
Appendix D: Pre-Scoping Forms

**PACKAGE PROJECT 1 –
CENTRAL DISTRICT ITS/SIGNAGE
IMPROVEMENTS
(MP 191-218)**

ADOT SR 87 Corridor Development Study

PRELIMINARY SCOPING REPORT

GENERAL PROJECT INFORMATION	
Date: 8/20/2019	ADOT Project Manager:
Project Name: Central District ITS/Signage Improvements	
City/Town: N/A	County: Maricopa
COG/MPO: MAG	ADOT District: Central
Primary Route/Street: SR 87	
Beginning Limit: 191	
End Limit: 218	
Project Length: 27 miles	
Right of Way Ownership(s) (where proposed project would occur): <i>(check all that apply)</i> <input type="checkbox"/> City/Town <input type="checkbox"/> County <input checked="" type="checkbox"/> ADOT <input type="checkbox"/> Private <input type="checkbox"/> Federal <input type="checkbox"/> Tribal <input type="checkbox"/> Other	
Adjacent Land Ownership(s): <i>(Check all that apply)</i> <input type="checkbox"/> City/Town <input checked="" type="checkbox"/> County <input type="checkbox"/> ADOT <input type="checkbox"/> Private <input checked="" type="checkbox"/> Federal <input checked="" type="checkbox"/> Tribal <input type="checkbox"/> Other	

PROJECT NEED
SR 87 Corridor from Milepost 191 through 218 is prone to motor vehicle accidents. Between 2013 and 2017, there were 373 crashes, 31 of which included a fatality or serious injury.

PROJECT PURPOSE			
What is the Primary Purpose of the Project?	<input type="checkbox"/> Preservation	<input checked="" type="checkbox"/> Modernization	<input type="checkbox"/> Expansion
Improve safety in corridor by implementing improved signage and intelligent transportation system infrastructure.			

PROJECT RISKS	
Check any risks identified that may impact the project's scope, schedule, or budget:	
<input type="checkbox"/> Access/Traffic Control/Detour Issues	<input type="checkbox"/> Right-of-Way
<input type="checkbox"/> Constructability/Construction Window Issues	<input type="checkbox"/> Environmental
<input type="checkbox"/> Stakeholder Issues	<input type="checkbox"/> Utilities
<input type="checkbox"/> Structures & Geotech	<input type="checkbox"/> Other:
Risk Description: <i>(if a box is checked above, briefly explain the risk)</i> There should be minimal project risks since this exhibit is comprised primarily of signage work.	

POTENTIAL FUNDING SOURCE(S)				
Anticipated Project Design/Construction Funding Type: <i>(Check all that applied)</i>	<input type="checkbox"/> STBG	<input type="checkbox"/> TAP	<input checked="" type="checkbox"/> HSIP	<input checked="" type="checkbox"/> State
	<input type="checkbox"/> Local	<input type="checkbox"/> Private	<input type="checkbox"/> Tribal	<input type="checkbox"/> Other

COST ESTIMATE			
Design \$49,250.00	Right-of-Way \$0.00	Construction \$443,250.00	Total \$492,500.00

RECOMMENDED PROJECT DELIVERY
Delivery: <input type="checkbox"/> Design-Bid-Build <input type="checkbox"/> Design-Build <input checked="" type="checkbox"/> Other:
Design Program Year: Click or tap here to enter text.
Construction Program Year: Click or tap here to enter text.

ATTACHMENTS

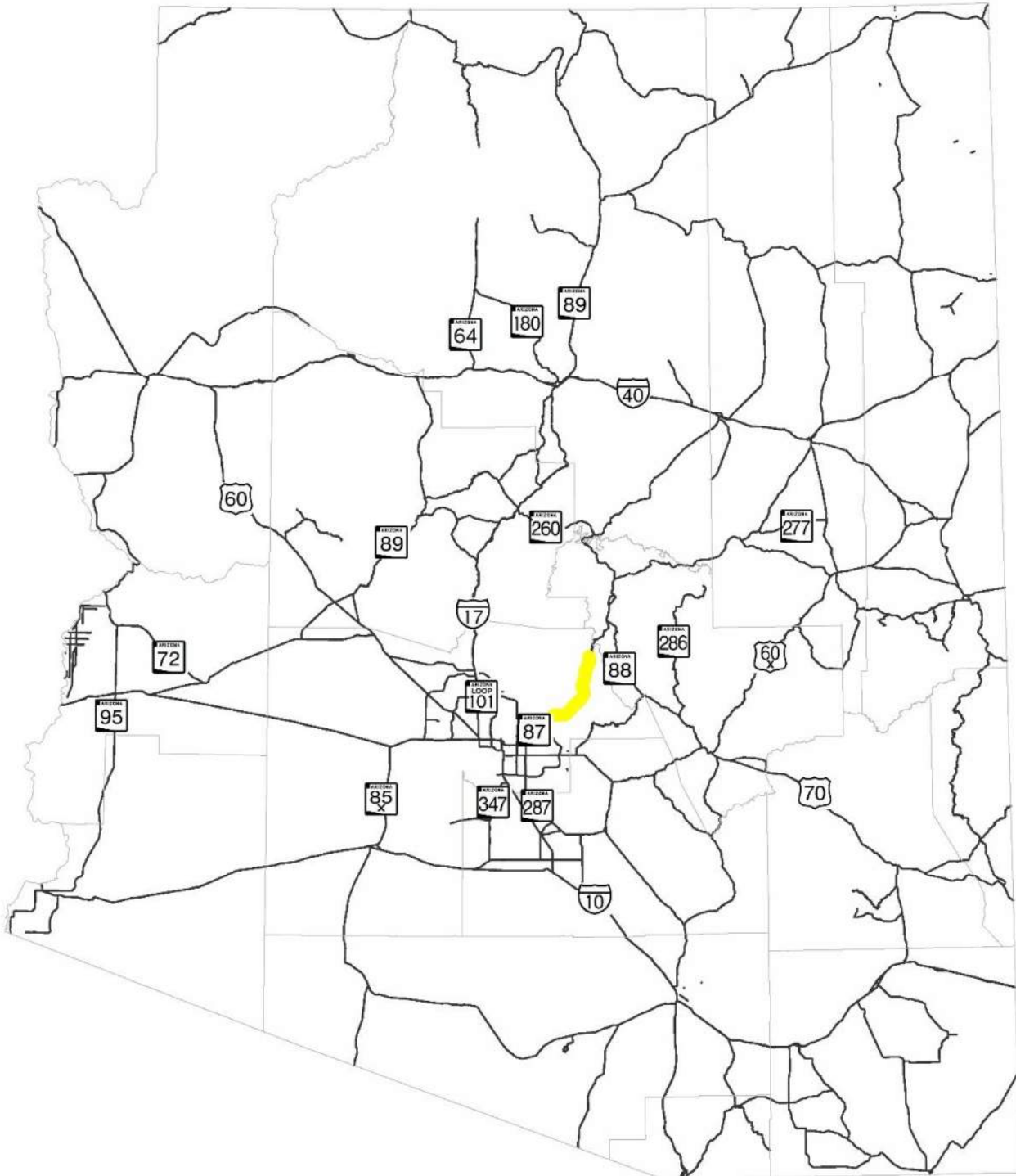
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|---|
| <ol style="list-style-type: none">1. Project Scope of Work2. State Location Map3. Project Vicinity Map4. Itemized Cost Estimate5. Conceptual Design Plans |
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ATTACHMENT 1: SCOPE OF WORK

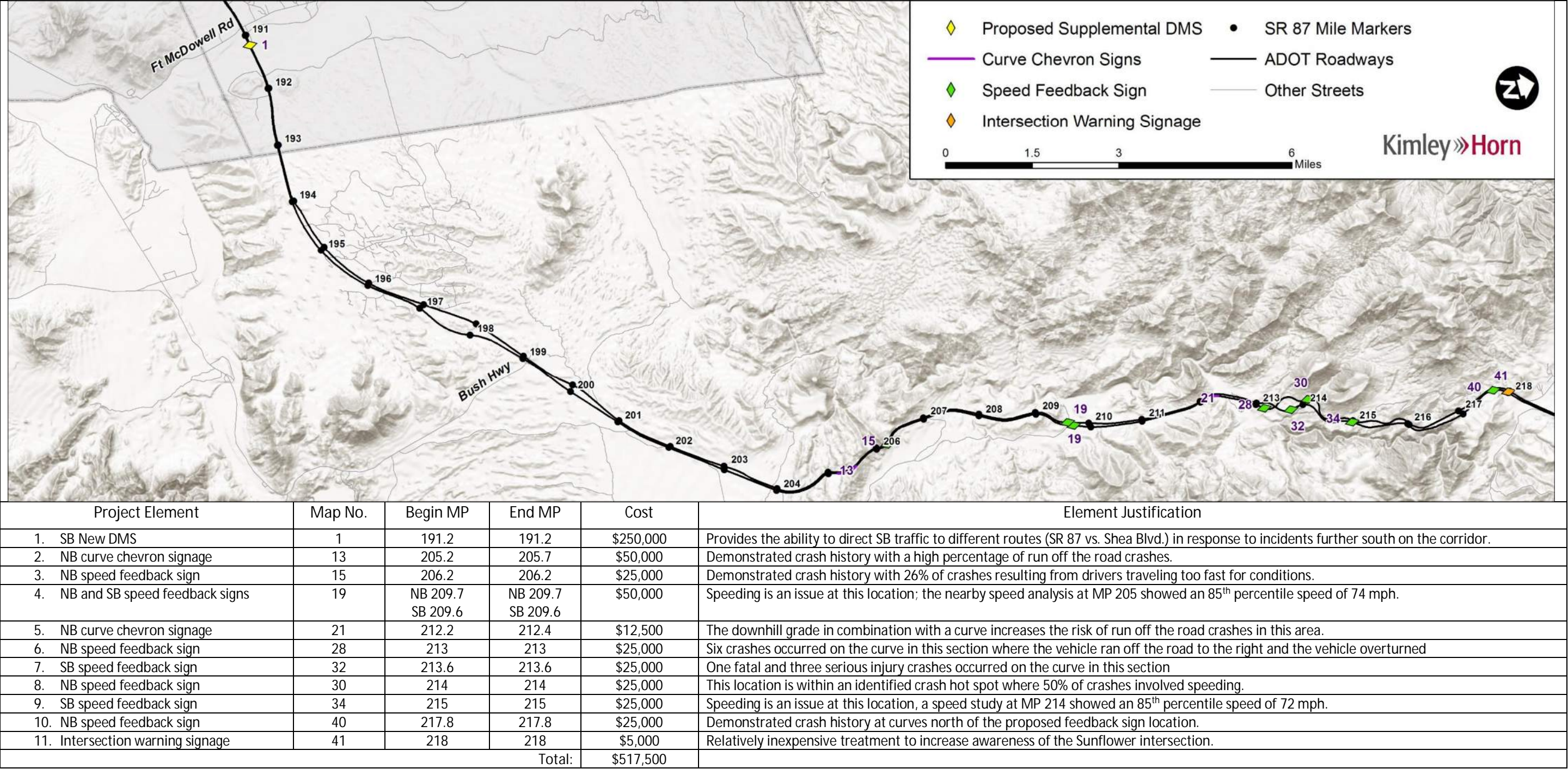
(Provide a detailed breakdown of the project's scope of work using bullet form)

- Southbound dynamic message sign (MP 191.2)
- Northbound curve chevron signage (MP 205.2-205.7)
- Northbound speed feedback sign (MP 206.2)
- Northbound and southbound speed feedback signs (NB MP 209.7, SB MP 209.6)
- Northbound curve chevron signage (MP 212.2-212.4)
- Northbound speed feedback sign (MP 213)
- Southbound speed feedback sign (MP 213.6)
- Northbound speed feedback sign (MP 214)
- Southbound speed feedback sign (MP 215)
- Northbound speed feedback sign (MP 217.8)
- Intersection warning signage – Sunflower (MP 218)

ATTACHMENT 2: STATE LOCATION MAP



ATTACHMENT 3: PROJECT VICINITY MAP



ATTACHMENT 4: ITEMIZED COST ESTIMATE

Itemized cost estimates were not developed for the ITS/Signage projects.

ATTACHMENT 5: PRELIMINARY PLANS

Preliminary (15%) plans were not developed for the ITS/Signage projects.

**PACKAGE PROJECT 2 –
CENTRAL DISTRICT SHOULDER
IMPROVEMENTS
(MP 196-211)**

ADOT SR 87 Corridor Development Study

PRELIMINARY SCOPING REPORT

GENERAL PROJECT INFORMATION	
Date: 8/20/2019	ADOT Project Manager:
Project Name: Central District Shoulder Improvements (MP 196-211)	
City/Town: N/A	County: Maricopa
COG/MPO: MAG	ADOT District: Central
Primary Route/Street: SR 87	
Beginning Limit: 196	
End Limit: 211	
Project Length: 15 Miles	
Right of Way Ownership(s) (where proposed project would occur): <i>(check all that apply)</i> <input type="checkbox"/> City/Town <input type="checkbox"/> County <input checked="" type="checkbox"/> ADOT <input type="checkbox"/> Private <input type="checkbox"/> Federal <input type="checkbox"/> Tribal <input type="checkbox"/> Other	
Adjacent Land Ownership(s): <i>(Check all that apply)</i> <input type="checkbox"/> City/Town <input checked="" type="checkbox"/> County <input type="checkbox"/> ADOT <input checked="" type="checkbox"/> Private <input checked="" type="checkbox"/> Federal <input type="checkbox"/> Tribal <input type="checkbox"/> Other	

PROJECT NEED
Shoulders at several locations are of substandard widths, other locations are in need of reconstruction. The north approach of the intersection of SR 87 and Goldfield Road is in poor condition.

PROJECT PURPOSE			
What is the Primary Purpose of the Project?	<input type="checkbox"/> Preservation	<input checked="" type="checkbox"/> Modernization	<input type="checkbox"/> Expansion
Widen shoulders to current standards, where needed, and rehabilitate shoulders in select locations to create a consistent recovery area and improve emergency response.			

PROJECT RISKS	
Check any risks identified that may impact the project's scope, schedule, or budget:	
<input type="checkbox"/> Access/Traffic Control/Detour Issues	<input type="checkbox"/> Right-of-Way
<input type="checkbox"/> Constructability/Construction Window Issues	<input type="checkbox"/> Environmental
<input type="checkbox"/> Stakeholder Issues	<input type="checkbox"/> Utilities
<input type="checkbox"/> Structures & Geotech	<input type="checkbox"/> Other:
Risk Description: <i>(if a box is checked above, briefly explain the risk)</i> Click or tap here to enter text.	

POTENTIAL FUNDING SOURCE(S)				
Anticipated Project Design/Construction Funding Type: <i>(Check all that applied)</i>	<input type="checkbox"/> STBG	<input type="checkbox"/> TAP	<input checked="" type="checkbox"/> HSIP	<input checked="" type="checkbox"/> State
	<input type="checkbox"/> Local	<input type="checkbox"/> Private	<input type="checkbox"/> Tribal	<input type="checkbox"/> Other

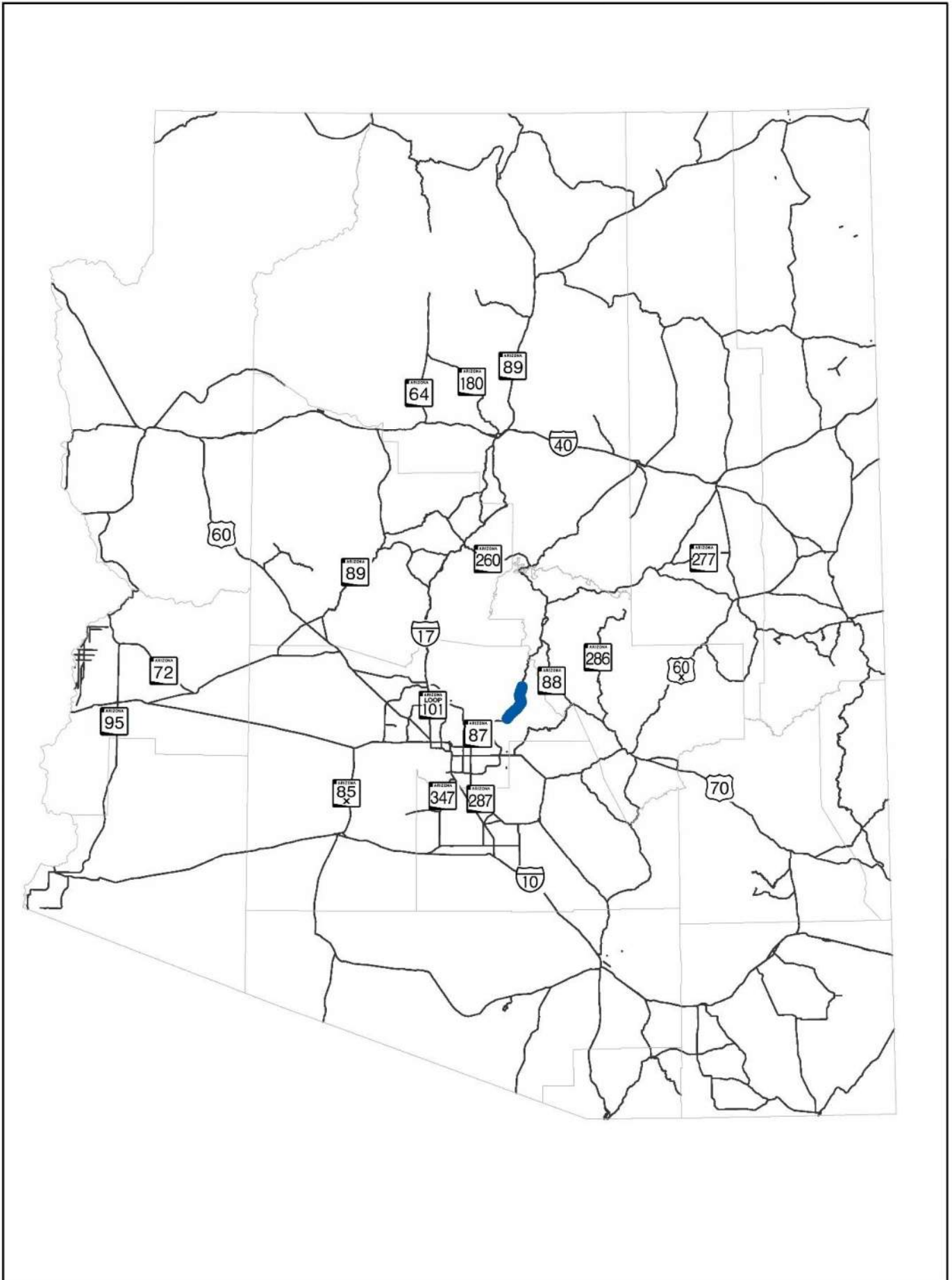
COST ESTIMATE			
Design \$548,600.00	Right-of-Way \$0.00	Construction \$7,133,100.00	Total \$7,681,700.00

RECOMMENDED PROJECT DELIVERY
Delivery: <input type="checkbox"/> Design-Bid-Build <input type="checkbox"/> Design-Build <input checked="" type="checkbox"/> Other:
Design Program Year: Click or tap here to enter text.
Construction Program Year: Click or tap here to enter text.

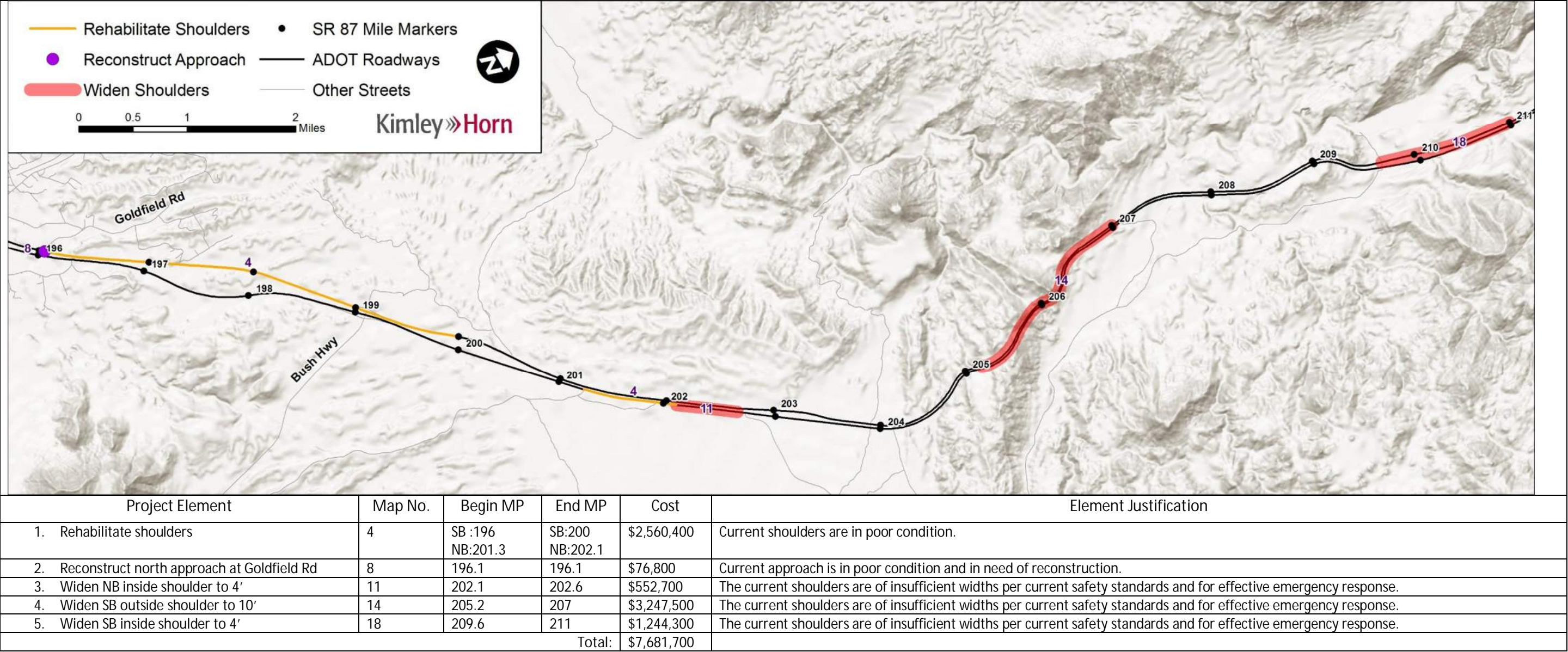
ATTACHMENTS
<ol style="list-style-type: none">1. Project Scope of Work2. State Location Map3. Project Vicinity Map4. Itemized Cost Estimate5. Conceptual Design Plans

ATTACHMENT 1: SCOPE OF WORK
<p><i>(Provide a detailed breakdown of the project's scope of work using bullet form)</i></p> <ul style="list-style-type: none">• Rehabilitate shoulders (Southbound: MP 196-200, Northbound: MP 201.3-202.1)• Reconstruct north approach at Goldfield Rd (MP 196.1)• Widen northbound inside shoulder to four feet (MP 202.1-202.6)• Widen southbound outside shoulder to ten feet (MP 205.2-207)• Widen southbound inside shoulder to four feet (MP 209.6-211)

ATTACHMENT 2: STATE LOCATION MAP



ATTACHMENT 3: PROJECT VICINITY MAP



Project Element	Map No.	Begin MP	End MP	Cost	Element Justification
1. Rehabilitate shoulders	4	SB :196 NB:201.3	SB:200 NB:202.1	\$2,560,400	Current shoulders are in poor condition.
2. Reconstruct north approach at Goldfield Rd	8	196.1	196.1	\$76,800	Current approach is in poor condition and in need of reconstruction.
3. Widen NB inside shoulder to 4'	11	202.1	202.6	\$552,700	The current shoulders are of insufficient widths per current safety standards and for effective emergency response.
4. Widen SB outside shoulder to 10'	14	205.2	207	\$3,247,500	The current shoulders are of insufficient widths per current safety standards and for effective emergency response.
5. Widen SB inside shoulder to 4'	18	209.6	211	\$1,244,300	The current shoulders are of insufficient widths per current safety standards and for effective emergency response.
Total:				\$7,681,700	

ATTACHMENT 4: ITEMIZED COST ESTIMATE



SR87 Corridor Development Study
ITEMIZED COST ESTIMATE

4. Rehabilitate northbound shoulders (MP 201.3-202.1)

ITEM NO	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
2020053	REMOVE (GR TERMINAL)	EACH	2	\$400.00	\$800
2020071	REMOVE GUARD RAIL	L.FT.	1,038	\$5.00	\$5,190
2020085	REMOVE BITUMINOUS PAVEMENT (MILLING) (3")	SQ.YD.	6,456	\$3.00	\$19,368
4090003	ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL)	TON	1,182	\$120.00	\$141,840
4110001	ASPHALTIC CONCRETE FRICTION COURSE (MISC.)	TON	191	\$100.00	\$19,100
6080101	MISCELLANEOUS WORK (SIGNS)	L.SUM	1	\$4,000.00	\$4,000
7041501	PAVEMENT MARKINGS	L.SUM	1	\$4,150.00	\$4,150
9050001	GUARD RAIL, W-BEAM, SINGLE FACE	L.FT.	1,038	\$30.00	\$31,140
9050026	GUARD RAIL TERMINAL (TANGENT TYPE)	EACH	1	\$2,500.00	\$2,500
9050036	GUARD RAIL, ANCHOR ASSEMBLY	EACH	1	\$800.00	\$800
9240050	MISCELLANEOUS WORK (PUBLIC RELATIONS)	L.SUM	1	\$6,000.00	\$6,000
9280037	GROUND-IN RUMBLE STRIP (12 INCH)	L.FT.	8,300	\$0.75	\$6,225
Roadway Construction Subtotal					\$241,113
Unidentified Item Allowance (15%)					\$ 36,167
Subtotal					\$277,280
Water Supply/Dust Palliative (3%)					\$ 8,319
Maintenance And Protection Of Traffic (15%)					\$ 41,592
Erosion Control (1%)					\$ 2,773
Contractor Quality Control (2%)					\$ 5,546
Construction Surveying And Layout (2%)					\$ 5,546
Other Item Subtotal					\$341,056
Mobilization (12%)					\$ 40,927
Construction Subtotal					\$ 381,983
Engineering Design (10%)					\$ 38,199
Construction Engineering and Contingencies (20%)					\$ 76,397
Indirect Cost Allocation (10.02%)					\$ 38,275
Construction Total					\$ 534,854

4. Rehabilitate southbound shoulders (MP 196 - 200)

ITEM NO	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
2020053	REMOVE (GR TERMINAL)	EACH	4	\$400.00	\$1,600
2020071	REMOVE GUARD RAIL	L.FT.	5,223	\$5.00	\$26,115
2020085	REMOVE BITUMINOUS PAVEMENT (MILLING) (3")	SQ.YD.	32,499	\$3.00	\$97,497
4090003	ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL)	TON	5,951	\$80.00	\$476,080
4110001	ASPHALTIC CONCRETE FRICTION COURSE (MISC.)	TON	959	\$90.00	\$86,310
6080101	MISCELLANEOUS WORK (SIGNS)	L.SUM	1	\$4,000.00	\$4,000
7041501	PAVEMENT MARKINGS	L.SUM	1	\$20,892.00	\$20,892
9050001	GUARD RAIL, W-BEAM, SINGLE FACE	L.FT.	5,223	\$30.00	\$156,690
9050026	GUARD RAIL TERMINAL (TANGENT TYPE)	EACH	2	\$2,500.00	\$5,000
9050036	GUARD RAIL, ANCHOR ASSEMBLY	EACH	2	\$800.00	\$1,600
9240050	MISCELLANEOUS WORK (PUBLIC RELATIONS)	L.SUM	1	\$6,000.00	\$6,000
9280037	GROUND-IN RUMBLE STRIP (12 INCH)	L.FT.	41,784	\$0.75	\$31,338
Roadway Construction Subtotal					\$913,122
Unidentified Item Allowance (15%)					\$ 136,969
Subtotal					\$1,050,091
Water Supply/Dust Palliative (3%)					\$ 31,503
Maintenance And Protection Of Traffic (15%)					\$ 157,514
Erosion Control (1%)					\$ 10,501
Contractor Quality Control (2%)					\$ 21,002
Construction Surveying And Layout (2%)					\$ 21,002
Other Item Subtotal					\$1,291,613
Mobilization (12%)					\$ 154,994
Construction Subtotal					\$ 1,446,607
Engineering Design (10%)					\$ 144,661
Construction Engineering and Contingencies (20%)					\$ 289,322
Indirect Cost Allocation (10.02%)					\$ 144,951
Construction Total					\$ 2,025,541
TOTAL SR87 Corridor Development Study COST					\$ 2,025,541

8. Reconstruct north approach at Goldfield Rd (MP 196.1)

ITEM NO	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
2010011	CLEARING AND GRUBBING	ACRE	1	\$5,000.00	\$5,000
2020029	REMOVAL OF ASPHALTIC CONCRETE PAVEMENT	SQ.YD.	139	\$35.00	\$4,865
2030301	ROADWAY EXCAVATION	CU.YD.	80	\$10.00	\$800
3030022	AGGREGATE BASE, CLASS 2	CU.YD.	58	\$120.00	\$6,960
4090003	ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL)	TON	49	\$160.00	\$7,840
4110001	ASPHALTIC CONCRETE FRICTION COURSE (MISC.)	TON	5	\$120.00	\$600
6080101	MISCELLANEOUS WORK (SIGNS)	L.SUM	1	\$2,000.00	\$2,000
7041501	PAVEMENT MARKINGS	L.SUM	1	\$50.00	\$50
8050003	SEEDING (CLASS II)	ACRE	1	\$3,500.00	\$3,500
9240050	MISCELLANEOUS WORK (PUBLIC RELATIONS)	L.SUM	1	\$3,000.00	\$3,000
Roadway Construction Subtotal					\$34,615
Unidentified Item Allowance (15%)					\$ 5,193
Subtotal					\$39,808
Water Supply/Dust Palliative (3%)					\$ 1,195
Maintenance And Protection Of Traffic (15%)					\$ 5,972
Erosion Control (1%)					\$ 399
Contractor Quality Control (2%)					\$ 797
Construction Surveying And Layout (2%)					\$ 797
Other Item Subtotal					\$48,968
Mobilization (12%)					\$ 5,877
Construction Subtotal					\$ 54,845
Engineering Design (10%)					\$ 5,485
Construction Engineering and Contingencies (20%)					\$ 10,969
Indirect Cost Allocation (10.02%)					\$ 5,496
Construction Total					\$ 76,795

11. Widen northbound inside shoulder to 4' (MP 202.1 to 202.6)

ITEM NO	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
2010011	CLEARING AND GRUBBING	ACRE	1	\$5,000.00	\$5,000
2020029	REMOVAL OF ASPHALTIC CONCRETE PAVEMENT	SQ.YD.	294	\$20.00	\$5,880
2020201	SAW CUTTING	L.FT.	2,640	\$2.50	\$6,600
2030301	ROADWAY EXCAVATION	CU.YD.	5,870	\$8.00	\$46,960
3030022	AGGREGATE BASE, CLASS 2	CU.YD.	1,076	\$60.00	\$64,560
4090003	ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL)	TON	631	\$160.00	\$100,960
4110001	ASPHALTIC CONCRETE FRICTION COURSE (MISC.)	TON	44	\$120.00	\$5,280
6080101	MISCELLANEOUS WORK (SIGNS)	L.SUM	1	\$2,000.00	\$2,000
7041501	PAVEMENT MARKINGS	L.SUM	1	\$2,640.00	\$2,640
8050003	SEEDING (CLASS II)	ACRE	1	\$3,500.00	\$3,500
9050036	GUARD RAIL, ANCHOR ASSEMBLY	EACH	1	\$800.00	\$800
9240050	MISCELLANEOUS WORK (PUBLIC RELATIONS)	L.SUM	1	\$3,000.00	\$3,000
9280037	GROUND-IN RUMBLE STRIP (12 INCH)	L.FT.	2,640	\$0.75	\$1,980
Roadway Construction Subtotal					\$249,160
Unidentified Item Allowance (15%)					\$ 37,374
Subtotal					\$286,534
Water Supply/Dust Palliative (3%)					\$ 8,597
Maintenance And Protection Of Traffic (15%)					\$ 42,981
Erosion Control (1%)					\$ 2,866
Contractor Quality Control (2%)					\$ 5,731
Construction Surveying And Layout (2%)					\$ 5,731
Other Item Subtotal					\$352,440
Mobilization (12%)					\$ 42,293
Construction Subtotal					\$ 394,733
Engineering Design (10%)					\$ 39,474
Construction Engineering and Contingencies (20%)					\$ 78,947
Indirect Cost Allocation (10.02%)					\$ 39,553
Construction Total					\$ 552,707

14. Widen southbound outside shoulder to 10' (MP MP205.2 - 207)

ITEM NO	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
2010011	CLEARING AND GRUBBING	ACRE	8	\$5,000.00	\$40,000
2020029	REMOVAL OF ASPHALTIC CONCRETE PAVEMENT	SQ.YD.	1,220	\$20.00	\$24,400
2020053	REMOVE (GR TERMINAL)	EACH	4	\$400.00	\$1,600
2020071	REMOVE GUARD RAIL	L.FT.	2,745	\$5.00	\$13,725
2020201	SAW CUTTING	L.FT.	10,978	\$2.50	\$27,445
2030301	ROADWAY EXCAVATION	CU.YD.	97,590	\$7.00	\$683,130
3030022	AGGREGATE BASE, CLASS 2	CU.YD.	4,066	\$60.00	\$243,960
4090003	ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL)	TON	2,219	\$120.00	\$266,280
4110001	ASPHALTIC CONCRETE FRICTION COURSE (MISC.)	TON	144	\$120.00	\$17,280
6080101	MISCELLANEOUS WORK (SIGNS)	L.SUM	1	\$4,000.00	\$4,000
7041501	PAVEMENT MARKINGS	L.SUM	1	\$10,978.00	\$10,978
8050003	SEEDING (CLASS II)	ACRE	8	\$3,500.00	\$28,000
9050001	GUARD RAIL, W-BEAM, SINGLE FACE	L.FT.	2,745	\$30.00	\$82,350
9050026	GUARD RAIL TERMINAL (TANGENT TYPE)	EACH	2	\$2,500.00	\$5,000
9050036	GUARD RAIL, ANCHOR ASSEMBLY	EACH	2	\$800.00	\$1,600
9240050	MISCELLANEOUS WORK (PUBLIC RELATIONS)	L.SUM	1	\$6,000.00	\$6,000
9280037	GROUND-IN RUMBLE STRIP (12 INCH)	L.FT.	10,978	\$0.75	\$8,234
Roadway Construction Subtotal					\$1,463,982
Unidentified Item Allowance (15%)					\$ 219,598
Subtotal					\$1,683,580
Water Supply/Dust Palliative (3%)					\$ 50,508
Maintenance And Protection Of Traffic (15%)					\$ 252,537
Erosion Control (1%)					\$ 16,836
Contractor Quality Control (2%)					\$ 33,672
Construction Surveying And Layout (2%)					\$ 33,672
Other Item Subtotal					\$2,070,805
Mobilization (12%)					\$ 248,497
Construction Subtotal					\$ 2,319,302
Engineering Design (10%)					\$ 231,931
Construction Engineering and Contingencies (20%)					\$ 463,861
Indirect Cost Allocation (10.02%)					\$ 232,395
Construction Total					\$ 3,247,489

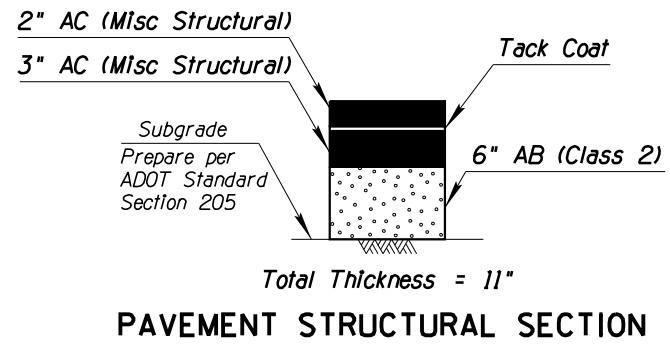
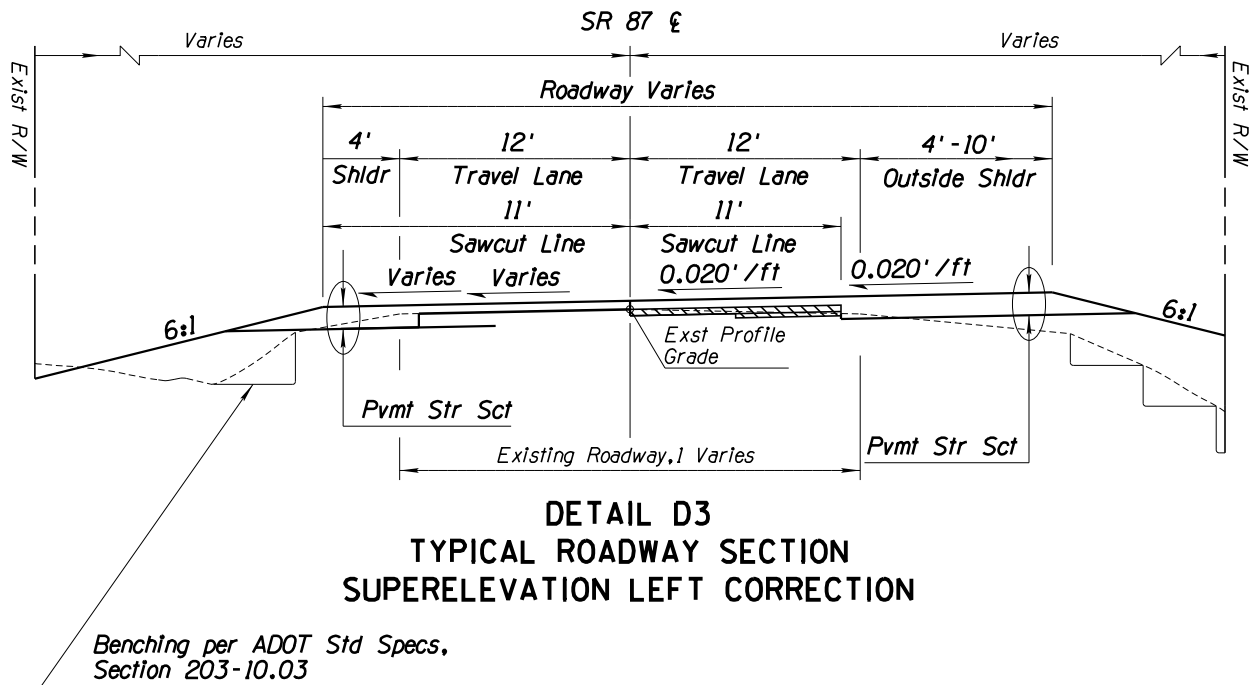
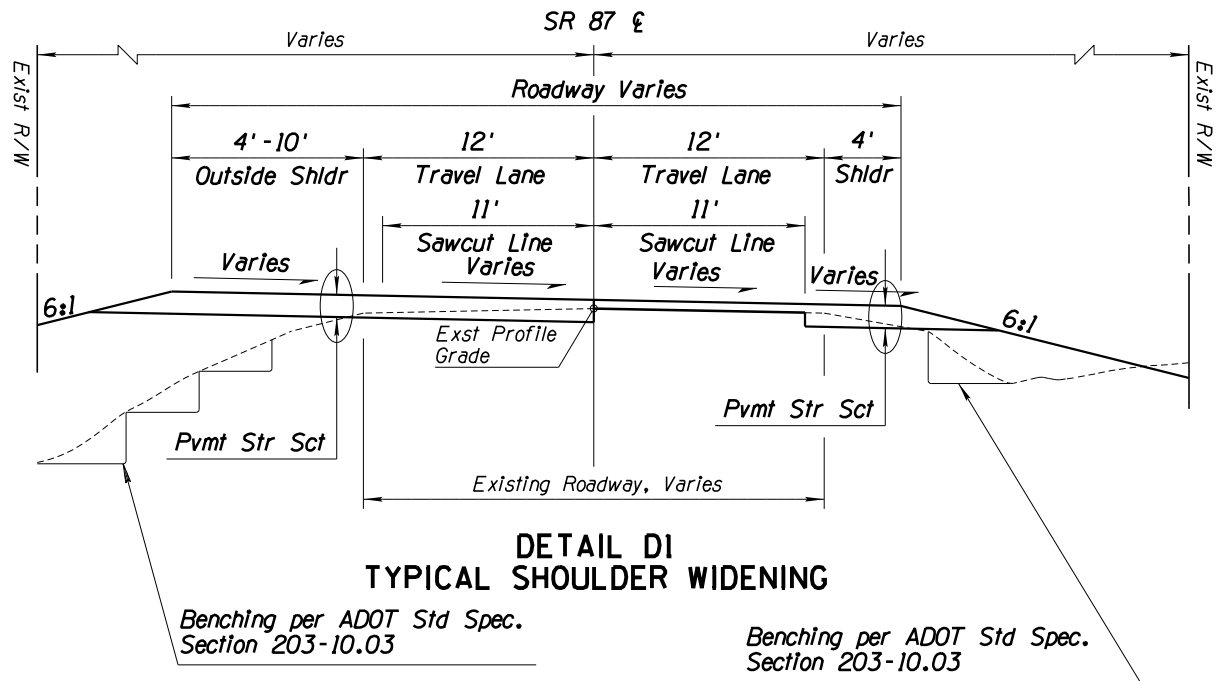
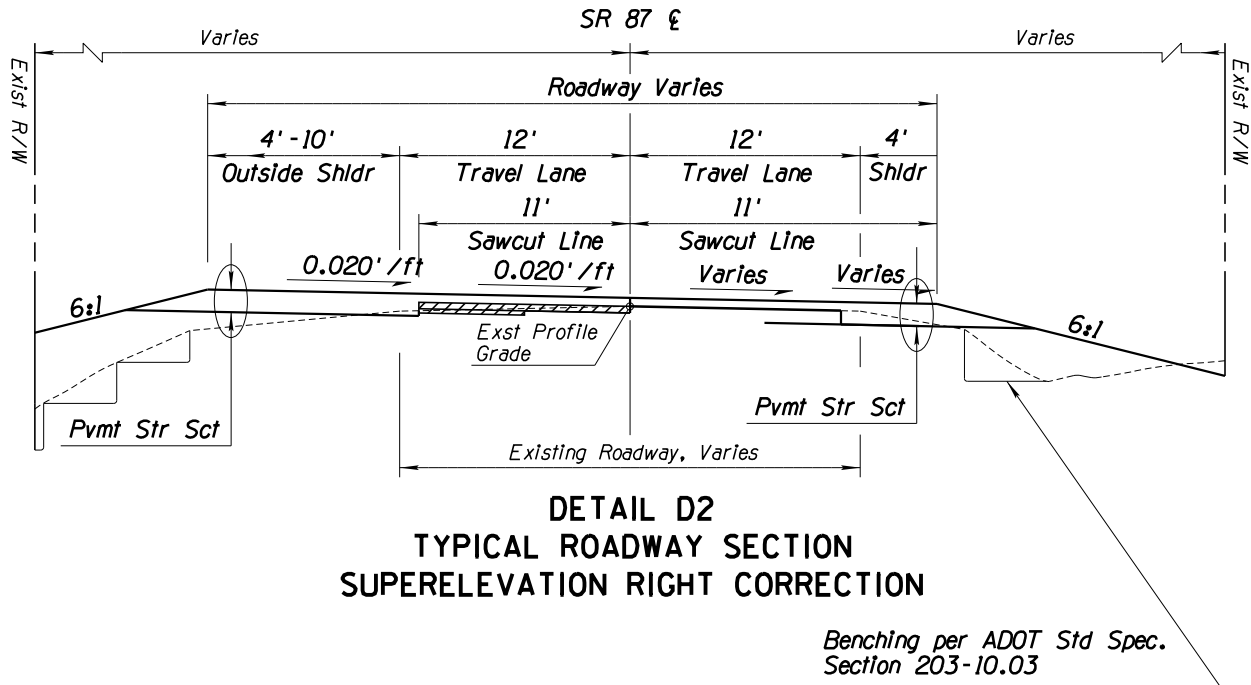
18. Widen southbound inside shoulder to 4' (MP 209.6 - 211)

ITEM NO	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
2010011	CLEARING AND GRUBBING	ACRE	2	\$5,000.00	\$10,000
2020029	REMOVAL OF ASPHALTIC CONCRETE PAVEMENT	SQ.YD.	779	\$20.00	\$15,580
2020053	REMOVE (GR TERMINAL)	EACH	2	\$400.00	\$800
2020071	REMOVE GUARD RAIL	L.FT.	400	\$5.00	\$2,000
2020201	SAW CUTTING	L.FT.	7,009	\$2.50	\$17,523
2030301	ROADWAY EXCAVATION	CU.YD.	10,390	\$8.00	\$83,120
3030022	AGGREGATE BASE, CLASS 2	CU.YD.	2,596	\$60.00	\$155,760
4090003	ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL)	TON	1,417	\$120.00	\$170,040
4110001	ASPHALTIC CONCRETE FRICTION COURSE (MISC.)	TON	92	\$120.00	\$11,040
6080101	MISCELLANEOUS WORK (SIGNS)	L.SUM	1	\$4,000.00	\$4,000
7041501	PAVEMENT MARKINGS	L.SUM	1	\$7,009.00	\$7,009
8050003	SEEDING (CLASS II)	ACRE	2	\$3,500.00	\$7,000
9050001	GUARD RAIL, W-BEAM, SINGLE FACE	L.FT.	1,753	\$30.00	\$52,590
9050026	GUARD RAIL TERMINAL (TANGENT TYPE)	EACH	4	\$2,500.00	\$10,000
9050036	GUARD RAIL, ANCHOR ASSEMBLY	EACH	4	\$800.00	\$3,200
9240050	MISCELLANEOUS WORK (PUBLIC RELATIONS)	L.SUM	1	\$6,000.00	\$6,000
9280037	GROUND-IN RUMBLE STRIP (12 INCH)	L.FT.	7,009	\$0.75	\$5,257
Roadway Construction Subtotal					\$560,918
Unidentified Item Allowance (15%)					\$ 84,138
Subtotal					\$645,056
Water Supply/Dust Palliative (3%)					\$ 19,352
Maintenance And Protection Of Traffic (15%)					\$ 96,759
Erosion Control (1%)					\$ 6,451
Contractor Quality Control (2%)					\$ 12,902
Construction Surveying And Layout (2%)					\$ 12,902
Other Item Subtotal					\$793,422
Mobilization (12%)					\$ 95,211
Construction Subtotal					\$ 888,633
Engineering Design (10%)					\$ 88,864
Construction Engineering and Contingencies (20%)					\$ 177,727
Indirect Cost Allocation (10.02%)					\$ 89,042
Construction Total					\$ 1,244,267

ATTACHMENT 5: PRELIMINARY PLANS

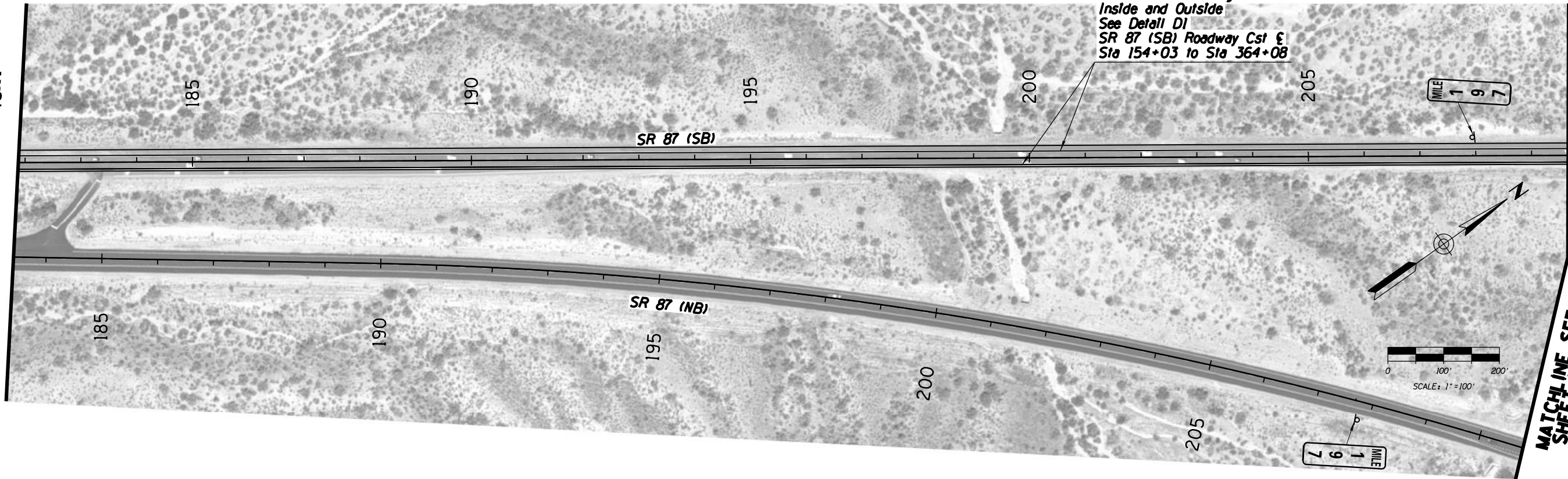
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
-	ARIZ.	-	-	59	

