

## Project Design Variation Memorandum

To: Kevin Ingle, P.E.  
District Design Engineer

Date: 08/29/2025

Financial Project ID: 446205-1-52-01 New Const.  RRR

Federal Aid Number: N/A

Project Name: SR 35 (US 17) from N of SR 64 to Bell St

**FULL PROJECT LIMITS:**  
 BEGIN MP 11.160 - END MP 11.753 (NB)  
 BEGIN MP 11.179 - END MP 11.753 (SB)  
 MP 11.753 = MP 0.000 (NB/SB) = MP 3.539 (SB)  
 BEGIN MP 0.000 - END MP 3.440 (NB)  
 BEGIN MP 0.017 - END MP 3.539 (SB)

State Road Number: 35 Co./Sec./Sub. 06010

Begin Project MP: MP 11.183 End Project MP: MP 3.530

**Request for: Design Variation**

Design Element	MP: Beg-End	Existing	Proposed	Required	Attr. Crashes	Approved	Denied	Addl. Docum.
1. <b>Curb Type</b>	MP 11.160 - MP 11.753 NB MP 11.179 - MP 11.753 SB MP 0.000 - MP 0.364 NB MP 3.313 - MP 3.539 SB	Type F Curb	Type F Curb	Type E Curb	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Justification: It is proposed that the existing Type F Curb and offset from the edge of traveled way (EOTW) to the lip of gutter remain. As there have been two crashes with the variation limits related to Type F curb and offset over a six-year period, less than the average predictive crash frequency predicted by the Highway Safety Manual (HSM) predictive method evaluation of 3 crashes/year. It is recommended the Department approve the Design Variation. Refer to the attached for documentation for additional information.

2. <b>Turn Lane Length</b>	MP 11.211 - MP 11.259 NB MP 11.700 - MP 11.745 NB MP 0.160 - MP 0.209 NB	250 FT 240 FT 258 FT	250 FT 240 FT 258 FT	<u>350 ft</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Justification: It is proposed that the existing turn lane lane length configuration in violation of design criteria be allowed to remain. There were no crashes within the variation limits related to the turn lane lengths. It is recommended the Department approve the Design Variation. Refer to the attached documentation for additional information.

3. <b>Lateral Offset</b>	MP 0.540 - MP 0.746 SB	Trees > 4" ≤ 1.5' from face of curb	Trees > 4" ≤ 1.5' from face of curb	Trees > 4" 1.5' from face of curb	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Justification: It is proposed that the existing trees located behind the curb are in violation of design criteria be allowed to remain. There were no crashes within the variation limits related to the lateral offset to the trees. It is recommended the Department approve the Design Variation. Refer to the attached documentation for additional information.

4. <b>Control Zone</b>	MP 0.552 - MP 0.746 SB	Trees > 4" ≤ 3' from driveway flare	Trees > 4" ≤ 3' from driveway flare	Trees > 4" 3' from driveway flare	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Justification: It is proposed that the existing trees located behind the curb in violation of design criteria be allowed to remain. There were no crashes within the variation limits related to the control zone offset to the trees. It is recommended the Department approve the Design Variation. Refer to the attached documentation for additional information.

**Design Element      MP: Beg-End      Existing      Proposed      Required      Attr. Crashes      Approved      Denied      Addl. Docum.**

5. Roadside Slope      MP 0.357 - MP 0.432 NB  
MP 0.517 - MP 0.839 NB  
MP 2.982 - MP 2.934 SB      1:10 - 1:5      1:4      1:6                       

Justification: It is proposed to allow 1:4 roadside slopes within the clear zone (new construction criteria) at isolated proposed sidewalk locations.

This proposed roadside slope is recoverable/traversable and there were no crashes within the variation limits attributable to roadside slopes.

It is recommended that the Department approve the Design Variation. Refer to attached documentation for additional information.

6. \_\_\_\_\_      \_\_\_\_\_      \_\_\_\_\_      \_\_\_\_\_      \_\_\_\_\_                       

Justification: \_\_\_\_\_

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Appendices:      Yes       No

If yes, list appendices in order: 1.) Curb Type: Benefit Cost Ratio, Construction Cost, Crash Data 2.) Turn lane Length: Crash Data 3.) Lateral Offset: Crash Data 4.) Control Zone: Crash Data 5.) Roadside Slope: Applicable Limits Plan Sheets

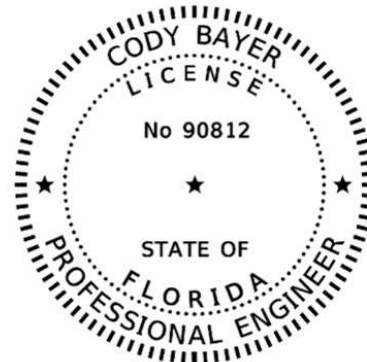
**Recommended by:**

\_\_\_\_\_ Date \_\_\_\_\_  
 Name: Cody Bayer, P.E.  
 Responsible Professional Engineer

**Approvals:**

\_\_\_\_\_ Date \_\_\_\_\_  
 Name:  
 District Traffic Operations Engineer

\_\_\_\_\_ Date \_\_\_\_\_  
 Name: Kevin Ingle, P.E.  
 District Design Engineer



This item has been digitally signed and sealed by Cody Bayer, P.E. on the date adjacent to the seal.

Signature must be verified on any electronic copies.

## 1. CURB TYPE

### DESIGN CRITERIA VERSUS PROPOSED DESIGN:

The existing typical section consists of a 4-lane and 6-lane roadway with type F curb and gutter on the inside and outside.

### FDOT CRITERIA:

- The 2025 FDOT Design Manual (FDM), Chapter 210, Section 210.5.1 specifies the following:
  - Curbed roadways with 50-55 mph design speeds are required to use Type E curb on the median and outside.
  - Curbed roadways are required to have an offset from the edge of the traveled roadway to the lip of the gutter.
    - (1) 4-foot to median curb for 4-lane roadway sections.
    - (2) 6.5-foot to median curb for 6-lane roadway sections.
    - (3) 6.5-foot to outside curb for all roadway sections.
- PROPOSED DESIGN:
  - The existing Type F curb on the northbound and southbound median curb and outside curb within the project limits specified below will remain in place.
  - It is proposed that the existing offsets from the northbound and southbound edge of traveled roadway (EOTW) to the lip of the median and outside lip of the gutter within the project limits specified below will remain.

LIMITS APPLICABLE:

MP	Station Limits	Side	Design Speed	Posted Speed & Target Speed	FDOT Design Criteria	Proposed Design
NB 4 Lane MP 11.160 - MP 11.753	Sta. 1091+38.92 to Sta. 1122+70.00 (NB)	LT/RT	45 MPH (MP 11.160 - MP 11.753)	55 MPH	4-ft offset from travel way to median gutter (type E) & 6.5- ft offset from travel way to outside gutter (type E curb)	0-ft offset from travel way to median gutter (type F curb) & 4-ft offset from travel way to outside gutter (type F curb)
NB 4 Lane MP 0.000 - MP 0.216	Sta. 1122+70.00 to Sta. 1134+08.00 (NB)	LT/RT	55 MPH (MP 0.000 - MP 0.216)		4-ft offset from travel way to median gutter (type E) & 6.5- ft offset from travel way to outside gutter (type E curb)	0-ft offset from travel way to median gutter (type F curb) & 4-ft offset from travel way to outside gutter (type F curb)
NB 6 Lane MP 0.216 - MP 0.364	Sta. 1134+08.00 to Sta. 1141+33.00 (NB)	LT/RT	55 MPH (MP 0.216 - MP 0.364)		6.5-ft offset from travel way to median gutter (type E curb) & 6.5-ft offset from travel way to outside gutter (type E curb)	0-ft offset from travel way to median gutter (type F curb) & 4-ft offset from travel way to outside gutter (type F curb)
SB 4 Lane MP 11.179 - MP 11.753	Sta. 510+75.62 to Sta. 541+07.43 (SB)	LT/RT	45 MPH (MP 11.179 - MP 11.753)	55 MPH	4-ft offset from travel way to median gutter (type E) & 6.5- ft offset from travel way to outside gutter (type E curb)	0-ft offset from travel way to median gutter (type F curb) & 4-ft offset from travel way to outside gutter (type F curb)
SB 4 Lane MP 3.372 - MP 3.539	Sta. 541+07.43 to Sta. 550+00.00 (SB)	LT/RT	55 MPH MP 3.372 - MP 3.539)		4-ft offset from travel way to median gutter (type E) & 6.5- ft offset from travel way to outside gutter (type E curb)	0-ft offset from travel way to median gutter (type F curb) & 4-ft offset from travel way to outside gutter (type F curb)
SB 6 Lane MP 3.313 - MP 3.372	Sta. 550+00.00 to Sta. 553+25.00 (SB)	LT/RT	55 MPH MP 3.313 - MP 3.372)		6.5-ft offset from travel way to median gutter (type E curb) & 6.5-ft offset from travel way to outside gutter (type E curb)	0-ft offset from travel way to median gutter (type F curb) & 4-ft offset from travel way to outside gutter (type F curb)

Stationing is based on the baseline of Survey SR 35 NB & SB. Stationing in relation to milepost (MP) is approximate.



Figure 1: Existing median and outside Type F curb and 0-ft offset from the EOTW to median gutter lip and 4-ft offset from the EOTW to outside gutter lip on northbound SR 35.



Figure 2: Existing median and outside Type F curb and 4-ft offset from the EOTW to the outside gutter lip on southbound SR 35. The inside lane is a left turn.

### REVIEW OF CRASH HISTORY:

- The six-year certified data crash history from 2019 to 2024 was reviewed. There were 24 crashes within the applicable limits.
- All available long-form crash reports were reviewed to verify the crash types and locations.
- One crash within the applicable limits included running off the road due to hydroplaning during wet conditions. The incident involved striking the curb; however, this crash was determined not to be attributable to the Type F curb since it was initiated by hydroplaning on the pavement surface.
- Two crashes in the applicable limits included vehicles hitting the curb, leaving the roadway, and coming to rest in the roadside ditch. Type F curb was determined to be attributable to the overturning of these crashes. However, the curb was not the initial cause of the crash. The crash data is in Appendix A-1

### JUSTIFICATION FOR PROPOSED CRITERIA:

- This project is a Resurfacing, Restoration, and Rehabilitation (RRR) project intended to extend the service life of the existing roadway.
- A benefit-cost (B/C) ratio analysis was conducted to evaluate the improvements needed to address the deficient Type F Curb. This analysis resulted in a benefit-cost (B/C) ratio of 0.02. Based on these findings, it is recommended to retain the existing Type F curb and offset. Refer to the appendix for the detailed B/C analysis.
- As there are no anticipated operational, level of service, or safety impacts associated with the current Type F curb and offset, it is recommended that the Department approve the Design Variation.

APPENDIX A – 1. CURB TYPE  
BENEFIT-COST ANALYSIS

**Benefit-Cost Analysis**

District: **One**

County: **06 - Hardee**

Date Prepared: **04/22/25**

Location: **SR 35 FROM N OF SR 64 TO BELL ST. NB and SB lanes**

Section : **06010**

Rdway Type: **2 - 3 Lanes Urban Divided**

Milepost Begin-End:  
MP 11.160 (NB) - MP 11.753 (NB)  
MP 11.179 (NB) - MP 11.753 (SB)  
MP 0.00 - MP 0.364 (NB)

Control Element: **Other (describe in box below)**

Maintain existing Type F curb and offset from edge of travel to gutter lip.

**ANNUAL COST OF IMPROVEMENTS**

Type	Cost	Service Life	Capital Recovery		Total
			Factor		
ROW		100	0.0408	\$	-
P.E.C.E.I.		15	0.0899	\$	-
Structure		75	0.0425	\$	-
Roadway	\$ 2,607,193.47	20	0.0736	\$	191,889.44
Drainage	\$ 786,725.73	20	0.0736	\$	57,903.01
Signal		20	0.0736	\$	-
Other	\$ 678,783.84	20	0.0736	\$	49,958.49
Sub-Total	\$ 4,072,703.04			\$	299,750.94
				Annual Cost = \$	299,750.94

Total number of crashes = 24  
 # of correctable crashes, PC = 3  
 # of years of crash data, YD = 6  
 PC/YD = 0.50  
 Crash reduction factor, CRF = 11.00%  
 CRF x (PC/YD) = 0.06  
 Cost per crash, CPC = \$109,686.00  
 Benefit = \$6,033

Primary crash reduction factor (%): 11  
 CMF ID: 2375, Install Curb  
 Additional crash reduction factor:  
 Additional crash reduction factor:

**BENEFIT/COST RATIO**

$$\frac{\text{Benefit}}{\text{Cost}} = \frac{\$6,032.73}{\$299,750.94} = \mathbf{0.02}$$

Assumptions for Other additional construction cost include MOT (10% of Roadway Subtotal) and Contingency (10% of Roadway Subtotal).

Prepared by: **KES**

APPENDIX B – 1. CURB TYPE

CONSTRUCTION COST TO ELIMINATE DESIGN VARIATION  
ESTIMATE

**ESTIMATE OF CONSTRUCTION COST  
FOR  
TYPE F CURB AND GUTTER REPLACEMENT**

ITEM NO.	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST	
<b>CLEARING/GRUBBING</b>						
110-1-1	CLEARING AND GRUBBING	AC	4.5	\$ 40,972.14	\$ 184,374.63	
110-4	REMOVAL OF EXISTING CONCRETE PAVEMENT	SY	11300	\$ 39.30	\$ 444,090.00	
	<b>CLEARING/GRUBBING &amp; EARTHWORK SUBTOTAL</b>				\$ 628,464.63	
<b>ROADWAY</b>						
160-4	TYPE B STABILIZATION	SY	8842	\$ 9.95	\$ 87,977.90	
285-711	OPTION BASE GROUP 11	SY	6413	\$ 29.23	\$ 187,451.99	
334-1-53	SUPERPAVE ASPHALTIC CONCRETE, TRAFFIC C, PG 76-22	TN	705.3	\$ 160.77	\$ 113,391.08	
337-7-83	ASPH. CONC. FRICTION COURSE, TRF C, FC 12.5, PG 76-22	TN	529	\$ 177.00	\$ 93,633.00	
520-1-7	CONCRETE CURB & GUTTER, TYPE E	LF	16950	\$ 45.69	\$ 774,445.50	
522-1	CONCRETE SIDEWALK, 4"	SY	7533	\$ 78.00	\$ 587,574.00	
522-2	CONCRETE SIDEWALK, 6"	SY	685	\$ 129.00	\$ 88,365.00	
575-1-2	PERFORMANCE TURF, SOD	SY	10359	\$ 4.43	\$ 45,890.37	
	<b>ROADWAY SUBTOTAL</b>				\$ 1,978,728.84	
425-1-351	INLETS, CURB, TYPE P-5, <10'	EA	29	\$ 14,370.18	\$ 416,735.22	
425-1-361	INLETS, CURB, TYPE P-6, <10'	EA	4	\$ 11,795.12	\$ 47,180.48	
425-2-43	MANHOLES, P-7, PARTIAL	EA	1	\$ 4,201.14	\$ 4,201.14	
425--2-41	MANHOLES, P-7, <10'	EA	31	\$ 9,351.99	\$ 289,911.69	
430-175-118	PIPE CULVERT, OPTIONAL MATERIAL, ROUND, 18" S/CD	LF	115	\$ 173.79	\$ 19,985.85	
430-175-124	PIPE CULVERT, OPTIONAL MATERIAL, ROUND, 24" S/CD	LF	35	\$ 166.01	\$ 5,810.35	
430-175-142	PIPE CULVERT, OPTIONAL MATERIAL, ROUND, 42" S/CD	LF	10	\$ 290.10	\$ 2,901.00	
	<b>DRAINAGE SUBTOTAL</b>				\$ 786,725.73	
	<b>PROJECT SUBTOTAL</b>				\$ 3,393,919.20	
<b>PROJECT TOTAL</b>				<b>SUBTOTAL</b>	\$ 3,393,919.20	
				MOBILIZATION (10%)	\$ 339,391.92	
				MOT (10%)	\$ 339,391.92	
				<b>TOTAL INCREASE IN COST</b>	\$ 4,072,703.04	

Note: Unit Costs sourced from Historical Item Averages Statewide 6 Months (Updated 3/24/25)

APPENDIX C – 1. CURB TYPE

CRASH DATA

Attributable Crash (Overturned vehicle after striking Type F curb) within limits of design variation

Non-Attributable crash within limits of design variation (Hydroplaning)

Other crashes within the limits of design variation

CRASH NUMBER	MILE POST	CRASH DATE	SITE LOCATION	LIGHT CONDITION	WEATHER CONDITION	MANNER OF COLLISION	NUMBER OF FATALITIES
24229284	11.445	8/25/2021	Not at Intersection	Dark - Not Lighted	Clear		0
24229548	11.194	7/29/2022	Not at Intersection	Dark - Lighted	Clear		0
89612221	11.571	4/24/2023	Not at Intersection	Daylight	Clear	Other	0
80807063	3.439	8/18/2023	Not at Intersection	Daylight	Rain		0
24980149	3.482	11/20/2022	Not at Intersection	Daylight	Rain	Other	0
24229312	0.155	10/4/2021	Not at Intersection	Daylight	Clear		0
80807034	11.487	7/5/2023	Not at Intersection	Daylight	Rain	Front to Rear	0
80806692	11.447	6/24/2020	Not at Intersection	Daylight	Clear	Other	0
26499525	11.288	6/12/2024	Not at Intersection	Daylight	Rain	Front to Rear	0
80806595	11.297	2/7/2020	Four-Way Intersection	Daylight	Clear	Front to Rear	0
80806895	11.218	12/5/2022	Not at Intersection	Dark - Lighted	Clear	Sideswipe, Same Direction	0
24229514	11.206	5/25/2022	Not at Intersection	Daylight	Clear	Sideswipe, Same Direction	0
26323275	3.467	5/3/2024	Not at Intersection	Daylight	Clear	Sideswipe, Same Direction	0
88383879	3.510	9/5/2020	Not at Intersection	Dark - Not Lighted	Cloudy	Sideswipe, Same Direction	0
26499554	11.189	8/12/2024	Not at Intersection	Daylight	Clear	Sideswipe, Same Direction	0
80806747	3.438	9/5/2020	Not at Intersection	Daylight	Clear	Front to Rear	0
24229547	0.040	7/27/2022	Not at Intersection	Daylight	Clear	Sideswipe, Same Direction	0
80806835	11.191	9/18/2022	Four-Way Intersection	Daylight	Clear	Front to Rear	0
80806936	11.198	2/11/2023	Not at Intersection	Daylight	Clear	Front to Rear	0
80806433	11.181	7/25/2019	Not at Intersection	Daylight	Rain	Front to Rear	0
80806452	11.177	8/26/2019	Not at Intersection	Dark - Lighted	Clear	Front to Rear	0
80806817	11.542	8/18/2022	Not at Intersection	Daylight	Rain		0
26400249	11.712	9/16/2024	Not at Intersection	Dawn	Clear	Other	0
88351651	3.518	7/26/2020	Not at Intersection	Dark - Not Lighted	Rain	Other	0

## 2. TURN LANE LENGTH

### DESIGN CRITERIA VERSUS PROPOSED DESIGN:

- FDOT CRITERIA:
  - The 2025 FDOT Design Manual (FDM), Chapter 212, section 212.14.1, Exhibit 212-1 specifies the following:
    - Total Deceleration Distance for a 55 MPH Design Speed is 350 ft.
- PROPOSED DESIGN:
  - Existing left turn lane lengths within the project limits specified below will remain in place.

### LIMITS APPLICABLE:

MP	Station Limits	Side	Design Speed	Post Speed & Target Speed	FDOT Design Criteria	Proposed Design
MP 11.211 - MP 11.259	Sta. 1094+10.00 to Sta. 1096+60.00 (NB)	LT	45 MPH	55 MPH	350 FT	250 FT
MP 11.700 - MP 11.745	Sta. 1119+90.00 to Sta. 1122+30.00 (NB)	LT	45 MPH	55 MPH	350 FT	240 FT
MP 0.160 - MP 0.209	Sta. 1131+13.00 to Sta. 1133+71.00 (NB)	LT	45 MPH	55 MPH	350 FT	258 FT

Stationing is based on the baseline of Survey SR 35 NB. Stationing in relation to milepost (MP) is approximate.



Figure 1: Existing turn lane 3,025 feet north of SR 64 in the northbound lanes of SR 35.

#### REVIEW OF CRASH HISTORY:

- The six-year crash history from 2019 to 2024 was reviewed.
- All available long-form crash reports were reviewed to verify the crash types and locations.
- There were a total of 24 crashes within the applicable limits. There were no crashes within the applicable limits of this variation that occurred with the turn lanes.

