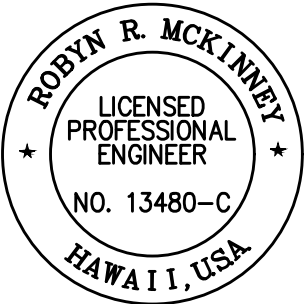
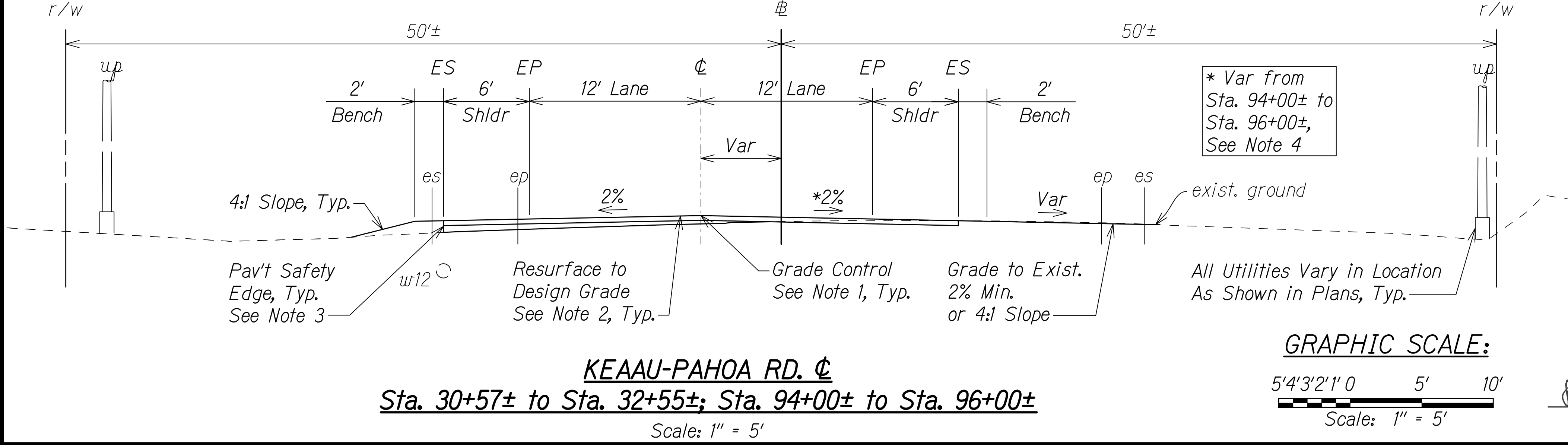
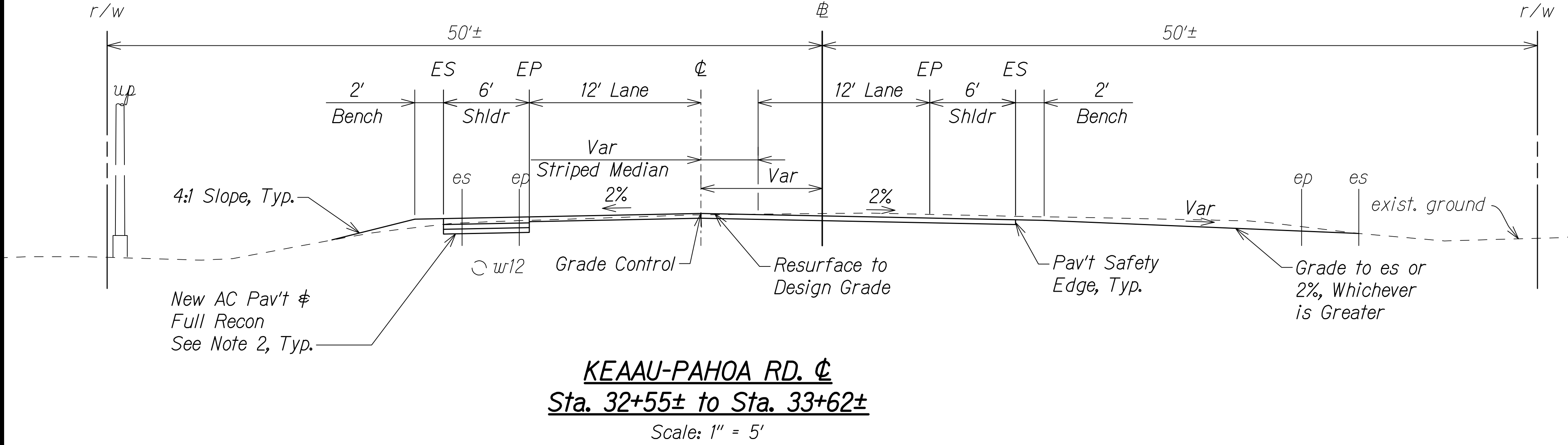
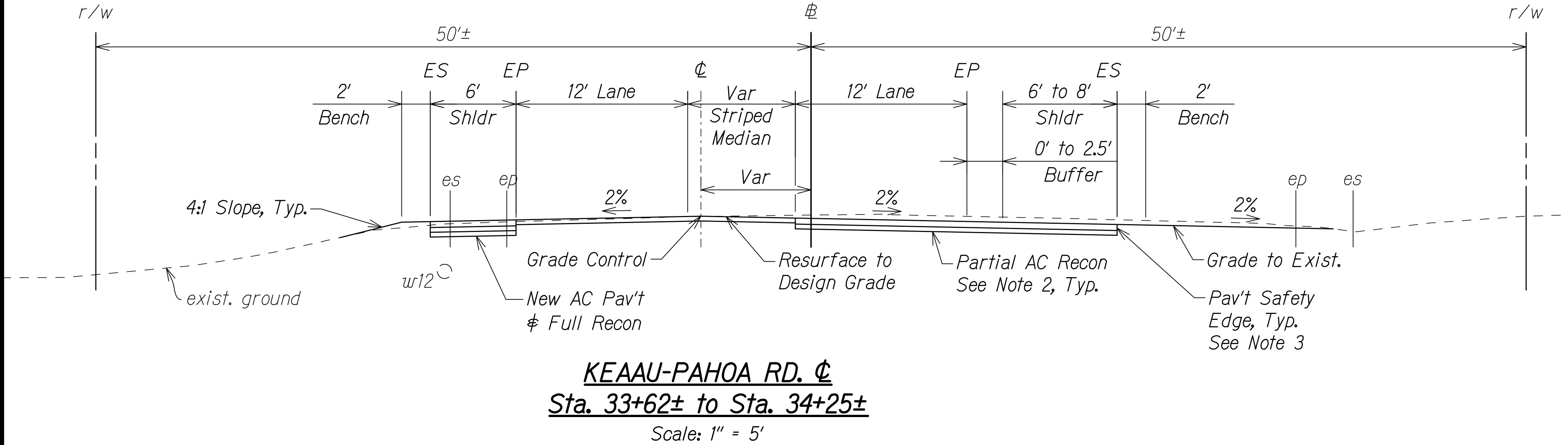


FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0130(27)	2021	10	116

- NOTES:**
1. Unless otherwise noted, Roadway Φ shall be used as grade control and for staking utility and roadway layout only. See Roadway Φ Plan and Profile Shts. 31 to 36.
 2. Limits of resurfacing, new AC pavement and reconstruction are shown in Roadway Plans Shts. 37 to 45. See typical AC pavement sections Sht. 19.
 3. Apply pavement safety edge on all outer edges of AC pavement. See detail Sht. 20.
 4. For cross slope, see Keaau-Pahoa Rd. Φ superelevation diagram Sht. 30.



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Rodin R. McKinney 04/30/22
SIGNATURE EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TYPICAL SECTIONS

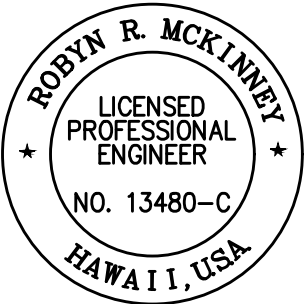
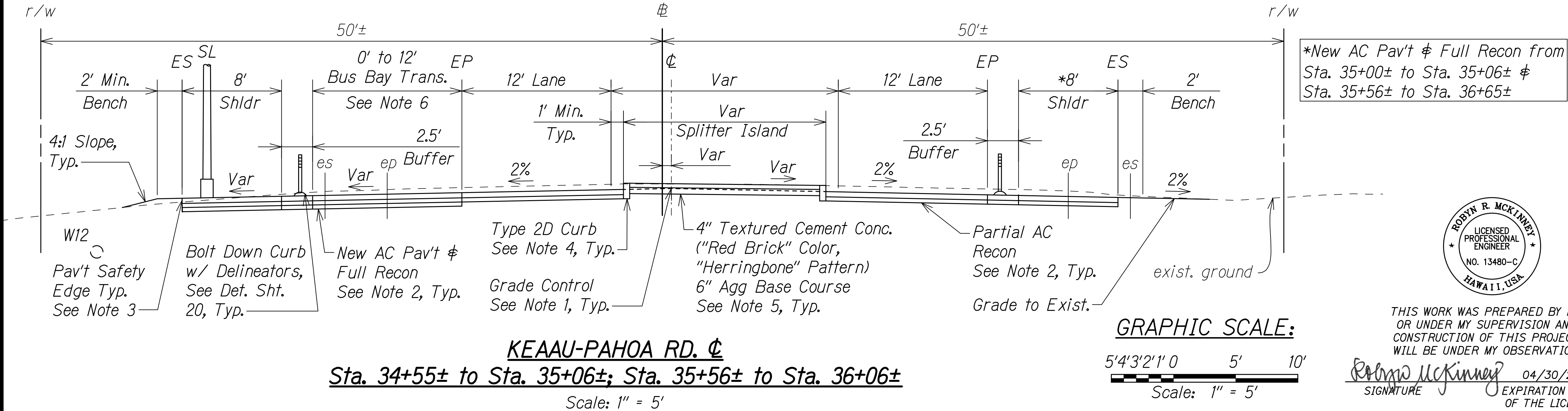
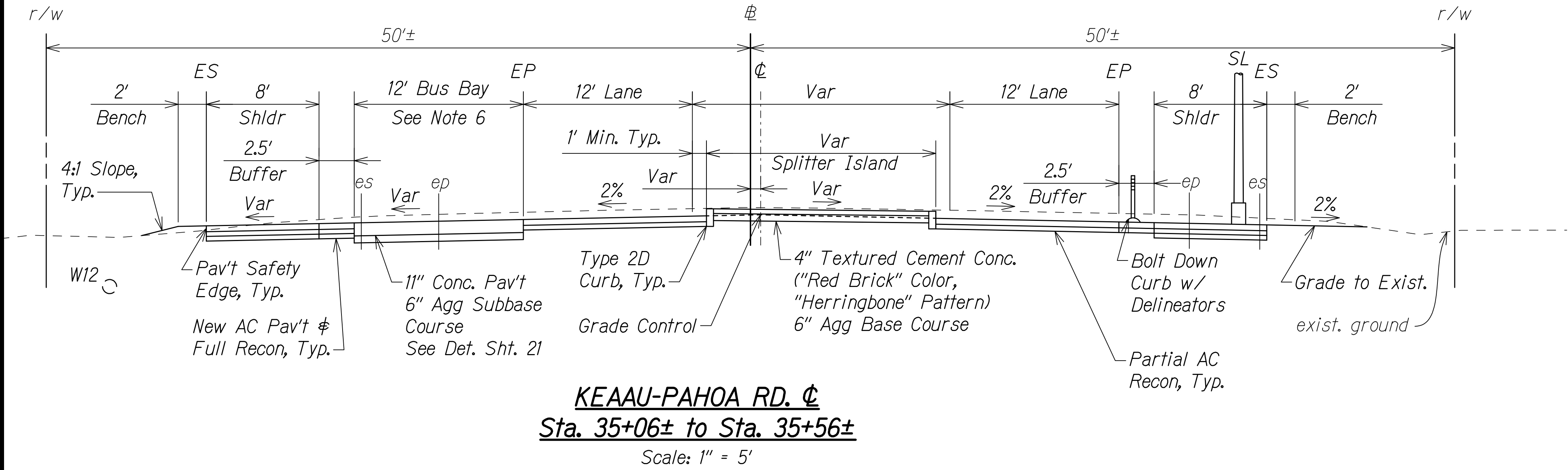
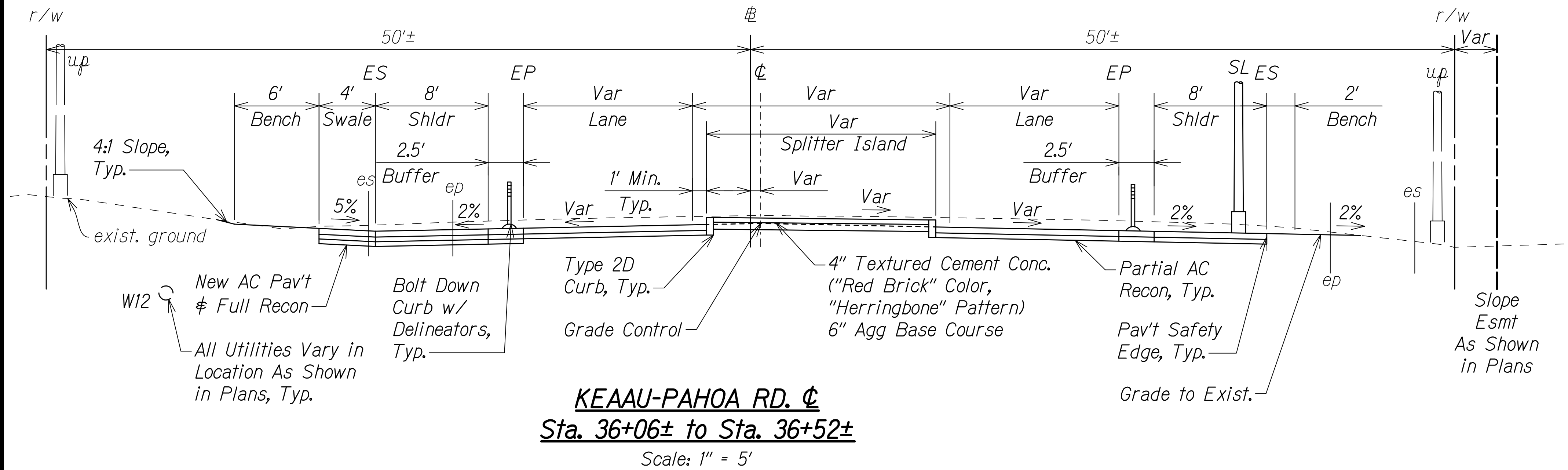
KEAAU-PAHOA ROAD
INTERSECTION IMPROVEMENTS
at Orchidland Drive & Makuu Drive
Federal-Aid Project No. STP-0130(27)