SR 87 MILE POST STATION			
MP NB	STATION	MP SB	STATION
196	101+73	196	101+18
197	155+53	197	154+02
198	207+69	198	207+94
199	261+02	199	259+13
200	314+21	200	311+72
201	367+73	201	364+06
202	419+18	202	417+81
203	471+36	203	470+65
204	526+28	204	523+10
205	577+70	205	575+84
206	630+73	206	628+30
207	682+81	207	680+28
208	736+47	208	734+12
209	788+55	209	786+62
210	842+08	210	839+50
211	894+91	211	890+40
212	942+20	212	939+42
213	998+65	213	995+55
214	1051+86	214	1050+06
215	1105+38	215	1095+77
216	1158+68	216	1147+95
217	1213+92	217	1199+48
218	1268+31	218	1250+20
219	1318+19	219	1304+12
220	1374+67	220	1359+76
221	1427+95	221	1412+99
222	1480+60	222	1465+84
223	1533+97	223	1518+89
224	1584+61	224	1570+72
225	1639+50	225	1625+29
226	1689+86	226	1676+32
227	1740+23	227	1726+14
228	1792+50	228	1778+04
229	1845+24	229	1831+98
230	1898+50	230	1884+70
231	1949+61	231	1933+71
232	1999+33	232	1985+29
233	2047+74	233	2033+06
234	2101+13	234	2085+05
235	2154+59	235	2137+29
236	2207+09	236	2189+44
237	2259+88	237	2240+86
238	2311+66	238	2293+85
239	2364+28	239	2344+91
240	2416+01	240	2397+41
241	2467+79	241	2448+96
242	2518+51	242	2496+68
243	2571+26	243	2549+70
244	2620+38	244	2601+82
245	2677+47	245	2655+01
246	2729+53	246	2703+04
247	2741+30	247	2747+68
248	2794+18	248	2801+15
249	2847+25	249	2854+41
250	2899+69	250	2906+58

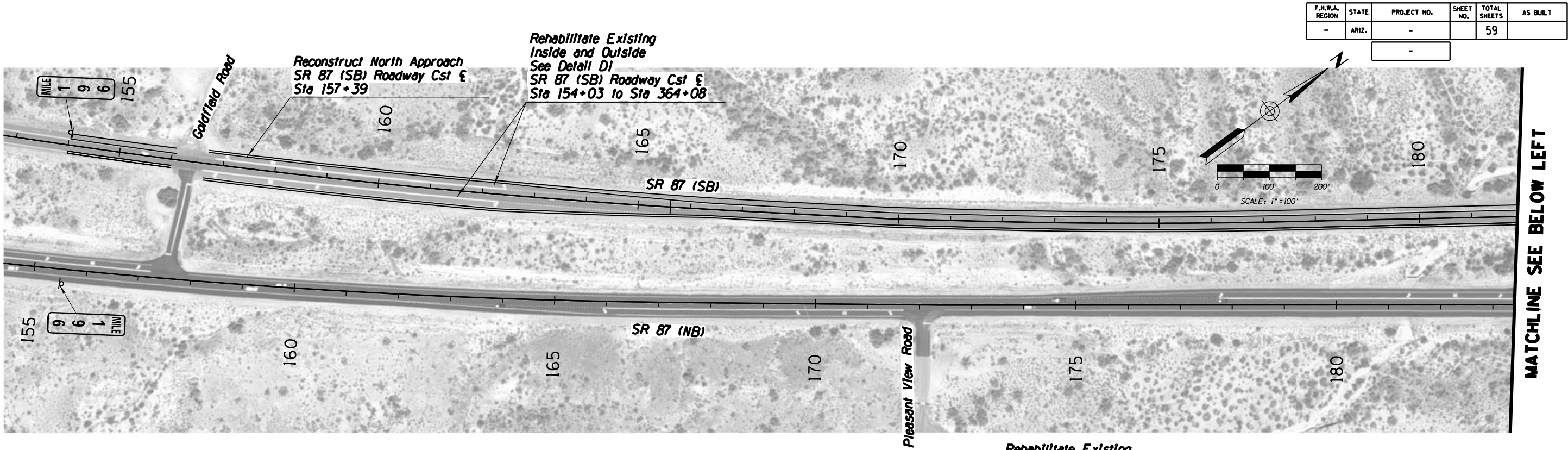


	NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION URBAN PROJECT MANAGEMENT		PRELIMINARY STAGE I Review NOT FOR CONSTRUCTION OR RECORDING
DESIGN	T. Raddeman	8/19			
DRAWN	D. Klebosky	8/19			
CHECKED	V. Rodriguez	8/19			
<div>Kimley»Horn</div> <div>© 2019 KIMLEY-HORN AND ASSOCIATES, INC.</div>					
ROUTE	LOCATION		MP 190 TO MP 250		DWG NO.
SR 87					
TRACS NO. XXXXX XXX		XXX-X(XXX)X		___ OF ___	

MATCHLINE SEE ABOVE RIGHT

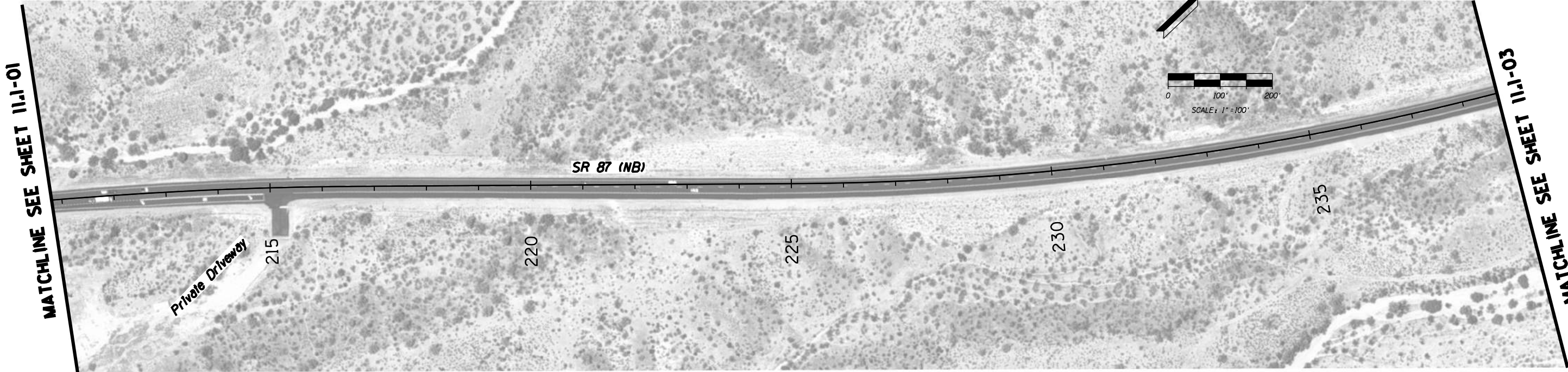


DESIGN	T. Raddeman	8/19	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION URBAN PROJECT MANAGEMENT	PRELIMINARY STAGE I Review NOT FOR CONSTRUCTION OR RECORDING
DRAWN	D. Klebosky	8/19		
CHECKED	V. Rodriguez	8/19		
Kimley»Horn <small>© 2019 KIMLEY-HORN AND ASSOCIATES, INC.</small>			PROJECT #2 CENTRAL DISTRICT SHOULDER IMPROVEMENT MP 196 TO 211	DWG NO. 11.1-01 OF
ROUTE	LOCATION			
SR 87	MP 190 TO MP 250			
TRACS NO. XXXXX XXX			XXX-X(XXX)X	



F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
-	ARIZ.	-	-	59	

MATCHLINE SEE SHEET 11.1-01

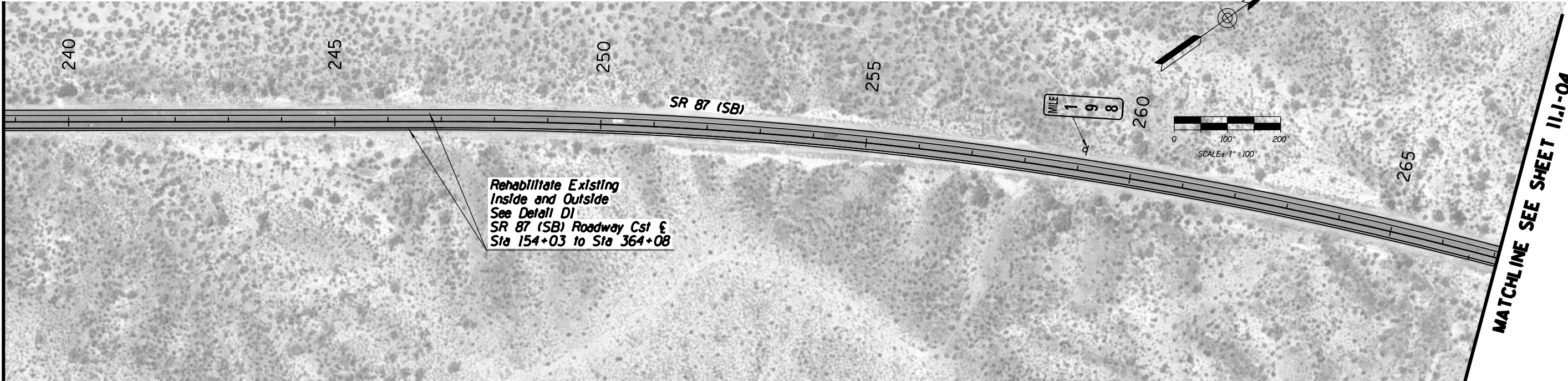


MATCHLINE SEE SHEET 11.1-03

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
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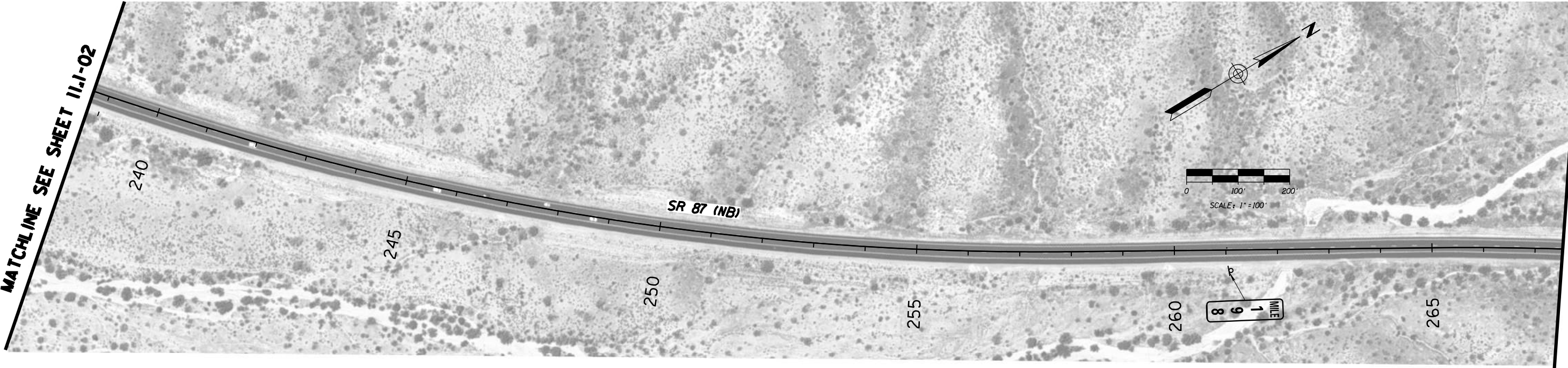
		NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION URBAN PROJECT MANAGEMENT PROJECT #2 CENTRAL DISTRICT SHOULDER IMPROVEMENTS MP 196 TO 211	PRELIMINARY STAGE I Review NOT FOR CONSTRUCTION OR RECORDING
DESIGN	T. Raddeman		8/19		
DRAWN	D. Klebosky		8/19		
CHECKED	V. Rodriguez		8/19		
<div>Kimley»Horn</div> <div>© 2019 KIMLEY-HORN AND ASSOCIATES, INC.</div>					
ROUTE		LOCATION			
SR 87		MP 190 TO MP 250		DWG NO. 11.1-02	
TRACS NO. XXXXX XXX			XXX-X(XXX)X	___ <i>OF</i> ___	

MATCHLINE SEE SHEET 11.1-02



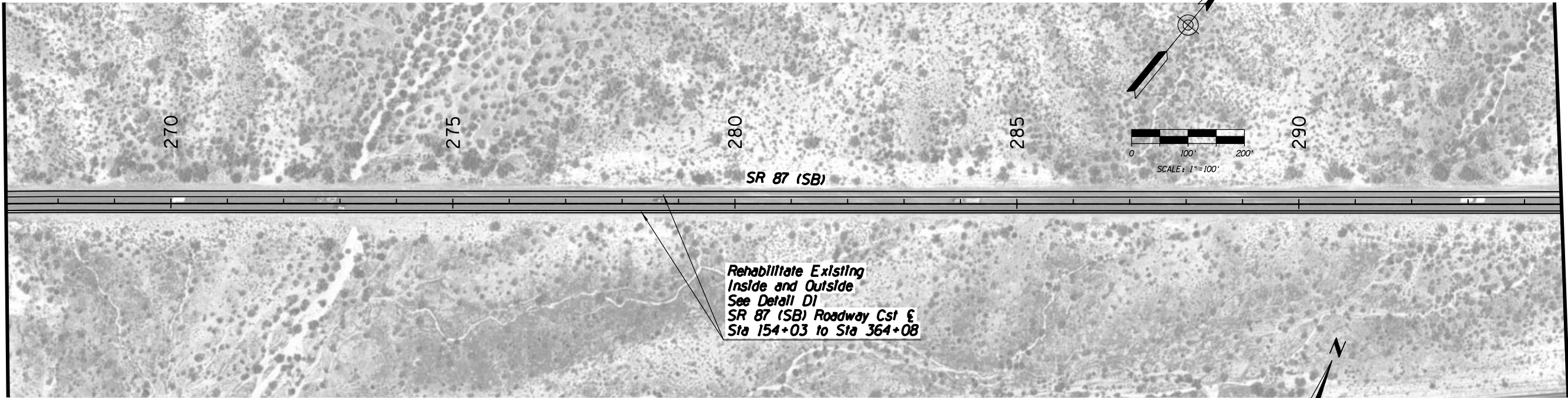
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
-	ARIZ.	-	-	59	

MATCHLINE SEE SHEET 11.1-02



		NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION URBAN PROJECT MANAGEMENT PROJECT #2 CENTRAL DISTRICT SHOULDER IMPROVEMENT MP 196 TO 211	PRELIMINARY STAGE I Review NOT FOR CONSTRUCTION OR RECORDING
DESIGN	T. Raddeman		8/19		
DRAWN	D. Klebosky		8/19		
CHECKED	V. Rodriguez		8/19		
<div>Kimley»Horn</div> <div>© 2019 KIMLEY-HORN AND ASSOCIATES, INC.</div>					
ROUTE		LOCATION			
SR 87		MP 190 TO MP 250		DWG NO. 11.1-03	
TRACS NO. XXXXX XXX				XXX-X(XXX)X	___ <i>OF</i> ___

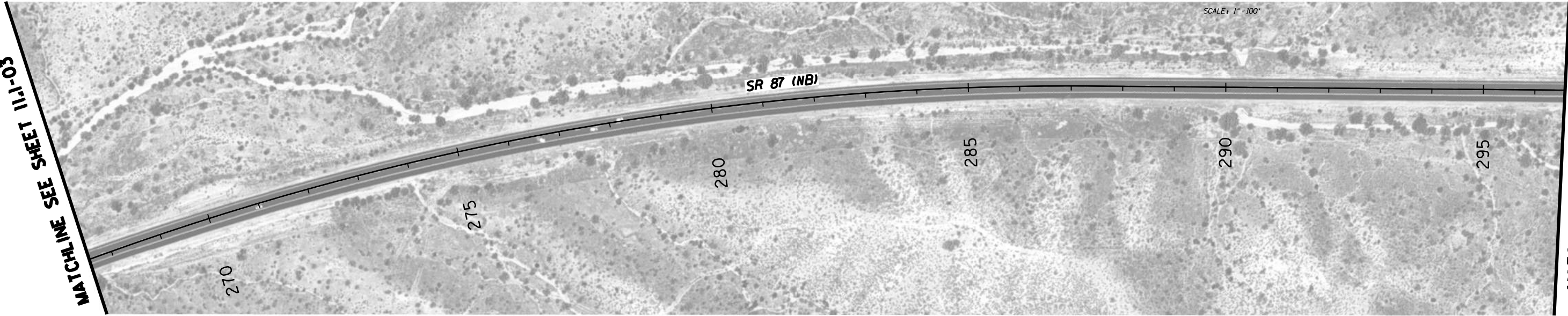
MATCHLINE SEE SHEET 11.1-03



MATCHLINE SEE SHEET 11.1-05

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
-	ARIZ.	-	-	59	

MATCHLINE SEE SHEET 11.1-03



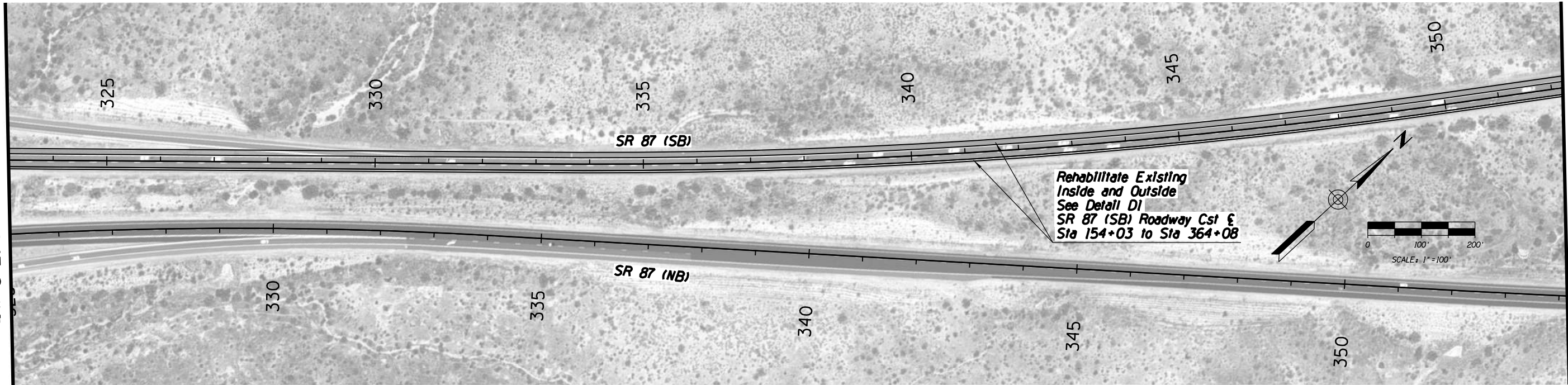
MATCHLINE SEE SHEET 11.1-05

		NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION URBAN PROJECT MANAGEMENT PROJECT #2 CENTRAL DISTRICT SHOULDER IMPROVEMENT MP 196 TO 211	PRELIMINARY
DESIGN	T. Raddeman		8/19		STAGE I Review NOT FOR CONSTRUCTION OR RECORDING
DRAWN	D. Klebosky		8/19		
CHECKED	V. Rodriguez		8/19		
<div>Kimley»Horn</div> <div>© 2019 KIMLEY-HORN AND ASSOCIATES, INC.</div>				MP 190 TO MP 250	DWG NO. 11.1-04
ROUTE		LOCATION			
SR 87					
TRACS NO. XXXXX XXX			XXX-X(XXX)X		___ OF ___

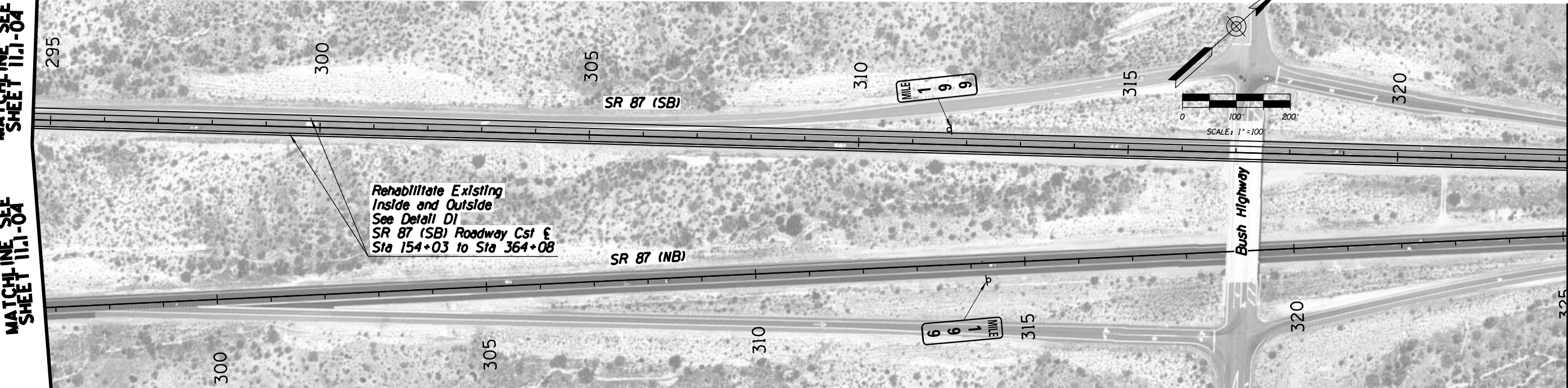
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MATCHLINE SEE SHEET 11.1-04

MATCHLINE SEE SHEET 11.1-04



MATCHLINE SEE SHEET 11.1-06

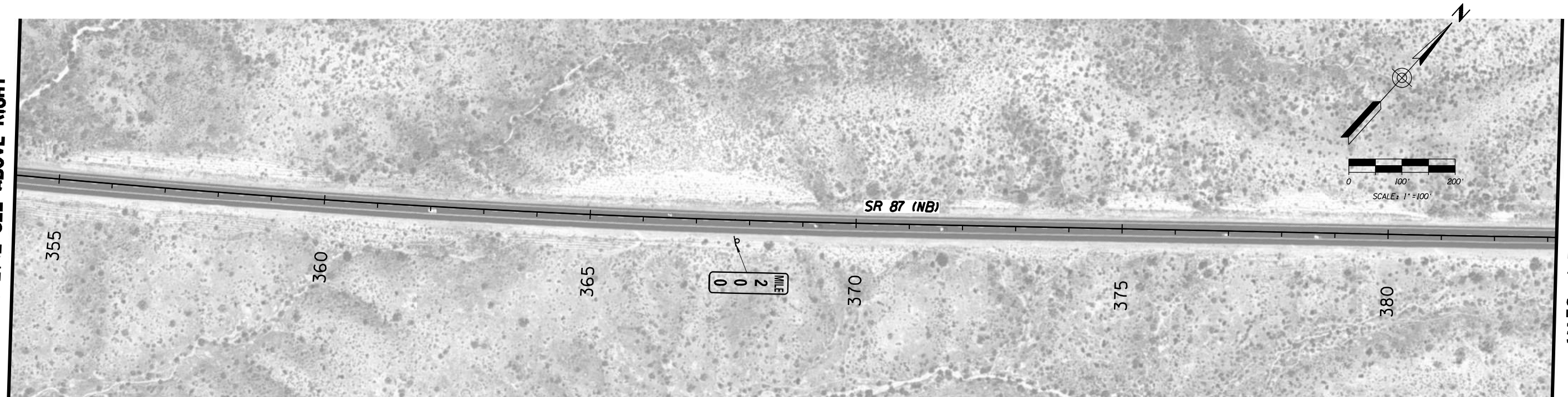
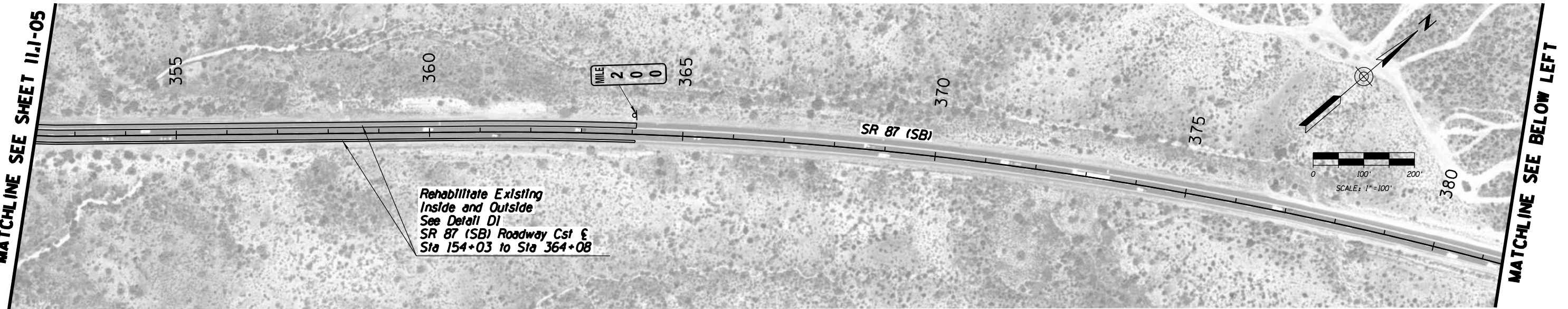


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F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
-	ARIZ.	-	-	59	

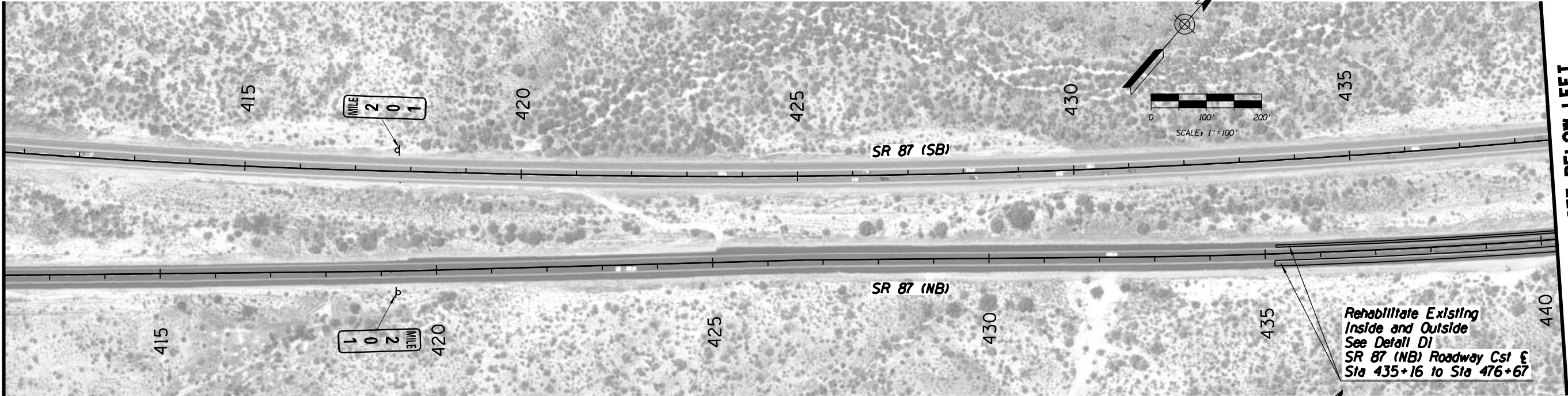
	NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION URBAN PROJECT MANAGEMENT PROJECT #2 CENTRAL DISTRICT SHOULDER IMPROVEMENTS MP 196 TO 211	PRELIMINARY STAGE I Review NOT FOR CONSTRUCTION OR RECORDING
DESIGN	T. Raddeman	8/19		
DRAWN	D. Klebosky	8/19		
CHECKED	V. Rodriguez	8/19		
Kimley»Horn				
© 2019 KIMLEY-HORN AND ASSOCIATES, INC.				
ROUTE	LOCATION			
SR 87	MP 190 TO MP 250		DWG NO. 11.1-05	
TRACS NO. XXXXX XXX			XXX-X(XXX)X	___ OF ___

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
-	ARIZ.	-		59	



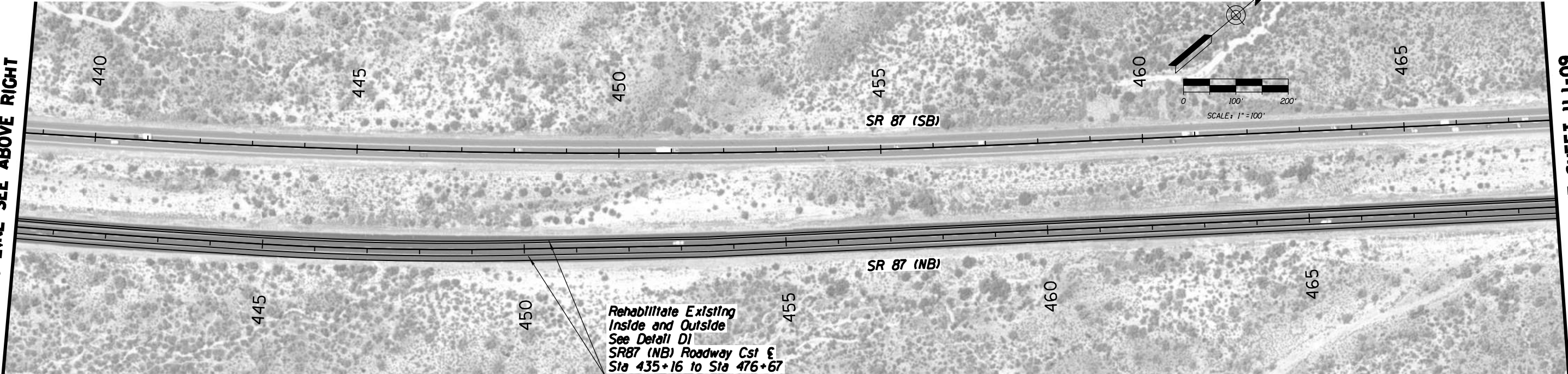
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DESIGN		T. Raddeman		8/19				STAGE I Review NOT FOR CONSTRUCTION OR RECORDING	
DRAWN		D. Klebosky		8/19					
CHECKED		V. Rodriguez		8/19					
Kimley»Horn									
© 2019 KIMLEY-HORN AND ASSOCIATES, INC.									
ROUTE		LOCATION							
SR 87				MP 190 TO MP 250				DWG NO. 11.I-06	
TRACS NO. XXXXX XXX						XXX-X(XXX)X		____ OF ____	

MATCHLINE SEE SHEET 11.1-07



F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
-	ARIZ.	-	-	59	

MATCHLINE SEE ABOVE RIGHT



MATCHLINE SEE SHEET 11.1-09

		NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION URBAN PROJECT MANAGEMENT PROJECT #2 CENTRAL DISTRICT SHOULDER IMPROVEMENTS MP 196 TO 211	PRELIMINARY STAGE I Review NOT FOR CONSTRUCTION OR RECORDING
DESIGN	T. Raddeman		8/19		
DRAWN	D. Klebosky		8/19		
CHECKED	V. Rodriguez		8/19		
<div>Kimley»Horn</div> <div>© 2019 KIMLEY-HORN AND ASSOCIATES, INC.</div>					
ROUTE		LOCATION			
SR 87		MP 190 TO MP 250		DWG NO. 11.1-08	
TRACS NO. XXXXX XXX			XXX-X(XXX)X	___ <i>OF</i> ___	

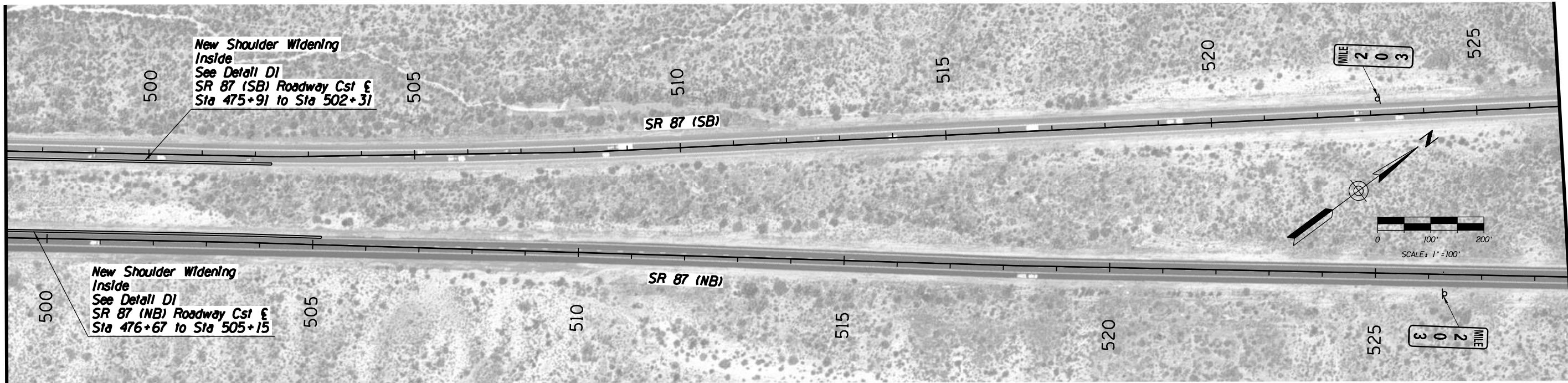
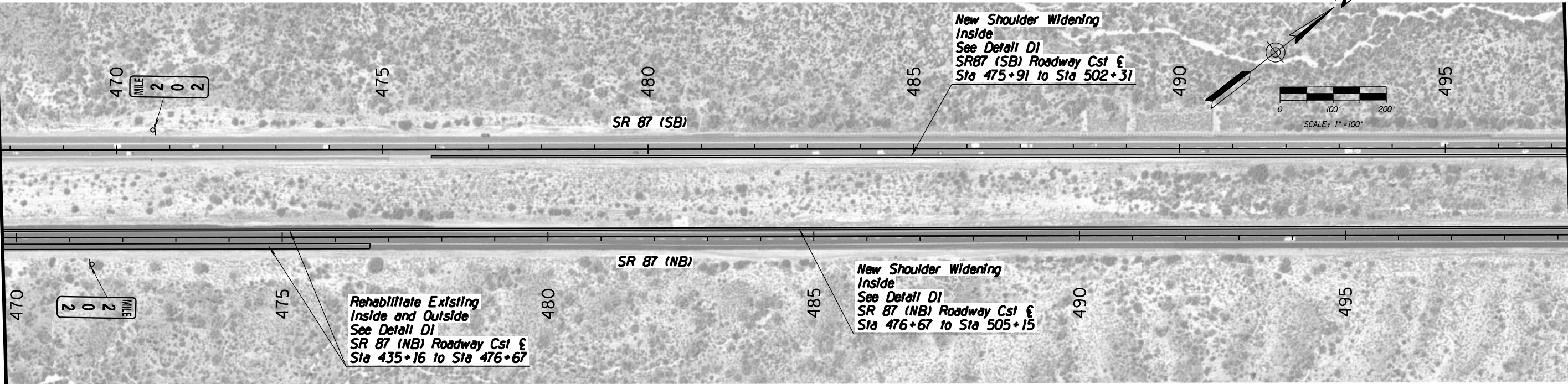
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MATCHLINE SEE ABOVE RIGHT

MATCHLINE SEE BELOW LEFT

MATCHLINE SEE SHEET 11.1-10

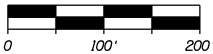
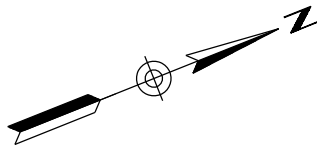
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
-	ARIZ.	-	-	59	



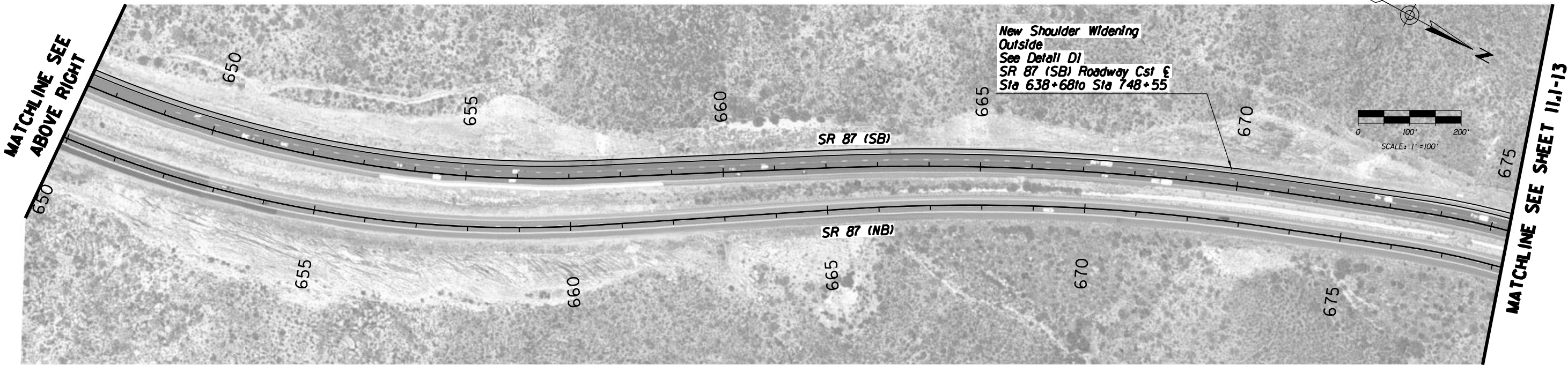
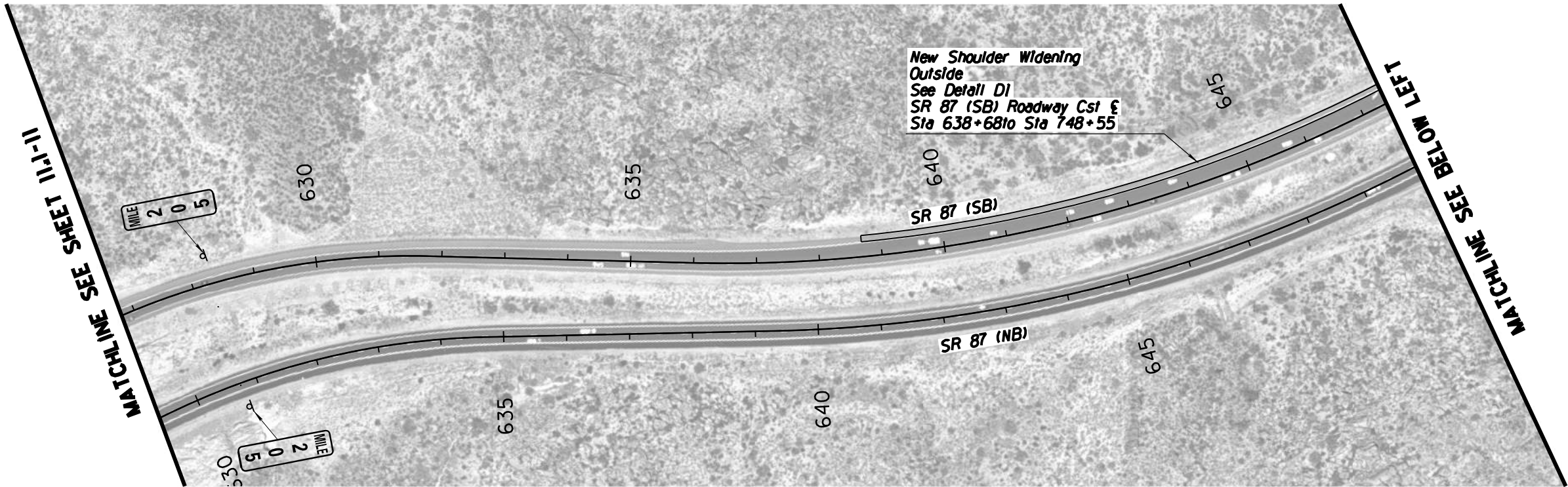
		NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION URBAN PROJECT MANAGEMENT PROJECT #2 CENTRAL DISTRICT SHOULDER IMPROVEMENTS MP 196 TO 211	PRELIMINARY STAGE I Review NOT FOR CONSTRUCTION OR RECORDING
DESIGN	T. Raddeman		8/19		
DRAWN	D. Klebosky		8/19		
CHECKED	V. Rodriguez		8/19		
<div>Kimley»Horn</div> <div>© 2019 KIMLEY-HORN AND ASSOCIATES, INC.</div>				MP 190 TO MP 250	DWG NO. 11.1-09
ROUTE		LOCATION			
SR 87					
TRACS NO. XXXXX XXX				XXX-X(XXX)X	___ <i>OF</i> ___

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
-	ARIZ.	-	-	59	

-



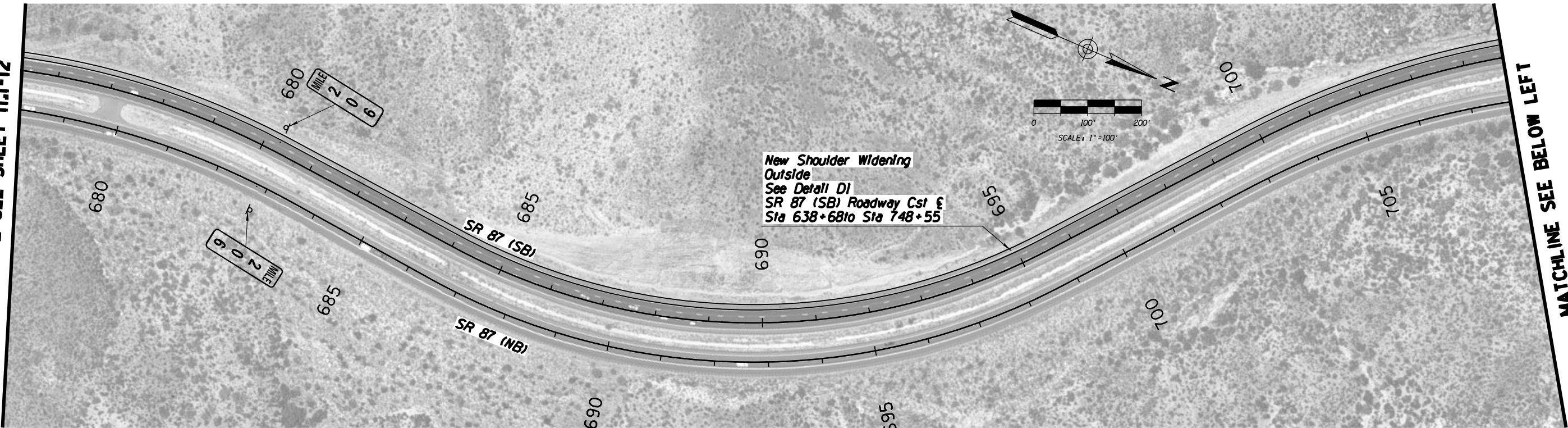
SCALE: 1" = 100'



		NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION URBAN PROJECT MANAGEMENT PROJECT #2 CENTRAL DISTRICT SHOULDER IMPROVEMENTS MP 196 TO 211	PRELIMINARY STAGE I Review NOT FOR CONSTRUCTION OR RECORDING
DESIGN		T. Raddeman	8/19		
DRAWN		D. Klebosky	8/19		
CHECKED		V. Rodriguez	8/19		
<div>Kimley»Horn</div> <div>© 2019 KIMLEY-HORN AND ASSOCIATES, INC.</div>					
ROUTE		LOCATION			
SR 87		MP 190 TO MP 250			DWG NO. 11.I-12
TRACS NO. XXXXX XXX				XXX-X(XXX)X	___ OF ___

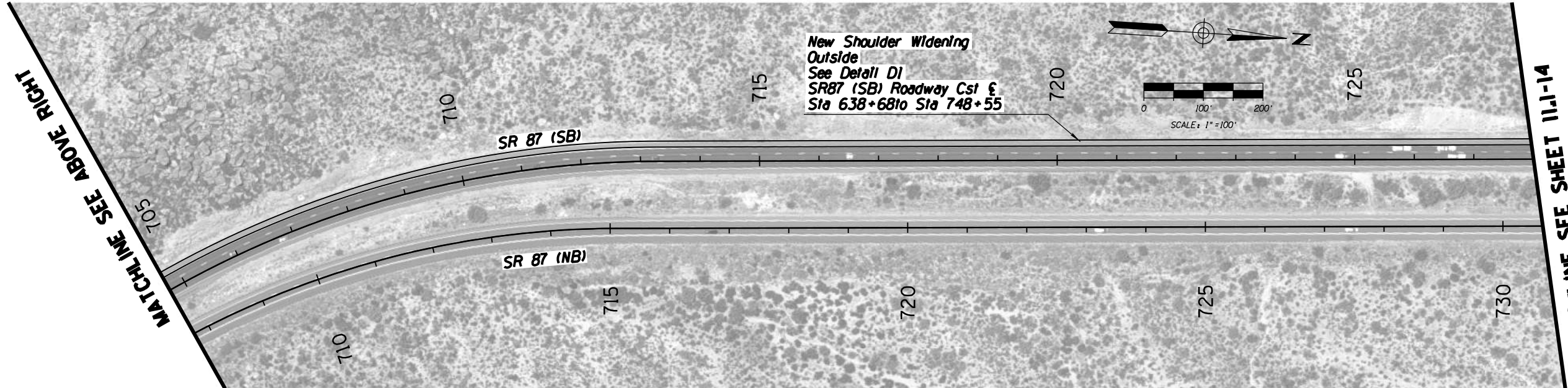
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
-	ARIZ.	-	-	59	

MATCHLINE SEE SHEET 11.1-12



MATCHLINE SEE BELOW LEFT

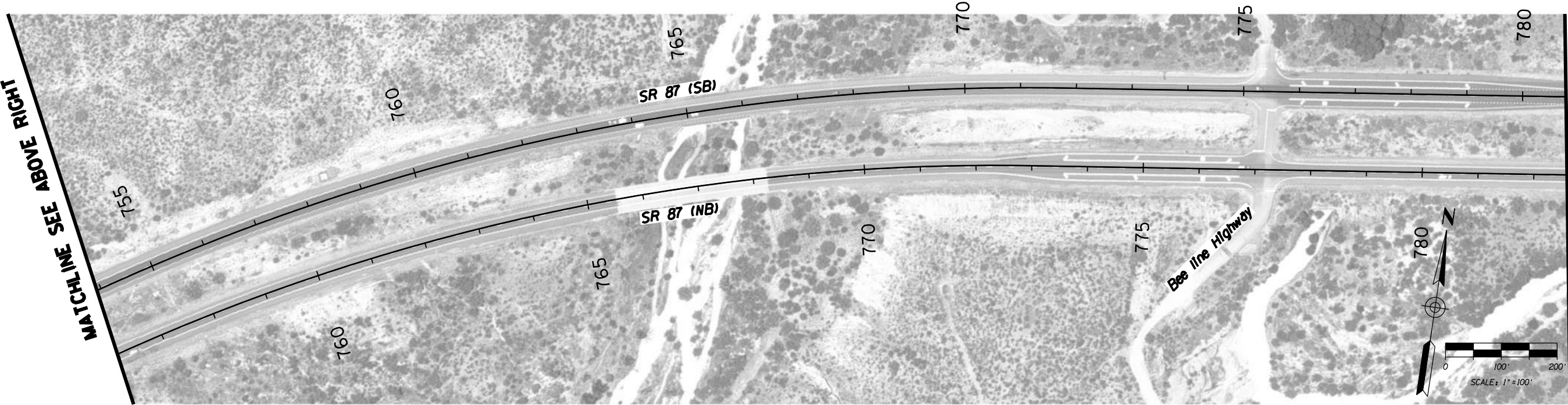
MATCHLINE SEE ABOVE RIGHT



MATCHLINE SEE SHEET 11.1-14

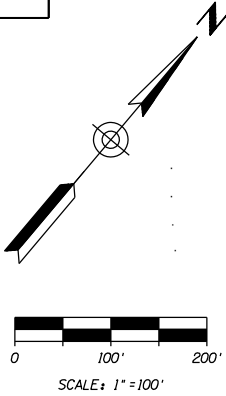
		NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION URBAN PROJECT MANAGEMENT PROJECT #2 CENTRAL DISTRICT SHOULDER IMPROVEMENTS MP 196 TO 211	PRELIMINARY STAGE I Review NOT FOR CONSTRUCTION OR RECORDING
DESIGN		T. Raddeman	8/19		
DRAWN		D. Klebosky	8/19		
CHECKED		V. Rodriguez	8/19		
Kimley»Horn © 2019 KIMLEY-HORN AND ASSOCIATES, INC.					
ROUTE		LOCATION		DWG NO. 11.1-13	
SR 87		MP 190 TO MP 250			
TRACS NO. XXXXX XXX				XXX-X(XXX)X	___ OF ___