#### JUSTIFICATION FOR PROPOSED CRITERIA:

- This project is a Resurfacing, Restoration, and Rehabilitation (RRR) project intended to extend the service life of the existing roadway.
- A benefit-cost ratio for the improvements to extend the turn lanes would result in a B/C ratio of zero, since there were no crashes found to be attributed to the current turn lane lengths in the analysis of the most recent six-year crash history
- As there are no anticipated operational, level of service, or safety impacts associated with the current turn lane lengths, it is recommended that the Department approve the Design Variation.

APPENDIX A – 2. TURN LANE LENGTHS

CRASH DATA

All crashes within the limits of design variation. (not attributable to turn lanes)

CRASH NUMBER	MILE POST	CRASH DATE	SITE LOCATION	LIGHT CONDITION	WEATHER CONDITION	MANNER OF COLLISION	NUMBER OF FATALITIES
24229284	11.445	8/25/2021	Not at Intersection	Dark - Not Lighted	Clear		0
24229548	11.194	7/29/2022	Not at Intersection	Dark - Lighted	Clear		0
89612221	11.571	4/24/2023	Not at Intersection	Daylight	Clear	Other	0
80807063	3.439	8/18/2023	Not at Intersection	Daylight	Rain		0
24980149	3.482	11/20/2022	Not at Intersection	Daylight	Rain	Other	0
24229312	0.155	10/4/2021	Not at Intersection	Daylight	Clear		0
80807034	11.487	7/5/2023	Not at Intersection	Daylight	Rain	Front to Rear	0
80806692	11.447	6/24/2020	Not at Intersection	Daylight	Clear	Other	0
26499525	11.288	6/12/2024	Not at Intersection	Daylight	Rain	Front to Rear	0
80806595	11.297	2/7/2020	Four-Way Intersection	Daylight	Clear	Front to Rear	0
80806895	11.218	12/5/2022	Not at Intersection	Dark - Lighted	Clear	Sideswipe, Same Direction	0
24229514	11.206	5/25/2022	Not at Intersection	Daylight	Clear	Sideswipe, Same Direction	0
26323275	3.467	5/3/2024	Not at Intersection	Daylight	Clear	Sideswipe, Same Direction	0
88383879	3.510	9/5/2020	Not at Intersection	Dark - Not Lighted	Cloudy	Sideswipe, Same Direction	0
26499554	11.189	8/12/2024	Not at Intersection	Daylight	Clear	Sideswipe, Same Direction	0
80806747	3.438	9/5/2020	Not at Intersection	Daylight	Clear	Front to Rear	0
24229547	0.040	7/27/2022	Not at Intersection	Daylight	Clear	Sideswipe, Same Direction	0
80806835	11.191	9/18/2022	Four-Way Intersection	Daylight	Clear	Front to Rear	0
80806936	11.198	2/11/2023	Not at Intersection	Daylight	Clear	Front to Rear	0
80806433	11.181	7/25/2019	Not at Intersection	Daylight	Rain	Front to Rear	0
80806452	11.177	8/26/2019	Not at Intersection	Dark - Lighted	Clear	Front to Rear	0
80806817	11.542	8/18/2022	Not at Intersection	Daylight	Rain		0
26400249	11.712	9/16/2024	Not at Intersection	Dawn	Clear	Other	0
88351651	3.518	7/26/2020	Not at Intersection	Dark - Not Lighted	Rain	Other	0

### 3. LATERAL OFFSET

**DESIGN CRITERIA VERSUS PROPOSED DESIGN:**

- **FDOT CRITERIA**
  - Per the FDM Table 215.2.2, the RRR minimum lateral offset distance for trees located on a curbed roadway with a speed limit of 45 mph where the diameter is or is expected to be > 4 inches measured 6 inches above the ground is 1.5 feet.
- **PROPOSED DESIGN**
  - Sixteen trees are located within the project limits that have a diameter greater than 4 inches and are located 1.5 feet or less from the face of curb.

**LIMITS APPLICABLE**

LOCATION STA. (MILEPOST)	SIDE	DESIGN SPEED	FDOT REQUIRED LATERAL OFFSET TREES	PROPOSED LATERAL OFFSET TREES	REMARKS
688+50 (MP 0.746)	L	45 MPH	1.5 Feet	≤1.5 Feet	Measured From Face of Curb
688+75 (MP 0.743)	R	45 MPH	1.5 Feet	≤1.5 Feet	Measured From Face of Curb
688+75 (MP 0.741)	L	45 MPH	1.5 Feet	≤1.5 Feet	Measured From Face of Curb
689+28 (MP 0.731)	R	45 MPH	1.5 Feet	≤1.5 Feet	Measured From Face of Curb
689+37 (MP 0.729)	R	45 MPH	1.5 Feet	≤1.5 Feet	Measured From Face of Curb
689+60 (MP 0.725)	L	45 MPH	1.5 Feet	≤1.5 Feet	Measured From Face of Curb
689+90 (MP 0.719)	R	45 MPH	1.5 Feet	≤1.5 Feet	Measured From Face of Curb
690+14 (MP 0.715)	L	45 MPH	1.5 Feet	≤1.5 Feet	Measured From Face of Curb
690+15 (MP 0.714)	R	45 MPH	1.5 Feet	≤1.5 Feet	Measured From Face of Curb
693+60 (MP 0.706)	R	45 MPH	1.5 Feet	≤1.5 Feet	Measured From Face of Curb
693+80 (MP 0.645)	R	45 MPH	1.5 Feet	≤1.5 Feet	Measured From Face of Curb
694+00 (MP 0.642)	R	45 MPH	1.5 Feet	≤1.5 Feet	Measured From Face of Curb
694+23 (MP 0.637)	L	45 MPH	1.5 Feet	≤1.5 Feet	Measured From Face of Curb
694+62 (MP 0.630)	L	45 MPH	1.5 Feet	≤1.5 Feet	Measured From Face of Curb
697+73 (MP 0.628)	L	45 MPH	1.5 Feet	≤1.5 Feet	Measured From Face of Curb
699+36 (MP 0.540)	R	45 MPH	1.5 Feet	≤1.5 Feet	Measured From Face of Curb

Stationing is based on the baseline of Survey SR 35 SB. Stationing in relation to milepost (MP) is approximate.



**Figure 1 - Landscaped tree plantings within the clear zone along southbound SR 35 (US 17), from N of SR 64 to Bell St.**

**REVIEW OF CRASH HISTORY:**

- The 6-year crash history from 2019 to 2024 was reviewed. There was a total of 31 crashes within the variation limits.
- All available long form crash reports were reviewed to verify the crash types and locations.
- There were no lane departure crashes resulting in crashes with trees.

**JUSTIFICATION FOR PROPOSED CRITERIA:**

- This project is a Resurfacing, Restoration, and Rehabilitation (RRR) project that is intended to extend the service life of the existing roadway.
- As none of the crashes could be attributed to the deficient lateral offset, no long- or short-term adverse impacts are anticipated on safety if the lateral offset is maintained.
- A Benefit/Cost analysis for the relocation the trees would result in a B/C ratio of 0 (zero) since there were no crashes found to be attributed to the deficient lateral offset in the analysis of the most recent six-year crash history.
- As there are no anticipated operational, level of service, or safety impacts associated with the current lateral offset of the trees, it is recommended that the Department approve the Design Variation.

APPENDIX A – 3. LATERAL OFFSET

CRASH DATA

All crashes within the limits of design variation. (not attributable to lateral offset)

CRASH NUMBER	MILE POST	CRASH DATE	SITE LOCATION	LIGHT CONDITION	WEATHER CONDITION	MANNER OF COLLISION	NUMBER OF FATALITIES
89452914	0.594	2/3/2022	Four-Way Intersection	Dark - Lighted	Clear	Angle	0
26220717	0.660	3/18/2024	Not at Intersection	Daylight	Cloudy	Sideswipe, Same Direction	0
82310356	0.686	12/15/2020	Four-Way Intersection	Daylight	Cloudy	Front to Rear	0
89453099	0.680	11/22/2022	Not at Intersection	Dark - Lighted	Clear	Sideswipe, Same Direction	0
89453222	0.714	7/30/2023	Not at Intersection	Daylight	Clear	Sideswipe, Same Direction	0
26220727	0.731	4/15/2024	Not at Intersection	Daylight	Clear	Sideswipe, Same Direction	0
82310462	0.689	7/15/2021	Other	Daylight	Clear	Angle	0
89452966	0.682	4/18/2022	Four-Way Intersection	Daylight	Cloudy	Sideswipe, Same Direction	0
89452957	N/A	4/2/2022	Four-Way Intersection	Daylight	Cloudy	Angle	0
89452908	0.690	1/28/2022	Four-Way Intersection	Daylight	Cloudy	Angle	0
89452830	0.691	10/10/2021	Four-Way Intersection	Daylight	Clear	Angle	0
89453005	0.680	7/2/2022	T-Intersection	Daylight	Clear	Angle	0
89453145	0.692	2/23/2023	Four-Way Intersection	Daylight	Clear	Angle	0
89452857	0.691	11/20/2021	Four-Way Intersection	Daylight	Cloudy	Sideswipe, Same Direction	0
82310113	0.687	7/12/2019	Four-Way Intersection	Daylight	Clear	Angle	0
89452898	0.703	1/15/2022	Four-Way Intersection	Daylight	Clear	Sideswipe, Same Direction	0
89452828	0.599	10/6/2021	Not at Intersection	Daylight	Clear	Sideswipe, Same Direction	0
89452824	0.600	9/30/2021	Four-Way Intersection	Daylight	Clear	Angle	0
89453123	0.581	1/27/2023	Not at Intersection	Daylight	Clear	Front to Rear	0
26220808	0.587	9/30/2024	Not at Intersection	Daylight	Clear	Sideswipe, Same Direction	0
89452889	0.604	1/4/2022	Four-Way Intersection	Daylight	Clear	Angle	0
82310405	0.601	2/26/2021	Four-Way Intersection	Daylight	Clear	Sideswipe, Same Direction	0
89453036	0.598	8/29/2022	Four-Way Intersection	Daylight	Clear	Angle	0
82310369	0.607	1/11/2021	Four-Way Intersection	Daylight	Clear	Angle	0
89453165	0.614	4/1/2023	Not at Intersection	Daylight	Clear	Angle	0
26220764	0.614	6/18/2024	Other	Daylight	Cloudy	Sideswipe, Same Direction	0
82310309	0.642	9/25/2020	Not at Intersection	Daylight	Clear	Angle	0
89453116	0.765	1/6/2023	Not at Intersection	Daylight	Clear	Sideswipe, Same Direction	0
82310498	0.760	9/15/2021	Four-Way Intersection	Daylight	Clear	Sideswipe, Same Direction	0
89452932	0.708	2/28/2022	Four-Way Intersection	Daylight	Clear	Sideswipe, Same Direction	0
82310483	0.545	8/19/2021	Not at Intersection	Daylight	Clear	Front to Rear	0

## 4. CONTROL ZONE

### DESIGN CRITERIA VERSUS PROPOSED DESIGN:

- **FDOT CRITERIA**
  - Per the FDM Figure 215.2.11, the minimum control zone offset distance from a driveway flare is 3 feet for trees with a diameter > 4 inches measured 6 inches above the ground.
- **PROPOSED DESIGN**
  - Four trees are located within the project limits that have a diameter greater than 4 inches and are located 3 feet or less from a driveway flare.

### LIMITS APPLICABLE

LOCATION STA. (MILEPOST)	SIDE	DESIGN SPEED	FDOT REQUIRED DRIVEWAY CONTROL ZONE OFFSET - TREES	PROPOSED CONTROL ZONE OFFSET - TREES	REMARKS
688+50 (MP 0.746)	L	45 MPH	3 Feet	≤3 Feet	Measured From Driveway Flare
688+75 (MP 0.741)	L	45 MPH	3 Feet	≤3 Feet	Measured From Driveway Flare
690+15 (MP 0.714)	R	45 MPH	3 Feet	≤3 Feet	Measured From Driveway Flare
698+72 (MP 0.552)	R	45 MPH	3 Feet	≤3 Feet	Measured From Driveway Flare

Stationing is based on the baseline of Survey SR 35 SB. Stationing in relation to milepost (MP) is approximate.



**Figure 1 - Landscaped tree plantings within the control zone along southbound SR 35 (US 17), from N of SR 64 to Bell St.**

**REVIEW OF CRASH HISTORY:**

- The 6-year crash history from 2019 to 2024 was reviewed. There was a total of 30 crashes within the variation limits.
- All available long form crash reports were reviewed to verify the crash types and locations.
- There were no lane departure crashes resulting in crashes with trees.

**JUSTIFICATION FOR PROPOSED CRITERIA:**

- This project is a Resurfacing, Restoration, and Rehabilitation (RRR) project that is intended to extend the service life of the existing roadway.
- As none of the crashes could be attributed to the deficient control zone offset, no long- or short-term adverse impacts are anticipated on safety if the control zone offset is maintained.
- A Benefit/Cost analysis for the relocation the trees would result in a B/C ratio of 0 (zero) since there were no crashes found to be attributed to the deficient control zone offset in the analysis of the most recent six-year crash history.
- As there are no anticipated operational, level of service, or safety impacts associated with the current control zone offset of the trees, it is recommended that the Department approve the Design Variation.

APPENDIX A – 4. CONTROL ZONE

CRASH DATA

All crashes within the limits of design variation. (not attributable to control zone)

CRASH NUMBER	MILE POST	CRASH DATE	SITE LOCATION	LIGHT CONDITION	WEATHER CONDITION	MANNER OF COLLISION	NUMBER OF FATALITIES
89452914	0.594	2/3/2022	Four-Way Intersection	Dark - Lighted	Clear	Angle	0
26220717	0.660	3/18/2024	Not at Intersection	Daylight	Cloudy	Sideswipe, Same Direction	0
82310356	0.686	12/15/2020	Four-Way Intersection	Daylight	Cloudy	Front to Rear	0
89453099	0.680	11/22/2022	Not at Intersection	Dark - Lighted	Clear	Sideswipe, Same Direction	0
89453222	0.714	7/30/2023	Not at Intersection	Daylight	Clear	Sideswipe, Same Direction	0
26220727	0.731	4/15/2024	Not at Intersection	Daylight	Clear	Sideswipe, Same Direction	0
82310462	0.689	7/15/2021	Other	Daylight	Clear	Angle	0
89452966	0.682	4/18/2022	Four-Way Intersection	Daylight	Cloudy	Sideswipe, Same Direction	0
89452957	N/A	4/2/2022	Four-Way Intersection	Daylight	Cloudy	Angle	0
89452908	0.690	1/28/2022	Four-Way Intersection	Daylight	Cloudy	Angle	0
89452830	0.691	10/10/2021	Four-Way Intersection	Daylight	Clear	Angle	0
89453005	0.680	7/2/2022	T-Intersection	Daylight	Clear	Angle	0
89453145	0.692	2/23/2023	Four-Way Intersection	Daylight	Clear	Angle	0
89452857	0.691	11/20/2021	Four-Way Intersection	Daylight	Cloudy	Sideswipe, Same Direction	0
82310113	0.687	7/12/2019	Four-Way Intersection	Daylight	Clear	Angle	0
89452898	0.703	1/15/2022	Four-Way Intersection	Daylight	Clear	Sideswipe, Same Direction	0
89452828	0.599	10/6/2021	Not at Intersection	Daylight	Clear	Sideswipe, Same Direction	0
89452824	0.600	9/30/2021	Four-Way Intersection	Daylight	Clear	Angle	0
89453123	0.581	1/27/2023	Not at Intersection	Daylight	Clear	Front to Rear	0
26220808	0.587	9/30/2024	Not at Intersection	Daylight	Clear	Sideswipe, Same Direction	0
89452889	0.604	1/4/2022	Four-Way Intersection	Daylight	Clear	Angle	0
82310405	0.601	2/26/2021	Four-Way Intersection	Daylight	Clear	Sideswipe, Same Direction	0
89453036	0.598	8/29/2022	Four-Way Intersection	Daylight	Clear	Angle	0
82310369	0.607	1/11/2021	Four-Way Intersection	Daylight	Clear	Angle	0
89453165	0.614	4/1/2023	Not at Intersection	Daylight	Clear	Angle	0
26220764	0.614	6/18/2024	Other	Daylight	Cloudy	Sideswipe, Same Direction	0
82310309	0.642	9/25/2020	Not at Intersection	Daylight	Clear	Angle	0
89453116	0.765	1/6/2023	Not at Intersection	Daylight	Clear	Sideswipe, Same Direction	0
82310498	0.760	9/15/2021	Four-Way Intersection	Daylight	Clear	Sideswipe, Same Direction	0
89452932	0.708	2/28/2022	Four-Way Intersection	Daylight	Clear	Sideswipe, Same Direction	0

## 5. ROADSIDE SLOPE

### DESCRIPTION:

The intent of this project is to rehabilitate the existing asphalt pavement by milling and resurfacing SR 35 from N. of SR 64 (MP 11.160 NB / MP 11.179 SB) to S. of Bell St. (MP 3.445 NB / MP 0.017 SB) in Hardee County. The typical section diverges to one-way pairs (OWP) beginning north of the RV Park Entrance (MP 11.753). The MP limits for the NB OWP is MP 0.000 (RV Park Entrance) to MP 3.445 (S. of Bell St.). The MP limits for the SB OWP is MP 0.017 (S. of Bell St.) to MP 3.539 (RV Park Entrance). Additionally, the project includes concrete sidewalk construction to fill in gaps. SR 35 is classified as a principal arterial and is a Strategic Intermodal System (SIS) facility. The typical section and project controls vary within the project limits. The below characteristics apply to the limits of the Design Variation.

- Flush shoulder typical section
- Context Classification: C3C suburban commercial
- Design Speed: 55 mph
- Posted Speed: 55 mph
- Target Speed: 55 mph

This Design Variation Memorandum requests 1:4 (recoverable) front slopes within the clear zone (new construction criteria) at isolated proposed sidewalk locations.

### DESIGN CRITERIA VERSUS PROPOSED DESIGN:

- FDOT CRITERIA:
  - The 2025 FDOT Design Manual (FDM), Chapter 215, Section 215.2.6 and Table 215.2.3 specifies the following:
    - Flush shoulder roadways with 0 -5 feet height of fill should have a front slope of 1:6.
- PROPOSED DESIGN:
  - The proposed design includes 1:4 (recoverable/traversable) front slopes within the 30-foot clear zone in isolated constrained areas of proposed sidewalk. The 1:4 front slopes will be located behind the proposed sidewalk and in front of the roadside ditches. These isolated areas are constrained due to the limited right-of-way and adjacent roadside ditch.
  - The existing front slopes within these limits vary from 1:5 to 1:10.

LIMITS APPLICABLE:

MP	Station Limits	Length (ft)	Design/Posted/Target Speed	Existing Roadside Slope (Approx.)	FDOT Roadside Slope Design Criteria	Proposed Roadside Slope Design
NB OWP (3-lane) MP 0.357- MP 0.432	Sta. 1141+50.00 to Sta. 1145+50.00 (NB)	400	55 MPH	1:5	1:6	1:4
NB OWP (3-lane) MP 0.517- MP 0.839	Sta. 1150+00.00 to Sta. 1167+00.00 (NB)	1,700	55 MPH	1:10	1:6	1:4
SB OWP (3-lane) MP 2.982 – MP 2.934	Sta. 570+50.00 to Sta. 573+00.00 (SB)	250	55 MPH	1:6	1:6	1:4

REVIEW OF CRASH HISTORY RELATED TO ROADSIDE SLOPE:


- The six-year certified data crash history from 2019 to 2024 was reviewed. There were two crashes within the applicable limits.
- All available long-form crash reports were reviewed to verify the crash types and locations.
- One crash involved striking a deer. The other crash involved a careless rear-end.
- It was determined that the two crashes are not attributable to roadside slope.