Scale: 1" = 5' Date: Sept, 2020

SHEET No. 1 OF 10 SHEETS

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0130(27)	2021	11	116

- NOTES:**
- Unless otherwise noted, Roadway ϕ shall be used as grade control and for staking utility and roadway layout only. See Roadway ϕ Plan and Profile Shts. 31 to 36.
 - Limits of resurfacing, new AC pavement and reconstruction are shown in Roadway Plans Shts. 37 to 45. See typical AC pavement sections Sht. 19.
 - Apply pavement safety edge on all outer edges of AC pavement. See detail Sht. 20.
 - All concrete curbs shall have a minimum of 6" aggregate base course. For Type 2D curb detail, see HDOT Std. Plan D-05.
 - For splitter island joints and reinforcements, see HDOT Std. Plan D-15.
 - For slopes at bus bays, see Sht. 50.



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Rodney R. McKinney 04/30/22
 SIGNATURE EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TYPICAL SECTIONS

KEAAU-PAHOA ROAD
INTERSECTION IMPROVEMENTS
at Orchidland Drive & Makuu Drive
Federal-Aid Project No. STP-0130(27)

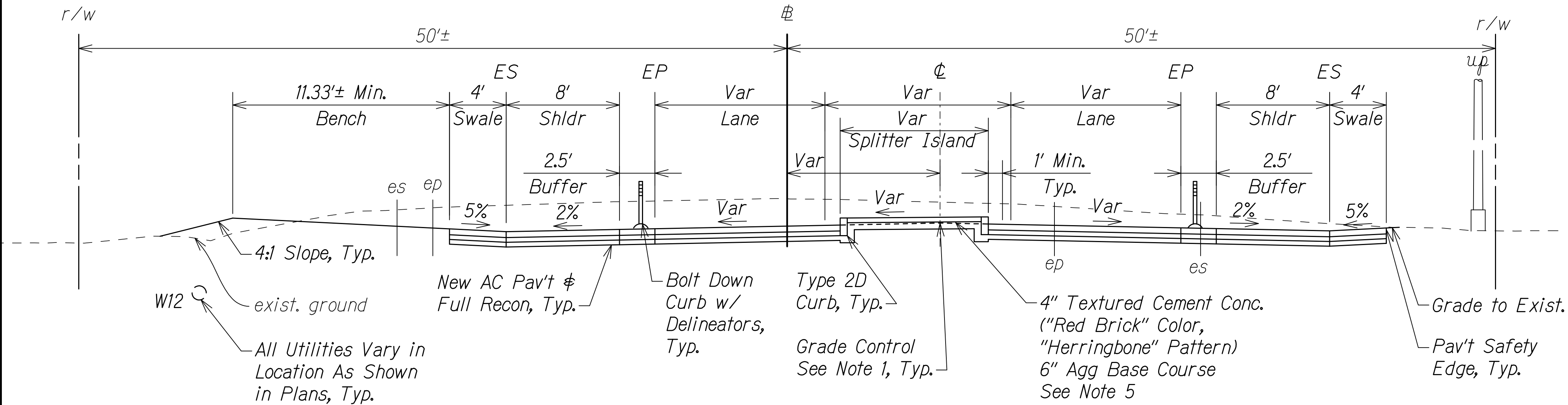
Scale: 1" = 5' Date: Sept, 2020

SHEET No. 2 OF 10 SHEETS

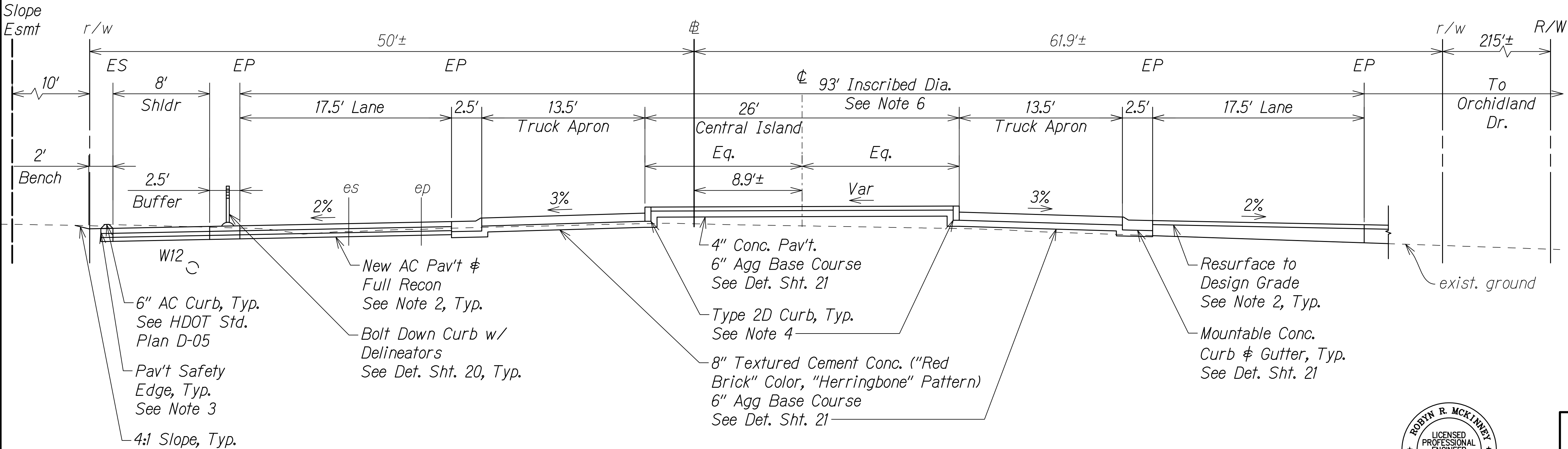
FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0130(27)	2021	12	116

NOTES:

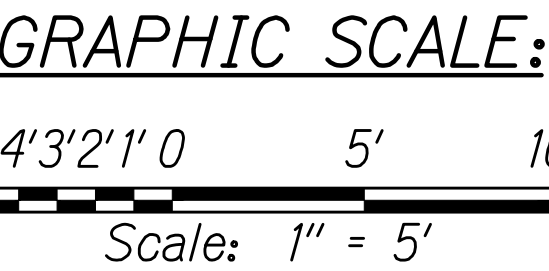
- 1. Unless otherwise noted, Roadway ϕ shall be used as grade control and for staking utility and roadway layout only. See Roadway ϕ Plan and Profile Shts. 31 to 36.
- 2. Limits of resurfacing, new AC pavement and reconstruction are shown in Roadway Plans Shts. 37 to 45. See typical AC pavement sections Sht. 19.
- 3. Apply pavement safety edge on all outer edges of AC pavement. See detail Sht. 20.
- 4. All concrete curbs shall have a minimum of 6" aggregate base course. For Type 2D curb detail, see HDOT Std. Plan D-05.
- 5. For splitter island joints and reinforcements, see HDOT Std. Plan D-15.
- 6. Grade control for the roundabout is along inscribed diameter. For elevations, see Sht. 51 and roadway plans for layout.