MATCHLINE SEE SHEET 11.1-13

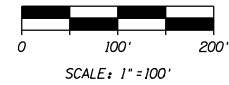
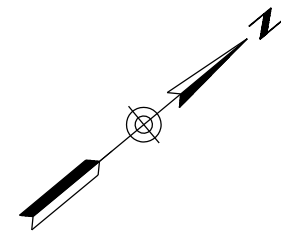
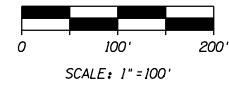
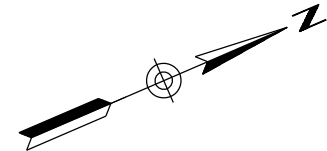
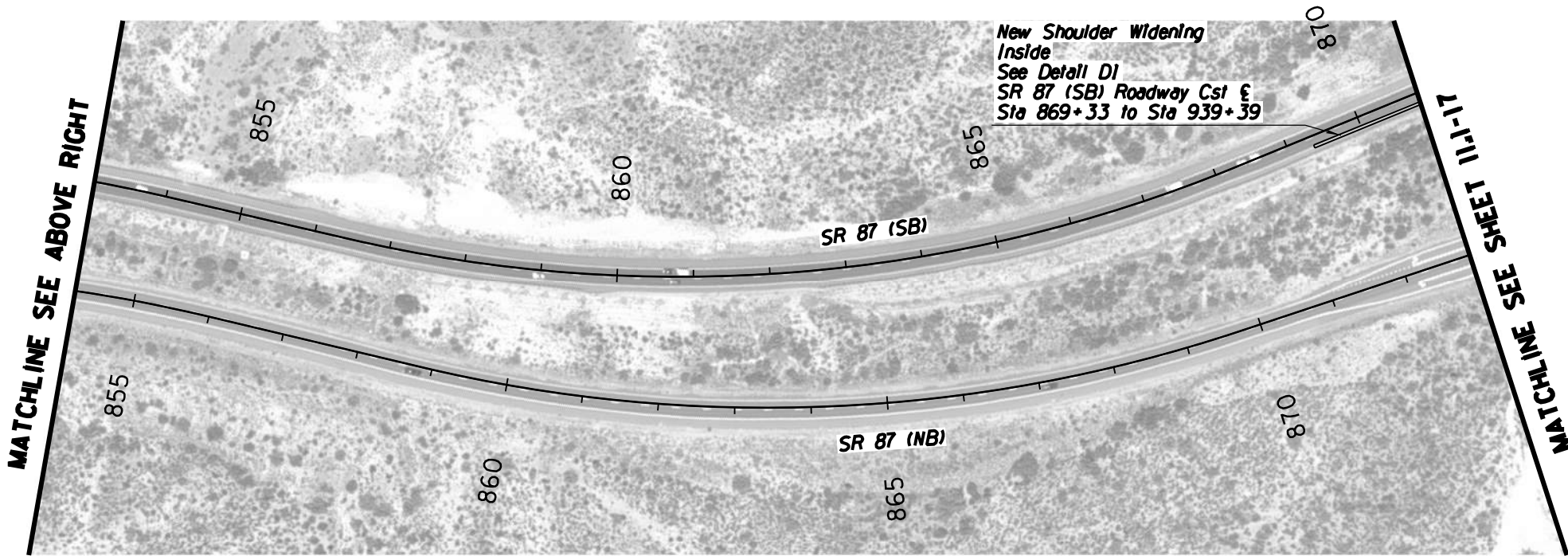
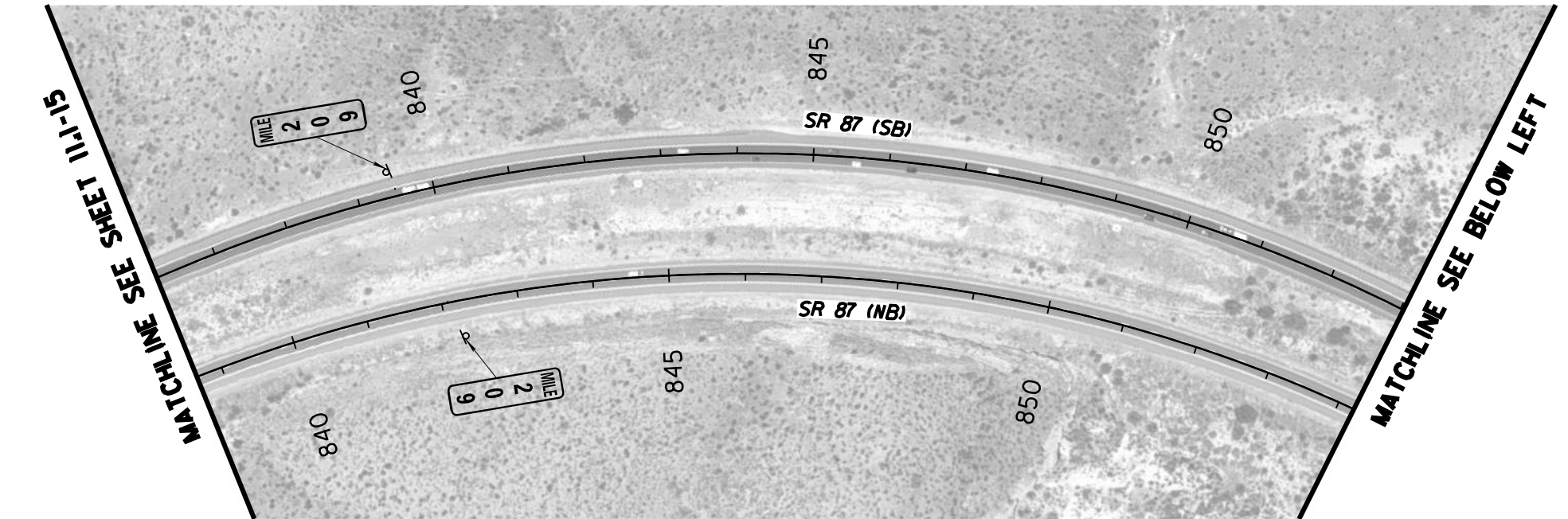


MATCHLINE SEE SHEET 11.1-15

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
-	ARIZ.	-	-	59	



	NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION URBAN PROJECT MANAGEMENT PROJECT #2 CENTRAL DISTRICT SHOULDER IMPROVEMENTS MP 196 TO 211	PRELIMINARY
DESIGN	T. Raddeman	8/19		STAGE I
DRAWN	D. Klebosky	8/19		
CHECKED	V. Rodriguez	8/19		
Kimley»Horn				Review
© 2019 KIMLEY-HORN AND ASSOCIATES, INC.				NOT FOR
ROUTE	LOCATION			CONSTRUCTION
SR 87	MP 190 TO MP 250			OR RECORDING
TRACS NO. XXXXX XXX			XXX-X(XXX)X	DWG NO. 11.1-14
				___ OF ___



F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
-	ARIZ.	-	-	59	

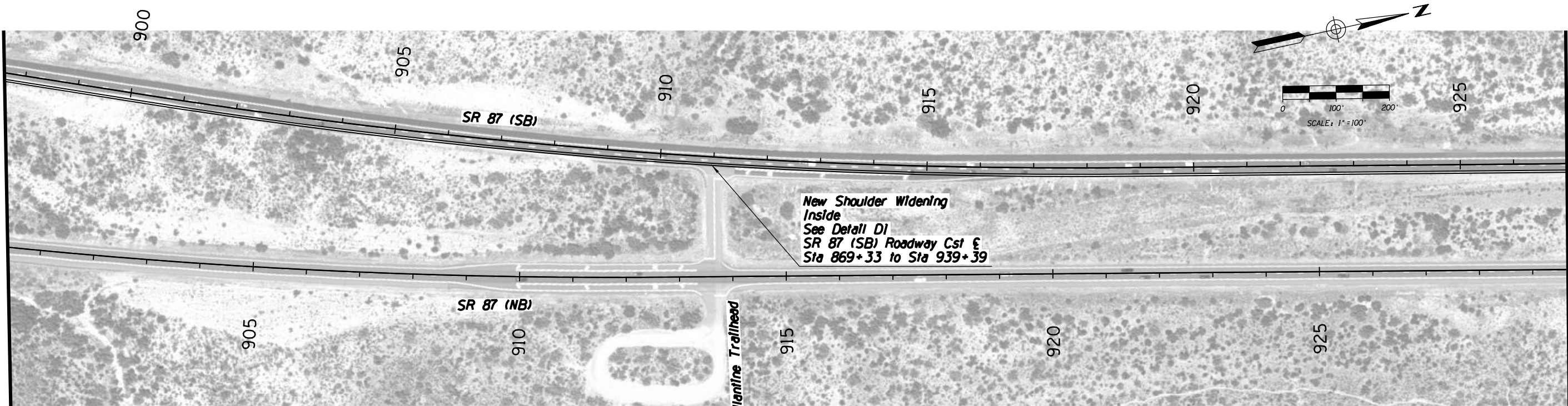
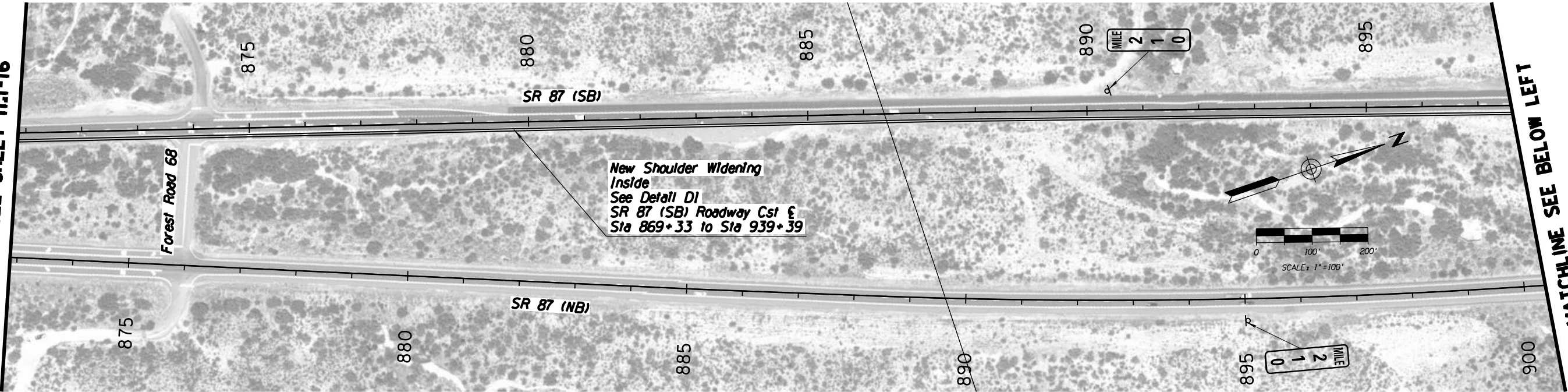
	NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION URBAN PROJECT MANAGEMENT PROJECT #2 CENTRAL DISTRICT SHOULDER IMPROVEMENTS MP 196 TO 211		PRELIMINARY STAGE I Review NOT FOR CONSTRUCTION OR RECORDING DWG NO. 11.1-16 OF
DESIGN	T. Raddeman	8/19			
DRAWN	D. Klebosky	8/19			
CHECKED	V. Rodriguez	8/19			
Kimley»Horn © 2019 KIMLEY-HORN AND ASSOCIATES, INC.					
ROUTE SR 87		LOCATION MP 190 TO MP 250			
TRACS NO. XXXXX XXX				XXX-X(XXX)X	

MATCHLINE SEE SHEET 11.I-16

MATCHLINE SEE ABOVE RIGHT

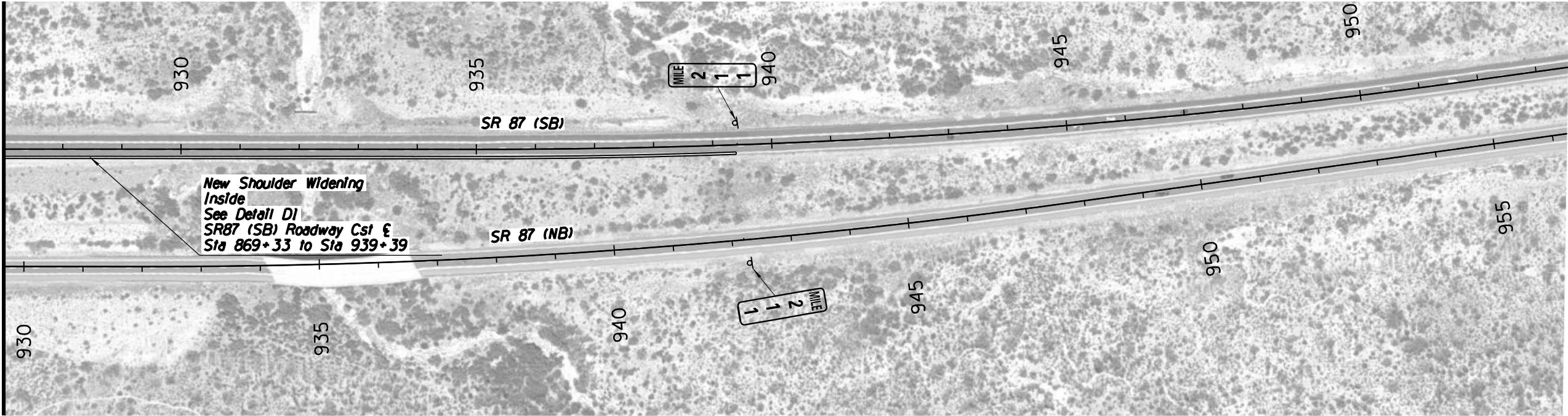
MATCHLINE SEE SHEET 11.I-18

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
-	ARIZ.	-	-	59	

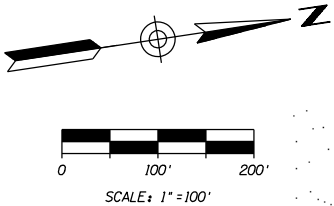


		NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION URBAN PROJECT MANAGEMENT	PRELIMINARY STAGE I Review NOT FOR CONSTRUCTION OR RECORDING
DESIGN	T. Raddeman		8/19		
DRAWN	D. Klebosky		8/19		
CHECKED	V. Rodriguez		8/19		
Kimley»Horn © 2019 KIMLEY-HORN AND ASSOCIATES, INC.				PROJECT #2 CENTRAL DISTRICT SHOULDER IMPROVEMENT MP 196 TO 211	
ROUTE		LOCATION		MP 190 TO MP 250	
SR 87					
TRACS NO. XXXXX XXX				XXX-X(XXX)X	
					___ <i>OF</i> ___

MATCHLINE SEE SHEET 11.1-17



F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
-	ARIZ.	-	-	59	



		NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION URBAN PROJECT MANAGEMENT PROJECT #2 CENTRAL DISTRICT SHOULDER IMPROVEMENTS MP 196 TO 211	PRELIMINARY STAGE I Review NOT FOR CONSTRUCTION OR RECORDING
DESIGN	T. Raddeman		8/19		
DRAWN	D. Klebosky		8/19		
CHECKED	V. Rodriguez		8/19		
<div>Kimley»Horn</div> <div>© 2019 KIMLEY-HORN AND ASSOCIATES, INC.</div>					
ROUTE		LOCATION			
SR 87		MP 190 TO MP 250			DWG NO. 11.1-18
TRACS NO. XXXXX XXX			XXX-X(XXX)X		___ OF ___

**PACKAGE PROJECT 3 –
NORTHBOUND IMPROVEMENTS
(MP 212-218)**

ADOT SR 87 Corridor Development Study

PRELIMINARY SCOPING REPORT

GENERAL PROJECT INFORMATION	
Date: 8/20/2019	ADOT Project Manager:
Project Name: Northbound Improvements (MP 212-218)	
City/Town: N/A	County: Maricopa
COG/MPO: MAG	ADOT District: Central
Primary Route/Street: SR 87	
Beginning Limit: 212	
End Limit: 218	
Project Length: 6 Miles	
Right of Way Ownership(s) (where proposed project would occur): (check all that apply)	
<input type="checkbox"/> City/Town <input type="checkbox"/> County <input checked="" type="checkbox"/> ADOT <input type="checkbox"/> Private <input type="checkbox"/> Federal <input type="checkbox"/> Tribal <input type="checkbox"/> Other	
Adjacent Land Ownership(s): (Check all that apply)	
<input type="checkbox"/> City/Town <input type="checkbox"/> County <input type="checkbox"/> ADOT <input type="checkbox"/> Private <input checked="" type="checkbox"/> Federal <input type="checkbox"/> Tribal <input type="checkbox"/> Other	

PROJECT NEED
There are large speed differentials in due to the sustained uphill grade, when combined with tight curves causes a safety hazard; two intersections do not have deceleration lanes; substandard shoulder widths in isolated locations.

PROJECT PURPOSE			
What is the Primary Purpose of the Project?	<input type="checkbox"/> Preservation	<input checked="" type="checkbox"/> Modernization	<input checked="" type="checkbox"/> Expansion
Construct a climbing lane to remove slow-moving heavy vehicles from the through traffic lanes, construct site-specific improvements at isolated locations to improve intersection safety and bring shoulders to current standards.			

PROJECT RISKS	
Check any risks identified that may impact the project's scope, schedule, or budget:	
<input type="checkbox"/> Access/Traffic Control/Detour Issues	<input type="checkbox"/> Right-of-Way
<input type="checkbox"/> Constructability/Construction Window Issues	<input type="checkbox"/> Environmental
<input type="checkbox"/> Stakeholder Issues	<input type="checkbox"/> Utilities
<input type="checkbox"/> Structures & Geotech	<input type="checkbox"/> Other:
Risk Description: (if a box is checked above, briefly explain the risk)	
Click or tap here to enter text.	

POTENTIAL FUNDING SOURCE(S)				
Anticipated Project Design/Construction Funding Type: (Check all that applied)	<input type="checkbox"/> STBG	<input type="checkbox"/> TAP	<input checked="" type="checkbox"/> HSIP	<input checked="" type="checkbox"/> State
	<input type="checkbox"/> Local	<input type="checkbox"/> Private	<input type="checkbox"/> Tribal	<input type="checkbox"/> Other

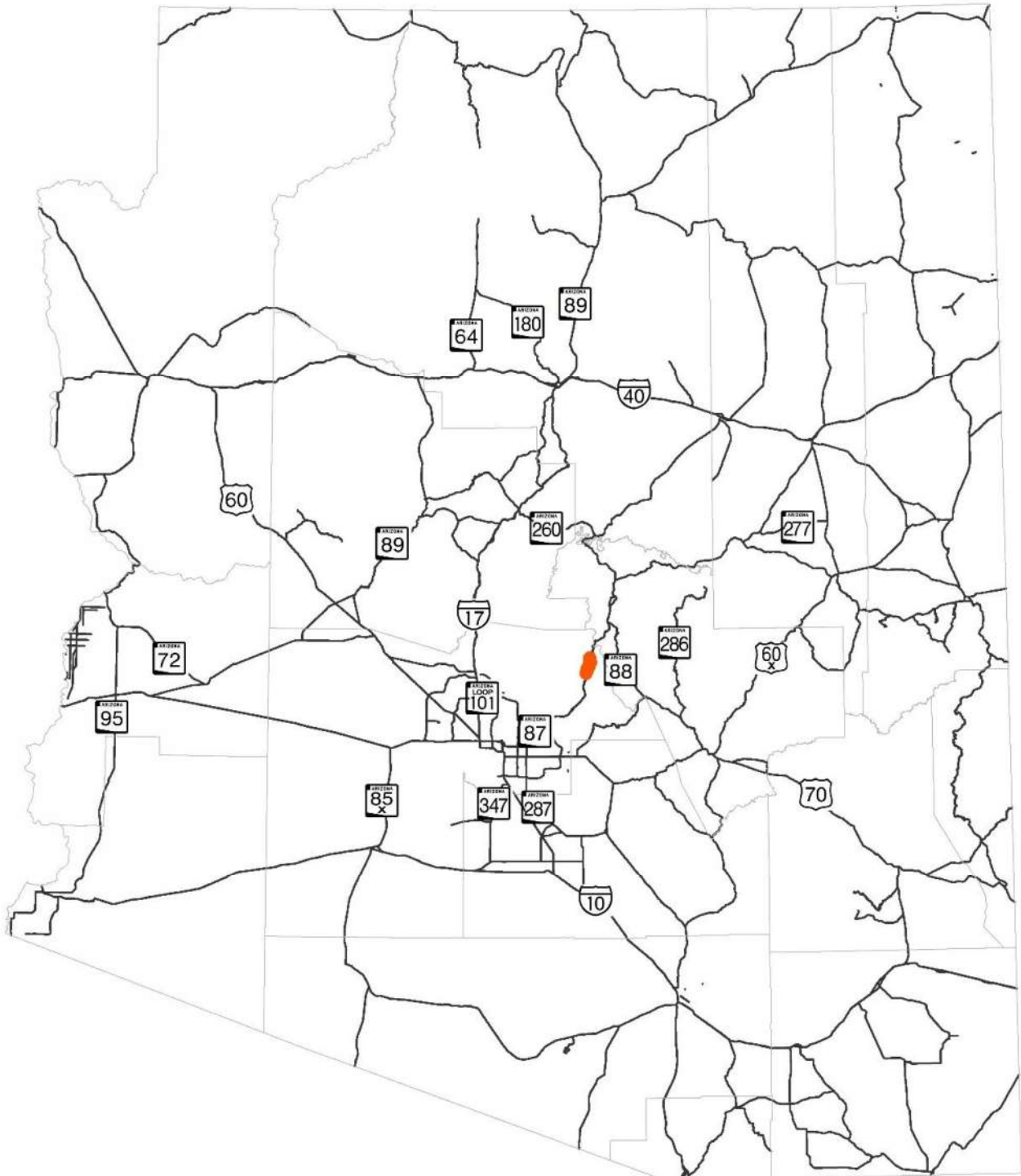
COST ESTIMATE			
Design \$887,600.00	Right-of-Way \$0.00	Construction \$11,590,900.00	Total \$12,478,500.00

RECOMMENDED PROJECT DELIVERY
Delivery: <input type="checkbox"/> Design-Bid-Build <input type="checkbox"/> Design-Build <input checked="" type="checkbox"/> Other:
Design Program Year: Click or tap here to enter text.
Construction Program Year: Click or tap here to enter text.

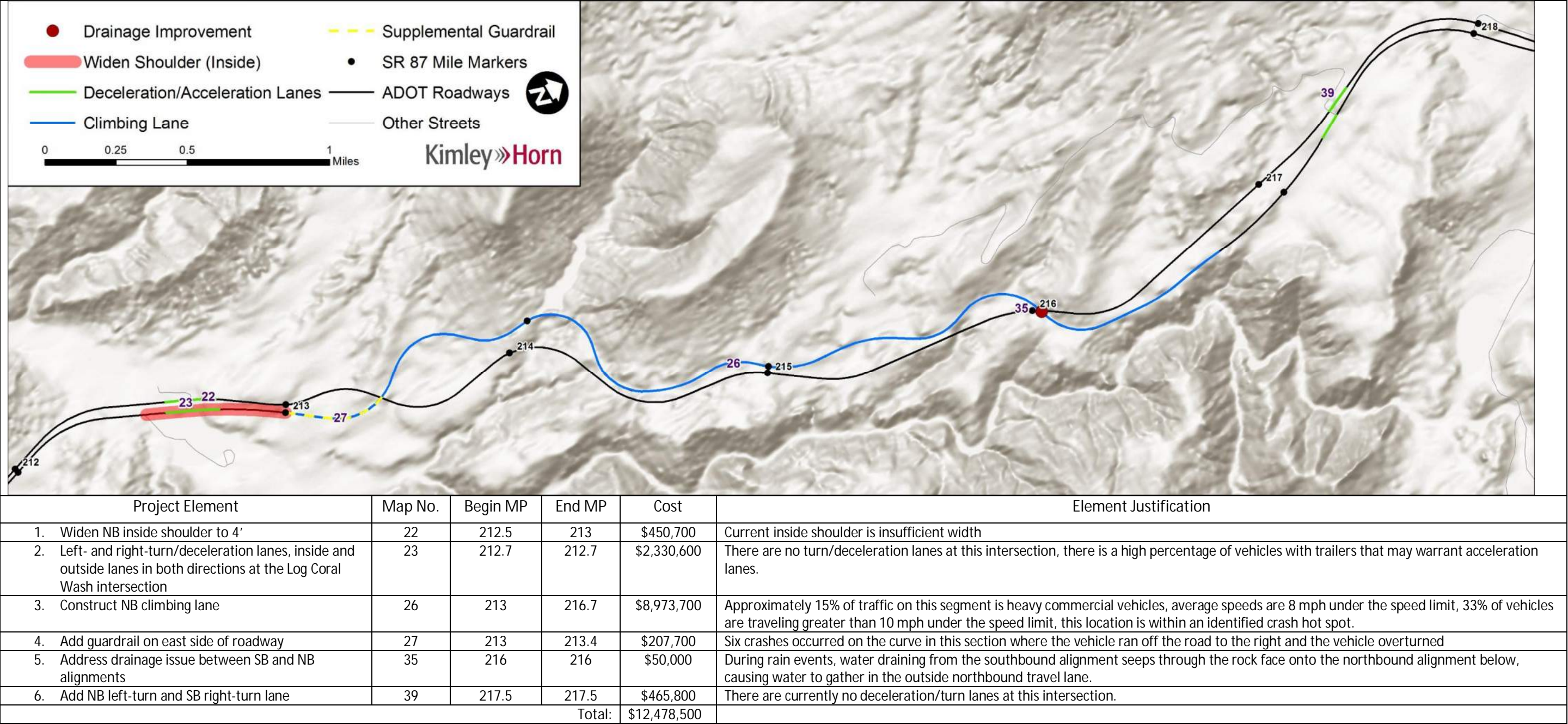
ATTACHMENTS
<ol style="list-style-type: none">1. Project Scope of Work2. State Location Map3. Project Vicinity Map4. Itemized Cost Estimate5. Conceptual Design Plans

ATTACHMENT 1: SCOPE OF WORK
<p><i>(Provide a detailed breakdown of the project's scope of work using bullet form)</i></p> <ul style="list-style-type: none">• Widen northbound inside shoulder to four feet (MP 212.5-213)• Construct left- and right-turn lanes, inside and outside acceleration lanes in both directions at Log Coral Wash (MP 212.7)• Construct northbound climbing lane (MP 213-216.7)• Add guardrail on east side of roadway (MP 213-213.4)• Address drainage issue between SB and NB alignments (MP 216)• Construct northbound left- and southbound right-turn lane (MP 217.5-217.5)

ATTACHMENT 2: STATE LOCATION MAP



ATTACHMENT 3: PROJECT VICINITY MAP



ATTACHMENT 4: ITEMIZED COST ESTIMATE


SR87 Corridor Development Study
ITEMIZED COST ESTIMATE
22. Widen northbound inside shoulder to 4' (MP 212.5)

ITEM NO	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
2010011	CLEARING AND GRUBBING	ACRE	1	\$5,000.00	\$5,000
2020029	REMOVAL OF ASPHALTIC CONCRETE PAVEMENT	SQ.YD.	233	\$35.00	\$8,155
2020201	SAW CUTTING	L.FT.	2,092	\$2.50	\$5,230
2030301	ROADWAY EXCAVATION	CU.YD.	3,100	\$10.00	\$31,000
3030022	AGGREGATE BASE, CLASS 2	CU.YD.	698	\$120.00	\$83,760
4090003	ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL)	TON	346	\$160.00	\$55,360
4110001	ASPHALTIC CONCRETE FRICTION COURSE (MISC.)	TON	21	\$120.00	\$2,520
6080101	MISCELLANEOUS WORK (SIGNS)	L.SUM	1	\$2,000.00	\$2,000
7041501	PAVEMENT MARKINGS	L.SUM	1	\$2,092.00	\$2,092
8050003	SEEDING (CLASS II)	ACRE	1	\$3,500.00	\$3,500
9240050	MISCELLANEOUS WORK (PUBLIC RELATIONS)	L.SUM	1	\$3,000.00	\$3,000
9280037	GROUND-IN RUMBLE STRIP (12 INCH)	L.FT.	2,092	\$0.75	\$1,569
Roadway Construction Subtotal					\$203,186
Unidentified Item Allowance (15%)					\$ 30,478
Subtotal					\$233,664
Water Supply/Dust Palliative (3%)					\$ 7,010
Maintenance And Protection Of Traffic (15%)					\$ 35,050
Erosion Control (1%)					\$ 2,337
Contractor Quality Control (2%)					\$ 4,674
Construction Surveying And Layout (2%)					\$ 4,674
Other Item Subtotal					\$287,409
Mobilization (12%)					\$ 34,490
Construction Subtotal					\$ 321,899
Engineering Design (10%)					\$ 32,190
Construction Engineering and Contingencies (20%)					\$ 64,380
Indirect Cost Allocation (10.02%)					\$ 32,255
Construction Total					\$ 450,724

23. NB LT and RT lanes, inside and outside accel lanes and fix both shoulders at Log Coral Wash (MP 212.7)

ITEM NO	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
2010011	CLEARING AND GRUBBING	ACRE	1	\$5,000.00	\$5,000
2020029	REMOVAL OF ASPHALTIC CONCRETE PAVEMENT	SQ.YD.	7,702	\$20.00	\$154,040
2020201	SAW CUTTING	L.FT.	4,332	\$2.50	\$10,830
2030301	ROADWAY EXCAVATION	CU.YD.	3,860	\$10.00	\$38,600
3030022	AGGREGATE BASE, CLASS 2	CU.YD.	3,273	\$60.00	\$196,380
4090003	ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL)	TON	2,526	\$80.00	\$202,080
4110001	ASPHALTIC CONCRETE FRICTION COURSE (MISC.)	TON	204	\$100.00	\$20,400
6080101	MISCELLANEOUS WORK (SIGNS)	L.SUM	1	\$4,000.00	\$4,000
7041501	PAVEMENT MARKINGS	L.SUM	1	\$4,332.00	\$4,332
8050003	SEEDING (CLASS II)	ACRE	1	\$3,500.00	\$3,500
9240050	MISCELLANEOUS WORK (PUBLIC RELATIONS)	L.SUM	1	\$6,000.00	\$6,000
9280037	GROUND-IN RUMBLE STRIP (12 INCH)	L.FT.	4,332	\$0.75	\$3,249
Roadway Construction Subtotal					\$648,411
Unidentified Item Allowance (15%)					\$ 97,262
Subtotal					\$745,673
Water Supply/Dust Palliative (3%)					\$ 22,371
Maintenance And Protection Of Traffic (15%)					\$ 111,851
Erosion Control (1%)					\$ 7,457
Contractor Quality Control (2%)					\$ 14,914
Construction Surveying And Layout (2%)					\$ 14,914
Other Item Subtotal					\$917,180
Mobilization (12%)					\$ 110,062
Construction Subtotal					\$ 1,027,242
Engineering Design (10%)					\$ 102,725
Construction Engineering and Contingencies (20%)					\$ 205,449
Indirect Cost Allocation (10.02%)					\$ 102,930
Construction Total					\$ 1,438,346

23. Southbound left- and right-turn lanes, inside and outside acceleration lanes and fix both shoulders at Log Coral Wash (MP 212

ITEM NO	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
2010011	CLEARING AND GRUBBING	ACRE	1	\$5,000.00	\$5,000
2020029	REMOVAL OF ASPHALTIC CONCRETE PAVEMENT	SQ.YD.	3,792	\$20.00	\$75,840
2020053	REMOVE (GR TERMINAL)	EACH	4	\$400.00	\$1,600
2020071	REMOVE GUARD RAIL	L.FT.	800	\$5.00	\$4,000
2020201	SAW CUTTING	L.FT.	2,133	\$2.50	\$5,333
2030301	ROADWAY EXCAVATION	CU.YD.	1,900	\$10.00	\$19,000
3030022	AGGREGATE BASE, CLASS 2	CU.YD.	1,578	\$60.00	\$94,680
4090003	ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL)	TON	1,188	\$120.00	\$142,560
4110001	ASPHALTIC CONCRETE FRICTION COURSE (MISC.)	TON	95	\$120.00	\$11,400
6080101	MISCELLANEOUS WORK (SIGNS)	L.SUM	1	\$2,000.00	\$2,000
7041501	PAVEMENT MARKINGS	L.SUM	1	\$2,133.00	\$2,133
8050003	SEEDING (CLASS II)	ACRE	1	\$3,500.00	\$3,500
9050001	GUARD RAIL, W-BEAM, SINGLE FACE	L.FT.	800	\$30.00	\$24,000
9050026	GUARD RAIL TERMINAL (TANGENT TYPE)	EACH	2	\$2,500.00	\$5,000
9050036	GUARD RAIL, ANCHOR ASSEMBLY	EACH	2	\$800.00	\$1,600
9240050	MISCELLANEOUS WORK (PUBLIC RELATIONS)	L.SUM	1	\$3,000.00	\$3,000
9280037	GROUND-IN RUMBLE STRIP (12 INCH)	L.FT.	2,133	\$0.75	\$1,600
Roadway Construction Subtotal					\$402,245
Unidentified Item Allowance (15%)					\$ 60,337
Subtotal					\$462,582
Water Supply/Dust Palliative (3%)					\$ 13,878
Maintenance And Protection Of Traffic (15%)					\$ 69,388
Erosion Control (1%)					\$ 4,626
Contractor Quality Control (2%)					\$ 9,252
Construction Surveying And Layout (2%)					\$ 9,252
Other Item Subtotal					\$568,978
Mobilization (12%)					\$ 68,278
Construction Subtotal					\$ 637,256
Engineering Design (10%)					\$ 63,726
Construction Engineering and Contingencies (20%)					\$ 127,452
Indirect Cost Allocation (10.02%)					\$ 63,854
Construction Total					\$ 892,289

26. Construct northbound climbing lane (MP 213-216.7)

ITEM NO	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
2010011	CLEARING AND GRUBBING	ACRE	14	\$5,000.00	\$70,000
2020029	REMOVAL OF ASPHALTIC CONCRETE PAVEMENT	SQ.YD.	2,231	\$20.00	\$44,620
2020053	REMOVE (GR TERMINAL)	EACH	4	\$400.00	\$1,600
2020071	REMOVE GUARD RAIL	L.FT.	5,019	\$5.00	\$25,095
2020201	SAW CUTTING	L.FT.	20,076	\$2.50	\$50,190
2030301	ROADWAY EXCAVATION	CU.YD.	1,490	\$10.00	\$14,900
2030901	BORROW	CU.YD.	148,720	\$12.00	\$1,784,640
3030022	AGGREGATE BASE, CLASS 2	CU.YD.	14,128	\$50.00	\$706,400
4090003	ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL)	TON	10,698	\$80.00	\$855,840
4110001	ASPHALTIC CONCRETE FRICTION COURSE (MISC.)	TON	856	\$90.00	\$77,040
6080101	MISCELLANEOUS WORK (SIGNS)	L.SUM	1	\$4,000.00	\$4,000
7041501	PAVEMENT MARKINGS	L.SUM	1	\$20,076.00	\$20,076
8050003	SEEDING (CLASS II)	ACRE	14	\$3,500.00	\$49,000
9050001	GUARD RAIL, W-BEAM, SINGLE FACE	L.FT.	10,038	\$30.00	\$301,140
9050026	GUARD RAIL TERMINAL (TANGENT TYPE)	EACH	6	\$2,500.00	\$15,000
9050036	GUARD RAIL, ANCHOR ASSEMBLY	EACH	6	\$800.00	\$4,800
9240050	MISCELLANEOUS WORK (PUBLIC RELATIONS)	L.SUM	1	\$6,000.00	\$6,000
9280037	GROUND-IN RUMBLE STRIP (12 INCH)	L.FT.	20,076	\$0.75	\$15,057
Roadway Construction Subtotal					\$4,045,398
Unidentified Item Allowance (15%)					\$ 606,810
Subtotal					\$4,652,208
Water Supply/Dust Palliative (3%)					\$ 139,567
Maintenance And Protection Of Traffic (15%)					\$ 697,832
Erosion Control (1%)					\$ 46,523
Contractor Quality Control (2%)					\$ 93,045
Construction Surveying And Layout (2%)					\$ 93,045
Other Item Subtotal					\$5,722,220
Mobilization (12%)					\$ 686,667
Construction Subtotal					\$ 6,408,887
Engineering Design (10%)					\$ 640,889
Construction Engineering and Contingencies (20%)					\$ 1,281,778
Indirect Cost Allocation (10.02%)					\$ 642,171
Construction Total					\$ 8,973,725

27. Add guardrail on right (east) side of roadway (MP 213-213.4)

ITEM NO	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
2010011	CLEARING AND GRUBBING	ACRE	1	\$5,000.00	\$5,000
2030301	ROADWAY EXCAVATION	CU.YD.	950	\$10.00	\$9,500
6080101	MISCELLANEOUS WORK (SIGNS)	L.SUM	1	\$2,000.00	\$2,000
8050003	SEEDING (CLASS II)	ACRE	1	\$3,500.00	\$3,500
9050001	GUARD RAIL, W-BEAM, SINGLE FACE	L.FT.	2,135	\$30.00	\$64,050
9050026	GUARD RAIL TERMINAL (TANGENT TYPE)	EACH	2	\$2,500.00	\$5,000
9050036	GUARD RAIL, ANCHOR ASSEMBLY	EACH	2	\$800.00	\$1,600
9240050	MISCELLANEOUS WORK (PUBLIC RELATIONS)	L.SUM	1	\$3,000.00	\$3,000
Roadway Construction Subtotal					\$93,650
Unidentified Item Allowance (15%)					\$ 14,048
Subtotal					\$107,698
Water Supply/Dust Palliative (3%)					\$ 3,231
Maintenance And Protection Of Traffic (15%)					\$ 16,155
Erosion Control (1%)					\$ 1,077
Contractor Quality Control (2%)					\$ 2,154
Construction Surveying And Layout (2%)					\$ 2,154
Other Item Subtotal					\$132,469
Mobilization (12%)					\$ 15,897
Construction Subtotal					\$ 148,366
Engineering Design (10%)					\$ 14,837
Construction Engineering and Contingencies (20%)					\$ 29,674
Indirect Cost Allocation (10.02%)					\$ 14,867
Construction Total					\$ 207,744

39. Add northbound left-turn lane (MP 217.5)

ITEM NO	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
2010011	CLEARING AND GRUBBING	ACRE	1	\$5,000.00	\$5,000
2020029	REMOVAL OF ASPHALTIC CONCRETE PAVEMENT	SQ.YD.	61	\$35.00	\$2,135
2020201	SAW CUTTING	L.FT.	541	\$2.50	\$1,353
2030301	ROADWAY EXCAVATION	CU.YD.	490	\$10.00	\$4,900
3030022	AGGREGATE BASE, CLASS 2	CU.YD.	381	\$120.00	\$45,720
4090003	ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL)	TON	289	\$160.00	\$46,240
4110001	ASPHALTIC CONCRETE FRICTION COURSE (MISC.)	TON	24	\$120.00	\$2,880
6080101	MISCELLANEOUS WORK (SIGNS)	L.SUM	1	\$2,000.00	\$2,000
7041501	PAVEMENT MARKINGS	L.SUM	1	\$541.00	\$541
8050003	SEEDING (CLASS II)	ACRE	1	\$3,500.00	\$3,500
9050001	GUARD RAIL, W-BEAM, SINGLE FACE	L.FT.	181	\$30.00	\$5,430
9050026	GUARD RAIL TERMINAL (TANGENT TYPE)	EACH	1	\$2,500.00	\$2,500
9050036	GUARD RAIL, ANCHOR ASSEMBLY	EACH	1	\$800.00	\$800
9240050	MISCELLANEOUS WORK (PUBLIC RELATIONS)	L.SUM	1	\$3,000.00	\$3,000
9280037	GROUND-IN RUMBLE STRIP (12 INCH)	L.FT.	541	\$1.50	\$812
Roadway Construction Subtotal					\$126,810
Unidentified Item Allowance (15%)					\$ 19,022
Subtotal					\$145,832
Water Supply/Dust Palliative (3%)					\$ 4,375
Maintenance And Protection Of Traffic (15%)					\$ 21,875
Erosion Control (1%)					\$ 1,459
Contractor Quality Control (2%)					\$ 2,917
Construction Surveying And Layout (2%)					\$ 2,917
Other Item Subtotal					\$179,375
Mobilization (12%)					\$ 21,525
Construction Subtotal					\$ 200,900
Engineering Design (10%)					\$ 20,090
Construction Engineering and Contingencies (20%)					\$ 40,180
Indirect Cost Allocation (10.02%)					\$ 20,131
Construction Total					\$ 281,301

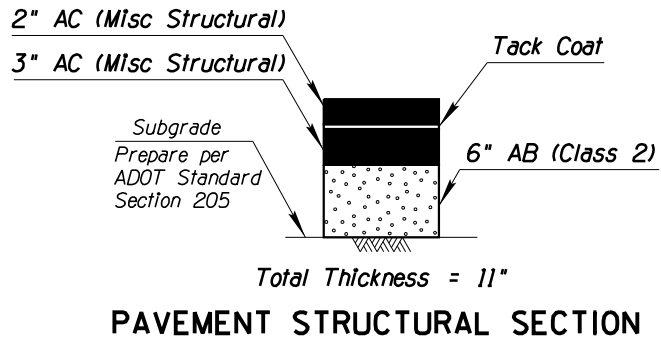
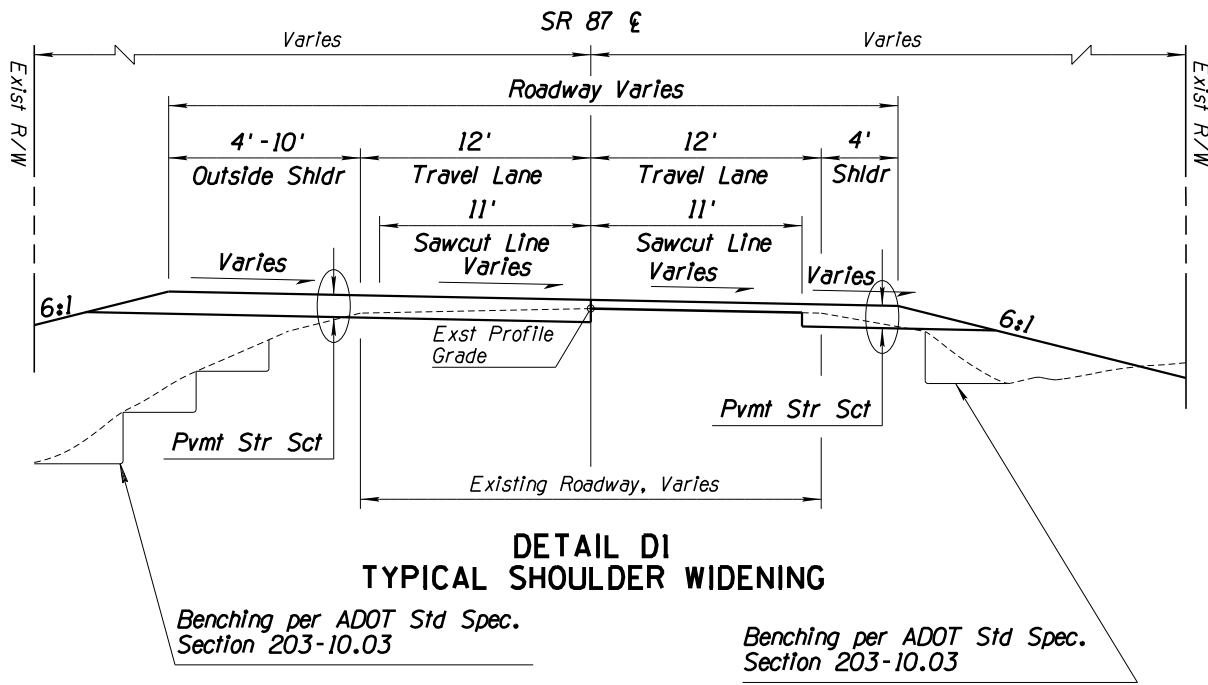
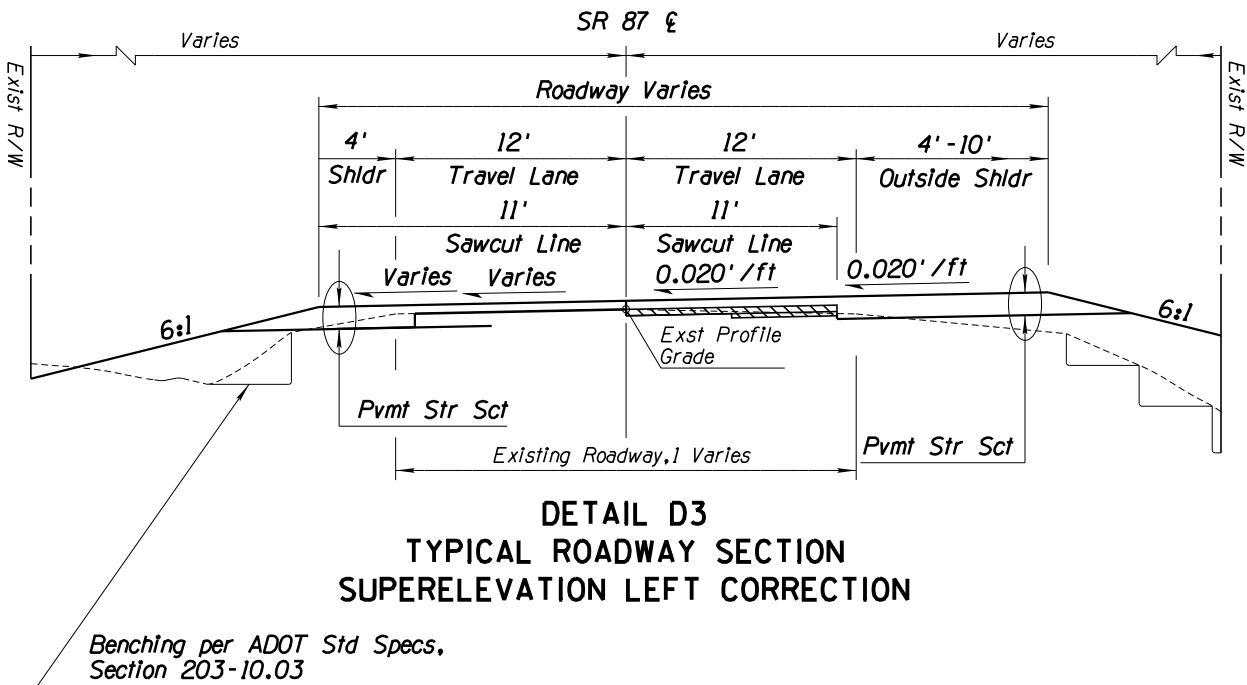
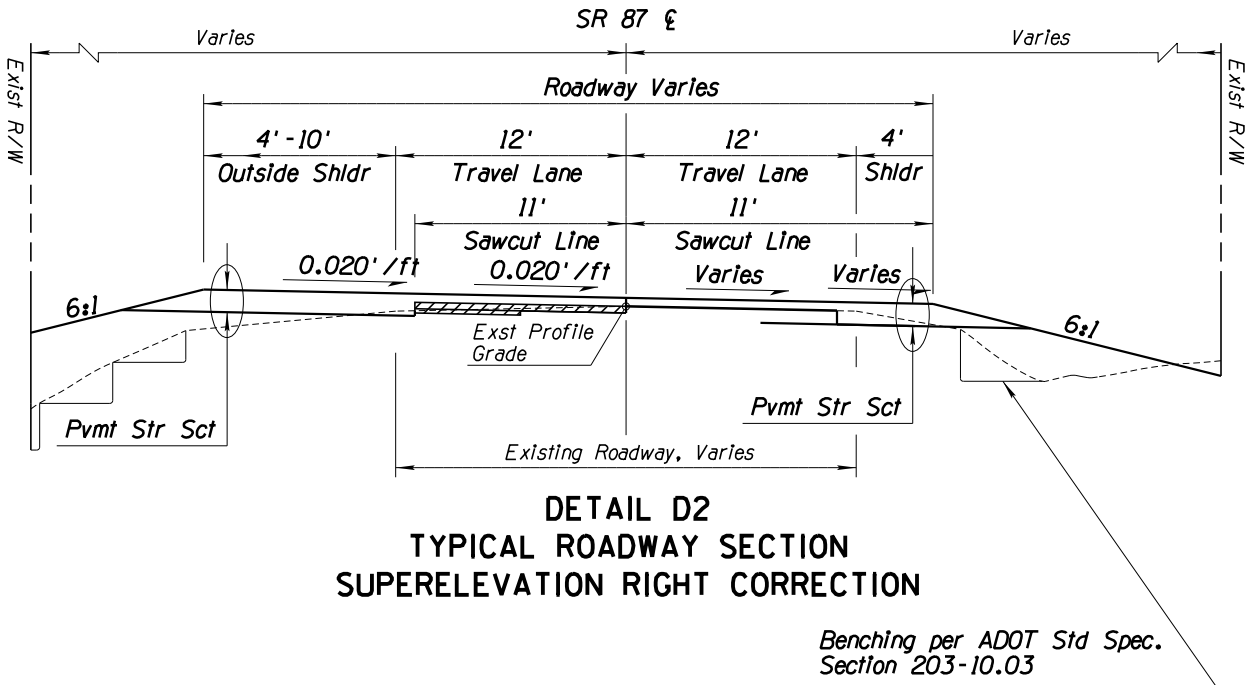
39. Southbound right-turn lane (MP 217.5)