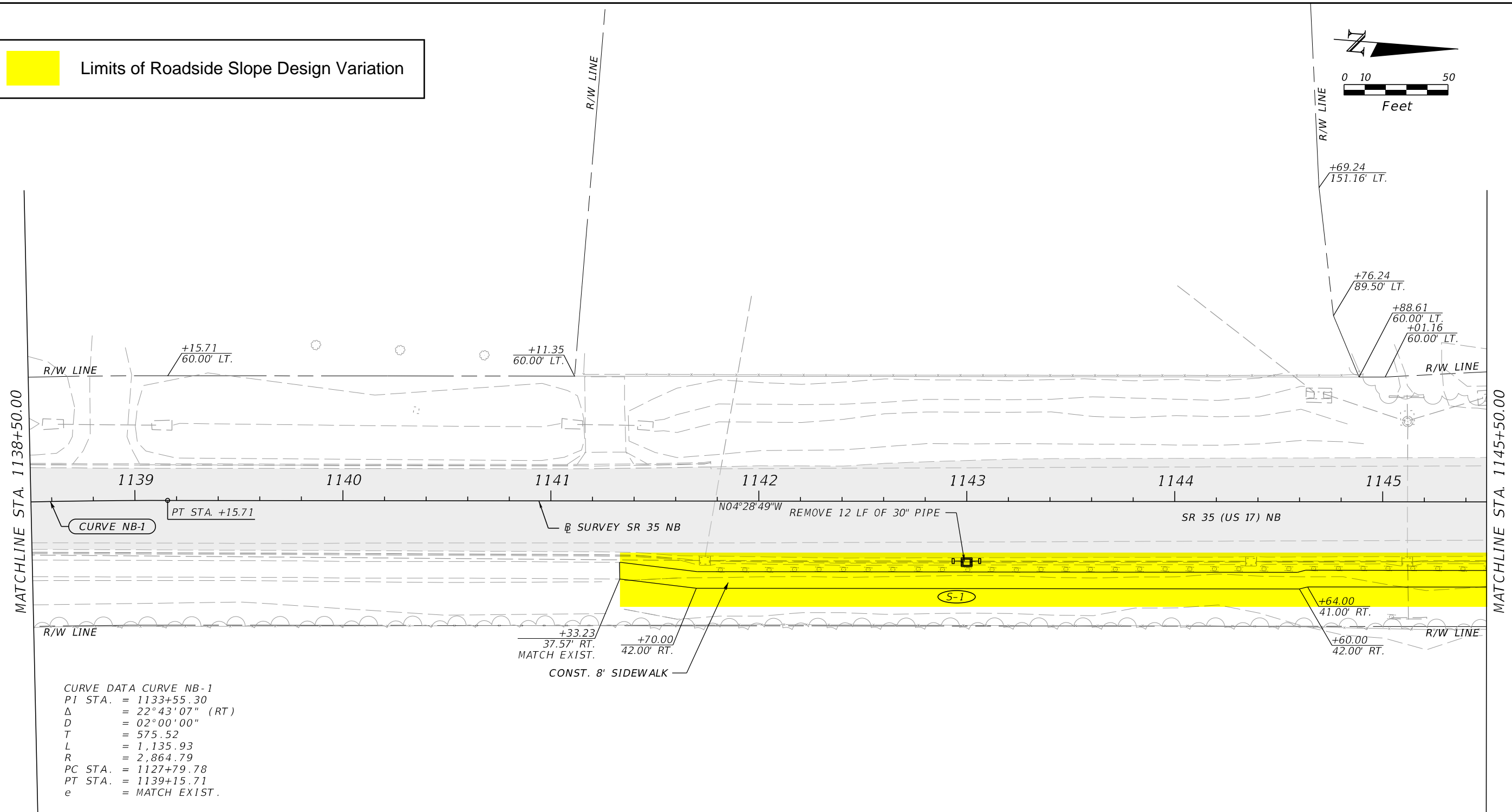
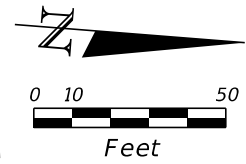
JUSTIFICATION FOR PROPOSED CRITERIA:

- FDM section 215.2.3 defines clear zone as the sum of all recoverable slopes. FDM section 215.2.2 classifies a 1:4 or flatter slope as a recoverable/traversable slope, which is allowable within the clear zone, as shown in Figure 215.2.2.
- Additionally, the AASHTO Roadside Design Guide (AASHTO RDG) classifies a 1:4 or flatter slope as recoverable.
- The proposed design includes 1:4 side slopes (recoverable/traversable) within the clear zone (new construction criteria) at isolated proposed sidewalk locations. This proposed roadside slope is noncompliant with FDM roadside slope criteria, but it provides a feasible solution without adversely impacting the roadway safety, as the proposed slope is recoverable/traversable.
- Alternative design includes R/W acquisition to allow for flatter slopes and maintaining the existing roadside ditches. Roadside barrier is not warranted, as the proposed 1:4 side slopes are recoverable/traversable.
- The crash history review determined that there were no attributable crashes to roadside slope.
- Approval is recommended of the roadside slope Design Variation for the limits identified.

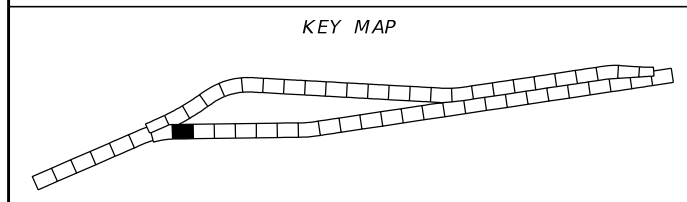
APPENDIX A – 5. ROADSIDE SLOPE


APPLICABLE LIMITS PLAN SHEETS

 Limits of Roadside Slope Design Variation




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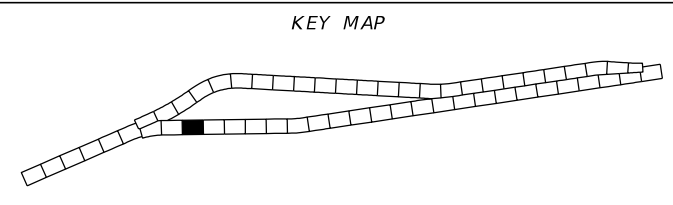
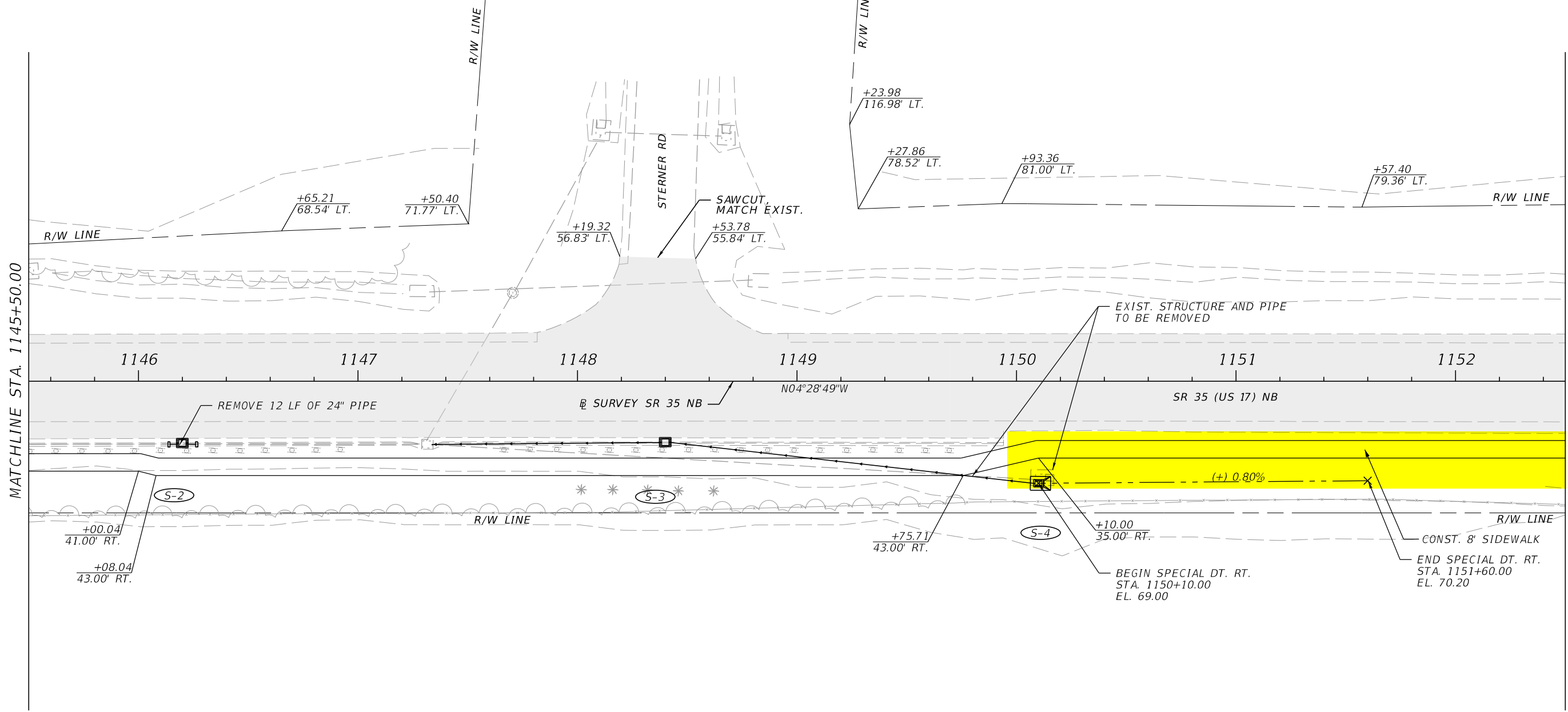
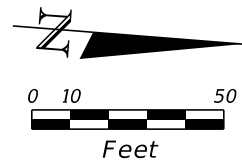



**LEGEND**  
 PAVEMENT MILLING & RESURFACING

REVISIONS				ENGINEER OF RECORD		STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			ROADWAY PLAN (8)	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION	CODY BAYER, P.E. LICENSE NUMBER: 90812 DRMP, INC. 941 LAKE BALDWIN LANE ORLANDO, FL 32814		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
						SR 35	HARDEE	446205-1-52-01		

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

 Limits of Roadside Slope Design Variation



LEGEND	
	PAVEMENT MILLING & RESURFACING

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION


ENGINEER OF RECORD  
 CODY BAYER, P.E.  
 LICENSE NUMBER: 90812  
 DRMP, INC.  
 941 LAKE BALDWIN LANE  
 ORLANDO, FL 32814

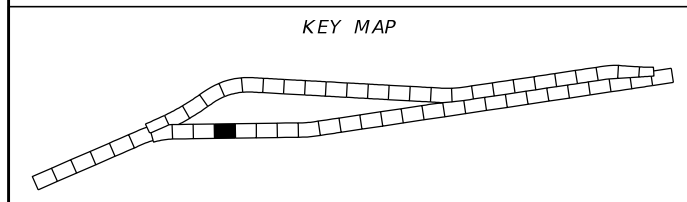
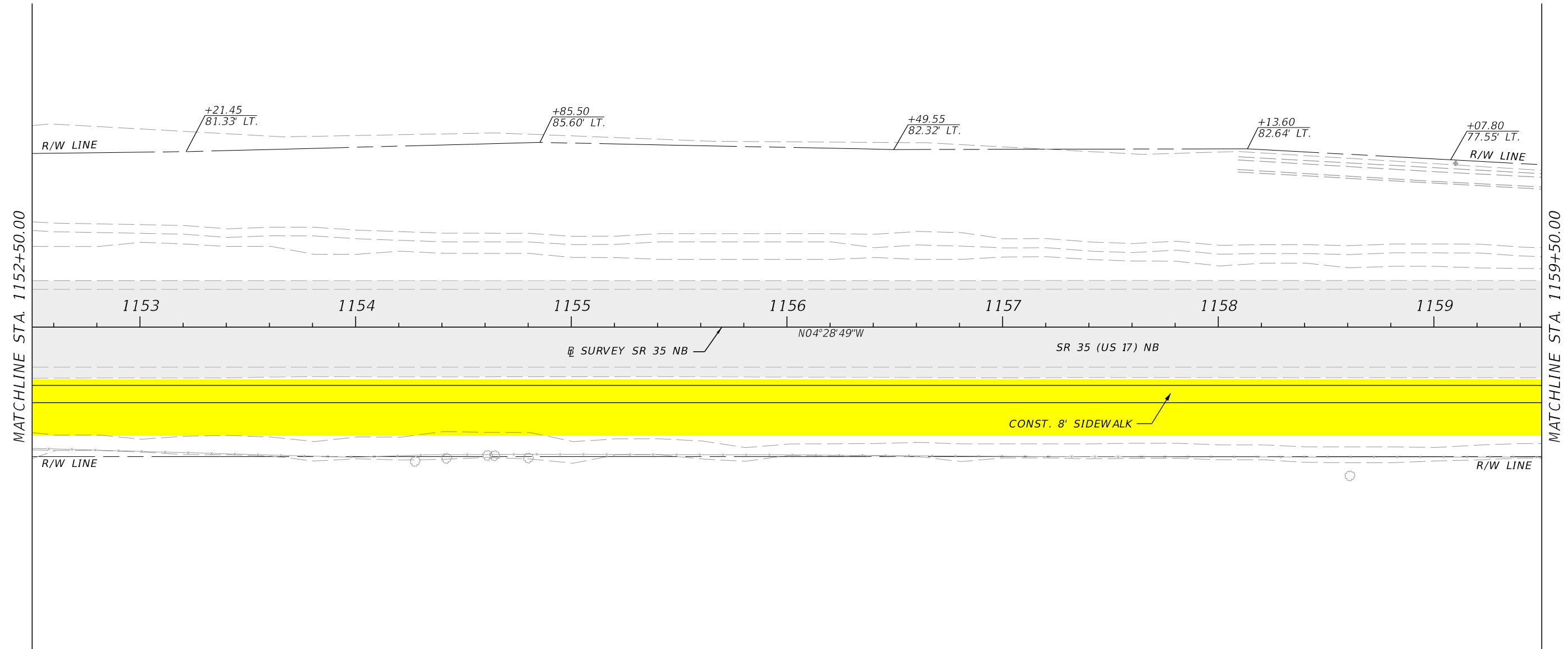
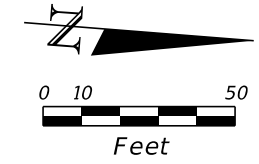
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 35	HARDEE	446205-1-52-01

**ROADWAY PLAN (9)**


SHEET NO.

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

 Limits of Roadside Slope Design Variation



**LEGEND**

 PAVEMENT MILLING & RESURFACING

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**ENGINEER OF RECORD**

CODY BAYER, P.E.  
 LICENSE NUMBER: 90812  
 DRMP, INC.  
 941 LAKE BALDWIN LANE  
 ORLANDO, FL 32814

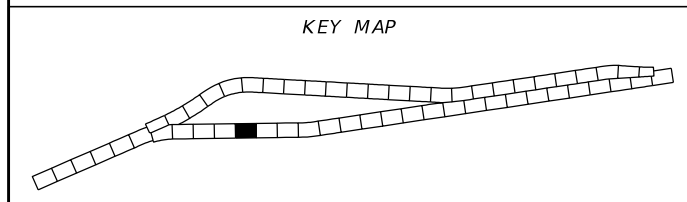
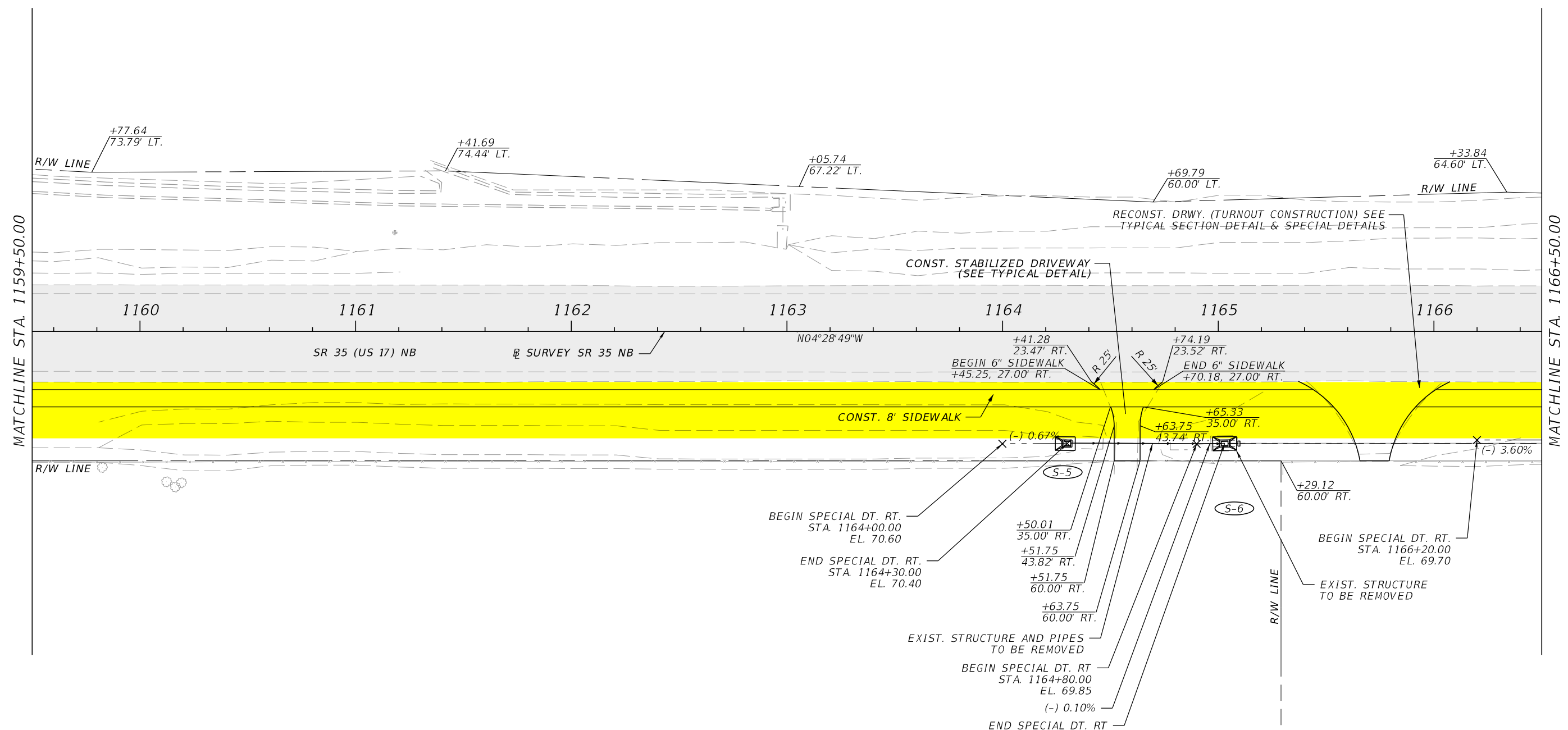
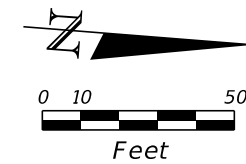
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 35	HARDEE	446205-1-52-01

**ROADWAY PLAN (10)**

SHEET NO.