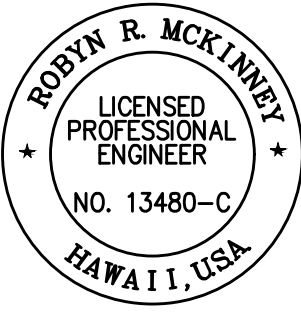
KEAAU-PAHOA RD. ϕ
Sta. 38+22± to Sta. 38+67±
Scale: 1" = 5'



KEAAU-PAHOA RD. ϕ
At Roundabout Center: Sta. 37+37± (Orchidland)
Scale: 1" = 5'



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Signature: *Robyn R. McKinney* 04/30/22
EXPIRATION DATE OF THE LICENSE



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TYPICAL SECTIONS

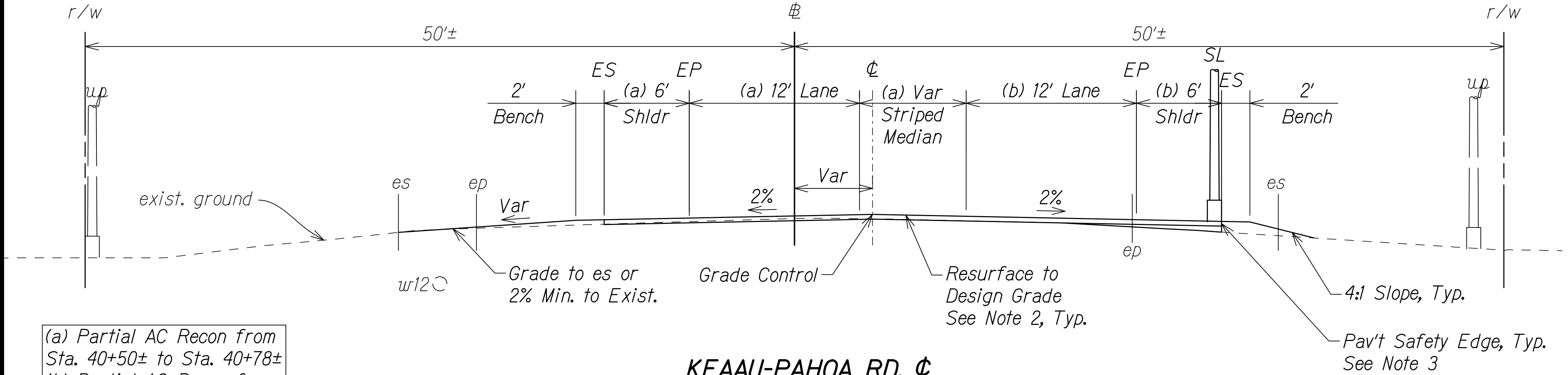
KEAAU-PAHOA ROAD
INTERSECTION IMPROVEMENTS
at Orchidland Drive & Makuu Drive
Federal-Aid Project No. STP-0130(27)

Scale: 1" = 5' Date: Sept, 2020

SHEET No. 3 OF 10 SHEETS

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0130(27)	2021	13	116

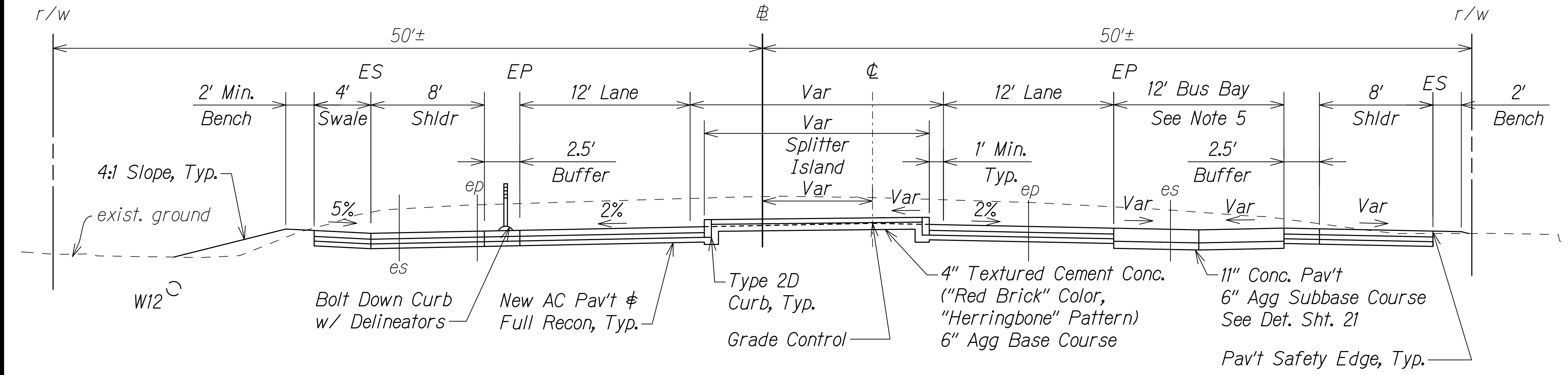
- NOTES:**
1. Unless otherwise noted, Roadway ϕ shall be used as grade control and for staking utility and roadway layout only. See Roadway ϕ Plan and Profile Shts. 31 to 36.
 2. Limits of resurfacing, new AC pavement and reconstruction are shown in Roadway Plans Shts. 37 to 45. See typical AC pavement sections Sht. 19.
 3. Apply pavement safety edge on *all* outer edges of AC pavement. See detail Sht. 20.
 4. All concrete curbs shall have a minimum of 6" aggregate base course. For Type 2D curb detail, see HDOT Std. Plan D-05.
 5. For splitter island joints and reinforcements, see HDOT Std. Plan D-15.
 6. For slopes at bus bays, see Sht. 50.



(a) Partial AC Recon from Sta. 40+50± to Sta. 40+78±
 (b) Partial AC Recon from Sta. 40+50± to Sta. 40+66±

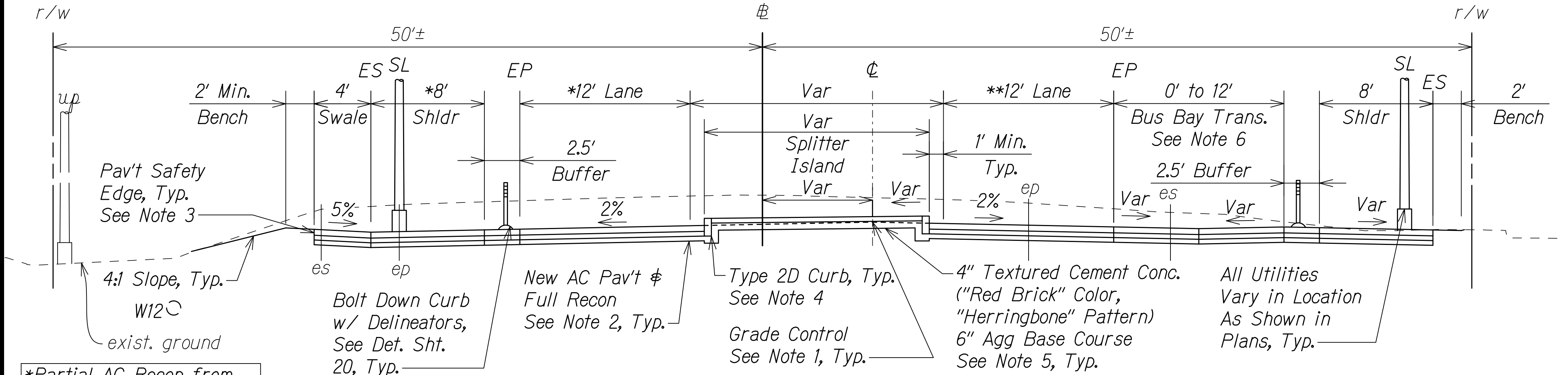
KEAAU-PAHOA RD. ϕ
Sta. 40+50± to Sta. 43+25±

Scale: 1" = 5'



KEAAU-PAHOA RD. ϕ
Sta. 39+17± to Sta. 39+68±

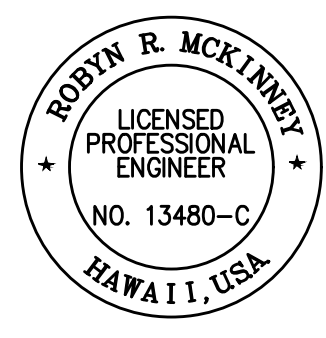
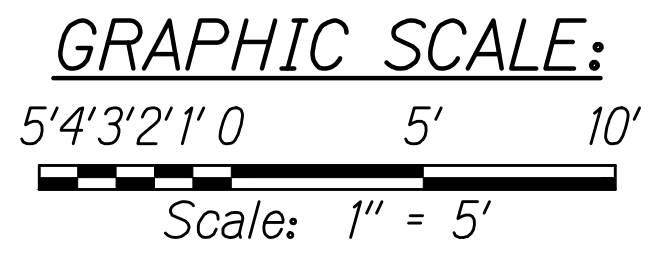
Scale: 1" = 5'



*Partial AC Recon from Sta. 40+05± to Sta. 40+18±
 **Partial AC Recon from Sta. 39+90± to Sta. 40+18±

KEAAU-PAHOA RD. ϕ
Sta. 38+67± to Sta. 39+17±; Sta. 39+68± to Sta. 40+18±

Scale: 1" = 5'



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 SIGNATURE: *Rodney R. McKinney* 04/30/22
 EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

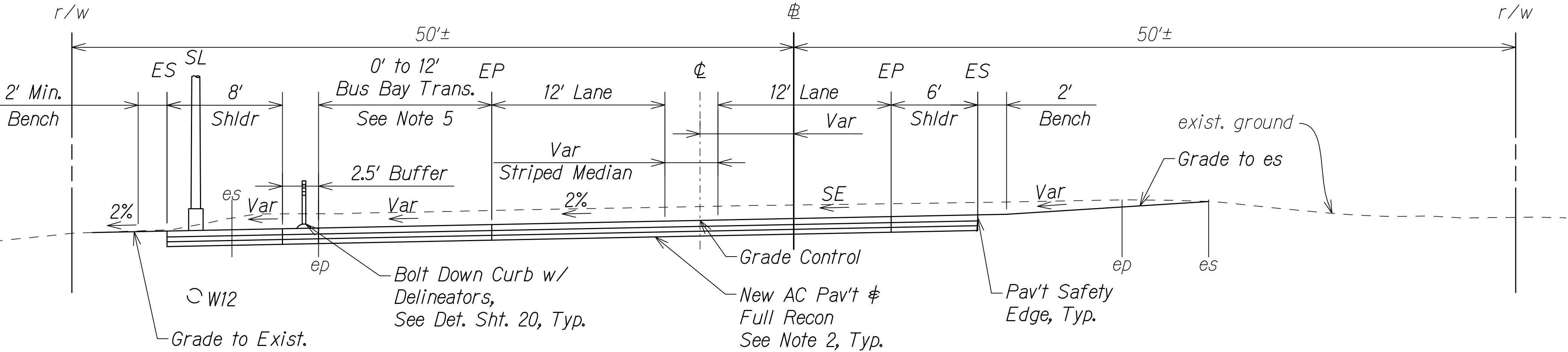
TYPICAL SECTIONS
KEAAU-PAHOA ROAD
INTERSECTION IMPROVEMENTS
at Orchidland Drive & Makuu Drive
Federal-Aid Project No. STP-0130(27)
Scale: 1" = 5' Date: Sept, 2020

SHEET No. 4 OF 10 SHEETS

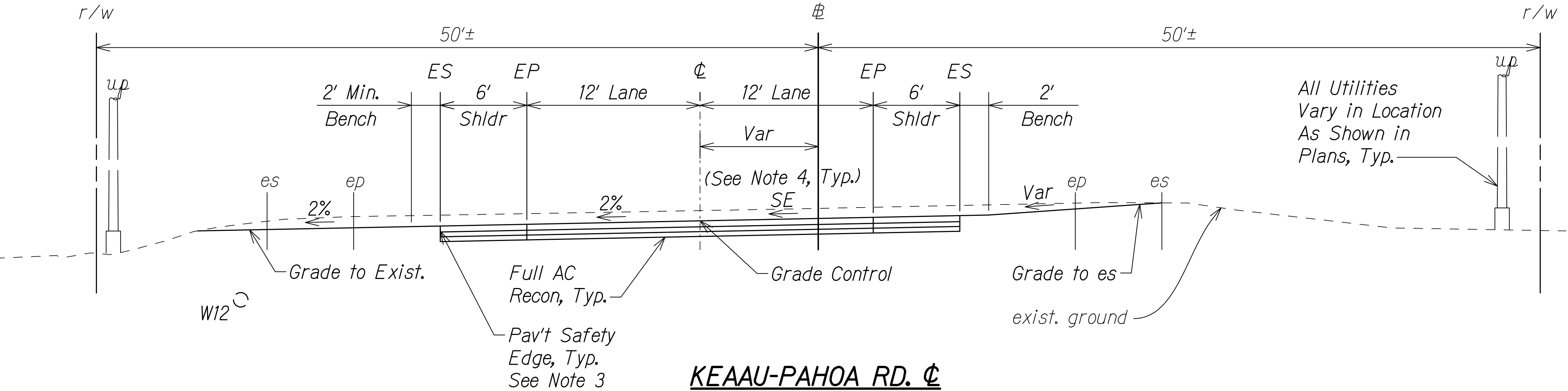
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FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0130(27)	2021	14	116