ITEM NO	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
2010011	CLEARING AND GRUBBING	ACRE	1	\$5,000.00	\$5,000
2020029	REMOVAL OF ASPHALTIC CONCRETE PAVEMENT	SQ.YD.	61	\$35.00	\$2,135
2020201	SAW CUTTING	L.FT.	541	\$2.50	\$1,353
2030301	ROADWAY EXCAVATION	CU.YD.	490	\$10.00	\$4,900
3030022	AGGREGATE BASE, CLASS 2	CU.YD.	261	\$120.00	\$31,320
4090003	ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL)	TON	169	\$160.00	\$27,040
4110001	ASPHALTIC CONCRETE FRICTION COURSE (MISC.)	TON	13	\$120.00	\$1,560
6080101	MISCELLANEOUS WORK (SIGNS)	L.SUM	1	\$2,000.00	\$2,000
7041501	PAVEMENT MARKINGS	L.SUM	1	\$541.00	\$541
8050003	SEEDING (CLASS II)	ACRE	1	\$3,500.00	\$3,500
9240050	MISCELLANEOUS WORK (PUBLIC RELATIONS)	L.SUM	1	\$3,000.00	\$3,000
9280037	GROUND-IN RUMBLE STRIP (12 INCH)	L.FT.	541	\$1.50	\$812
Roadway Construction Subtotal					\$83,160
Unidentified Item Allowance (15%)					\$ 12,474
Subtotal					\$95,634
Water Supply/Dust Palliative (3%)					\$ 2,870
Maintenance And Protection Of Traffic (15%)					\$ 14,346
Erosion Control (1%)					\$ 957
Contractor Quality Control (2%)					\$ 1,913
Construction Surveying And Layout (2%)					\$ 1,913
Other Item Subtotal					\$117,633
Mobilization (12%)					\$ 14,116
Construction Subtotal					\$ 131,749
Engineering Design (10%)					\$ 13,175
Construction Engineering and Contingencies (20%)					\$ 26,350
Indirect Cost Allocation (10.02%)					\$ 13,202
Construction Total					\$ 184,476

ATTACHMENT 5: PRELIMINARY PLANS

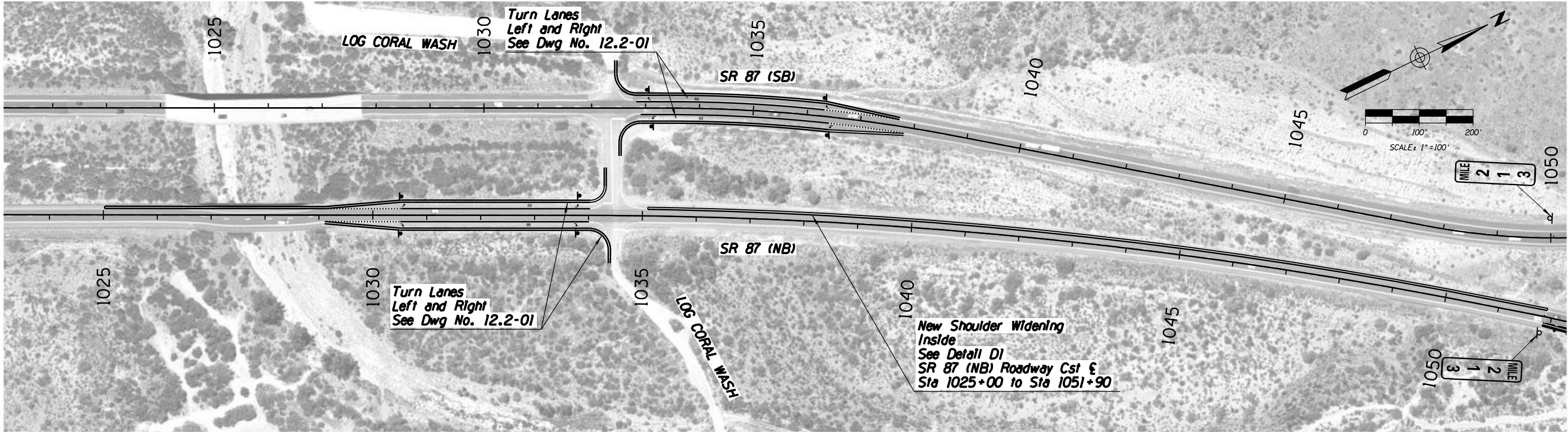
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
-	ARIZ.	-	-	59	

SR 87 MILE POST STATION			
MP NB	STATION	MP SB	STATION
196	101+73	196	101+18
197	155+53	197	154+02
198	207+69	198	207+94
199	261+02	199	259+13
200	314+21	200	311+72
201	367+73	201	364+06
202	419+18	202	417+81
203	471+36	203	470+65
204	526+28	204	523+10
205	577+70	205	575+84
206	630+73	206	628+30
207	682+81	207	680+28
208	736+47	208	734+12
209	788+55	209	786+62
210	842+08	210	839+50
211	894+91	211	890+40
212	942+20	212	939+42
213	998+65	213	995+55
214	1051+86	214	1050+06
215	1105+38	215	1095+77
216	1158+68	216	1147+95
217	1213+92	217	1199+48
218	1268+31	218	1250+20
219	1318+19	219	1304+12
220	1374+67	220	1359+76
221	1427+95	221	1412+99
222	1480+60	222	1465+84
223	1533+97	223	1518+89
224	1584+61	224	1570+72
225	1639+50	225	1625+29
226	1689+86	226	1676+32
227	1740+23	227	1726+14
228	1792+50	228	1778+04
229	1845+24	229	1831+98
230	1898+50	230	1884+70
231	1949+61	231	1933+71
232	1999+33	232	1985+29
233	2047+74	233	2033+06
234	2101+13	234	2085+05
235	2154+59	235	2137+29
236	2207+09	236	2189+44
237	2259+88	237	2240+86
238	2311+66	238	2293+85
239	2364+28	239	2344+91
240	2416+01	240	2397+41
241	2467+79	241	2448+96
242	2518+51	242	2496+68
243	2571+26	243	2549+70
244	2620+38	244	2601+82
245	2677+47	245	2655+01
246	2729+53	246	2703+04
247	2741+30	247	2747+68
248	2794+18	248	2801+15
249	2847+25	249	2854+41
250	2899+69	250	2906+58



	NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION URBAN PROJECT MANAGEMENT	PRELIMINARY STAGE I Review NOT FOR CONSTRUCTION OR RECORDING
DESIGN	T. Raddeman	8/19		
DRAWN	D. Klebosky	8/19		
CHECKED	V. Rodriguez	8/19		
Kimley»Horn © 2019 KIMLEY-HORN AND ASSOCIATES, INC.				
ROUTE	LOCATION		MP 190 TO MP 250	DWG NO.
SR 87				
TRACS NO. XXXXX XXX		XXX-X(XXX)X		___ OF ___

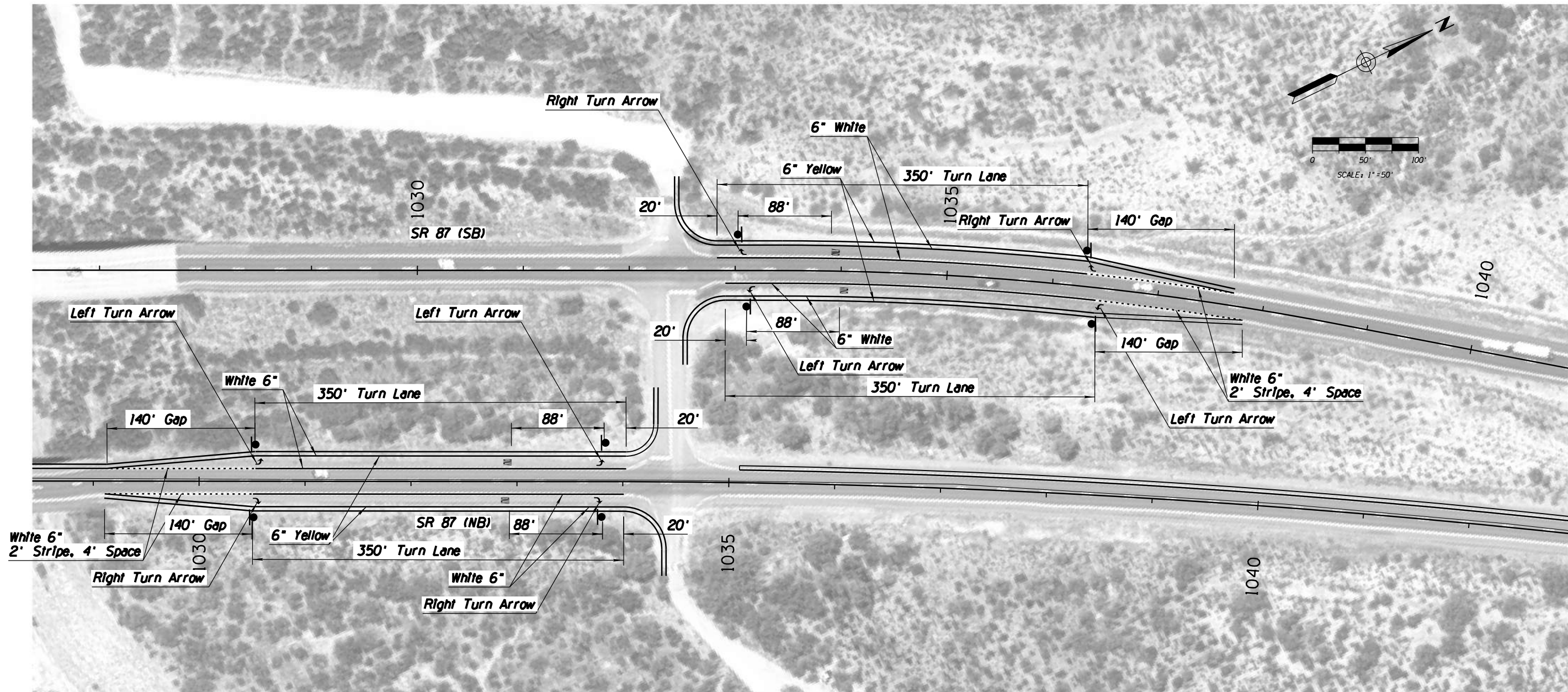
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
-	ARIZ.	-	-	59	



		NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION URBAN PROJECT MANAGEMENT	PRELIMINARY STAGE I Review NOT FOR CONSTRUCTION OR RECORDING
DESIGN	T. Raddeman		8/19		
DRAWN	D. Klebosky		8/19		
CHECKED	V. Rodriguez		8/19		
Kimley»Horn © 2019 KIMLEY-HORN AND ASSOCIATES, INC.				PROJECT #3 NB IMPROVEMENTS MP 212 TO 218	DWG NO. 12.1-01
ROUTE		LOCATION			
SR 87		MP 190 TO MP 250			
TRACS NO. XXXXX XXX			XXX-X(XXX)X		___ OF ___

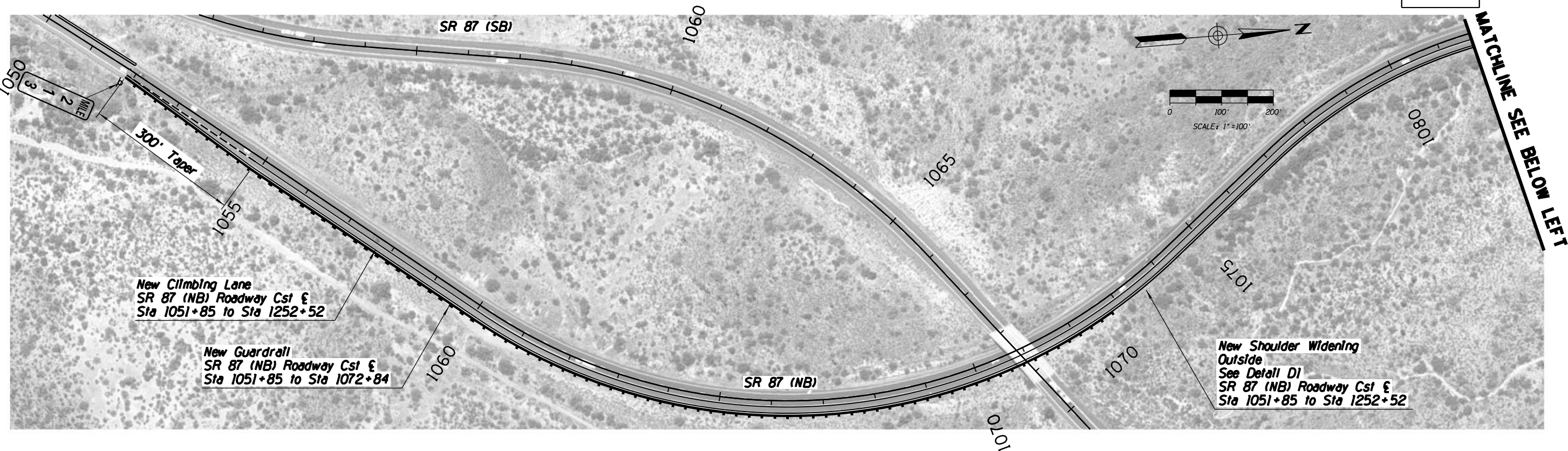
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F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
-	ARIZ.	-	-	59	
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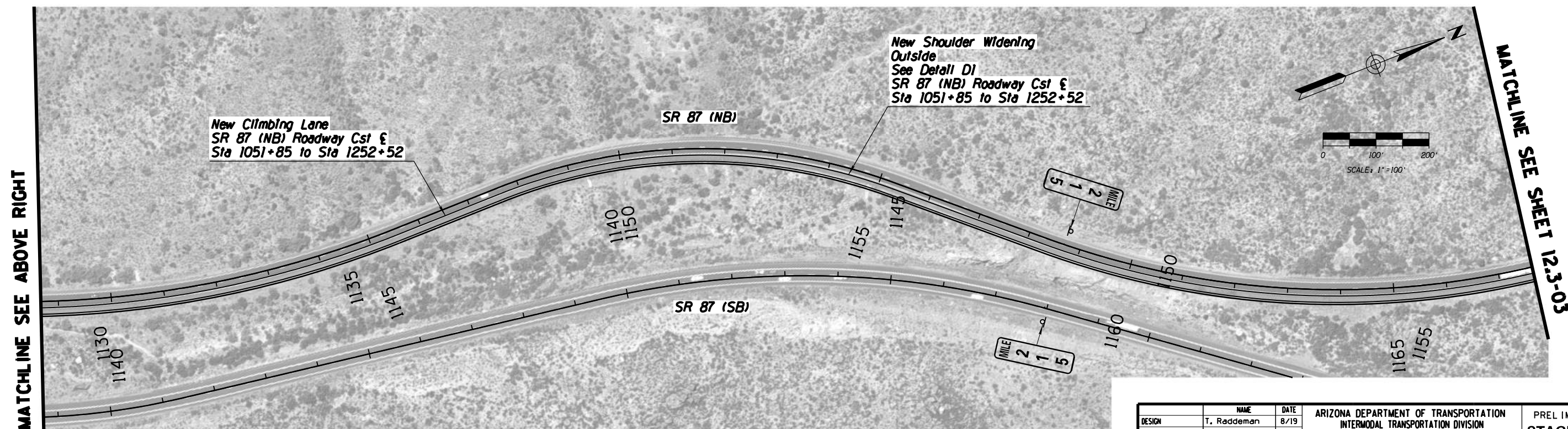
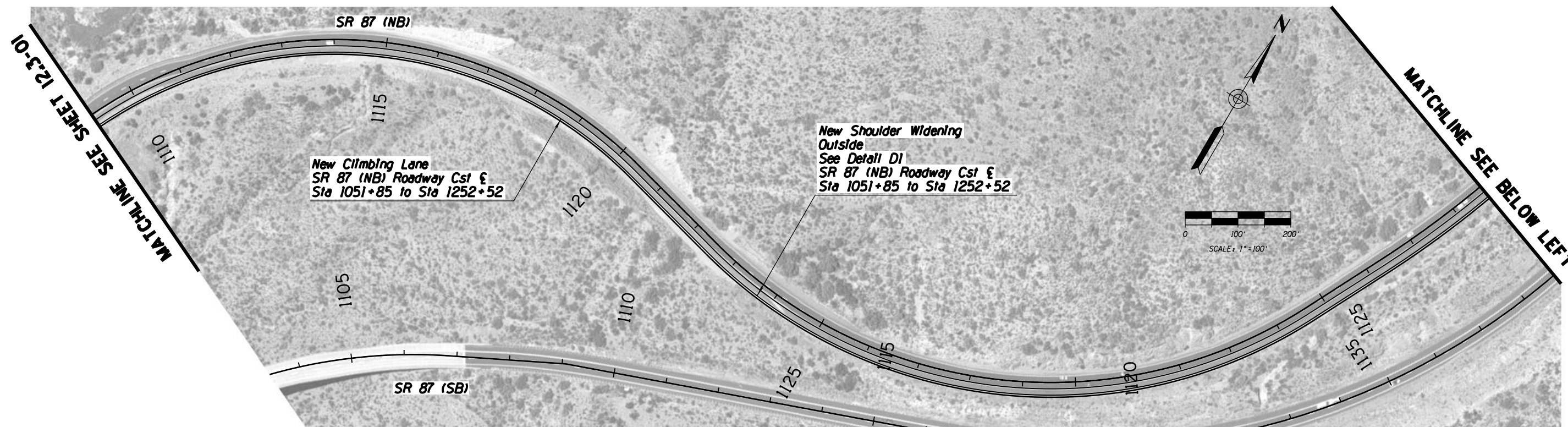
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DRAWN	D. Klebosky		8/19		
CHECKED	V. Rodriguez		8/19	PROJECT #3 NB IMPROVEMENTS MP 212 TO 218	DWG NO. 12.2-01
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ROUTE		LOCATION			
SR 87		MP 190 TO MP 250			
TRACS NO. XXXXX XXX			XXX-X(XXX)X		___ OF ___

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
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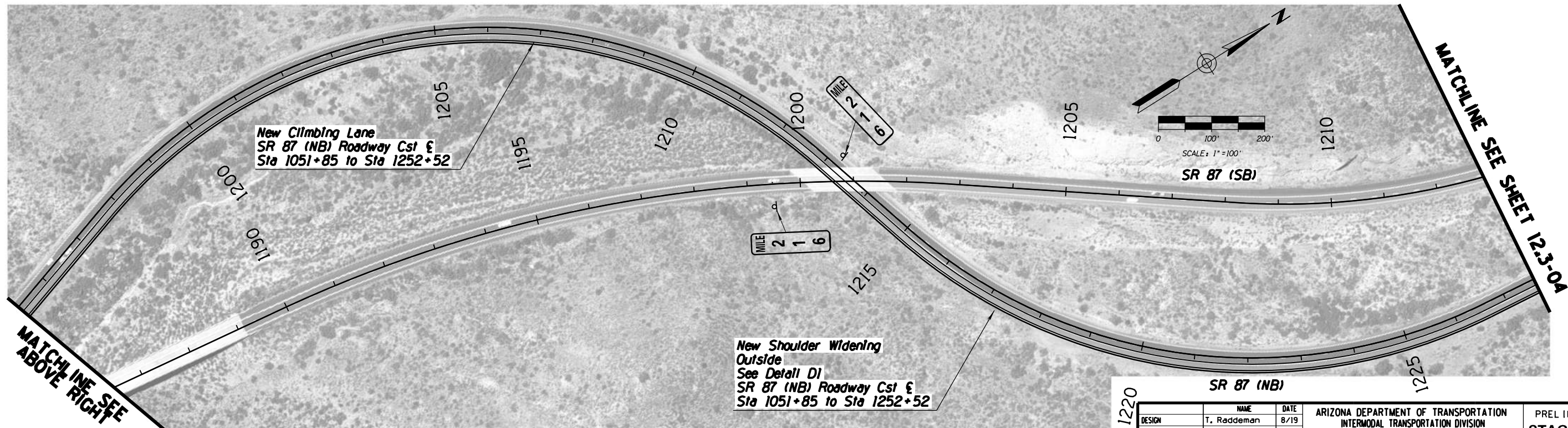
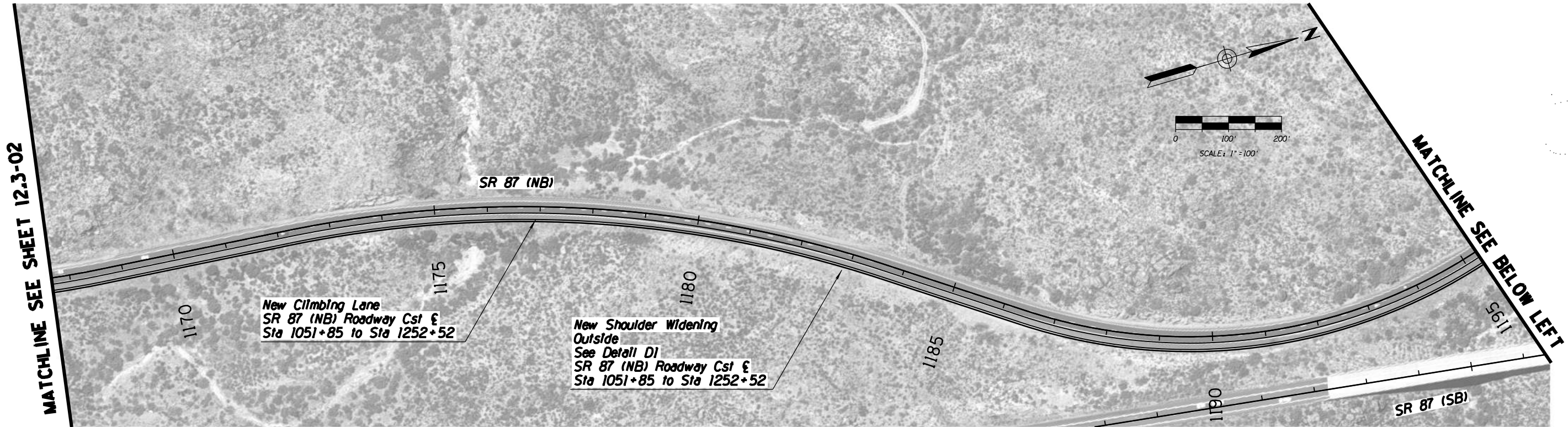
		NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION URBAN PROJECT MANAGEMENT	PRELIMINARY STAGE I Review NOT FOR CONSTRUCTION OR RECORDING
DESIGN	T. Raddeman		8/19		
DRAWN	D. Klebosky		8/19		
CHECKED	V. Rodriguez		8/19		
<div>Kimley»Horn</div> <div>© 2019 KIMLEY-HORN AND ASSOCIATES, INC.</div>				PROJECT #3 NB IMPROVEMENTS MP 212 TO 218	
ROUTE		LOCATION		MP 190 TO MP 250	DWG NO. 12.3-01
SR 87					
TRACS NO. XXXXX XXX				XXX-X(XXX)X	___ OF ___

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
-	ARIZ.	-		59	



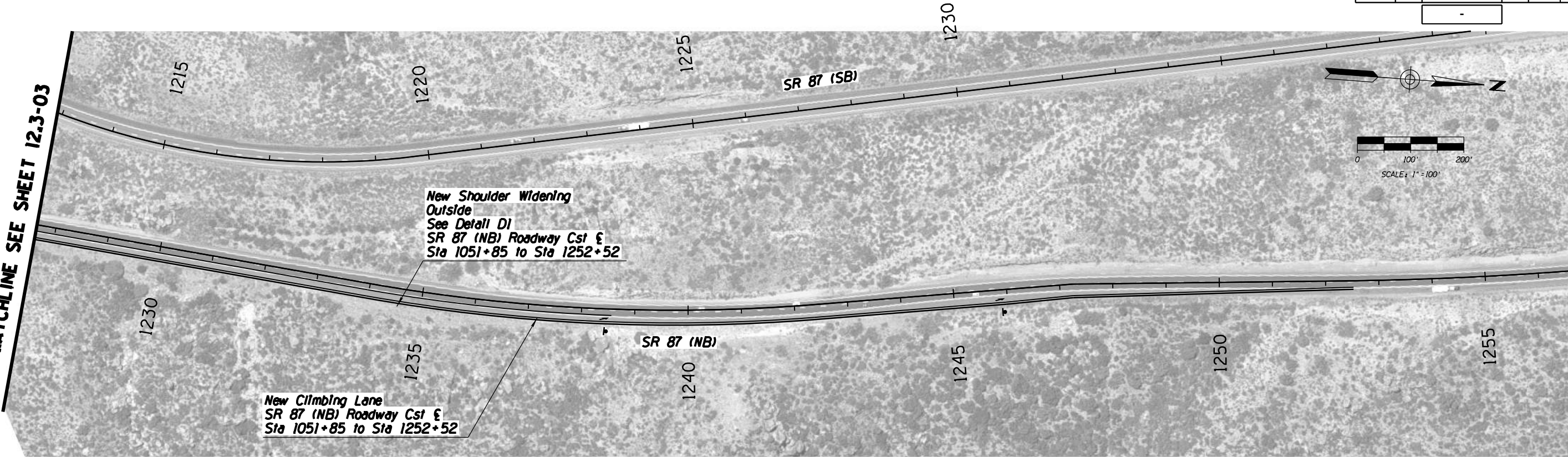
		NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION URBAN PROJECT MANAGEMENT		PRELIMINARY STAGE 1 Review NOT FOR CONSTRUCTION OR RECORDING
DESIGN	T. Raddeman		8/19	PROJECT #3 NB IMPROVEMENTS MP 212 TO 218		DWG NO. 12.3-02
DRAWN	D. Klebosky		8/19			
CHECKED	V. Rodriguez		8/19			
Kimley»Horn <small>© 2019 KIMLEY-HORN AND ASSOCIATES, INC.</small>						
ROUTE		LOCATION		MP 190 TO MP 250		
SR 87						
TRACS NO. XXXXX XXX				XXX-X(XXX)X		___ OF ___

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
-	ARIZ.	-	-	59	
-					



		NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION URBAN PROJECT MANAGEMENT		PRELIMINARY STAGE I Review NOT FOR CONSTRUCTION OR RECORDING
DESIGN		T. Raddeman	8/19			
DRAWN		D. Klebosky	8/19			
CHECKED		V. Rodriguez	8/19	PROJECT #3 NB IMPROVEMENTS MP 212 TO 218		DWG NO. 12.3-03 OF
Kimley»Horn © 2019 KIMLEY-HORN AND ASSOCIATES, INC.						
ROUTE		LOCATION		MP 190 TO MP 250		
SR 87						
TRACS NO. XXXXX XXX				XXX-X(XXX)X		

MATCHLINE SEE SHEET 12.3-03

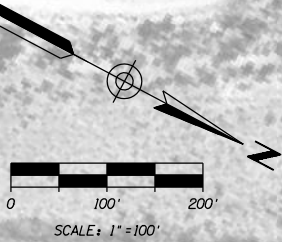
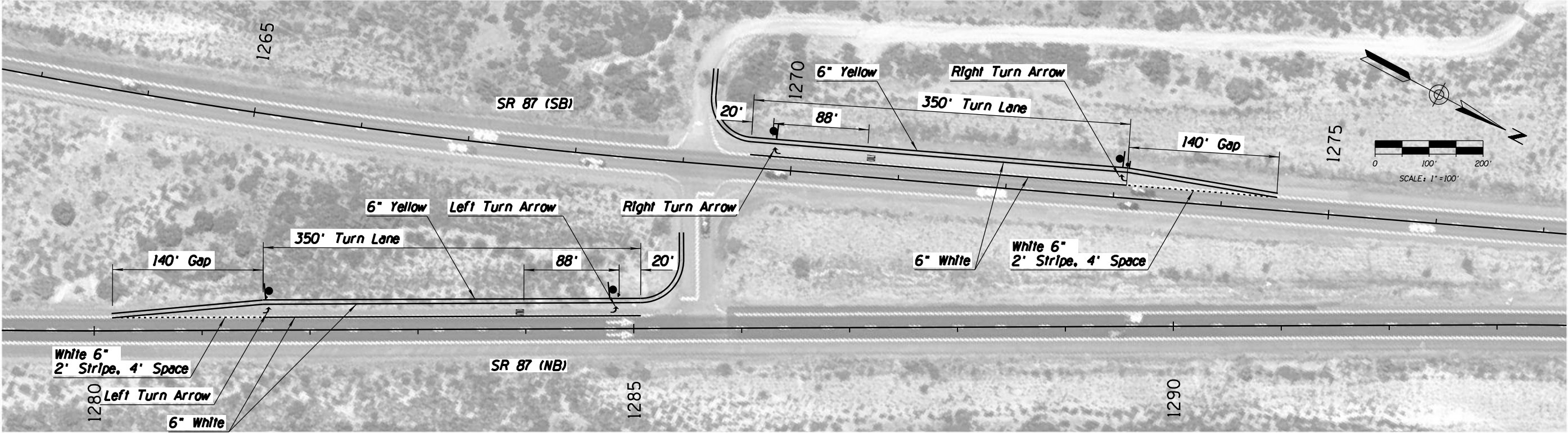


F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
-	ARIZ.	-	-	59	

		NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION URBAN PROJECT MANAGEMENT	PRELIMINARY STAGE I Review NOT FOR CONSTRUCTION OR RECORDING
DESIGN		T. Raddeman	8/19		
DRAWN		D. Klebosky	8/19		
CHECKED		V. Rodriguez	8/19		
Kimley»Horn © 2019 KIMLEY-HORN AND ASSOCIATES, INC.				PROJECT #3 NB IMPROVEMENTS MP 212 TO 218	DWG NO. 12.3-04 ___ <i>OF</i> ___
ROUTE		LOCATION			
SR 87		MP 190 TO MP 250			
TRACS NO. XXXXX XXX				XXX-X(XXX)X	

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
-	ARIZ.	-	-	59	

-



		NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION URBAN PROJECT MANAGEMENT	PRELIMINARY STAGE I Review NOT FOR CONSTRUCTION OR RECORDING
DESIGN	SS		8/19		
DRAWN	CEM		8/19		
CHECKED	RLK		8/19		
<div>Kimley»Horn</div> <div>© 2019 KIMLEY-HORN AND ASSOCIATES, INC.</div>				PROJECT #3 NB IMPROVEMENTS MP 212 TO 218	
ROUTE		LOCATION			
SR 87		MP 190 TO MP 250			DWG NO. 12.5-01
TRACS NO. XXXXX XXX				XXX-X(XXX)X	___ <i>OF</i> ___

**PACKAGE PROJECT 4 –
CENTRAL DISTRICT ROCK-FALL
MITIGATION
(MP 213-218)**

ADOT SR 87 Corridor Development Study

PRELIMINARY SCOPING REPORT

GENERAL PROJECT INFORMATION	
Date: 8/20/2019	ADOT Project Manager:
Project Name: Central District Rock-Fall Mitigation	
City/Town: N/A	County: Maricopa
COG/MPO: MAG	ADOT District: Central
Primary Route/Street: SR 87	
Beginning Limit: 214	
End Limit: 218	
Project Length: 4 Miles	
Right of Way Ownership(s) (where proposed project would occur): (check all that apply)	
<input type="checkbox"/> City/Town <input type="checkbox"/> County <input checked="" type="checkbox"/> ADOT <input type="checkbox"/> Private <input type="checkbox"/> Federal <input type="checkbox"/> Tribal <input type="checkbox"/> Other	
Adjacent Land Ownership(s): (Check all that apply)	
<input type="checkbox"/> City/Town <input type="checkbox"/> County <input type="checkbox"/> ADOT <input type="checkbox"/> Private <input checked="" type="checkbox"/> Federal <input type="checkbox"/> Tribal <input type="checkbox"/> Other	

PROJECT NEED
Erosion and rock-fall issues between MP 214 and 218 causing recurring maintenance issues and debris-related crashes

PROJECT PURPOSE			
What is the Primary Purpose of the Project?	<input type="checkbox"/> Preservation	<input checked="" type="checkbox"/> Modernization	<input type="checkbox"/> Expansion
Mitigate rock-fall issues.			

PROJECT RISKS	
Check any risks identified that may impact the project's scope, schedule, or budget:	
<input type="checkbox"/> Access/Traffic Control/Detour Issues	<input type="checkbox"/> Right-of-Way
<input type="checkbox"/> Constructability/Construction Window Issues	<input type="checkbox"/> Environmental
<input type="checkbox"/> Stakeholder Issues	<input type="checkbox"/> Utilities
<input type="checkbox"/> Structures & Geotech	<input type="checkbox"/> Other:
Risk Description: (if a box is checked above, briefly explain the risk)	
Click or tap here to enter text.	

POTENTIAL FUNDING SOURCE(S)				
Anticipated Project Design/Construction Funding Type: (Check all that applied)	<input type="checkbox"/> STBG	<input type="checkbox"/> TAP	<input type="checkbox"/> HSIP	<input checked="" type="checkbox"/> State
	<input type="checkbox"/> Local	<input type="checkbox"/> Private	<input type="checkbox"/> Tribal	<input type="checkbox"/> Other

COST ESTIMATE			
Design	Right-of-Way	Construction	Total
\$280,000.00	\$0.00	\$2,520,000	\$2,800,000

RECOMMENDED PROJECT DELIVERY
Delivery: <input type="checkbox"/> Design-Bid-Build <input type="checkbox"/> Design-Build <input checked="" type="checkbox"/> Other:
Design Program Year: Click or tap here to enter text.
Construction Program Year: Click or tap here to enter text.

ATTACHMENTS

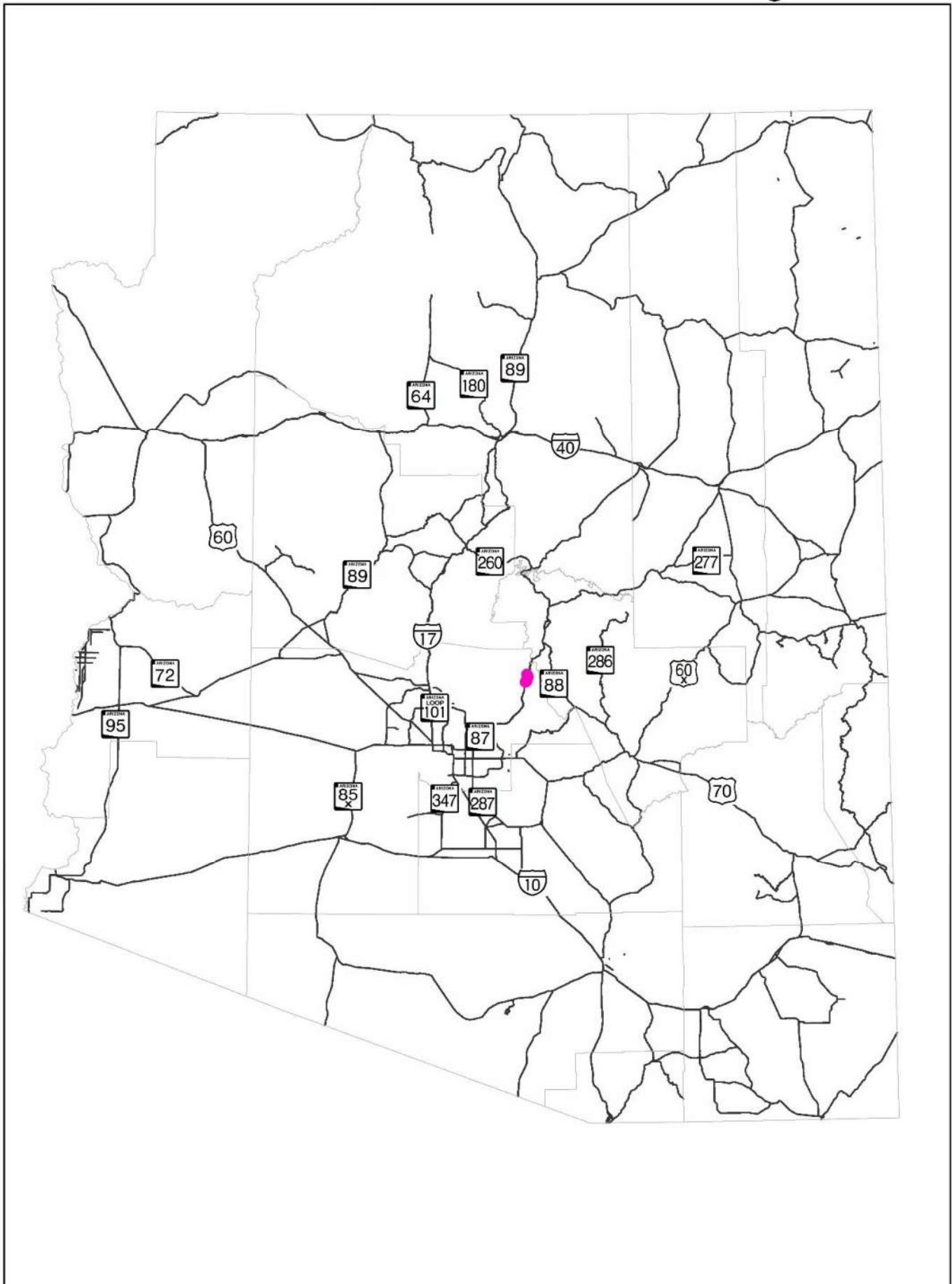
- | |
|---|
| <ol style="list-style-type: none">1. Project Scope of Work2. State Location Map3. Project Vicinity Map4. Itemized Cost Estimate5. Conceptual Design Plans |
|---|

ATTACHMENT 1: SCOPE OF WORK

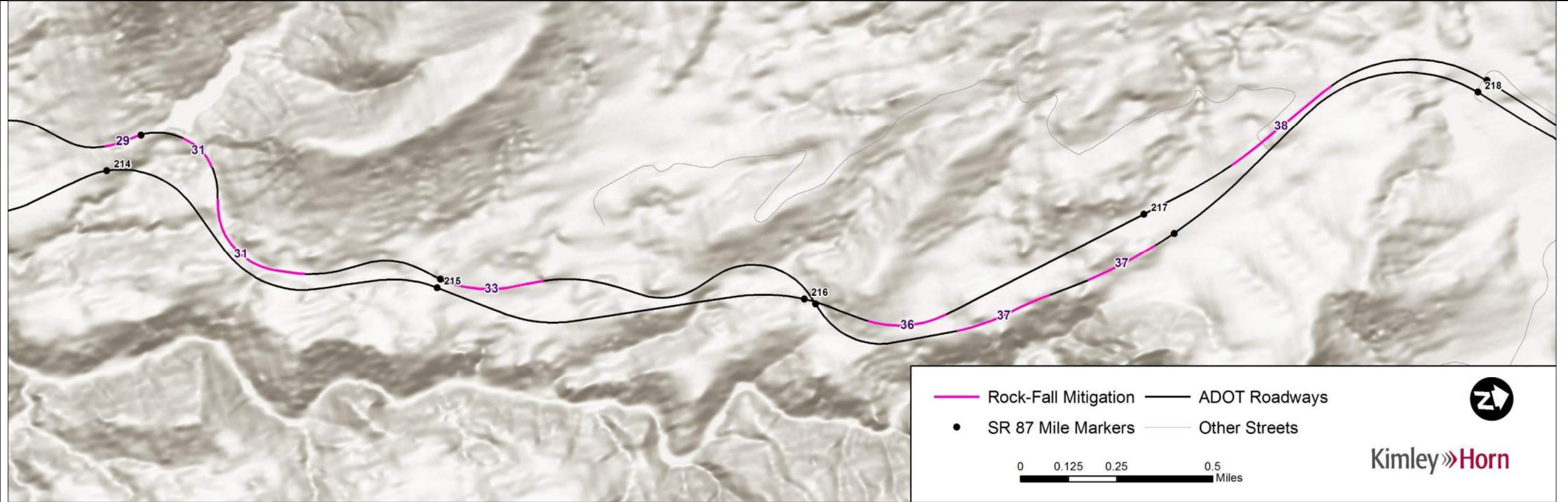
(Provide a detailed breakdown of the project's scope of work using bullet form)

- Northbound rock-fall mitigation – west side (MP 213.9-214)
- Northbound rock-fall mitigation – east side (MP 214.2-214.3)
- Northbound rock-fall mitigation – east side (MP 214.4-214.6)
- Northbound rock-fall mitigation – west side (MP 215-215.2)
- Southbound rock-fall mitigation – east side (MP 216.1-216.2)
- Northbound rock-fall mitigation – west side (MP 216.4-216.6)
- Northbound rock-fall mitigation – west side (MP 216.7-216.9)
- Southbound rock-fall mitigation – east side (MP 217.3-217.6)

ATTACHMENT 3: STATE LOCATION MAP



ATTACHMENT 3: PROJECT VICINITY MAP



Project Element	Map No.	Begin MP	End MP	Cost	Element Justification
1. NB both sides – re-slope to ¾:1, widen and deepen ditches	29	213.9	214	\$250,000	Frequent cleanup required on shoulder, cut eroding and raveling, short sight distance
2. NB left side – re-slope ¾:1 (1 st stretch), ½:1 (2 nd stretch, rock portions), and 1:1 (earth, saprolite); round crest in gravels; pinned netting in earthen materials; widen and deepen ditch; rock lined crown ditch	31	1: 214.2 2: 214.4	1: 214.3 2: 214.6	1: \$995,000 2: \$350,000	1 st stretch: Wedge and toppling geometries plus raveling lead to frequent rock on shoulder, differential erosion features slope to roadway 2 nd stretch: Slabby granite with planar fractures leading to raveling, toppling and wedge releases to shoulder and roadway; accumulations of saprolite w/boulders at crest, some w/inclined surfaces toward roadway
3. NB left side – scale, widen and deepen ditch	33	215	215.2	\$170,000	Erosion with unfavorable structure, inadequate ditch
4. SB left side – heavy scaling, bolts, local pinned mesh	36	216.1	216.2	\$450,000	Erosion with favorable structure along faults and dikes, continuous and discontinuous fractures dipping toward roadway, toppling
5. NB left side – heavy scaling, bolts, dowels (1 st stretch); heavy scaling, spot rock bolting, erosion control (2 nd stretch)	37	1: 216.4 2: 216.7	1: 216.6 2: 216.9	1: \$100,000 2: \$100,000	1 st stretch: Differential erosion in saprolite, may release large boulders, outward dipping sliding surface 2 nd stretch: Continuous fractures dipping moderately outward, major erosion w/unfavorable structure, eroded faults at MP 216.77
6. SB left side – heavy scaling, pattern bolting, erosion control	38	217.3	217.6	\$385,000	Erosion, continuous fractures dipping outward, release along continuous dike, significant recent rockfall history
Total:				\$2,800,000	

ATTACHMENT 4: ITEMIZED COST ESTIMATE

Itemized cost estimates were not developed for the rock-fall mitigation projects.

ATTACHMENT 5: PRELIMINARY PLANS

Preliminary (15%) plans were not developed for the rock-fall mitigation projects.

**PACKAGE PROJECT 5 –
NORTHCENTRAL DISTRICT
ITS/SIGNAGE IMPROVEMENTS
(MP 218-251)**

ADOT SR 87 Corridor Development Study

PRELIMINARY SCOPING REPORT

GENERAL PROJECT INFORMATION	
Date: 8/20/2019	ADOT Project Manager:
Project Name: Northcentral District ITS/Signage Improvements	
City/Town: N/A	County: Maricopa/Gila
COG/MPO: MAG/CAG	ADOT District: Northcentral
Primary Route/Street: SR 87	
Beginning Limit: 218	
End Limit: 250	
Project Length: 32 Miles	
Right of Way Ownership(s) (where proposed project would occur): <i>(check all that apply)</i> <input type="checkbox"/> City/Town <input type="checkbox"/> County <input checked="" type="checkbox"/> ADOT <input type="checkbox"/> Private <input type="checkbox"/> Federal <input type="checkbox"/> Tribal <input type="checkbox"/> Other	
Adjacent Land Ownership(s): <i>(Check all that apply)</i> <input type="checkbox"/> City/Town <input checked="" type="checkbox"/> County <input type="checkbox"/> ADOT <input type="checkbox"/> Private <input checked="" type="checkbox"/> Federal <input type="checkbox"/> Tribal <input type="checkbox"/> Other	

PROJECT NEED
SR 87 Corridor from Milepost 198 through 250 is prone to motor vehicle accidents. Between 2013 and 2017, there were 615 crashes, 37 of which included a fatality or serious injury. There is also substantial congestion experienced during summer weekends south of Payson.

PROJECT PURPOSE			
What is the Primary Purpose of the Project?	<input type="checkbox"/> Preservation	<input checked="" type="checkbox"/> Modernization	<input type="checkbox"/> Expansion
Improve safety/congestion by implementing improved signage and intelligent transportation system infrastructure.			

PROJECT RISKS	
Check any risks identified that may impact the project's scope, schedule, or budget:	
<input type="checkbox"/> Access/Traffic Control/Detour Issues	<input type="checkbox"/> Right-of-Way
<input type="checkbox"/> Constructability/Construction Window Issues	<input type="checkbox"/> Environmental
<input type="checkbox"/> Stakeholder Issues	<input checked="" type="checkbox"/> Utilities
<input type="checkbox"/> Structures & Geotech	<input type="checkbox"/> Other:
Risk Description: <i>(if a box is checked above, briefly explain the risk)</i> Providing power to the site for the installation of a new dynamic message sign.	

POTENTIAL FUNDING SOURCE(S)				
Anticipated Project Design/Construction Funding Type: <i>(Check all that applied)</i>	<input type="checkbox"/> STBG	<input type="checkbox"/> TAP	<input checked="" type="checkbox"/> HSIP	<input checked="" type="checkbox"/> State
	<input type="checkbox"/> Local	<input type="checkbox"/> Private	<input type="checkbox"/> Tribal	<input type="checkbox"/> Other

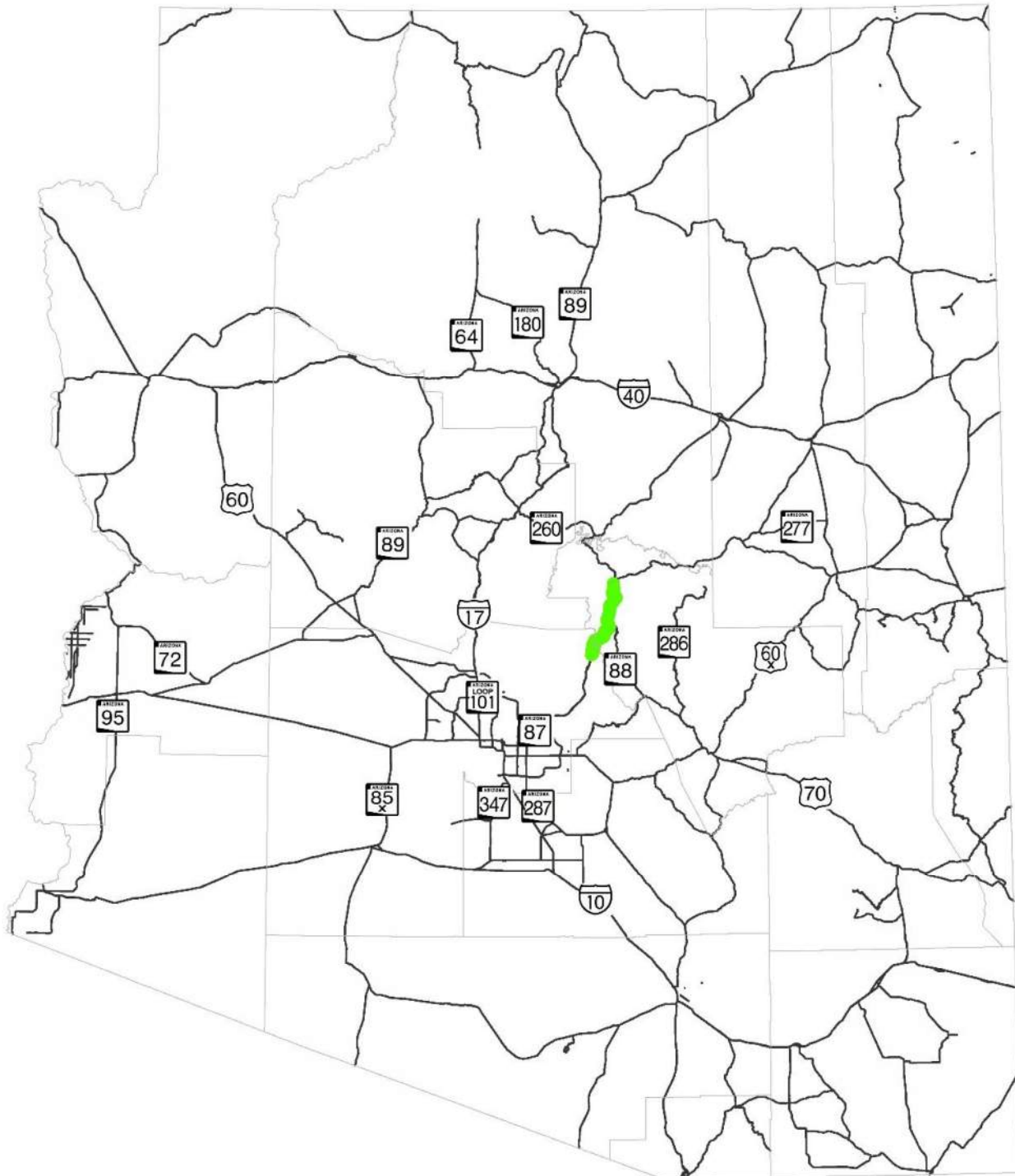
COST ESTIMATE			
Design \$189,400.00	Right-of-Way \$0.00	Construction \$1,704,600.00	Total \$1,894,000.00

RECOMMENDED PROJECT DELIVERY
Delivery: <input type="checkbox"/> Design-Bid-Build <input type="checkbox"/> Design-Build <input checked="" type="checkbox"/> Other:
Design Program Year: Click or tap here to enter text.
Construction Program Year: Click or tap here to enter text.