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

**Limits of Roadside Slope Design Variation**



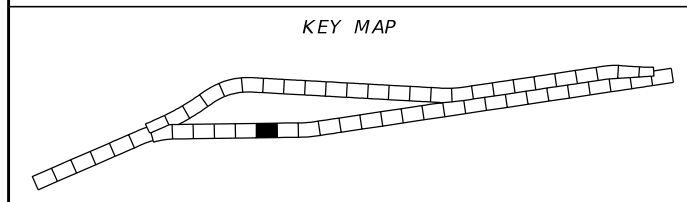
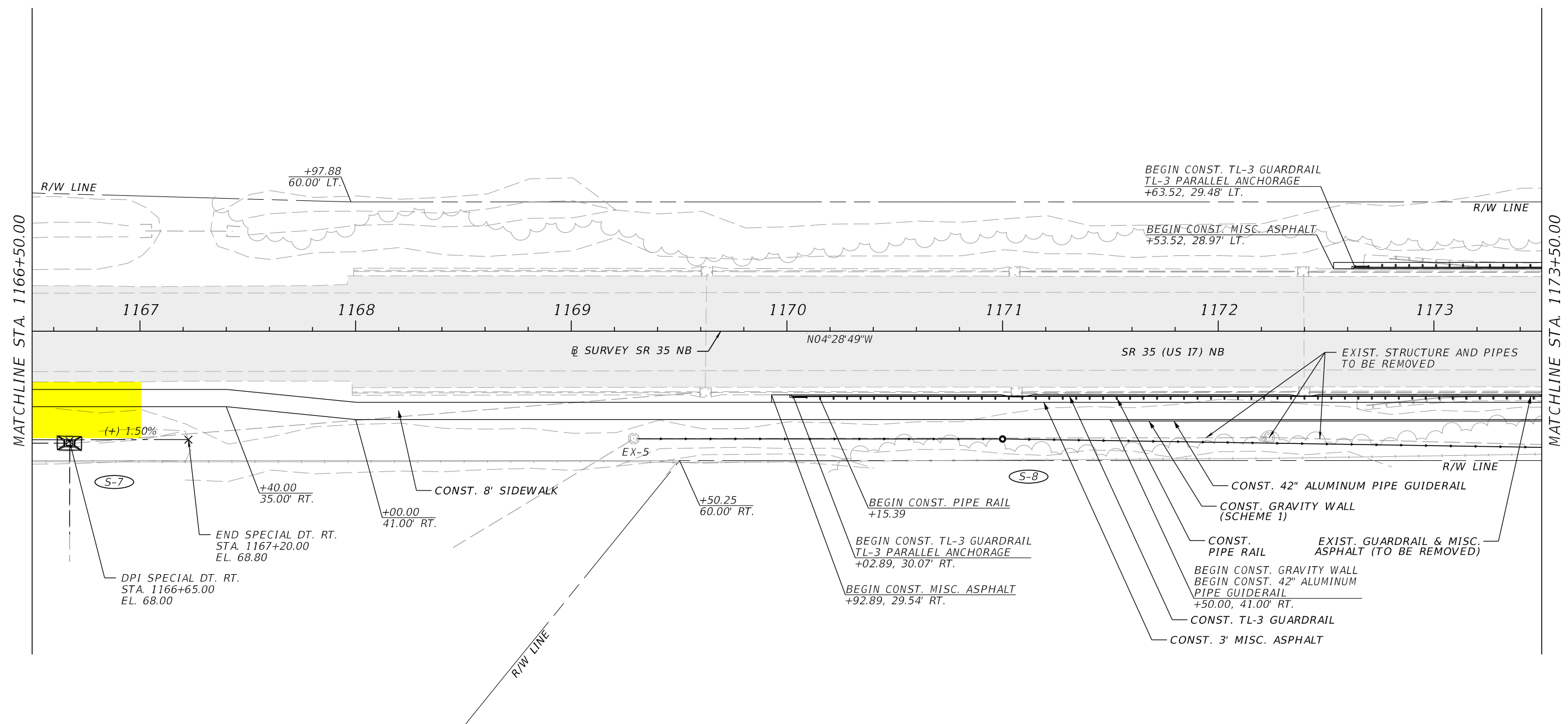
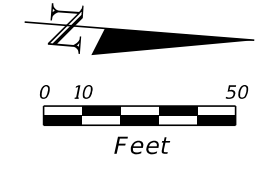
**LEGEND**

	PAVEMENT MILLING & RESURFACING
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REVISIONS				ENGINEER OF RECORD		STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			ROADWAY PLAN (11)	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION	CODY BAYER, P.E. LICENSE NUMBER: 90812 DRMP, INC. 941 LAKE BALDWIN LANE ORLANDO, FL 32814		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
						SR 35	HARDEE	446205-1-52-01		

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**Limits of Roadside Slope Design Variation**



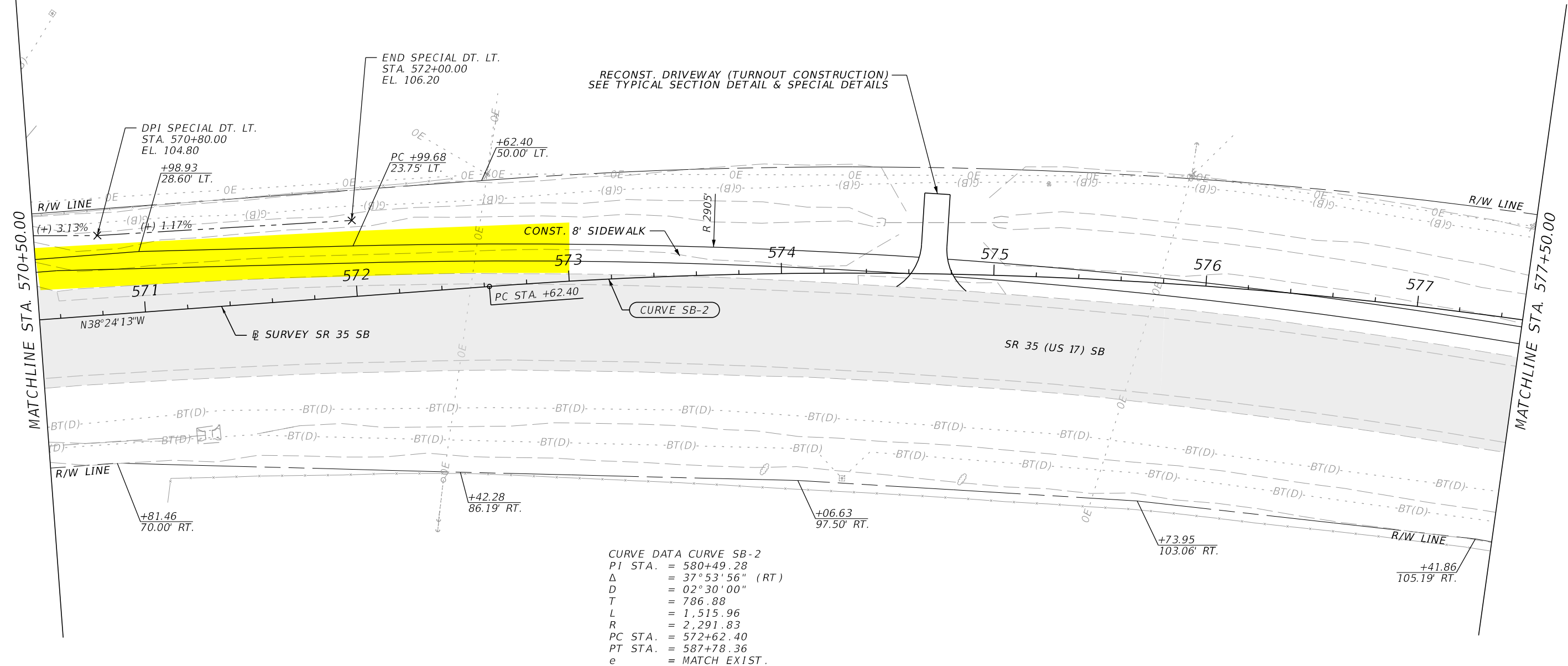
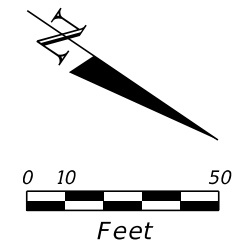
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	PAVEMENT MILLING & RESURFACING
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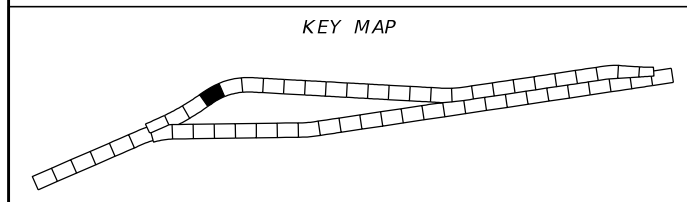
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DATE	DESCRIPTION	DATE	DESCRIPTION	CODY BAYER, P.E. LICENSE NUMBER: 90812 DRMP, INC. 941 LAKE BALDWIN LANE ORLANDO, FL 32814		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
						SR 35	HARDEE	446205-1-52-01		

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**Limits of Roadside Slope Design Variation**



**CURVE DATA CURVE SB-2**  
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 PT STA. = 587+78.36  
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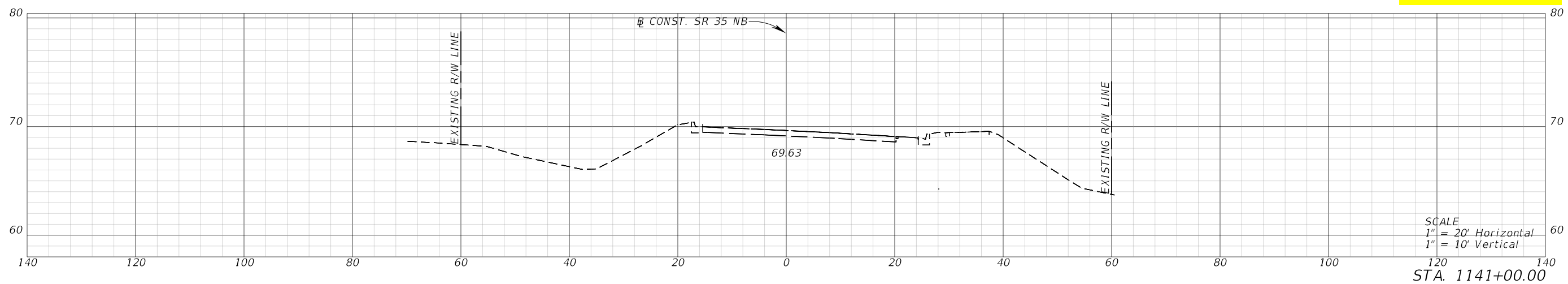
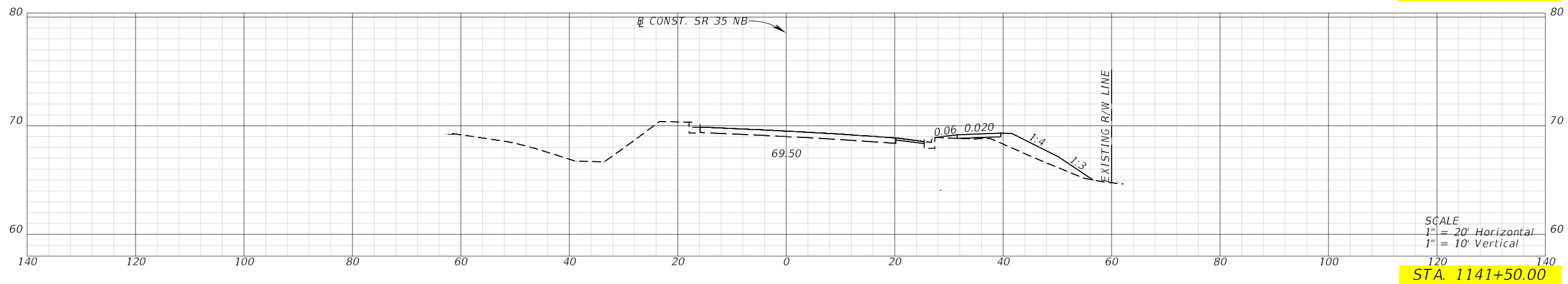
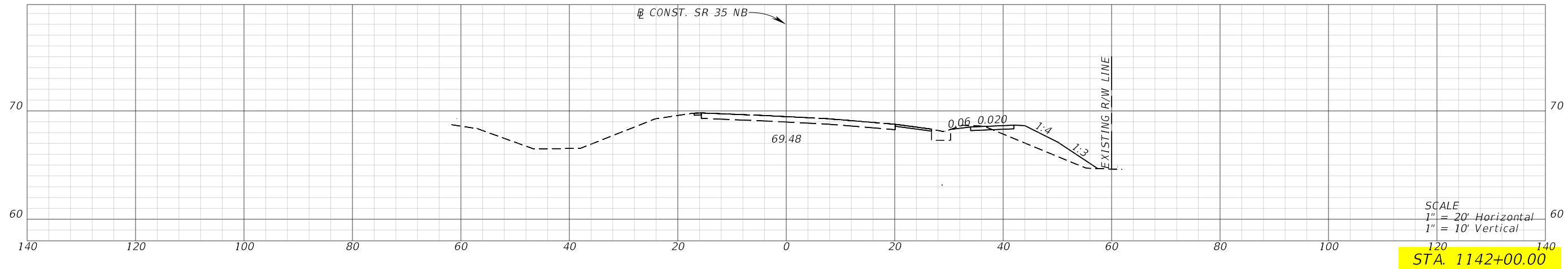


**LEGEND**  
 PAVEMENT MILLING & RESURFACING

REVISIONS				ENGINEER OF RECORD		STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			ROADWAY PLAN (35)	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION	CODY BAYER, P.E. LICENSE NUMBER: 90812 DRMP, INC. 941 LAKE BALDWIN LANE ORLANDO, FL 32814		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
						SR 35	HARDEE	446205-1-52-01		

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

**Limits of Roadside Slope Design Variation**

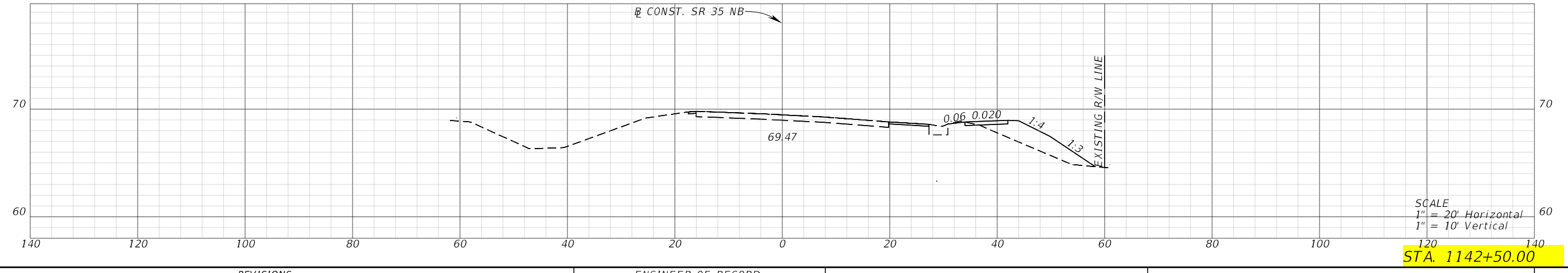
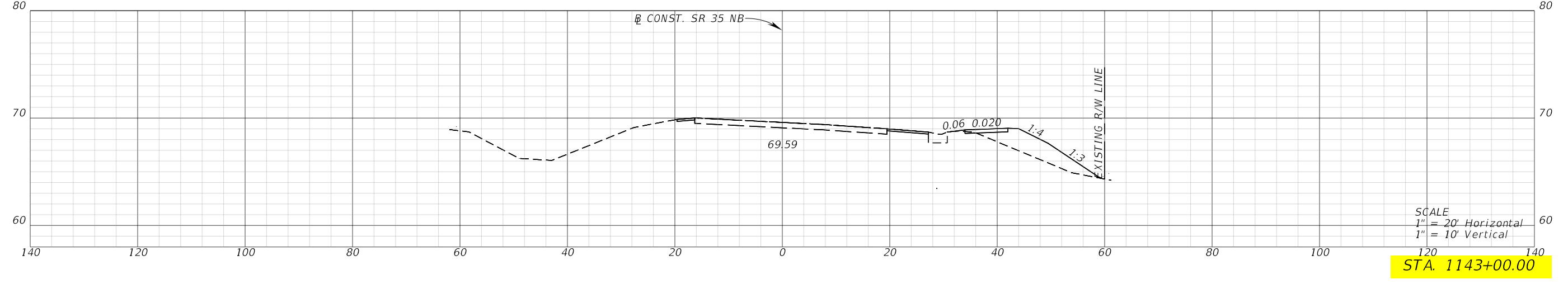
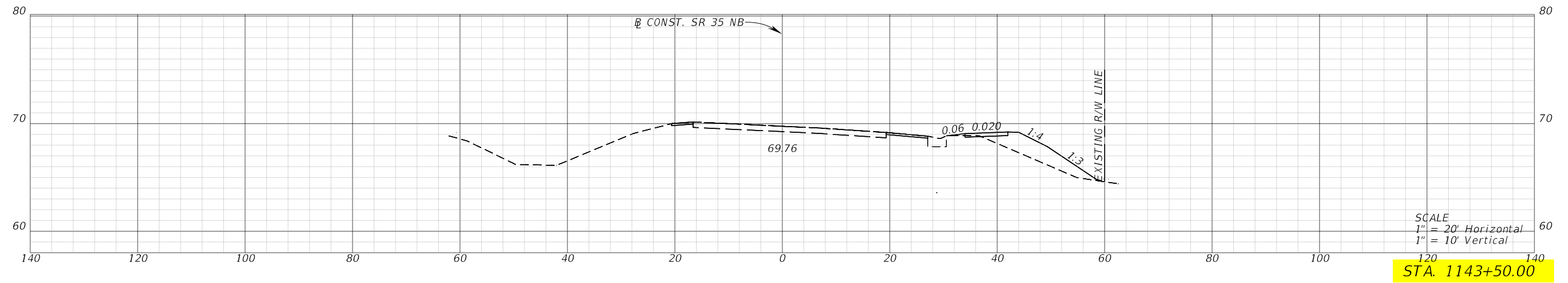


REVISIONS				ENGINEER OF RECORD			STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION	CODY BAYER, P.E. LICENSE NUMBER: 90812 DRMP, INC. 941 LAKE BALDWIN LANE ORLANDO, FL 32814			ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
							SR 35	HARDEE	446205-1-52-01	

**CROSS SECTIONS (1)**

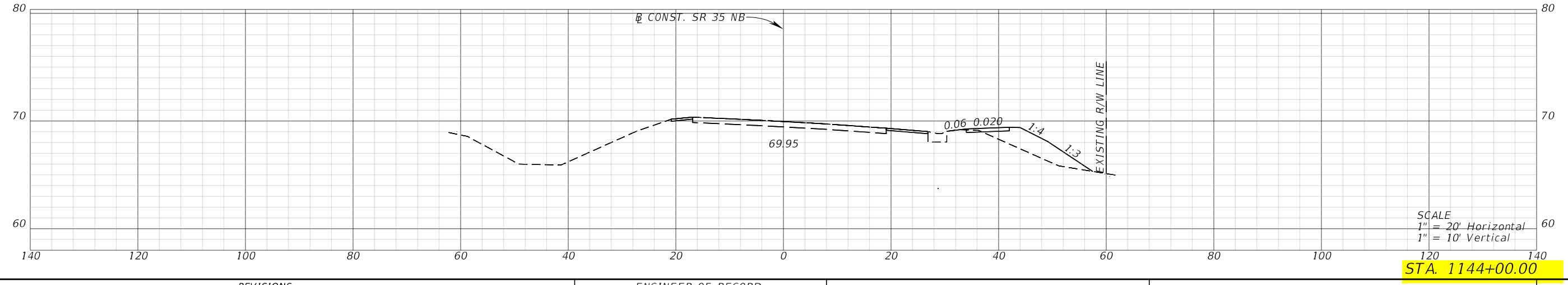
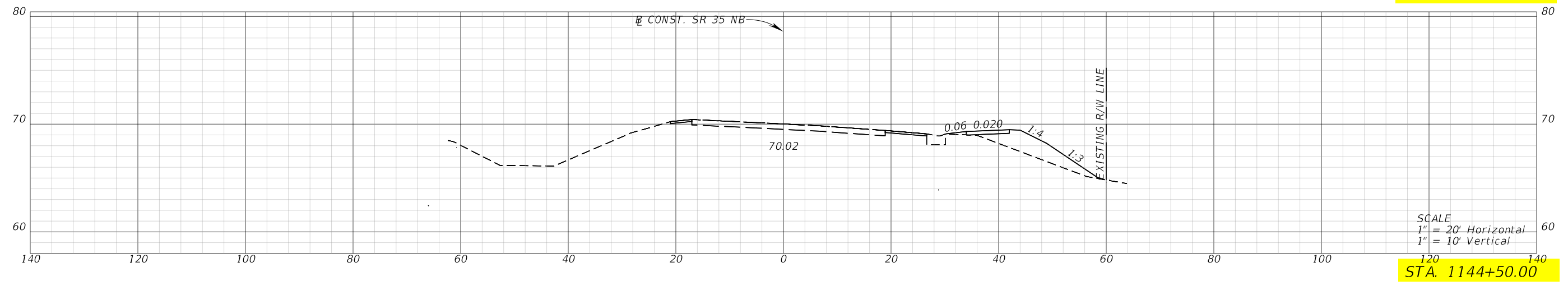
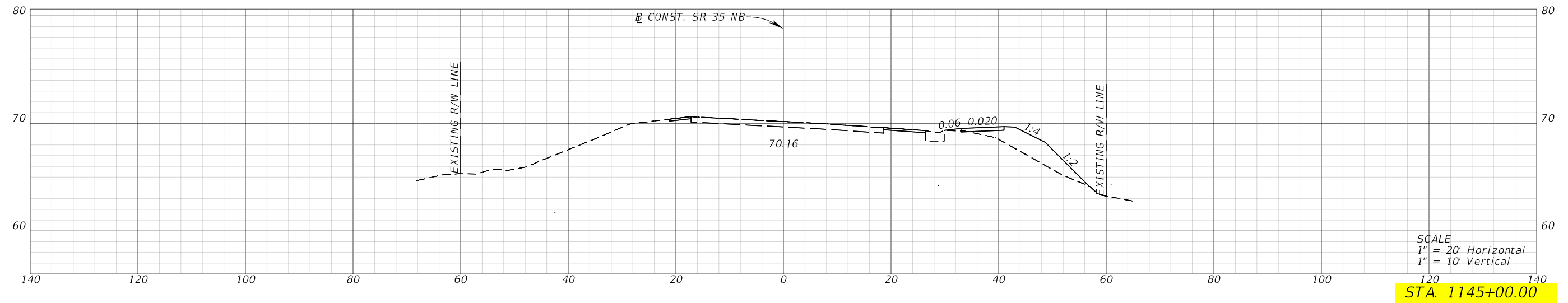
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**Limits of Roadside Slope Design Variation**



REVISIONS				ENGINEER OF RECORD			STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION	CODY BAYER, P.E. LICENSE NUMBER: 90812 DRMP, INC. 941 LAKE BALDWIN LANE ORLANDO, FL 32814			ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
							SR 35	HARDEE	446205-1-52-01	