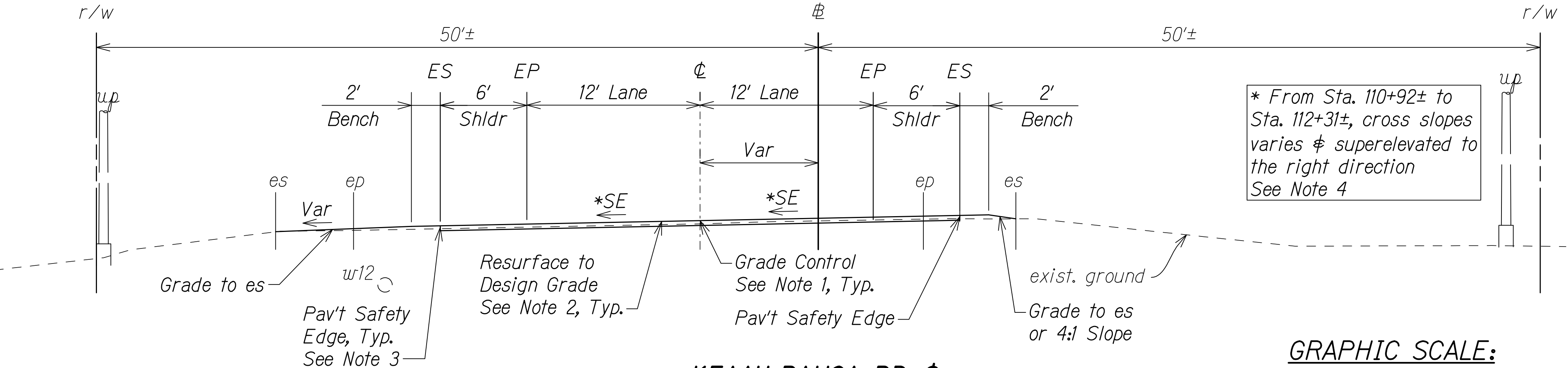
- NOTES:**
1. Unless otherwise noted, Roadway ϕ shall be used as grade control and for staking utility and roadway layout only. See Roadway ϕ Plan and Profile Shts. 31 to 36.
 2. Limits of resurfacing, new AC pavement and reconstruction are shown in Roadway Plans Shts. 37 to 45. See typical AC pavement sections Sht. 19.
 3. Apply pavement safety edge on *all* outer edges of AC pavement. See detail Sht. 20.
 4. For cross slope, see Keaau-Pahoa Rd. ϕ superelevation diagram Sht. 30.
 5. For slopes at bus bays, see Sht. 52.



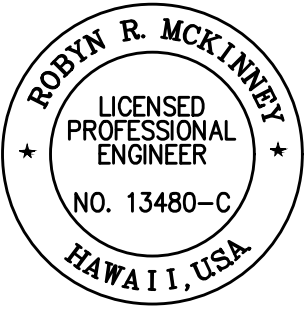
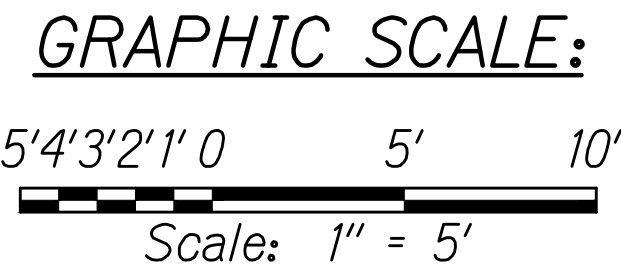
KEAAU-PAHOA RD. ϕ
Sta. 102+25± to Sta. 102+75±
 Scale: 1" = 5'



KEAAU-PAHOA RD. ϕ
Sta. 100+77± to Sta. 101+89±
 Scale: 1" = 5'



KEAAU-PAHOA RD. ϕ
Sta. 96+00± to Sta. 100+77±; Sta. 110+92± to Sta. 112+31±
 Scale: 1" = 5'



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Rodin R. McKinney 04/30/22
 SIGNATURE EXPIRATION DATE
 OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

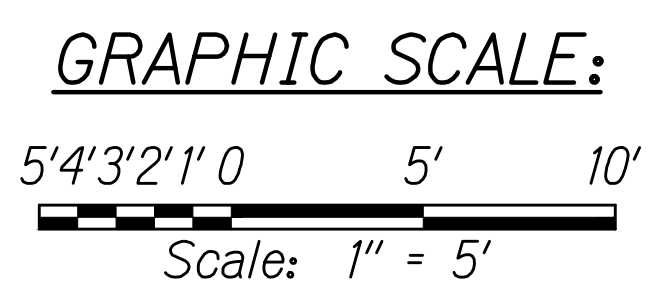
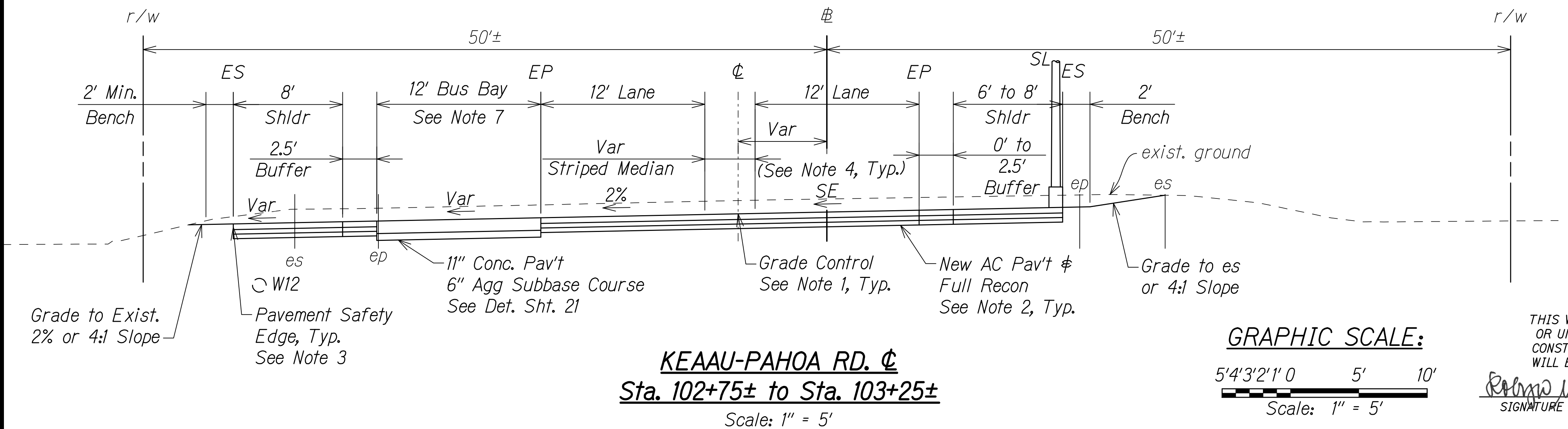
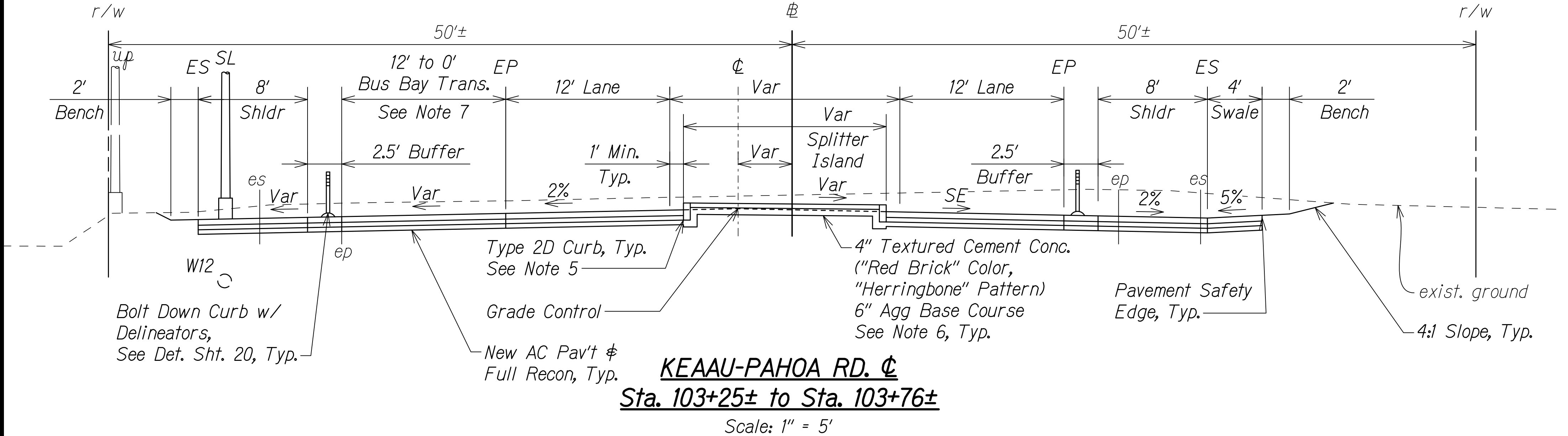
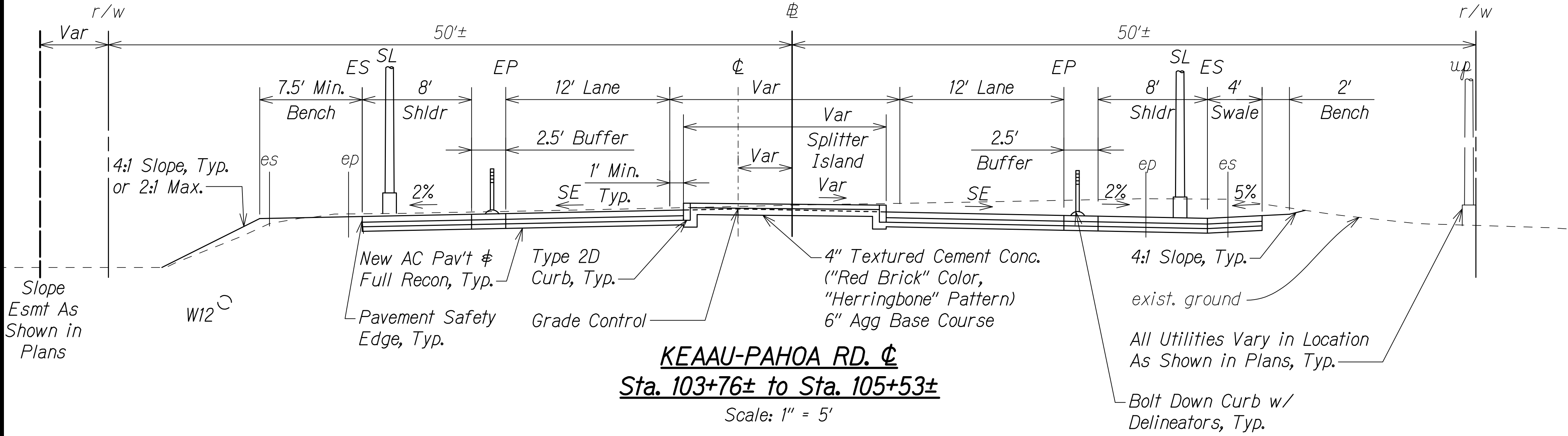
TYPICAL SECTIONS
KEAAU-PAHOA ROAD
INTERSECTION IMPROVEMENTS
at Orchidland Drive & Makuu Drive
Federal-Aid Project No. STP-0130(27)
Scale: 1" = 5' Date: Sept, 2020

SHEET No. 5 OF 10 SHEETS

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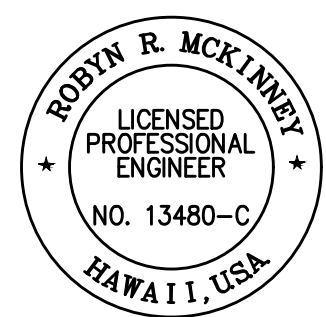
FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0130(27)	2021	15	116

- NOTES:**
- Unless otherwise noted, Roadway ϕ shall be used as grade control and for staking utility and roadway layout only. See Roadway ϕ Plan and Profile Shts. 31 to 36.
 - Limits of resurfacing, new AC pavement and reconstruction are shown in Roadway Plans Shts. 37 to 45. See typical AC pavement sections Sht. 19.
 - Apply pavement safety edge on *all* outer edges of AC pavement. See detail Sht. 20.
 - For cross slope, see Keaau-Pahoa Rd. ϕ superelevation diagram Sht. 30.
 - All concrete curbs shall have a minimum of 6" aggregate base course. For Type 2D curb detail, see HDOT Std. Plan D-05.
 - For splitter island joints and reinforcements, see HDOT Std. Plan D-15.
 - For slopes at bus bays, see Sht. 52.



