sta. 6+44±



7/21/21	6	Revised Guardrails
7/9/21	3	BWS Tracings, Revised Guardrails, Pav't Section & Limits, Added Exist. Median DI Label
DATE		REVISION

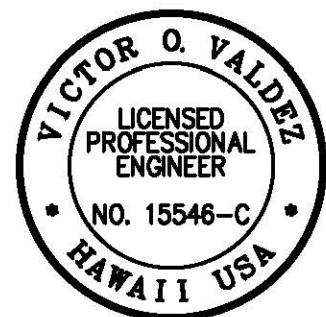
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

INTERSTATE ROUTE H-1 RESURFACING
Miller Pedestrian Overpass to Kapiolani Interchange
Federal-Aid Project No. NH-HI-1(279)

Scale: 1" = 40' Date: August 2021

SHEET No. R13 OF 41 SHEETS



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

SIGNATURE
EXPIRATION DATE OF THE LICENSE

H-1 Sta. 11+71 to Sta. 13+11 Lt.
Install 115 LF New Midwest Guardrail System with 9 FT Posts (See Note 4)
28.13 LF MGS with 9 FT Posts Transition to Strong Post Guardrail, (See Note 4) 3
H-1 Sta. 13+88 Rt. to Ramp "U-1" Sta. 2+60 Lt.
Install 28.13 LF MGS with 9 FT Posts Transition to Strong Post Guardrail
255 LF New Midwest Guardrail System with 9 FT Posts with Rubrails (See Note 4) 3 6
H-1 Sta. 11+49± Lt.
Install Trailing-end Anchorage System
Install New SCI 100 GM Attenuator System or Approved Equal (See Sheet R40)
H-1 Sta. 10+74, O/S 40' Lt.

NOTES:

- If the underlying cement-treated base or other obstructions are found such that the full thickness of the pavement section is affected, the 2" HMA Mix IV should be replaced with 2" PMA, and the thickness of the ACB should be adjusted appropriately to achieve finish grade.
- The Contractor shall inspect and clean all drain culverts within the project limits and shall be paid under Item No. 603.0100 Clean Existing Culverts, as directed by the Engineer.
- For Thrie Beam Connection to Existing Concrete Barrier, See Sheet R36A. 3
- For Full Guardrail System Upgrade Description, See Sheets R24 to R27B. For Details, See Sheets R28 to R36A. 3
- For Pavement Elevations, See Sheet GR1 to GR21.
- The Contractor shall survey and stake out the roadway work in accordance with Section 105.10 Construction Stakes, Lines and Grades from the HDOT Standard Specifications.

Ramp "U-1" Sta. 2+60 to Sta. 2+89 Lt.
Install 28.13 LF MGS with 9 FT Posts Transition to Strong Post Guardrail, (See Note 4)

Ramp "U-1" Sta. 2+89 to Sta. 5+73 Lt.
Install 6.25 LF Transition Section Thrie Beam to Midwest Guardrail (Symmetric, See Sheet R36A), 265 LF Thrie Beam Guardrails, 6.25 LF Transition Section Thrie Beam to Strong Post Guardrail (Symmetric), Existing Guardrail Posts to remain. (See Note 4) 3

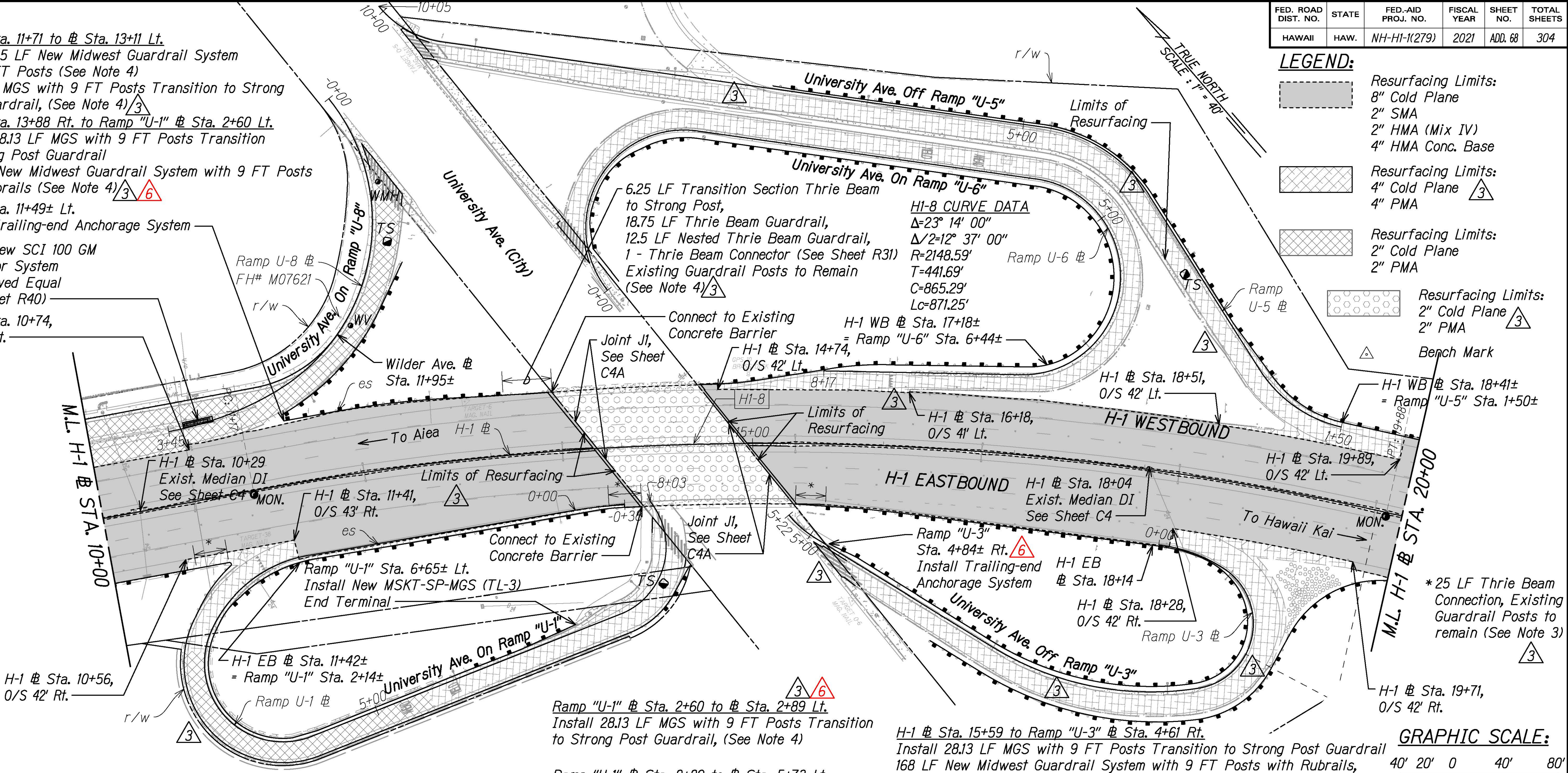
Ramp "U-1" Sta. 5+73 to Sta. 6+18 Lt.
Install 28.13 LF MGS Transition to Strong Post Guardrail, 18 LF New Midwest Guardrail System (See Sheet R29), (See Note 4) 3

APPROVED: 3

MANAGER AND CHIEF ENGINEER, BWS
(For Work Affecting BWS Facilities in City/State R/W and BWS Easements Only)

DATE

H-1 Sta. 15+59 to Ramp "U-3" Sta. 4+61 Rt.
Install 28.13 LF MGS with 9 FT Posts Transition to Strong Post Guardrail
168 LF New Midwest Guardrail System with 9 FT Posts with Rubrails, New Long-Span MGS with 9 FT Posts Type 3 W-Beam, 31 Inches (3-Posts Omitted at Catch Basin Location, 175 LF)
205 LF New Midwest Guardrail System with 9 FT Posts (See Sheet R29), New Long-Span MGS Type 3 W-Beam, 31 Inches (3-Posts Omitted at Catch Basin Location, 126.25 LF) (See Note 4) 3 6



G:\CIVIL\3D PROJECTS\2016_2022\000 DOT-HWYS H1 RESURFACING - MILLER TO KAPIOLANI CIVIL DRAWINGS\R13-R17 ROADWAY PLAN.DWG 7/28/2021 11:44 AM

C:_CIVIL_3D PROJECTS\2016_2022\000 DOT-HWYS H1 RESURFACING - MILLER TO KAPITOLI CIVIL DRAWINGS\R13-R17 ROADWAY PLAN.DWG 7/28/2021 11:59 AM

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-H1-1(279)	2021	ADD. 69	304

Ramp "U-5" Sta. 9+67± Limits of Resurfacing

Ramp "U-8" Sta. 0+63± Limits of Resurfacing

Ramp "U-8" @ Sta. 1+69 to @ Sta. 2+41 Lt.
Install 81 LF New Midwest Guardrail System
(See Note 4 and Sheet R29) 3

Ramp "U-8" Sta. 1+28± Lt.
Install New MSKT-SP-MGS (TL-3) End Terminal

Ramp "U-1" @ Sta. 2+81 to @ Sta. 7+20 Rt.
Install 18 LF New W-Beam Guardrail (See Sheet R29),
6.25 LF Transition Section Thrie Beam to Strong
Post Guardrail (Symmetric, See Note 3),
462 LF Thrie Beam Guardrails,
Existing Guardrail Posts to remain
(See Note 4) 3

Ramp "U-8" Sta. 2+62± Lt.
Install Trailing-end Anchorage System

Ramp "U-6" Sta. 0+00± Rt.
Install Trailing-end Anchorage System 3

Ramp "U-5" Sta. 6+93± Lt.
Install Trailing-end Anchorage System 3

University Ave. Off Ramp "U-5"

University Ave. On Ramp "U-6"

Ramp U-6 @

Limits of
Resurfacing

H-1 WB @ Sta. 17+45±
= Ramp "U-6" Sta. 6+08±

Connect to Existing
Concrete Barrier

Ramp "U-6"
Sta. 0+41±
Limits of
Resurfacing

Ramp "U-6" @ Sta. 0+26 Rt. to H-1 @ Sta. 14+84 Lt.
Install 62 LF New MGS, (See Sheet R29)
New Long-Span MGS with 9 FT Posts Type 3 W-Beam, 31"
(3-Post Omitted at Catch Basin Location, 175 LF),
325 LF New Midwest Guardrail System with 9 FT Posts,
249 LF New Midwest Guardrail System with 9 FT
Posts with Rubrails,
28.13 LF MGS with 9 FT Posts Transition to
Strong Post Guardrail (See Note 4) 3 6

Ramp "U-5" @ Sta. 6+70 Rt. to H-1 @ Sta. 19+96 Lt.
Install 575 LF New Midwest Guardrail System
with 9 FT Posts (See Note 4) 3 6

H-1 WB @ Sta. 19+41±
= Ramp "U-5" Sta. 1+50±

Ramp
U-5 @

* 25 LF Thrie Beam
Connection, Existing
Guardrail Posts to
remain (See Note 3)

H-1 EB @ Sta. 19+46±
= Ramp "U-3" Sta. 0+96±

LEGEND:

Resurfacing Limits:
8" Cold Plane
2" SMA
2" HMA (Mix IV)
4" HMA Conc. Base

Resurfacing Limits:
2" Cold Plane
2" PMA

Resurfacing Limits:
2" Cold Plane
2" SMA 3

Resurfacing Limits:
4" Cold Plane
4" PMA 3

3 Bench Mark

NOTES:

- If the underlying cement-treated base or other obstructions are found such that the full thickness of the pavement section is affected, the 2" HMA Mix IV should be replaced with 2" PMA, and the thickness of the ACB should be adjusted appropriately to achieve finish grade.
- The Contractor shall inspect and clean all drain culverts within the project limits and shall be paid under Item No. 603.0100 Clean Existing Culverts, as directed by the Engineer.
- For Thrie Beam Connection to Existing Concrete Barrier, See Sheet R36A. 3
- For Full Guardrail System Upgrade Description, See 3 Sheets R24 to R27B. For Details, See Sheets R28 to R36A. City/State R/W and BWS Easements Only)
- For Pavement Elevations, See Sheet GR1 to GR21.
- The Contractor shall survey and stake out the roadway work in accordance with Section 105.10 Construction Stakes, Lines and Grades from the HDOT Standard Specifications.

APPROVED: 3

MANAGER AND CHIEF ENGINEER, BWS
(For Work Affecting BWS Facilities in
City/State R/W and BWS Easements Only)

DATE



THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION

SIGNATURE

04/30/22
EXPIRATION DATE
OF THE LICENSE

GRAPHIC SCALE:

40' 20' 0 40' 80'
Scale: 1" = 40'

7/21/21	6 Revised Guardrails
7/9/21	3 BWS Tracings, Revised Guardrails, Pav't Section & Limits
DATE	REVISION

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
ROADWAY PLAN	
INTERSTATE ROUTE H-1 RESURFACING	
Miller Pedestrian Overpass to Kapiolani Interchange	
Federal-Aid Project No. NH-H1-1(279)	
Scale: 1" = 40'	Date: August 2021
SHEET No. R14 OF 41 SHEETS	

ADD. 69

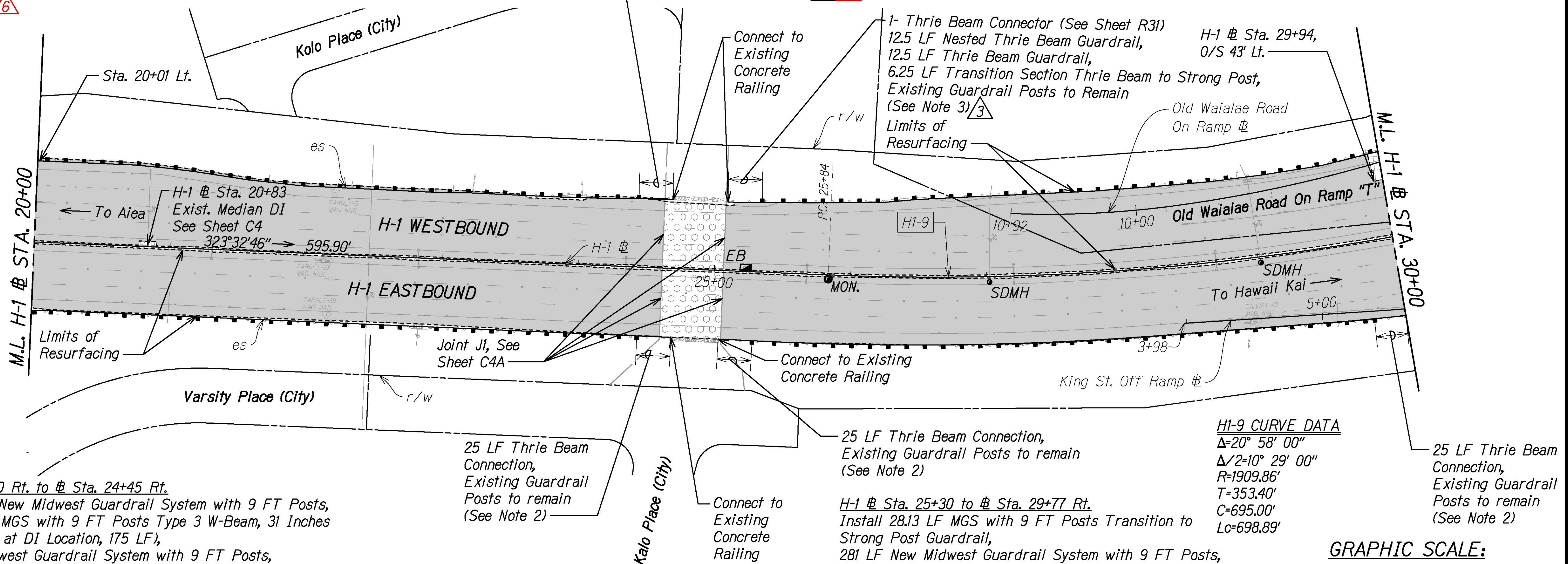
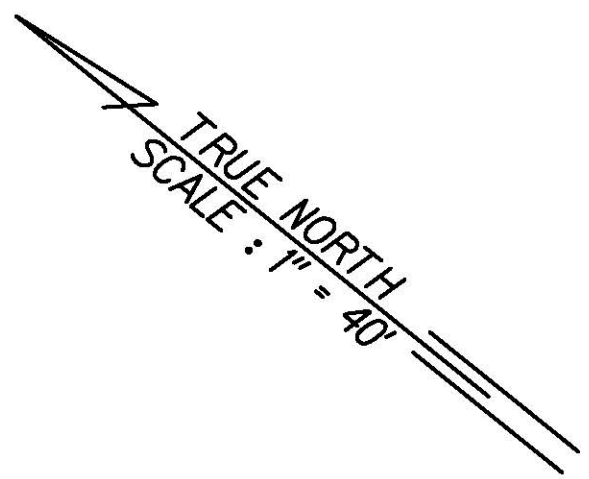
G:\CIVIL 3D PROJECTS\2016_2022\000 DOT-HWYS H1 RESURFACING - MILLER TO KAPITV01 CIVIL DRAWINGS\R13-R17 ROADWAY PLAN.DWG 7/28/2021 4:52 PM

H-1 @ Sta. 19+96 to Sta. 21+70 Lt.
Install New Long-Span MGS with 9 FT Posts
Type 3 W-Beam, 31 Inches
(3-Posts Omitted at Inlet Location, 175 LF), 6
(See Note 3)
H-1 @ Sta. 21+70 to Sta. 24+36 Lt.
Install 237 LF New Midwest Guardrail System
with 9 FT Posts,
28.13 LF MGS with 9 FT Posts Transition
to Strong Post Guardrail
(See Note 3) 3 6

3 6.25 LF Transition Section Thrie Beam
to Strong Post,
12.5 LF Thrie Beam Guardrail,
12.5 LF Nested Thrie Beam Guardrail,
1- Thrie Beam Connector (See Sheet R31)
Existing Guardrail Posts to Remain
(See Note 3)

H-1 @ Sta. 25+39 to Waialae On Ramp @ Sta. 7+50 Lt.
Install 28.13 LF MGS with 9 FT Posts Transition to Strong Post Guardrail,
45 LF New Midwest Guardrail System with 9 FT Posts,
New Long-Span MGS with 9 FT Posts Type 3 W-Beam, 31 Inches
(3-Post Omitted at Inlet Location, 175 LF),
15 LF New Midwest Guardrail System with 9 FT Posts,
New Long-Span MGS with 9 FT Posts Type 3 W-Beam, 31 Inches
(3-Post Omitted at Inlet Location, 175 LF),
48 LF New Midwest Guardrail System with 9 FT Posts,
28.13 LF MGS with 9 FT Posts Transition to Strong Post Guardrail
(See Note 3) 3 6

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-HI-1(279)	2021	ADD. 70	304



H-1 @ Sta. 19+90 Rt. to @ Sta. 24+45 Rt.
Install 208 LF New Midwest Guardrail System with 9 FT Posts,
New Long-Span MGS with 9 FT Posts Type 3 W-Beam, 31 Inches
(3-Post Omitted at DI Location, 175 LF),
45 LF New Midwest Guardrail System with 9 FT Posts,
28.13 LF MGS with 9 FT Posts Transition to Strong Post Guardrail
(See Note 3) 3

LEGEND:

	Resurfacing Limits: 8" Cold Plane 2" SMA 2" HMA (Mix IV) 4" HMA Conc. Base
	Resurfacing Limits: 2" Cold Plane 2" SMA
	Resurfacing Limits: 4" Cold Plane 3 4" PMA
	Bench Mark

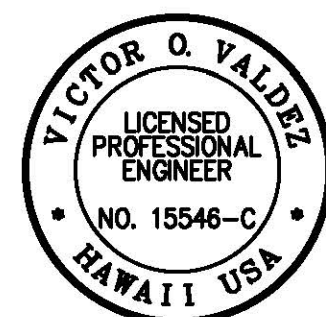
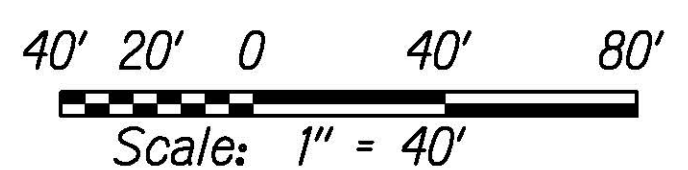
NOTES:

- If the underlying cement-treated base or other obstructions are found such that the full thickness of the pavement section is affected, the 2" HMA Mix IV should be replaced with 2" PMA, and the thickness of the ACB should be adjusted appropriately to achieve finish grade.
- For Thrie Beam Connection to Existing Concrete Railing, See Sheet R36A. 3
- For Full Guardrail System Upgrade Description, See Sheets R24 to R27B. For Details, See Sheets R28 to R36A. 3
- For Pavement Elevations, See Sheet GR1 to GR21.
- The Contractor shall survey and stake out the roadway work in accordance with Section 105.10 Construction Stakes, Lines and Grades from the HDOT Standard Specifications.

H1-9 CURVE DATA

$\Delta=20^{\circ} 58' 00''$
 $\Delta/2=10^{\circ} 29' 00''$
 $R=1909.86'$
 $T=353.40'$
 $C=695.00'$
 $Lc=698.89'$

GRAPHIC SCALE:



THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION

SIGNATURE: EXPIRATION DATE OF THE LICENSE: 04/30/22

7/21/21	6 Revised Guardrails
7/9/21	3 Revised Guardrails, Pav't Section & Limits, Added Exist. Median DI Label
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
ROADWAY PLAN	
INTERSTATE ROUTE H-1 RESURFACING Miller Pedestrian Overpass to Kapiolani Interchange Federal-Aid Project No. NH-HI-1(279)	
Scale: 1" = 40'	Date: August 2021

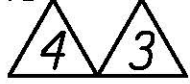
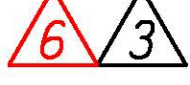
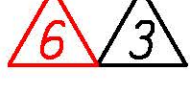
SHEET No. R15 OF 41 SHEETS

ADD. 70

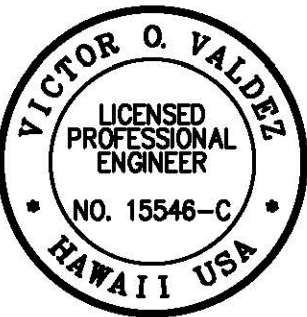
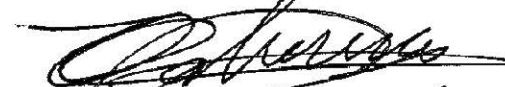
G:\CIVIL_3D PROJECTS\2016_2022\DOT-HWYS H1 RESURFACING - MILLER TO KAPOLANI CIVIL DRAWINGS\R24_R27 GUARDRAIL SCHEDULE.DWG 7/28/2021 1:50 PM

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-HI-1(279)	2021	ADD. 80	304

SCHEDULE - EXISTING GUARDRAIL UPGRADE					
DRAWING NO.	DESCRIPTION	FROM	TO	DISTANCE (Feet)	GUARDRAIL UPGRADE (Feet)
R3	 Ward Ave. On Ramp (Rt.)	Ⓜ 7+14	Ⓜ 7+73	59	- Midwest Guardrail existing guardrail posts to remain
	 Ward Ave. On Ramp (Rt.)	Ⓜ 7+73	Ⓜ 8+30	--	- 6.25 LF Transition Section Thrie Beam to Strong Posts - 45 LF Thrie Beam Guardrail - 6.25 LF Transition Section Thrie Beam to Strong Posts, existing guardrail posts to remain
R4	 Ward Ave. On Ramp (Rt.)	Ⓜ 8+30	H-1 EB Ⓜ 200+36	28.13	- MGS with 9 FT Posts Transition to Strong Post Guardrail
	 H-1 EB Shoulder	Ⓜ 200+36	Ⓜ 201+94	158	- Midwest Guardrail with 9 FT Posts
	 H-1 EB Shoulder	Ⓜ 201+94	Ⓜ 202+22	28.13	- MGS with 9 FT Posts Transition to Strong Post Guardrail
	 H-1 EB Shoulder	Ⓜ 202+22	Ⓜ 202+71	50	Midwest Guardrail with Rubrails, existing guardrail posts to remain
	H-1 EB Shoulder	Ⓜ 202+71	Ⓜ 202+96±	25	- Thrie Beam Connection to existing concrete barrier, existing guardrail posts to remain
	 H-1 WB Shoulder (along Lunalilo Street)	Ⓜ 201+98±	Ⓜ 202+58	--	- Thrie Beam Connector - 12.5 LF Nested Thrie Beam Guardrail - 47.5 LF Thrie Beam Guardrail - Thrie Beam End Section (Rounded), existing guardrail posts to remain
	 H-1 WB Shoulder (along Lunalilo On Ramp)	Ⓜ 201+98±	Ⓜ 202+58	--	- Thrie Beam Connector - 12.5 LF Nested Thrie Beam Guardrail - 47.5 LF Thrie Beam Guardrail - Thrie Beam End Section (Rounded), existing guardrail posts to remain
R5	Piikoi On Ramp (Lt.)	Ⓜ 17+98±	Ⓜ 18+45	--	- MSKT-SP-MGS (TL-3) End Terminal
	Piikoi On Ramp (Lt.)	Ⓜ 18+45	Ⓜ 20+73	228	- Midwest Guardrail
 Piikoi On Ramp (Lt.)	Ⓜ 20+73	Ⓜ 20+96	--	- Trailing-End Anchorage System	
R6	 H-1 WB Shoulder	Ⓜ 224+51±	Ⓜ 224+65	--	- Thrie Beam Connector - 7.38 LF Thrie Beam Guardrail - 6.25 LF Transition Section Thrie Beam to Strong Posts
	 H-1 WB Shoulder	Ⓜ 224+65	Ⓜ 225+20	53.13	- Long-Span Strong Post, (3 - Post Omitted at Catch Basin Location)
	 H-1 WB Shoulder	Ⓜ 225+14	Ⓜ 225+18	4.75	- SCI 100 GM Transition to W-Beam (31" High), Connect to New Impact Attenuator
	 Lunalilo Street (Rt.)	Ⓜ 62+49	Ⓜ 62+72	--	- Trailing-End Anchorage System
	 Lunalilo Street (Rt.)	Ⓜ 62+72	Ⓜ 63+53	81.25	- Long-Span Midwest Guardrail System, (3 - Post Omitted at Catch Basin Location)
	 Lunalilo Street (Rt.)	Ⓜ 63+47	Ⓜ 63+52	4.75	- SCI 100 GM Transition to W-Beam (28" High), Connect to New Impact Attenuator
R8	 H-1 EB Shoulder (along Punahou Street)	Ⓜ 239+67	Ⓜ 240+71	--	- Connect to New Impact Attenuator - 101 LF Thrie Beam Guardrail, - Thrie Beam Connector