**Limits of Roadside Slope Design Variation**

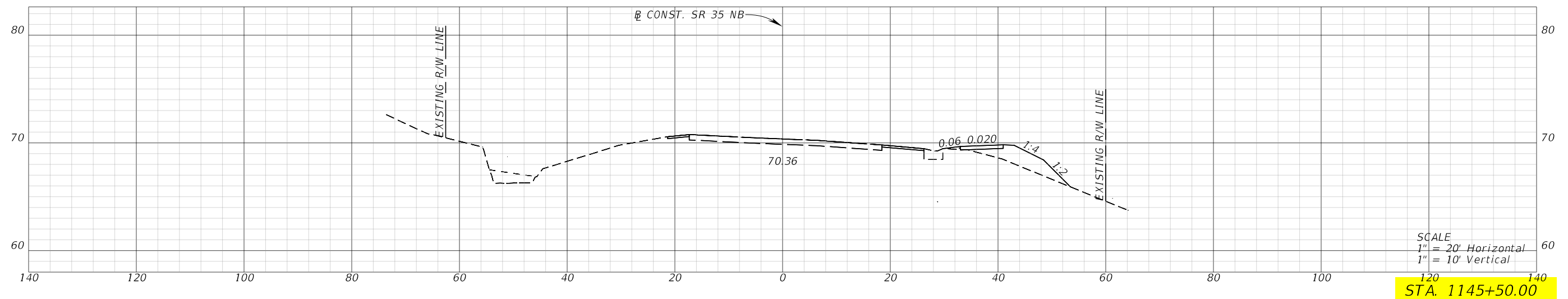
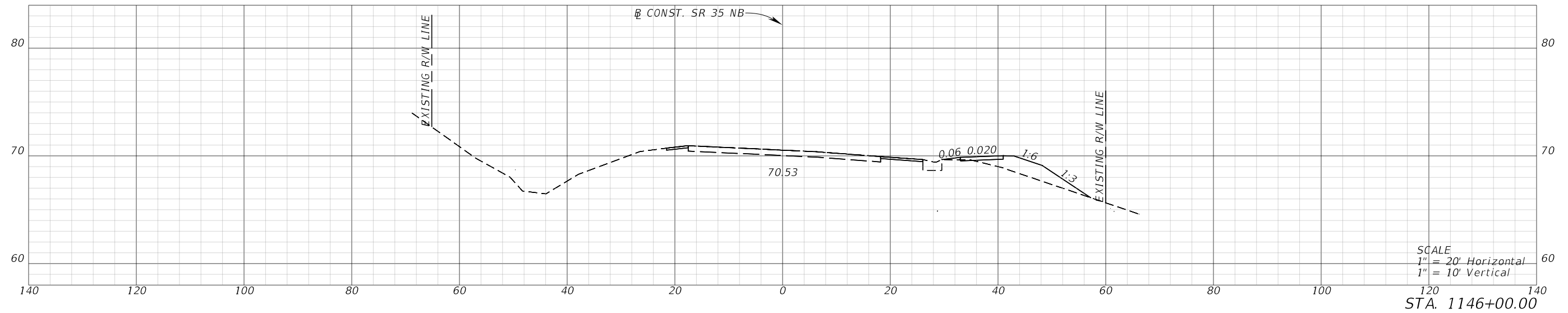
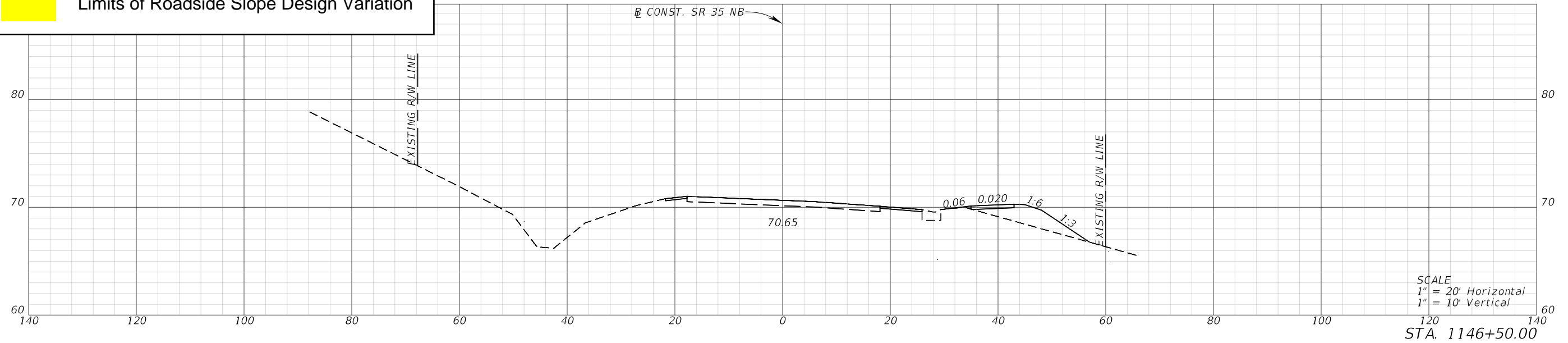


REVISIONS				ENGINEER OF RECORD			STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION	CODY BAYER, P.E. LICENSE NUMBER: 90812 DRMP, INC. 941 LAKE BALDWIN LANE ORLANDO, FL 32814			ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
							SR 35	HARDEE	446205-1-52-01	

**CROSS SECTIONS (3)**

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**Limits of Roadside Slope Design Variation**

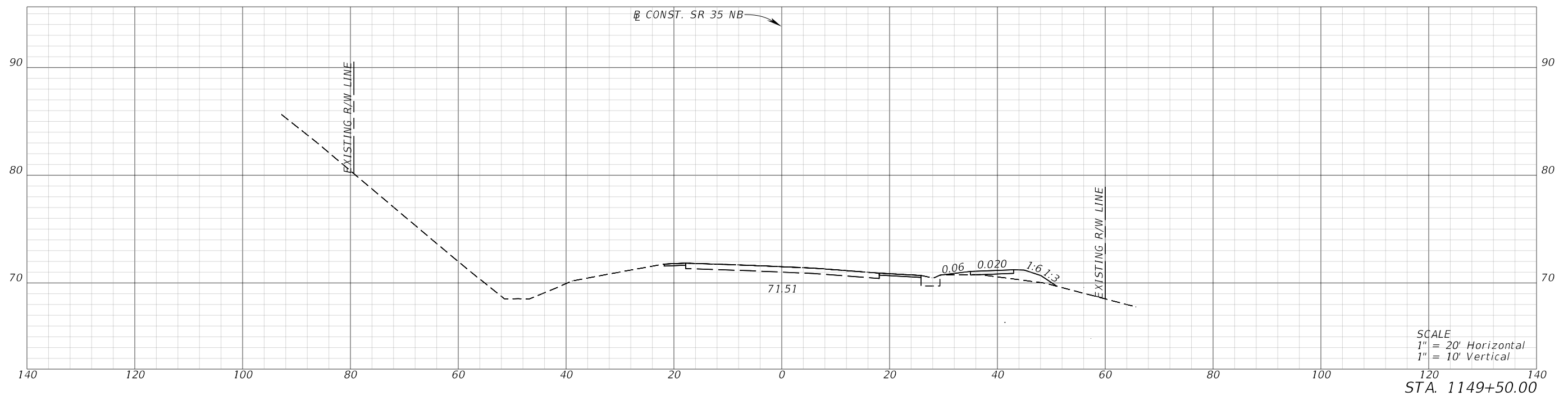
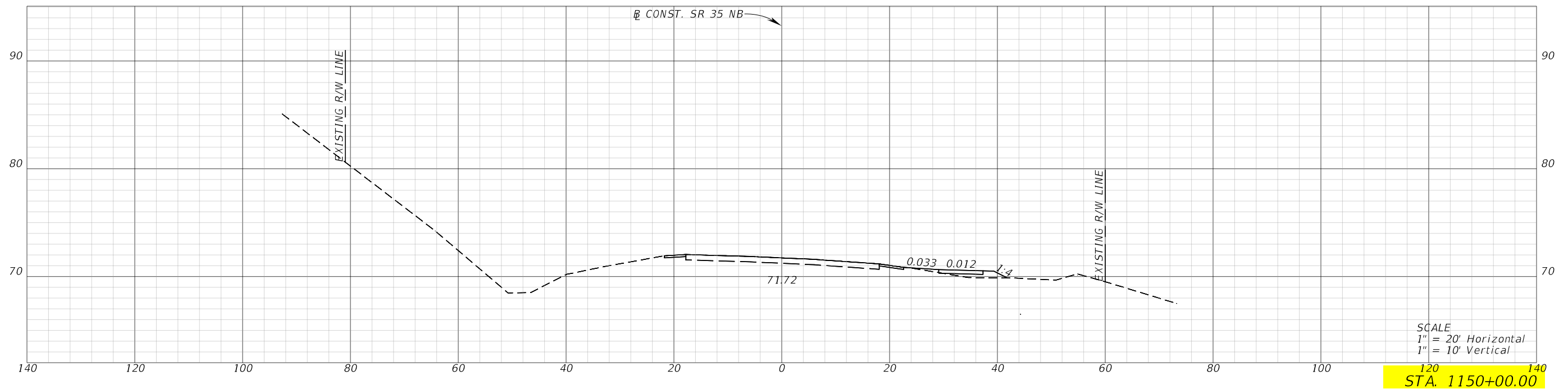


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DATE	DESCRIPTION	DATE	DESCRIPTION	CODY BAYER, P.E. LICENSE NUMBER: 90812 DRMP, INC. 941 LAKE BALDWIN LANE ORLANDO, FL 32814			ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
							SR 35	HARDEE	446205-1-52-01	

**CROSS SECTIONS (4)**

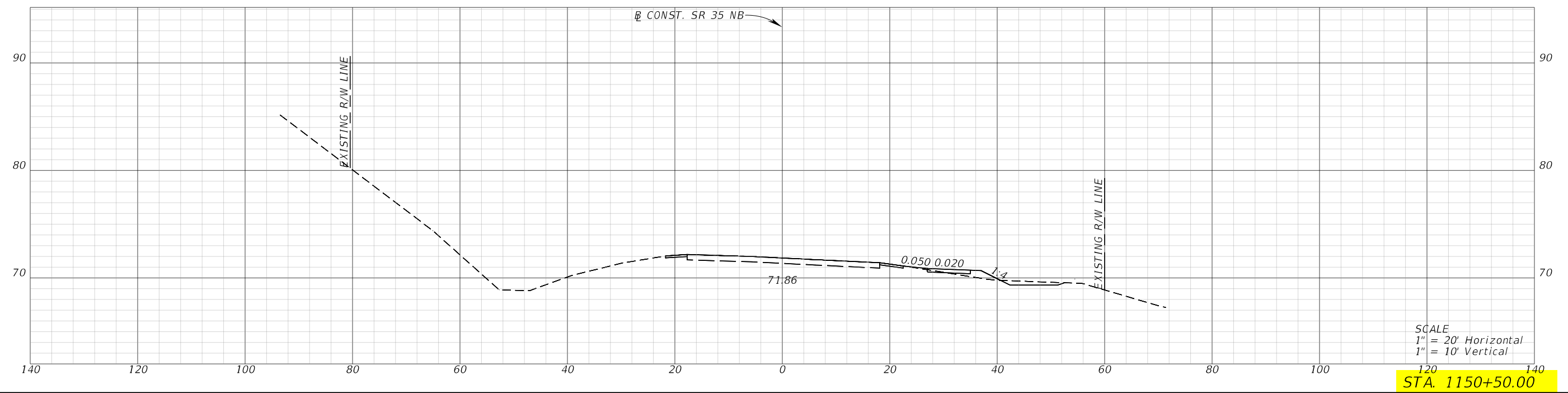
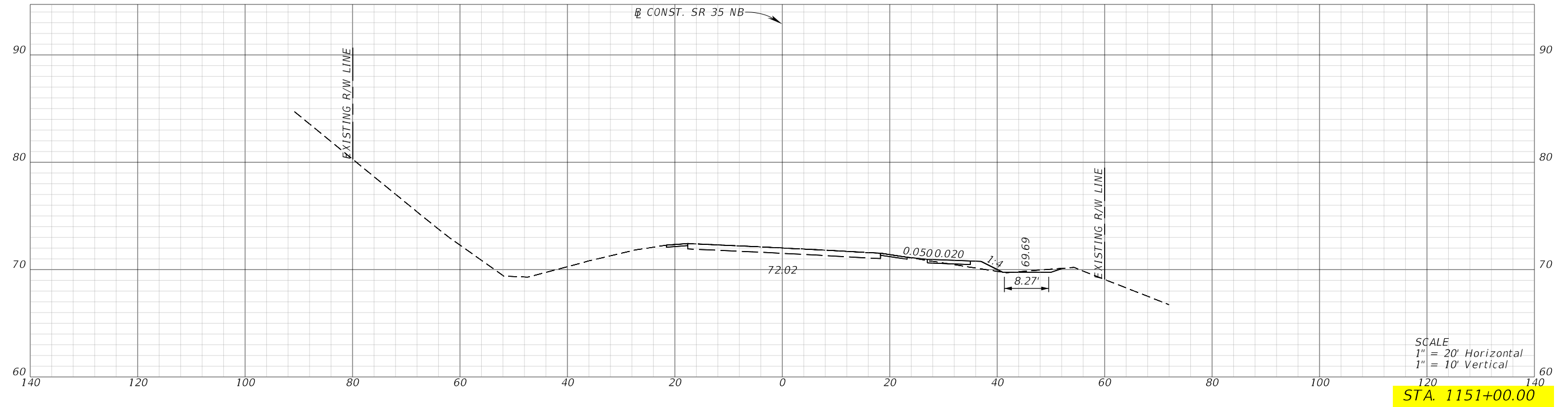
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**Limits of Roadside Slope Design Variation**



REVISIONS				ENGINEER OF RECORD			STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION	CODY BAYER, P.E. LICENSE NUMBER: 90812 DRMP, INC. 941 LAKE BALDWIN LANE ORLANDO, FL 32814			ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
							SR 35	HARDEE	446205-1-52-01	

**Limits of Roadside Slope Design Variation**



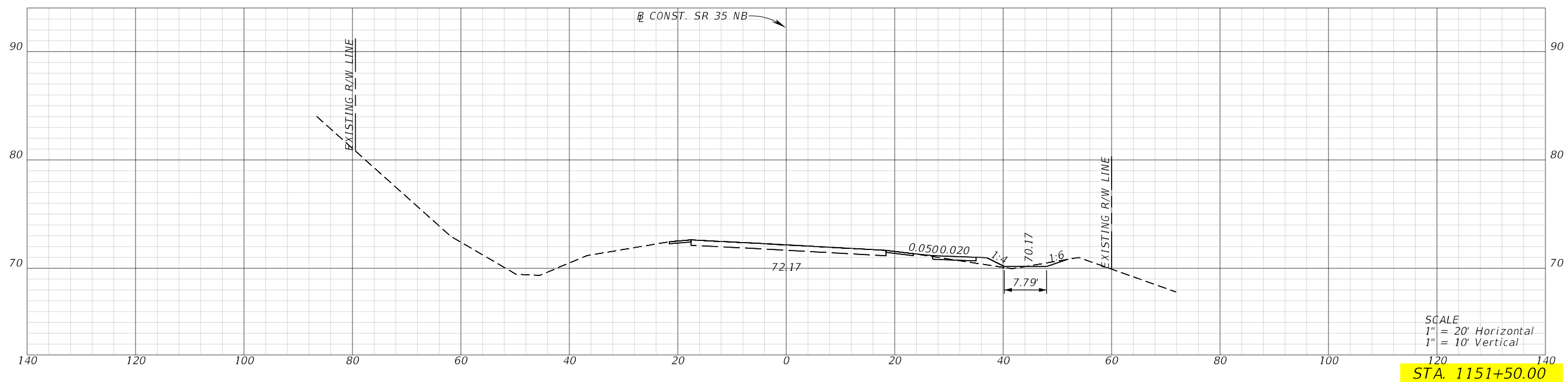
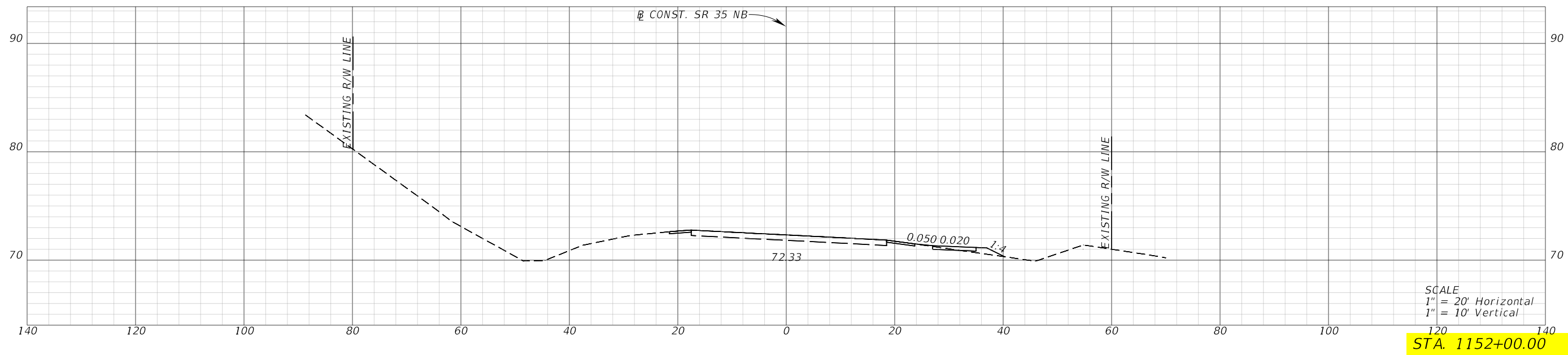
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DATE	DESCRIPTION	DATE	DESCRIPTION	ROAD NO.	COUNTY	FINANCIAL PROJECT ID	CROSS SECTIONS (8)			
				SR 35	HARDEE	446205-1-52-01				

CODY BAYER, P.E.  
LICENSE NUMBER: 90812  
DRMP, INC.  
941 LAKE BALDWIN LANE  
ORLANDO, FL 32814

**CROSS SECTIONS (8)**

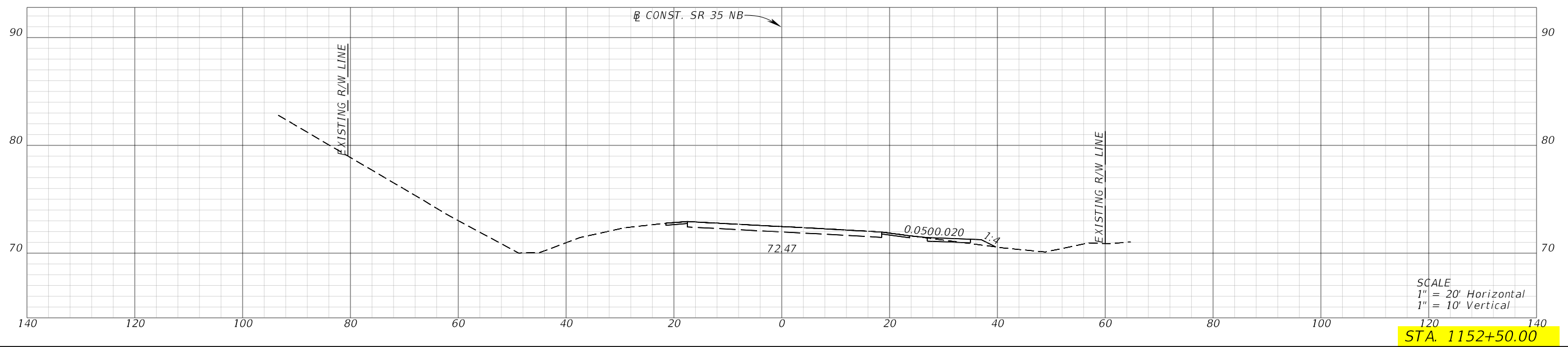
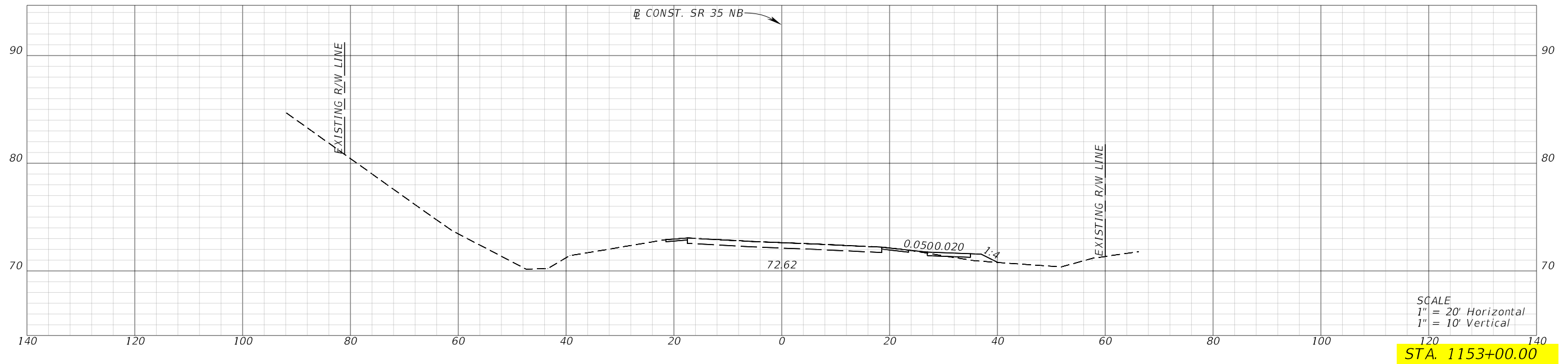
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**Limits of Roadside Slope Design Variation**