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Rodney R. McKinney 04/30/22
 SIGNATURE EXPIRATION DATE OF THE LICENSE



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

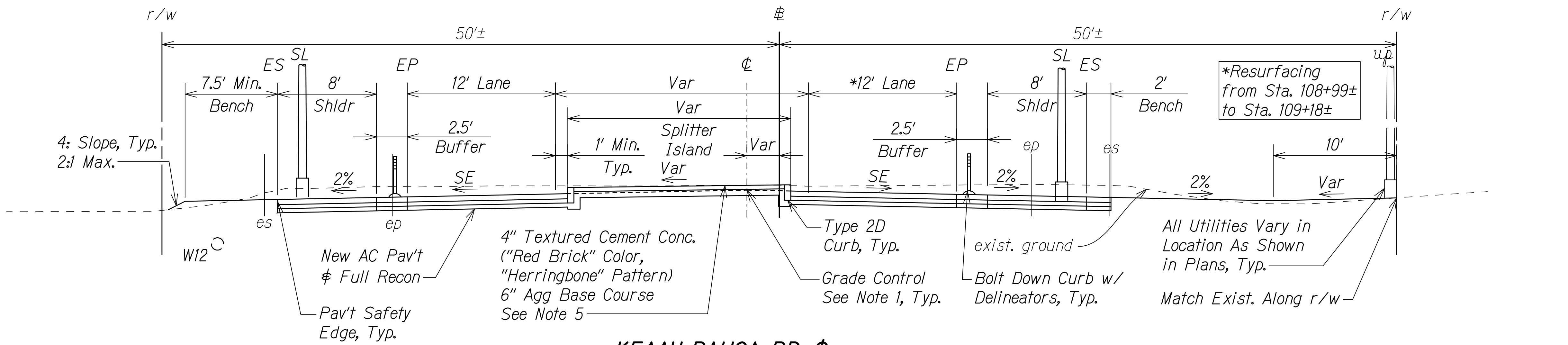
TYPICAL SECTIONS
KEAAU-PAHOA ROAD
INTERSECTION IMPROVEMENTS
at Orchidland Drive & Makuu Drive
Federal-Aid Project No. STP-0130(27)
Scale: 1" = 5' Date: Sept, 2020

SHEET No. 6 OF 10 SHEETS

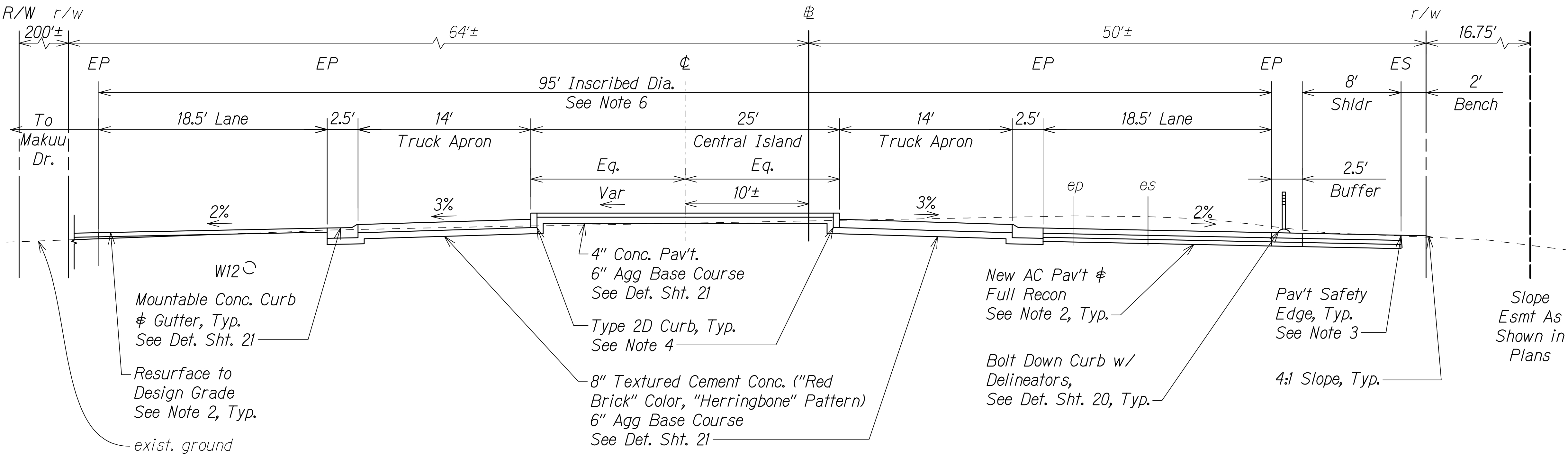
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FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0130(27)	2021	16	116

- NOTES:**
- Unless otherwise noted, Roadway ϕ shall be used as grade control and for staking utility and roadway layout only. See Roadway ϕ Plan and Profile Shts. 31 to 36.
 - Limits of resurfacing, new AC pavement and reconstruction are shown in Roadway Plans Shts. 37 to 45. See typical AC pavement sections Sht. 19.
 - Apply pavement safety edge on all outer edges of AC pavement. See detail Sht. 20.
 - All concrete curbs shall have a minimum of 6" aggregate base course. For Type 2D curb detail, see HDOT Std. Plan D-05.
 - For splitter island joints and reinforcements, see HDOT Std. Plan D-15.
 - Grade control for the roundabout is along inscribed diameter. For elevations, see Sht. 53 and roadway plans for layout.

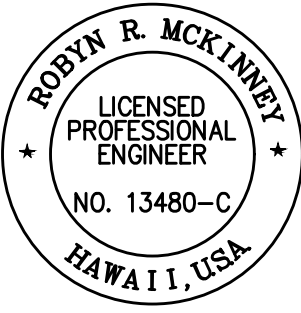
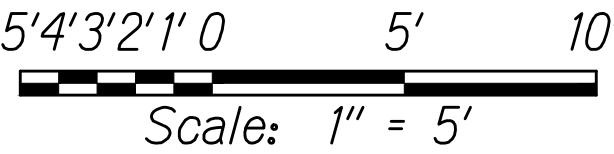


KEAAU-PAHOA RD. ϕ
Sta. 107+54± to Sta. 109+18±
 Scale: 1" = 5'



KEAAU-PAHOA RD. ϕ
At Roundabout Center: Sta. 106+52± (Makuu)
 Scale: 1" = 5'

GRAPHIC SCALE:



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 SIGNATURE *Rodin R. McKinney* 04/30/22
 EXPIRATION DATE OF THE LICENSE

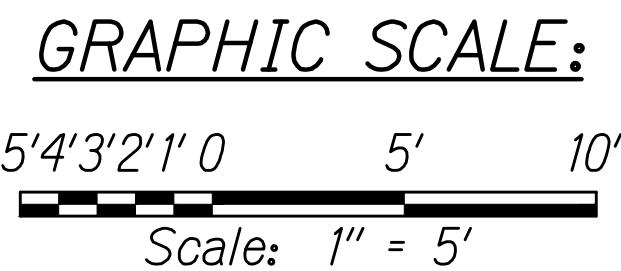
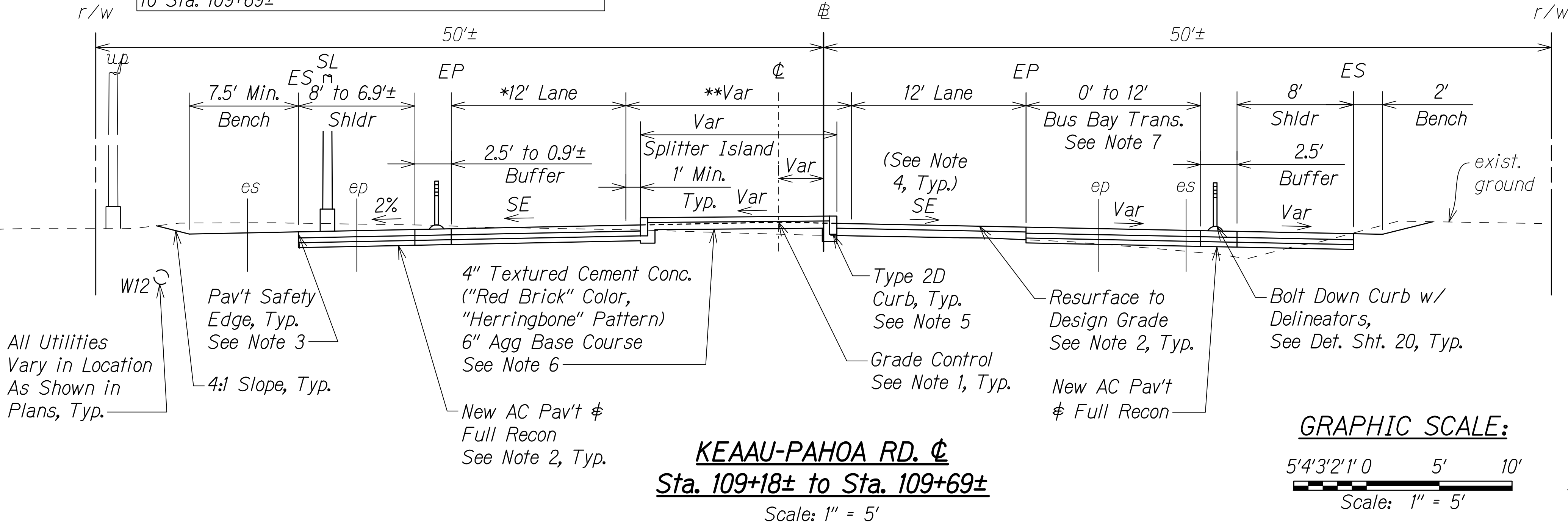
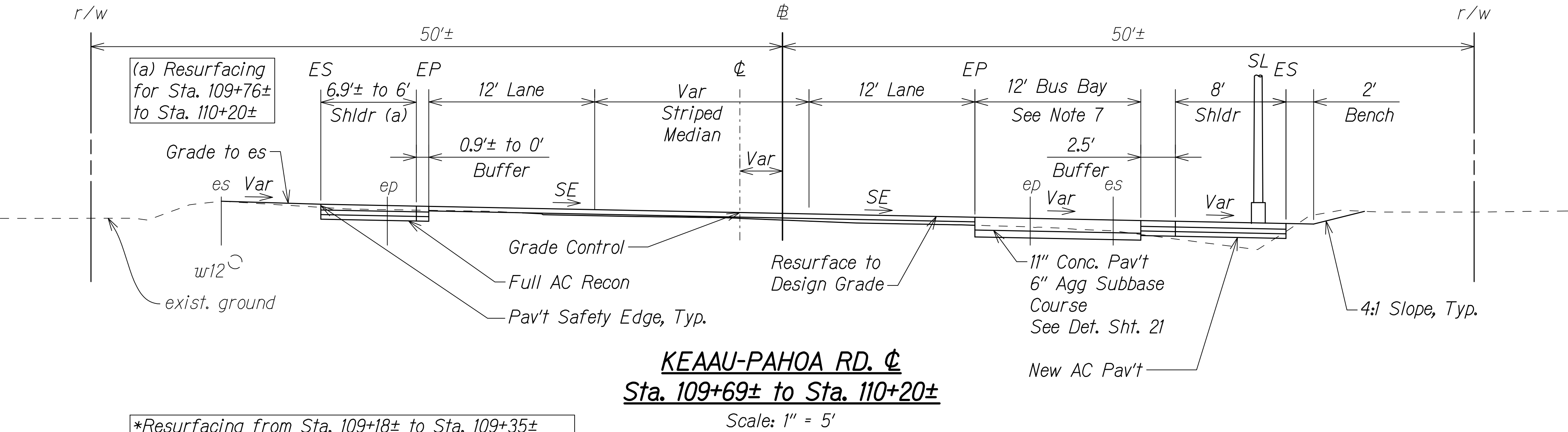
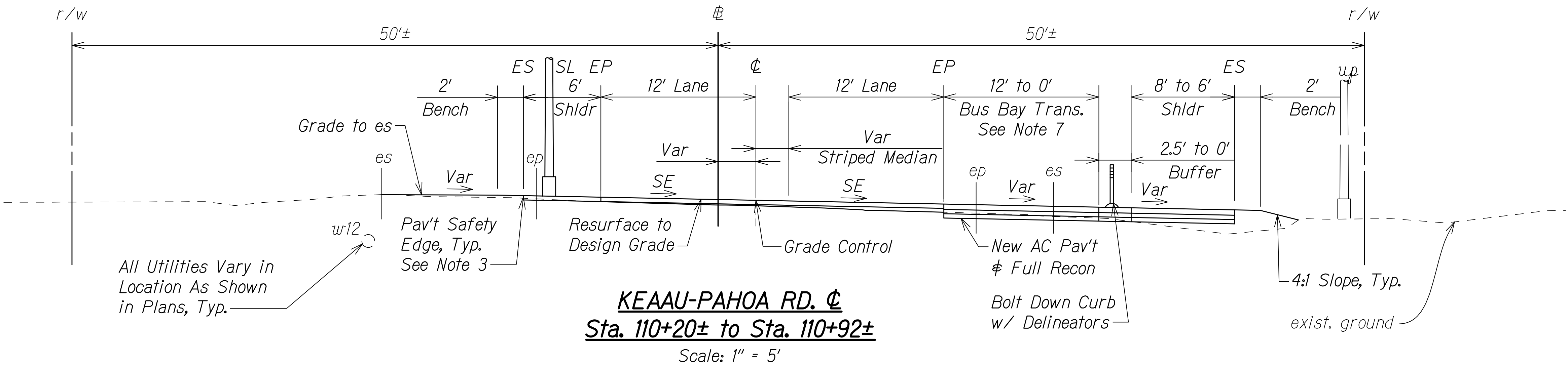
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TYPICAL SECTIONS
KEAAU-PAHOA ROAD
INTERSECTION IMPROVEMENTS
at Orchidland Drive & Makuu Drive
Federal-Aid Project No. STP-0130(27)
Scale: 1" = 5' Date: Sept, 2020