SCHEDULE - EXISTING GUARDRAIL UPGRADE					
DRAWING NO.	DESCRIPTION	FROM	TO	DISTANCE (Feet)	GUARDRAIL UPGRADE (Feet)
R8 	Punahou St. Off Ramp (Lt.)	Punahou St. Off Ramp Ⓜ 19+75	Punahou St. Off Ramp Ⓜ 20+75	--	- Connect to New Impact Attenuator - 102 LF Thrie Beam Guardrail, - Thrie Beam Connector
  R12     	H-1 EB Shoulder	Ⓜ 4+70±	Ⓜ 4+95	25	- Thrie Beam Connection to existing concrete barrier, existing guardrail posts to remain
	 H-1 EB Shoulder	Ⓜ 4+95±	Ⓜ 5+24	28.13	- MGS with 9 FT Posts Transition to Strong Post Guardrail
	 H-1 EB Shoulder	Ⓜ 5+24±	Ⓜ 5+58	34	- Midwest Guardrail with 9 FT Posts
	 H-1 EB Shoulder	Ⓜ 5+58	Ⓜ 7+33	175 	- Long-Span MGS with 9 FT Posts, (3 - Post Omitted at Inlet Location)
	 H-1 EB Shoulder	Ⓜ 7+33	Ⓜ 9+35	203	- Midwest Guardrail with 9 FT Posts
	 H-1 EB Shoulder	Ⓜ 9+35	Ⓜ 10+35	100	- Long-Span MGS with 9 FT Posts, (3 - Post Omitted at Inlet Location)
R13	H-1 EB Shoulder	Ⓜ 10+63	Ⓜ 10+88	25	- Thrie Beam Connection to existing concrete post, existing guardrail posts to remain
	H-1 WB Shoulder	Ⓜ 11+49	Ⓜ 11+71	--	- Trailing-End Anchorage System
	 H-1 WB Shoulder	Ⓜ 11+71	Ⓜ 12+84	115	- Midwest Guardrail with 9 FT Posts
	 H-1 WB Shoulder	Ⓜ 12+84	Ⓜ 13+11	28.13	- MGS with 9 FT Posts Transition to Strong Post Guardrail
	 H-1 WB Shoulder	Ⓜ 13+11	Ⓜ 13+48±	--	- 6.25 LF Transition Section Thrie Beam to Strong Posts - 18.75 LF Thrie Beam Guardrail - 12.5 LF Nested Thrie Beam Guardrail - Thrie Beam Connector, existing guardrail posts to remain

*Equation Station:
H-1 @ Sta. 280+00=H-1 @ Sta. 0+00


THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION

SIGNATURE
04/30/22
EXPIRATION DATE OF THE LICENSE

7/21/21	 Revised System Description and Quantity
7/14/21	 Revised System Description
7/9/21	 Revised Guardrails
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION GUARDRAIL SCHEDULE INTERSTATE ROUTE H-1 RESURFACING Miller Pedestrian Overpass to Kapiolani Interchange Federal-Aid Project No. NH-HI-1(279) Scale: N/A Date: August 2021 SHEET No. R25 OF 41 SHEETS	

G:_CIVIL_3D PROJECTS\2016_202\000 DOT-HWYS H1 RESURFACING - MILLER TO KAPINTY01 CIVIL DRAWINGS\R24_R27 GUARDRAIL SCHEDULE.DWG 7/28/2021 1:50 PM

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-HI-1(279)	2021	ADD. 81	304

SCHEDULE - EXISTING GUARDRAIL UPGRADE					
DRAWING NO.	DESCRIPTION	FROM	TO	DISTANCE (Feet)	GUARDRAIL UPGRADE (Feet)
R13	H-1 EB Shoulder	⌂ 15+33±	⌂ 15+59	25	- Thrie Beam Connection to existing concrete barrier, existing guardrail posts to remain
	 H-1 EB Shoulder	⌂ 15+59	⌂ 15+87	28.13	- MGS with 9 FT Posts Transition to Strong Post Guardrail
	  H-1 EB Shoulder	⌂ 15+87	⌂ 17+60	168	- MGS with 9 FT Posts with Rubrail
	  Ramp "U-3" Shoulder (Rt.)	H-1 EB ⌂ 17+60	Ramp "U-3" ⌂ 1+23	175	- Long-Span MGS with 9 FT Posts, (3 - Post Omitted at Catch Basin Location)
	  Ramp "U-3" Shoulder (Rt.)	⌂ 1+23	⌂ 3+35	205	- Midwest Guardrail with 9 FT Posts
	  Ramp "U-3" Shoulder (Rt.)	⌂ 3+35	⌂ 4+61	126.25	- Long-Span Midwest Guardrail System, (3 - Post Omitted at Catch Basin Location)
	  Ramp "U-3" Shoulder (Rt.)	⌂ 4+61	⌂ 4+84	--	- Trailing-End Anchorage System
	 H-1 EB Shoulder	⌂ 14+13	⌂ 13+88±	25	- Thrie Beam Connection to existing concrete barrier, existing guardrail posts to remain
	 Ramp "U-1" Shoulder (Lt.)	⌂ 13+88	⌂ 13+59	28.13	- MGS with 9 FT Posts Transition to Strong Post Guardrail
	  H-1 EB Shoulder	⌂ 13+59	Ramp "U-1" ⌂ 2+60 / H-1 EB ⌂ 11+00	255	- MGS with 9 FT Posts with Rubrail
	 				
	 Ramp "U-1" Shoulder (Lt.)	⌂ 2+60	⌂ 2+89	28.13	- MGS with 9 FT Posts Transition to Strong Post Guardrail
	 Ramp "U-1" Shoulder (Lt.)	⌂ 2+89	⌂ 2+96	6.25	- Transition Section Thrie Beam to Strong Post Guardrail (Symmetric)
	Ramp "U-1" Shoulder (Lt.)	⌂ 2+96	⌂ 5+67	265	- Thrie Beam Guardrail existing guardrail posts to remain
R14	 Ramp "U-1" Shoulder (Lt.)	⌂ 5+67	⌂ 5+73	6.25	- Transition Section Thrie Beam to Midwest Guardrail (Symmetric)
	 Ramp "U-1" Shoulder (Lt.)	⌂ 5+73	⌂ 6+01	28.13	- Midwest Guardrail System Transition to Strong Post Guardrail
	 Ramp "U-1" Shoulder (Lt.)	⌂ 6+01	⌂ 6+18	18	- Midwest Guardrail
	Ramp "U-1" Shoulder (Lt.)	⌂ 6+18	⌂ 6+65	--	- MSKT-SP-MGS (TL-3) End Terminal
	 Ramp "U-6" Shoulder (Rt.)	⌂ 0+00	⌂ 0+26	--	- Trailing-End Anchorage System
 	 Ramp "U-6" Shoulder (Rt.)	⌂ 0+26	⌂ 0+91	 62	- Midwest Guardrail
	Ramp "U-6" Shoulder (Rt.)	⌂ 0+91	⌂ 2+72	175	- Long-Span MGS with 9 FT Posts, (3 - Post Omitted at Catch Basin Location)

SCHEDULE - EXISTING GUARDRAIL UPGRADE					
DRAWING NO.	DESCRIPTION	FROM	TO	DISTANCE (Feet)	GUARDRAIL UPGRADE (Feet)
 	Ramp "U-6" Shoulder (Rt.)	⌂ 2+72	⌂ 6+08	325	- Midwest Guardrail with 9 FT Posts
 					
	H-1 WB Shoulder	Ramp "U-6" ⌂ 6+08 / H-1 EB ⌂ 17+45	⌂ 15+12	249	- MGS with 9 FT Posts with Rubrail
	H-1 WB Shoulder	⌂ 15+12	⌂ 14+84	28.13	- MGS with 9 FT Posts Transition to Strong Post Guardrail
R14 	H-1 WB Shoulder	⌂ 14+84	⌂ 14+60	25	- Thrie Beam Connection to existing concrete barrier, existing guardrail posts to remain
	Ramp "U-1" Shoulder (Rt.)	⌂ 2+60±	⌂ 2+81	25	- Thrie Beam Connection to existing concrete post, existing guardrail posts to remain
	Ramp "U-1" Shoulder (Rt.)	⌂ 2+81	⌂ 2+96	18	- Midwest Guardrail existing guardrail posts to remain
	Ramp "U-1" Shoulder (Rt.)	⌂ 2+96	⌂ 3+02	6.25	- Transition Section Thrie Beam to Midwest Guardrail (Symmetric)
	Ramp "U-1" Shoulder (Rt.)	⌂ 3+02	⌂ 7+20	462	- Thrie Beam Guardrail existing guardrail posts to remain
	Ramp "U-1" Shoulder (Rt.)	⌂ 7+20	⌂ 7+42	28.13	- Midwest Guardrail System Transition to Strong Post Guardrail



THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION


SIGNATURE

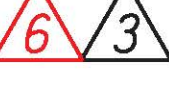
04/30/22
EXPIRATION DATE
OF THE LICENSE

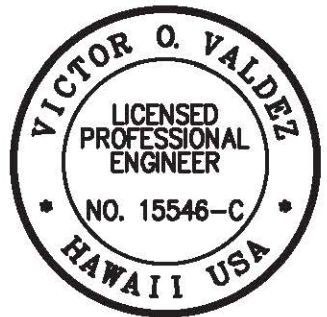
7/21/21	 Revised System Description and Quantity
7/9/21	 Revised Guardrails
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
GUARDRAIL SCHEDULE	
INTERSTATE ROUTE H-1 RESURFACING	
Miller Pedestrian Overpass to Kapiolani Interchange	
Federal-Aid Project No. NH-HI-1(279)	
Scale: N/A	Date: August 2021
SHEET No. R26 OF 41 SHEETS	

G:_CIVIL_3D_PROJECTS\2016_202\000_DOT-HWYS H1 RESURFACING - MILLER TO KAPINUI\01 CIVIL DRAWINGS\R24_R27 GUARDRAIL SCHEDULE.DWG 7/28/2021 7:57 PM

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-HI-1(279)	2021	ADD. 82	304

SCHEDULE - EXISTING GUARDRAIL UPGRADE					
DRAWING NO.	DESCRIPTION	FROM	TO	DISTANCE (Feet)	GUARDRAIL UPGRADE (Feet)
R14	 Ramp "U-1" Shoulder (Rt.)	Ⓜ 7+42	Ⓜ 7+55±	17	- Trailing-End Anchorage System
	Ramp "U-8" Shoulder (Lt.)	Ⓜ 1+28	Ⓜ 1+69	--	- MSKT-SP-MGS (TL-3) End Terminal
	Ramp "U-8" Shoulder (Lt.)	Ⓜ 1+69	Ⓜ 2+41	81	- Midwest Guardrail
	 Ramp "U-8" Shoulder (Lt.)	Ⓜ 2+41	Ⓜ 2+62	--	- Trailing-End Anchorage System
	Ramp "U-3" Shoulder (Lt.)	Ⓜ 3+80	Ⓜ 3+57	--	- Trailing-End Anchorage System
	  Ramp "U-3" Shoulder (Lt.)	Ⓜ 3+57	Ⓜ 1+73	300	- Midwest Guardrail with 9 FT Posts
	  Ramp "U-3" Shoulder (Lt.)	Ⓜ 1+73	H-1 EB Ⓜ 19+90	175	- Long-Span MGS with 9 FT Posts, (3 - Post Omitted at Sta. 1+13±)
	Ramp "U-5" Shoulder (Lt.)	Ⓜ 6+93±	Ⓜ 6+70	--	- Trailing-End Anchorage System
	  Ramp "U-5" Shoulder (Lt.)	Ⓜ 6+70	H-1 WB Ⓜ 19+96	575	- Midwest Guardrail with 9 FT Posts
	  H-1 WB Shoulder	Ⓜ 19+96	Ⓜ 21+70	175	- Long-Span MGS with 9 FT Posts, (3 - Post Omitted at Inlet Location)
	  H-1 WB Shoulder	Ⓜ 21+70	Ⓜ 24+07	237	- Midwest Guardrail with 9 FT Posts
	 H-1 WB Shoulder	Ⓜ 24+07	Ⓜ 24+36	28.13	- MGS with 9 FT Posts Transition to Strong Post Guardrail
	 H-1 WB Shoulder	Ⓜ 24+36	Ⓜ 24+67	--	- 6.25 LF Transition Section Thrie Beam to Strong Posts - 12.5 LF Thrie Beam Guardrail - 12.5 LF Nested Thrie Beam Guardrail - Thrie Beam Connector, existing guardrail posts to remain
	  H-1 EB Shoulder	H-1 EB Ⓜ 19+90	Ⓜ 21+97	208	- Midwest Guardrail with 9 FT Posts
R15	  H-1 EB Shoulder	Ⓜ 21+97	Ⓜ 23+72	175	- Long-Span MGS with 9 FT Posts, (3 - Post Omitted at DI Location)
	  H-1 EB Shoulder	Ⓜ 23+72	Ⓜ 24+17	45	- Midwest Guardrail with 9 FT Posts
	 H-1 EB Shoulder	Ⓜ 24+17	Ⓜ 24+45	28.13	- MGS with 9 FT Posts Transition to Strong Post Guardrail
	 H-1 EB Shoulder	Ⓜ 24+45	Ⓜ 24+70±	25	- Thrie Beam Connection to existing concrete railing, existing guardrail posts to remain
	H-1 EB Shoulder	Ⓜ 25+05±	Ⓜ 25+30	25	- Thrie Beam Connection to existing concrete railing, existing guardrail posts to remain
	 H-1 EB Shoulder	Ⓜ 25+30	Ⓜ 25+58	28.13	- MGS with 9 FT Posts Transition to Strong Post Guardrail
	 H-1 EB Shoulder	Ⓜ 25+58	Ⓜ 28+32	281	- Midwest Guardrail with 9 FT Posts

SCHEDULE - EXISTING GUARDRAIL UPGRADE					
DRAWING NO.	DESCRIPTION	FROM	TO	DISTANCE (Feet)	GUARDRAIL UPGRADE (Feet)
	H-1 EB Shoulder	Ⓜ 28+32	Ⓜ 29+50	121	- Midwest Guardrail
	 H-1 EB Shoulder	Ⓜ 29+50	Ⓜ 29+77	28.13	- Midwest Guardrail System Transition to Strong Post Guardrail
	H-1 EB Shoulder	Ⓜ 29+77	Ⓜ 30+02±	25	- Thrie Beam Connection to existing concrete railing, existing guardrail posts to remain
	 H-1 WB Shoulder	Ⓜ 25+08	Ⓜ 25+39	--	- Thrie Beam Connector - 6.25 LF Transition Section Thrie Beam to Strong Posts - 12.5 LF Nested Thrie Beam Guardrail - 12.5 LF Thrie Beam Guardrail, existing guardrail posts to remain
	R15  H-1 WB Shoulder	Ⓜ 25+39	Ⓜ 25+67	28.13	- MGS with 9 FT Posts Transition to Strong Post Guardrail
 	  H-1 WB Shoulder	Ⓜ 25+67	Ⓜ 26+14	45	- Midwest Guardrail with 9 FT Posts
	  H-1 WB Shoulder	Ⓜ 26+14	Ⓜ 27+94	175	- Long-Span MGS with 9 FT Posts, (3 - Post Omitted at Inlet Location)
	  H-1 WB Shoulder	Ⓜ 27+94	Ⓜ 28+09	15	- Midwest Guardrail with 9 FT Posts
	  H-1 WB Shoulder	Ⓜ 28+09	Ⓜ 29+90	175	- Long-Span MGS with 9 FT Posts, (3 - Post Omitted at Inlet Location)
	  H-1 WB Shoulder	Ⓜ 29+90	Ⓜ 30+40	48	- Midwest Guardrail with 9 FT Posts
	  H-1 WB Shoulder	Ⓜ 30+40	Ramp "T" Ⓜ Ah 7+50	28.13	- MGS with 9 FT Posts Transition to Strong Post Guardrail



THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION

 04/30/22

SIGNATURE EXPIRATION DATE
OF THE LICENSE

7/21/21 Revised System Description and Quantity

7/9/21 Revised Guardrails

DATE REVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GUARDRAIL SCHEDULE

INTERSTATE ROUTE H-1 RESURFACING
Miller Pedestrian Overpass to Kapiolani Interchange
Federal-Aid Project No. NH-HI-1(279)

Scale: N/A Date: August 2021

SHEET No. R27 OF 41 SHEETS

G:\CIVIL_3D PROJECTS\2016_202\000 DOT-HWYS H1 RESURFACING - MILLER TO KAPUNI\01 CIVIL DRAWINGS\R24_R27 GUARDRAIL SCHEDULE.DWG 7/28/2021 7:57 PM

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-HI-1(279)	2021	ADD. 82S-2	304

SCHEDULE - EXISTING GUARDRAIL UPGRADE					
DRAWING NO.	DESCRIPTION	FROM	TO	DISTANCE (Feet)	GUARDRAIL UPGRADE (Feet)
R17	3 H-1 WB Shoulder	⌂ 43+15	⌂ 43+83	68	- W-Beam Guardrail, existing guardrail posts to remain
	3 H-1 WB Shoulder	⌂ 43+83	⌂ 43+89	6.25	- Transition Section Thrie Beam to Midwest Guardrail (Symmetric)
	3 H-1 WB Shoulder	⌂ 43+89	⌂ 44+49	60	- Thrie Beam Guardrail, existing guardrail posts to remain
	3 H-1 WB Shoulder	⌂ 44+49	⌂ 44+55	6.25	- Transition Section Thrie Beam to Midwest Guardrail (Symmetric)
	3 H-1 WB Shoulder	⌂ 44+55	⌂ 44+83	28.13	- MGS with 9 FT Posts Transition to Strong Post Guardrail
	4 3 H-1 WB Shoulder	⌂ 44+83	⌂ 45+76	94	- Midwest Guardrail with 9FT Posts
	3 H-1 WB Shoulder	⌂ 45+76	⌂ 46+04	28.13	- MGS with 9 FT Posts Transition to Strong Post Guardrail
	H-1 WB Shoulder	⌂ 46+04	⌂ 46+29±	25	- Thrie Beam Connection to existing concrete railing, existing guardrail posts to remain

SUMMARY - EXISTING GUARDRAIL UPGRADE 3	
DESCRIPTION	QTY
Midwest Guardrail System, MGS	4 1,223 LF 6
Midwest Guardrail System, MGS (with Rubrails)	50 LF
Midwest on 2:1 Fill Slope (9ft Post)	4 4,115 LF 6
Midwest on 2:1 Fill Slope (9ft Post) (with Rubrails)	4 672 LF 6
MGS Transition to Strong Post Guardrail	4 19 EA
MGS Transition to Strong Post Guardrail with 9ft Posts	4 17 EA
25 LF Thrie Beam Connection (Railing Replacement Only)	4 26 EA
W-Beam Railing (Existing Posts to Remain)	4 165 LF
W-Beam Railing (with Rubrails) (Existing Posts to Remain)	50 LF 4
Type 3 Thrie Beam Railing (Existing Posts to Remain)	4 1,439 LF 6
Type 3 Thrie Beam Railing (with Posts)	210 LF 6
Thrie Beam End Terminal Connector	4 11 EA
Thrie Beam End Rounded End Section	4 EA 6
W-Beam End Rounded End Section	2 EA
Symmetrical Thrie Beam to Strong Post Transition (6.25 LF)	4 13 EA 6
Asymmetrical Thrie Beam to MGS Transition (6.25 LF)	4 6 EA
SoftStop (TL-2) End Terminal	1 EA 4
MSKT-SP-MGS (TL-3) End Terminal	6 EA
Trailing-End Anchorage System	4 11 EA
Long-Span MGS Type 3 W-Beam, 31 Inches (3-Post Omitted)	2 EA 6
Long-Span MGS Type 3 W-Beam, 31 Inches (3-Post Omitted) with 9 ft Posts	4 9 EA 6

SUMMARY - EXISTING GUARDRAIL UPGRADE	
DESCRIPTION	QTY
Long-Span Strong Post W-Beam, 28 Inches (3-Post Omitted)	1 EA 6
SCI 100 GM Transition to W-Beam (28" High)	1 EA 6
SCI 100 GM Transition to W-Beam (31" High)	1 EA 6

7/21/21	6 Revised Quantities & System Description
7/14/21	4 Revised Quantities, System Description, & Added SoftStop
7/9/21	3 Revised Guardrails
DATE	REVISION

VICTOR O. VALDEZ

LICENSED PROFESSIONAL ENGINEER

NO. 15546-C

HAWAII USA

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

Signature

04/30/22

SIGNATURE

EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GUARDRAIL SCHEDULE

INTERSTATE ROUTE H-1 RESURFACING

Miller Pedestrian Overpass to Kapiolani Interchange

Federal-Aid Project No. NH-HI-1(279)

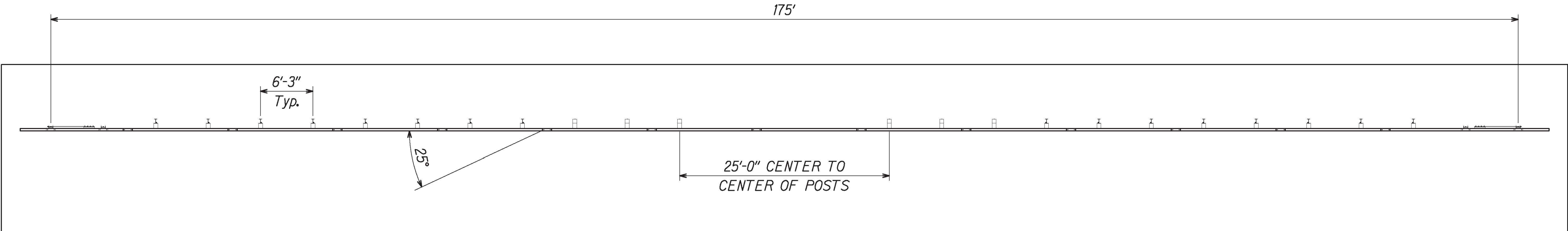
Scale: N/A

Date: August 2021

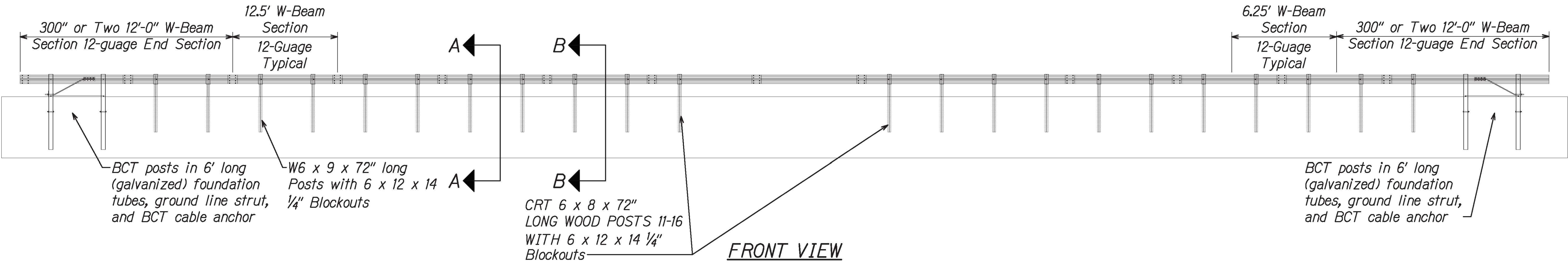
SHEET No. R27B OF 41 SHEETS

ADD. 82S-2

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-HI-1(279)	2021	ADD. 84S-3	304

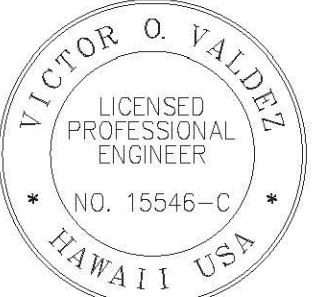


PLAN VIEW



FRONT VIEW

MGS LONG SPAN LSC-2 DETAILS 6

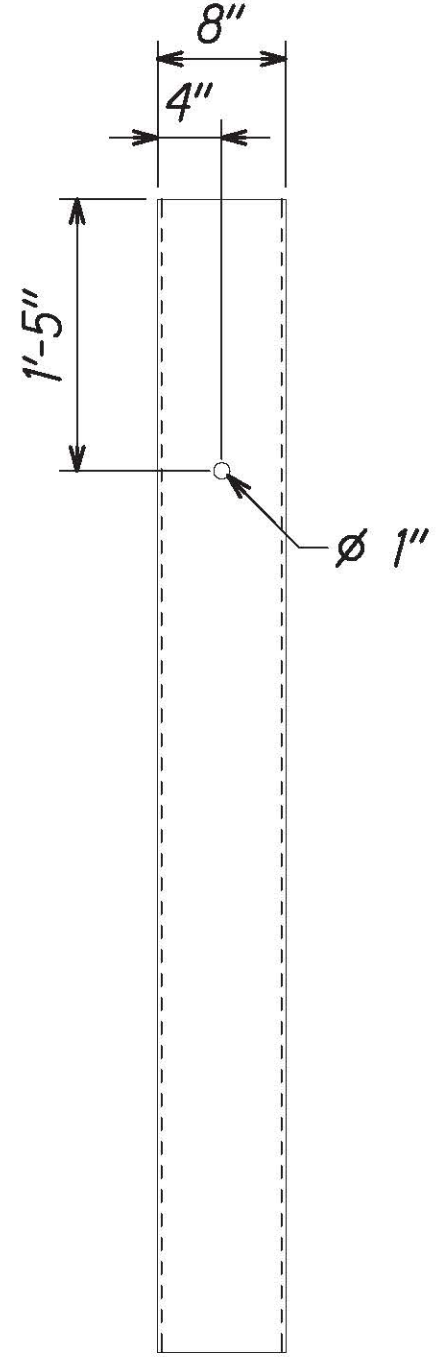
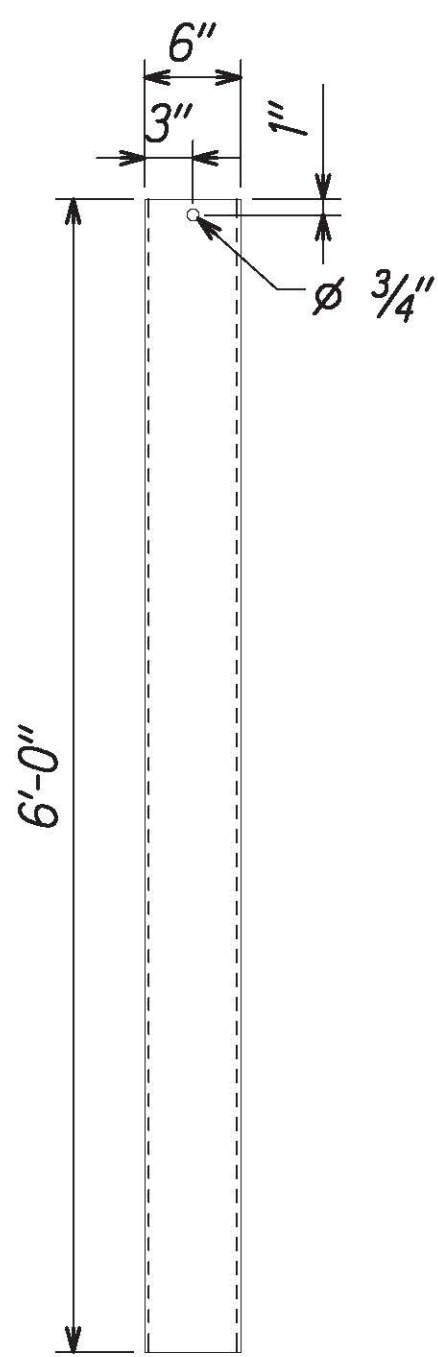
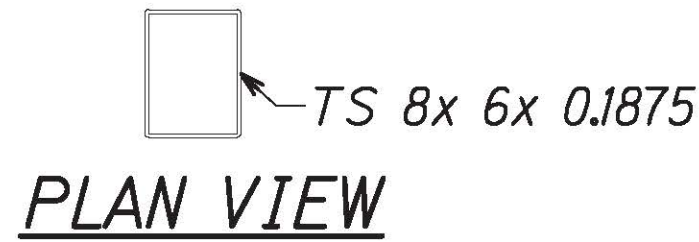


THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION
[Signature]
SIGNATURE
04/30/22
EXPIRATION DATE
OF THE LICENSE

7/21/21	6 Added Sheet
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
<u>MGS LONG SPAN LSC-2</u>	
<u>INTERSTATE ROUTE H-1 RESURFACING</u>	
<u>Miller Pedestrian Overpass to Kapiolani Interchange</u>	
<u>Federal-Aid Project No. NH-HI-1(279)</u>	
Scale: NTS	Date: August 2021

C:\CIVIL 3D PROJECTS\2016_202\000 DOT-HWYS H1 RESURFACING - MILLER TO KAPIOLANI CIVIL DRAWINGS\R29C MGS LONG SPAN LSC-2.DWG 7/26/2021 11:19 PM

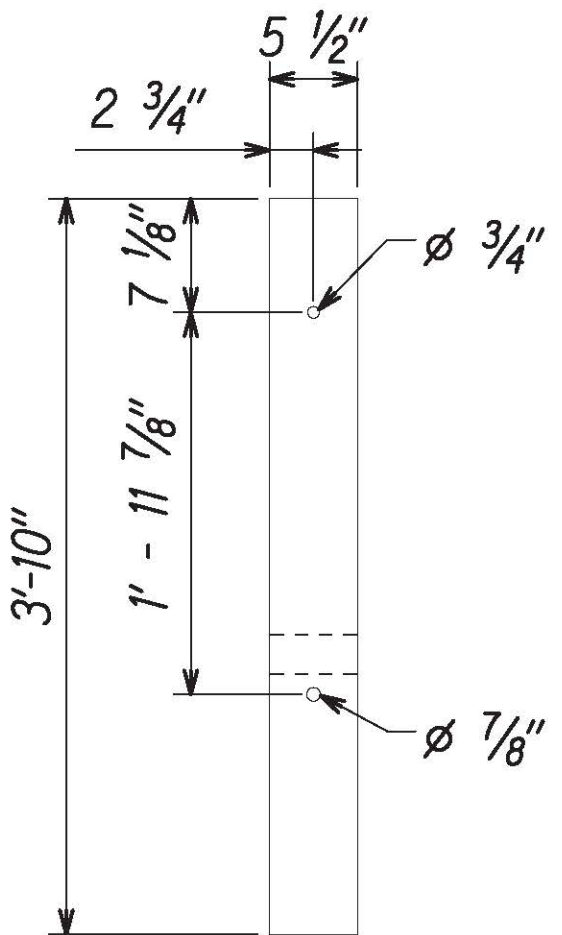
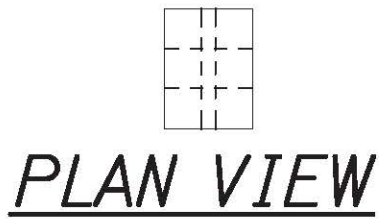
FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-HI-1(279)	2021	ADD. 84S-4	304



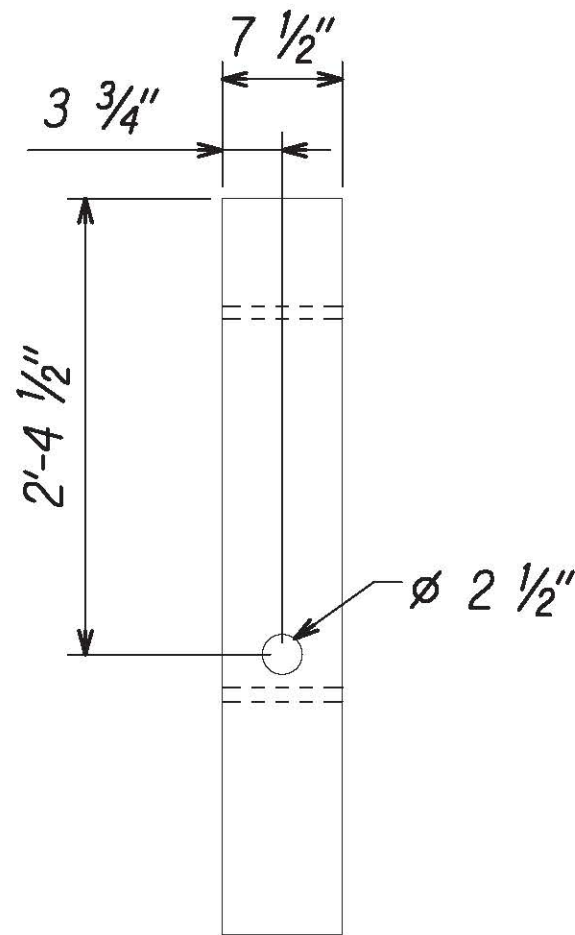
PROFILE VIEW

SIDE VIEW

FOUNDATION TUBE PART B1



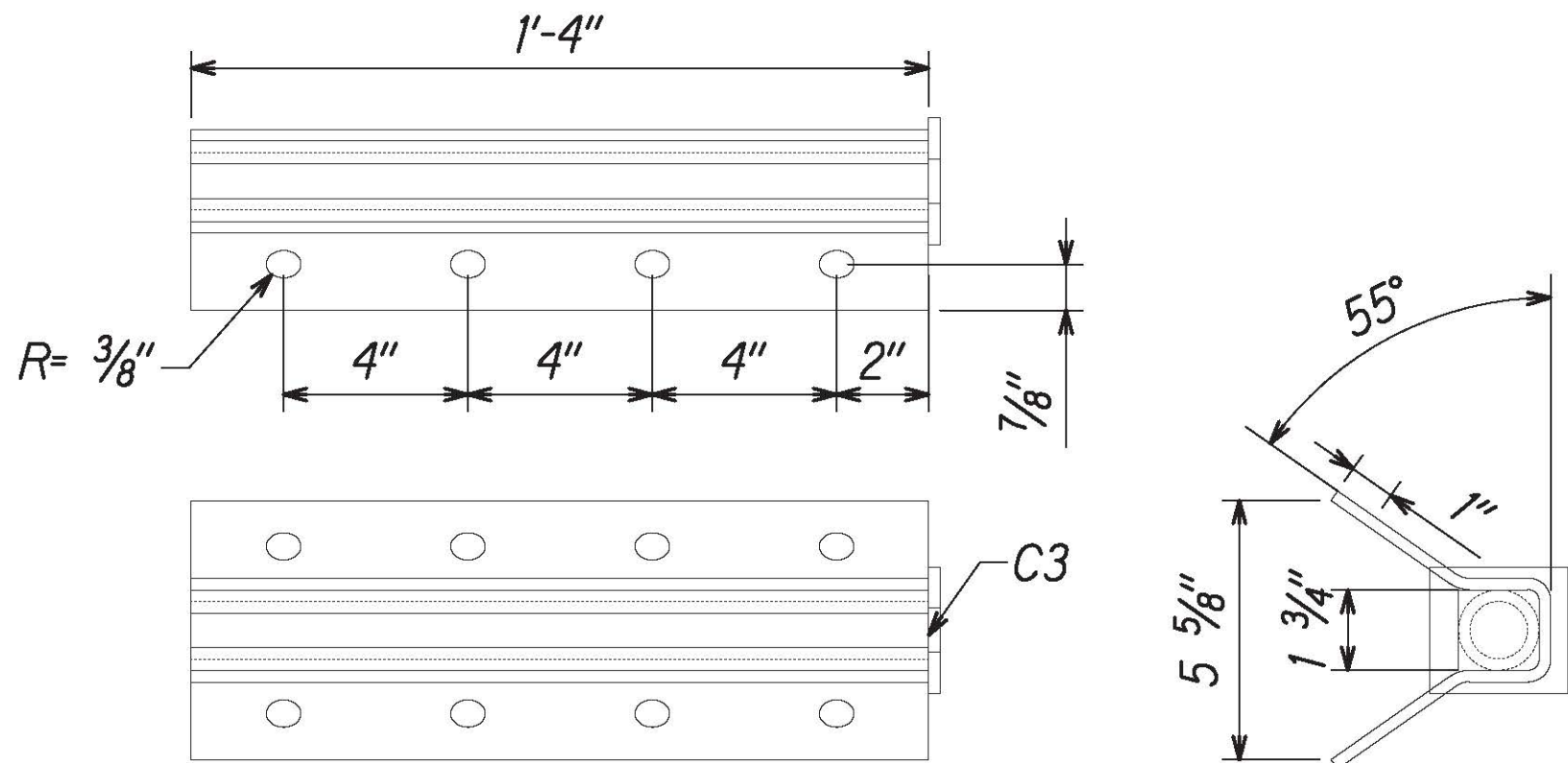
PROFILE VIEW



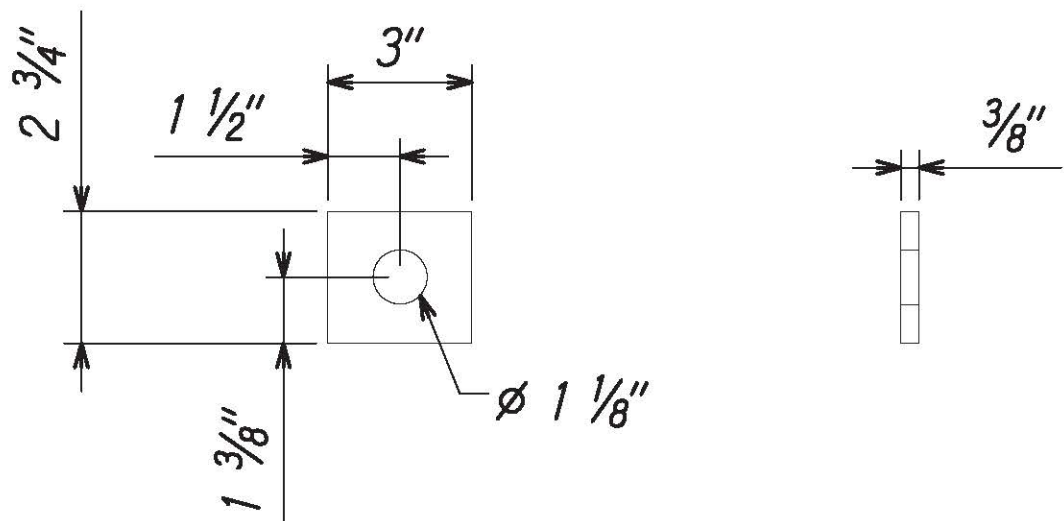
SIDE VIEW

PART B2

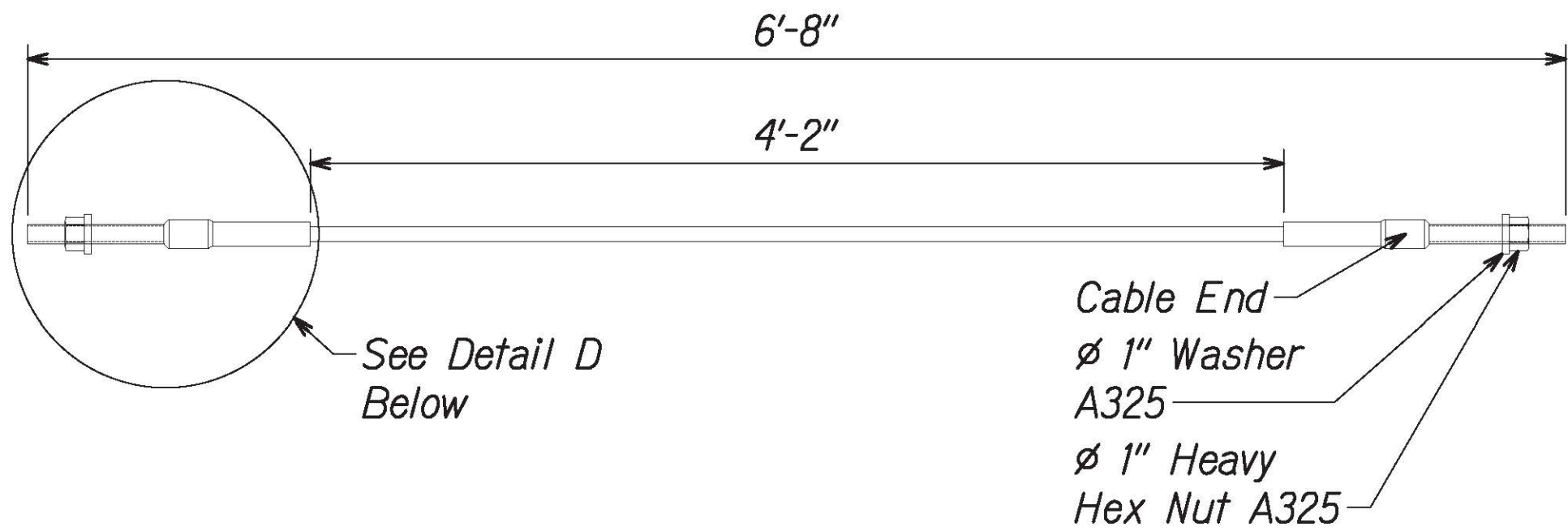
BCT (MGS) TIMBER POST



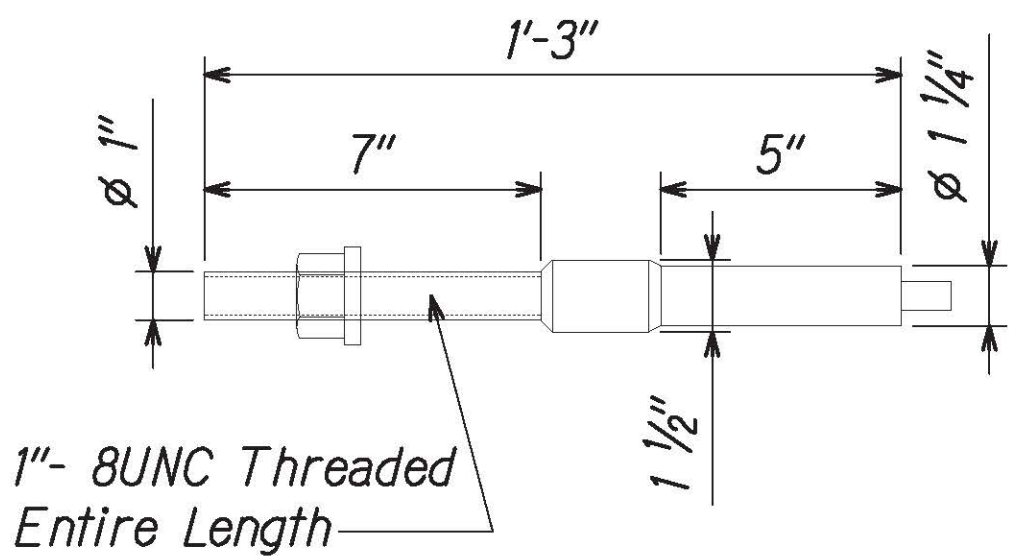
ANCHOR BRACKET PART C2



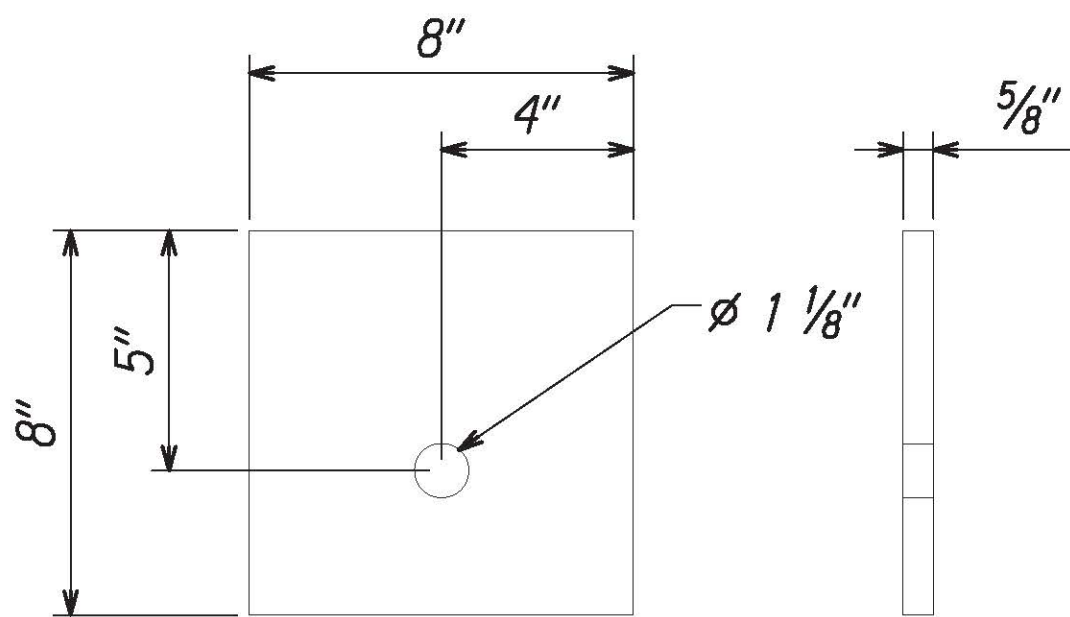
ANCHOR BRACKET BEARING PLATE PART C3



BCT ANCHOR CABLE PART D1



DETAIL "D"