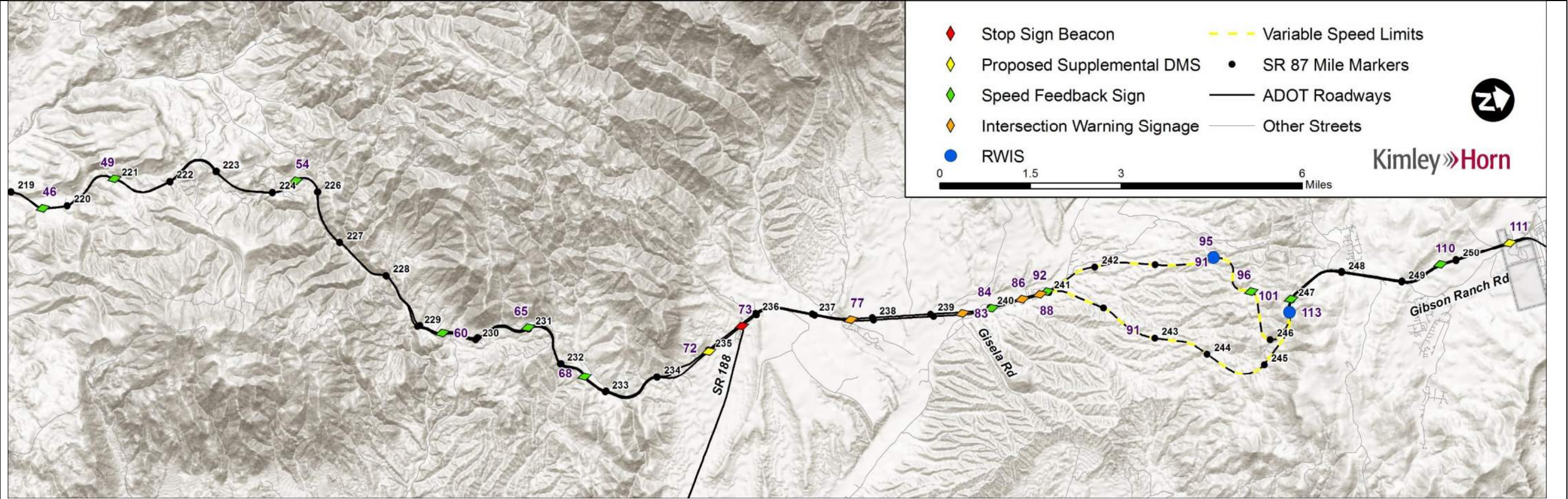
ATTACHMENTS
<ol style="list-style-type: none">1. Project Scope of Work2. State Location Map3. Project Vicinity Map4. Itemized Cost Estimate5. Conceptual Design Plans

ATTACHMENT 1: SCOPE OF WORK
<p><i>(Provide a detailed breakdown of the project's scope of work using bullet form)</i></p> <ul style="list-style-type: none">• Southbound speed feedback sign (MP 219.6)• Southbound speed feedback sign (MP 221)• Northbound speed feedback sign (MP 224.5)• Southbound speed feedback sign (MP 229.3)• Southbound speed feedback sign (MP 231)• Northbound speed feedback sign (MP 232.5)• Northbound dynamic message sign (MP 235)• Westbound stop sign beacon – SR 188 (MP 235.7)• Intersection warning signage – Deer Creek Drive (MP 237.6)• Intersection warning signage – Gisela Road (MP 239.5)• Northbound speed feedback sign (MP 240)• Intersection warning signage – South Rye Crossover (MP 240.5)• Intersection warning signage – North Rye Crossover (MP 240.9)• Variable speed limits with dynamic message signs at both termini (MP 241-247)• Southbound speed feedback sign (MP 241)• Southbound road weather information system with dynamic warning beacons (MP 244)• Southbound speed feedback sign (MP 245)• Northbound and southbound RWIS with dynamic warning beacons (MP 246.3)• Southbound speed feedback sign (MP 247)• Southbound speed feedback sign (MP 249.8)• Southbound dynamic message sign (MP 251)

ATTACHMENT 2: STATE LOCATION MAP



ATTACHMENT 3: PROJECT VICINITY MAP



Project Element	Map No.	Begin MP	End MP	Cost	Element Justification
1. SB speed feedback sign	46	219.6	219.6	\$25,000	Speeding is an issue at this location, a speed study at MP 221 showed an 85 th percentile speed of 73 mph.
2. SB speed feedback sign	49	221	221	\$25,000	Speeding is an issue at this location, a speed study at this location showed an 85 th percentile speed of 73 mph.
3. NB speed feedback sign	54	224.5	224.5	\$25,000	Within an identified crash hot spot where 50% of crashes involved traveling too fast for conditions, 27% of crashes ran into a concrete traffic barrier, 23% ran off the road to the right, 12% ran off the road to the left.
4. SB speed feedback sign	60	229.3	229.3	\$25,000	A downhill grade leading into a relatively sharp curve (with a 55-mph advisory speed) is an optimal location for a speed feedback sign to reinforce the advisory speed.
5. SB speed feedback sign	65	231	231	\$25,000	There is a small cluster of serious injury and fatal crashes at this location. A combination of a downhill grade and relatively sharp curves are optimal locations for a speed feedback sign.
6. NB speed feedback sign	68	232.5	232.5	\$25,000	A 6% downhill grade leading into a relatively sharp curve is an optimal location for a speed feedback sign to reinforce the speed limit.
7. New NB DMS	72	235	235	\$250,000	Provides the opportunity to detour NB traffic onto SR 188 in response to incidents or extreme congestion leading into Payson.
8. WB stop sign beacon on SR 188	73	235.7	235.7	\$15,000	Improves the visibility of the stop sign to slow traffic down in advance of the intersection.
9. Intersection warning signage – Deer Creek Dr	77	237.6	237.6	\$5,000	Relatively inexpensive treatment to increase awareness of the Deer Creek Dr. intersection.
10. Intersection warning signage at Gisela Road	83	239.5	239.5	\$5,000	Increase awareness and attention to cross-traffic at the Gisela Road intersection; one crash was reported in the crash analysis at this location.
11. NB speed feedback sign	84	240	240	\$25,000	Reinforce the speed limit through the Rye area, the current 85 th percentile speed is 73 mph.
12. Intersection warning signage at the S. Rye Crossover	86	240.5	240.5	\$5,000	Increase awareness and attention to cross-traffic at the S. Rye Crossover intersection; two crashes were reported in the crash analysis at this location.
13. Intersection warning signage at the N. Rye Crossover	88	240.9	240.9	\$5,000	Increase awareness and attention to the cross-traffic at the N. Rye Crossover intersection.
14. Variable speed limits, with DMS on both ends	91	241	247	\$844,000	Add the ability to raise and lower speed limits in an area with a high propensity for crashes based on weather, events, crashes, or other factors where reduced speed limits may be warranted.
15. SB speed feedback sign	92	241	241	\$25,000	Reinforce the speed limit through the Rye area, the current 85 th percentile speed is 74 mph and the average speed is 72 mph.
16. NB and SB RWIS with dynamic warning beacons	95	244	244	\$60,000	Provide the ability to warn drivers of adverse weather conditions, could be in communication with the proposed variable speed limits.
17. SB speed feedback sign	96	245	245	\$25,000	Increase awareness of the speed limit on the long, downhill grade with sharp curves.

18. NB and SB RWIS with dynamic warning beacons	113	246.3	246.3	\$180,000	In the northbound direction, provide the ability to warn drivers of adverse weather conditions and could be in communication with the proposed variable speed limits. In the southbound direction, provide a Dynamic Curve Warning System for Corvair Curve that uses supplemental beacons and/or messages that activate when a motorist approaches the curve at a high speed. A typical dynamic curve warning system combines a speed measuring device (such as loop detectors or radar) with flashing beacon and a variable message sign. The system can incorporate a camera to provide visual surveillance of the curve. The system is designed to slow high-speed vehicles as they approach and enter a horizontal curve. It works by measuring the speeds of approaching vehicles and providing messages to speeding drivers to slow down to an advisory speed.
19. SB speed feedback sign	101	247	247	\$25,000	Reinforce the speed limit and driver awareness of their speeds, 85 th percentile speeds are 19 mph over the speed limit and average speeds are 17 mph over the speed limit.
20. SB speed feedback sign	110	249.8	249.8	\$25,000	Reinforce the speed limit and driver awareness of their speeds.
21. New SB DMS	111	251	251	\$250,000	Provides the ability to advise SB traffic to turn around in response to incidents or extreme congestion on the SR 87 corridor south of Payson.
Total:				\$1,894,000	

ATTACHMENT 4: ITEMIZED COST ESTIMATE

Itemized cost estimates were not developed for the ITS/Signage Improvement projects.

ATTACHMENT 5: PRELIMINARY PLANS

Preliminary (15%) plans were not developed for the ITS/Signage Improvement Projects

**PACKAGE PROJECT 6 –
NORTHCENTRAL DISTRICT ROCK-
FALL MITIGATION
(MP 222-247)**

ADOT SR 87 Corridor Development Study

PRELIMINARY SCOPING REPORT

GENERAL PROJECT INFORMATION	
Date: 8/20/2019	ADOT Project Manager:
Project Name: Northcentral District Rock-Fall Mitigation	
City/Town: N/A	County: Gila
COG/MPO: MAG/CAG	ADOT District: Northcentral
Primary Route/Street: SR 87	
Beginning Limit: 222	
End Limit: 234	
Project Length: 12 Miles	
Right of Way Ownership(s) (where proposed project would occur): (check all that apply)	
<input type="checkbox"/> City/Town <input type="checkbox"/> County <input checked="" type="checkbox"/> ADOT <input type="checkbox"/> Private <input type="checkbox"/> Federal <input type="checkbox"/> Tribal <input type="checkbox"/> Other	
Adjacent Land Ownership(s): (Check all that apply)	
<input type="checkbox"/> City/Town <input type="checkbox"/> County <input type="checkbox"/> ADOT <input type="checkbox"/> Private <input checked="" type="checkbox"/> Federal <input type="checkbox"/> Tribal <input type="checkbox"/> Other	

PROJECT NEED
Erosion and rock-fall issues between MP 222 and 234 causing recurring maintenance issues and debris-related crashes

PROJECT PURPOSE			
What is the Primary Purpose of the Project?	<input type="checkbox"/> Preservation	<input checked="" type="checkbox"/> Modernization	<input type="checkbox"/> Expansion
Mitigate rock-fall issues.			

PROJECT RISKS	
Check any risks identified that may impact the project's scope, schedule, or budget:	
<input type="checkbox"/> Access/Traffic Control/Detour Issues	<input type="checkbox"/> Right-of-Way
<input type="checkbox"/> Constructability/Construction Window Issues	<input type="checkbox"/> Environmental
<input type="checkbox"/> Stakeholder Issues	<input type="checkbox"/> Utilities
<input type="checkbox"/> Structures & Geotech	<input type="checkbox"/> Other:
Risk Description: (if a box is checked above, briefly explain the risk)	
Click or tap here to enter text.	

POTENTIAL FUNDING SOURCE(S)				
Anticipated Project Design/Construction Funding Type: (Check all that applied)	<input type="checkbox"/> STBG	<input type="checkbox"/> TAP	<input type="checkbox"/> HSIP	<input checked="" type="checkbox"/> State
	<input type="checkbox"/> Local	<input type="checkbox"/> Private	<input type="checkbox"/> Tribal	<input type="checkbox"/> Other

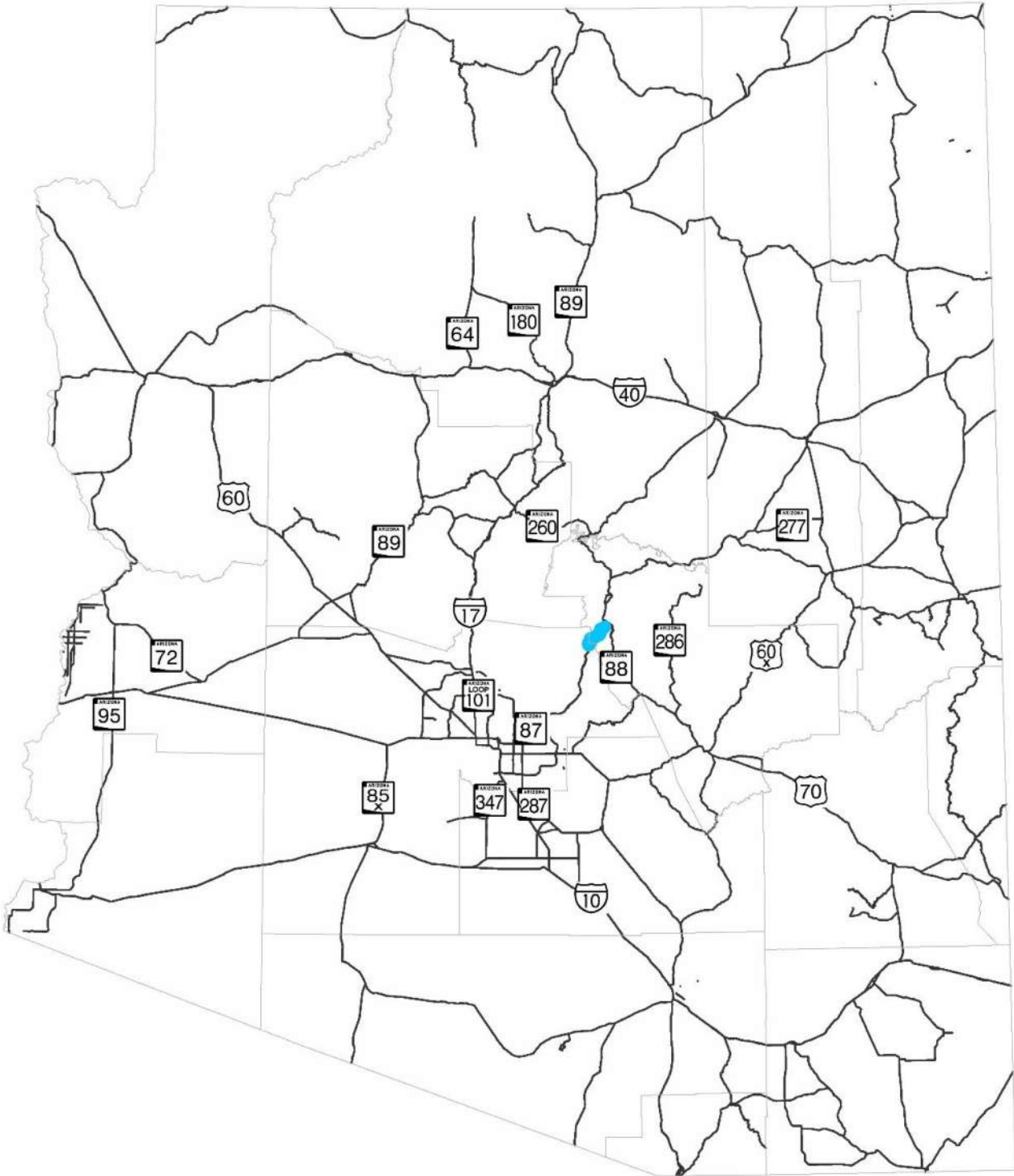
COST ESTIMATE			
Design	Right-of-Way	Construction	Total
\$584,000.00	\$0.00	\$5,256,000	\$5,840,000

RECOMMENDED PROJECT DELIVERY
Delivery: <input type="checkbox"/> Design-Bid-Build <input type="checkbox"/> Design-Build <input checked="" type="checkbox"/> Other:
Design Program Year: Click or tap here to enter text.
Construction Program Year: Click or tap here to enter text.

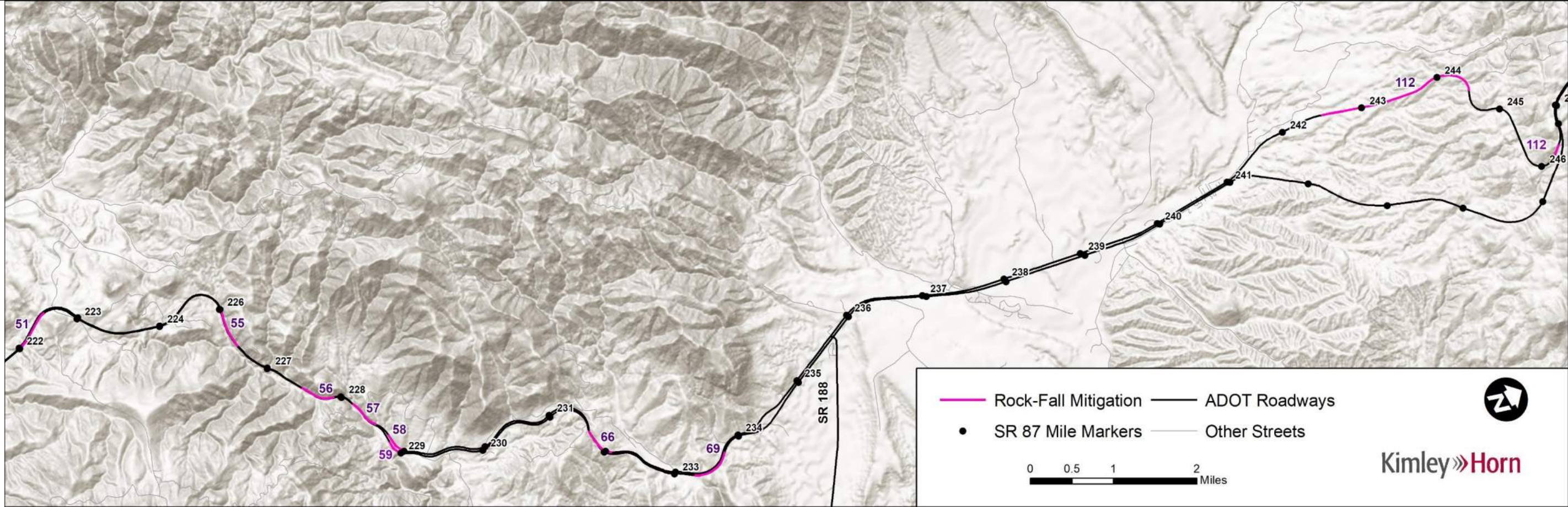
ATTATCHMENTS
<ol style="list-style-type: none">1. Project Scope of Work2. State Location Map3. Project Vicinity Map4. Itemized Cost Estimate5. Conceptual Design Plans

ATTACHMENT 1: SCOPE OF WORK
<p><i>(Provide a detailed breakdown of the project's scope of work using bullet form)</i></p> <ul style="list-style-type: none">• Northbound rock-fall mitigation – east side (MP 222.2-222.6)• Southbound rock-fall mitigation – west side (MP 226.1-226.5)• Southbound rock-fall mitigation – west side (MP 227.5-227.9)• Southbound rock-fall mitigation – west side (MP 228.2-228.5)• Southbound rock-fall mitigation – both sides (MP 228.7-229.0)• Northbound rock-fall mitigation – both sides (MP 228.9-229)• Northbound rock-fall mitigation – east side (MP 231.6-231.7)• Southbound rock-fall mitigation – east side (MP 231.7-232.1)• Northbound rock-fall mitigation – east side (MP 233.3-233.7)• Southbound rock-fall mitigation – east side (MP 242.5-244.5, 246.4-246.6)

ATTACHMENT 2: STATE LOCATION MAP



ATTACHMENT 3: PROJECT VICINITY MAP



Project Element	Map No.	Begin MP	End MP	Cost	Element Justification
1. NB both sides – re-grade with rock-lined interceptor channels and crown ditch, gabions	51	222	222.6	\$650,000	Re-grade with rock-lined interceptor channels and crown ditch, gabions
2. SB left side – pinned mesh in the narrow shoulder area, deepen ditch to 6’, rock fence on bench, grade slope and scale (1 st stretch); crest erosion, protect with thrie beam barrier, pinned mesh in crown area gravels, scale (2 nd stretch); pinned mesh in the crest, deepen ditch, protect with weathering thrie beam barrier (3 rd stretch)	55	1: 226 2: 226.1 3: 226.3	1: 226.1 2: 226.3 3: 226.5	1: \$440,000 2: \$325,000 3: \$550,000	1 st stretch: Erosion with boulders, upper bench may be breached, potential upslope contribution above bench. Rock fall is frequent but widened paved shoulder keeps most rock off pavement, despite lack of ditch cross slope. 2 nd stretch: Crest erosion, limited catchment with many rock falls 3 rd stretch: Local terrace gravels at top of slope cut, rock face well vegetated and mostly stable but catchment is inadequate
3. SB left side – deepen ditch by toe excavation, protect ditch cross slope with weathering thrie beam barrier	56	227.5	227.9	\$250,000	Tall cut appx 3/4:1 paved ditch inadequate depth. Rock slope mostly well vegetated and uniform, generally stable. Local raveling and release from crest.
4. SB left side - spot and pattern rock bolting (crane basket), attenuators, local anchored mesh, heavy scaling, widen and deepen ditch and protect with weathering thrie beam or concrete barrier	57	228.2	228.5	\$660,000	High & steep cut, widespread plane shear and wedge fracture geometries, erosion along faults and shears. Ditch width and cross slope inadequate. Emergency cleanups have been infrequent, but free-standing rock erosion features are developing and may lead to significant and damaging future falls.
5. SB left side – rock lined crown ditch, dress and revegetate slope, widen and deepen ditch and protect with weathering thrie beam barrier (1 st stretch); SB right side - deepen ditch and protect with weathering thrie beam barrier	58	1: 228.7 2: 228.8	1: 229 2: 229	1: \$230,000 2: \$150,000	1 st stretch: Fanglomerate, benches 80%-90% eroded w/vegetation on remnants, rock fall almost to shoulder, ditch depth inadequate. Assume 2018 repair \$\$ appearing in PeCos was for this cut. 2 nd stretch: Fanglomerate, many rocks in ditch, depth inadequate
6. NB both sides – re-grade to eliminate remnant benches, use sace to improve ditch configuration both sides	59	228.8	229	\$160,000	Looser material atop cut overlies denser fanglomerate. Catch benches have filled up, potential for rock bouncing out from face
7. NB right side – re-grade with rock-lined interceptor channels and crown ditch, gabions (1 st stretch); SB left side – in rock cut deepen ditch and protect with weathering thrie beam barrier, retain paved shoulders; in alluvium construct rock-lined crown and interceptor ditches, gabions as necessary (2 nd stretch)	66	1: 231.6 2: 231.7	1: 231.7 2: 232.1	1: \$530,000 2: \$485,000	1 st stretch: Heavy rill erosion, obvious recent clean-up work 2 nd stretch: Partial raveling but mostly kinematically stable rock slope with ditch of inadequate depth. North 2/3 is valley fill sediments with heavy rill erosion, locally undercutting slope face, no crown ditch
8. NB right side – re-grade with rock-lined interceptor channels and crown ditch, gabions	69	233.3	233.7	\$780,000	Two tall cuts in unconsolidated alluvium, heavy rill erosion, widened shoulders, history of major sluffing & major reconstruction, may recur.

9. SB left side – Move slope back 10 ft to widen and deepen ditch, revegetate earth slopes, R&R barrier with single-beam weathering type (1 st stretch); SB left side – round crest & layback & widen ditch, protect deepened ditch with weathering single-beam barrier (2 nd stretch)	112	1: 242.5 2: 246.4	1: 244.5 2: 246.6	1: \$500,000 2: \$130,000	1 st stretch: 6 cuts SB LT, rocks roll out into travel lanes during significant rainfall or snowmelt events 2 nd stretch: Boulders at crest eroding out, maintenance activity has occurred in the MP range.
Total:				\$5,840,000	

ATTACHMENT 4: ITEMIZED COST ESTIMATE

Itemized cost estimates were not developed for the rock-fall mitigation projects.

ATTACHMENT 5: PRELIMINARY PLANS

Preliminary (15%) plans were not developed for the rock-fall mitigation projects.

**PACKAGE PROJECT 7 –
NORTHBOUND IMPROVEMENTS
(MP 218-226)**

ADOT SR 87 Corridor Development Study

PRELIMINARY SCOPING REPORT

GENERAL PROJECT INFORMATION	
Date: 8/20/2019	ADOT Project Manager:
Project Name: Northbound Improvements (MP 218-226)	
City/Town: N/A	County: Maricopa/Gila
COG/MPO: MAG/CAG	ADOT District: Northcentral
Primary Route/Street: SR 87	
Beginning Limit: 218	
End Limit: 226	
Project Length: 8 Miles	
Right of Way Ownership(s) (where proposed project would occur): <i>(check all that apply)</i> <input type="checkbox"/> City/Town <input type="checkbox"/> County <input checked="" type="checkbox"/> ADOT <input type="checkbox"/> Private <input type="checkbox"/> Federal <input type="checkbox"/> Tribal <input type="checkbox"/> Other	
Adjacent Land Ownership(s): <i>(Check all that apply)</i> <input type="checkbox"/> City/Town <input checked="" type="checkbox"/> County <input type="checkbox"/> ADOT <input type="checkbox"/> Private <input checked="" type="checkbox"/> Federal <input type="checkbox"/> Tribal <input type="checkbox"/> Other	

PROJECT NEED
Large speed differentials have been observed during a speed study at this location caused by slow truck speeds due to a steep uphill grade in the northbound direction.

PROJECT PURPOSE			
What is the Primary Purpose of the Project?	<input type="checkbox"/> Preservation	<input checked="" type="checkbox"/> Modernization	<input checked="" type="checkbox"/> Expansion
Address large speed differentials by providing a climbing lane for trucks, while also making safety improvements at the Bushnell Tanks intersection and north of the climbing lane.			

PROJECT RISKS	
Check any risks identified that may impact the project's scope, schedule, or budget:	
<input type="checkbox"/> Access/Traffic Control/Detour Issues	<input type="checkbox"/> Right-of-Way
<input type="checkbox"/> Constructability/Construction Window Issues	<input type="checkbox"/> Environmental
<input type="checkbox"/> Stakeholder Issues	<input type="checkbox"/> Utilities
<input checked="" type="checkbox"/> Structures & Geotech	<input type="checkbox"/> Other:
Risk Description: <i>(if a box is checked above, briefly explain the risk)</i> Two bridges will need to be widened to accommodate the climbing lane.	

POTENTIAL FUNDING SOURCE(S)				
Anticipated Project Design/Construction Funding Type: <i>(Check all that applied)</i>	<input type="checkbox"/> STBG	<input type="checkbox"/> TAP	<input type="checkbox"/> HSIP	<input checked="" type="checkbox"/> State
	<input type="checkbox"/> Local	<input type="checkbox"/> Private	<input type="checkbox"/> Tribal	<input type="checkbox"/> Other

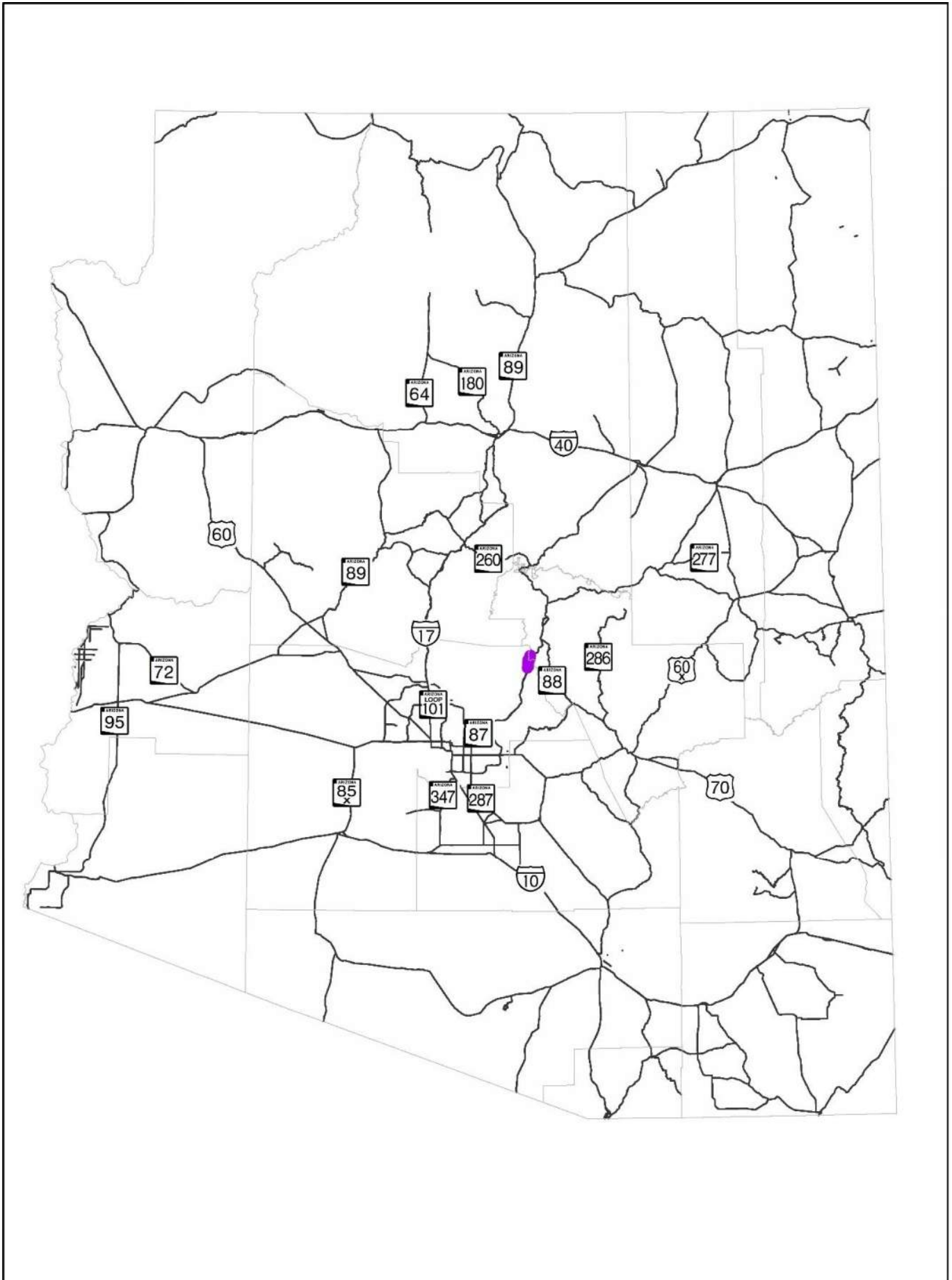
COST ESTIMATE			
Design \$2,091,700.00	Right-of-Way \$0.00	Construction \$27,196,900.00	Total \$29,288,600.00

RECOMMENDED PROJECT DELIVERY
Delivery: <input type="checkbox"/> Design-Bid-Build <input type="checkbox"/> Design-Build <input checked="" type="checkbox"/> Other:
Design Program Year: Click or tap here to enter text.
Construction Program Year: Click or tap here to enter text.

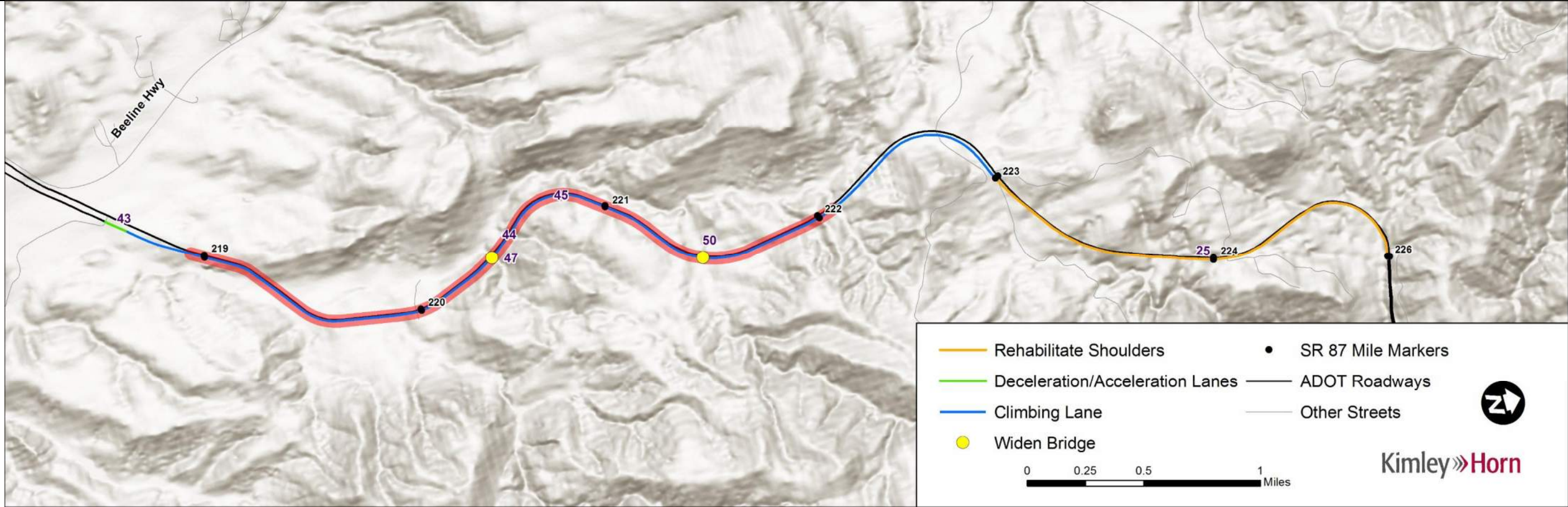
ATTATCHMENTS
<ol style="list-style-type: none">1. Project Scope of Work2. State Location Map3. Project Vicinity Map4. Itemized Cost Estimates5. Conceptual Design Plans

ATTACHMENT 1: SCOPE OF WORK
<p><i>(Provide a detailed breakdown of the project's scope of work using bullet form)</i></p> <ul style="list-style-type: none">• Rehabilitate northbound shoulders (MP 223-226)• Add northbound outside acceleration lane and southbound inside acceleration lane at the Bushnell Tanks Intersection (MP 218.5)• Widen inside shoulders to 4' and outside shoulders to 10' (MP 218.9-222.1)• Construct northbound climbing lane (MP 218.6-223)• Widen the Whiskey Springs bridge to accommodate the proposed climbing lane (MP 220.3)• Widen the Kitty Joe Creek bridge to accommodate the proposed climbing lane (MP 221.4)

ATTACHMENT 2: STATE LOCATION MAP



ATTACHMENT 3: PROJECT VICINITY MAP



Project Element	Map No.	Begin MP	End MP	Cost	Element Justification
1. Rehabilitate NB shoulders	25	223	226	\$1,111,200	The shoulders in this location are in poor condition, with significant cracking and vegetation growing.
2. NB outside acceleration lane, SB inside acceleration lane at Bushnell Tanks intersection	43	218.5	218.5	\$1,330,500	Relatively high level of vehicles with trailers that may warrant acceleration lanes.
3. Widen inside shoulders to 4' and outside shoulders to 10'	44	218.9	222.1	\$4,061,600	The current shoulders are of insufficient widths per current safety standards and for effective emergency response.
4. Construct NB climbing lane	45	218.6	223	\$16,108,300	Approximately 15% of traffic on this segment is heavy commercial vehicles, the uphill grade causes low speeds and large speed variances between vehicles.
5. Widen Whiskey Springs bridge	47	220.3	220.3	\$2,904,500	Bridge will need to be widened to accommodate the proposed northbound climbing lane.
6. Widen Kitty Joe Creek bridge	50	221.4	221.4	\$3,772,500	Bridge will need to be widened to accommodate the proposed northbound climbing lane.
Total:				\$29,288,600	

ATTACHMENT 4: ITEMIZED COST ESTIMATES



SR87 Corridor Development Study ITEMIZED COST ESTIMATE

25. Rehabilitate northbound shoulders – 223-226

ITEM NO	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
2020053	REMOVE (GR TERMINAL)	EACH	2	\$400.00	\$800
2020071	REMOVE GUARD RAIL	L.FT.	5,280	\$5.00	\$26,400
2020085	REMOVE BITUMINOUS PAVEMENT (MILLING) (3")	SQ.YD.	17,096	\$3.00	\$51,288
4090003	ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL)	TON	3,131	\$80.00	\$250,480
4110001	ASPHALTIC CONCRETE FRICTION COURSE (MISC.)	TON	505	\$90.00	\$45,450
6080101	MISCELLANEOUS WORK (SIGNS)	L.SUM	1	\$4,000.00	\$4,000
7041501	PAVEMENT MARKINGS	L.SUM	1	\$10,990.00	\$10,990
9050001	GUARD RAIL, W-BEAM, SINGLE FACE	L.FT.	2,748	\$30.00	\$82,440
9050026	GUARD RAIL TERMINAL (TANGENT TYPE)	EACH	2	\$2,500.00	\$5,000
9050036	GUARD RAIL, ANCHOR ASSEMBLY	EACH	2	\$800.00	\$1,600
9240050	MISCELLANEOUS WORK (PUBLIC RELATIONS)	L.SUM	1	\$6,000.00	\$6,000
9280037	GROUND-IN RUMBLE STRIP (12 INCH)	L.FT.	21,980	\$0.75	\$16,485
Roadway Construction Subtotal					\$500,933
Unidentified Item Allowance (15%)					\$ 75,140
Subtotal					\$576,073
Water Supply/Dust Palliative (3%)					\$ 17,283
Maintenance And Protection Of Traffic (15%)					\$ 86,411
Erosion Control (1%)					\$ 5,761
Contractor Quality Control (2%)					\$ 11,522
Construction Surveying And Layout (2%)					\$ 11,522
Other Item Subtotal					\$708,572
Mobilization (12%)					\$ 85,029
Construction Subtotal					\$ 793,601
Engineering Design (10%)					\$ 79,361
Construction Engineering and Contingencies (20%)					\$ 158,721
Indirect Cost Allocation (10.02%)					\$ 79,519
Construction Total					\$ 1,111,202

43. Northbound outside acceleration lane at Bushnell Tanks (MP 218.5)

ITEM NO	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
2010011	CLEARING AND GRUBBING	ACRE	1	\$5,000.00	\$5,000
2020029	REMOVAL OF ASPHALTIC CONCRETE PAVEMENT	SQ.YD.	1,600	\$20.00	\$32,000
2020201	SAW CUTTING	L.FT.	1,440	\$2.50	\$3,600
2030301	ROADWAY EXCAVATION	CU.YD.	2,140	\$10.00	\$21,400
3030022	AGGREGATE BASE, CLASS 2	CU.YD.	1,174	\$60.00	\$70,440
4090003	ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL)	TON	927	\$160.00	\$148,320
4110001	ASPHALTIC CONCRETE FRICTION COURSE (MISC.)	TON	76	\$120.00	\$9,120
6080101	MISCELLANEOUS WORK (SIGNS)	L.SUM	1	\$2,000.00	\$2,000
7041501	PAVEMENT MARKINGS	L.SUM	1	\$1,440.00	\$1,440
8050003	SEEDING (CLASS II)	ACRE	1	\$3,500.00	\$3,500
9240050	MISCELLANEOUS WORK (PUBLIC RELATIONS)	L.SUM	1	\$3,000.00	\$3,000
9280037	GROUND-IN RUMBLE STRIP (12 INCH)	L.FT.	1,440	\$1.50	\$2,160
Roadway Construction Subtotal					\$301,980
Unidentified Item Allowance (15%)					\$ 45,297
Subtotal					\$347,277
Water Supply/Dust Palliative (3%)					\$ 10,419
Maintenance And Protection Of Traffic (15%)					\$ 52,092
Erosion Control (1%)					\$ 3,473
Contractor Quality Control (2%)					\$ 6,946
Construction Surveying And Layout (2%)					\$ 6,946
Other Item Subtotal					\$427,153
Mobilization (12%)					\$ 51,259
Construction Subtotal					\$ 478,412
Engineering Design (10%)					\$ 47,842
Construction Engineering and Contingencies (20%)					\$ 95,683
Indirect Cost Allocation (10.02%)					\$ 47,937
Construction Total					\$ 669,874

43. Southbound inside acceleration lane at Bushnell Tanks (MP 218.5)

ITEM NO	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
2010011	CLEARING AND GRUBBING	ACRE	1	\$5,000.00	\$5,000
2020029	REMOVAL OF ASPHALTIC CONCRETE PAVEMENT	SQ.YD.	292	\$20.00	\$5,840
2020053	REMOVE (GR TERMINAL)	EACH	2	\$400.00	\$800
2020071	REMOVE GUARD RAIL	L.FT.	350	\$5.00	\$1,750
2020201	SAW CUTTING	L.FT.	1,310	\$2.50	\$3,275
2030301	ROADWAY EXCAVATION	CU.YD.	1,950	\$10.00	\$19,500
3030022	AGGREGATE BASE, CLASS 2	CU.YD.	1,068	\$60.00	\$64,080
4090003	ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL)	TON	843	\$160.00	\$134,880
4110001	ASPHALTIC CONCRETE FRICTION COURSE (MISC.)	TON	69	\$120.00	\$8,280
6080101	MISCELLANEOUS WORK (SIGNS)	L.SUM	1	\$2,000.00	\$2,000
7041501	PAVEMENT MARKINGS	L.SUM	1	\$1,310.00	\$1,310
8050003	SEEDING (CLASS II)	ACRE	1	\$3,500.00	\$3,500
9050001	GUARD RAIL, W-BEAM, SINGLE FACE	L.FT.	1,310	\$30.00	\$39,300
9050026	GUARD RAIL TERMINAL (TANGENT TYPE)	EACH	1	\$2,500.00	\$2,500
9050036	GUARD RAIL, ANCHOR ASSEMBLY	EACH	1	\$800.00	\$800
9240050	MISCELLANEOUS WORK (PUBLIC RELATIONS)	L.SUM	1	\$3,000.00	\$3,000
9280037	GROUND-IN RUMBLE STRIP (12 INCH)	L.FT.	1,310	\$1.50	\$1,965
Roadway Construction Subtotal					\$297,780
Unidentified Item Allowance (15%)					\$ 44,667
Subtotal					\$342,447
Water Supply/Dust Palliative (3%)					\$ 10,274
Maintenance And Protection Of Traffic (15%)					\$ 51,368
Erosion Control (1%)					\$ 3,425
Contractor Quality Control (2%)					\$ 6,849
Construction Surveying And Layout (2%)					\$ 6,849
Other Item Subtotal					\$421,212
Mobilization (12%)					\$ 50,546
Construction Subtotal					\$ 471,758
Engineering Design (10%)					\$ 47,176
Construction Engineering and Contingencies (20%)					\$ 94,352
Indirect Cost Allocation (10.02%)					\$ 47,271
Construction Total					\$ 660,557

44. Widen inside shoulders to 4' and outside shoulders to 10' (MP 218.9 – 222.1)

ITEM NO	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
2010011	CLEARING AND GRUBBING	ACRE	4	\$5,000.00	\$20,000
2020029	REMOVAL OF ASPHALTIC CONCRETE PAVEMENT	SQ.YD.	3,755	\$20.00	\$75,100
2020053	REMOVE (GR TERMINAL)	EACH	4	\$400.00	\$1,600
2020071	REMOVE GUARD RAIL	L.FT.	4,224	\$5.00	\$21,120
2020201	SAW CUTTING	L.FT.	33,792	\$2.50	\$84,480
2030301	ROADWAY EXCAVATION	CU.YD.	30,040	\$7.00	\$210,280
3030022	AGGREGATE BASE, CLASS 2	CU.YD.	12,516	\$50.00	\$625,800
4090003	ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL)	TON	6,831	\$80.00	\$546,480
4110001	ASPHALTIC CONCRETE FRICTION COURSE (MISC.)	TON	444	\$90.00	\$39,960
6080101	MISCELLANEOUS WORK (SIGNS)	L.SUM	1	\$4,000.00	\$4,000
7041501	PAVEMENT MARKINGS	L.SUM	1	\$16,896.00	\$16,896
8050003	SEEDING (CLASS II)	ACRE	4	\$3,500.00	\$14,000
9050001	GUARD RAIL, W-BEAM, SINGLE FACE	L.FT.	4,224	\$30.00	\$126,720
9050026	GUARD RAIL TERMINAL (TANGENT TYPE)	EACH	4	\$2,500.00	\$10,000
9050036	GUARD RAIL, ANCHOR ASSEMBLY	EACH	4	\$800.00	\$3,200
9240050	MISCELLANEOUS WORK (PUBLIC RELATIONS)	L.SUM	1	\$6,000.00	\$6,000
9280037	GROUND-IN RUMBLE STRIP (12 INCH)	L.FT.	33,792	\$0.75	\$25,344
Roadway Construction Subtotal					\$1,830,980
Unidentified Item Allowance (15%)					\$ 274,647
Subtotal					\$2,105,627
Water Supply/Dust Palliative (3%)					\$ 63,169
Maintenance And Protection Of Traffic (15%)					\$ 315,845
Erosion Control (1%)					\$ 21,057
Contractor Quality Control (2%)					\$ 42,113
Construction Surveying And Layout (2%)					\$ 42,113
Other Item Subtotal					\$2,589,924
Mobilization (12%)					\$ 310,791
Construction Subtotal					\$ 2,900,715
Engineering Design (10%)					\$ 290,072
Construction Engineering and Contingencies (20%)					\$ 580,143
Indirect Cost Allocation (10.02%)					\$ 290,652
Construction Total					\$ 4,061,582

45. Construct climbing lane (MP 218.6-223)

ITEM NO	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
2010011	CLEARING AND GRUBBING	ACRE	16	\$5,000.00	\$80,000
2020029	REMOVAL OF ASPHALTIC CONCRETE PAVEMENT	SQ.YD.	2,582	\$20.00	\$51,640
2020053	REMOVE (GR TERMINAL)	EACH	4	\$400.00	\$1,600
2020071	REMOVE GUARD RAIL	L.FT.	5,809	\$5.00	\$29,045
2020201	SAW CUTTING	L.FT.	23,232	\$2.50	\$58,080
2030301	ROADWAY EXCAVATION	CU.YD.	1,730	\$10.00	\$17,300
2030901	BORROW	CU.YD.	137,680	\$12.00	\$1,652,160
3030022	AGGREGATE BASE, CLASS 2	CU.YD.	16,349	\$50.00	\$817,450
4090003	ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL)	TON	12,380	\$80.00	\$990,400
4110001	ASPHALTIC CONCRETE FRICTION COURSE (MISC.)	TON	990	\$90.00	\$89,100
6080101	MISCELLANEOUS WORK (SIGNS)	L.SUM	1	\$4,000.00	\$4,000
7041501	PAVEMENT MARKINGS	L.SUM	1	\$23,232.00	\$23,232
8050003	SEEDING (CLASS II)	ACRE	16	\$3,500.00	\$56,000
9050001	GUARD RAIL, W-BEAM, SINGLE FACE	L.FT.	11,616	\$30.00	\$348,480
9050026	GUARD RAIL TERMINAL (TANGENT TYPE)	EACH	6	\$2,500.00	\$15,000
9050036	GUARD RAIL, ANCHOR ASSEMBLY	EACH	6	\$800.00	\$4,800
9240050	MISCELLANEOUS WORK (PUBLIC RELATIONS)	L.SUM	1	\$6,000.00	\$6,000
9280037	GROUND-IN RUMBLE STRIP (12 INCH)	L.FT.	23,232	\$0.75	\$17,424
Roadway Construction Subtotal					\$4,261,711
Two structures widening (12*500'+12*650') @ \$250/sft					\$ 3,450,000
Unidentified Item Allowance (15%)					\$ 639,257
Subtotal					\$8,350,968
Water Supply/Dust Palliative (3%)					\$ 250,530
Maintenance And Protection Of Traffic (15%)					\$ 1,252,646
Erosion Control (1%)					\$ 83,510
Contractor Quality Control (2%)					\$ 167,020
Construction Surveying And Layout (2%)					\$ 167,020
Other Item Subtotal					\$10,271,694
Mobilization (12%)					\$ 1,232,604
Construction Subtotal					\$ 11,504,298
Engineering Design (10%)					\$ 1,150,430
Construction Engineering and Contingencies (20%)					\$ 2,300,860
Indirect Cost Allocation (10.02%)					\$ 1,152,731
Construction Total					\$ 16,108,319