SHEET No. 7 OF 10 SHEETS

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0130(27)	2021	17	116

- NOTES:
- Unless otherwise noted, Roadway ϕ shall be used as grade control and for staking utility and roadway layout only. See Roadway ϕ Plan and Profile Shts. 31 to 36.
 - Limits of resurfacing, new AC pavement and reconstruction are shown in Roadway Plans Shts. 37 to 45. See typical AC pavement sections Sht. 19.
 - Apply pavement safety edge on all outer edges of AC pavement. See detail Sht. 20.
 - For cross slope, see Keaau-Pahoa Rd. ϕ superelevation diagram Sht. 30.
 - All concrete curbs shall have a minimum of 6" aggregate base course. For Type 2D curb detail, see HDOT Std. Plan D-05.
 - For splitter island joints and reinforcements, see HDOT Std. Plan D-15.
 - For slopes at bus bays, see Sht. 52.



RODIN R. MCKINNEY

LICENSED PROFESSIONAL ENGINEER

NO. 13480-C

HAWAII, USA

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SIGNATURE

04/30/22

EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

HIGHWAYS DIVISION

TYPICAL SECTIONS

KEAAU-PAHOA ROAD

INTERSECTION IMPROVEMENTS

at Orchidland Drive & Makuu Drive

Federal-Aid Project No. STP-0130(27)

Scale: 1" = 5'

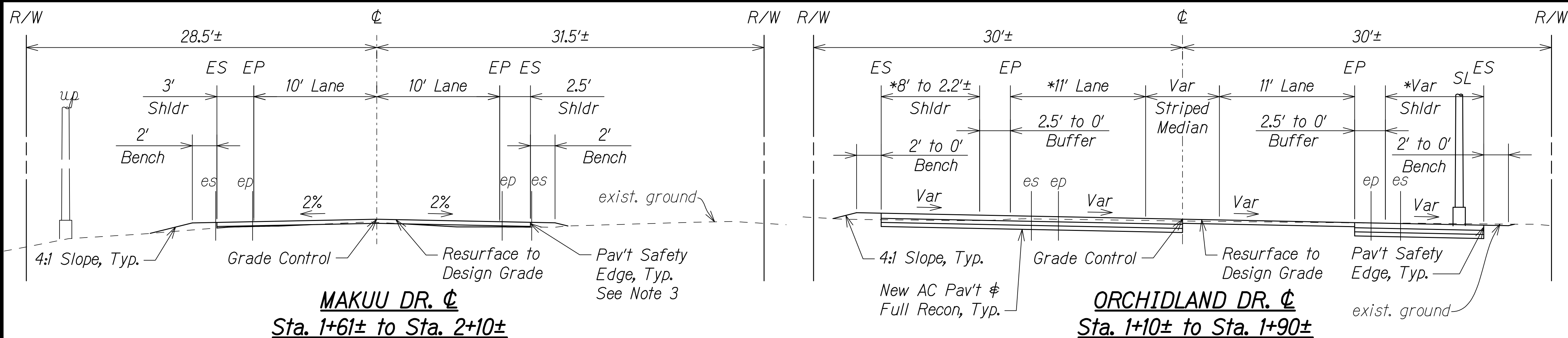
Date: Sept, 2020

SHEET No. 8 OF 10 SHEETS

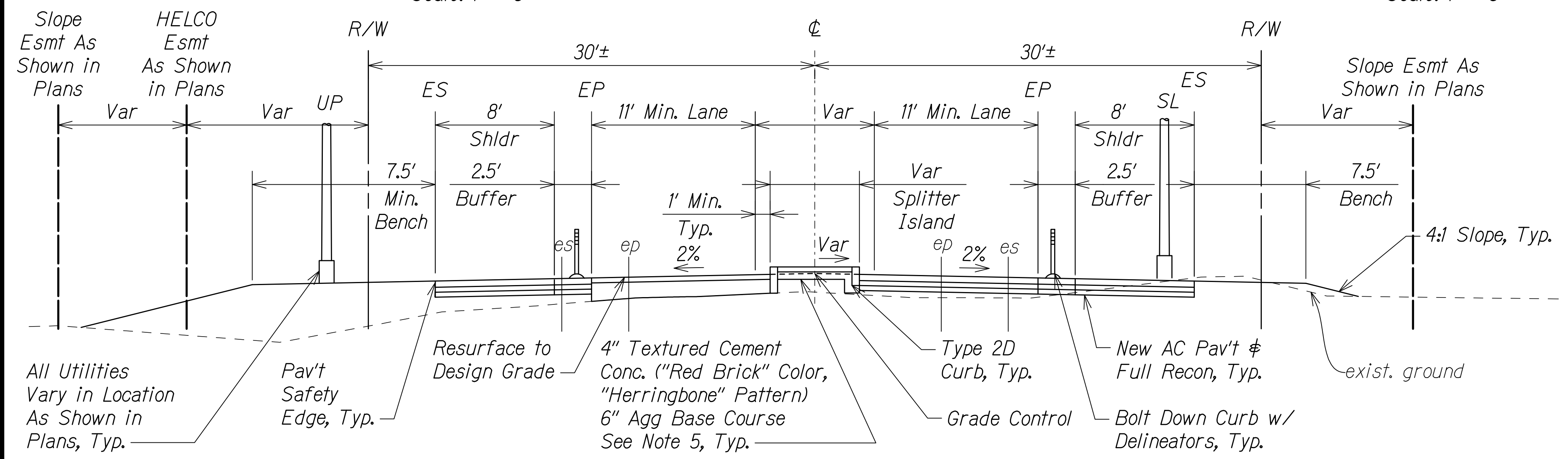
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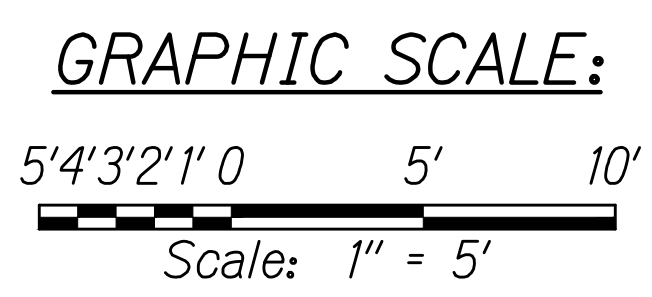
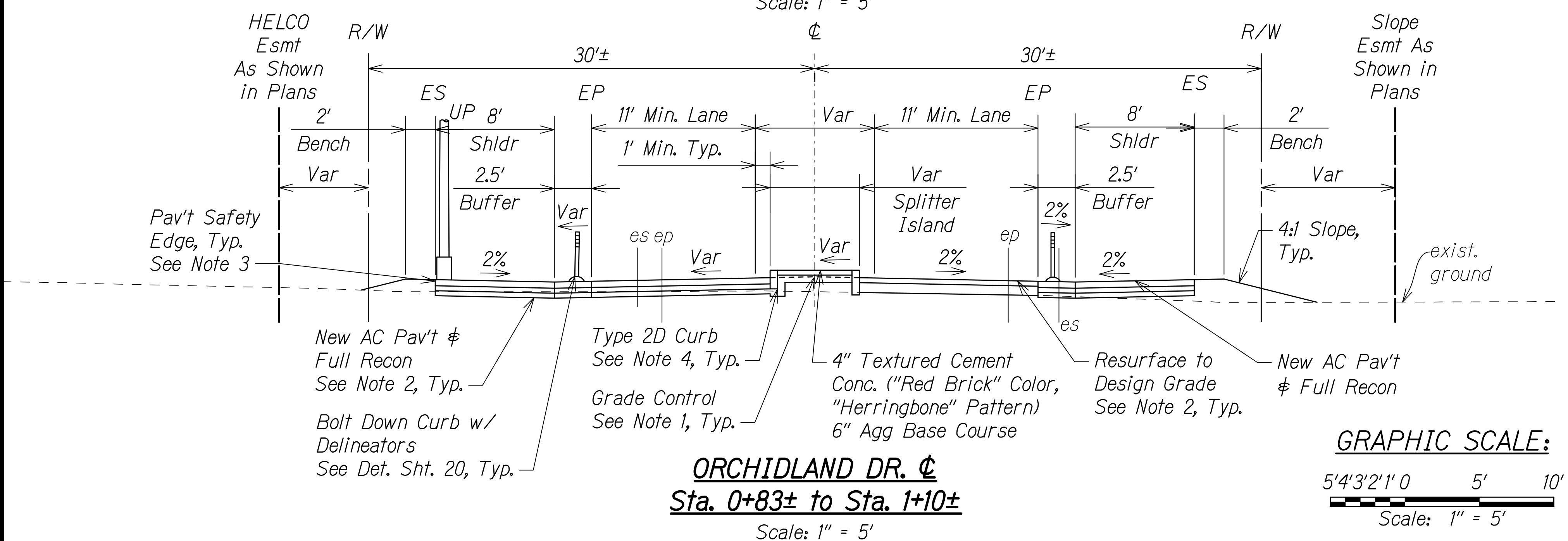
FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0130(27)	2021	18	116



*Resurfacing from Sta. 1+26± to Sta. 1+90±



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 - Apply pavement safety edge on all outer edges of AC pavement. See detail Sht. 20.
 - All concrete curbs shall have a minimum of 6" aggregate base course. For Type 2D curb detail, see HDOT Std. Plan D-05.
 - For splitter island joints and reinforcements, see HDOT Std. Plan D-15.