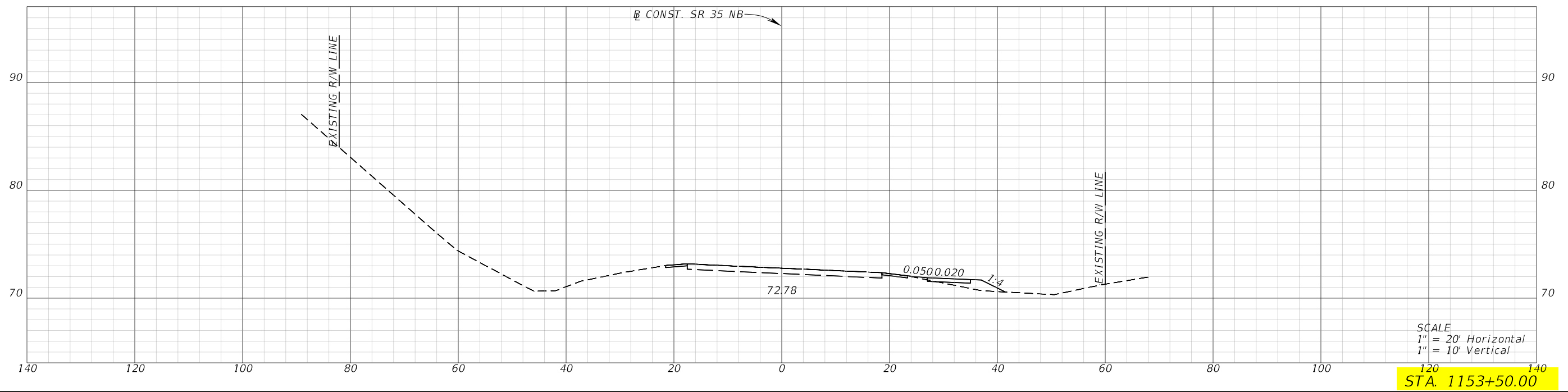
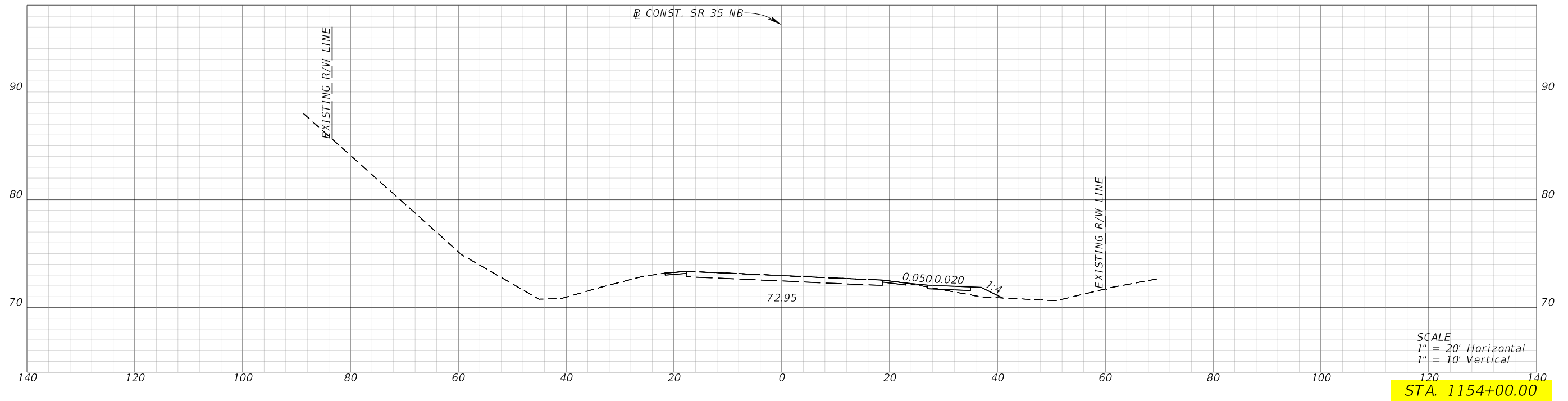
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DATE	DESCRIPTION	DATE	DESCRIPTION	CODY BAYER, P.E. LICENSE NUMBER: 90812 DRMP, INC. 941 LAKE BALDWIN LANE ORLANDO, FL 32814			ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
							SR 35	HARDEE	446205-1-52-01	

**Limits of Roadside Slope Design Variation**



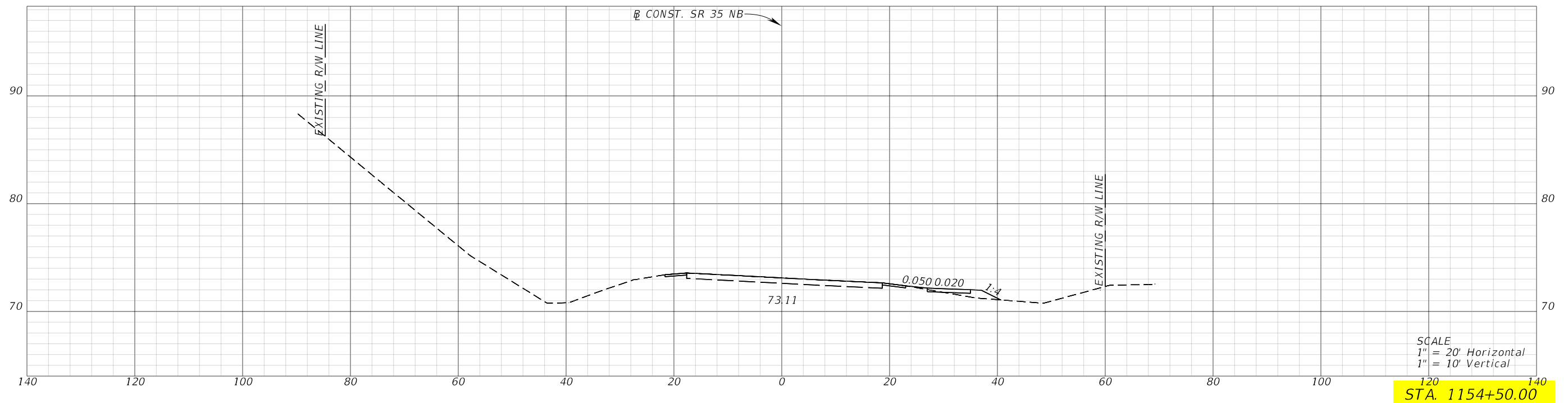
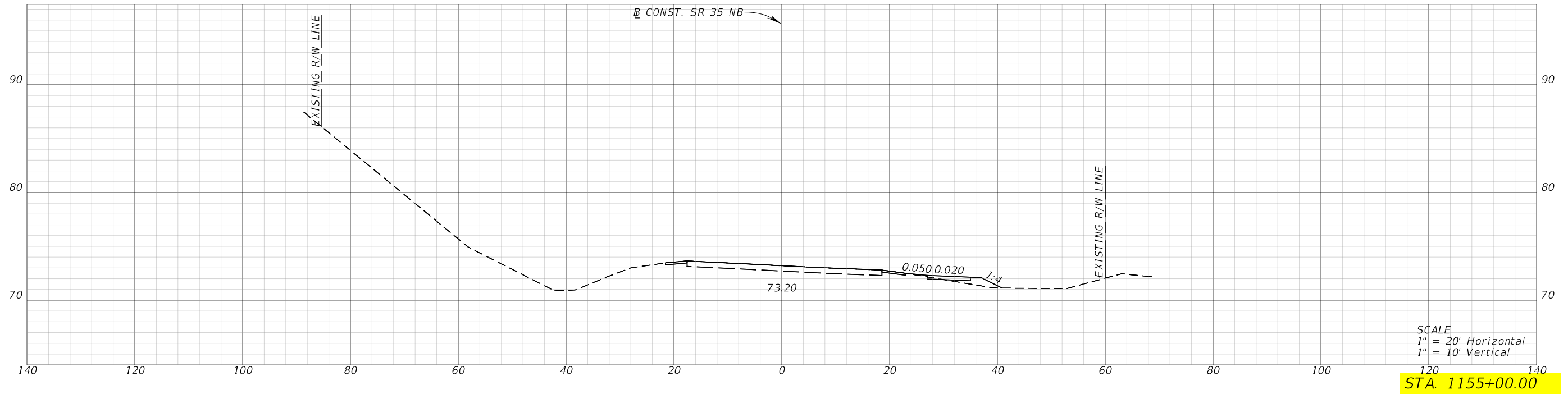
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DATE	DESCRIPTION	DATE	DESCRIPTION	CODY BAYER, P.E. LICENSE NUMBER: 90812 DRMP, INC. 941 LAKE BALDWIN LANE ORLANDO, FL 32814		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
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**Limits of Roadside Slope Design Variation**



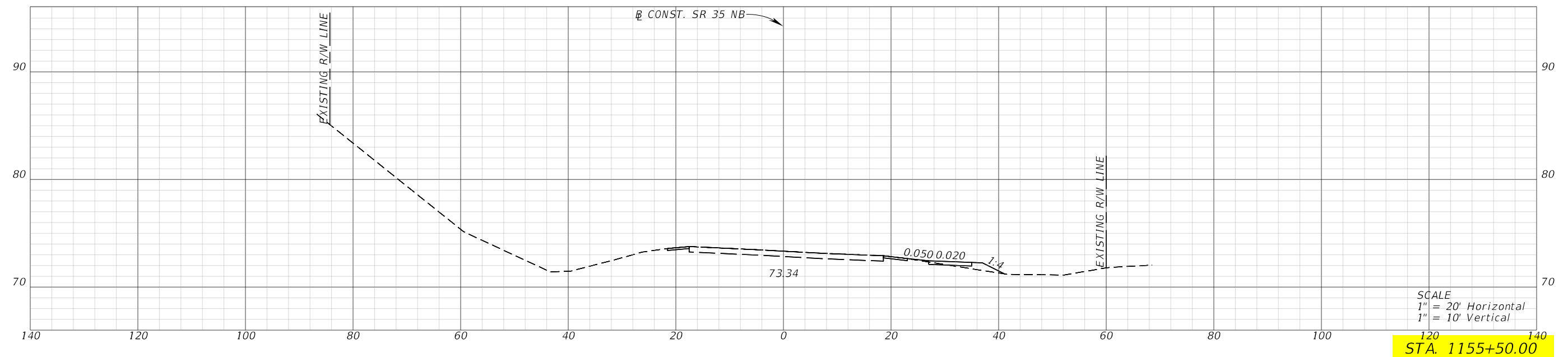
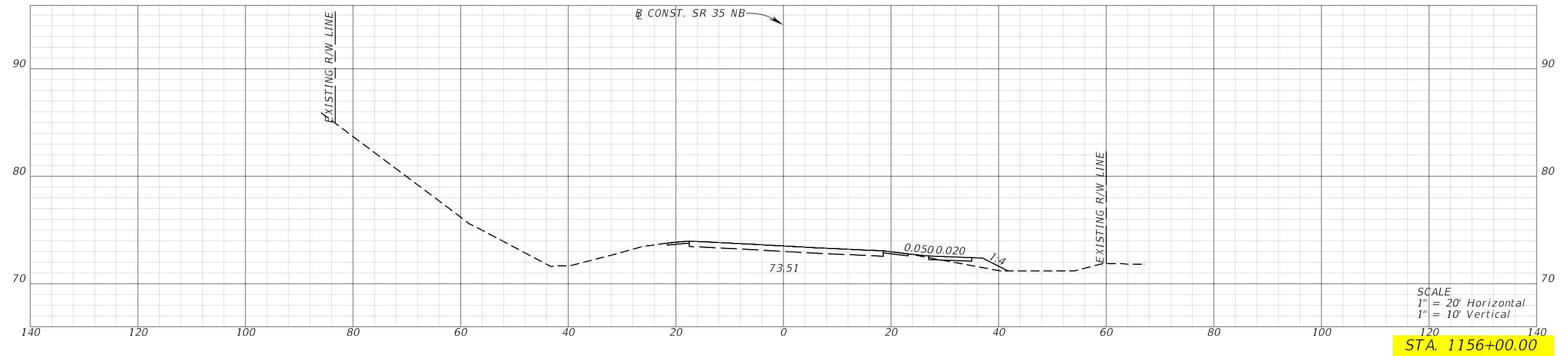
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DATE	DESCRIPTION	DATE	DESCRIPTION	CODY BAYER, P.E. LICENSE NUMBER: 90812 DRMP, INC. 941 LAKE BALDWIN LANE ORLANDO, FL 32814		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
						SR 35	HARDEE	446205-1-52-01		

**Limits of Roadside Slope Design Variation**



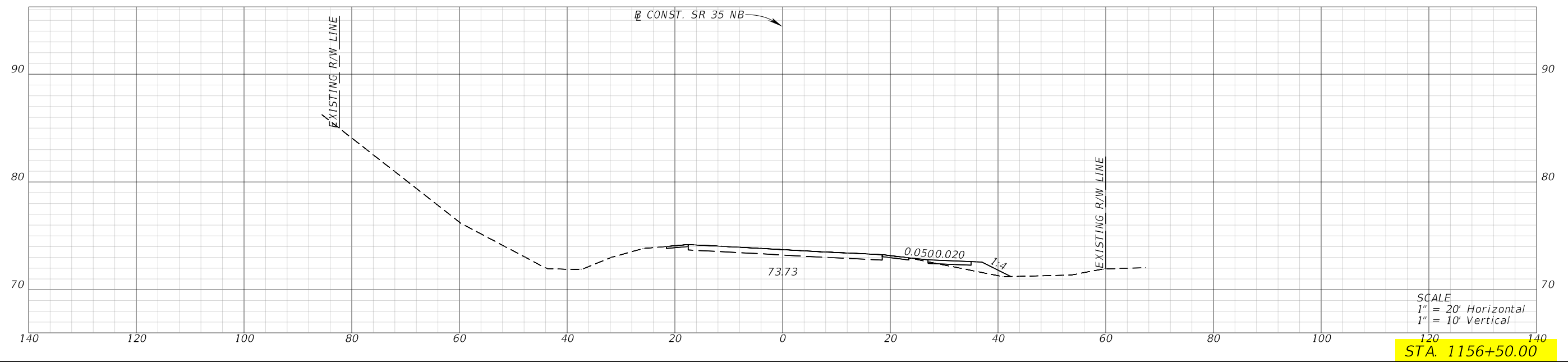
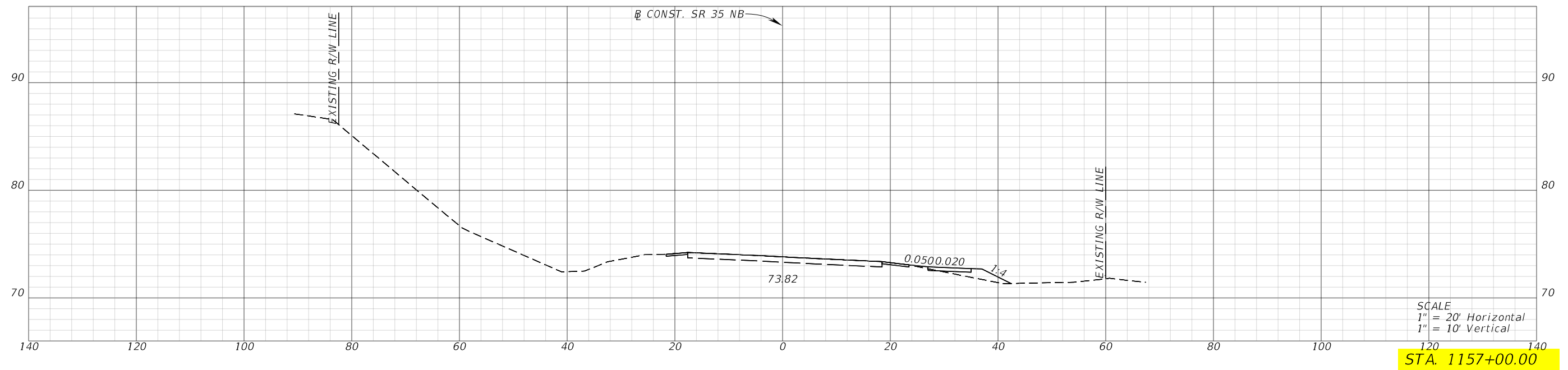
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DATE	DESCRIPTION	DATE	DESCRIPTION	CODY BAYER, P.E. LICENSE NUMBER: 90812 DRMP, INC. 941 LAKE BALDWIN LANE ORLANDO, FL 32814		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
						SR 35	HARDEE	446205-1-52-01		

**Limits of Roadside Slope Design Variation**



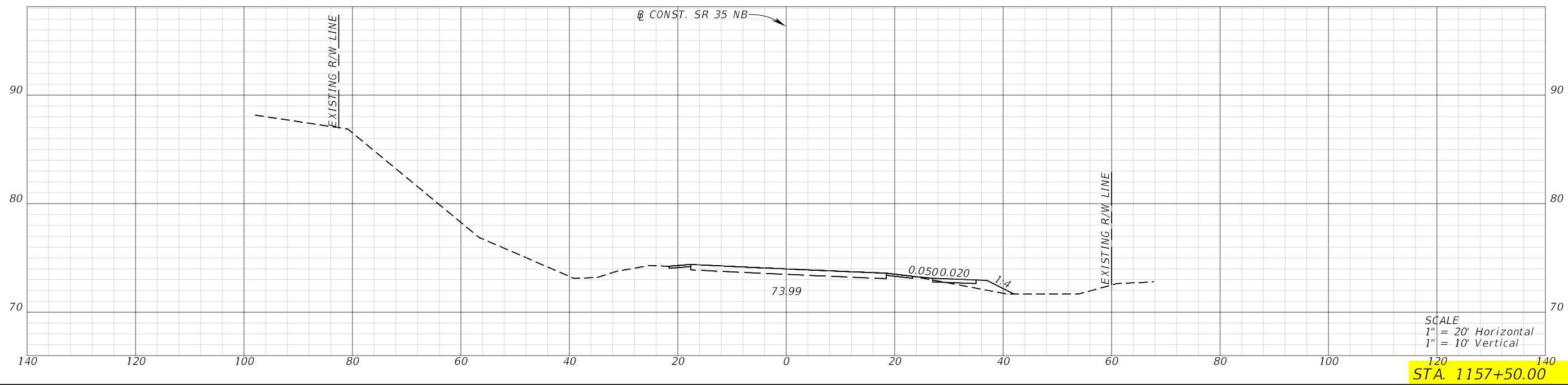
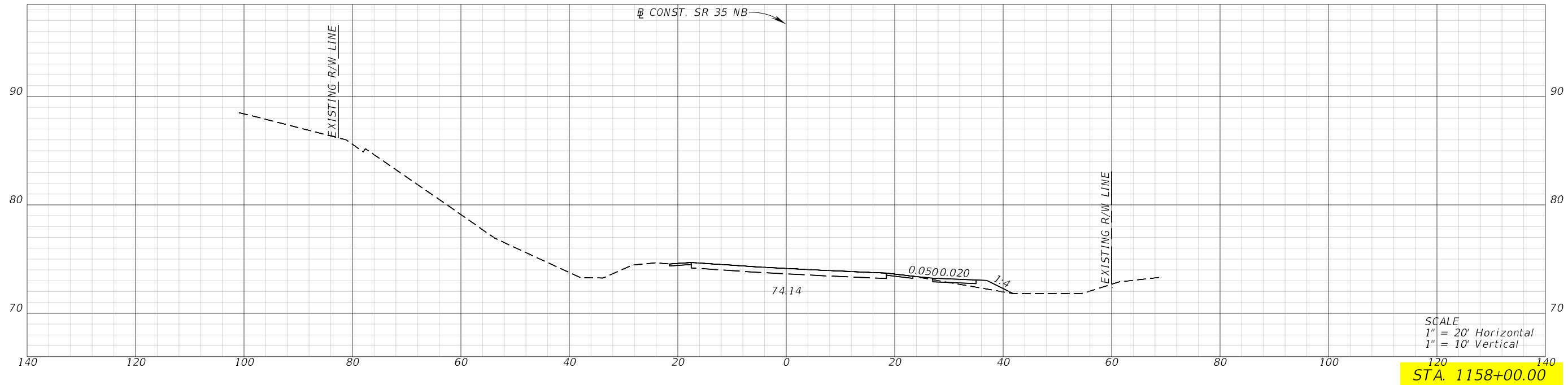
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DATE	DESCRIPTION	DATE	DESCRIPTION	CODY BAYER, P.E. LICENSE NUMBER: 90812 DRMP, INC. 941 LAKE BALDWIN LANE ORLANDO, FL 32814		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
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**Limits of Roadside Slope Design Variation**