47. Widen Whiskey Springs Bridge (MP 220.3)

ITEM NO	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
6080101	MISCELLANEOUS WORK (SIGNS)	L.SUM	1	\$2,000.00	\$2,000
9240050	MISCELLANEOUS WORK (PUBLIC RELATIONS)	L.SUM	1	\$3,000.00	\$3,000
Roadway Construction Subtotal					\$5,000
	Structure widening (12'*500') @ \$250/sft				\$ 1,500,000
	Unidentified Item Allowance (15%)				\$ 750
Subtotal					\$1,505,750
	Water Supply/Dust Palliative (3%)				\$ 45,173
	Maintenance And Protection Of Traffic (15%)				\$ 225,863
	Erosion Control (1%)				\$ 15,058
	Contractor Quality Control (2%)				\$ 30,115
	Construction Surveying And Layout (2%)				\$ 30,115
Other Item Subtotal					\$1,852,074
	Mobilization (12%)				\$ 222,249
Construction Subtotal					\$ 2,074,323
	Engineering Design (10%)				\$ 207,433
	Construction Engineering and Contingencies (20%)				\$ 414,865
	Indirect Cost Allocation (10.02%)				\$ 207,848
Construction Total					\$ 2,904,469

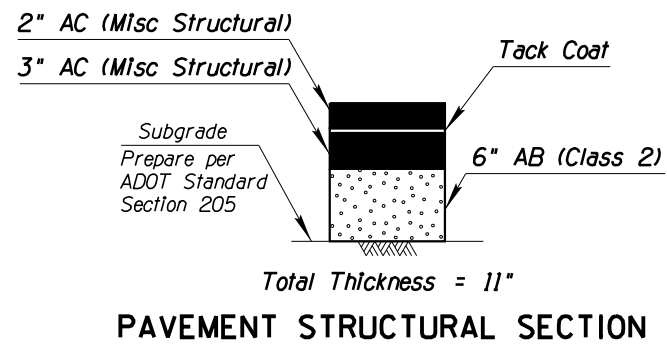
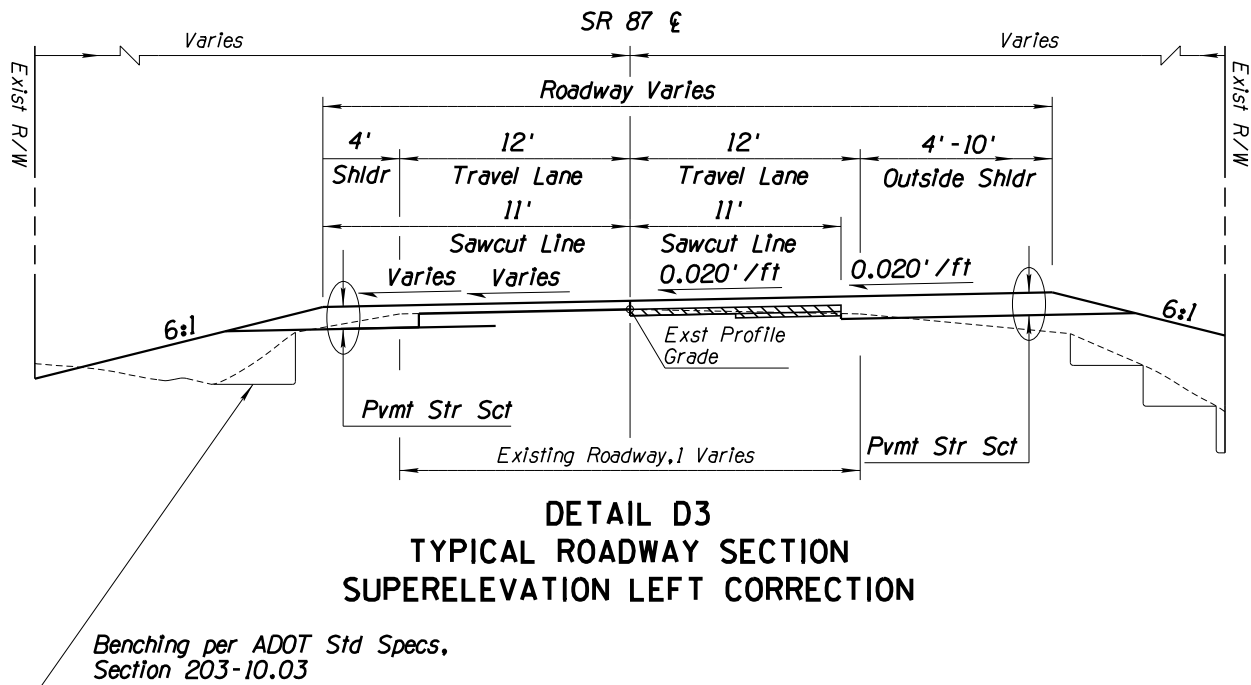
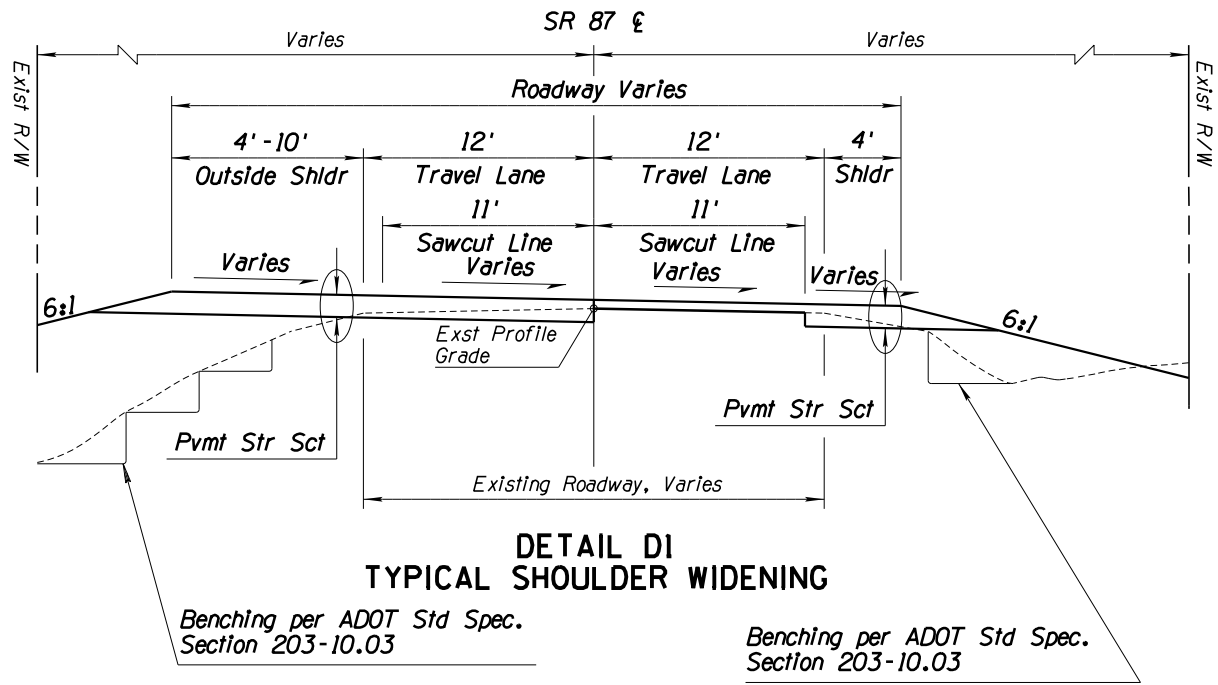
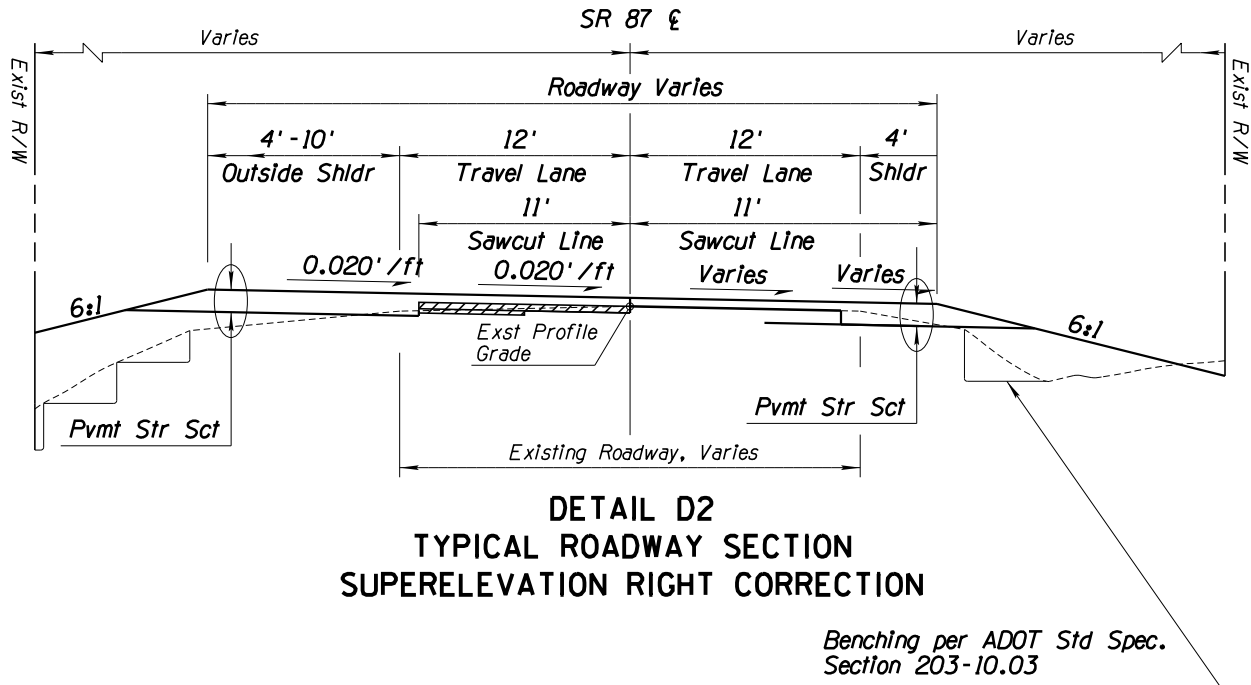
50. Widen Kitty Joe Creek Bridge (MP 221.4)

ITEM NO	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
6080101	MISCELLANEOUS WORK (SIGNS)	L.SUM	1	\$2,000.00	\$2,000
9240050	MISCELLANEOUS WORK (PUBLIC RELATIONS)	L.SUM	1	\$3,000.00	\$3,000
Roadway Construction Subtotal					\$5,000
	Structure widening (12'*650') @ \$250/sft				\$ 1,950,000
	Unidentified Item Allowance (15%)				\$ 750
Subtotal					\$1,955,750
	Water Supply/Dust Palliative (3%)				\$ 58,673
	Maintenance And Protection Of Traffic (15%)				\$ 293,363
	Erosion Control (1%)				\$ 19,558
	Contractor Quality Control (2%)				\$ 39,115
	Construction Surveying And Layout (2%)				\$ 39,115
Other Item Subtotal					\$2,405,574
	Mobilization (12%)				\$ 288,669
Construction Subtotal					\$ 2,694,243
	Engineering Design (10%)				\$ 269,425
	Construction Engineering and Contingencies (20%)				\$ 538,849
	Indirect Cost Allocation (10.02%)				\$ 269,964
Construction Total					\$ 3,772,481

ATTACHMENT 5: PRELIMINARY PLANS

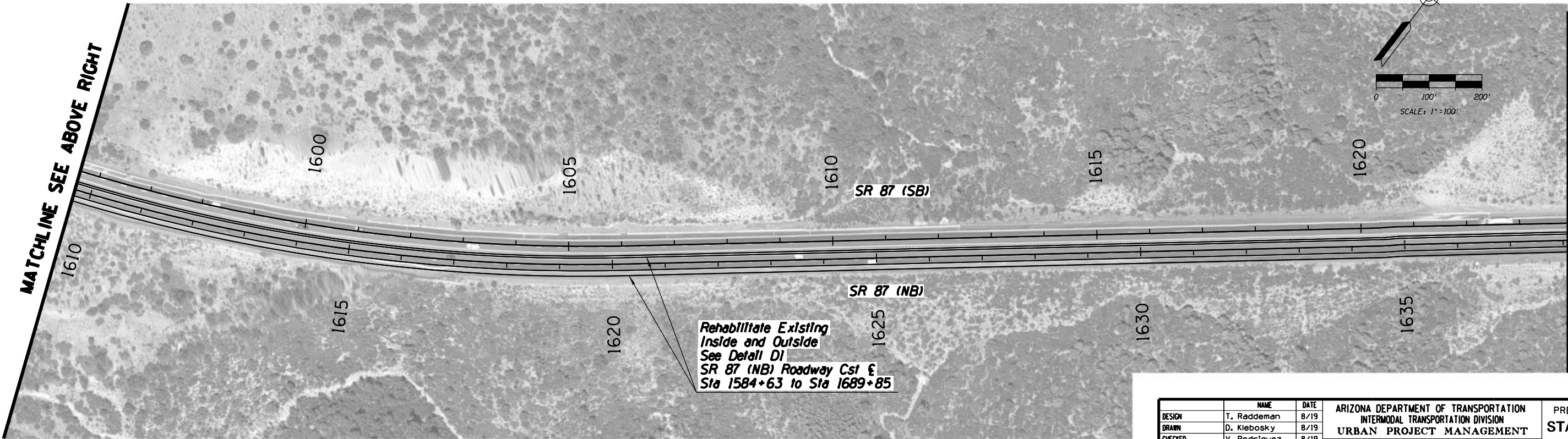
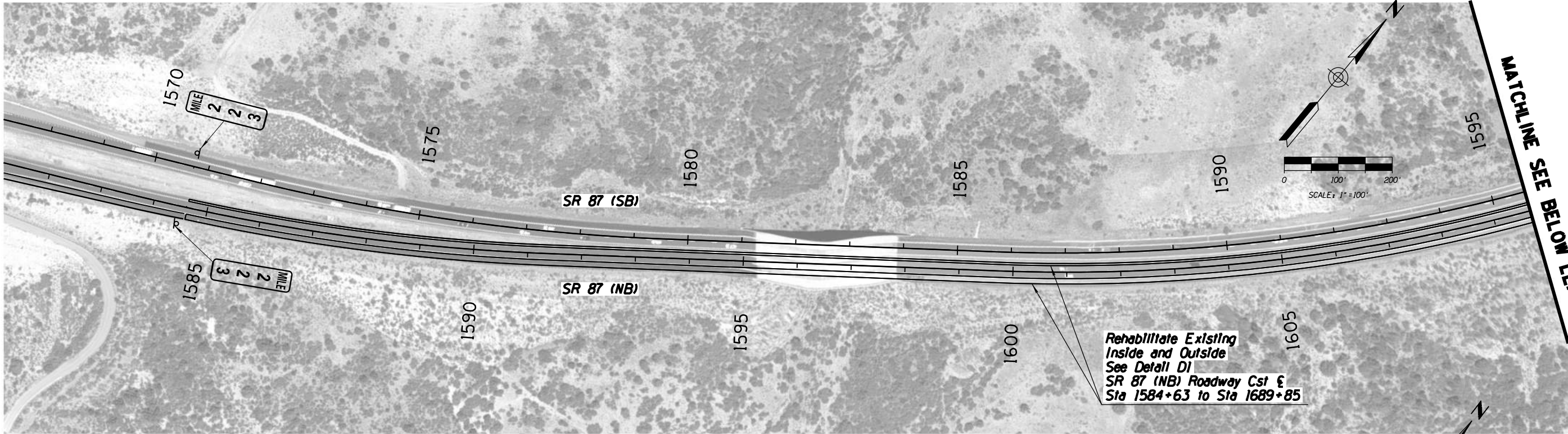
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
-	ARIZ.	-	-	59	

SR 87 MILE POST STATION			
MP NB	STATION	MP SB	STATION
196	101+73	196	101+18
197	155+53	197	154+02
198	207+69	198	207+94
199	261+02	199	259+13
200	314+21	200	311+72
201	367+73	201	364+06
202	419+18	202	417+81
203	471+36	203	470+65
204	526+28	204	523+10
205	577+70	205	575+84
206	630+73	206	628+30
207	682+81	207	680+28
208	736+47	208	734+12
209	788+55	209	786+62
210	842+08	210	839+50
211	894+91	211	890+40
212	942+20	212	939+42
213	998+65	213	995+55
214	1051+86	214	1050+06
215	1105+38	215	1095+77
216	1158+68	216	1147+95
217	1213+92	217	1199+48
218	1268+31	218	1250+20
219	1318+19	219	1304+12
220	1374+67	220	1359+76
221	1427+95	221	1412+99
222	1480+60	222	1465+84
223	1533+97	223	1518+89
224	1584+61	224	1570+72
225	1639+50	225	1625+29
226	1689+86	226	1676+32
227	1740+23	227	1726+14
228	1792+50	228	1778+04
229	1845+24	229	1831+98
230	1898+50	230	1884+70
231	1949+61	231	1933+71
232	1999+33	232	1985+29
233	2047+74	233	2033+06
234	2101+13	234	2085+05
235	2154+59	235	2137+29
236	2207+09	236	2189+44
237	2259+88	237	2240+86
238	2311+66	238	2293+85
239	2364+28	239	2344+91
240	2416+01	240	2397+41
241	2467+79	241	2448+96
242	2518+51	242	2496+68
243	2571+26	243	2549+70
244	2620+38	244	2601+82
245	2677+47	245	2655+01
246	2729+53	246	2703+04
247	2741+30	247	2747+68
248	2794+18	248	2801+15
249	2847+25	249	2854+41
250	2899+69	250	2906+58



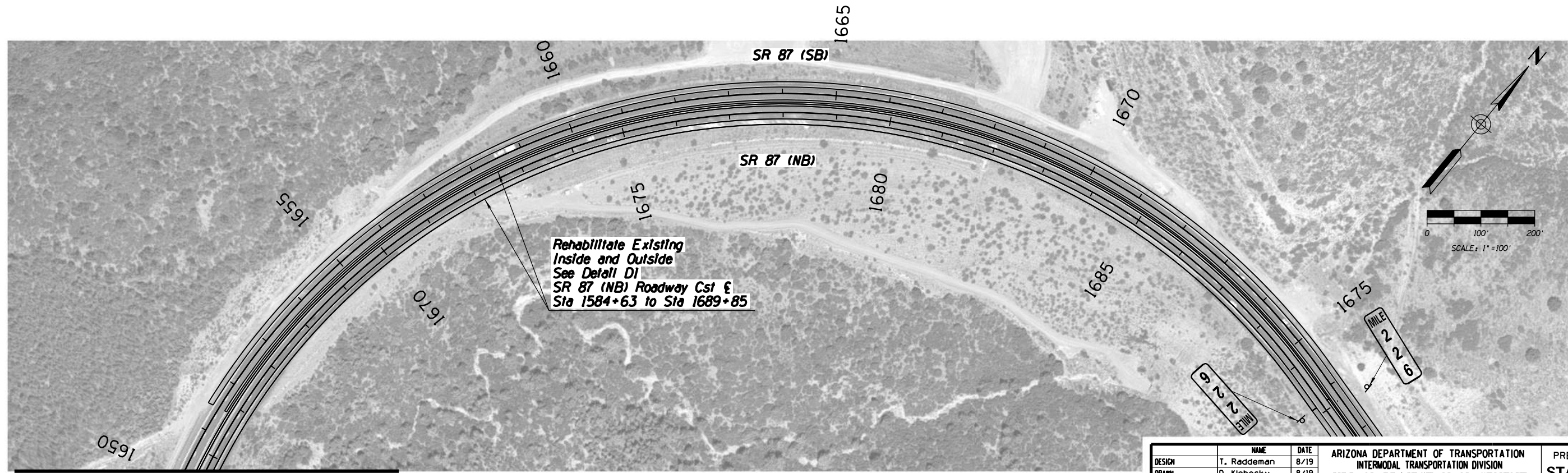
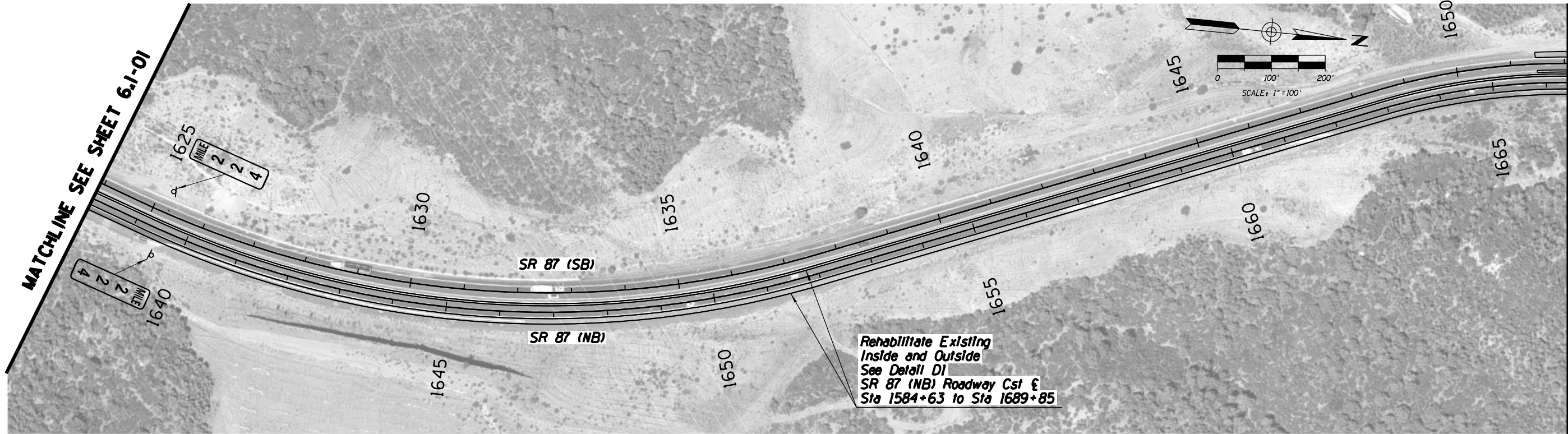
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DRAWN	T. Raddeman	8/19			STAGE I
CHECKED	D. Klebosky	8/19			Review
Kimley»Horn		8/19			NOT FOR CONSTRUCTION OR RECORDING
ROUTE	LOCATION	MP 190 TO MP 250		DWG NO.	
SR 87				OF	
TRACS NO. XXXXX XXX		XXX-X(XXX)X			

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
-	ARIZ.	-	-	59	



DESIGN	T. Raddeman	8/19	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION URBAN PROJECT MANAGEMENT	PRELIMINARY STAGE I Review NOT FOR CONSTRUCTION OR RECORDING
DRAWN	D. Klebosky	8/19		
CHECKED	V. Rodriguez	8/19		
Kimley»Horn			PROJECT #7 NB IMPROVEMENTS MP 218.5 TO 226	DWG NO. 6.I-01 OF
ROUTE SR 87			LOCATION MP 190 TO MP 250	
TRACS NO. XXXXX XXX			XXX-X(XXX)X	

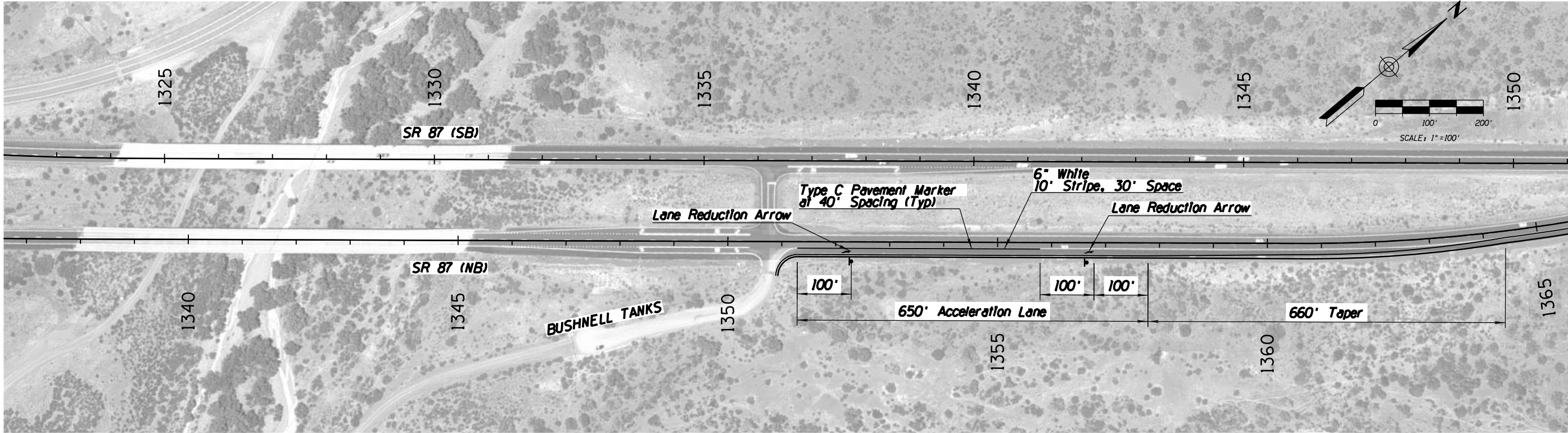
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
-	ARIZ.	-	-	59	



MATCHLINE SEE ABOVE RIGHT

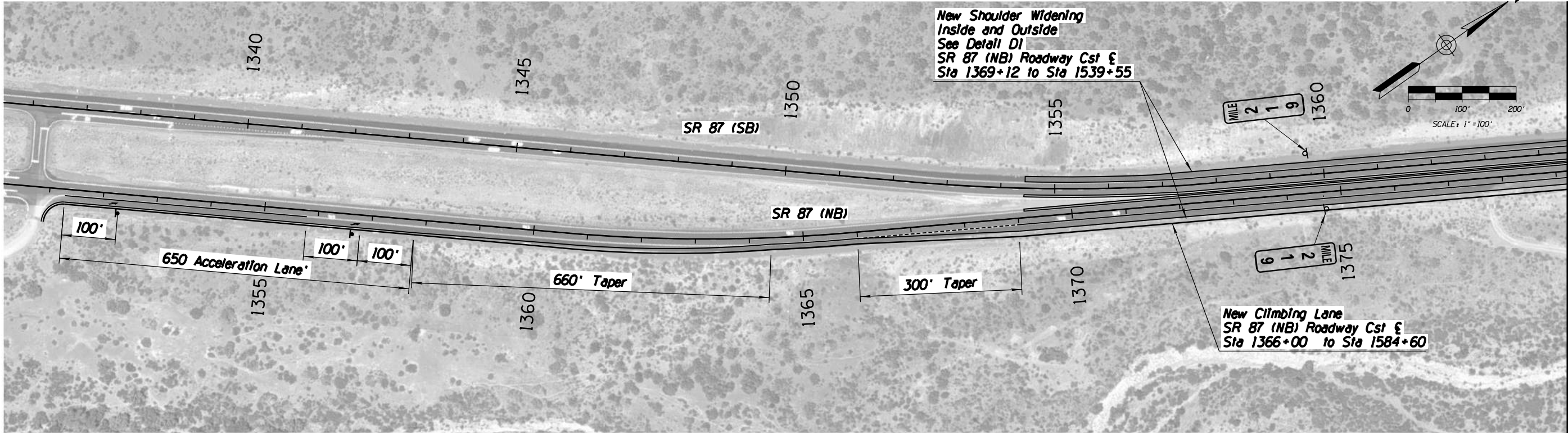
	NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION URBAN PROJECT MANAGEMENT	PRELIMINARY STAGE I Review NOT FOR CONSTRUCTION OR RECORDING
DESIGN	T. Raddeman	8/19		
DRAWN	D. Klebosky	8/19		
CHECKED	V. Rodriguez	8/19		
Kimley»Horn © 2019 KIMLEY-HORN AND ASSOCIATES, INC.			PROJECT #7 NB IMPROVEMENTS MP 218.5 TO 226	
ROUTE	LOCATION			
SR 87		MP 190 TO MP 250	DWG NO. 6.1-02	
TRACS NO. XXXXX XXX			XXX-X(XXX)X	___ OF ___

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
-	ARIZ.	-	-	59	

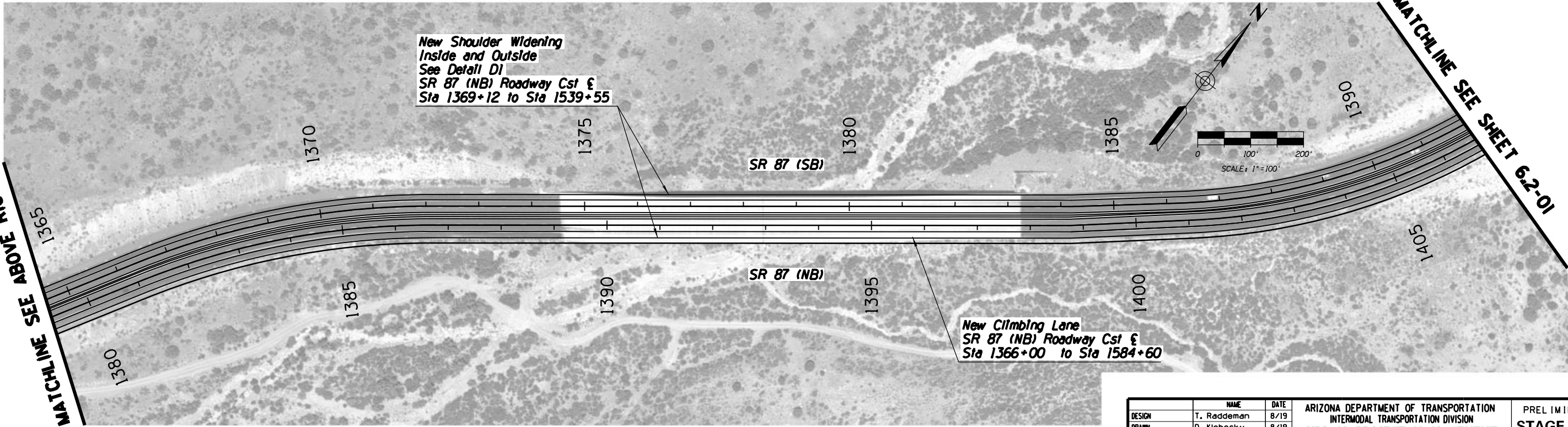


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DRAWN	CEM				8/19		
CHECKED	RLK				8/19		
Kimley»Horn © 2019 KIMLEY-HORN AND ASSOCIATES, INC.						PROJECT #7 NB IMPROVEMENTS MP 218.5 TO 226	
ROUTE		LOCATION					
SR 87		MP 190 TO MP 250				DWG NO. 6.2-01	
TRACS NO. XXXXX XXX				XXX-X(XXX)X		___ <i>OF</i> ___	

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
-	ARIZ.	-	-	59	



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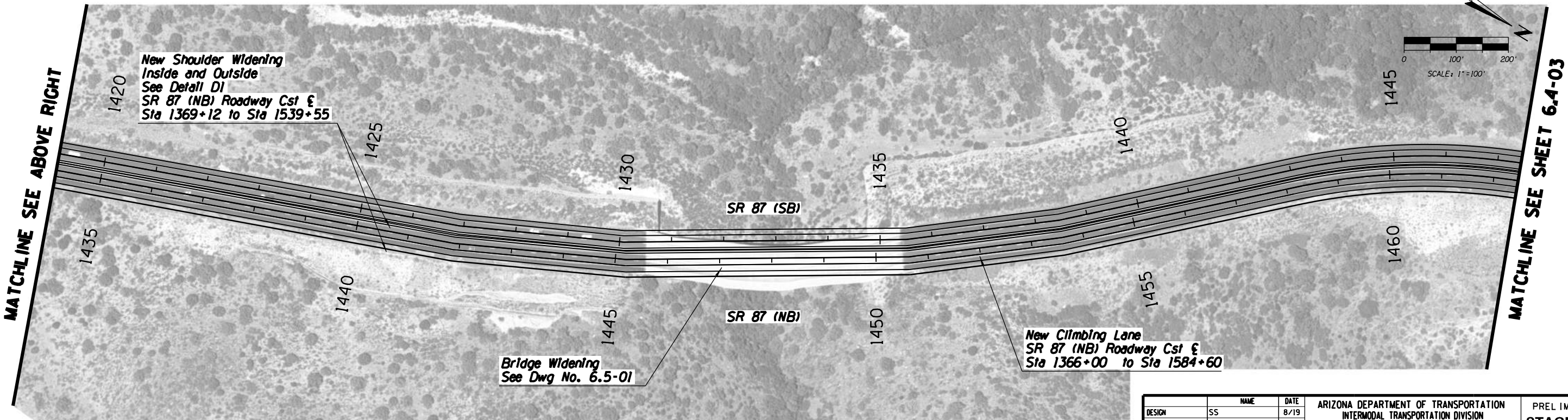
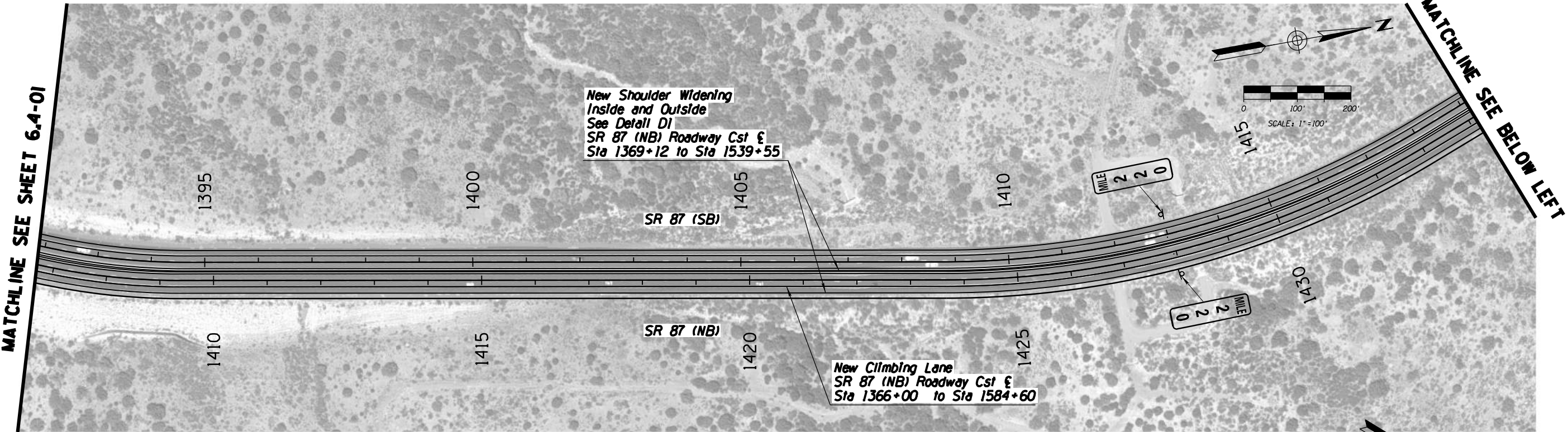


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MATCHLINE SEE SHEET 6.2-01

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DESIGN	T. Raddeman		8/19			
DRAWN	D. Klebosky		8/19			
CHECKED	V. Rodriguez		8/19			
Kimley»Horn © 2019 KIMLEY-HORN AND ASSOCIATES, INC.				PROJECT #7 NB IMPROVEMENTS MP 218.5 TO 226		
ROUTE		LOCATION		MP 190 TO MP 250		
SR 87						
TRACS NO. XXXXX XXX				XXX-X(XXX)X		
				DWG NO. 6.4-01		
				___ OF ___		

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
-	ARIZ.	-	-	59	



		NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION URBAN PROJECT MANAGEMENT	PRELIMINARY STAGE I Review NOT FOR CONSTRUCTION OR RECORDING
DESIGN	SS		8/19		
DRAWN	CEM		8/19		
CHECKED	RLK		8/19		
Kimley»Horn © 2019 KIMLEY-HORN AND ASSOCIATES, INC.				PROJECT #7 NB IMPROVEMENTS MP 218.5 TO 226	DWG NO. 6.4-02 ___ OF ___
ROUTE		LOCATION			
SR 87		MP 190 TO MP 250			
TRACS NO. XXXXX XXX				XXX-X(XXX)X	

New Shoulder Widening
Inside and Outside
See Detail D1
SR 87 (NB) Roadway Cst &
Sta 1369+12 to Sta 1539+55

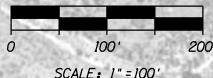
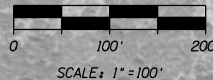
New Climbing Lane
SR 87 (NB) Roadway Cst &
Sta 1366+00 to Sta 1584+60

New Shoulder Widening
Inside and Outside
See Detail D1
SR 87 (NB) Roadway Cst &
Sta 1369+12 to Sta 1539+55

Bridge Widening
See Dwg No. 6.6-01

New Climbing Lane
SR 87 (NB) Roadway Cst &
Sta 1366+00 to Sta 1584+60

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
-	ARIZ.	-	-	59	



Kimley»Horn
© 2019 KIMLEY-HORN AND ASSOCIATES, INC.

ROUTE SR 87 LOCATION

ARIZONA DEPARTMENT OF TRANSPORTATION
INTERMODAL TRANSPORTATION DIVISION
URBAN PROJECT MANAGEMENT

PROJECT #7 NB IMPROVEMENTS
MP 218.5 TO 226

MP 190 TO MP 250

TRACS NO. XXXXX XXX

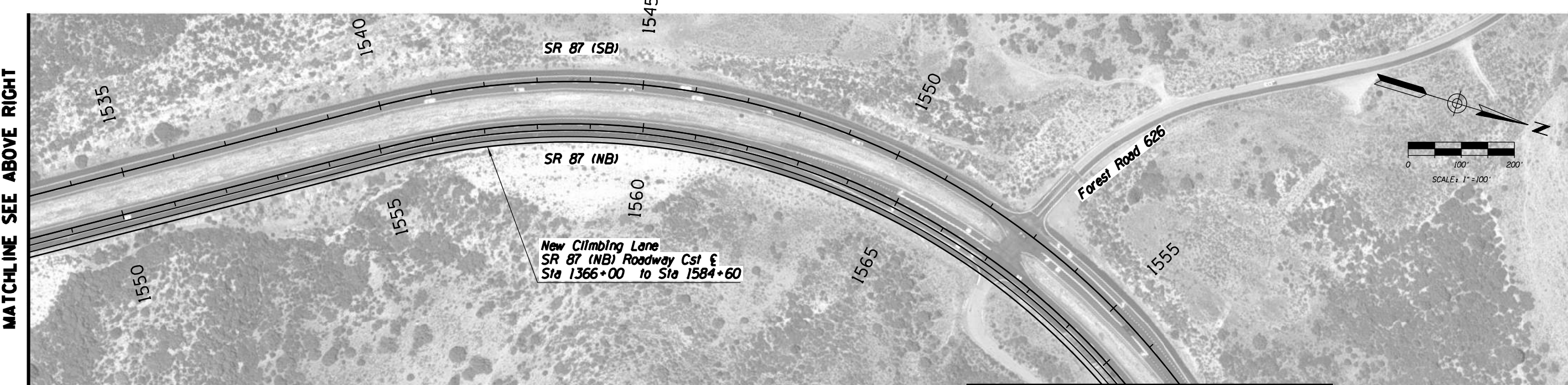
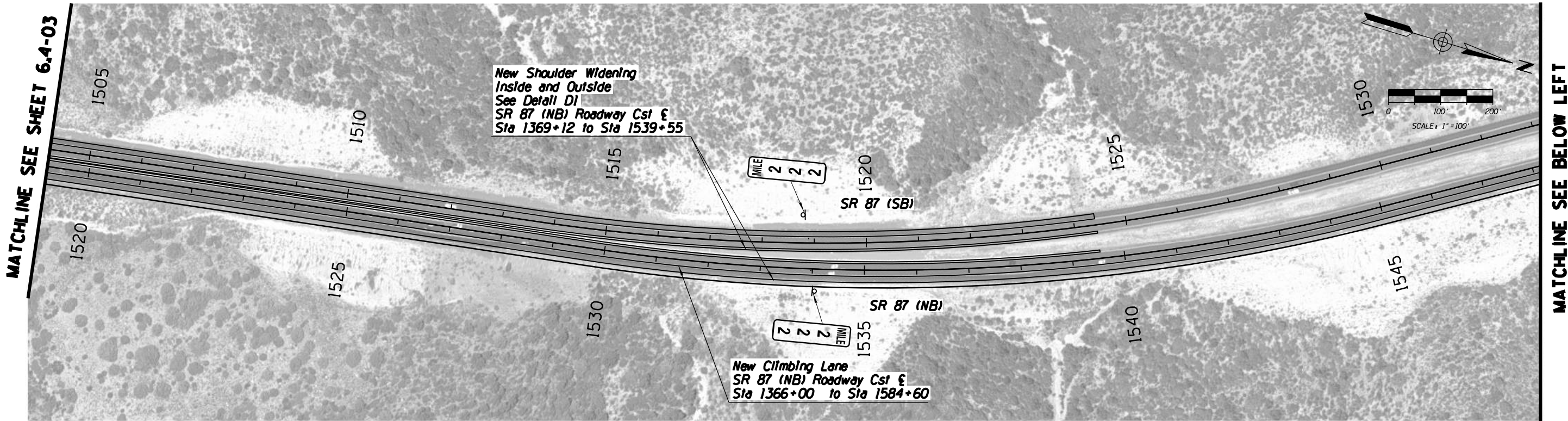
XXX-X(XXX)X

PRELIMINARY
STAGE I
Review
NOT FOR
CONSTRUCTION
OR RECORDING
DWG NO. 6.4-03
OF

DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO. DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO.

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
-	ARIZ.	-	-	59	

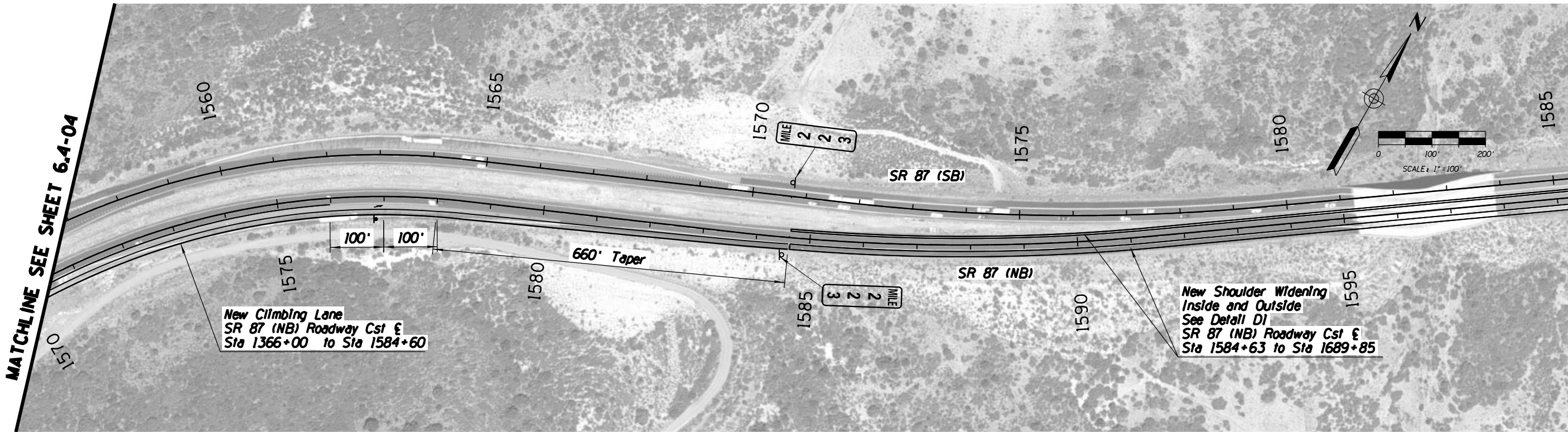
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MATCHLINE SEE SHEET 6.4-05

		NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION URBAN PROJECT MANAGEMENT	PRELIMINARY STAGE I Review NOT FOR CONSTRUCTION OR RECORDING	
DESIGN	T. Raddeman		8/19			
DRAWN	D. Klebosky		8/19			
CHECKED	V. Rodriguez		8/19			
Kimley»Horn © 2019 KIMLEY-HORN AND ASSOCIATES, INC.				PROJECT #7 NB IMPROVEMENTS MP 218.5 TO 226		
ROUTE		LOCATION				
SR 87		MP 190 TO MP 250				DWG NO. 6.4-04
TRACS NO. XXXXX XXX			XXX-X(XXX)X			___ OF ___

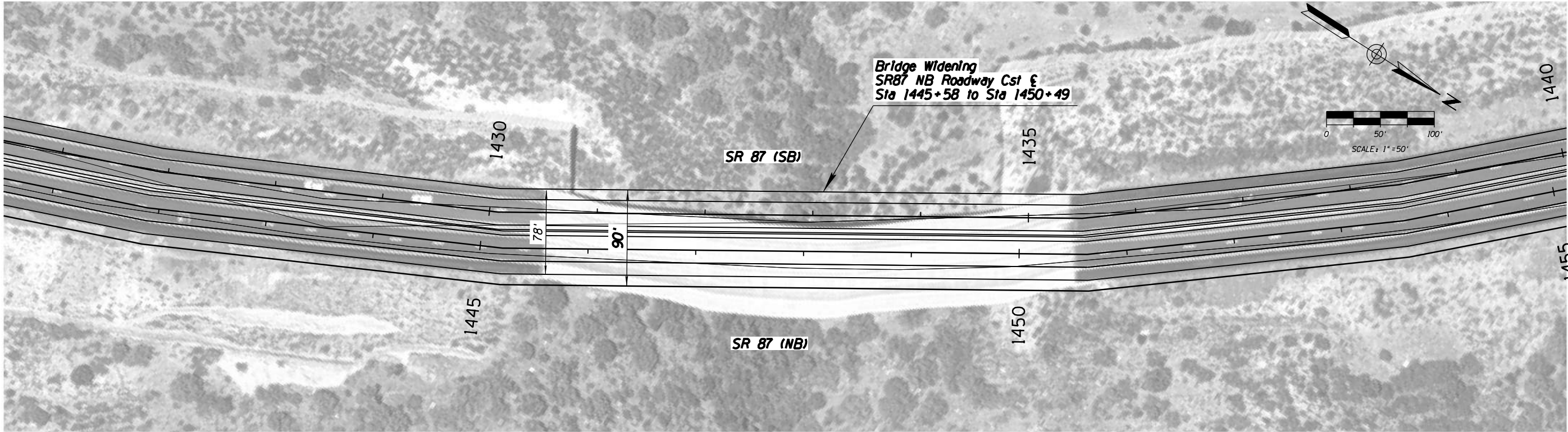
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
-	ARIZ.	-	-	59	



		NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION URBAN PROJECT MANAGEMENT	PRELIMINARY STAGE I Review NOT FOR CONSTRUCTION OR RECORDING	
DESIGN	T. Raddeman		8/19			
DRAWN	D. Klebosky		8/19			
CHECKED	V. Rodriguez		8/19			
Kimley»Horn © 2019 KIMLEY-HORN AND ASSOCIATES, INC.				PROJECT #7 NB IMPROVEMENTS MP 218.5 TO 226		
ROUTE		LOCATION		DWG NO. 6.4-05		
SR 87		MP 190 TO MP 250				
TRACS NO. XXXXX XXX			XXX-X(XXX)X		___ <i>OF</i> ___	

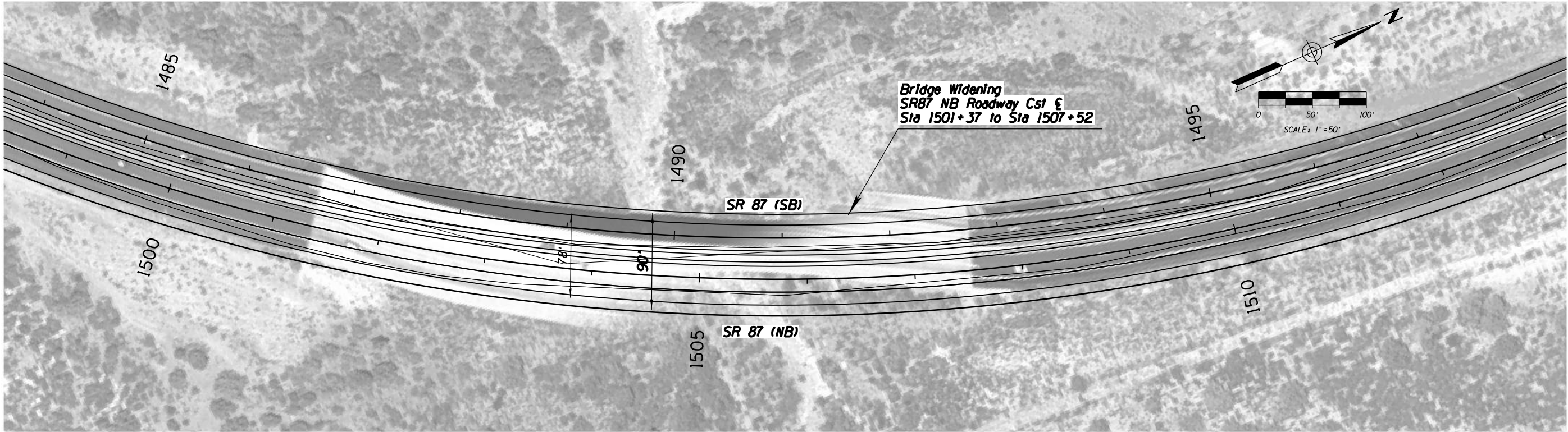
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
-	ARIZ.	-		59	

-



		NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION URBAN PROJECT MANAGEMENT	PRELIMINARY STAGE I Review NOT FOR CONSTRUCTION OR RECORDING
DESIGN	T. Raddeman		8/19		
DRAWN	D. Klebosky		8/19		
CHECKED	V. Rodriguez		8/19		
Kimley»Horn © 2019 KIMLEY-HORN AND ASSOCIATES, INC.				PROJECT #7 NB IMPROVEMENTS MP 218.5 TO 226	
ROUTE		LOCATION			
SR 87		MP 190 TO MP 250			
TRACS NO. XXXXX XXX			XXX-X(XXX)X		DWG NO. 6.5-01
					<u> </u> OF <u> </u>

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
-	ARIZ.	-		59	
-					



		NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION URBAN PROJECT MANAGEMENT	PRELIMINARY STAGE I Review NOT FOR CONSTRUCTION OR RECORDING
DESIGN	T. Raddeman		8/19		
DRAWN	D. Kiebosky		8/19		
CHECKED	V. Rodriguez		8/19		
Kimley»Horn © 2019 KIMLEY-HORN AND ASSOCIATES, INC.				PROJECT #7 NB IMPROVEMENTS MP 218.5 TO 226	
ROUTE		LOCATION		MP 190 TO MP 250 DWG NO. 6.6-01	
SR 87					
TRACS NO. XXXXX XXX				XXX-X(XXX)X	___ <i>OF</i> ___

**PACKAGE PROJECT 8 –
SLATE CREEK IMPROVEMENTS
(MP 226-232)**

ADOT SR 87 Corridor Development Study

PRELIMINARY SCOPING REPORT

GENERAL PROJECT INFORMATION	
Date: 8/20/2019	ADOT Project Manager:
Project Name: Slate Creek Improvements (MP 226-232)	
City/Town: N/A	County: Gila
COG/MPO: CAG	ADOT District: Northcentral
Primary Route/Street: SR 87	
Beginning Limit: 226	
End Limit: 232	
Project Length: 6 Miles	
Right of Way Ownership(s) (where proposed project would occur): (check all that apply)	
<input type="checkbox"/> City/Town <input type="checkbox"/> County <input checked="" type="checkbox"/> ADOT <input type="checkbox"/> Private <input type="checkbox"/> Federal <input type="checkbox"/> Tribal <input type="checkbox"/> Other	
Adjacent Land Ownership(s): (Check all that apply)	
<input type="checkbox"/> City/Town <input type="checkbox"/> County <input type="checkbox"/> ADOT <input type="checkbox"/> Private <input checked="" type="checkbox"/> Federal <input type="checkbox"/> Tribal <input type="checkbox"/> Other	

PROJECT NEED
Shoulder widths are substandard and are in poor condition in some areas causing safety and emergency response issues.