RODNEY R. MCKINNEY
LICENSED PROFESSIONAL ENGINEER
NO. 13480-C
HAWAII, USA

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Robbie McKinney 04/30/22
SIGNATURE EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TYPICAL SECTIONS

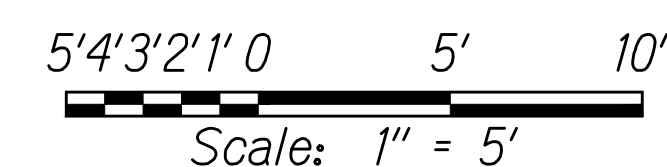
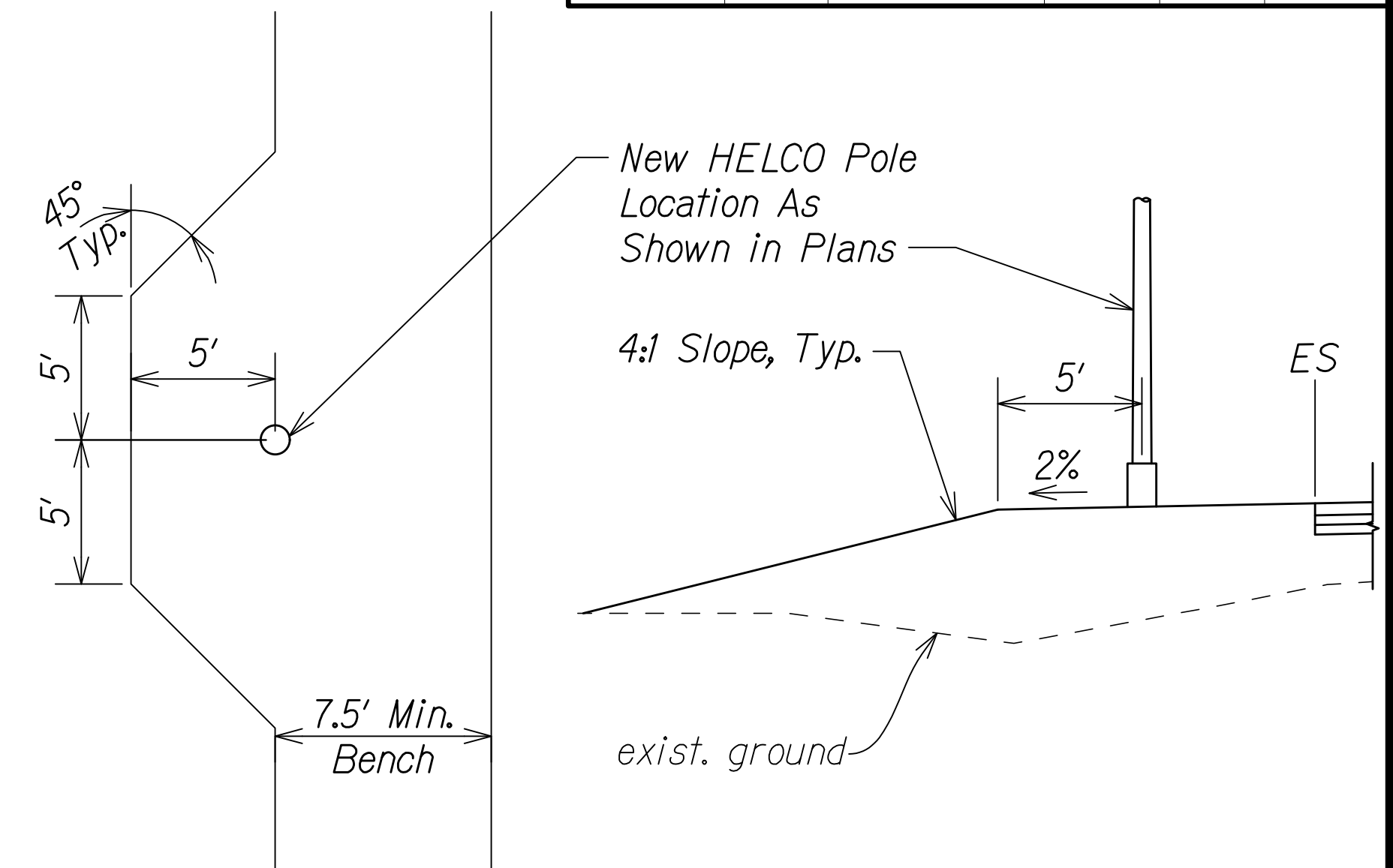
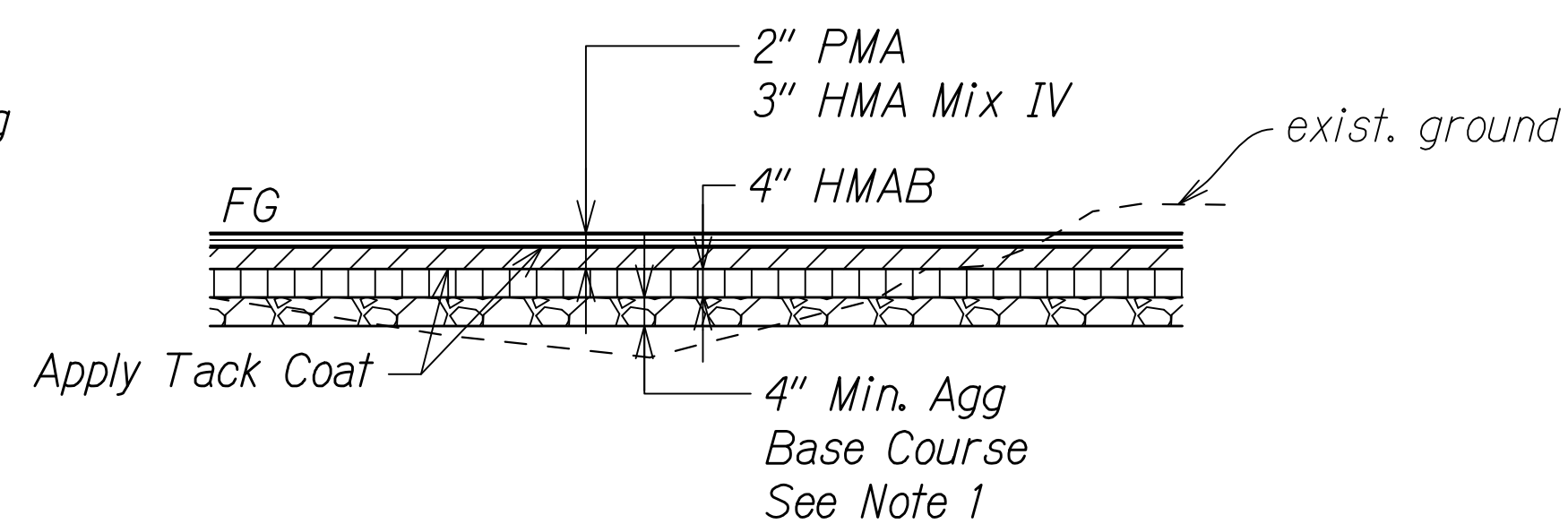
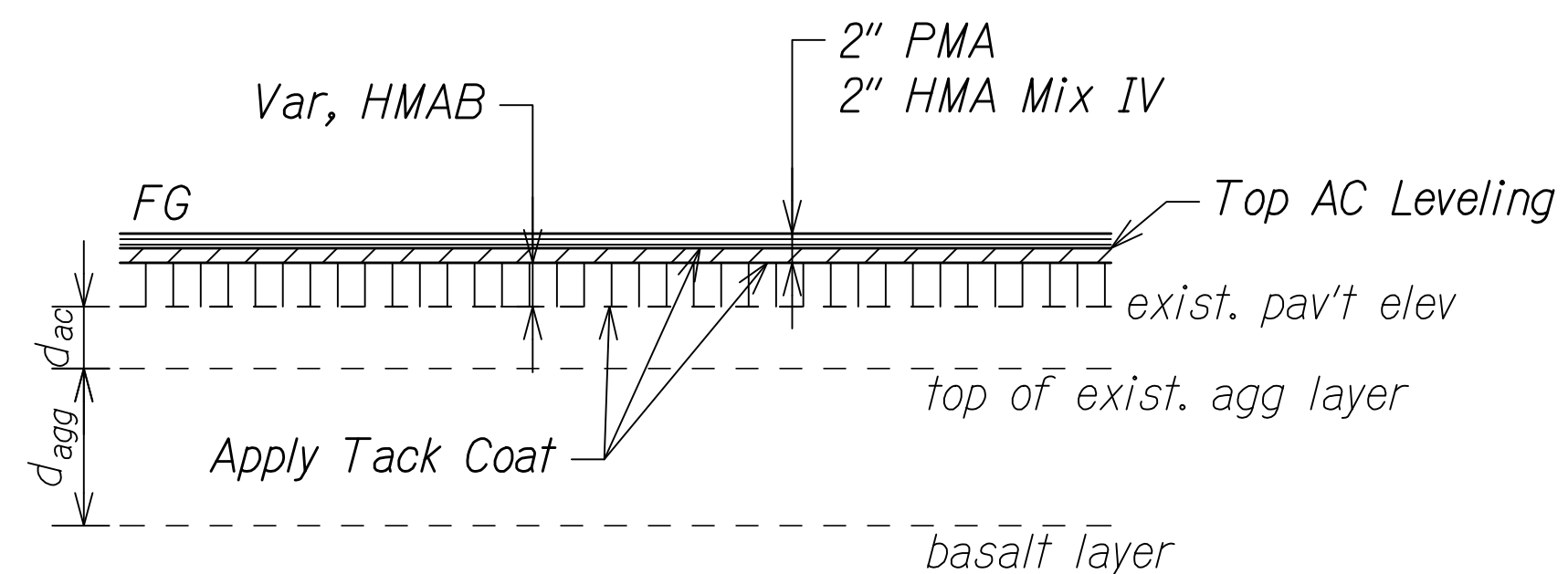
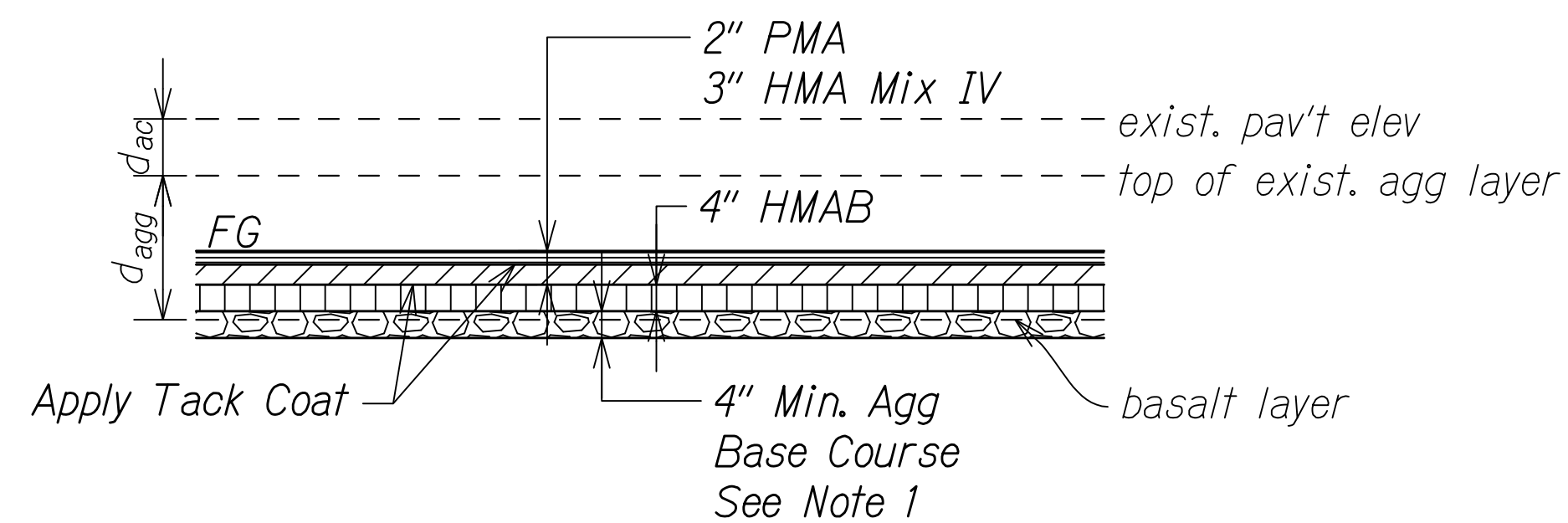
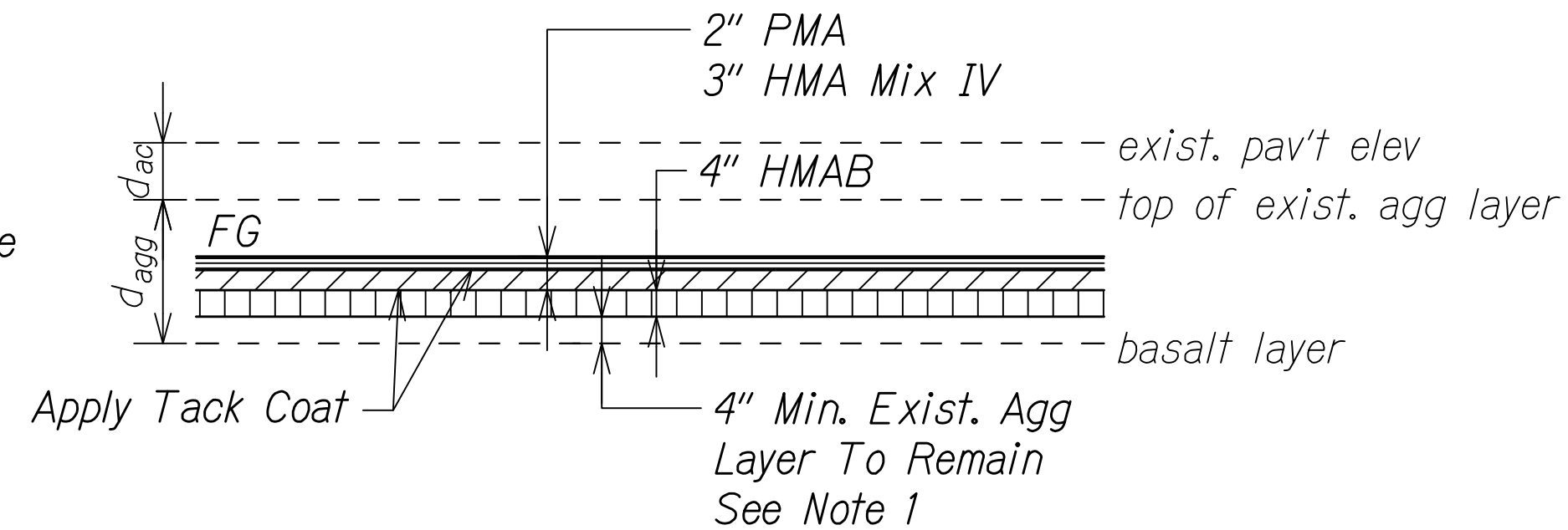
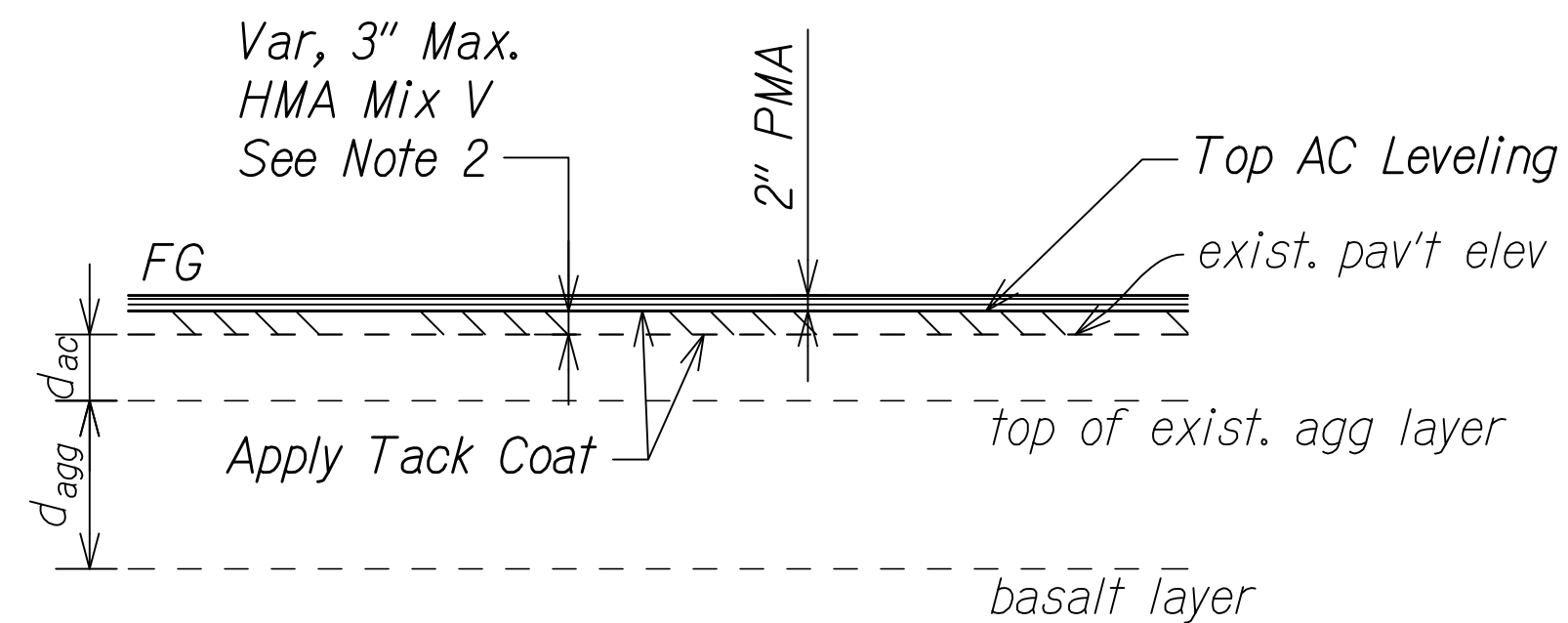
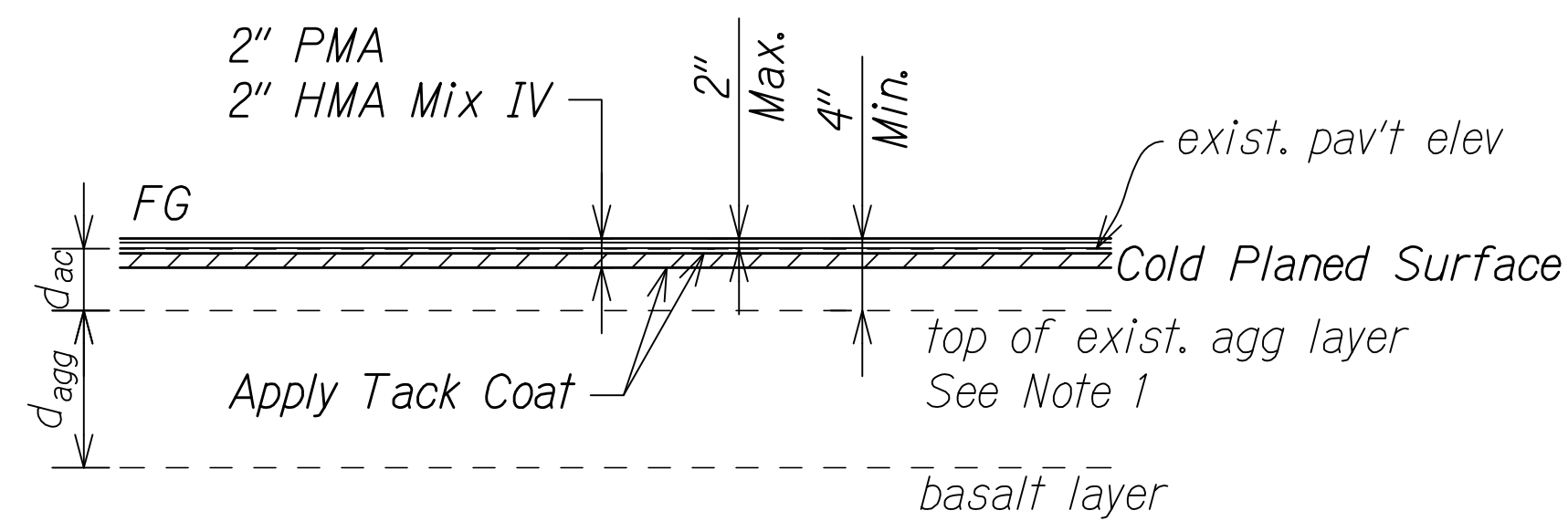
KEAAU-PAHOA ROAD
INTERSECTION IMPROVEMENTS
at Orchidland Drive & Makuu Drive
Federal-Aid Project No. STP-0130(27)

Scale: 1" = 5' Date: Sept, 2020

SHEET No. 9 OF 10 SHEETS

C:\CIVIL 3D PROJECTS\2012_153.000 KEAU-PAHOA RD IMPR RTE\30\ROUNDABOUT DESIGN\01 CIVIL DRAWINGS\02 ORCH AND MAKUU\018 - 019 TYP SEC_SIDE RD.DWG 8/25/2020 6:39 PM KSAW

2. Cold plane as needed to achieve minimum Mix V thickness.
3. PMA shall use PG 64E-22 binder and HMA Mix IV shall use PG 64-16.
4. For Boring Logs, see Sht. 24
5. Cold planing and leveling courses shall be constructed per HSS Sections 415 and 410 respectively. AC paving shall be done in multiple lifts per specifications.



Robyn McKinney 04/30/22
SIGNATURE EXPIRATION DATE
OF THE LICENSE

Scale: As Noted Date: Sept, 2020

SHEET No. 10 OF 10 SHEETS