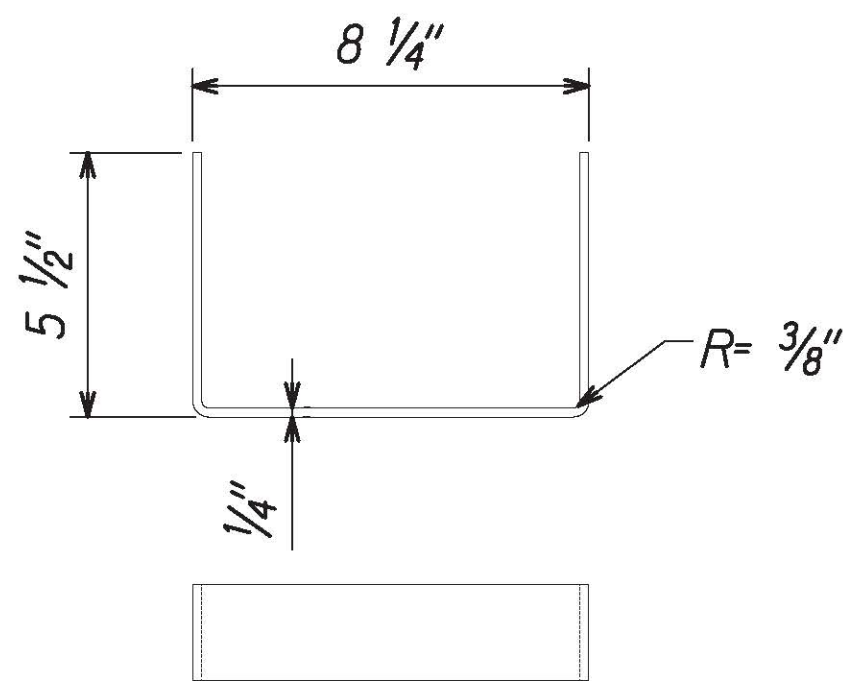


SIDE VIEW

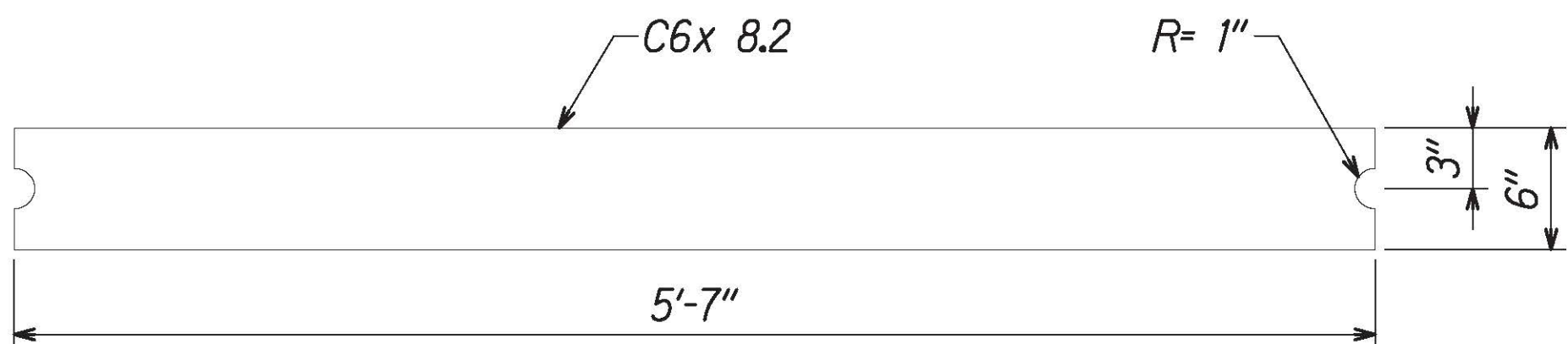
PROFILE VIEW

ANCHOR CABLE BEARING PLATE PART D2

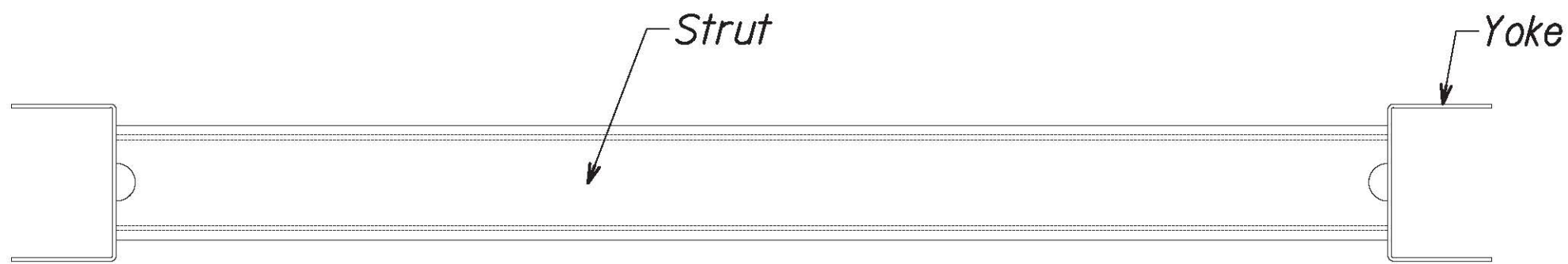
BCT ANCHOR CABLE DETAIL



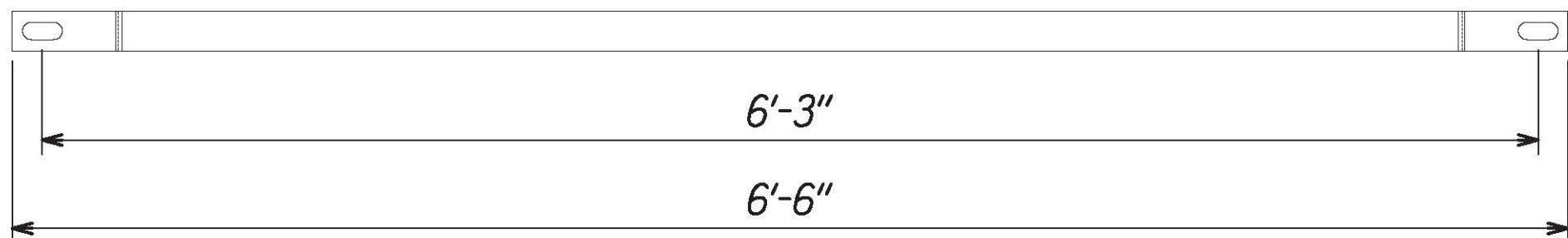
YOKE DETAIL



STRUT DETAIL



PLAN VIEW



FRONT VIEW

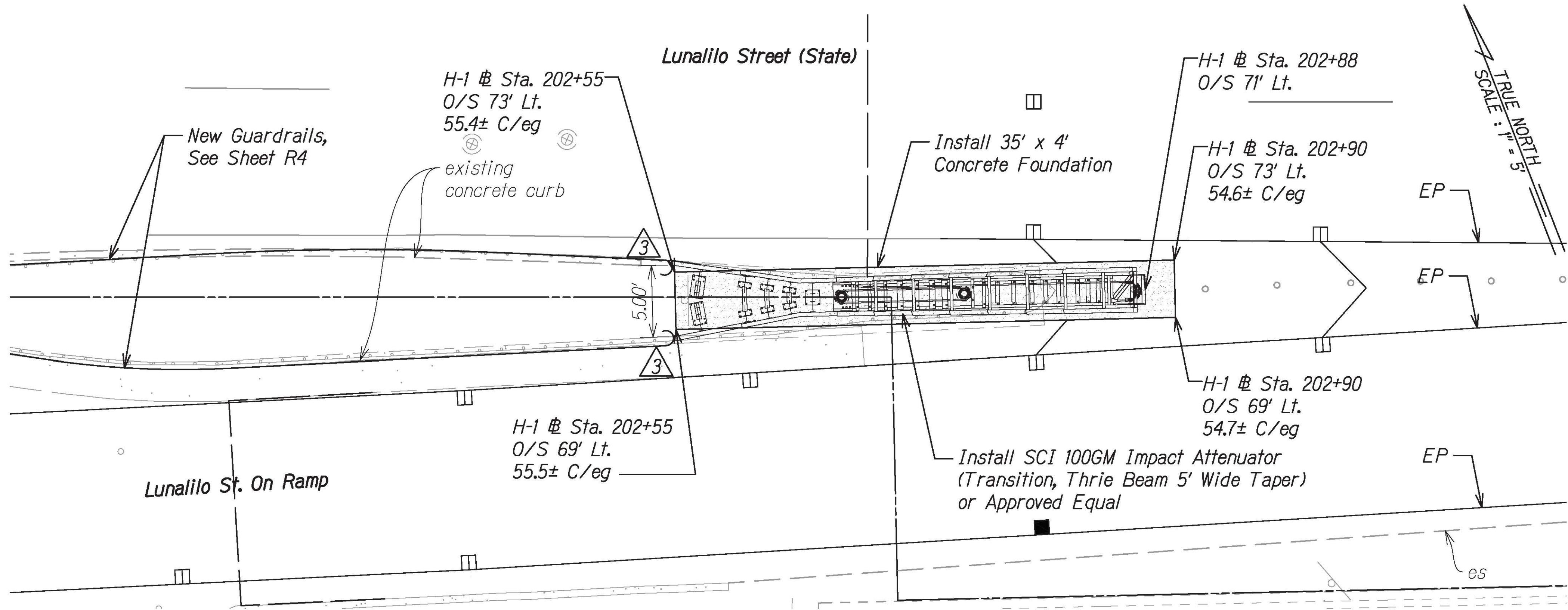
GROUND STRUT PART C1



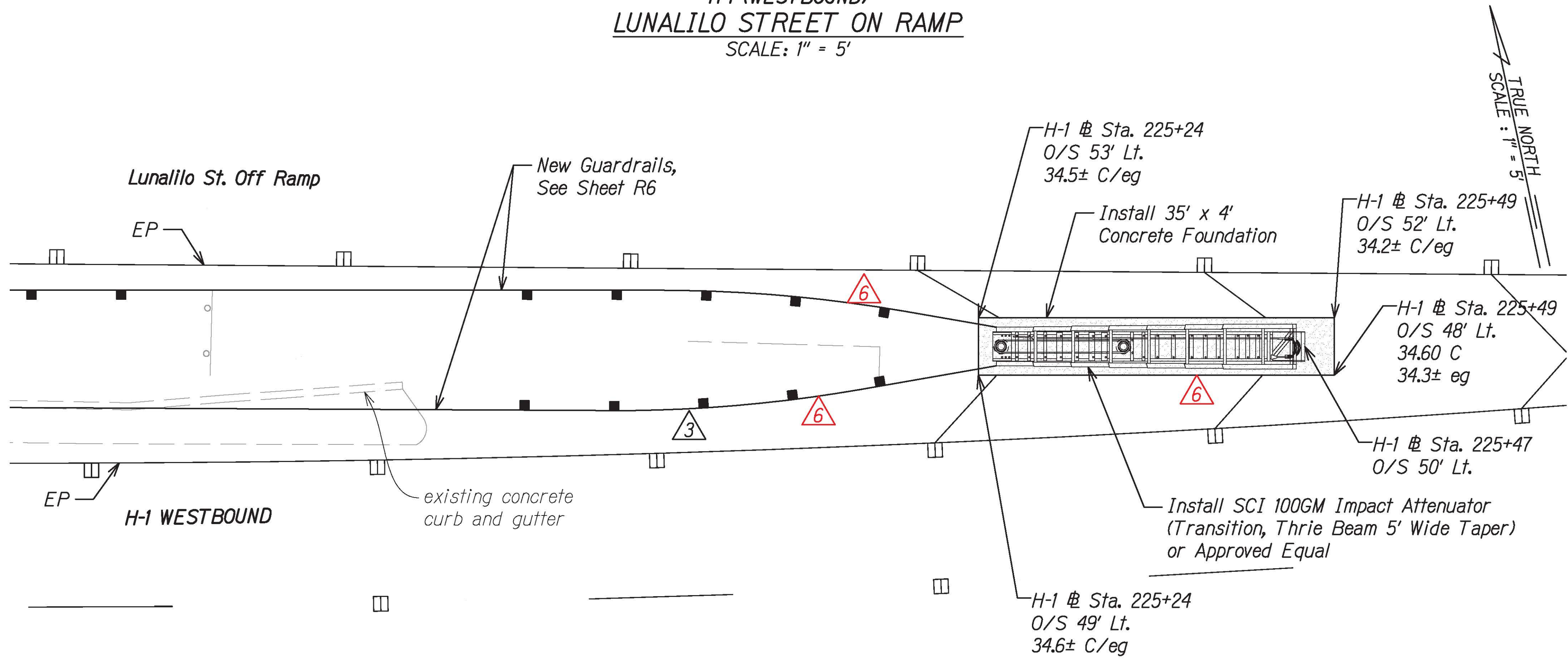
THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION
SIGNATURE
04/30/22
EXPIRATION DATE
OF THE LICENSE

7/21/21	Added Sheet
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
MGS LONG SPAN LSC-2	
INTERSTATE ROUTE H-1 RESURFACING	
Miller Pedestrian Overpass to Kapiolani Interchange	
Federal-Aid Project No. NH-HI-1(279)	
Scale: NTS	Date: August 2021
SHEET No. R29D OF 41 SHEETS	

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-HI-1(279)	2021	ADD. 93	304



H-1 (WESTBOUND)
LUNALILO STREET ON RAMP
 SCALE: 1" = 5'

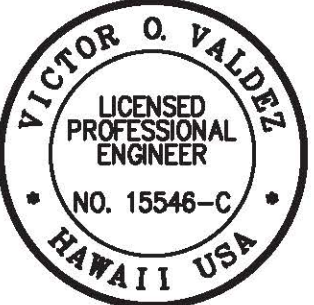


H-1 (WESTBOUND)
LUNALILO STREET OFF RAMP
 SCALE: 1" = 5'

- NOTES:**
- For specific information regarding installation and technical guidance of the system, the Contractor shall follow Manufacturer's product manual and recommendations.
 - Additional details for the transition options and foundation options will be shown on the Manufacturer's shop drawings furnished to the Engineer.
 - Concrete shall be Class "S" with a minimum Compressive Strength of 4,000 psi.
 - Maximum permissible cross-slope is 8%.
 - The installation area should be free from curbs, elevated objects, or depressions.
 - The SCI 100GM System should be approximately parallel with the barrier or C of merging barriers.

7/21/21		Revised Guardrail and Moved Attenuator
7/9/21		Revised Guardrails
DATE	REVISION	

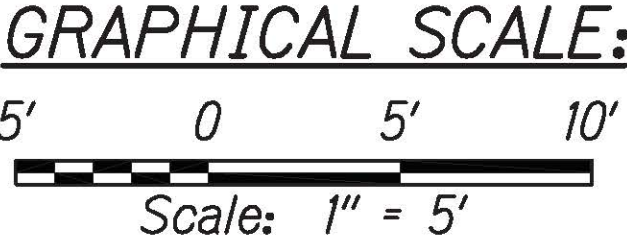
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
<u>IMPACT ATTENUATOR DETAILS</u>	
<u>INTERSTATE ROUTE H-1 RESURFACING</u>	
<u>Miller Pedestrian Overpass to Kapiolani Interchange</u>	
<u>Federal-Aid Project No. NH-HI-1(279)</u>	
Scale: 1" = 5'	Date: August 2021
SHEET No. R38 OF 41 SHEETS	



THIS WORK WAS PREPARED BY ME
 OR UNDER MY SUPERVISION

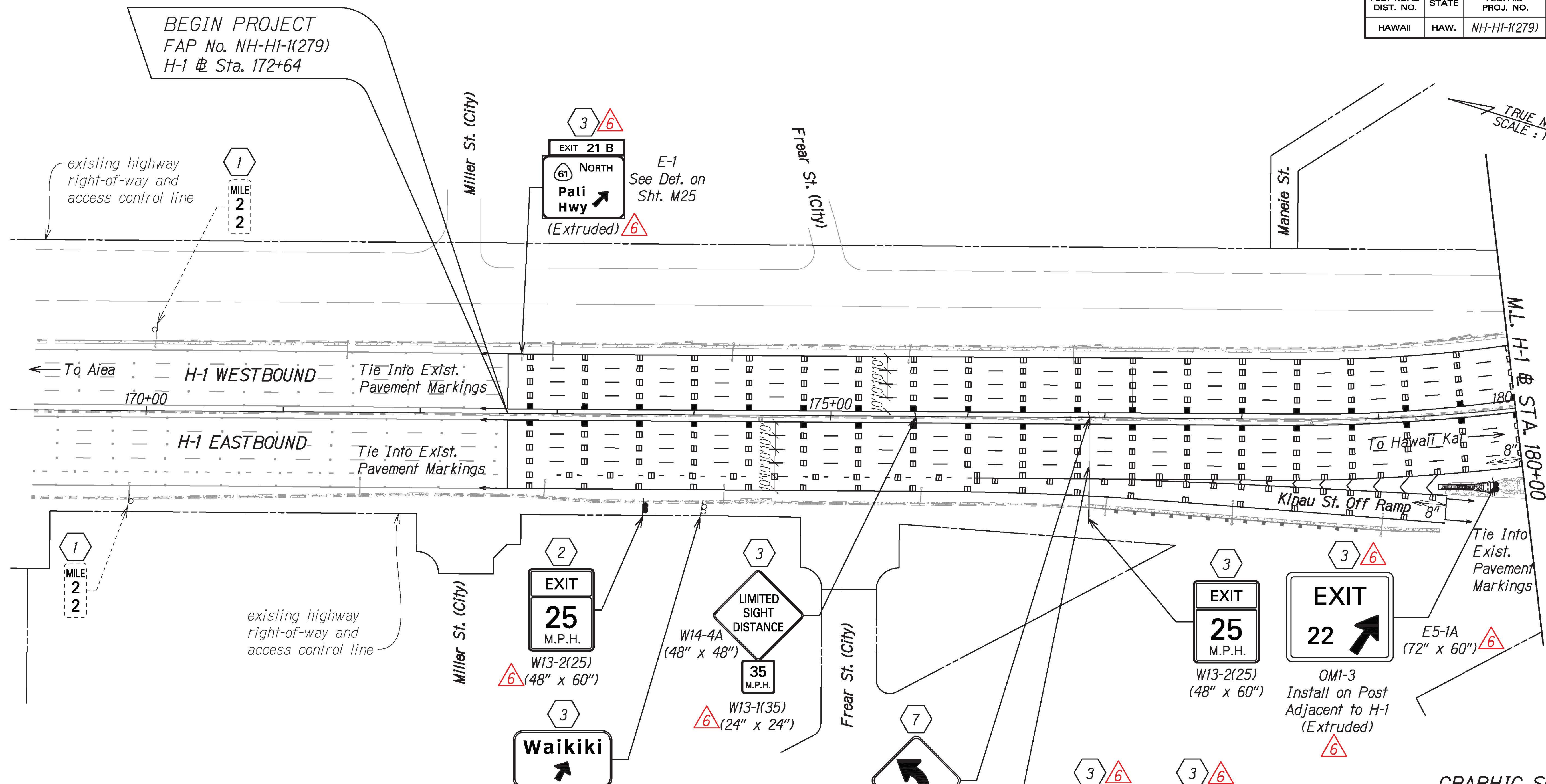
SIGNATURE

04/30/22
 EXPIRATION DATE
 OF THE LICENSE

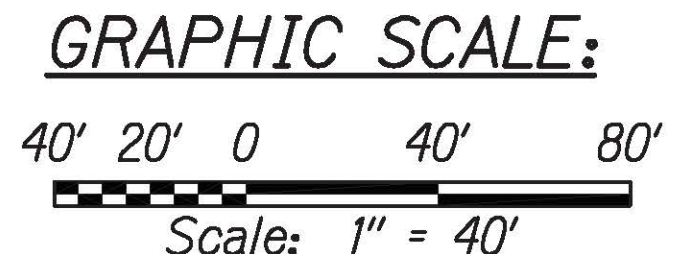


G:\CIVIL_3D PROJECTS\2016_2022\DOT-HWYS H1 RESURFACING - MILLER TO KAPITV01 CIVIL DRAWINGS\R37-R41 IMPACT ATTENUATOR DETAILS.DWG 7/9/2021 4:35 PM

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-H1-1(279)	2021	ADD. 143	304



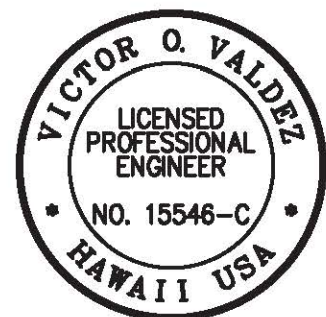
TRUE NORTH
SCALE : 1" = 40'



NOTE:
For pavement marking and signing legend, see Sht. M1

- SIGNING KEY:**
- 1 Exist. Sign(s) & Post(s) to Remain
 - 2 Remove Exist. Sign(s) w/Post(s) & Install New Sign(s) w/ Post(s).
Install Type II Reflector Marker (RM-2, Yellow) on New Posts except where there is OMI-3.
 - 3 Remove Exist. Sign(s) & Install New Sign(s) on Exist. Post(s)
 - 7 Remove Exist. Sign(s) & Install New Sign(s) on Exist. Column Sign Post
- 6

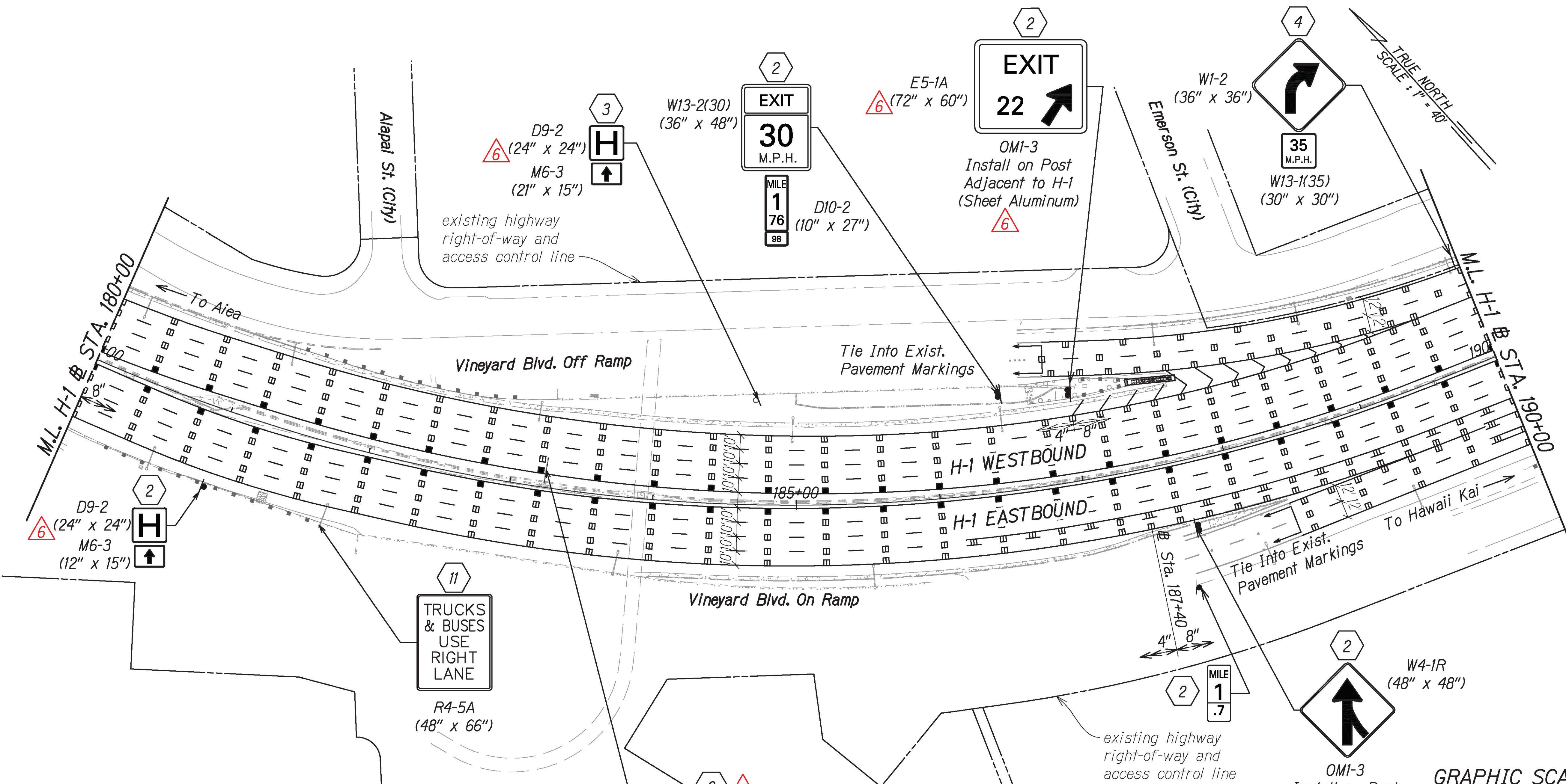
7/21/21	Removed Signing Key No. 10, Updated Sign Size and Updated Reference Note
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION PAVEMENT MARKING & SIGNING PLAN INTERSTATE ROUTE H-1 RESURFACING Miller Pedestrian Overpass to Kapiolani Interchange Federal-Aid Project No. NH-H1-1(279) Scale: 1" = 40' Date: August 2021	
SHEET No. M2 OF 34 SHEETS	



THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION

SIGNATURE: *[Signature]* 04/30/22
EXPIRATION DATE OF THE LICENSE

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-HI-1(279)	2021	ADD. 144	304



NOTE:

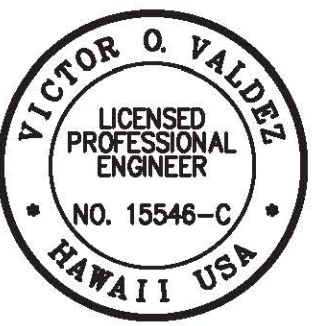
For pavement marking and signing legend, see Sht. M1

SIGNING KEY:

- Remove Exist. Sign(s) w/Post(s) & Install New Sign(s) w/ Post(s).
Install Type II Reflector Marker (RM-2, Yellow) on New Posts except where there is OMI-3.
- Remove Exist. Sign(s) & Install New Sign(s) on Exist. Post(s)
- Remove Exist. Sign(s) & Install New Sign(s) on Existing Wall Mounted Post(s)
- Remove Exist. Sign(s) & Install New Sign(s) on Exist. Street Light Post(s)

Pali Hwy. 1/4
School St. 3/4
Palama St. 1 1/2
E-3
See Det. on
Sht. M25
(Extruded)

GRAPHIC SCALE:
40' 20' 0' 40' 80'
Scale: 1" = 40'



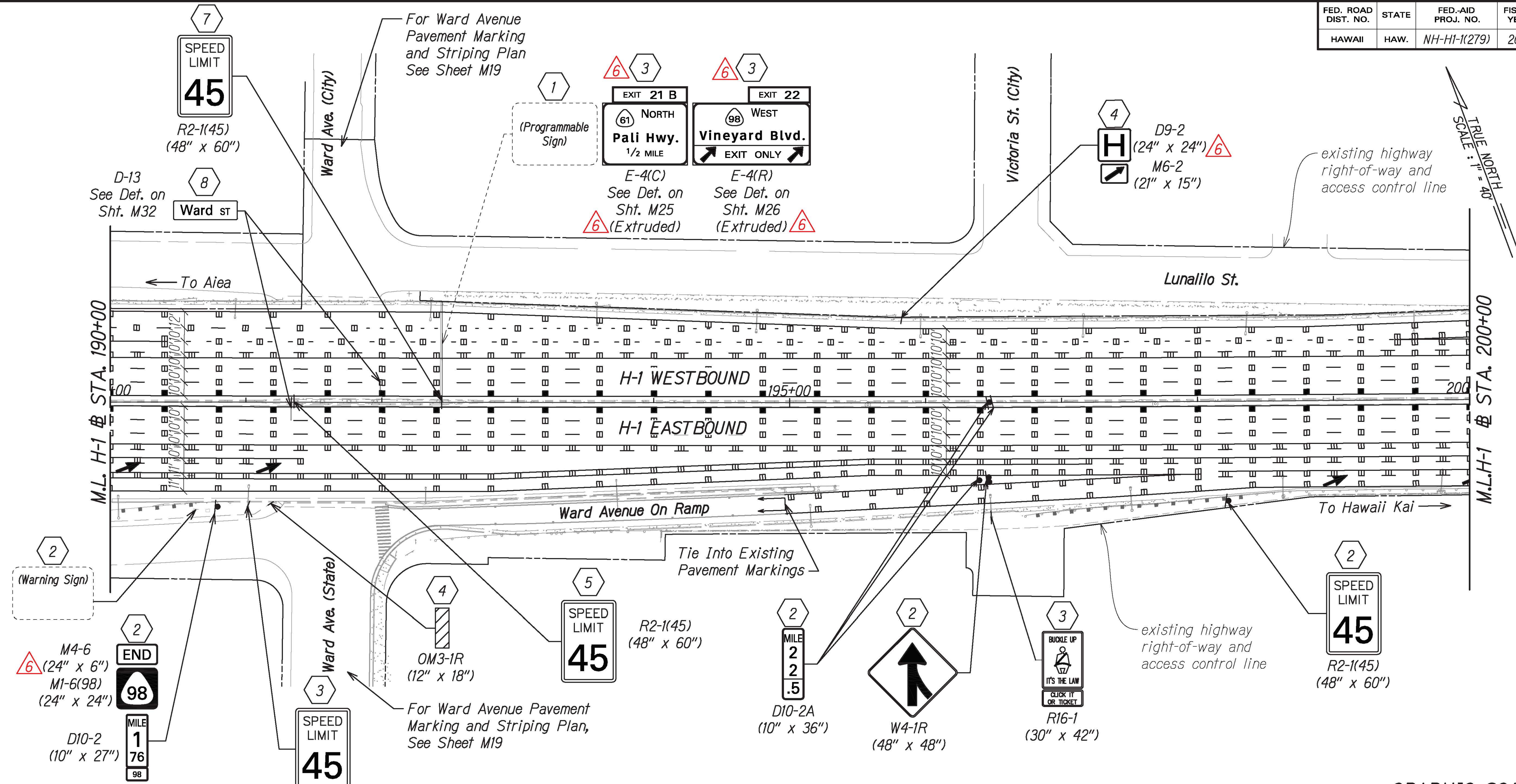
THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION

04/30/22
EXPIRATION DATE
OF THE LICENSE

7/21/21	Removed Signing Key No. 10, Updated Sign Size and Updated Reference Note
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION PAVEMENT MARKING & SIGNING PLAN INTERSTATE ROUTE H-1 RESURFACING Miller Pedestrian Overpass to Kapiolani Interchange Federal-Aid Project No. NH-HI-1(279) Scale: 1" = 40' Date: August 2021	
SHEET No. M3 OF 34 SHEETS	

G:\CIVIL 3D PROJECTS\2016_2022\DOT-HWYS H1 RESURFACING - MILLER TO KAPITV01 CIVIL DRAWINGS\M2 - M18 - PAVEMENT MARKING AND SIGNING PLANS.DWG 7/22/2021 9:08 AM

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-HI-1(279)	2021	ADD. 145	304



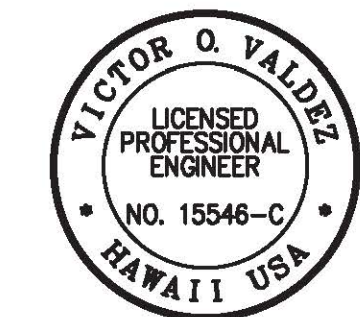
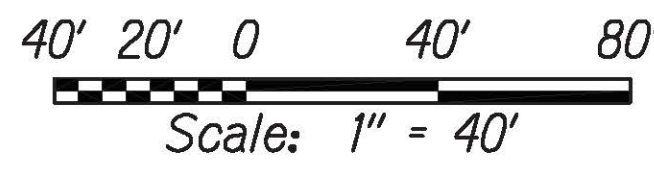
SIGNING KEY:

- 1 Exist. Sign(s) & Post(s) to Remain
- 2 Remove Exist. Sign(s) w/ Post(s) & Install New Sign(s) w/ Post(s).
Install Type II Reflector Marker (RM-2, Yellow) on New Posts except where there is OM1-3.
- 3 Remove Exist. Sign(s) & Install New Sign(s) on Exist. Post(s)
- 4 Remove Exist. Sign(s) & Install New Sign(s) Mounted on Wall
- 5 Remove Exist. Sign(s) & Install New Sign(s) on Bridge Column
- 7 Remove Exist. Sign(s) & Install New Sign(s) on Exist. Column Sign Post
- 8 Remove Exist. Sign(s) & Install New Sign Mounted on Overpass (Bridge) Fascia

NOTE:

For pavement marking and signing legend, see Sht. M1

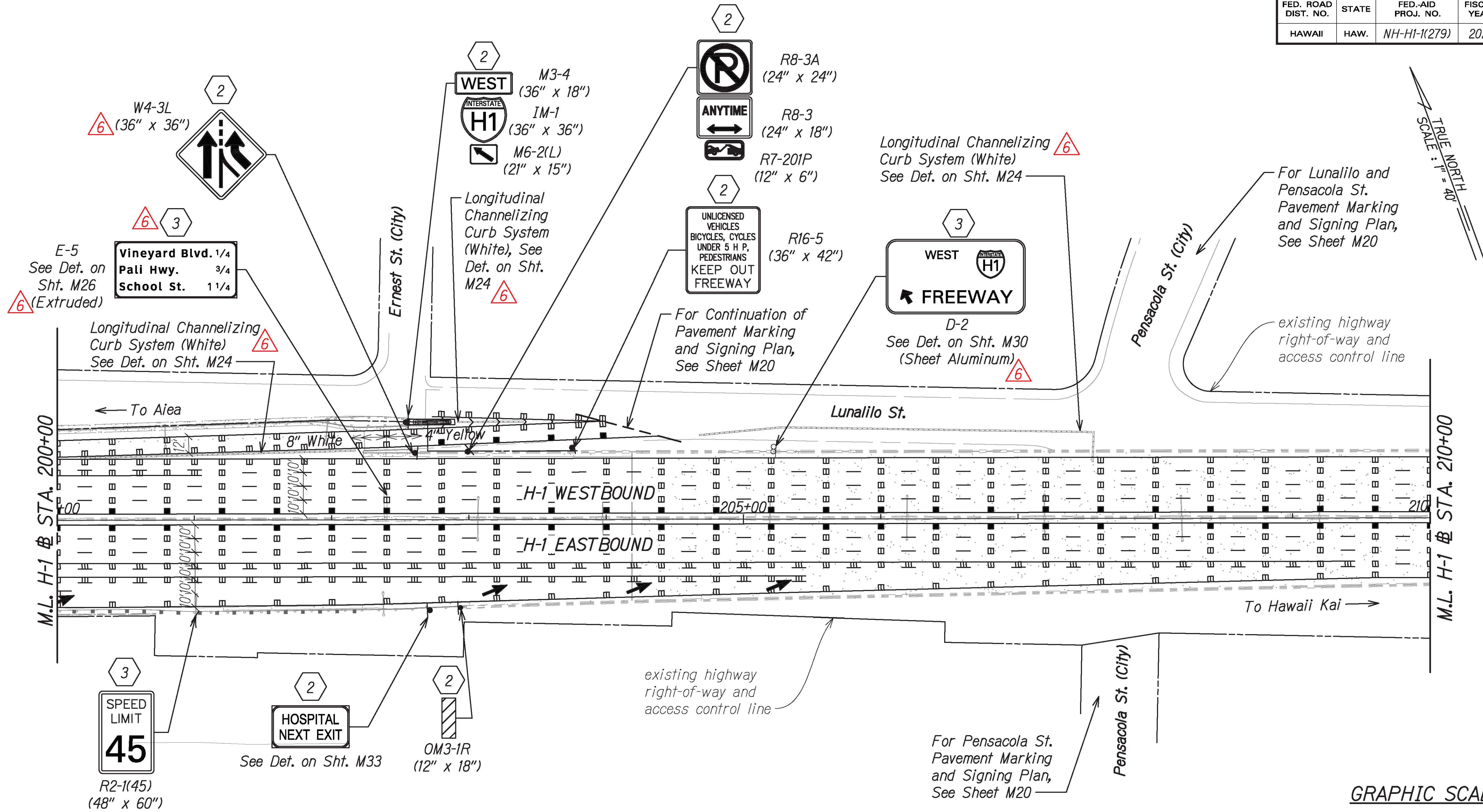
GRAPHIC SCALE:



THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION
[Signature]
SIGNATURE
04/30/22
EXPIRATION DATE
OF THE LICENSE

7/21/21	Removed Signing Key No. 10, Updated Sign Size and Updated Reference Note
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION PAVEMENT MARKING & SIGNING PLAN INTERSTATE ROUTE H-1 RESURFACING Miller Pedestrian Overpass to Kapiolani Interchange Federal-Aid Project No. NH-HI-1(279) Scale: 1" = 40' Date: August 2021	
SHEET No. M4 OF 34 SHEETS	

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-HI-1(279)	2021	ADD. 146	304



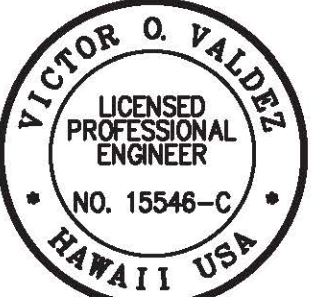
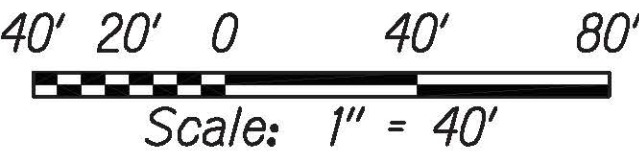
NOTE:

For pavement marking and signing legend, see Sht. M1

SIGNING KEY:

- 2 Remove Exist. Sign(s) w/Post(s) & Install New Sign(s) w/ Post(s).
Install Type II Reflector Marker (RM-2, Yellow) on New Posts except where there is OM1-3.
- 3 Remove Exist. Sign(s) & Install New Sign(s) on Exist. Post(s)
- 6

GRAPHIC SCALE:

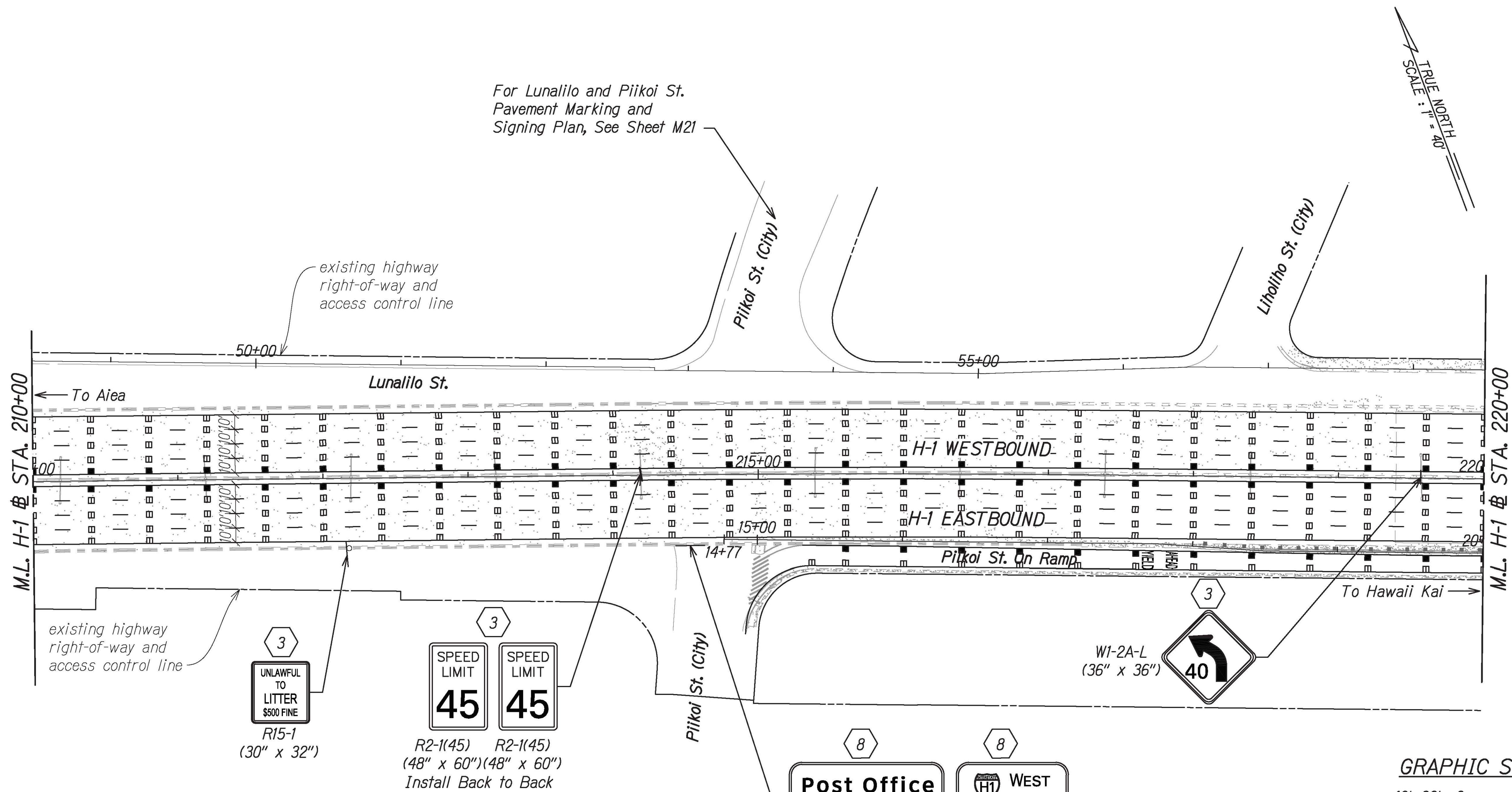


THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION
SIGNATURE
04/30/22
EXPIRATION DATE
OF THE LICENSE

7/21/21	Removed Signing Key No. 10, Updated Sign Size and Updated Reference Note and Callout
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION PAVEMENT MARKING & SIGNING PLAN INTERSTATE ROUTE H-1 RESURFACING Miller Pedestrian Overpass to Kapiolani Interchange Federal-Aid Project No. NH-HI-1(279) Scale: 1" = 40' Date: August 2021	

SHEET No. M5 OF 34 SHEETS

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-HI-1(279)	2021	ADD. 147	304



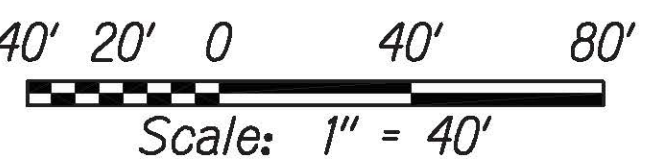
NOTE:

For pavement marking and signing legend, see Sht. M1

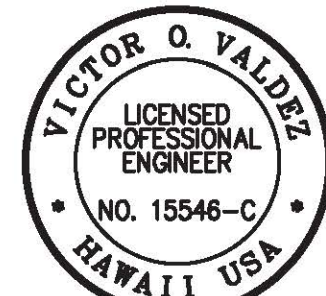
SIGNING KEY:

- 3 Remove Exist. Sign(s) & Install New Sign(s) on Exist. Post(s)
- 8 Remove Exist. Sign(s) & Install New Sign Mounted on Overpass (Bridge) Fascia

GRAPHIC SCALE:



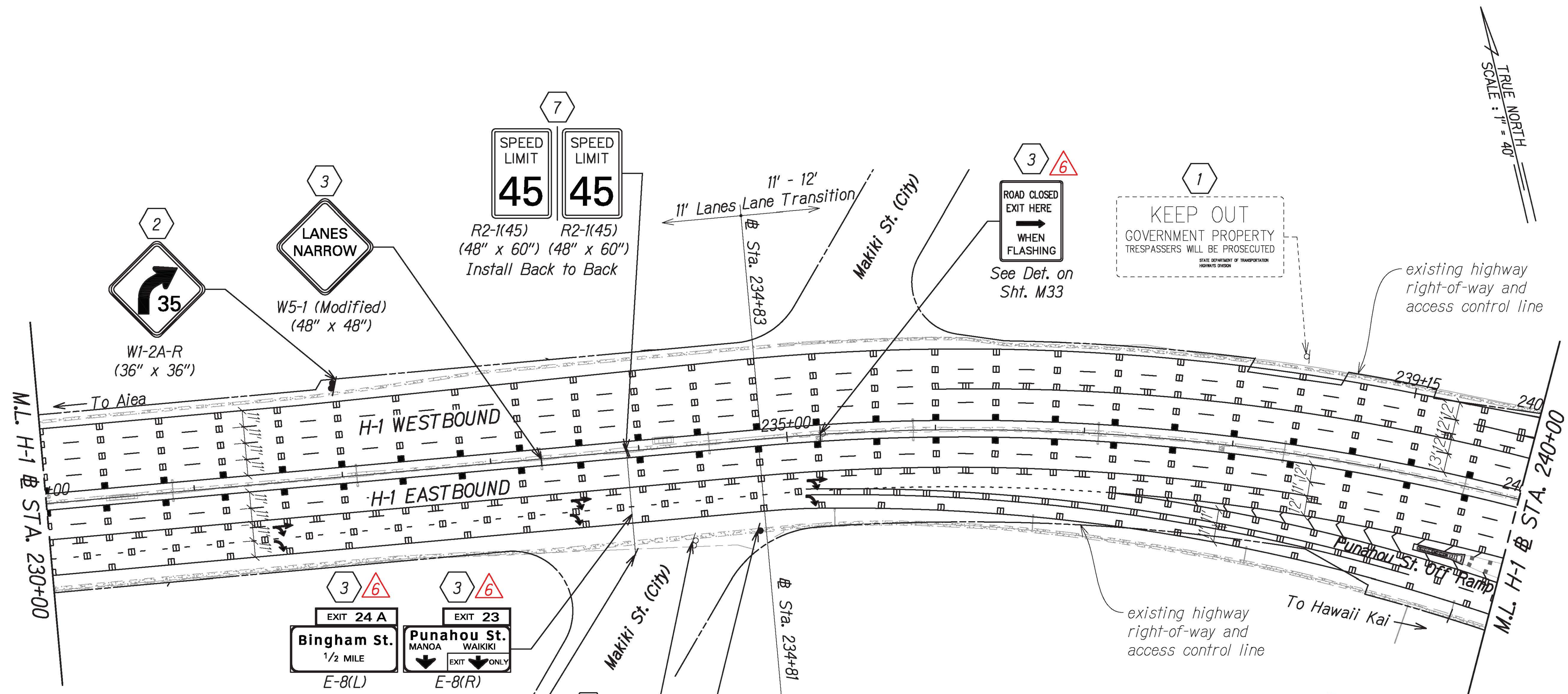
7/21/21	Updated Callout
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION PAVEMENT MARKING & SIGNING PLAN INTERSTATE ROUTE H-1 RESURFACING Miller Pedestrian Overpass to Kapiolani Interchange Federal-Aid Project No. NH-HI-1(279) Scale: 1" = 40' Date: August 2021	
SHEET No. M6 OF 34 SHEETS	



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

SIGNATURE: [Signature] 04/30/22
EXPIRATION DATE OF THE LICENSE

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-HI-1(279)	2021	ADD. 149	304



TRUE NORTH
SCALE: 1" = 40'

NOTE:

For pavement marking and signing legend, see Sht. M1

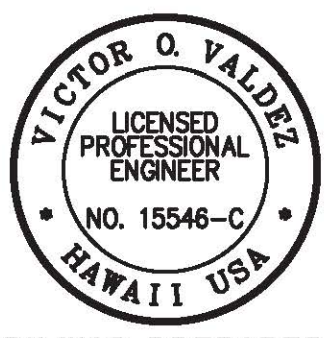
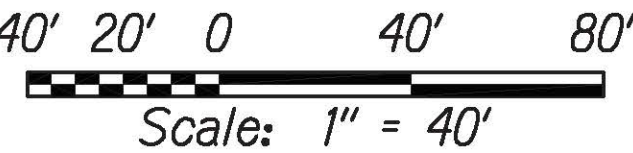
SIGNING KEY:

- 1 Exist. Sign(s) & Post(s) to Remain
- 2 Remove Exist. Sign(s) w/Post(s) & Install New Sign(s) w/ Post(s). Install Type II Reflector Marker (RM-2, Yellow) on New Posts except where there is OMI-3.
- 3 Remove Exist. Sign(s) & Install New Sign(s) on Exist. Post(s)
- 7 Remove Exist. Sign(s) & Install New Sign(s) on Exist. Column Sign Post
- 6 Remove Exist. Sign(s) & Install New Sign(s) on Existing Concrete Barrier Mounted Post(s)
- 12 Remove Exist. Sign(s) & Install New Sign(s) on Existing Concrete Barrier Mounted Post(s)

NOTE:

For pavement marking and signing legend, see Sht. M1

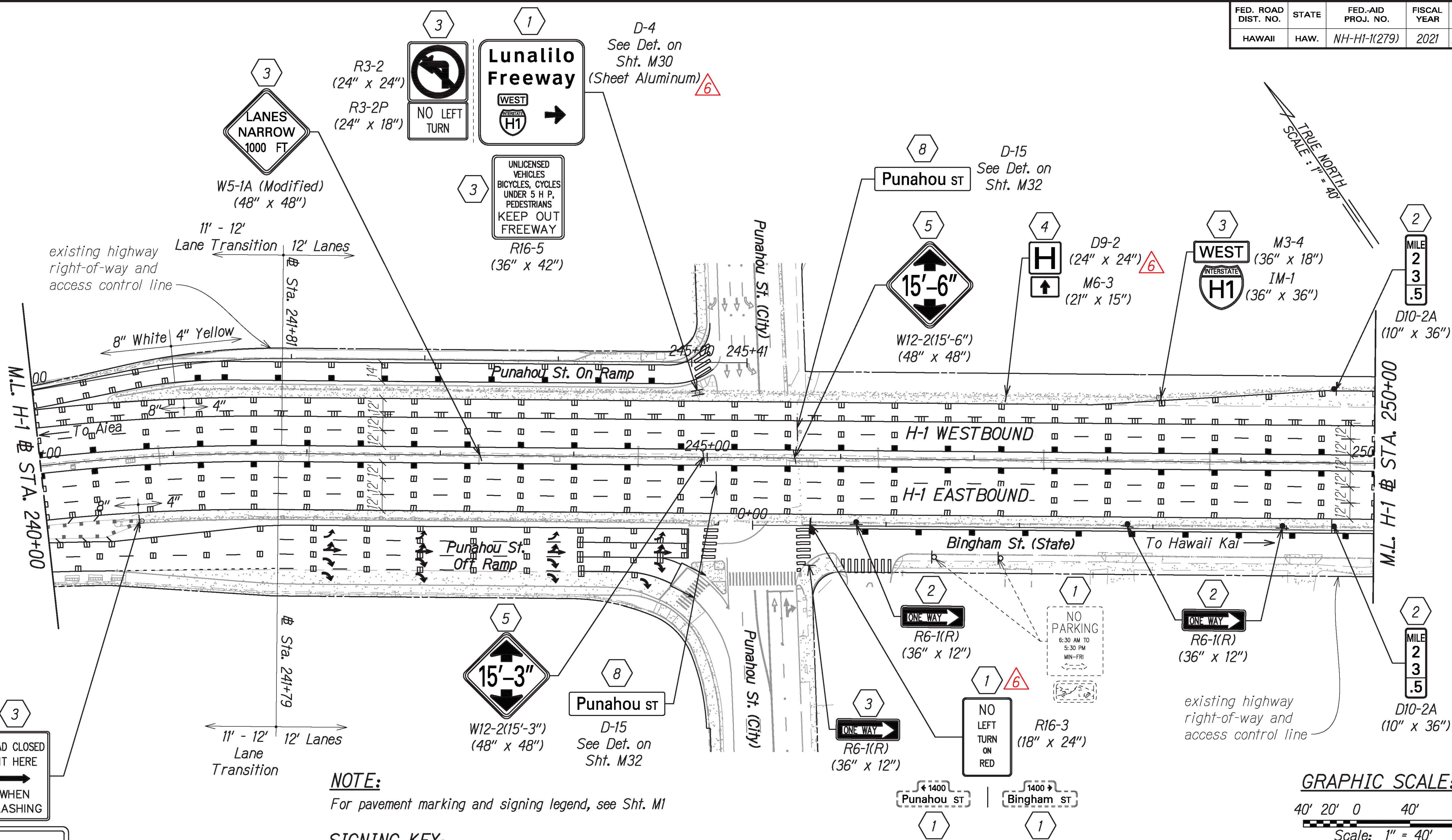
GRAPHIC SCALE:



THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION
SIGNATURE
EXPIRATION DATE OF THE LICENSE 04/30/22

7/21/21	Removed Signing Key No. 10, Updated Sign Size and Updated Reference Note and Callout
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION PAVEMENT MARKING & SIGNING PLAN INTERSTATE ROUTE H-1 RESURFACING Miller Pedestrian Overpass to Kapiolani Interchange Federal-Aid Project No. NH-HI-1(279) Scale: 1" = 40' Date: August 2021	
SHEET No. M8 OF 34 SHEETS	

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-HI-1(279)	2021	ADD. 150	304

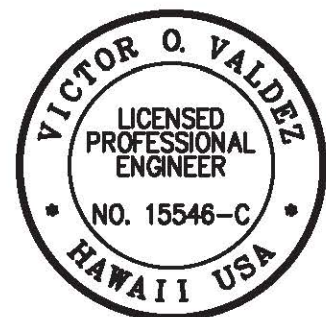


NOTE:
For pavement marking and signing legend, see Sht. M1

- SIGNING KEY:**
- 1 Exist. Sign(s) & Post(s) to Remain
 - 2 Remove Exist. Sign(s) w/Post(s) & Install New Sign(s) w/ Post(s). Install Type II Reflector Marker (RM-2, Yellow) on New Posts except where there is OM1-3.
 - 3 Remove Exist. Sign(s) & Install New Sign(s) on Exist. Post(s)
 - 4 Remove Exist. Sign(s) & Install New Sign(s) Mounted on Wall
 - 5 Remove Exist. Sign(s) & Install New Sign(s) on Bridge Column
 - 8 Remove Exist. Sign(s) & Install New Sign Mounted on Overpass (Bridge) Fascia

See Det. on Sht. M33

OM1-3
Install on Post
(Extruded)



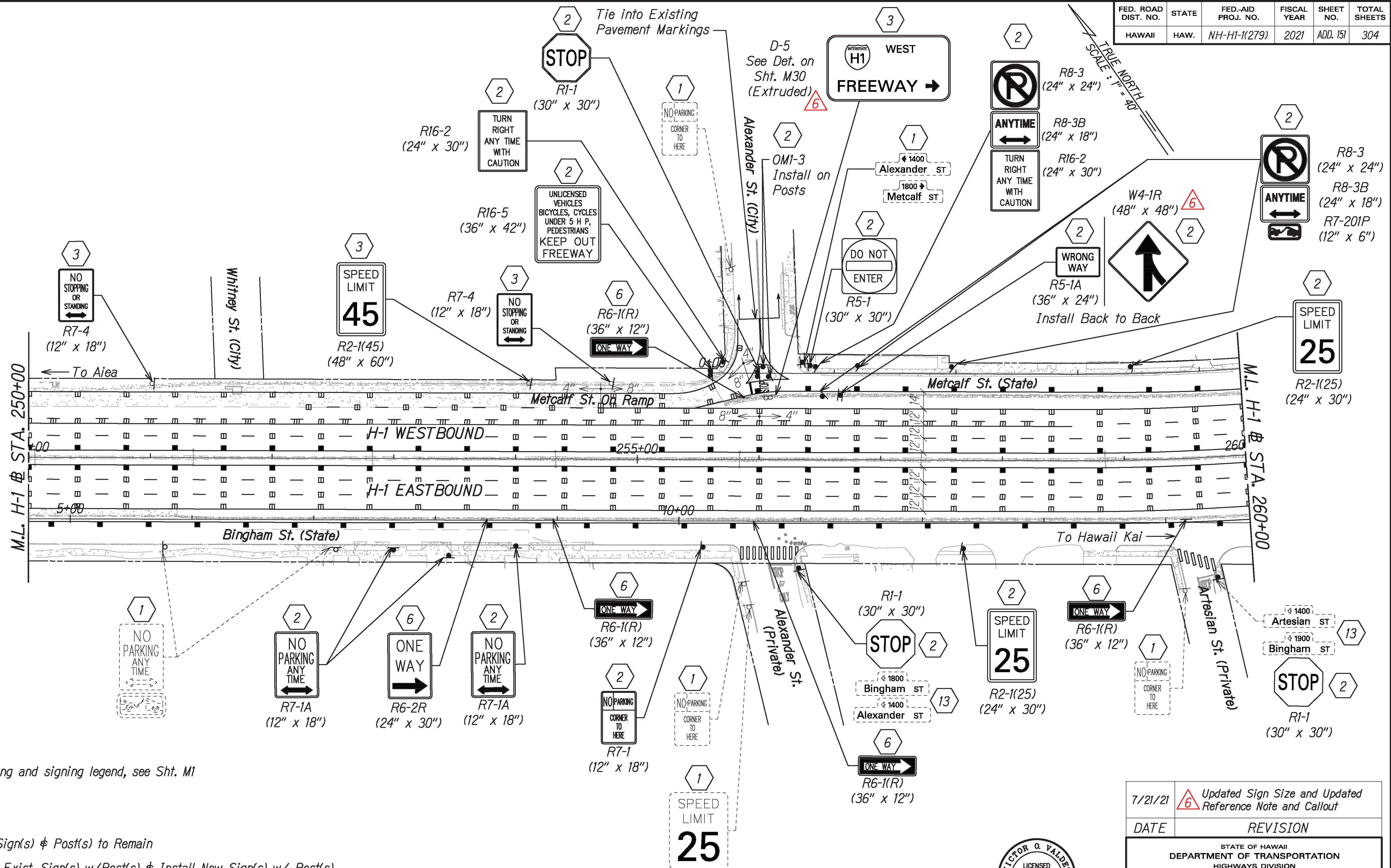
THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION

SIGNATURE: [Signature] EXPIRATION DATE OF THE LICENSE: 04/30/22

7/21/21	Updated Sign Size and Updated Reference Note and Callout
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION PAVEMENT MARKING & SIGNING PLAN INTERSTATE ROUTE H-1 RESURFACING Miller Pedestrian Overpass to Kapiolani Interchange Federal-Aid Project No. NH-HI-1(279) Scale: 1" = 40' Date: August 2021	
SHEET No. M9 OF 34 SHEETS	

G:\CIVIL_3D PROJECTS\2016_2022\000 DOT-HWYS H1 RESURFACING - MILLER TO KAPITV01 CIVIL DRAWINGS\M2 - M18 - PAVEMENT MARKING AND SIGNING PLANS.DWG 7/28/2021 8:59 PM

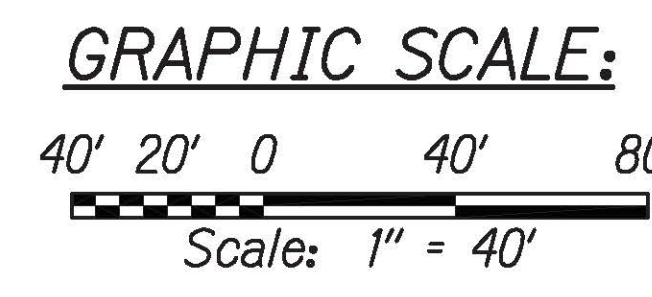
FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-HI-1(279)	2021	ADD. 151	304