PROJECT PURPOSE			
What is the Primary Purpose of the Project?	<input type="checkbox"/> Preservation	<input checked="" type="checkbox"/> Modernization	<input type="checkbox"/> Expansion
Widen shoulders, where they are substandard, and rehabilitate shoulders, where needed, to create a consistent recovery area and aid in emergency response.			

PROJECT RISKS	
Check any risks identified that may impact the project's scope, schedule, or budget:	
<input type="checkbox"/> Access/Traffic Control/Detour Issues	<input type="checkbox"/> Right-of-Way
<input type="checkbox"/> Constructability/Construction Window Issues	<input type="checkbox"/> Environmental
<input type="checkbox"/> Stakeholder Issues	<input type="checkbox"/> Utilities
<input type="checkbox"/> Structures & Geotech	<input type="checkbox"/> Other:
Risk Description: (if a box is checked above, briefly explain the risk)	
Click or tap here to enter text.	

POTENTIAL FUNDING SOURCE(S)				
Anticipated Project Design/Construction Funding Type: (Check all that applied)	<input type="checkbox"/> STBG	<input type="checkbox"/> TAP	<input checked="" type="checkbox"/> HSIP	<input checked="" type="checkbox"/> State
	<input type="checkbox"/> Local	<input type="checkbox"/> Private	<input checked="" type="checkbox"/> Tribal	<input type="checkbox"/> Other

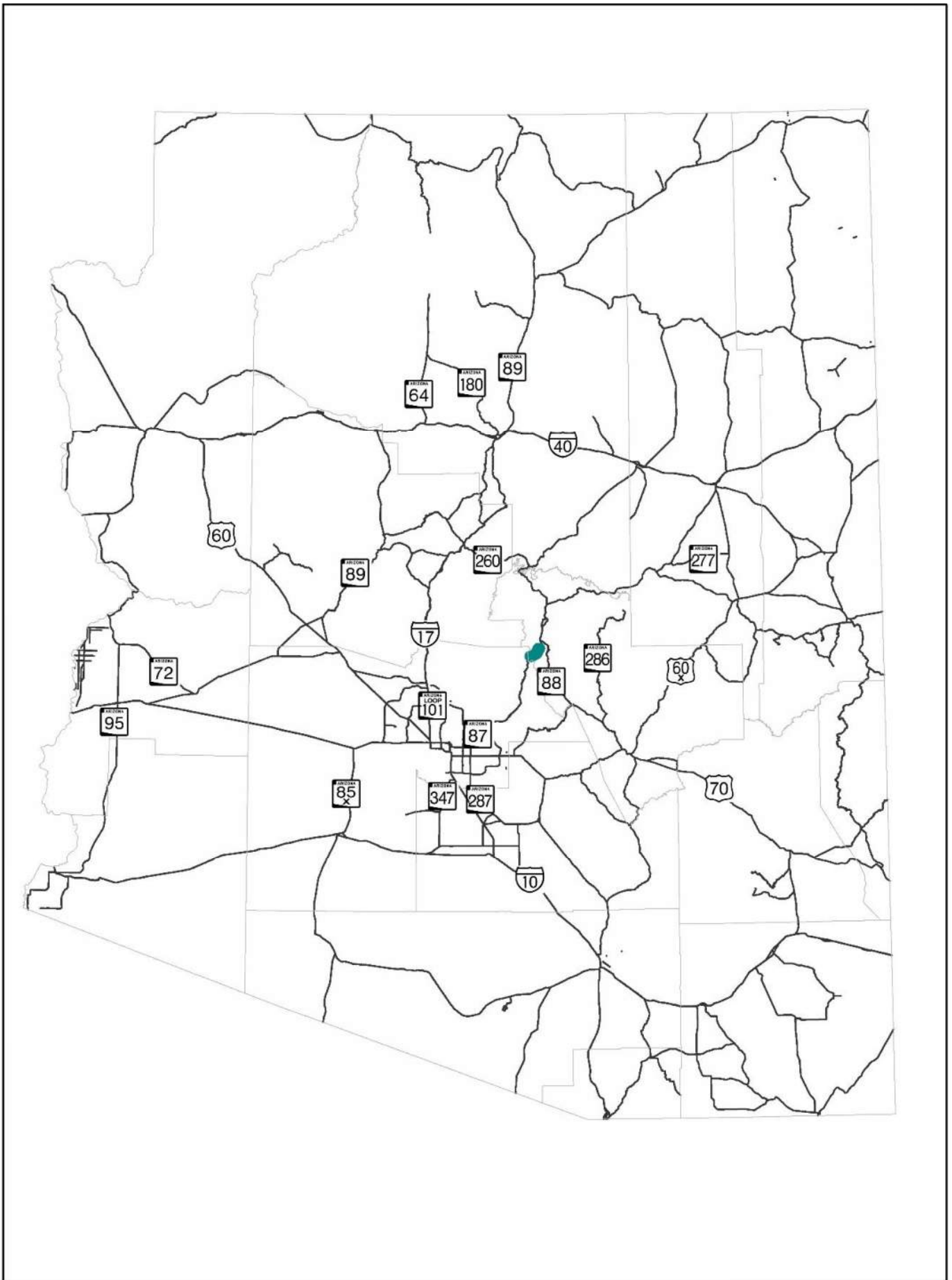
COST ESTIMATE			
Design \$1,257,900.00	Right-of-Way \$0.00	Construction \$16,354,900.00	Total \$17,612,800

RECOMMENDED PROJECT DELIVERY
Delivery: <input type="checkbox"/> Design-Bid-Build <input type="checkbox"/> Design-Build <input checked="" type="checkbox"/> Other:
Design Program Year: Click or tap here to enter text.
Construction Program Year: Click or tap here to enter text.

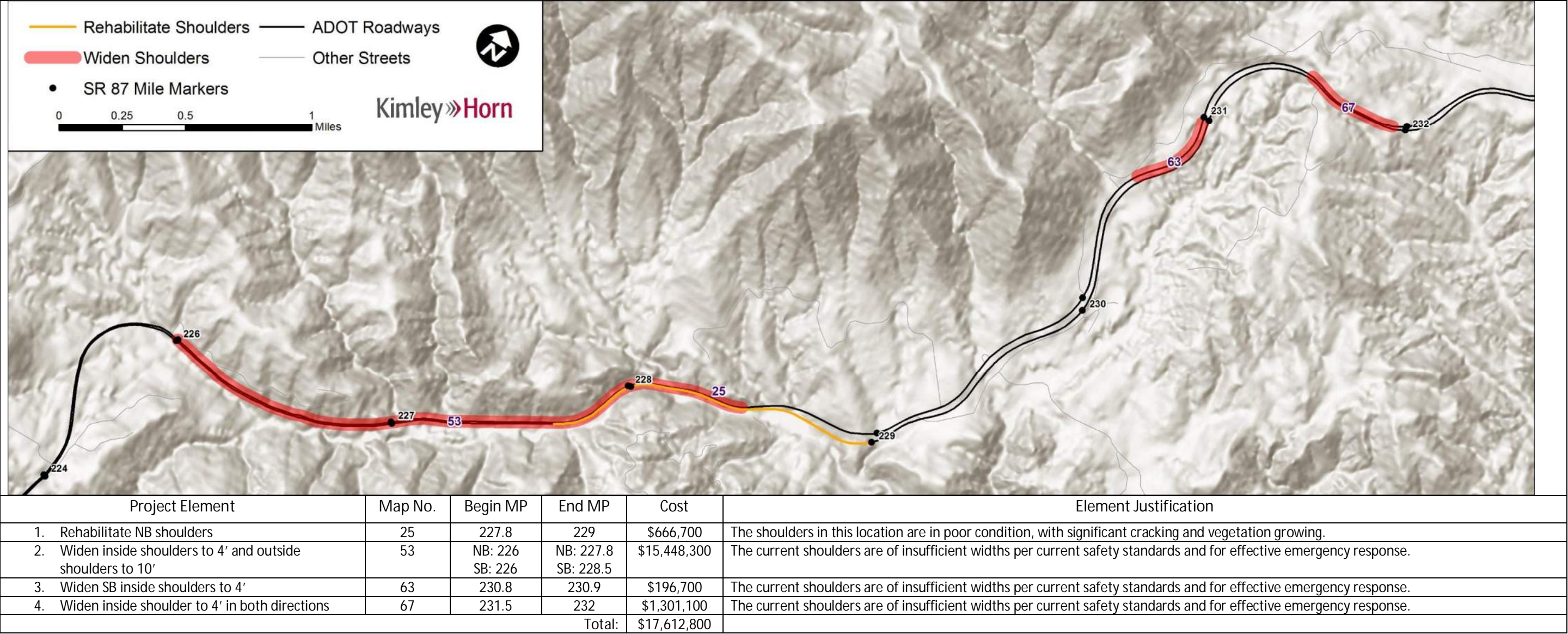
ATTACHMENTS
<ol style="list-style-type: none">1. Project Scope of Work2. State Location Map3. Project Vicinity Map4. Itemized Cost Estimate5. Conceptual Design Plans

ATTACHMENT 1: SCOPE OF WORK
<p><i>(Provide a detailed breakdown of the project's scope of work using bullet form)</i></p> <ul style="list-style-type: none">• Rehabilitate northbound shoulder (MP 227.8-229)• Widen inside shoulders to four feet and outside shoulders to ten feet (Northbound: MP 226-227.8, Southbound: MP 226-228.5)• Widen southbound inside shoulders to four feet (MP 230.8-230.9)• Widen inside shoulder to four feet in both directions (MP 231.5-232)

ATTACHMENT 2: STATE LOCATION MAP



ATTACHMENT 3: PROJECT VICINITY MAP



Project Element	Map No.	Begin MP	End MP	Cost	Element Justification
1. Rehabilitate NB shoulders	25	227.8	229	\$666,700	The shoulders in this location are in poor condition, with significant cracking and vegetation growing.
2. Widen inside shoulders to 4' and outside shoulders to 10'	53	NB: 226 SB: 226	NB: 227.8 SB: 228.5	\$15,448,300	The current shoulders are of insufficient widths per current safety standards and for effective emergency response.
3. Widen SB inside shoulders to 4'	63	230.8	230.9	\$196,700	The current shoulders are of insufficient widths per current safety standards and for effective emergency response.
4. Widen inside shoulder to 4' in both directions	67	231.5	232	\$1,301,100	The current shoulders are of insufficient widths per current safety standards and for effective emergency response.
Total:				\$17,612,800	

ATTACHMENT 4: ITEMIZED COST ESTIMATE



SR87 Corridor Development Study
ITEMIZED COST ESTIMATE

25. Rehabilitate northbound shoulders (MP 227.8-229)

ITEM NO	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
2020053	REMOVE (GR TERMINAL)	EACH	1	\$400.00	\$400
2020071	REMOVE GUARD RAIL	L.FT.	686	\$5.00	\$3,430
2020085	REMOVE BITUMINOUS PAVEMENT (MILLING) (3")	SQ.YD.	8,248	\$3.00	\$24,744
4090003	ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL)	TON	1,510	\$120.00	\$181,200
4110001	ASPHALTIC CONCRETE FRICTION COURSE (MISC.)	TON	244	\$100.00	\$24,400
6080101	MISCELLANEOUS WORK (SIGNS)	L.SUM	1	\$4,000.00	\$4,000
7041501	PAVEMENT MARKINGS	L.SUM	1	\$5,301.70	\$5,302
9050001	GUARD RAIL, W-BEAM, SINGLE FACE	L.FT.	1,326	\$30.00	\$39,780
9050026	GUARD RAIL TERMINAL (TANGENT TYPE)	EACH	1	\$2,500.00	\$2,500
9050036	GUARD RAIL, ANCHOR ASSEMBLY	EACH	1	\$800.00	\$800
9240050	MISCELLANEOUS WORK (PUBLIC RELATIONS)	L.SUM	1	\$6,000.00	\$6,000
9280037	GROUND-IN RUMBLE STRIP (12 INCH)	L.FT.	10,604	\$0.75	\$7,953
Roadway Construction Subtotal					\$300,509
Unidentified Item Allowance (15%)					\$ 45,077
Subtotal					\$345,586
Water Supply/Dust Palliative (3%)					\$ 10,368
Maintenance And Protection Of Traffic (15%)					\$ 51,838
Erosion Control (1%)					\$ 3,456
Contractor Quality Control (2%)					\$ 6,912
Construction Surveying And Layout (2%)					\$ 6,912
Other Item Subtotal					\$425,072
Mobilization (12%)					\$ 51,009
Construction Subtotal					\$ 476,081
Engineering Design (10%)					\$ 47,609
Construction Engineering and Contingencies (20%)					\$ 95,217
Indirect Cost Allocation (10.02%)					\$ 47,704
Construction Total					\$ 666,611

53. Widen northbound inside and outside shoulders (MP 226 – 227.8)

ITEM NO	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
2010011	CLEARING AND GRUBBING	ACRE	11	\$5,000.00	\$55,000
2020029	REMOVAL OF ASPHALTIC CONCRETE PAVEMENT	SQ.YD.	3,286	\$20.00	\$65,720
2020053	REMOVE (GR TERMINAL)	EACH	4	\$400.00	\$1,600
2020071	REMOVE GUARD RAIL	L.FT.	3,697	\$5.00	\$18,485
2020201	SAW CUTTING	L.FT.	29,569	\$2.50	\$73,923
2030301	ROADWAY EXCAVATION	CU.YD.	164,270	\$7.00	\$1,149,890
3030022	AGGREGATE BASE, CLASS 2	CU.YD.	10,952	\$50.00	\$547,600
4090003	ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL)	TON	5,977	\$80.00	\$478,160
4110001	ASPHALTIC CONCRETE FRICTION COURSE (MISC.)	TON	388	\$90.00	\$34,920
6080101	MISCELLANEOUS WORK (SIGNS)	L.SUM	1	\$4,000.00	\$4,000
7041501	PAVEMENT MARKINGS	L.SUM	1	\$14,784.00	\$14,784
8050003	SEEDING (CLASS II)	ACRE	11	\$3,500.00	\$38,500
9050001	GUARD RAIL, W-BEAM, SINGLE FACE	L.FT.	3,697	\$30.00	\$110,910
9050026	GUARD RAIL TERMINAL (TANGENT TYPE)	EACH	4	\$2,500.00	\$10,000
9050036	GUARD RAIL, ANCHOR ASSEMBLY	EACH	4	\$800.00	\$3,200
9240050	MISCELLANEOUS WORK (PUBLIC RELATIONS)	L.SUM	1	\$6,000.00	\$6,000
9280037	GROUND-IN RUMBLE STRIP (12 INCH)	L.FT.	29,569	\$0.75	\$22,177
Roadway Construction Subtotal					\$2,634,868
Unidentified Item Allowance (15%)					\$ 395,231
Subtotal					\$3,030,099
Water Supply/Dust Palliative (3%)					\$ 90,903
Maintenance And Protection Of Traffic (15%)					\$ 454,515
Erosion Control (1%)					\$ 30,301
Contractor Quality Control (2%)					\$ 60,602
Construction Surveying And Layout (2%)					\$ 60,602
Other Item Subtotal					\$3,727,022
Mobilization (12%)					\$ 447,243
Construction Subtotal					\$ 4,174,265
Engineering Design (10%)					\$ 417,427
Construction Engineering and Contingencies (20%)					\$ 834,854
Indirect Cost Allocation (10.02%)					\$ 418,262
Construction Total					\$ 5,844,809

53. Widen southbound inside and outside shoulders (MP 226 - 228.5)

ITEM NO	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
2010011	CLEARING AND GRUBBING	ACRE	17	\$5,000.00	\$85,000
2020029	REMOVAL OF ASPHALTIC CONCRETE PAVEMENT	SQ.YD.	5,432	\$20.00	\$108,640
2020053	REMOVE (GR TERMINAL)	EACH	4	\$400.00	\$1,600
2020071	REMOVE GUARD RAIL	L.FT.	6,110	\$5.00	\$30,550
2020201	SAW CUTTING	L.FT.	48,880	\$2.50	\$122,200
2030301	ROADWAY EXCAVATION	CU.YD.	271,560	\$7.00	\$1,900,920
3030022	AGGREGATE BASE, CLASS 2	CU.YD.	18,104	\$50.00	\$905,200
4090003	ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL)	TON	9,880	\$80.00	\$790,400
4110001	ASPHALTIC CONCRETE FRICTION COURSE (MISC.)	TON	641	\$90.00	\$57,690
6080101	MISCELLANEOUS WORK (SIGNS)	L.SUM	1	\$4,000.00	\$4,000
7041501	PAVEMENT MARKINGS	L.SUM	1	\$24,440.00	\$24,440
8050003	SEEDING (CLASS II)	ACRE	17	\$3,500.00	\$59,500
9050001	GUARD RAIL, W-BEAM, SINGLE FACE	L.FT.	6,110	\$30.00	\$183,300
9050026	GUARD RAIL TERMINAL (TANGENT TYPE)	EACH	4	\$2,500.00	\$10,000
9050036	GUARD RAIL, ANCHOR ASSEMBLY	EACH	4	\$800.00	\$3,200
9240050	MISCELLANEOUS WORK (PUBLIC RELATIONS)	L.SUM	1	\$6,000.00	\$6,000
9280037	GROUND-IN RUMBLE STRIP (12 INCH)	L.FT.	48,880	\$0.75	\$36,660
Roadway Construction Subtotal					\$4,329,300
Unidentified Item Allowance (15%)					\$ 649,395
Subtotal					\$4,978,695
Water Supply/Dust Palliative (3%)					\$ 149,361
Maintenance And Protection Of Traffic (15%)					\$ 746,805
Erosion Control (1%)					\$ 49,787
Contractor Quality Control (2%)					\$ 99,574
Construction Surveying And Layout (2%)					\$ 99,574
Other Item Subtotal					\$6,123,796
Mobilization (12%)					\$ 734,856
Construction Subtotal					\$ 6,858,652
Engineering Design (10%)					\$ 685,866
Construction Engineering and Contingencies (20%)					\$ 1,371,731
Indirect Cost Allocation (10.02%)					\$ 687,237
Construction Total					\$ 9,603,486

63. Widen southbound inside shoulder to 4' (MP 230.8-230.9)

ITEM NO	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
2010011	CLEARING AND GRUBBING	ACRE	1	\$5,000.00	\$5,000
2020029	REMOVAL OF ASPHALTIC CONCRETE PAVEMENT	SQ.YD.	63	\$35.00	\$2,205
2020053	REMOVE (GR TERMINAL)	EACH	2	\$400.00	\$800
2020071	REMOVE GUARD RAIL	L.FT.	561	\$5.00	\$2,805
2020201	SAW CUTTING	L.FT.	561	\$2.50	\$1,403
2030301	ROADWAY EXCAVATION	CU.YD.	840	\$10.00	\$8,400
3030022	AGGREGATE BASE, CLASS 2	CU.YD.	187	\$120.00	\$22,440
4090003	ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL)	TON	93	\$160.00	\$14,880
4110001	ASPHALTIC CONCRETE FRICTION COURSE (MISC.)	TON	6	\$120.00	\$720
6080101	MISCELLANEOUS WORK (SIGNS)	L.SUM	1	\$2,000.00	\$2,000
7041501	PAVEMENT MARKINGS	L.SUM	1	\$561.00	\$561
8050003	SEEDING (CLASS II)	ACRE	1	\$3,500.00	\$3,500
9050001	GUARD RAIL, W-BEAM, SINGLE FACE	L.FT.	561	\$30.00	\$16,830
9050026	GUARD RAIL TERMINAL (TANGENT TYPE)	EACH	1	\$2,500.00	\$2,500
9050036	GUARD RAIL, ANCHOR ASSEMBLY	EACH	1	\$800.00	\$800
9240050	MISCELLANEOUS WORK (PUBLIC RELATIONS)	L.SUM	1	\$3,000.00	\$3,000
9280037	GROUND-IN RUMBLE STRIP (12 INCH)	L.FT.	561	\$1.50	\$842
Roadway Construction Subtotal					\$88,685
Unidentified Item Allowance (15%)					\$ 13,303
Subtotal					\$101,988
Water Supply/Dust Palliative (3%)					\$ 3,060
Maintenance And Protection Of Traffic (15%)					\$ 15,299
Erosion Control (1%)					\$ 1,020
Contractor Quality Control (2%)					\$ 2,040
Construction Surveying And Layout (2%)					\$ 2,040
Other Item Subtotal					\$125,447
Mobilization (12%)					\$ 15,054
Construction Subtotal					\$ 140,501
Engineering Design (10%)					\$ 14,051
Construction Engineering and Contingencies (20%)					\$ 28,101
Indirect Cost Allocation (10.02%)					\$ 14,079
Construction Total					\$ 196,732

67. Widen inside shoulder to 4' (MP 231.5-232)

ITEM NO	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
2010011	CLEARING AND GRUBBING	ACRE	2	\$5,000.00	\$10,000
2020029	REMOVAL OF ASPHALTIC CONCRETE PAVEMENT	SQ.YD.	281	\$20.00	\$5,620
2020201	SAW CUTTING	L.FT.	2,527	\$2.50	\$6,318
2030301	ROADWAY EXCAVATION	CU.YD.	3,750	\$10.00	\$37,500
3030022	AGGREGATE BASE, CLASS 2	CU.YD.	843	\$120.00	\$101,160
4090003	ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL)	TON	418	\$160.00	\$66,880
4110001	ASPHALTIC CONCRETE FRICTION COURSE (MISC.)	TON	25	\$120.00	\$3,000
6080101	MISCELLANEOUS WORK (SIGNS)	L.SUM	1	\$2,000.00	\$2,000
7041501	PAVEMENT MARKINGS	L.SUM	1	\$2,527.00	\$2,527
8050003	SEEDING (CLASS II)	ACRE	2	\$3,500.00	\$7,000
9240050	MISCELLANEOUS WORK (PUBLIC RELATIONS)	L.SUM	1	\$3,000.00	\$3,000
9280037	GROUND-IN RUMBLE STRIP (12 INCH)	L.FT.	2,527	\$0.75	\$1,895
Roadway Construction Subtotal					\$246,900
Unidentified Item Allowance (15%)					\$ 37,035
Subtotal					\$283,935
Water Supply/Dust Palliative (3%)					\$ 8,519
Maintenance And Protection Of Traffic (15%)					\$ 42,591
Erosion Control (1%)					\$ 2,840
Contractor Quality Control (2%)					\$ 5,679
Construction Surveying And Layout (2%)					\$ 5,679
Other Item Subtotal					\$349,243
Mobilization (12%)					\$ 41,910
Construction Subtotal					\$ 391,153
Engineering Design (10%)					\$ 39,116
Construction Engineering and Contingencies (20%)					\$ 78,231
Indirect Cost Allocation (10.02%)					\$ 39,194
Construction Total					\$ 547,694

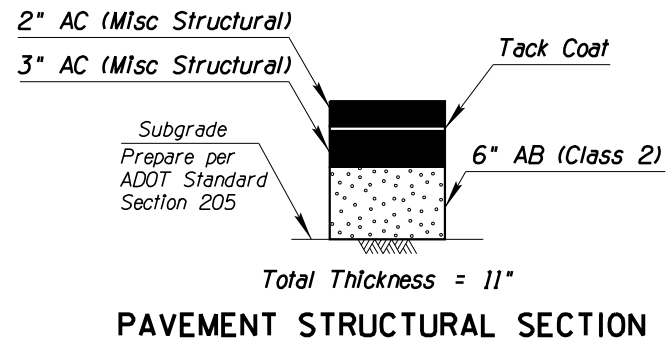
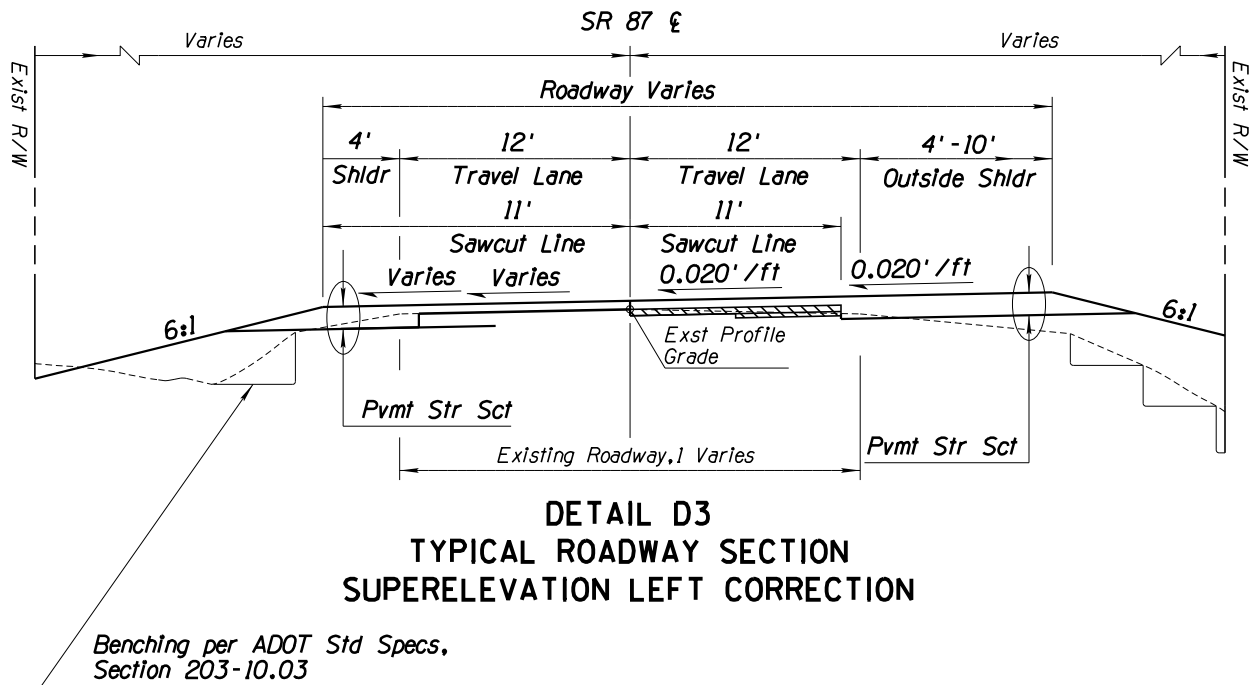
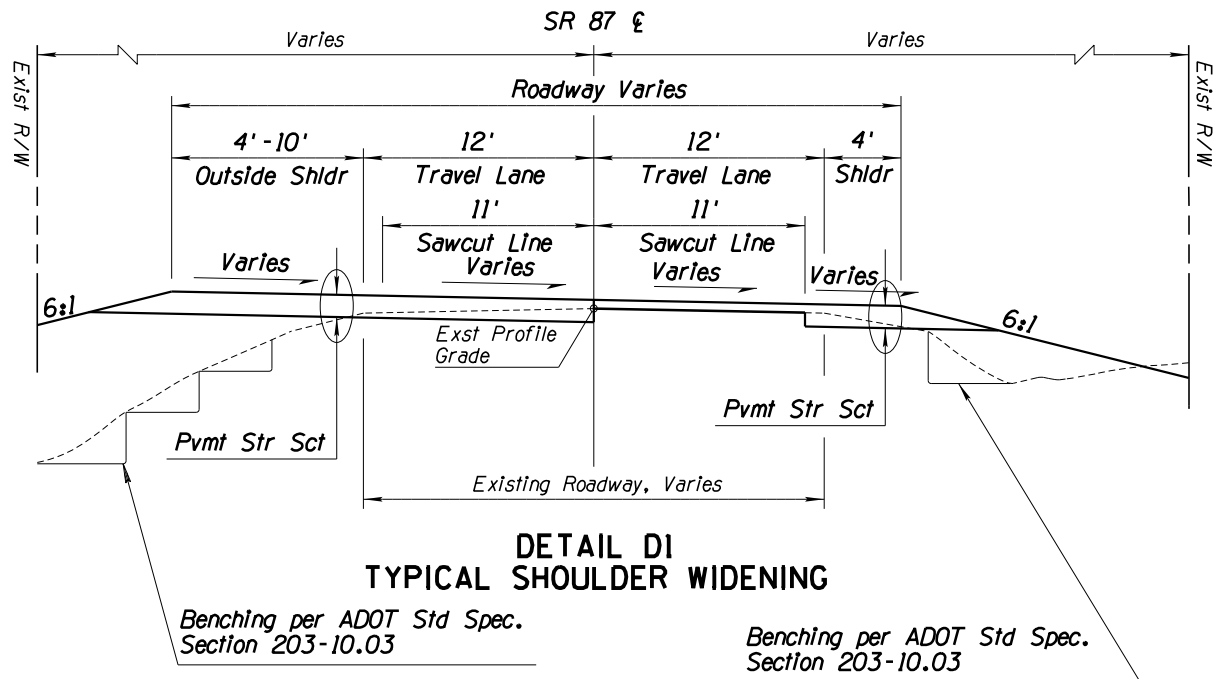
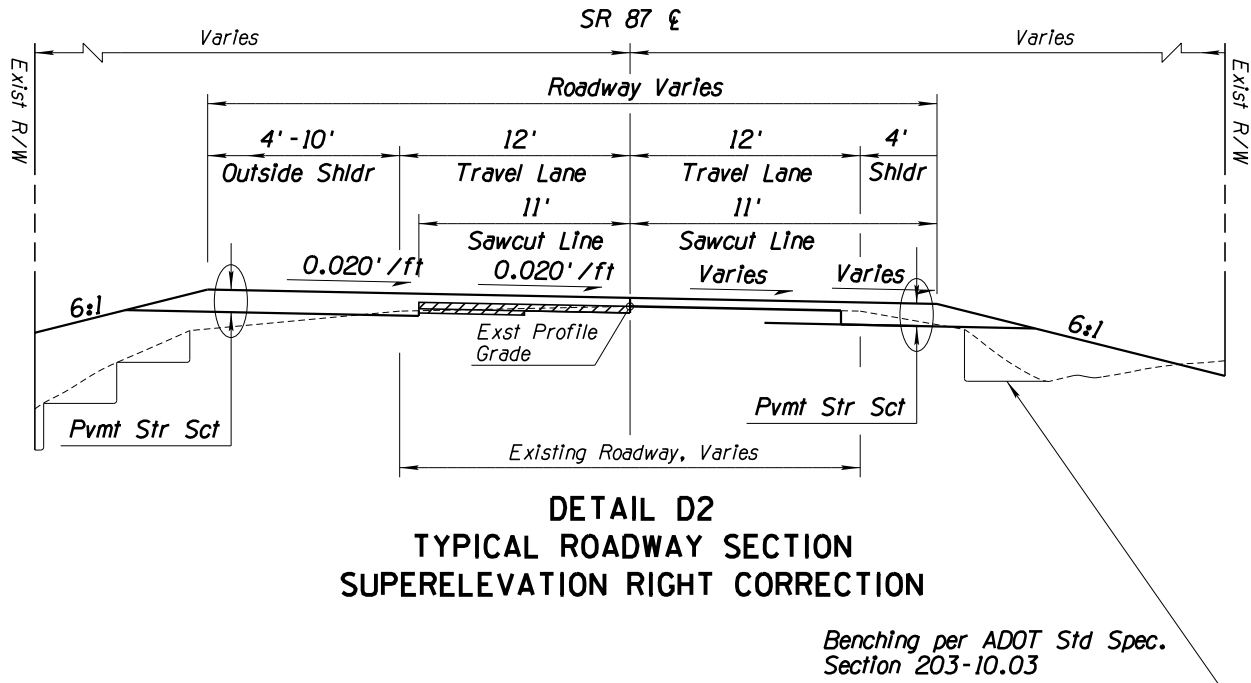
67. Widen southbound inside shoulder to 4' (MP 231.5-232)

ITEM NO	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
2010011	CLEARING AND GRUBBING	ACRE	2	\$5,000.00	\$10,000
2020029	REMOVAL OF ASPHALTIC CONCRETE PAVEMENT	SQ.YD.	281	\$20.00	\$5,620
2020053	REMOVE (GR TERMINAL)	EACH	2	\$400.00	\$800
2020071	REMOVE GUARD RAIL	L.FT.	2,528	\$5.00	\$12,640
2020201	SAW CUTTING	L.FT.	2,528	\$2.50	\$6,320
2030301	ROADWAY EXCAVATION	CU.YD.	3,750	\$10.00	\$37,500
3030022	AGGREGATE BASE, CLASS 2	CU.YD.	843	\$120.00	\$101,160
4090003	ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL)	TON	419	\$160.00	\$67,040
4110001	ASPHALTIC CONCRETE FRICTION COURSE (MISC.)	TON	25	\$120.00	\$3,000
6080101	MISCELLANEOUS WORK (SIGNS)	L.SUM	1	\$2,000.00	\$2,000
7041501	PAVEMENT MARKINGS	L.SUM	1	\$2,528.00	\$2,528
8050003	SEEDING (CLASS II)	ACRE	2	\$3,500.00	\$7,000
9050001	GUARD RAIL, W-BEAM, SINGLE FACE	L.FT.	2,528	\$30.00	\$75,840
9050026	GUARD RAIL TERMINAL (TANGENT TYPE)	EACH	1	\$2,500.00	\$2,500
9050036	GUARD RAIL, ANCHOR ASSEMBLY	EACH	1	\$800.00	\$800
9240050	MISCELLANEOUS WORK (PUBLIC RELATIONS)	L.SUM	1	\$3,000.00	\$3,000
9280037	GROUND-IN RUMBLE STRIP (12 INCH)	L.FT.	2,528	\$0.75	\$1,896
Roadway Construction Subtotal					\$339,644
Unidentified Item Allowance (15%)					\$ 50,947
Subtotal					\$390,591
Water Supply/Dust Palliative (3%)					\$ 11,718
Maintenance And Protection Of Traffic (15%)					\$ 58,589
Erosion Control (1%)					\$ 3,906
Contractor Quality Control (2%)					\$ 7,812
Construction Surveying And Layout (2%)					\$ 7,812
Other Item Subtotal					\$480,428
Mobilization (12%)					\$ 57,652
Construction Subtotal					\$ 538,080
Engineering Design (10%)					\$ 53,808
Construction Engineering and Contingencies (20%)					\$ 107,616
Indirect Cost Allocation (10.02%)					\$ 53,916
Construction Total					\$ 753,420

ATTACHMENT 5: PRELIMINARY PLANS

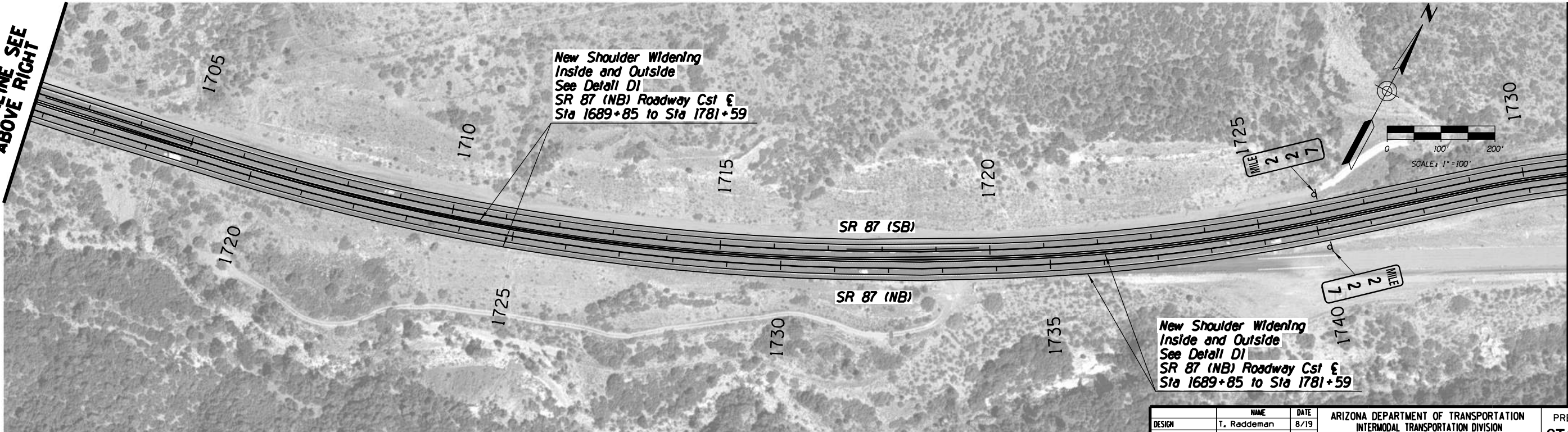
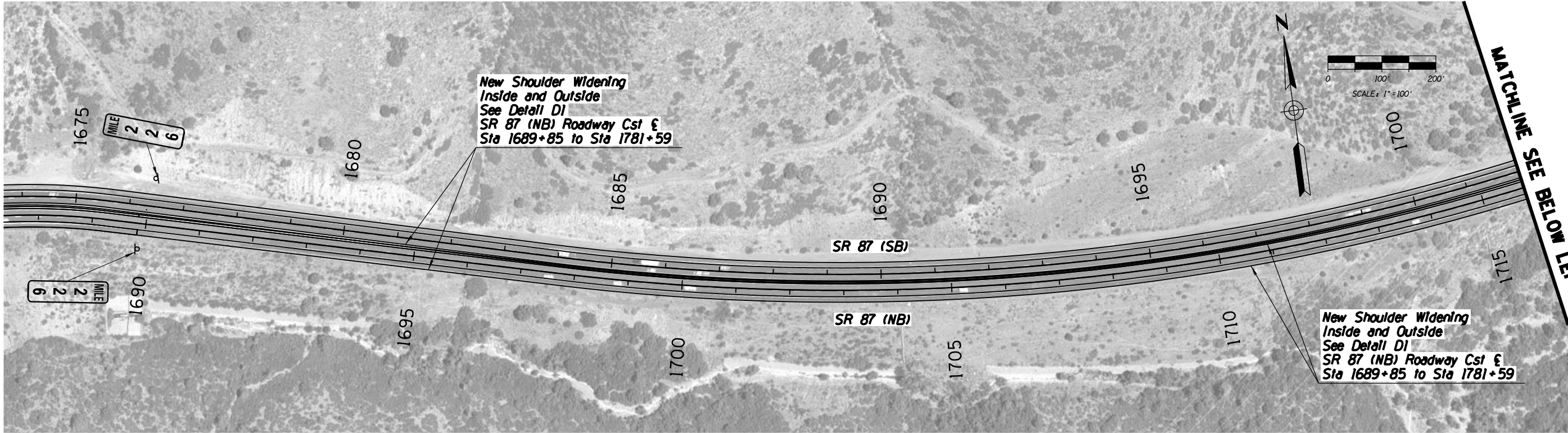
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
-	ARIZ.	-	-	59	

SR 87 MILE POST STATION			
MP NB	STATION	MP SB	STATION
196	101+73	196	101+18
197	155+53	197	154+02
198	207+69	198	207+94
199	261+02	199	259+13
200	314+21	200	311+72
201	367+73	201	364+06
202	419+18	202	417+81
203	471+36	203	470+65
204	526+28	204	523+10
205	577+70	205	575+84
206	630+73	206	628+30
207	682+81	207	680+28
208	736+47	208	734+12
209	788+55	209	786+62
210	842+08	210	839+50
211	894+91	211	890+40
212	942+20	212	939+42
213	998+65	213	995+55
214	1051+86	214	1050+06
215	1105+38	215	1095+77
216	1158+68	216	1147+95
217	1213+92	217	1199+48
218	1268+31	218	1250+20
219	1318+19	219	1304+12
220	1374+67	220	1359+76
221	1427+95	221	1412+99
222	1480+60	222	1465+84
223	1533+97	223	1518+89
224	1584+61	224	1570+72
225	1639+50	225	1625+29
226	1689+86	226	1676+32
227	1740+23	227	1726+14
228	1792+50	228	1778+04
229	1845+24	229	1831+98
230	1898+50	230	1884+70
231	1949+61	231	1933+71
232	1999+33	232	1985+29
233	2047+74	233	2033+06
234	2101+13	234	2085+05
235	2154+59	235	2137+29
236	2207+09	236	2189+44
237	2259+88	237	2240+86
238	2311+66	238	2293+85
239	2364+28	239	2344+91
240	2416+01	240	2397+41
241	2467+79	241	2448+96
242	2518+51	242	2496+68
243	2571+26	243	2549+70
244	2620+38	244	2601+82
245	2677+47	245	2655+01
246	2729+53	246	2703+04
247	2741+30	247	2747+68
248	2794+18	248	2801+15
249	2847+25	249	2854+41
250	2899+69	250	2906+58



	NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION URBAN PROJECT MANAGEMENT		PRELIMINARY STAGE I Review NOT FOR CONSTRUCTION OR RECORDING
DESIGN	T. Raddeman	8/19			
DRAWN	D. Klebosky	8/19			
CHECKED	V. Rodriguez	8/19			
Kimley»Horn © 2019 KIMLEY-HORN AND ASSOCIATES, INC.					
ROUTE	LOCATION				
SR 87	MP 190 TO MP 250				
TRACS NO. XXXXX XXX			XXX-X(XXX)X		____ <i>OF</i> ____

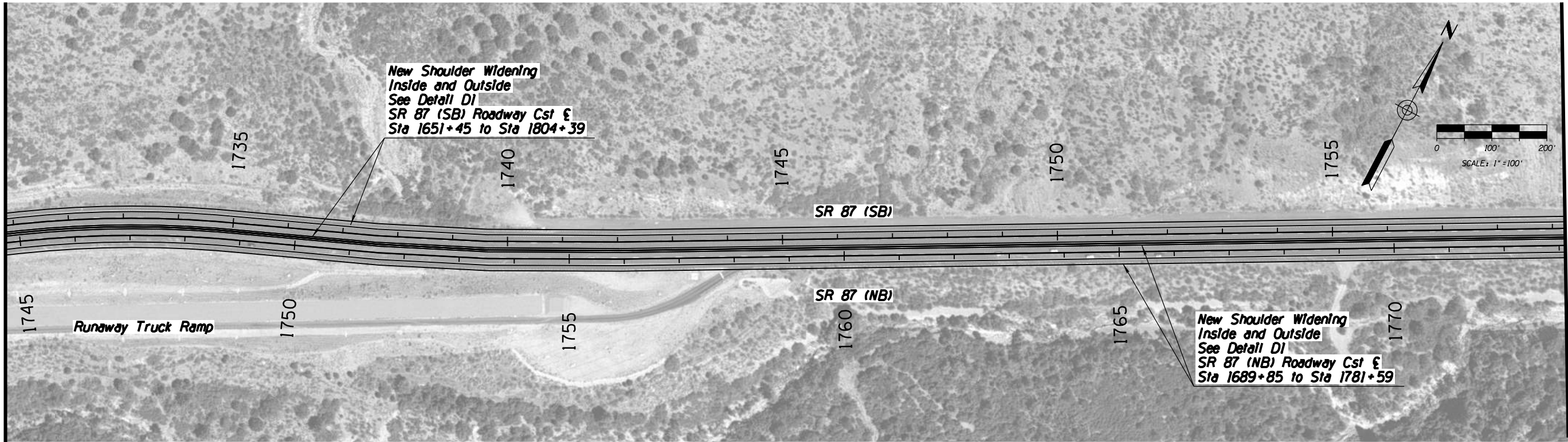
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
-	ARIZ.	-	-	59	



	NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION URBAN PROJECT MANAGEMENT	PRELIMINARY STAGE I Review NOT FOR CONSTRUCTION OR RECORDING	
DESIGN	T. Raddeman	8/19			
DRAWN	D. Klebosky	8/19			
CHECKED	V. Rodriguez	8/19	PROJECT #8 SLATE CREEK IMPROVEMENTS MP 226 TO 232		
Kimley»Horn © 2019 KIMLEY-HORN AND ASSOCIATES, INC.					
ROUTE	LOCATION				
SR 87		MP 190 TO MP 250			DWG NO. 9.I-01
TRACS NO. XXXXX XXX			XXX-X(XXX)X		___ OF ___