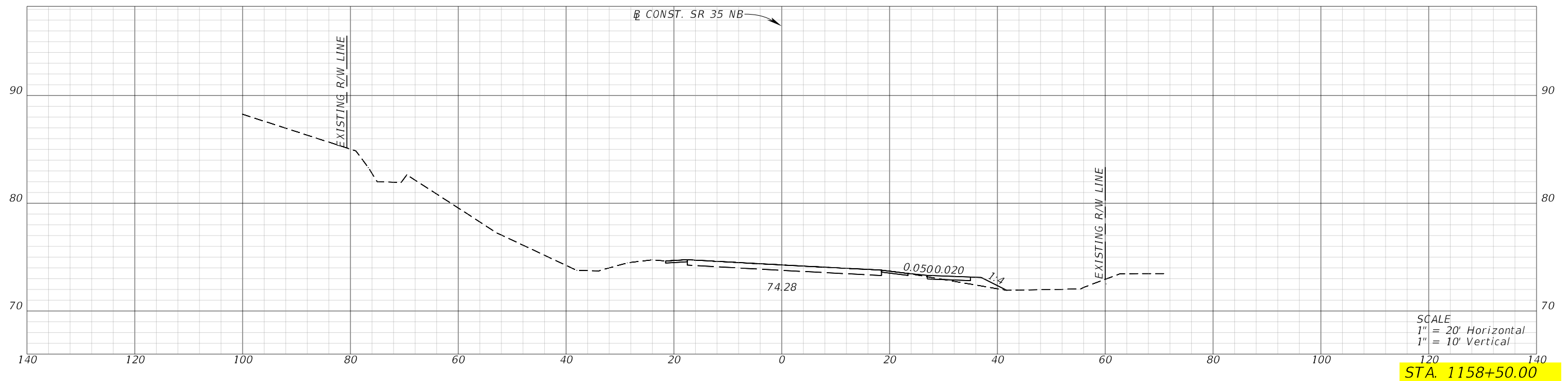
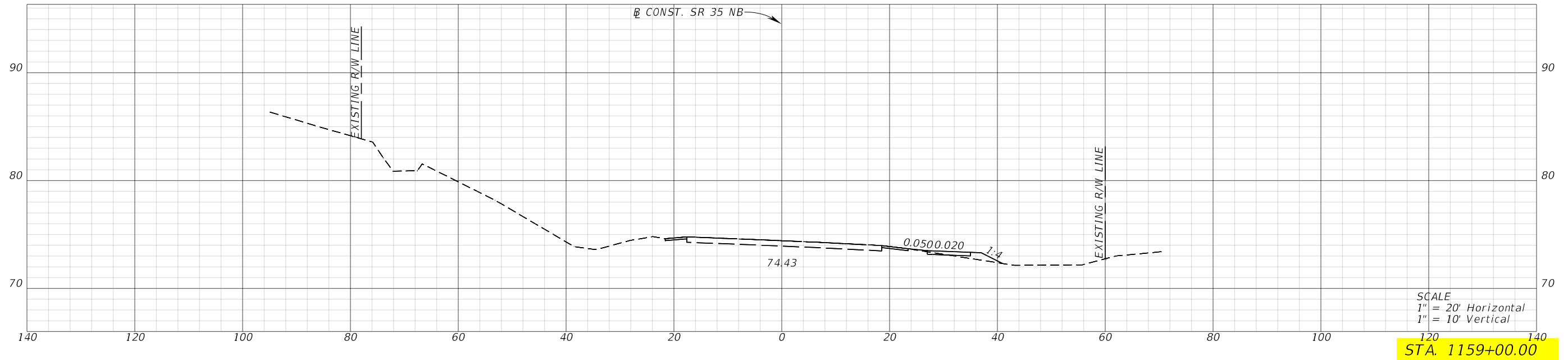
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DATE	DESCRIPTION	DATE	DESCRIPTION	CODY BAYER, P.E. LICENSE NUMBER: 90812 DRMP, INC. 941 LAKE BALDWIN LANE ORLANDO, FL 32814		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
						SR 35	HARDEE	446205-1-52-01		

**Limits of Roadside Slope Design Variation**



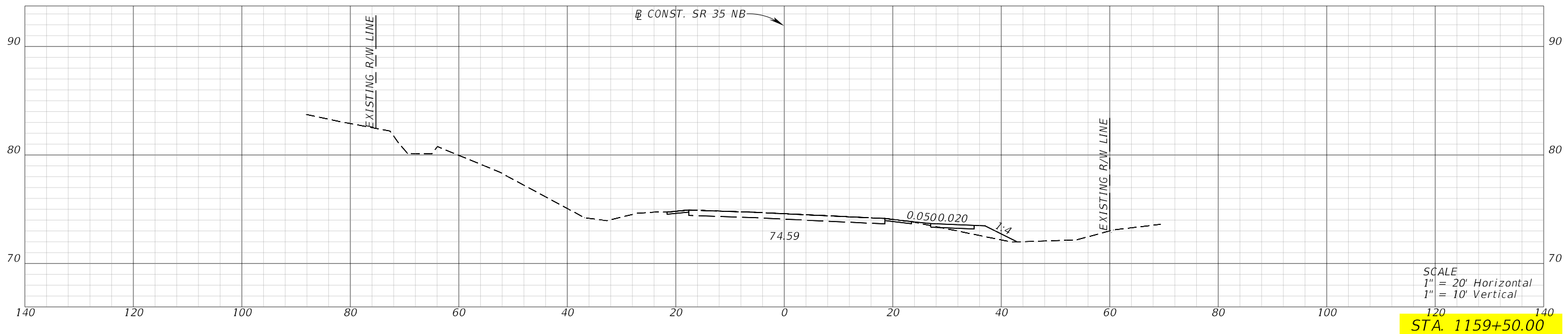
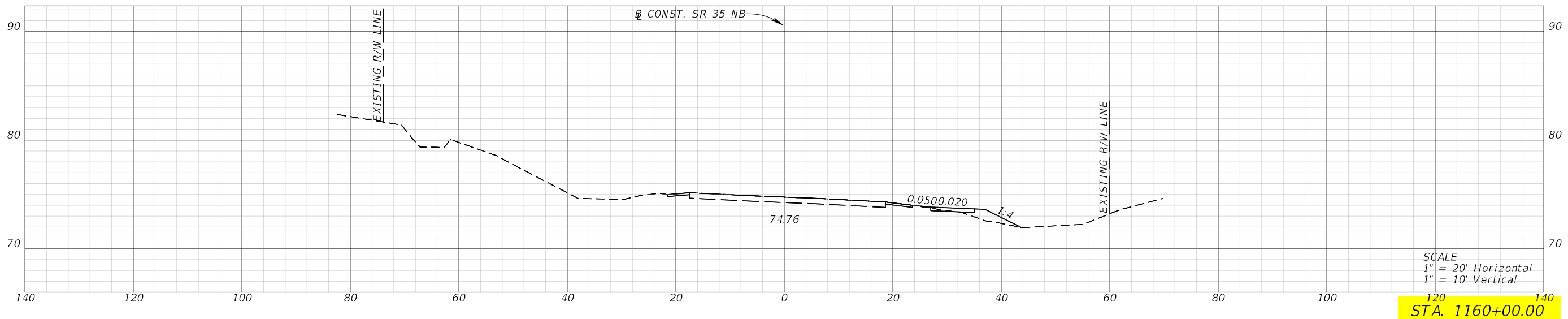
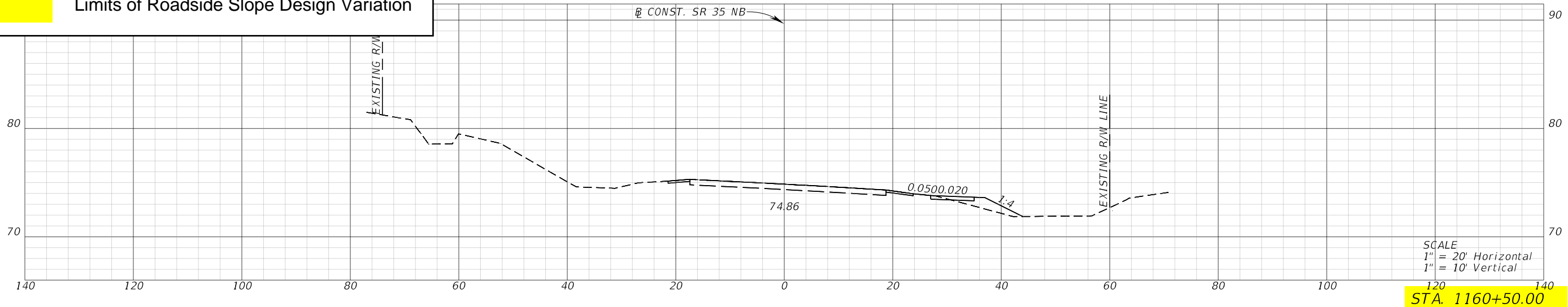
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						SR 35	HARDEE	446205-1-52-01		

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REVISIONS				ENGINEER OF RECORD		STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			CROSS SECTIONS (16)	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION	CODY BAYER, P.E. LICENSE NUMBER: 90812 DRMP, INC. 941 LAKE BALDWIN LANE ORLANDO, FL 32814		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
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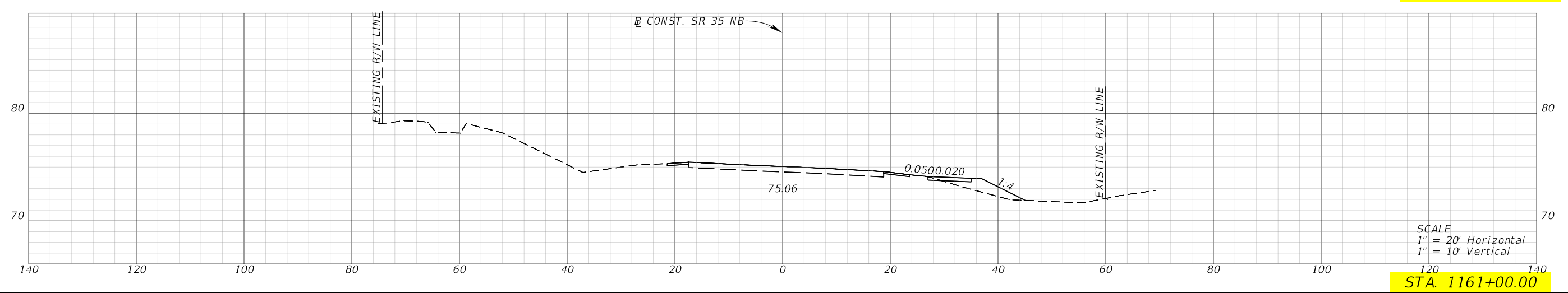
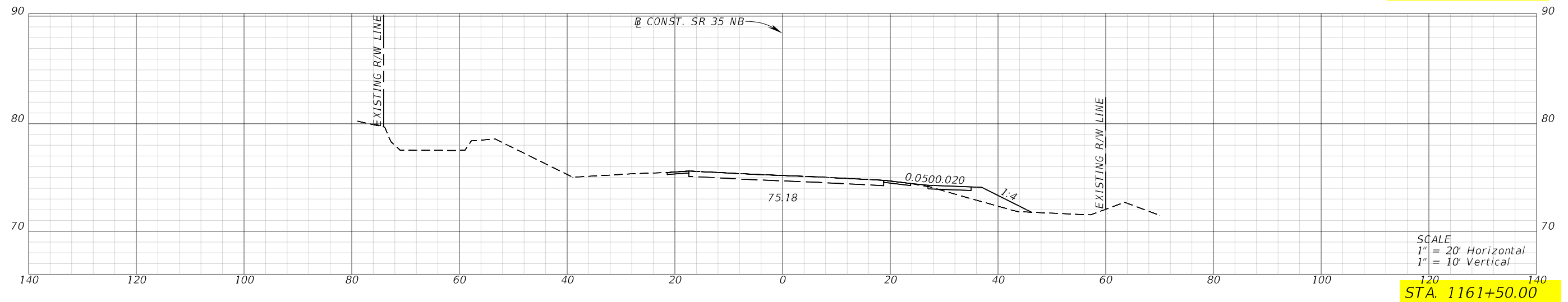
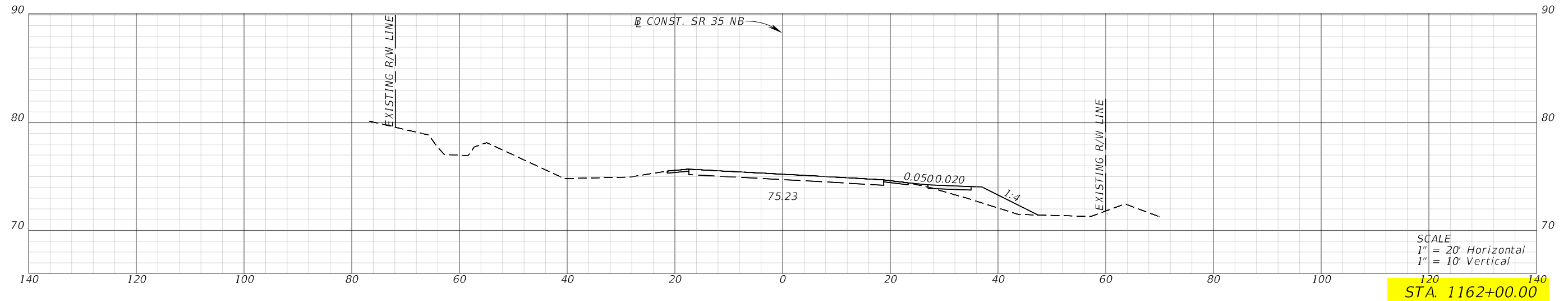
**Limits of Roadside Slope Design Variation**



REVISIONS				ENGINEER OF RECORD		STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			CROSS SECTIONS (17)	SHEET NO.
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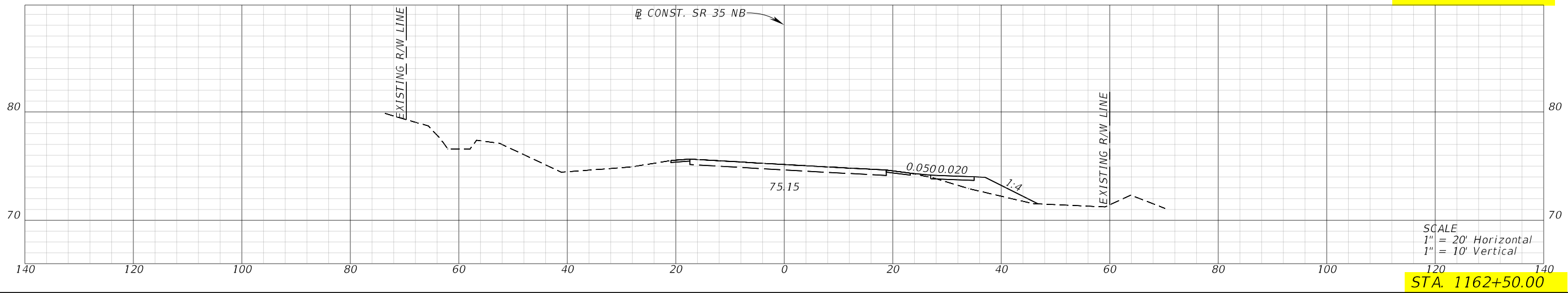
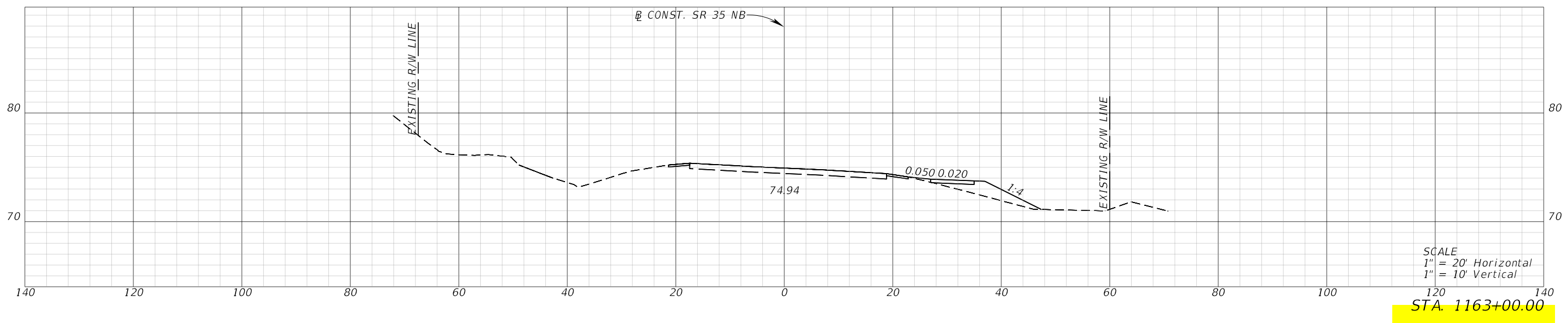
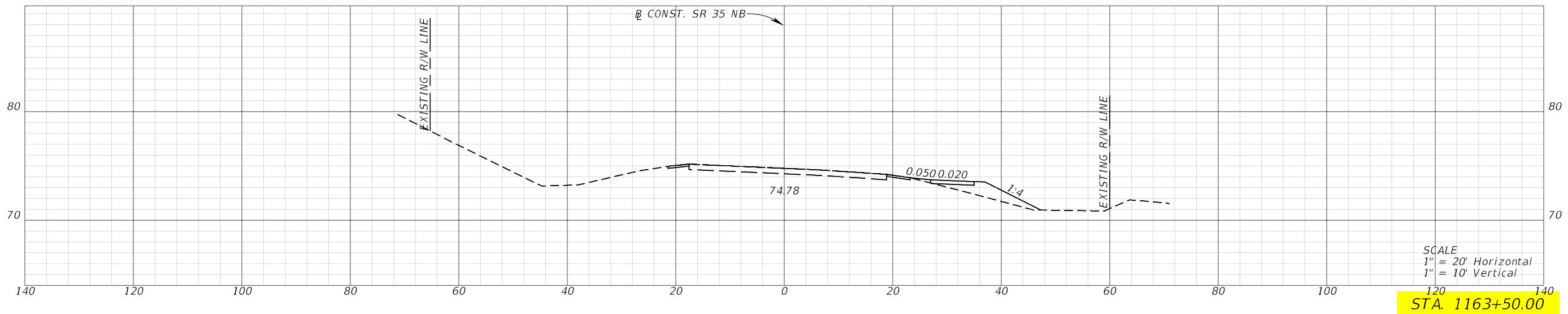
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**Limits of Roadside Slope Design Variation**