NOTE:
For pavement marking and signing legend, see Sht. M1

SIGNING KEY:

- 1 Exist. Sign(s) & Post(s) to Remain
- 2 Remove Exist. Sign(s) w/Post(s) & Install New Sign(s) w/ Post(s).
Install Type II Reflector Marker (RM-2, Yellow) on New Posts except where there is OMI-3.
- 3 Remove Exist. Sign(s) & Install New Sign(s) on Exist. Post(s)
- 6 Remove Exist. Sign(s) & Install New Sign(s) on Exist. Fence
- 13 Reinstall Exist. Sign(s) to New Post



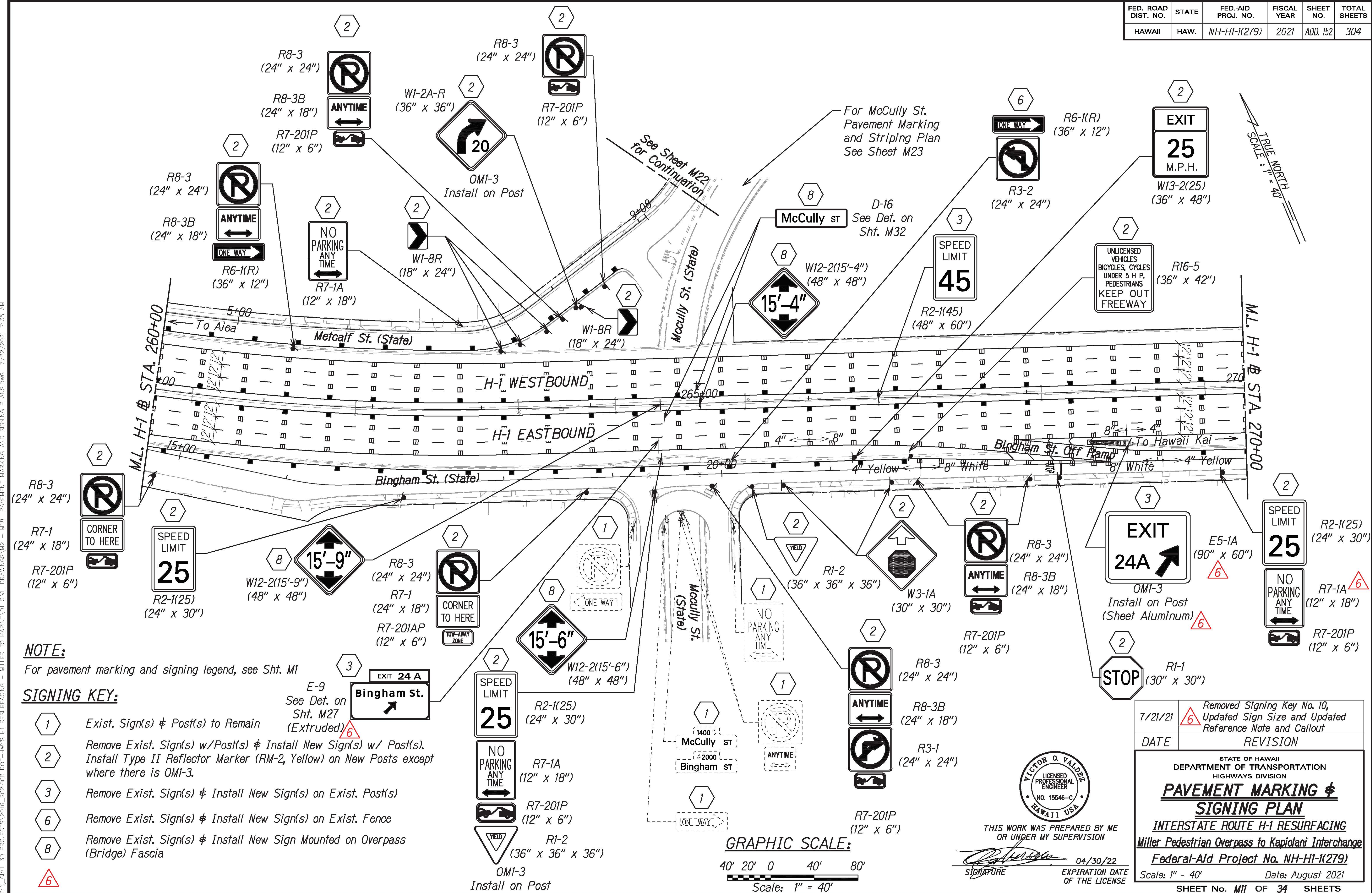
VICTOR O. VALDEZ
LICENSED PROFESSIONAL ENGINEER
NO. 15546-C
HAWAII USA

THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION

SIGNATURE: [Signature]
EXPIRATION DATE OF THE LICENSE: 04/30/22

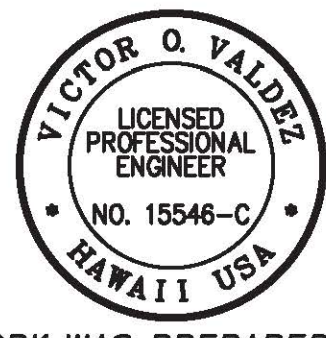
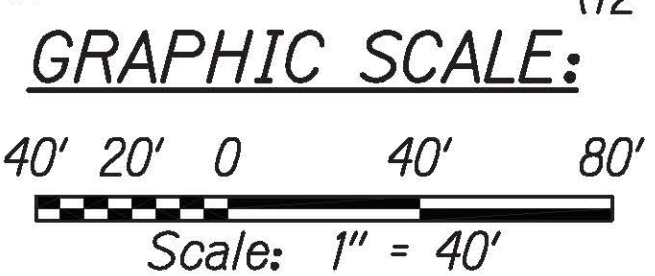
7/21/21	Updated Sign Size and Updated Reference Note and Callout
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION PAVEMENT MARKING & SIGNING PLAN INTERSTATE ROUTE H-1 RESURFACING Miller Pedestrian Overpass to Kapiolani Interchange Federal-Aid Project No. NH-HI-1(279) Scale: 1" = 40' Date: August 2021	
SHEET No. M10 OF 34 SHEETS	

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-HI-1(279)	2021	ADD. 152	304



NOTE:
For pavement marking and signing legend, see Sht. M1

- SIGNING KEY:**
- 1 Exist. Sign(s) & Post(s) to Remain
 - 2 Remove Exist. Sign(s) w/ Post(s) & Install New Sign(s) w/ Post(s). Install Type II Reflector Marker (RM-2, Yellow) on New Posts except where there is OM1-3.
 - 3 Remove Exist. Sign(s) & Install New Sign(s) on Exist. Post(s)
 - 6 Remove Exist. Sign(s) & Install New Sign(s) on Exist. Fence
 - 8 Remove Exist. Sign(s) & Install New Sign Mounted on Overpass (Bridge) Fascia



THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION

SIGNATURE: [Signature] 04/30/22
EXPIRATION DATE OF THE LICENSE

7/21/21	Removed Signing Key No. 10, Updated Sign Size and Updated Reference Note and Callout
DATE	REVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PAVEMENT MARKING & SIGNING PLAN

INTERSTATE ROUTE H-1 RESURFACING
Miller Pedestrian Overpass to Kapiolani Interchange
Federal-Aid Project No. NH-HI-1(279)

Scale: 1" = 40' Date: August 2021

SHEET No. **M11** OF 34 SHEETS

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-HI-1(279)	2021	ADD. 153	304

TRUE NORTH
SCALE: 1" = 40'

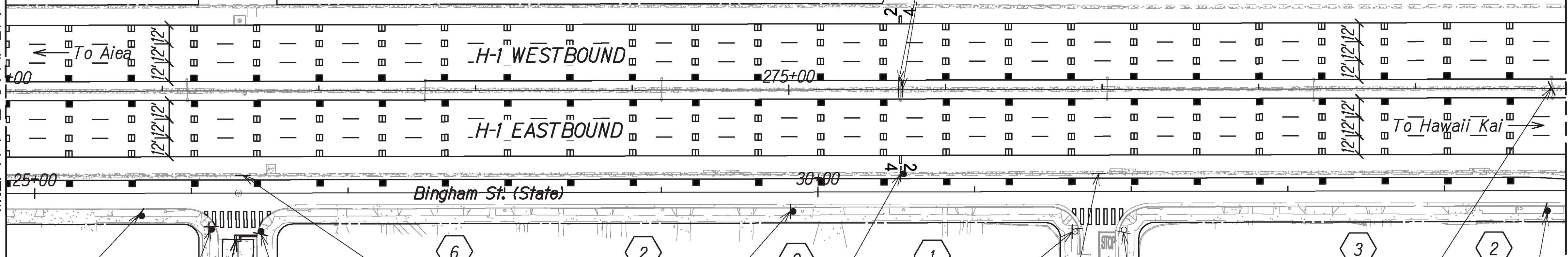
Wilder Ave. (State)

Griffith St. (City)

Farrington St. (City)

M.L. H-1 @ STA. 270+00

M.L. H-1 @ STA. 280+00



R8-3
(24" x 24")
R8-3B
(24" x 18")
R7-201P
(12" x 6")

1
Bingham ST
Farrington ST

Tie into Existing
Pavement Markings

2
STOP

R3-2
(24" x 24")

6
ONE-WAY
R6-1(R)
(36" x 12")
R1-1
(30" x 30")

2
SPEED LIMIT
25
R2-1(25)
(24" x 30")

2
MILE
2
4
D10-5(24)
(12" x 36")

1
Bingham ST
Griffiths ST
R6-1(R)
(36" x 12")
R3-2
(24" x 24")
ONE-WAY

Griffith St. (City)

2
STOP

R3-2
(24" x 24")

3
SPEED LIMIT
45
R2-1(45)
(48" x 60")

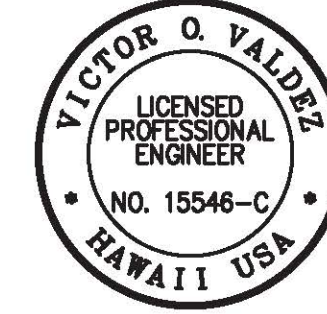
2
NO PARKING
CORNER
TO HERE
R7-1
(12" x 18")

GRAPHIC SCALE:
40' 20' 0 40' 80'
Scale: 1" = 40'

NOTE:
For pavement marking and signing legend, see Sht. M1

SIGNING KEY:

- 1 Exist. Sign(s) & Post(s) to Remain
- 2 Remove Exist. Sign(s) w/ Post(s) & Install New Sign(s) w/ Post(s).
Install Type II Reflector Marker (RM-2, Yellow) on New Posts except where there is OMI-3.
- 3 Remove Exist. Sign(s) & Install New Sign(s) on Exist. Post(s)
- 6 Remove Exist. Sign(s) & Install New Sign(s) on Exist. Fence



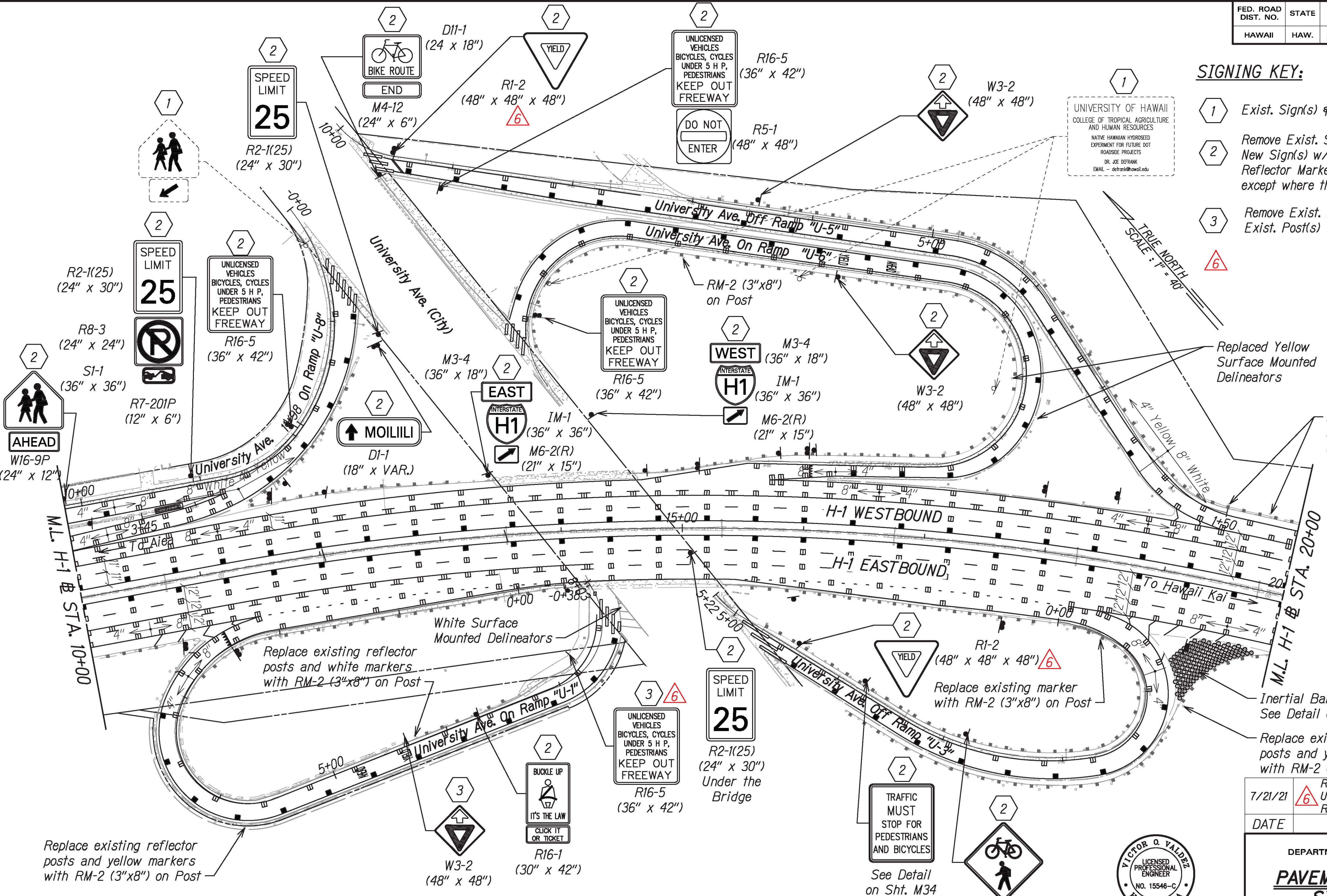
THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION
SIGNATURE
04/30/22
EXPIRATION DATE
OF THE LICENSE

7/21/21	Updated Sign Description
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION PAVEMENT MARKING & SIGNING PLAN INTERSTATE ROUTE H-1 RESURFACING Miller Pedestrian Overpass to Kapiolani Interchange Federal-Aid Project No. NH-HI-1(279) Scale: 1" = 40' Date: August 2021	
SHEET No. M12 OF 34 SHEETS	

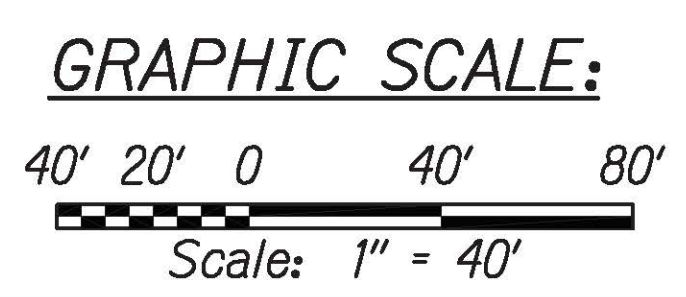
FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-HI-1(279)	2021	ADD. 156	304

- SIGNING KEY:**
- 1 Exist. Sign(s) & Post(s) to Remain
 - 2 Remove Exist. Sign(s) w/Post(s) & Install New Sign(s) w/ Post(s). Install Type II Reflector Marker (RM-2, Yellow) on New Posts except where there is OMI-3.
 - 3 Remove Exist. Sign(s) & Install New on Exist. Post(s)

UNIVERSITY OF HAWAII
COLLEGE OF TROPICAL AGRICULTURE
AND HUMAN RESOURCES
NATIVE HAWAIIAN HYDROSEED
EXPERIMENT FOR FUTURE DOT
ROADSIDE PROJECTS
DR. JOE DEFRAK
EMAIL - defrank@hawaii.edu



NOTE:
For pavement marking and signing legend, see Sht. M1



VICTOR O. VALDEZ
LICENSED PROFESSIONAL ENGINEER
NO. 15546-C
HAWAII USA

THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION

SIGNATURE: [Signature]
04/30/22
EXPIRATION DATE OF THE LICENSE

7/21/21	Removed Signing Key No. 10, Updated Sign Size and Updated Reference Note and Callout
DATE	REVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

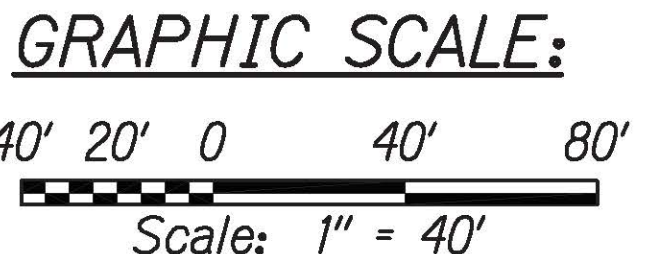
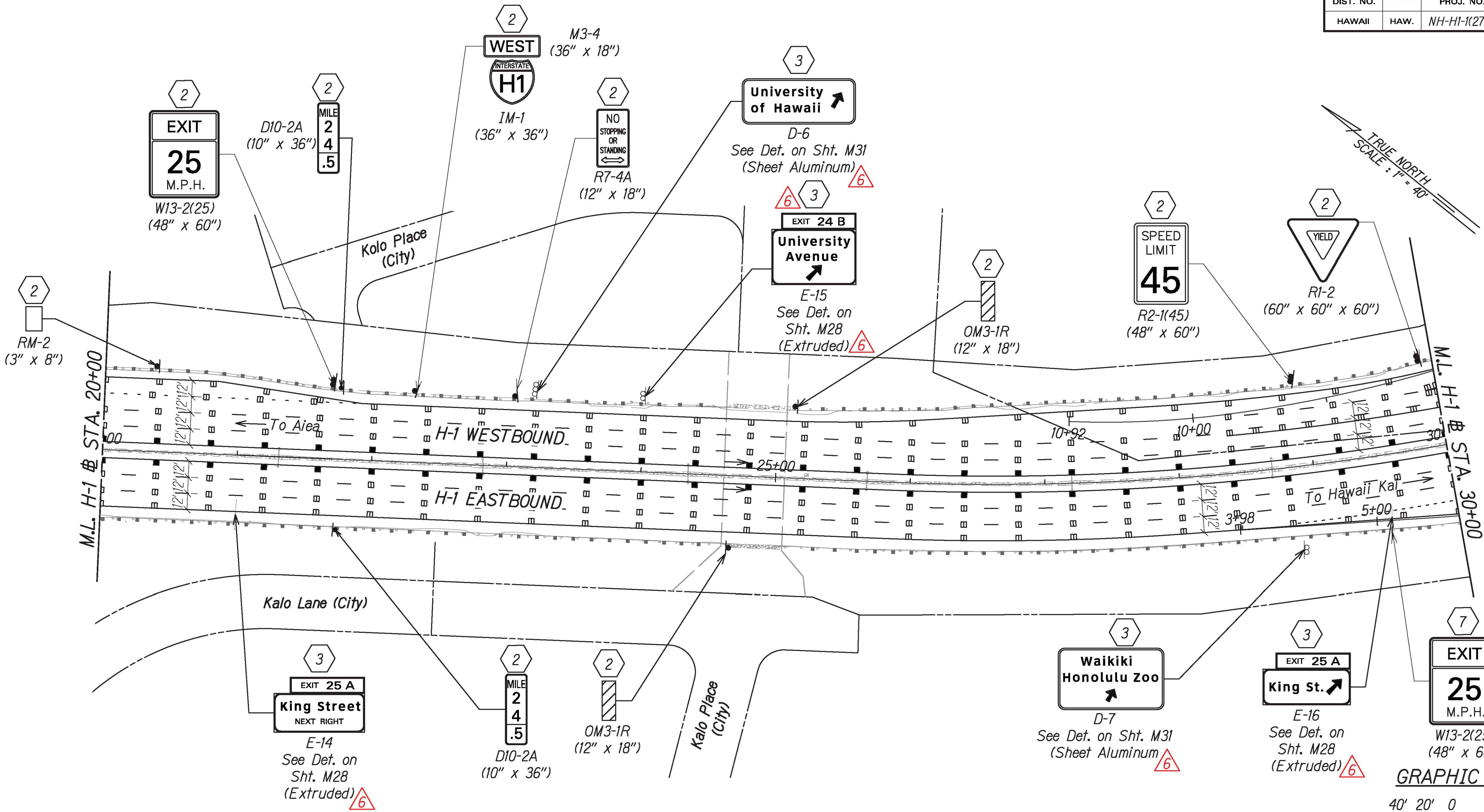
PAVEMENT MARKING & SIGNING PLAN

INTERSTATE ROUTE H-1 RESURFACING
Miller Pedestrian Overpass to Kapiolani Interchange
Federal-Aid Project No. NH-HI-1(279)

Scale: 1" = 40' Date: August 2021

SHEET No. M15 OF 34 SHEETS

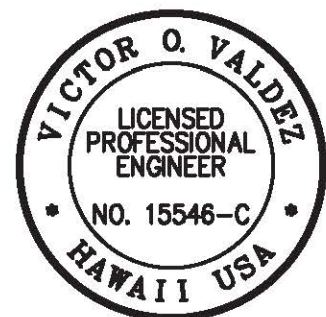
FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-HI-1(279)	2021	ADD. 157	304



NOTE:
For pavement marking and signing legend, see Sht. M1

SIGNING KEY:

- 2 Remove Exist. Sign(s) w/Post(s) & Install New Sign(s) w/ Post(s).
Install Type II Reflector Marker (RM-2, Yellow) on New Posts except where there is OMI-3.
 - 3 Remove Exist. Sign(s) & Install New Sign(s) on Exist. Post(s)
 - 7 Remove Exist. Sign(s) & Install New Sign(s) on Exist. Column Sign Post
- 6

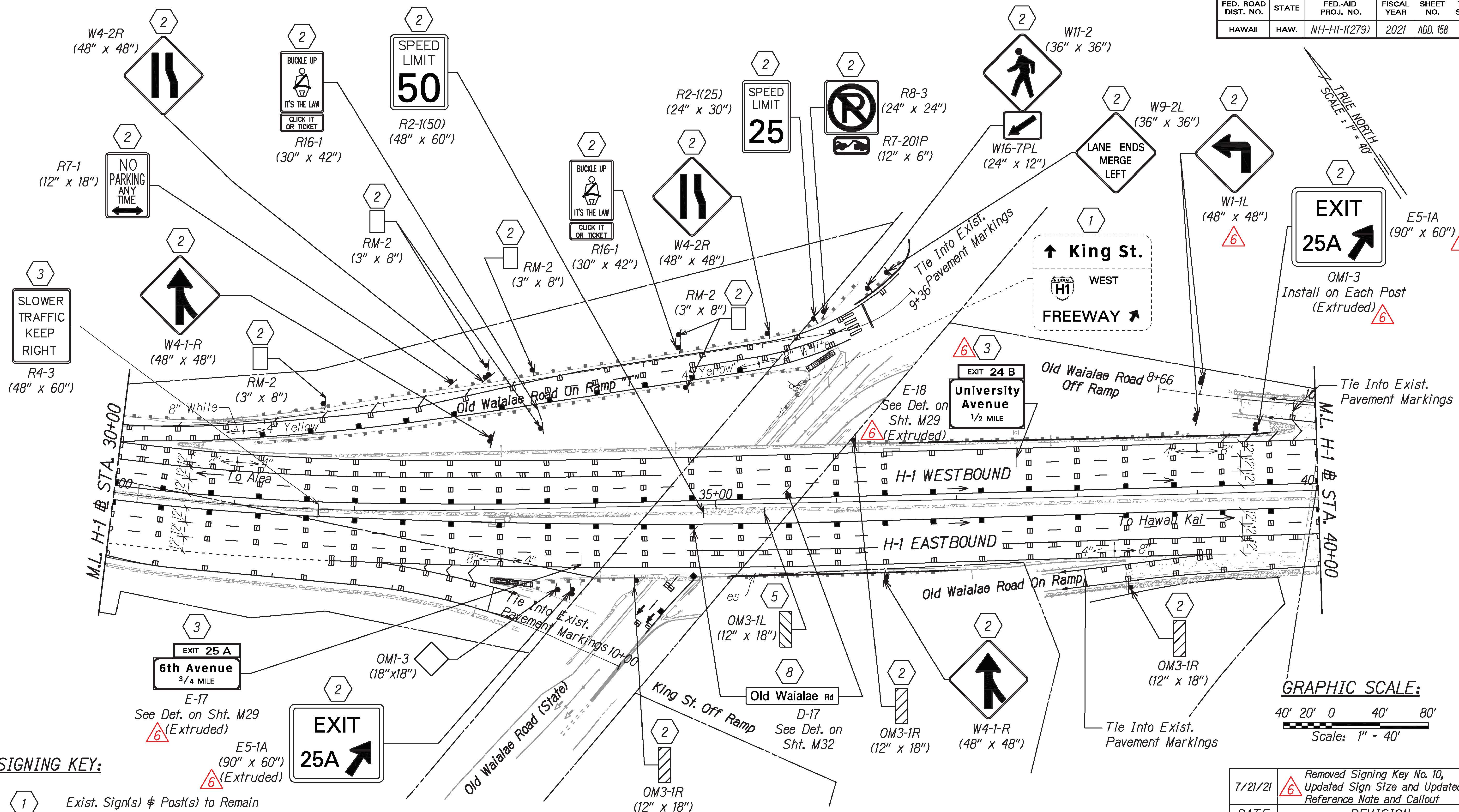


THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION

SIGNATURE: [Signature] 04/30/22
EXPIRATION DATE OF THE LICENSE

7/21/21	Removed Signing Key No. 10, Updated Sign Size and Updated Reference Note and Callout
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION PAVEMENT MARKING & SIGNING PLAN INTERSTATE ROUTE H-1 RESURFACING Miller Pedestrian Overpass to Kapiolani Interchange Federal-Aid Project No. NH-HI-1(279) Scale: 1" = 40' Date: August 2021	
SHEET No. M16 OF 34 SHEETS	

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-HI-1(279)	2021	ADD. 158	304



SIGNING KEY:

- 1 Exist. Sign(s) & Post(s) to Remain
 - 2 Remove Exist. Sign(s) w/Post(s) & Install New Sign(s) w/ Post(s).
Install Type II Reflector Marker (RM-2, Yellow) on New Posts except where there is OM1-3.
 - 3 Remove Exist. Sign(s) & Install New Sign(s) on Exist. Post(s)
 - 5 Remove Exist. Sign(s) & Install New Sign(s) on Bridge Column
 - 8 Remove Exist. Sign(s) & Install New Sign Mounted on Overpass (Bridge) Fascia
- 6 (Triangle with exclamation mark) Extruded

NOTE:
For pavement marking and signing legend, see Sht. M1

VICTOR O. VALDES
LICENSED PROFESSIONAL ENGINEER
NO. 15546-C
HAWAII, USA

THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION

SIGNATURE: [Signature] 04/30/22
EXPIRATION DATE OF THE LICENSE

7/21/21	Removed Signing Key No. 10, Updated Sign Size and Updated Reference Note and Callout
DATE	REVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PAVEMENT MARKING & SIGNING PLAN

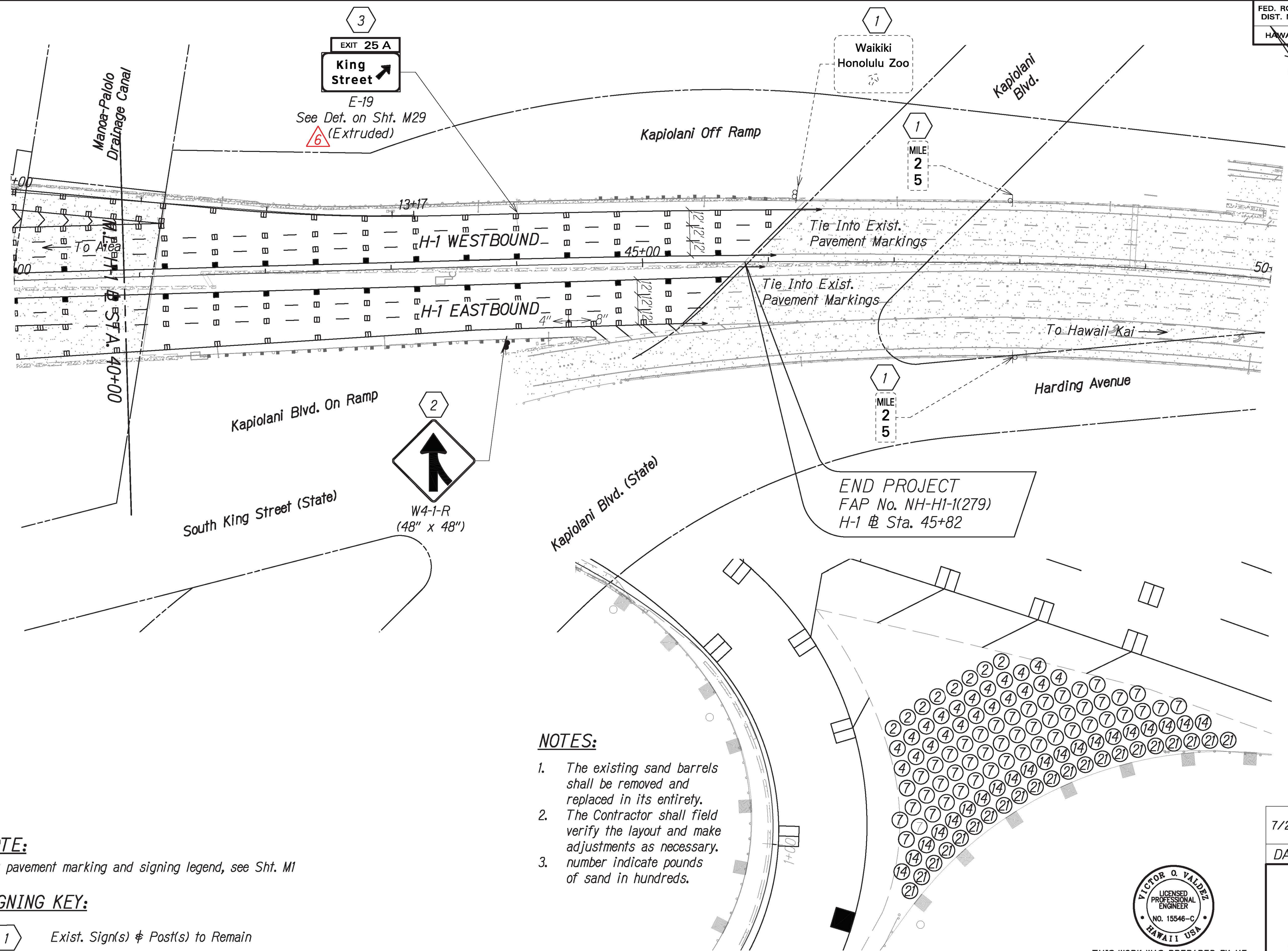
INTERSTATE ROUTE H-1 RESURFACING
Miller Pedestrian Overpass to Kapiolani Interchange
Federal-Aid Project No. NH-HI-1(279)

Scale: 1" = 40' Date: August 2021

SHEET No. M17 OF 34 SHEETS

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-HI-1(279)	2021	ADD. 159	304

TRUE NORTH
SCALE: 1" = 40'



NOTES:

1. The existing sand barrels shall be removed and replaced in its entirety.
2. The Contractor shall field verify the layout and make adjustments as necessary.
3. number indicate pounds of sand in hundreds.

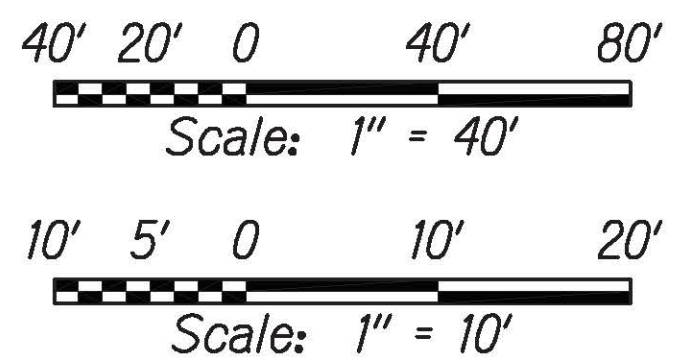
NOTE:

For pavement marking and signing legend, see Sht. M1

SIGNING KEY:

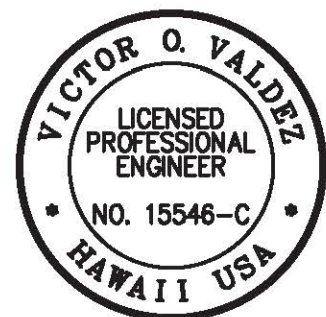
- 1 Exist. Sign(s) & Post(s) to Remain
- 2 Remove Exist. Sign(s) w/Post(s) & Install New Sign(s) w/ Post(s).
Install Type II Reflector Marker (RM-2, Yellow) on New Posts except where there is OMI-3.
- 6

GRAPHIC SCALE:



INERTIAL BARRIER SYSTEM LAYOUT AT UNIVERSITY OFF RAMP U-3

Scale: 1" = 10'



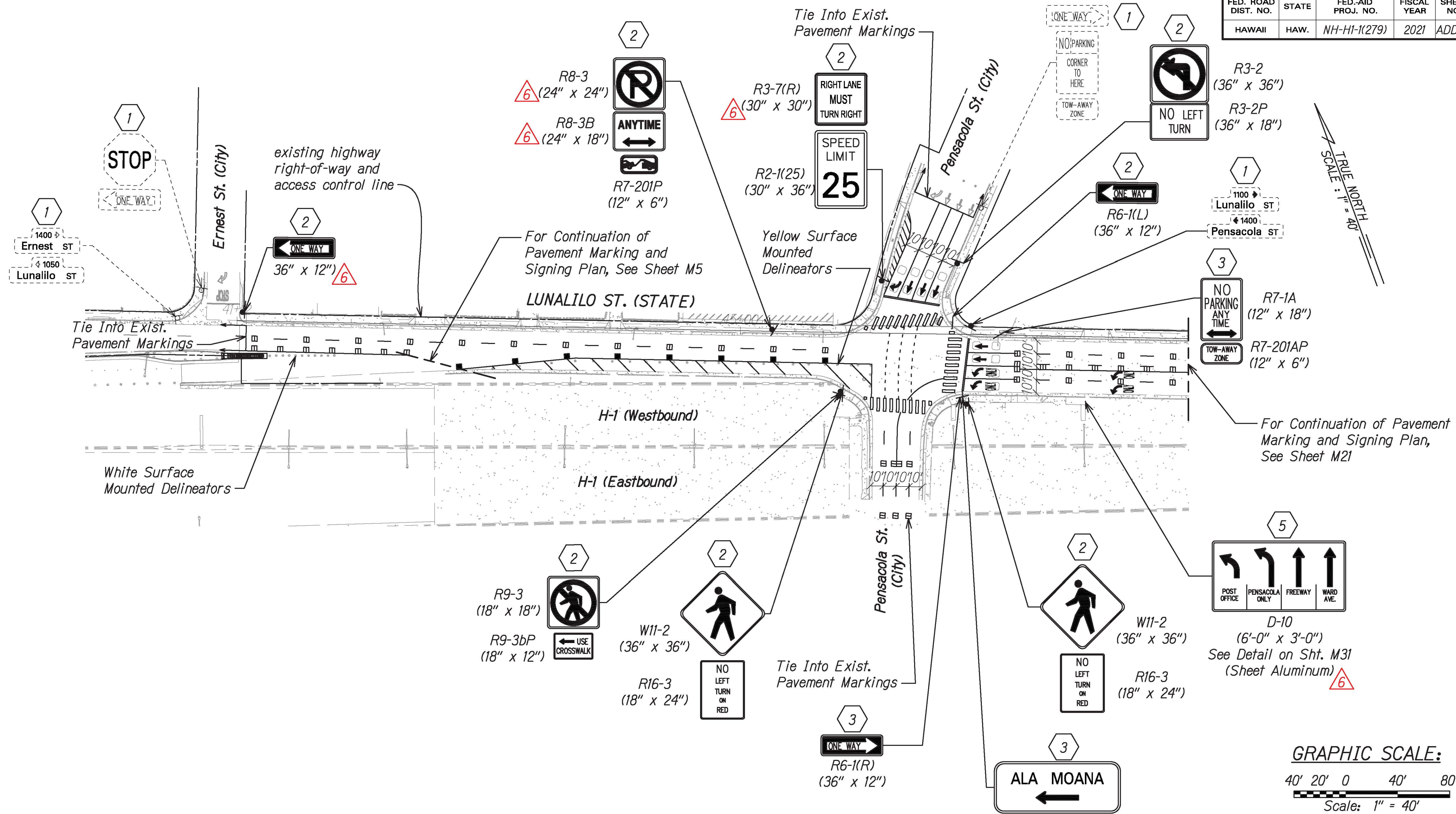
THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION
SIGNATURE
04/30/22
EXPIRATION DATE
OF THE LICENSE

7/21/21	Added Barrier Sytem Layout, Removed Signing Key No. 10 and Updated Reference Note
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION PAVEMENT MARKING & SIGNING PLAN INTERSTATE ROUTE H-1 RESURFACING Miller Pedestrian Overpass to Kapiolani Interchange Federal-Aid Project No. NH-HI-1(279) Scale: 1" = 40' Date: August 2021	

G:\CIVIL 3D PROJECTS\2016_2022\000 DOT-HWYS H1 RESURFACING - MILLER TO KAPINITY01 CIVIL DRAWINGS\M2 - M18 PAVEMENT MARKING AND SIGNING PLANS.DWG 7/22/2021 8:07 AM

G:\CIVIL_3D PROJECTS\2016_202\000 DOT-HWYS H-1 RESURFACING - MILLER TO KAPUNI\01 CIVIL DRAWINGS\M19 - M24 - PAVEMENT MARKING AND SIGNING PLANS.DWG 7/22/2021 4:51 AM

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-HI-1(279)	2021	ADD.161	304



NOTE:
For pavement marking and signing legend, see Sht. M1

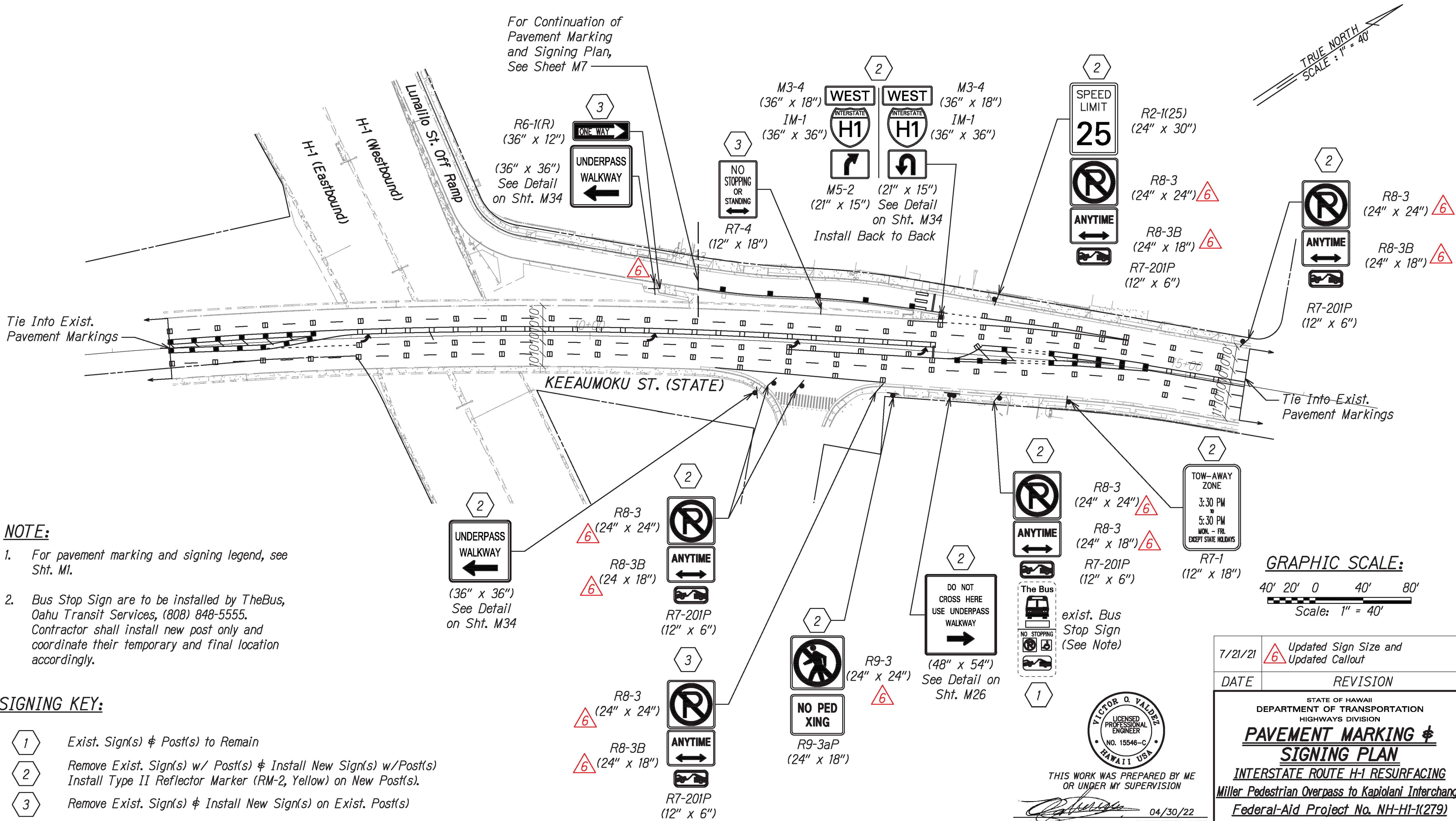
SIGNING KEY:

- 1 Exist. Sign(s) & Post(s) to Remain
- 2 Remove Exist. Sign(s) w/ Post(s) & Install New Sign(s) w/Post(s). Install Type II Reflector Marker (RM-2, Yellow) on New Post(s).
- 3 Remove Exist. Sign(s) & Install New Sign(s) on Exist. Post(s)
- 5 Remove Exist. Sign(s) & Install New Sign(s) on Bridge Column

GRAPHIC SCALE:
40' 20' 0 40' 80'
Scale: 1" = 40'

7/21/21	Updated Sign Description and Updated Sign Size
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION PAVEMENT MARKING & SIGNING PLAN INTERSTATE ROUTE H-1 RESURFACING Miller Pedestrian Overpass to Kapiolani Interchange Federal-Aid Project No. NH-HI-1(279) Scale: 1" = 40' Date: August 2021	
SHEET No. M20 OF 34 SHEETS	

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-HI-1(279)	2021	ADD. 163	304



NOTE:

- For pavement marking and signing legend, see Sht. M1.
- Bus Stop Sign are to be installed by TheBus, Oahu Transit Services, (808) 848-5555. Contractor shall install new post only and coordinate their temporary and final location accordingly.

SIGNING KEY:

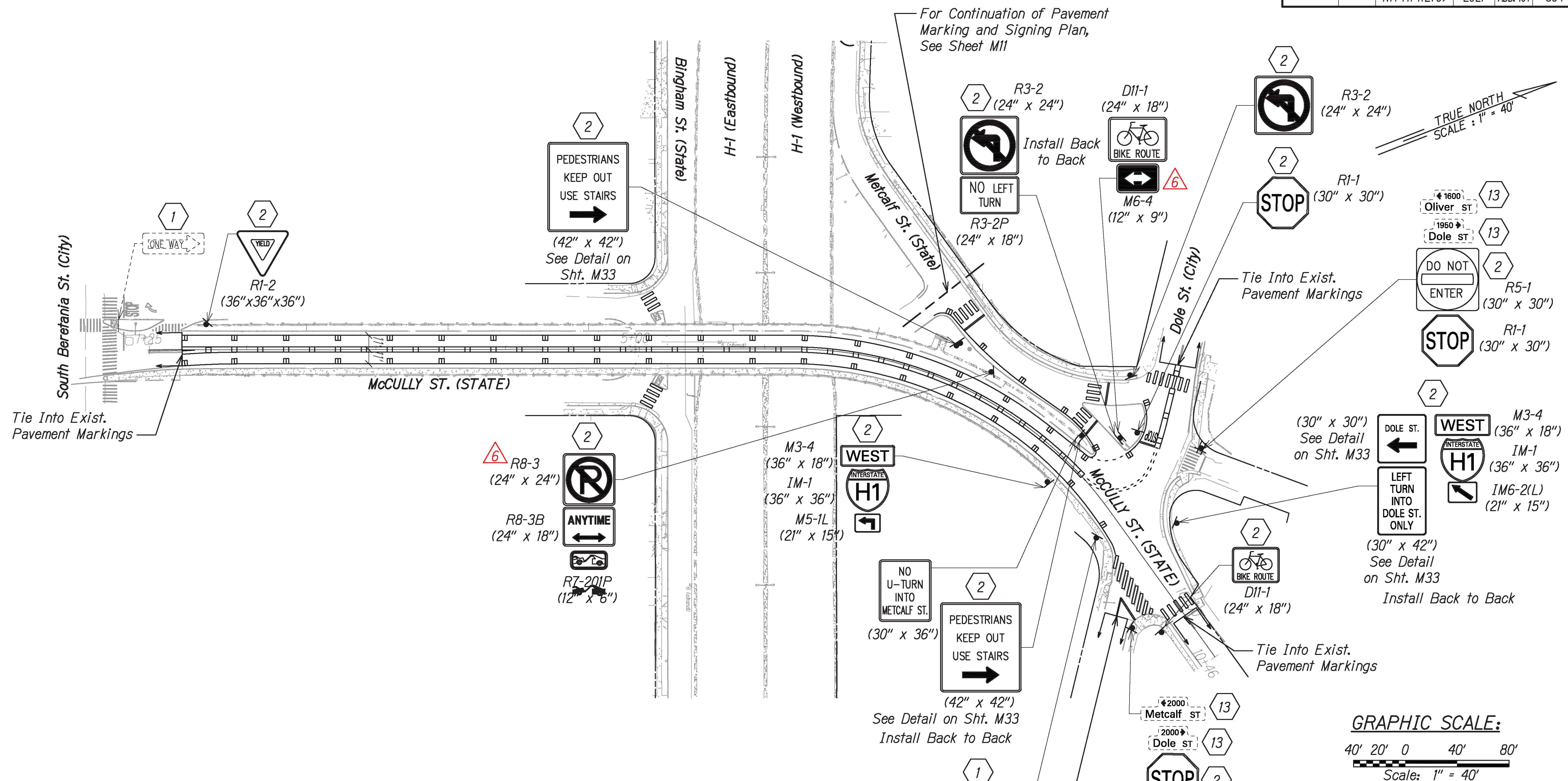
- 1 Exist. Sign(s) & Post(s) to Remain
- 2 Remove Exist. Sign(s) w/ Post(s) & Install New Sign(s) w/Post(s)
Install Type II Reflector Marker (RM-2, Yellow) on New Post(s).
- 3 Remove Exist. Sign(s) & Install New Sign(s) on Exist. Post(s)

7/21/21	Updated Sign Size and Updated Callout
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION PAVEMENT MARKING & SIGNING PLAN INTERSTATE ROUTE H-1 RESURFACING Miller Pedestrian Overpass to Kapiolani Interchange Federal-Aid Project No. NH-HI-1(279) Scale: 1" = 40' Date: August 2021	
SHEET No. M22 OF 34 SHEETS	



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE: [Signature] 04/30/22
EXPIRATION DATE OF THE LICENSE

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-HI-1(279)	2021	ADD. 164	304



NOTE:
For pavement marking and signing legend, see Sht. M1

SIGNING KEY:

- 1 Exist. Sign(s) & Post(s) to Remain
- 2 Remove Exist. Sign(s) w/ Post(s) & Install New Sign(s) w/Post(s)
Install Type II Reflector Marker (RM-2, Yellow) on New Post(s).
- 13 Reinstall Exist. Sign(s) to New Post

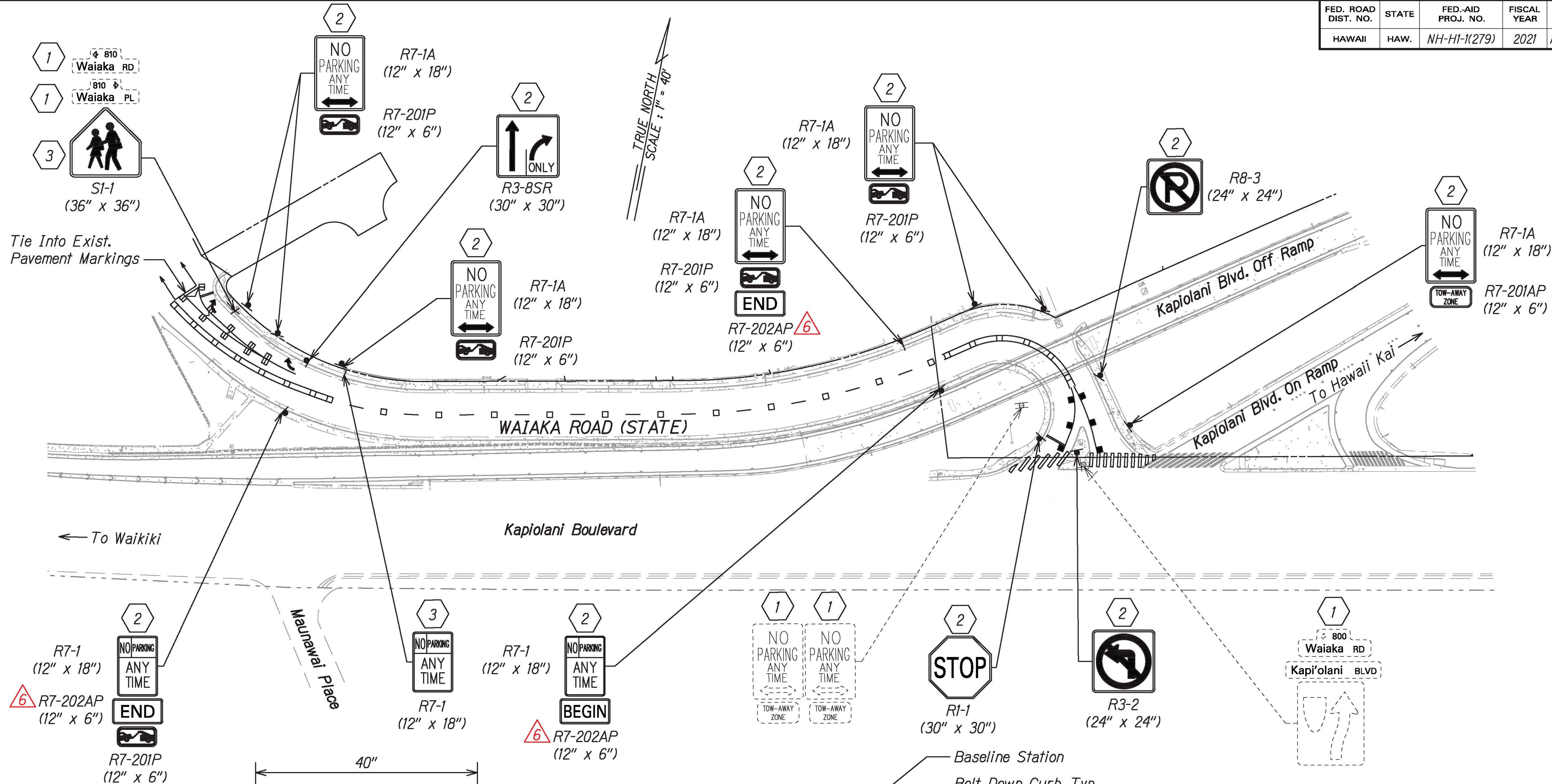
VICTOR O. VALDEZ
LICENSED PROFESSIONAL ENGINEER
NO. 15546-C
HAWAII USA

THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION

04/30/22
EXPIRATION DATE OF THE LICENSE

7/21/21	Updated Sign and Description
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
PAVEMENT MARKING & SIGNING PLAN	
INTERSTATE ROUTE H-1 RESURFACING	
Miller Pedestrian Overpass to Kapiolani Interchange	
Federal-Aid Project No. NH-HI-1(279)	
Scale: 1" = 40'	Date: August 2021
SHEET No. M23 OF 34 SHEETS	