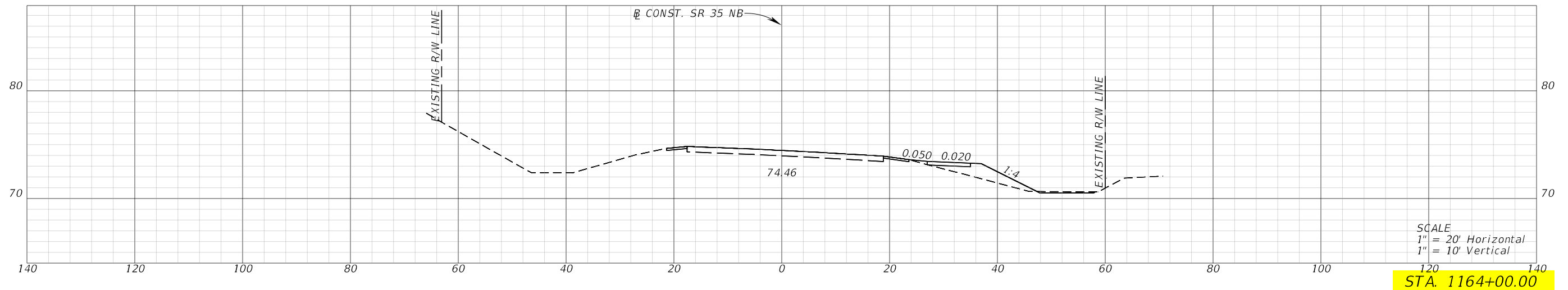
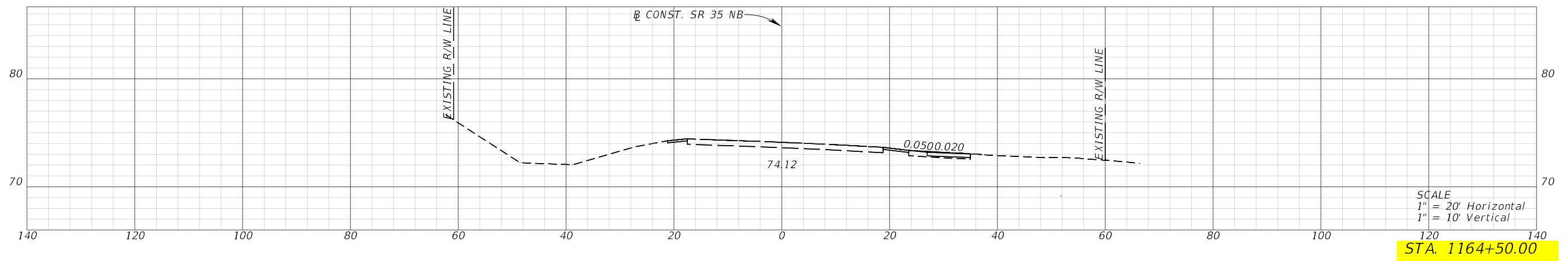
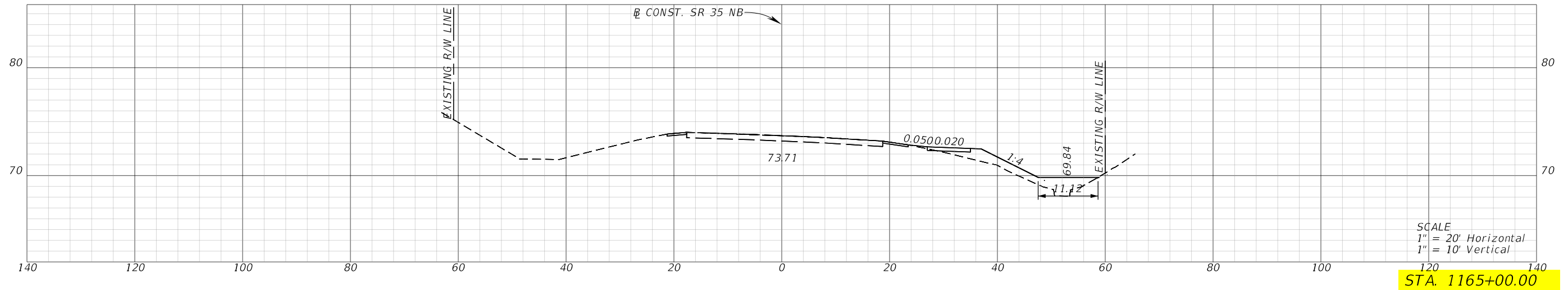
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**Limits of Roadside Slope Design Variation**



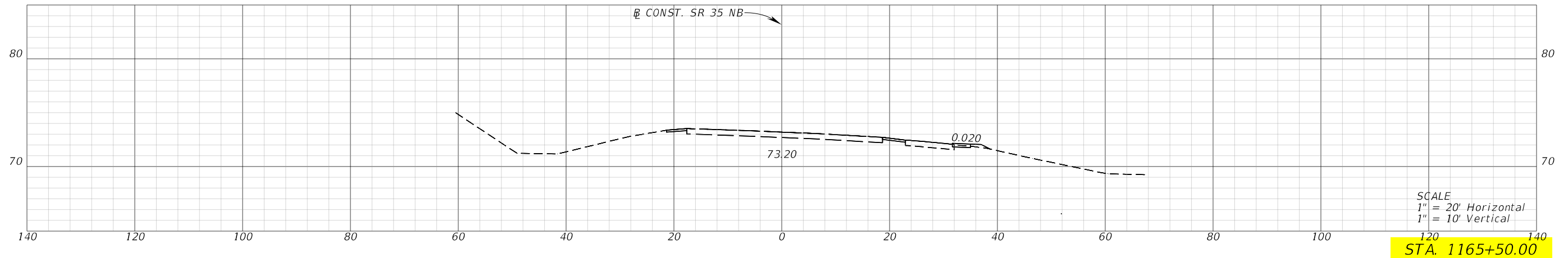
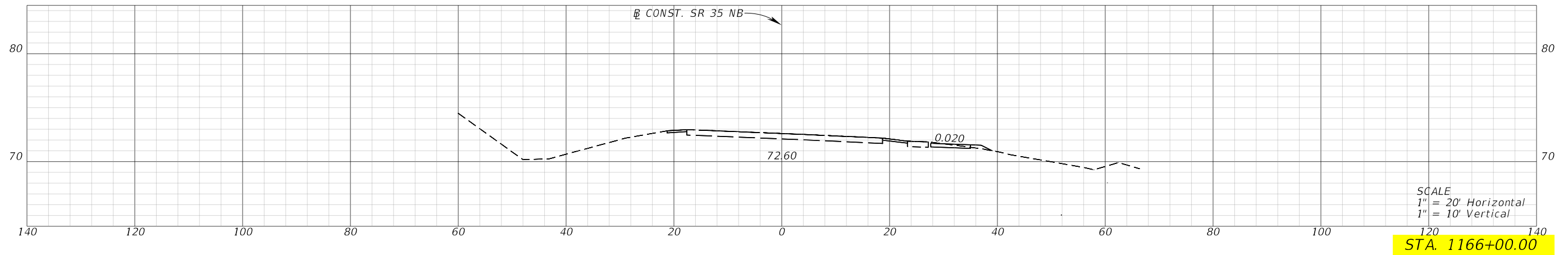
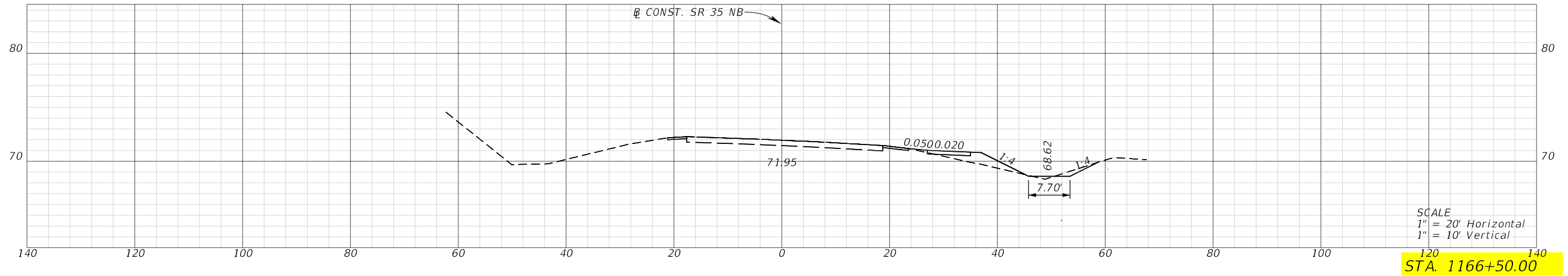
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DATE	DESCRIPTION	DATE	DESCRIPTION	CODY BAYER, P.E. LICENSE NUMBER: 90812 DRMP, INC. 941 LAKE BALDWIN LANE ORLANDO, FL 32814			ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
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**Limits of Roadside Slope Design Variation**



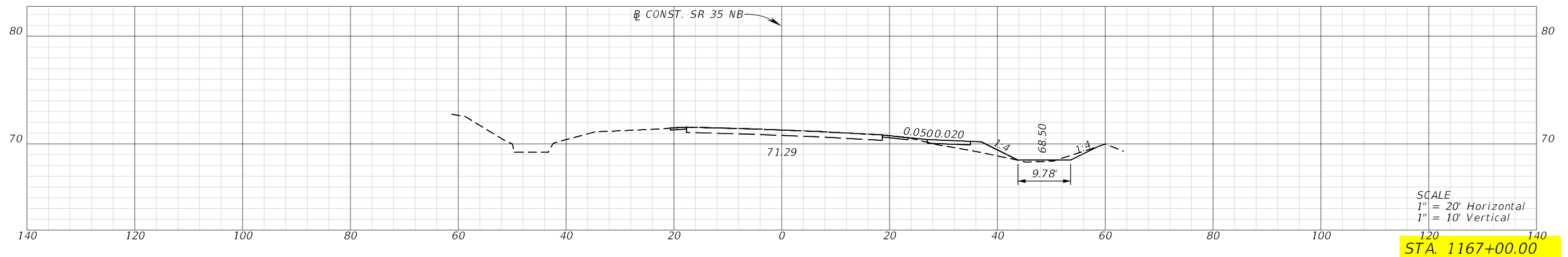
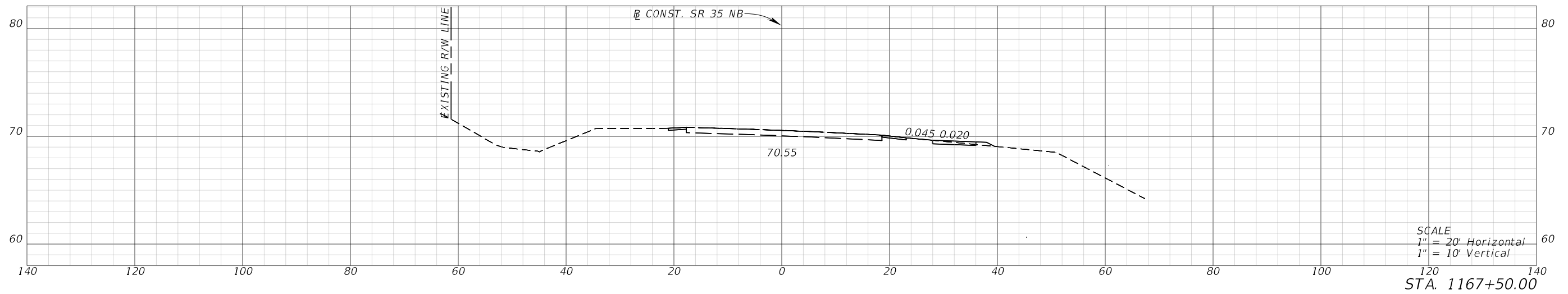
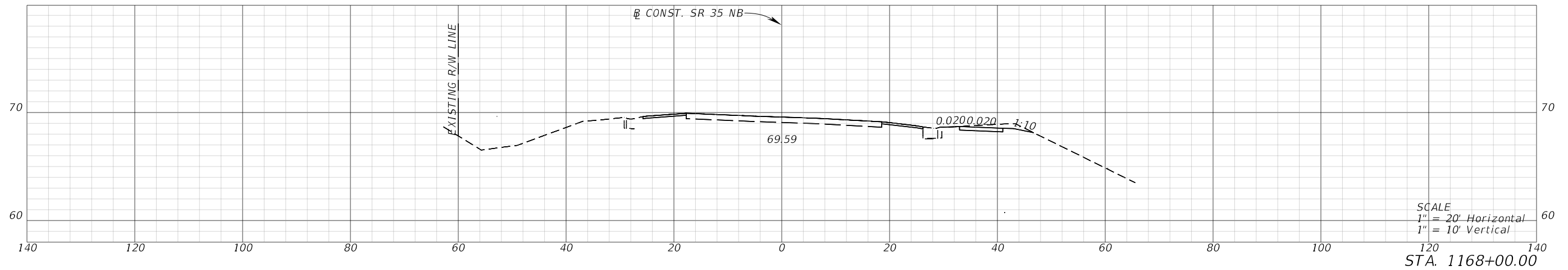
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DATE	DESCRIPTION	DATE	DESCRIPTION	CODY BAYER, P.E. LICENSE NUMBER: 90812 DRMP, INC. 941 LAKE BALDWIN LANE ORLANDO, FL 32814		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
						SR 35	HARDEE	446205-1-52-01		

**Limits of Roadside Slope Design Variation**



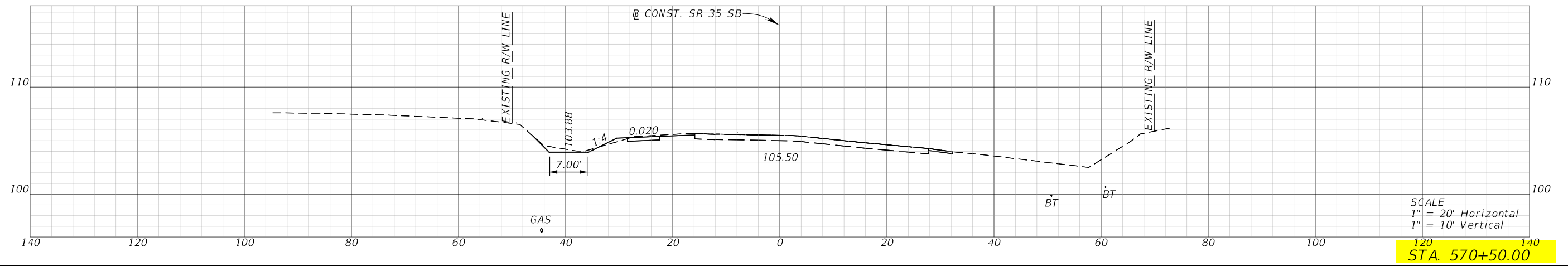
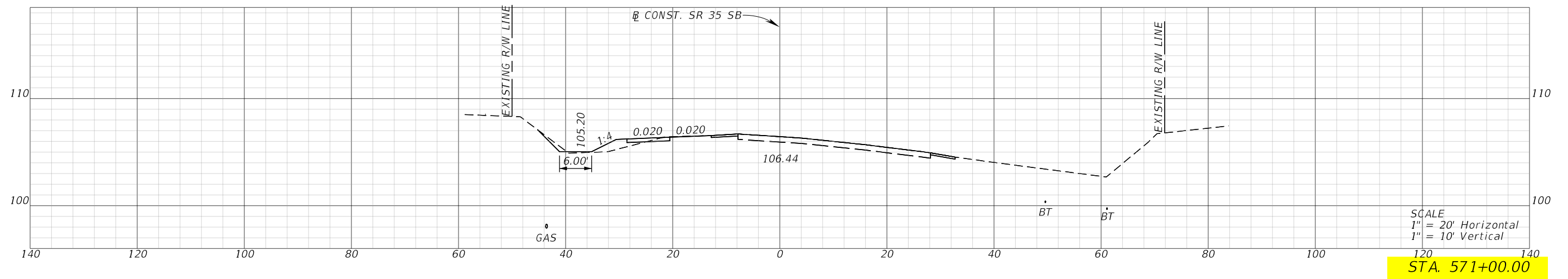
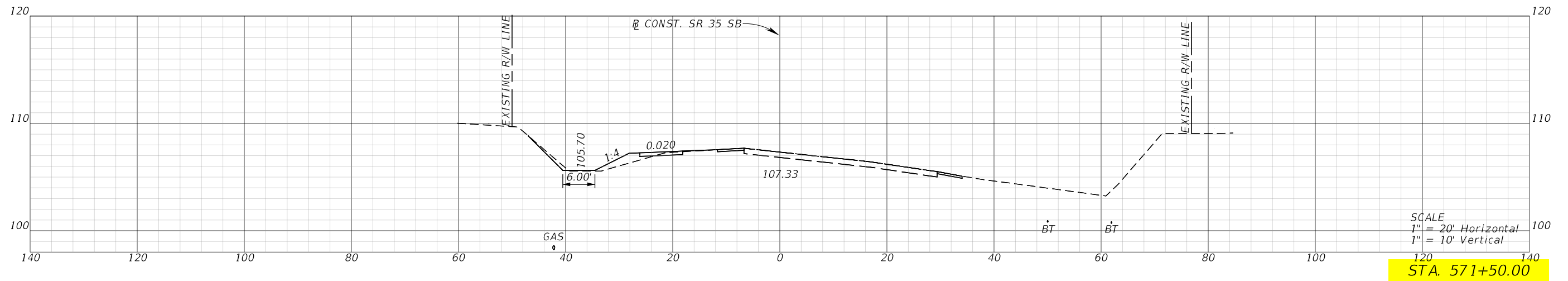
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							SR 35	HARDEE	446205-1-52-01		

**Limits of Roadside Slope Design Variation**



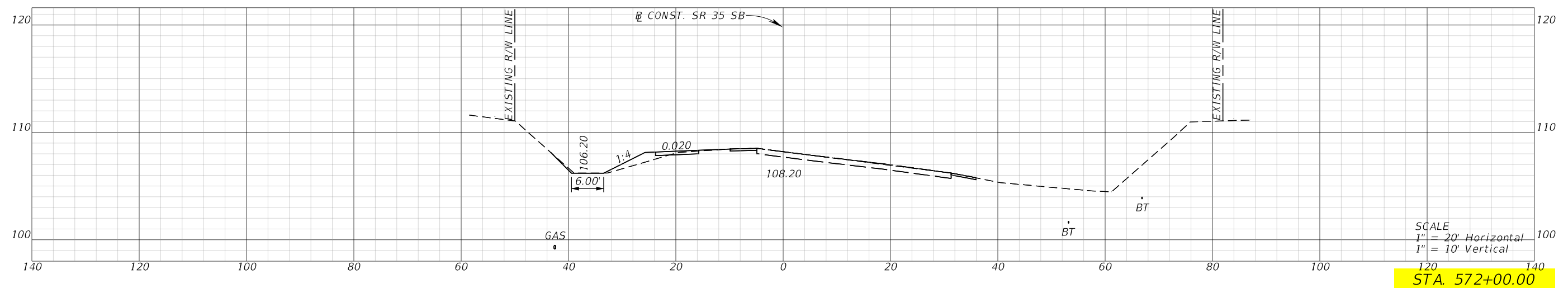
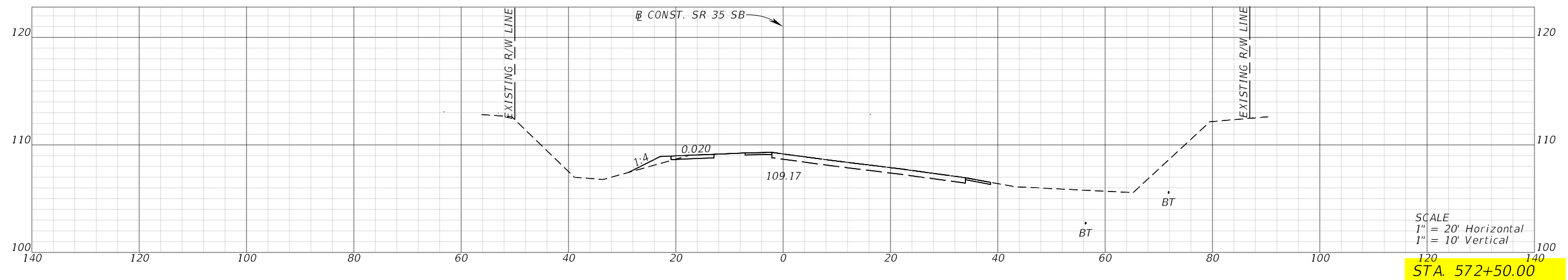
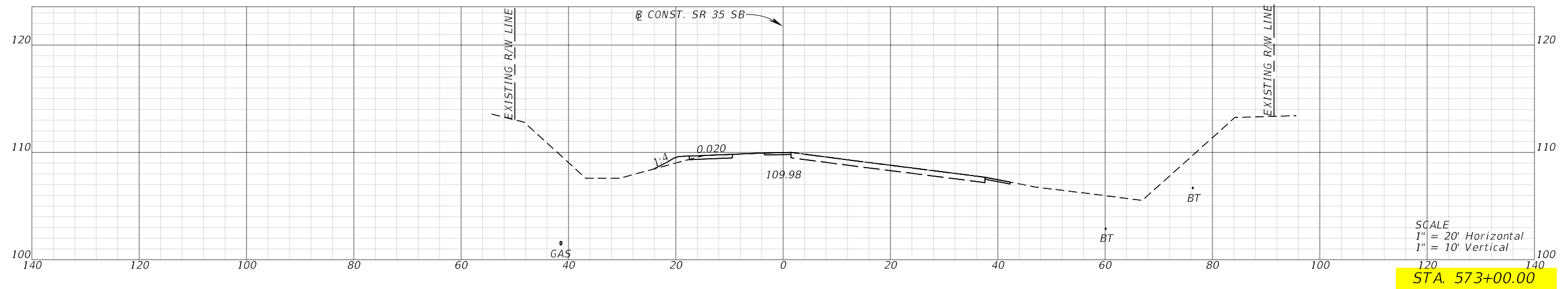
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REVISIONS				ENGINEER OF RECORD		STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			CROSS SECTIONS (59)	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION	CODY BAYER, P.E. LICENSE NUMBER: 90812 DRMP, INC. 941 LAKE BALDWIN LANE ORLANDO, FL 32814		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
						SR 35	HARDEE	446205-1-52-01		

**Limits of Roadside Slope Design Variation**



REVISIONS				ENGINEER OF RECORD		STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION	CODY BAYER, P.E. LICENSE NUMBER: 90812 DRMP, INC. 941 LAKE BALDWIN LANE ORLANDO, FL 32814		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
						SR 35	HARDEE	446205-1-52-01	