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-HI-1(279)	2021	ADD. 165	304

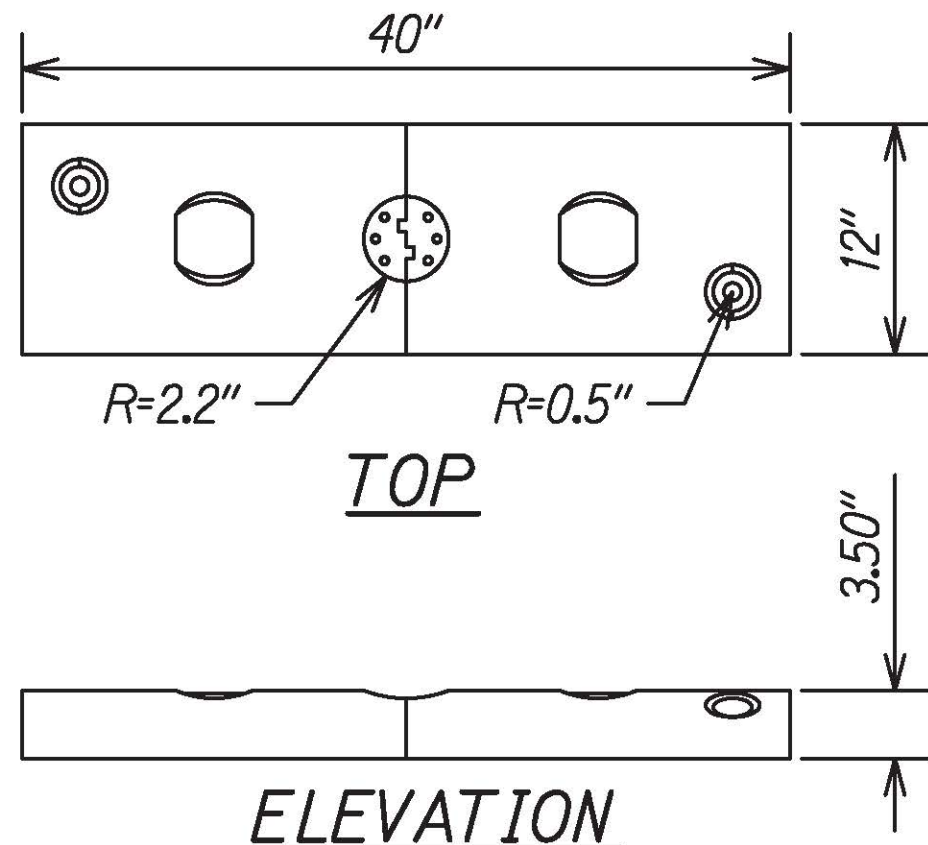


NOTE:

For pavement marking and signing legend, see Sht. M1

SIGNING KEY:

- 1 Exist. Sign(s) & Post(s) to Remain
- 2 Remove Exist. Sign(s) w/ Post(s) & Install New Sign(s) w/ Post(s)
Install Type II Reflector Marker (RM-2, Yellow) on New Post(s).
- 3 Remove Exist. Sign(s) & Install New Sign(s) on Exist. Post(s)

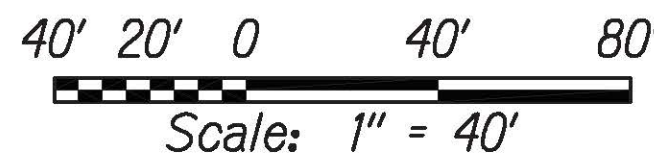


NOTES:

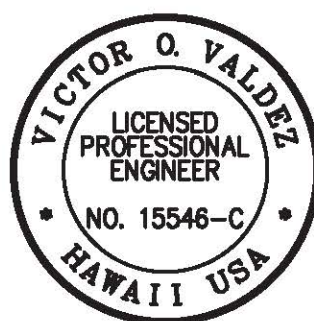
1. Bolt Down Curbing System color shall be White.
2. Bolt Down Curbing System shall be Crashworthiness Tested to 2009 M.A.S.H. Standards.
3. Install using 1/2" x 4" concrete screw anchors or 5/8" x 5" plastic sleeve anchors.

LONGITUDINAL CHANNELIZING CURB SYSTEM
NOT TO SCALE

GRAPHIC SCALE:



7/21/21	Updated Sign Description and Added Longitudinal Channelizing Curb System Details
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION PAVEMENT MARKING & SIGNING PLAN INTERSTATE ROUTE H-1 RESURFACING Miller Pedestrian Overpass to Kapiolani Interchange Federal-Aid Project No. NH-HI-1(279) Scale: 1" = 40' Date: August 2021	
SHEET No. M24 OF 34 SHEETS	

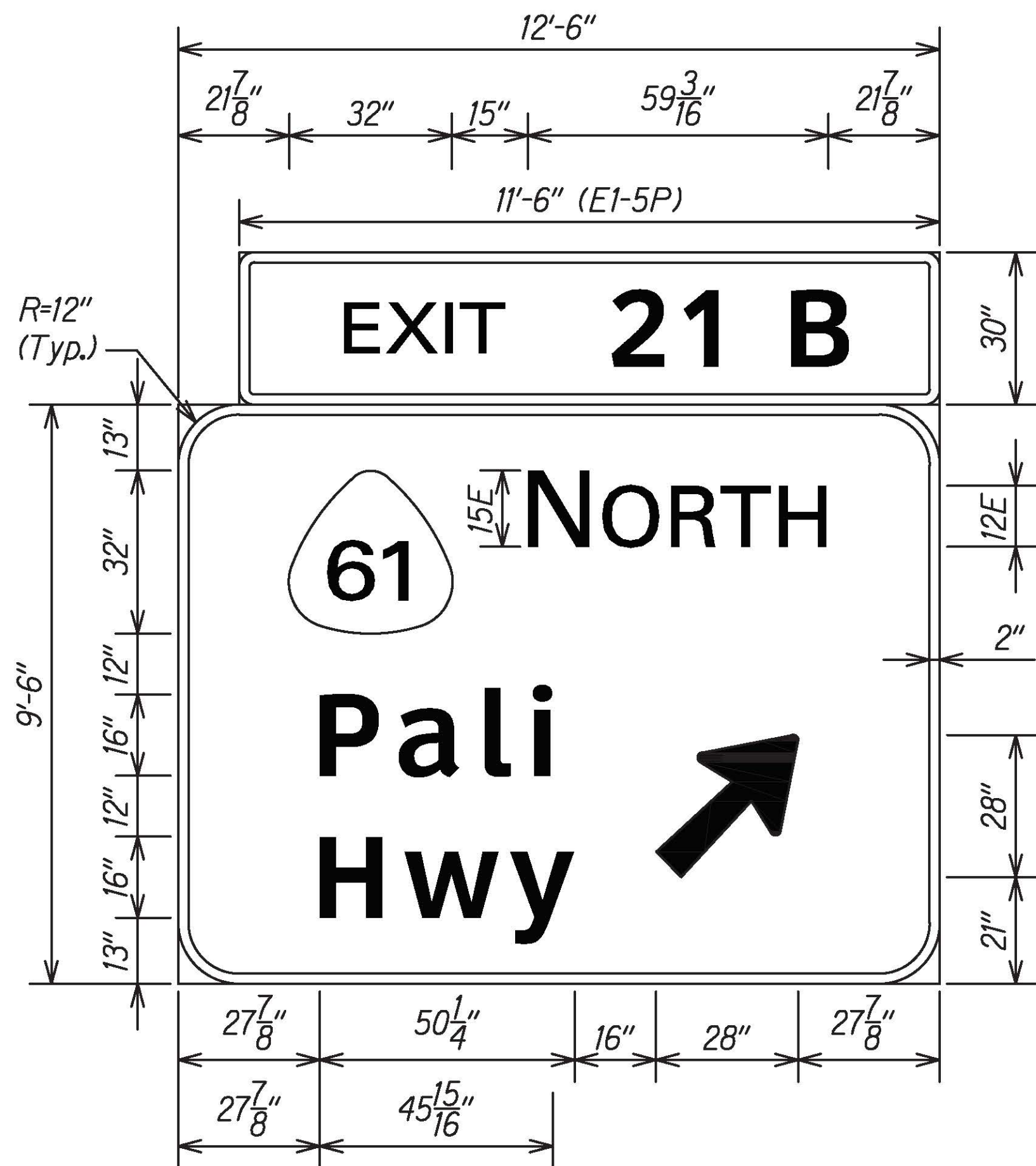


THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

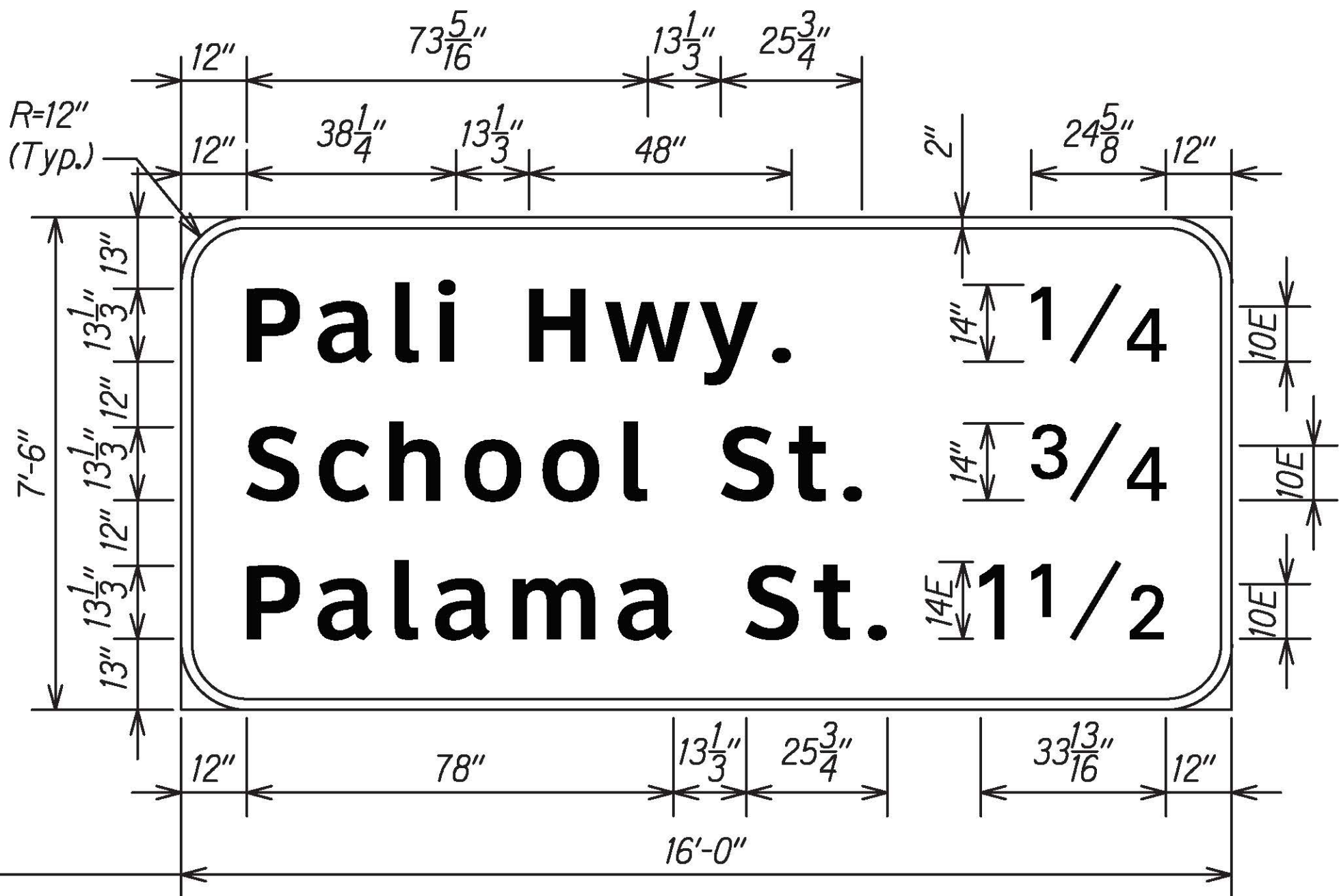
SIGNATURE

04/30/22
EXPIRATION DATE OF THE LICENSE

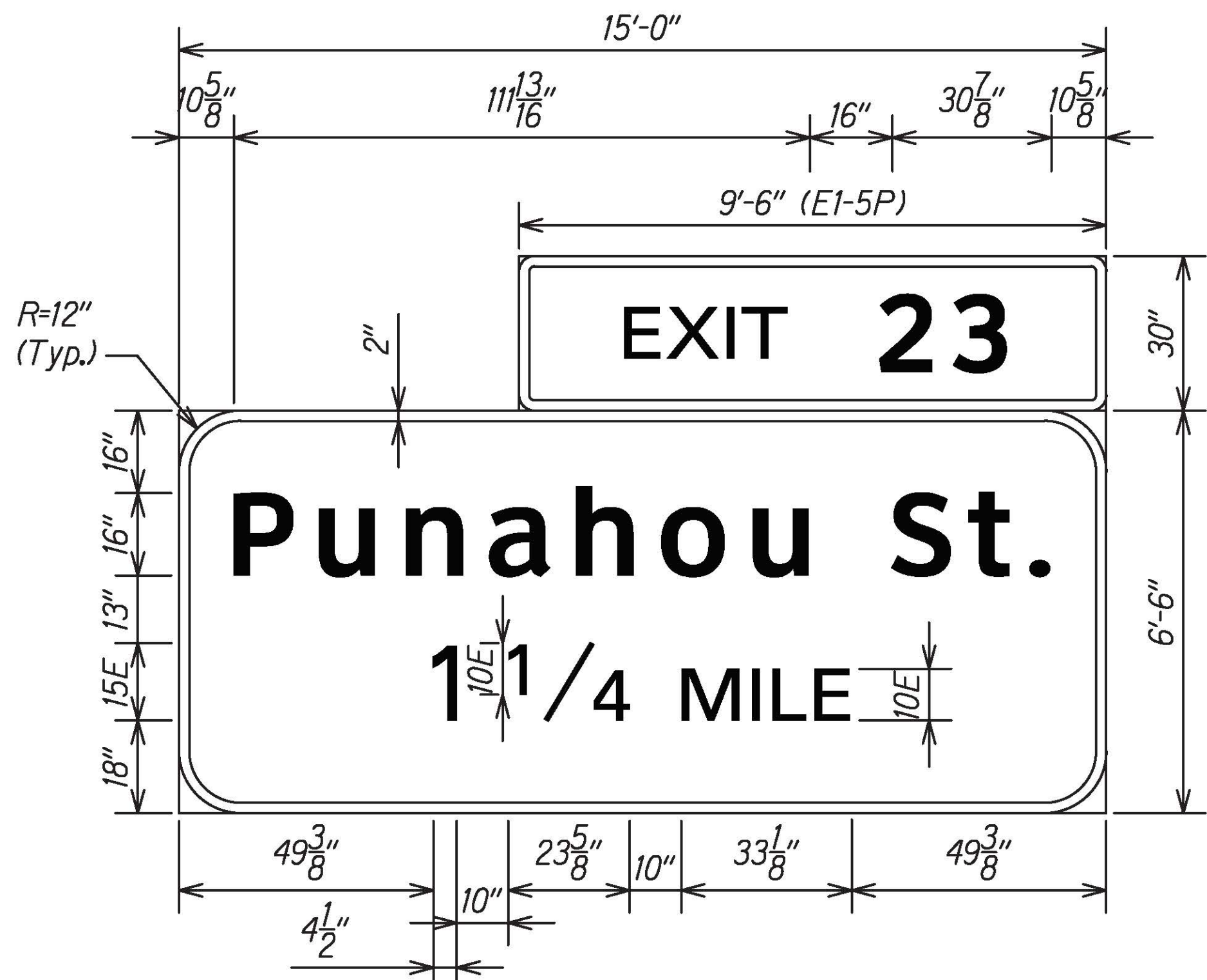
FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-HI-1(279)	2021	ADD. 166	304



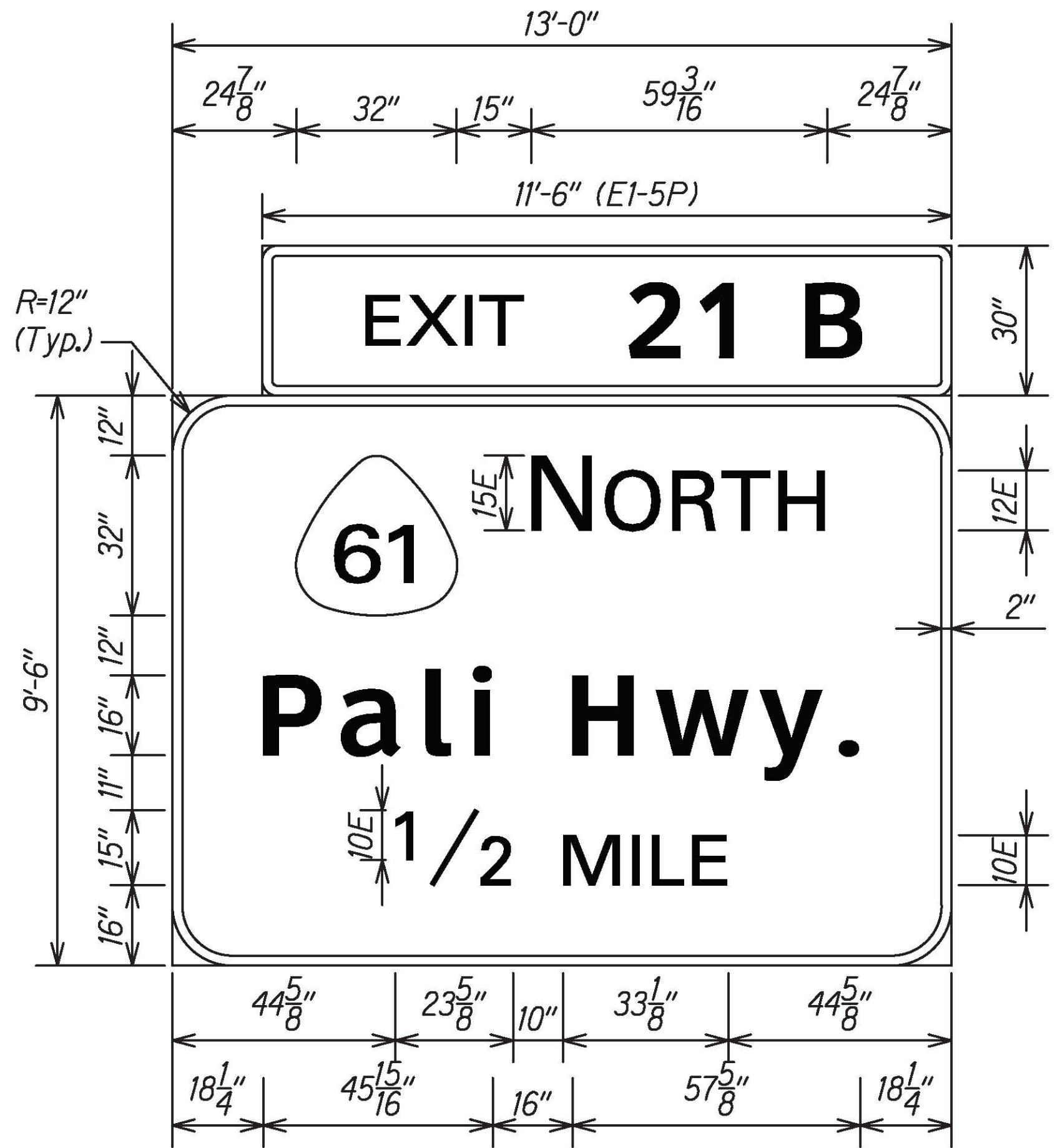
E-1 (White on Green)
Scale: 1/2" = 1'-0"



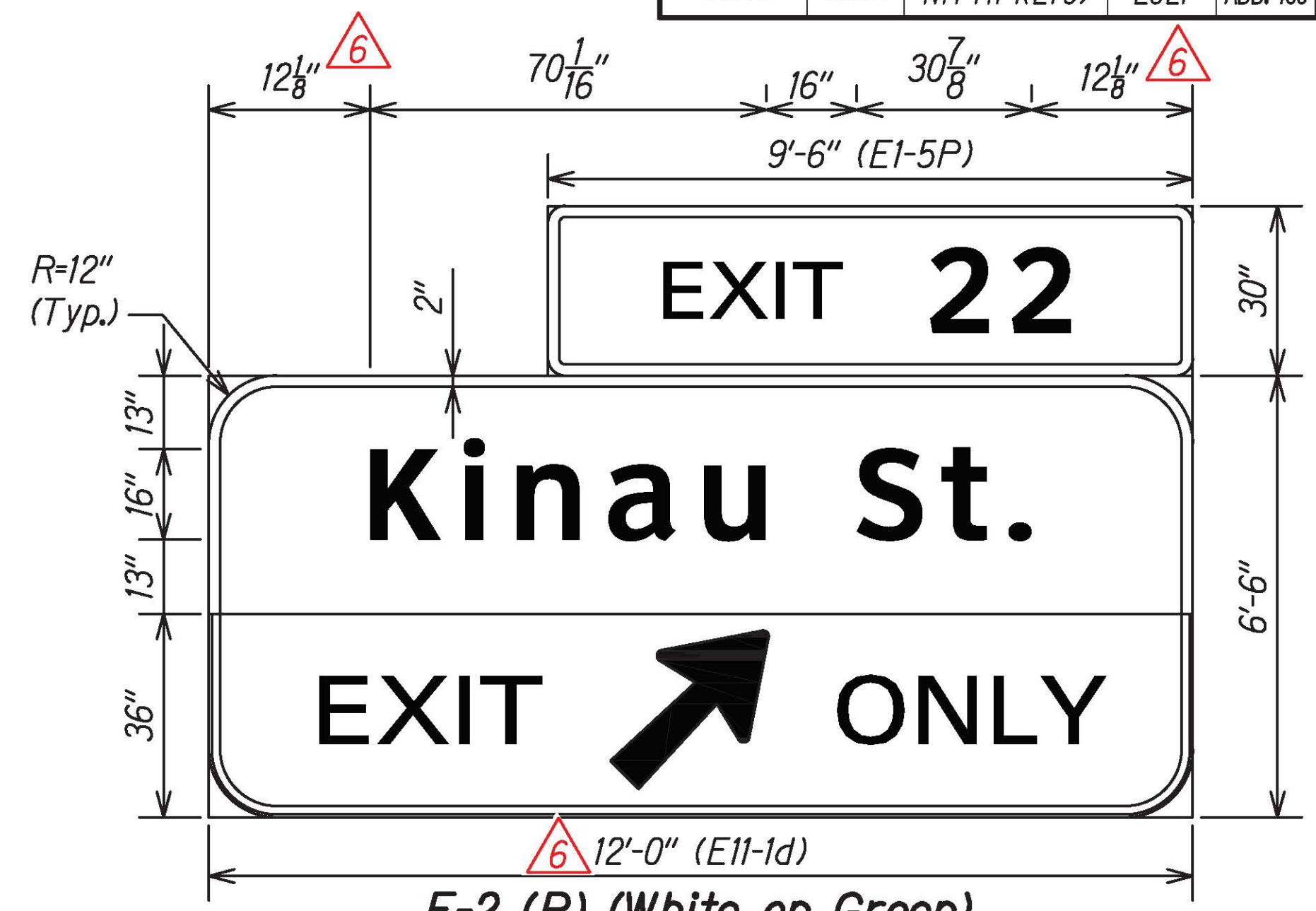
E-3 (White on Green)
Scale: 1/2" = 1'-0"



E-2 (L) (White on Green)
Scale: 1/2" = 1'-0"



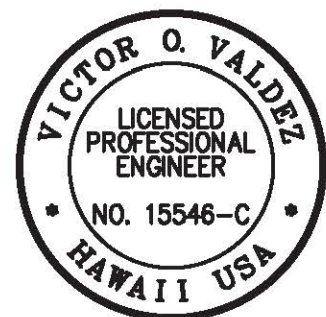
E-4 (C) (White on Green)
Scale: 1/2" = 1'-0"



E-2 (R) (White on Green)
Scale: 1/2" = 1'-0"

NOTES:

- All signs conform to Section 630 - Traffic Control Guide Signs of the Standard Specifications and the latest editions amendments of the following FHWA publications:
 - "Manual on Uniform Traffic Control Devices for Streets and Highways" (MUTCD)
 - "Standard Highway Signs"
 - "Standard Alphabets for Highway Signs"
 - Borders, messages, arrows symbols and shield conform to details as shown on the plans and as specified in the MUTCD.
 - Sign messages shall be as indicated on the plans.
 - All panels shall be retroreflectorized in accordance with subsection 750.01(A)(1) - Retroreflectorization of the Standard Specifications.
 - Contractor shall submit all sign splicing details to the Engineer for acceptance.
- EXPRESSWAY (E) AND DESTINATION (D) SIGN NOTES:**
- The Contractor shall verify the locations and dimensions of existing Sign Panels and supports.
 - New sign panels shall be laminated aluminum or extruded aluminum.
 - Letter size:
 - When letters are all uppercase, use series "E".
 - When initial uppercase letter is used in conjunction with lowercase letters, use Clearview 5-W.
 - Incidental parts and services not shown on the plans or specified but deemed necessary for the sign installation, shall be furnished and installed by the Contractor as part of the work contracted.
 - Removal and disposal of existing sign panels, posts with foundation, luminaries and supports will not be paid for separately, but shall be considered incidental to the various signing items.



THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION

[Signature] 04/30/22
SIGNATURE EXPIRATION DATE
OF THE LICENSE

7/21/21	Revised Sign Size
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
SIGNAGE DETAILS	
INTERSTATE ROUTE H-1 RESURFACING	
Miller Pedestrian Overpass to Kapiolani Interchange	
Federal-Aid Project No. NH-HI-1(279)	
Scale: 1/2" = 1'-0"	Date: August 2021

C:_CIVIL_3D PROJECTS\2016_2022 DOT-HWYS H1 RESURFACING - MILLER TO KAPITV01 CIVIL DRAWINGS\M25 - M29 SIGNING PANEL DETAILS.DWG 7/22/2021 11:20 AM