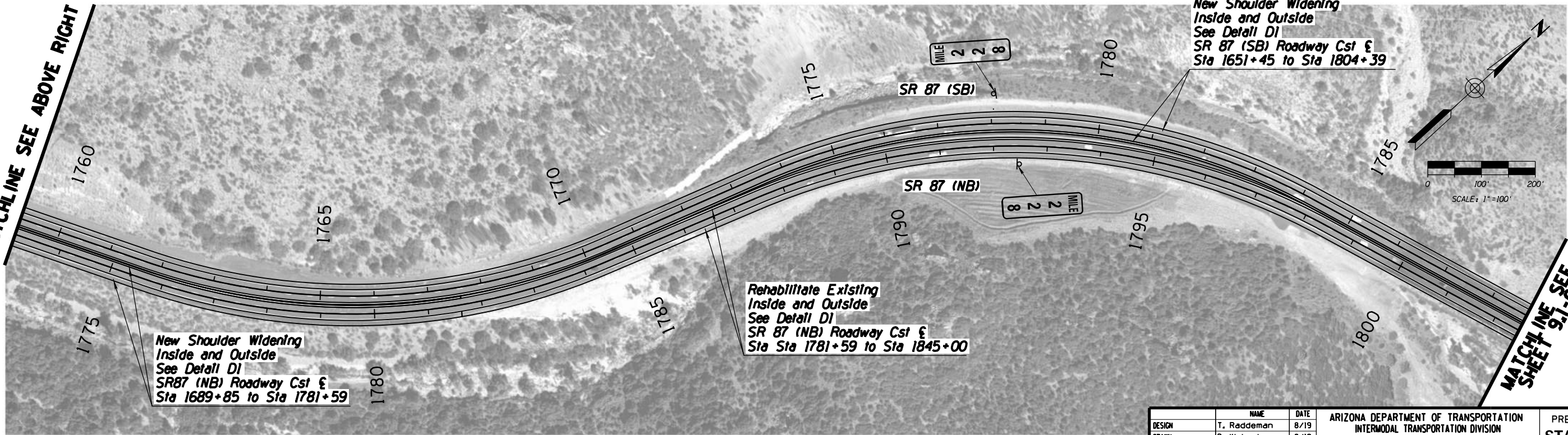
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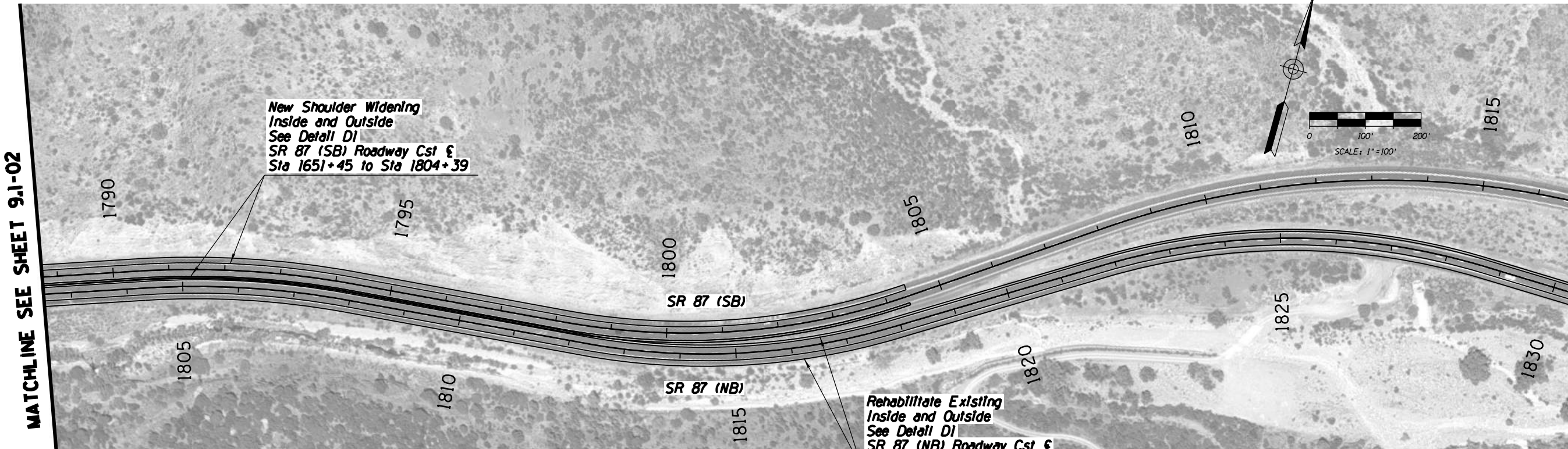
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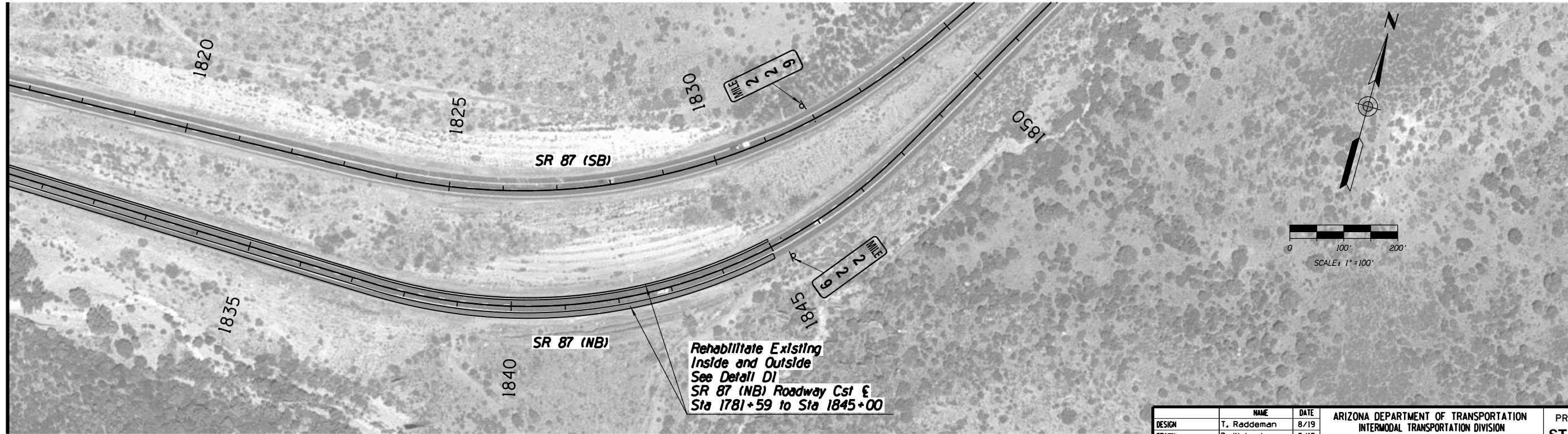
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DRAWN	D. Klebosky		8/19			
CHECKED	V. Rodriguez		8/19			
Kimley»Horn © 2019 KIMLEY-HORN AND ASSOCIATES, INC.				PROJECT #8 SLATE CREEK IMPROVEMENTS MP 226 TO 232		
ROUTE		LOCATION				DWG NO. 9.I-02 ____ <i>OF</i> ____
SR 87		MP 190 TO MP 250				
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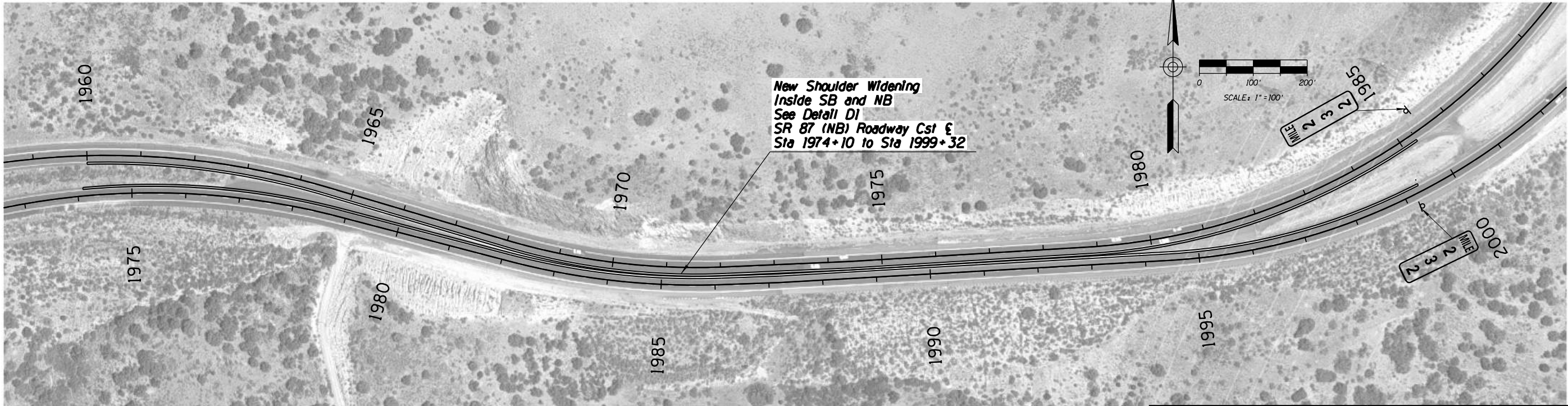
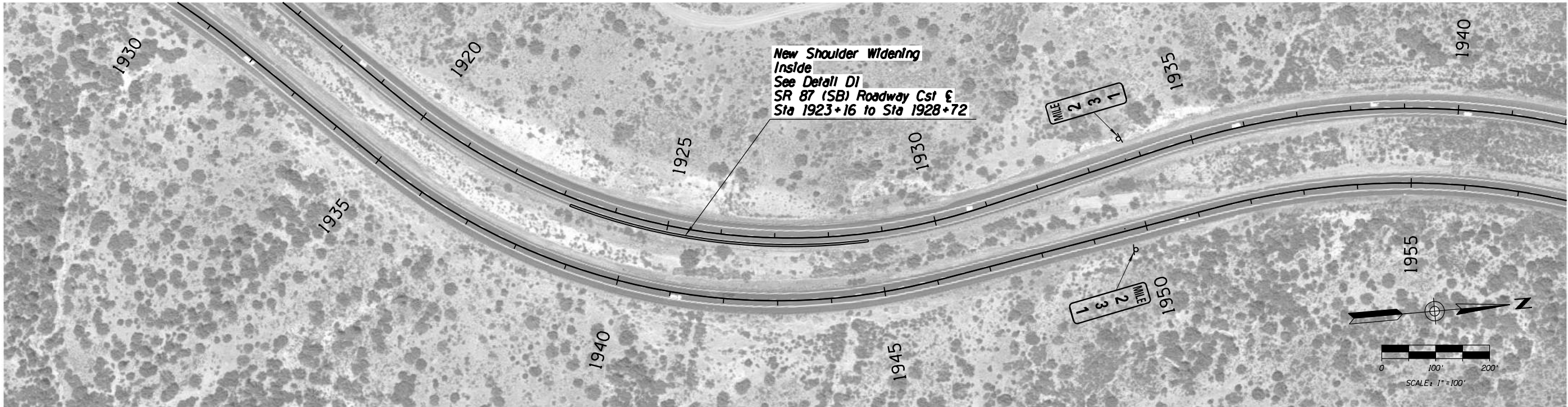
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F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
-	ARIZ.	-	-	59	

	NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION URBAN PROJECT MANAGEMENT		PRELIMINARY STAGE I Review NOT FOR CONSTRUCTION OR RECORDING
DESIGN	T. Raddeman	8/19			
DRAWN	D. Klebosky	8/19			
CHECKED	V. Rodriguez	8/19	PROJECT #8 SLATE CREEK IMPROVEMENTS MP 226 TO 232		DWG NO. 9.1-03
Kimley»Horn © 2019 KIMLEY-HORN AND ASSOCIATES, INC.					
ROUTE SR 87		LOCATION MP 190 TO MP 250			
TRACS NO. XXXXX XXX				XXX-X(XXX)X ___ OF ___	

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
-	ARIZ.	-	-	59	



	NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION URBAN PROJECT MANAGEMENT	PRELIMINARY STAGE I Review NOT FOR CONSTRUCTION OR RECORDING
DESIGN	T. Raddeman	8/19		
DRAWN	D. Klebosky	8/19		
CHECKED	V. Rodriguez	8/19	PROJECT #8 SLATE CREEK IMPROVEMENTS MP 226 TO 232	
Kimley»Horn © 2019 KIMLEY-HORN AND ASSOCIATES, INC.				
ROUTE		LOCATION	MP 190 TO MP 250	DWG NO. 9.3-01
SR 87				
TRACS NO. XXXXX XXX			XXX-X(XXX)X	___ OF ___

**PACKAGE PROJECT 9 –
RYE IMPROVEMENTS
(MP 239-241)**

ADOT SR 87 Corridor Development Study

PRELIMINARY SCOPING REPORT

GENERAL PROJECT INFORMATION	
Date: 8/20/2019	ADOT Project Manager:
Project Name: Rye Improvements (MP239-241)	
City/Town: N/A	County: Gila
COG/MPO: CAG	ADOT District: Northcentral
Primary Route/Street: SR 87	
Beginning Limit: 239	
End Limit: 241	
Project Length: 2 Miles	
Right of Way Ownership(s) (where proposed project would occur): <i>(check all that apply)</i> <input type="checkbox"/> City/Town <input type="checkbox"/> County <input checked="" type="checkbox"/> ADOT <input type="checkbox"/> Private <input type="checkbox"/> Federal <input type="checkbox"/> Tribal <input type="checkbox"/> Other	
Adjacent Land Ownership(s): <i>(Check all that apply)</i> <input type="checkbox"/> City/Town <input checked="" type="checkbox"/> County <input type="checkbox"/> ADOT <input checked="" type="checkbox"/> Private <input type="checkbox"/> Federal <input type="checkbox"/> Tribal <input type="checkbox"/> Other	

PROJECT NEED
This intersection density in this area is higher than the rest of the corridor and there are locations without deceleration lanes leading to large speed differentials in the through travel lanes.

PROJECT PURPOSE			
What is the Primary Purpose of the Project?	<input type="checkbox"/> Preservation	<input checked="" type="checkbox"/> Modernization	<input type="checkbox"/> Expansion
Supplement signage to increase awareness of the presence of intersections and cross-traffic in the area, as well as add deceleration and acceleration lanes to remove slow-moving vehicles from the through travel lanes.			

PROJECT RISKS	
Check any risks identified that may impact the project's scope, schedule, or budget:	
<input type="checkbox"/> Access/Traffic Control/Detour Issues	<input type="checkbox"/> Right-of-Way
<input type="checkbox"/> Constructability/Construction Window Issues	<input type="checkbox"/> Environmental
<input type="checkbox"/> Stakeholder Issues	<input type="checkbox"/> Utilities
<input type="checkbox"/> Structures & Geotech	<input type="checkbox"/> Other:
Risk Description: <i>(if a box is checked above, briefly explain the risk)</i> Click or tap here to enter text.	

POTENTIAL FUNDING SOURCE(S)				
Anticipated Project Design/Construction Funding Type: <i>(Check all that applied)</i>	<input type="checkbox"/> STBG	<input type="checkbox"/> TAP	<input checked="" type="checkbox"/> HSIP	<input checked="" type="checkbox"/> State
	<input type="checkbox"/> Local	<input type="checkbox"/> Private	<input type="checkbox"/> Tribal	<input type="checkbox"/> Other

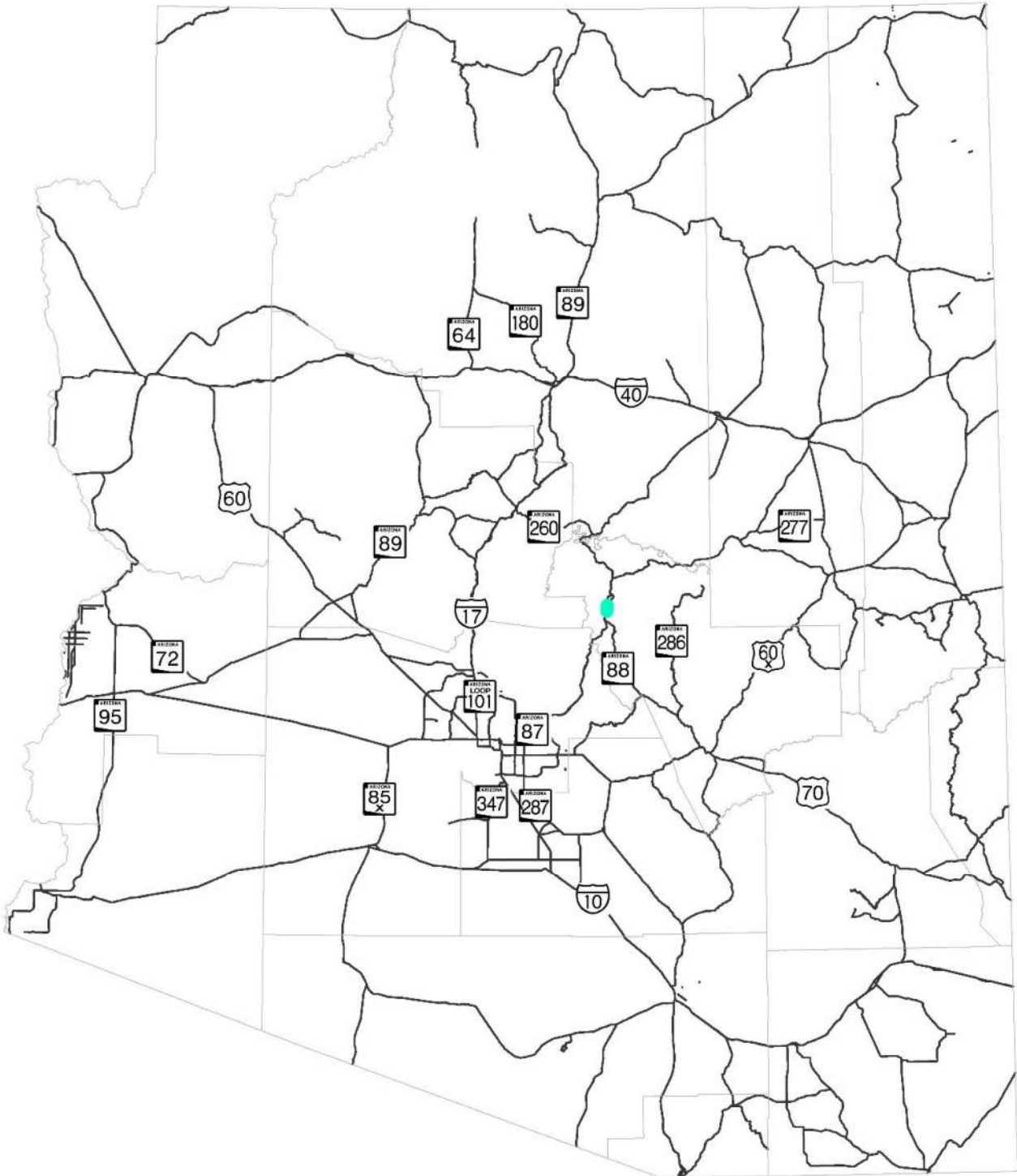
COST ESTIMATE			
Design \$499,600.00	Right-of-Way \$0.00	Construction \$6,495,300.00	Total \$6,994,900.00

RECOMMENDED PROJECT DELIVERY
Delivery: <input type="checkbox"/> Design-Bid-Build <input type="checkbox"/> Design-Build <input checked="" type="checkbox"/> Other:
Design Program Year: Click or tap here to enter text.
Construction Program Year: Click or tap here to enter text.

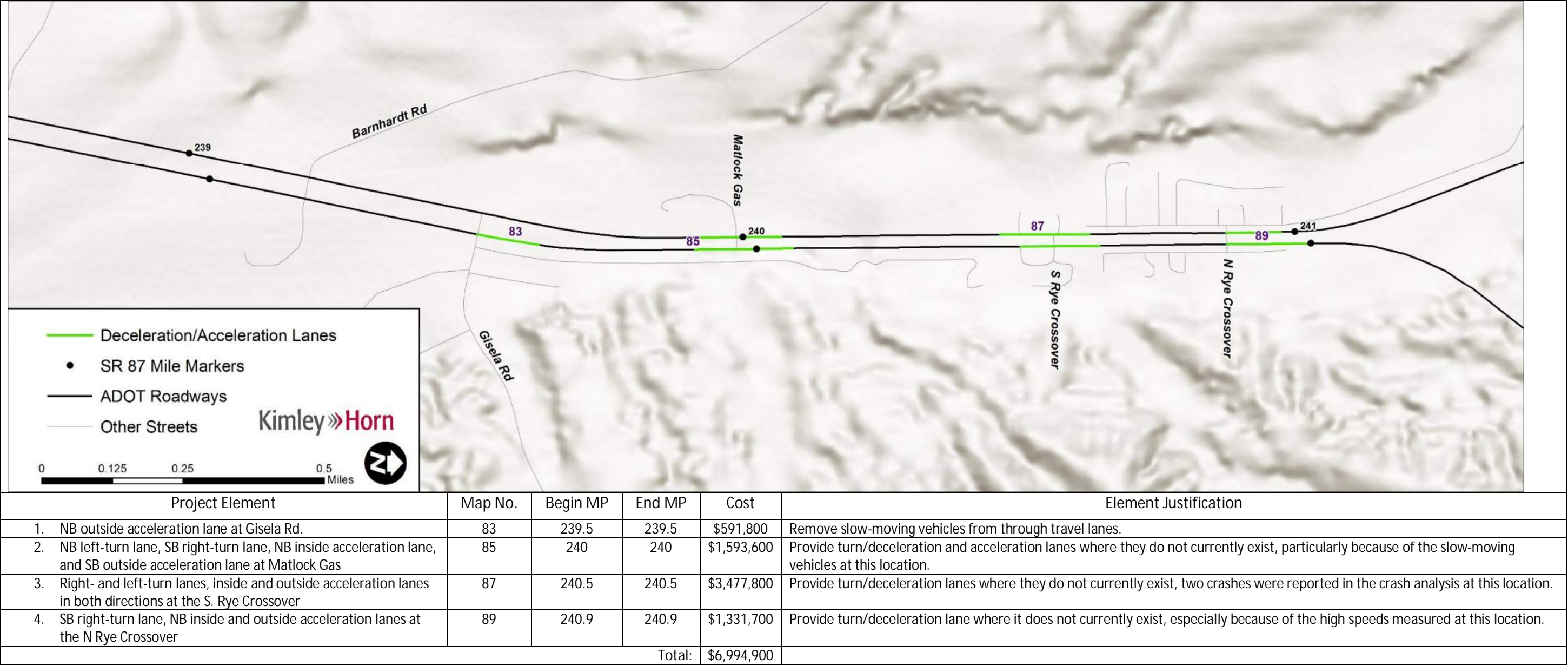
ATTACHMENTS
<ol style="list-style-type: none">1. Project Scope of Work2. State Location Map3. Project Vicinity Map4. Itemized Cost Estimate5. Conceptual Design Plans

ATTACHMENT 1: SCOPE OF WORK
<p><i>(Provide a detailed breakdown of the project's scope of work using bullet form)</i></p> <ul style="list-style-type: none">• Construct northbound outside acceleration lane at Gisela Rd (MP 239.5)• Construct northbound left-turn lane, southbound right-turn lane, northbound inside acceleration lane, and southbound outside acceleration lane at Matlock Gas (MP 240)• Construct right- and left-turn lanes, inside and outside acceleration lanes in both directions at the South Rye Crossover (MP 240.5)• Construct southbound right-turn lane, northbound inside and outside acceleration lanes at the North Rye Crossover (240.9)

ATTACHMENT 2: STATE LOCATION MAP



ATTACHMENT 3: PROJECT VICINITY MAP



ATTACHMENT 4: ITEMIZED COST ESTIMATE



SR87 Corridor Development Study
ITEMIZED COST ESTIMATE

83. NB outside accel lane at Gisela Rd (MP 248.4)

ITEM NO	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
2010011	CLEARING AND GRUBBING	ACRE	1	\$5,000.00	\$5,000
2020029	REMOVAL OF ASPHALTIC CONCRETE PAVEMENT	SQ.YD.	292	\$20.00	\$5,840
2020201	SAW CUTTING	L.FT.	1,310	\$2.50	\$3,275
2030301	ROADWAY EXCAVATION	CU.YD.	1,170	\$10.00	\$11,700
3030022	AGGREGATE BASE, CLASS 2	CU.YD.	922	\$120.00	\$110,640
4090003	ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL)	TON	699	\$160.00	\$111,840
4110001	ASPHALTIC CONCRETE FRICTION COURSE (MISC.)	TON	56	\$120.00	\$6,720
6080101	MISCELLANEOUS WORK (SIGNS)	L.SUM	1	\$2,000.00	\$2,000
7041501	PAVEMENT MARKINGS	L.SUM	1	\$1,310.00	\$1,310
8050003	SEEDING (CLASS II)	ACRE	1	\$3,500.00	\$3,500
9240050	MISCELLANEOUS WORK (PUBLIC RELATIONS)	L.SUM	1	\$3,000.00	\$3,000
9280037	GROUND-IN RUMBLE STRIP (12 INCH)	L.FT.	1,310	\$1.50	\$1,965
Roadway Construction Subtotal					\$266,790
Unidentified Item Allowance (15%)					\$ 40,019
Subtotal					\$306,809
Water Supply/Dust Palliative (3%)					\$ 9,205
Maintenance And Protection Of Traffic (15%)					\$ 46,022
Erosion Control (1%)					\$ 3,069
Contractor Quality Control (2%)					\$ 6,137
Construction Surveying And Layout (2%)					\$ 6,137
Other Item Subtotal					\$377,379
Mobilization (12%)					\$ 45,286
Construction Subtotal					\$ 422,665
Engineering Design (10%)					\$ 42,267
Construction Engineering and Contingencies (20%)					\$ 84,533
Indirect Cost Allocation (10.02%)					\$ 42,352
Construction Total					\$ 591,817

85. Northbound left-turn lane at Matlock Gas (MP 240)

ITEM NO	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
2010011	CLEARING AND GRUBBING	ACRE	1	\$5,000.00	\$5,000
2020029	REMOVAL OF ASPHALTIC CONCRETE PAVEMENT	SQ.YD.	55	\$35.00	\$1,925
2020201	SAW CUTTING	L.FT.	490	\$2.50	\$1,225
2030301	ROADWAY EXCAVATION	CU.YD.	440	\$10.00	\$4,400
3030022	AGGREGATE BASE, CLASS 2	CU.YD.	345	\$120.00	\$41,400
4090003	ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL)	TON	262	\$160.00	\$41,920
4110001	ASPHALTIC CONCRETE FRICTION COURSE (MISC.)	TON	21	\$120.00	\$2,520
6080101	MISCELLANEOUS WORK (SIGNS)	L.SUM	1	\$2,000.00	\$2,000
7041501	PAVEMENT MARKINGS	L.SUM	1	\$490.00	\$490
8050003	SEEDING (CLASS II)	ACRE	1	\$3,500.00	\$3,500
9240050	MISCELLANEOUS WORK (PUBLIC RELATIONS)	L.SUM	1	\$3,000.00	\$3,000
9280037	GROUND-IN RUMBLE STRIP (12 INCH)	L.FT.	490	\$1.50	\$735
Roadway Construction Subtotal					\$108,115
Unidentified Item Allowance (15%)					\$ 16,218
Subtotal					\$124,333
Water Supply/Dust Palliative (3%)					\$ 3,730
Maintenance And Protection Of Traffic (15%)					\$ 18,650
Erosion Control (1%)					\$ 1,244
Contractor Quality Control (2%)					\$ 2,487
Construction Surveying And Layout (2%)					\$ 2,487
Other Item Subtotal					\$152,931
Mobilization (12%)					\$ 18,352
Construction Subtotal					\$ 171,283
Engineering Design (10%)					\$ 17,129
Construction Engineering and Contingencies (20%)					\$ 34,257
Indirect Cost Allocation (10.02%)					\$ 17,163
Construction Total					\$ 239,832

85. Northbound inside acceleration lane at Matlock Gas (MP 240)

ITEM NO	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
2010011	CLEARING AND GRUBBING	ACRE	1	\$5,000.00	\$5,000
2020029	REMOVAL OF ASPHALTIC CONCRETE PAVEMENT	SQ.YD.	292	\$20.00	\$5,840
2020201	SAW CUTTING	L.FT.	1,310	\$2.50	\$3,275
2030301	ROADWAY EXCAVATION	CU.YD.	1,170	\$10.00	\$11,700
3030022	AGGREGATE BASE, CLASS 2	CU.YD.	922	\$120.00	\$110,640
4090003	ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL)	TON	699	\$160.00	\$111,840
4110001	ASPHALTIC CONCRETE FRICTION COURSE (MISC.)	TON	56	\$120.00	\$6,720
6080101	MISCELLANEOUS WORK (SIGNS)	L.SUM	1	\$2,000.00	\$2,000
7041501	PAVEMENT MARKINGS	L.SUM	1	\$1,310.00	\$1,310
8050003	SEEDING (CLASS II)	ACRE	1	\$3,500.00	\$3,500
9240050	MISCELLANEOUS WORK (PUBLIC RELATIONS)	L.SUM	1	\$3,000.00	\$3,000
9280037	GROUND-IN RUMBLE STRIP (12 INCH)	L.FT.	1,310	\$1.50	\$1,965
Roadway Construction Subtotal					\$266,790
Unidentified Item Allowance (15%)					\$ 40,019
Subtotal					\$306,809
Water Supply/Dust Palliative (3%)					\$ 9,205
Maintenance And Protection Of Traffic (15%)					\$ 46,022
Erosion Control (1%)					\$ 3,069
Contractor Quality Control (2%)					\$ 6,137
Construction Surveying And Layout (2%)					\$ 6,137
Other Item Subtotal					\$377,379
Mobilization (12%)					\$ 45,286
Construction Subtotal					\$ 422,665
Engineering Design (10%)					\$ 42,267
Construction Engineering and Contingencies (20%)					\$ 84,533
Indirect Cost Allocation (10.02%)					\$ 42,352
Construction Total					\$ 591,817

85. Southbound right-turn lane at Matlock Gas (MP 240)

ITEM NO	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
2010011	CLEARING AND GRUBBING	ACRE	1	\$5,000.00	\$5,000
2020029	REMOVAL OF ASPHALTIC CONCRETE PAVEMENT	SQ.YD.	55	\$35.00	\$1,925
2020201	SAW CUTTING	L.FT.	490	\$2.50	\$1,225
2030301	ROADWAY EXCAVATION	CU.YD.	440	\$10.00	\$4,400
3030022	AGGREGATE BASE, CLASS 2	CU.YD.	236	\$120.00	\$28,320
4090003	ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL)	TON	154	\$160.00	\$24,640
4110001	ASPHALTIC CONCRETE FRICTION COURSE (MISC.)	TON	12	\$120.00	\$1,440
6080101	MISCELLANEOUS WORK (SIGNS)	L.SUM	1	\$2,000.00	\$2,000
7041501	PAVEMENT MARKINGS	L.SUM	1	\$490.00	\$490
8050003	SEEDING (CLASS II)	ACRE	1	\$3,500.00	\$3,500
9240050	MISCELLANEOUS WORK (PUBLIC RELATIONS)	L.SUM	1	\$3,000.00	\$3,000
9280037	GROUND-IN RUMBLE STRIP (12 INCH)	L.FT.	490	\$1.50	\$735
Roadway Construction Subtotal					\$76,675
Unidentified Item Allowance (15%)					\$ 11,502
Subtotal					\$88,177
Water Supply/Dust Palliative (3%)					\$ 2,646
Maintenance And Protection Of Traffic (15%)					\$ 13,227
Erosion Control (1%)					\$ 882
Contractor Quality Control (2%)					\$ 1,764
Construction Surveying And Layout (2%)					\$ 1,764
Other Item Subtotal					\$108,460
Mobilization (12%)					\$ 13,016
Construction Subtotal					\$ 121,476
Engineering Design (10%)					\$ 12,148
Construction Engineering and Contingencies (20%)					\$ 24,296
Indirect Cost Allocation (10.02%)					\$ 12,172
Construction Total					\$ 170,092

85. Southbound outside accel lane at Matlock Gas (MP 240)

ITEM NO	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
2010011	CLEARING AND GRUBBING	ACRE	1	\$5,000.00	\$5,000
2020029	REMOVAL OF ASPHALTIC CONCRETE PAVEMENT	SQ.YD.	292	\$20.00	\$5,840
2020201	SAW CUTTING	L.FT.	1,310	\$2.50	\$3,275
2030301	ROADWAY EXCAVATION	CU.YD.	1,170	\$10.00	\$11,700
3030022	AGGREGATE BASE, CLASS 2	CU.YD.	922	\$120.00	\$110,640
4090003	ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL)	TON	699	\$160.00	\$111,840
4110001	ASPHALTIC CONCRETE FRICTION COURSE (MISC.)	TON	56	\$120.00	\$6,720
6080101	MISCELLANEOUS WORK (SIGNS)	L.SUM	1	\$2,000.00	\$2,000
7041501	PAVEMENT MARKINGS	L.SUM	1	\$1,310.00	\$1,310
8050003	SEEDING (CLASS II)	ACRE	1	\$3,500.00	\$3,500
9240050	MISCELLANEOUS WORK (PUBLIC RELATIONS)	L.SUM	1	\$3,000.00	\$3,000
9280037	GROUND-IN RUMBLE STRIP (12 INCH)	L.FT.	1,310	\$1.50	\$1,965
Roadway Construction Subtotal					\$266,790
Unidentified Item Allowance (15%)					\$ 40,019
Subtotal					\$306,809
Water Supply/Dust Palliative (3%)					\$ 9,205
Maintenance And Protection Of Traffic (15%)					\$ 46,022
Erosion Control (1%)					\$ 3,069
Contractor Quality Control (2%)					\$ 6,137
Construction Surveying And Layout (2%)					\$ 6,137
Other Item Subtotal					\$377,379
Mobilization (12%)					\$ 45,286
Construction Subtotal					\$ 422,665
Engineering Design (10%)					\$ 42,267
Construction Engineering and Contingencies (20%)					\$ 84,533
Indirect Cost Allocation (10.02%)					\$ 42,352
Construction Total					\$ 591,817

87. NB right- and left-turn lanes at S Rye Crossover (MP 240.5)

ITEM NO	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
2010011	CLEARING AND GRUBBING	ACRE	1	\$5,000.00	\$5,000
2020029	REMOVAL OF ASPHALTIC CONCRETE PAVEMENT	SQ.YD.	218	\$35.00	\$7,630
2020201	SAW CUTTING	L.FT.	980	\$2.50	\$2,450
2030301	ROADWAY EXCAVATION	CU.YD.	880	\$10.00	\$8,800
3030022	AGGREGATE BASE, CLASS 2	CU.YD.	927	\$120.00	\$111,240
4090003	ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL)	TON	674	\$160.00	\$107,840
4110001	ASPHALTIC CONCRETE FRICTION COURSE (MISC.)	TON	53	\$120.00	\$6,360
6080101	MISCELLANEOUS WORK (SIGNS)	L.SUM	1	\$2,000.00	\$2,000
7041501	PAVEMENT MARKINGS	L.SUM	1	\$980.00	\$980
8050003	SEEDING (CLASS II)	ACRE	1	\$3,500.00	\$3,500
9240050	MISCELLANEOUS WORK (PUBLIC RELATIONS)	L.SUM	1	\$3,000.00	\$3,000
9280037	GROUND-IN RUMBLE STRIP (12 INCH)	L.FT.	980	\$1.50	\$1,470
Roadway Construction Subtotal					\$260,270
Unidentified Item Allowance (15%)					\$ 39,041
Subtotal					\$299,311
Water Supply/Dust Palliative (3%)					\$ 8,980
Maintenance And Protection Of Traffic (15%)					\$ 44,897
Erosion Control (1%)					\$ 2,994
Contractor Quality Control (2%)					\$ 5,987
Construction Surveying And Layout (2%)					\$ 5,987
Other Item Subtotal					\$368,156
Mobilization (12%)					\$ 44,179
Construction Subtotal					\$ 412,335
Engineering Design (10%)					\$ 41,234
Construction Engineering and Contingencies (20%)					\$ 82,467
Indirect Cost Allocation (10.02%)					\$ 41,316
Construction Total					\$ 577,352

89. Northbound inside and outside acceleration lanes at N Rye Crossover (MP 240.5)

ITEM NO	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
2010011	CLEARING AND GRUBBING	ACRE	2	\$5,000.00	\$10,000
2020029	REMOVAL OF ASPHALTIC CONCRETE PAVEMENT	SQ.YD.	1,165	\$20.00	\$23,300
2020201	SAW CUTTING	L.FT.	2,620	\$2.50	\$6,550
2030301	ROADWAY EXCAVATION	CU.YD.	4,660	\$10.00	\$46,600
3030022	AGGREGATE BASE, CLASS 2	CU.YD.	3,106	\$60.00	\$186,360
4090003	ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL)	TON	2,648	\$80.00	\$211,840
4110001	ASPHALTIC CONCRETE FRICTION COURSE (MISC.)	TON	224	\$100.00	\$22,400
6080101	MISCELLANEOUS WORK (SIGNS)	L.SUM	1	\$2,000.00	\$2,000
7041501	PAVEMENT MARKINGS	L.SUM	1	\$2,620.00	\$2,620
8050003	SEEDING (CLASS II)	ACRE	2	\$3,500.00	\$7,000
9240050	MISCELLANEOUS WORK (PUBLIC RELATIONS)	L.SUM	1	\$3,000.00	\$3,000
9280037	GROUND-IN RUMBLE STRIP (12 INCH)	L.FT.	2,620	\$0.75	\$1,965
Roadway Construction Subtotal					\$523,635
Unidentified Item Allowance (15%)					\$ 78,546
Subtotal					\$602,181
Water Supply/Dust Palliative (3%)					\$ 18,066
Maintenance And Protection Of Traffic (15%)					\$ 90,328
Erosion Control (1%)					\$ 6,022
Contractor Quality Control (2%)					\$ 12,044
Construction Surveying And Layout (2%)					\$ 12,044
Other Item Subtotal					\$740,685
Mobilization (12%)					\$ 88,883
Construction Subtotal					\$ 829,568
Engineering Design (10%)					\$ 82,957
Construction Engineering and Contingencies (20%)					\$ 165,914
Indirect Cost Allocation (10.02%)					\$ 83,123
Construction Total					\$ 1,161,562

87. Southbound right- and left-turn lanes at the South Rye Crossover (MP 240.5)

ITEM NO	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
2010011	CLEARING AND GRUBBING	ACRE	1	\$5,000.00	\$5,000
2020029	REMOVAL OF ASPHALTIC CONCRETE PAVEMENT	SQ.YD.	218	\$35.00	\$7,630
2020201	SAW CUTTING	L.FT.	980	\$2.50	\$2,450
2030301	ROADWAY EXCAVATION	CU.YD.	880	\$10.00	\$8,800
3030022	AGGREGATE BASE, CLASS 2	CU.YD.	927	\$120.00	\$111,240
4090003	ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL)	TON	674	\$160.00	\$107,840
4110001	ASPHALTIC CONCRETE FRICTION COURSE (MISC.)	TON	53	\$120.00	\$6,360
6080101	MISCELLANEOUS WORK (SIGNS)	L.SUM	1	\$2,000.00	\$2,000
7041501	PAVEMENT MARKINGS	L.SUM	1	\$980.00	\$980
8050003	SEEDING (CLASS II)	ACRE	1	\$3,500.00	\$3,500
9240050	MISCELLANEOUS WORK (PUBLIC RELATIONS)	L.SUM	1	\$3,000.00	\$3,000
9280037	GROUND-IN RUMBLE STRIP (12 INCH)	L.FT.	980	\$1.50	\$1,470
Roadway Construction Subtotal					\$260,270
Unidentified Item Allowance (15%)					\$ 39,041
Subtotal					\$299,311
Water Supply/Dust Palliative (3%)					\$ 8,980
Maintenance And Protection Of Traffic (15%)					\$ 44,897
Erosion Control (1%)					\$ 2,994
Contractor Quality Control (2%)					\$ 5,987
Construction Surveying And Layout (2%)					\$ 5,987
Other Item Subtotal					\$368,156
Mobilization (12%)					\$ 44,179
Construction Subtotal					\$ 412,335
Engineering Design (10%)					\$ 41,234
Construction Engineering and Contingencies (20%)					\$ 82,467
Indirect Cost Allocation (10.02%)					\$ 41,316
Construction Total					\$ 577,352

87. Southbound inside and outside acceleration lanes at S Rye Crossover (MP 240)

ITEM NO	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
2010011	CLEARING AND GRUBBING	ACRE	2	\$5,000.00	\$10,000
2020029	REMOVAL OF ASPHALTIC CONCRETE PAVEMENT	SQ.YD.	1,165	\$20.00	\$23,300
2020201	SAW CUTTING	L.FT.	2,620	\$2.50	\$6,550
2030301	ROADWAY EXCAVATION	CU.YD.	4,660	\$10.00	\$46,600
3030022	AGGREGATE BASE, CLASS 2	CU.YD.	3,106	\$60.00	\$186,360
4090003	ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL)	TON	2,648	\$80.00	\$211,840
4110001	ASPHALTIC CONCRETE FRICTION COURSE (MISC.)	TON	224	\$100.00	\$22,400
6080101	MISCELLANEOUS WORK (SIGNS)	L.SUM	1	\$2,000.00	\$2,000
7041501	PAVEMENT MARKINGS	L.SUM	1	\$2,620.00	\$2,620
8050003	SEEDING (CLASS II)	ACRE	2	\$3,500.00	\$7,000
9240050	MISCELLANEOUS WORK (PUBLIC RELATIONS)	L.SUM	1	\$3,000.00	\$3,000
9280037	GROUND-IN RUMBLE STRIP (12 INCH)	L.FT.	2,620	\$0.75	\$1,965
Roadway Construction Subtotal					\$523,635
Unidentified Item Allowance (15%)					\$ 78,546
Subtotal					\$602,181
Water Supply/Dust Palliative (3%)					\$ 18,066
Maintenance And Protection Of Traffic (15%)					\$ 90,328
Erosion Control (1%)					\$ 6,022
Contractor Quality Control (2%)					\$ 12,044
Construction Surveying And Layout (2%)					\$ 12,044
Other Item Subtotal					\$740,685
Mobilization (12%)					\$ 88,883
Construction Subtotal					\$ 829,568
Engineering Design (10%)					\$ 82,957
Construction Engineering and Contingencies (20%)					\$ 165,914
Indirect Cost Allocation (10.02%)					\$ 83,123
Construction Total					\$ 1,161,562

89. Northbound inside and outside acceleration lanes at N Rye Crossover (MP 240.9)

ITEM NO	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
2010011	CLEARING AND GRUBBING	ACRE	2	\$5,000.00	\$10,000
2020029	REMOVAL OF ASPHALTIC CONCRETE PAVEMENT	SQ.YD.	1,165	\$20.00	\$23,300
2020201	SAW CUTTING	L.FT.	2,620	\$2.50	\$6,550
2030301	ROADWAY EXCAVATION	CU.YD.	4,660	\$10.00	\$46,600
3030022	AGGREGATE BASE, CLASS 2	CU.YD.	3,106	\$60.00	\$186,360
4090003	ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL)	TON	2,648	\$80.00	\$211,840
4110001	ASPHALTIC CONCRETE FRICTION COURSE (MISC.)	TON	224	\$100.00	\$22,400
6080101	MISCELLANEOUS WORK (SIGNS)	L.SUM	1	\$2,000.00	\$2,000
7041501	PAVEMENT MARKINGS	L.SUM	1	\$2,620.00	\$2,620
8050003	SEEDING (CLASS II)	ACRE	2	\$3,500.00	\$7,000
9240050	MISCELLANEOUS WORK (PUBLIC RELATIONS)	L.SUM	1	\$3,000.00	\$3,000
9280037	GROUND-IN RUMBLE STRIP (12 INCH)	L.FT.	2,620	\$0.75	\$1,965
Roadway Construction Subtotal					\$523,635
Unidentified Item Allowance (15%)					\$ 78,546
Subtotal					\$602,181
Water Supply/Dust Palliative (3%)					\$ 18,066
Maintenance And Protection Of Traffic (15%)					\$ 90,328
Erosion Control (1%)					\$ 6,022
Contractor Quality Control (2%)					\$ 12,044
Construction Surveying And Layout (2%)					\$ 12,044
Other Item Subtotal					\$740,685
Mobilization (12%)					\$ 88,883
Construction Subtotal					\$ 829,568
Engineering Design (10%)					\$ 82,957
Construction Engineering and Contingencies (20%)					\$ 165,914
Indirect Cost Allocation (10.02%)					\$ 83,123
Construction Total					\$ 1,161,562

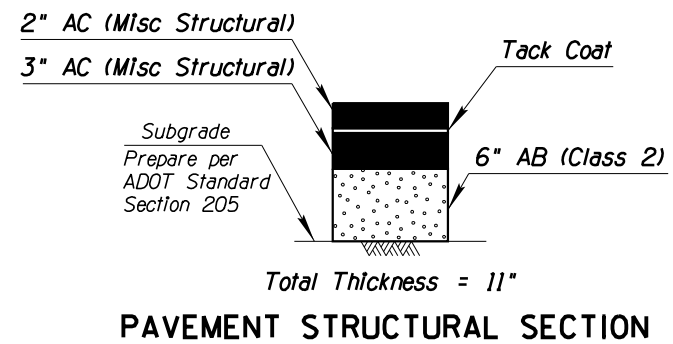
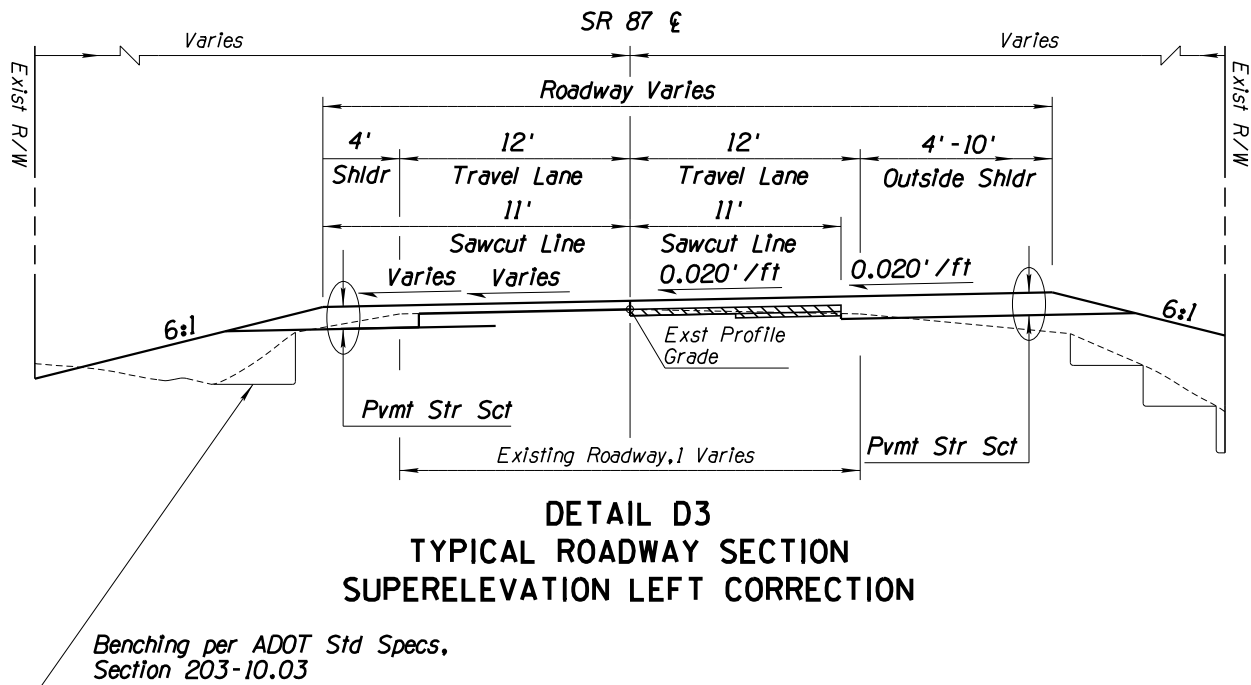
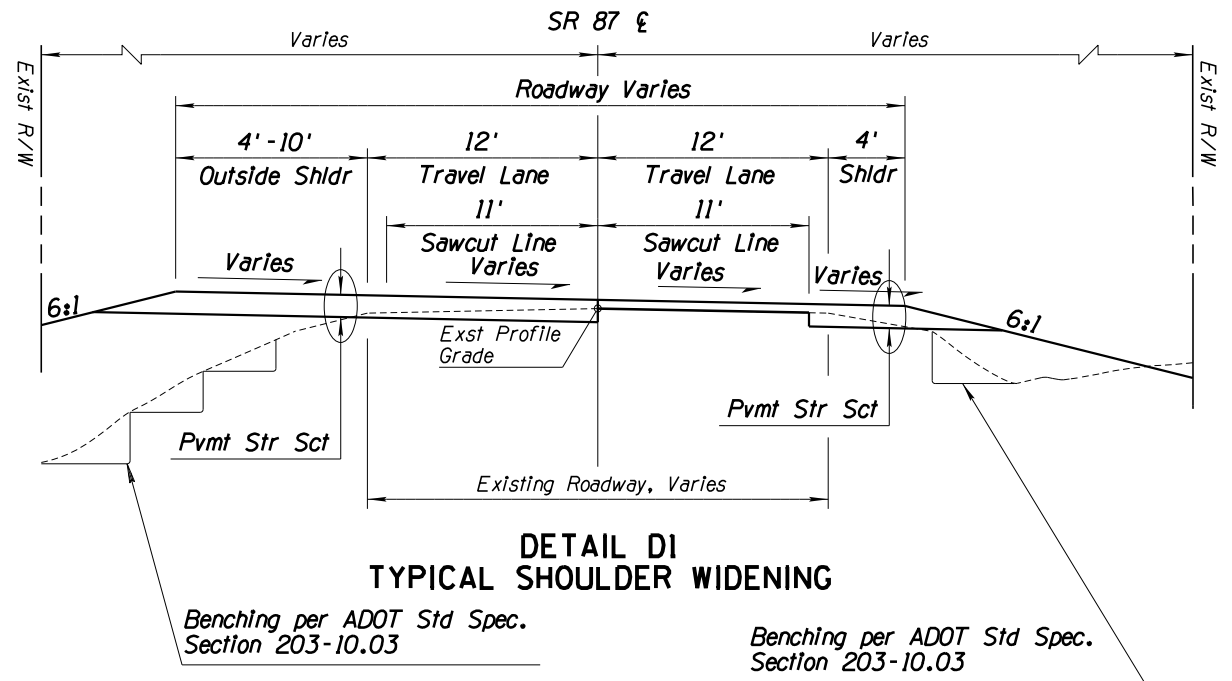
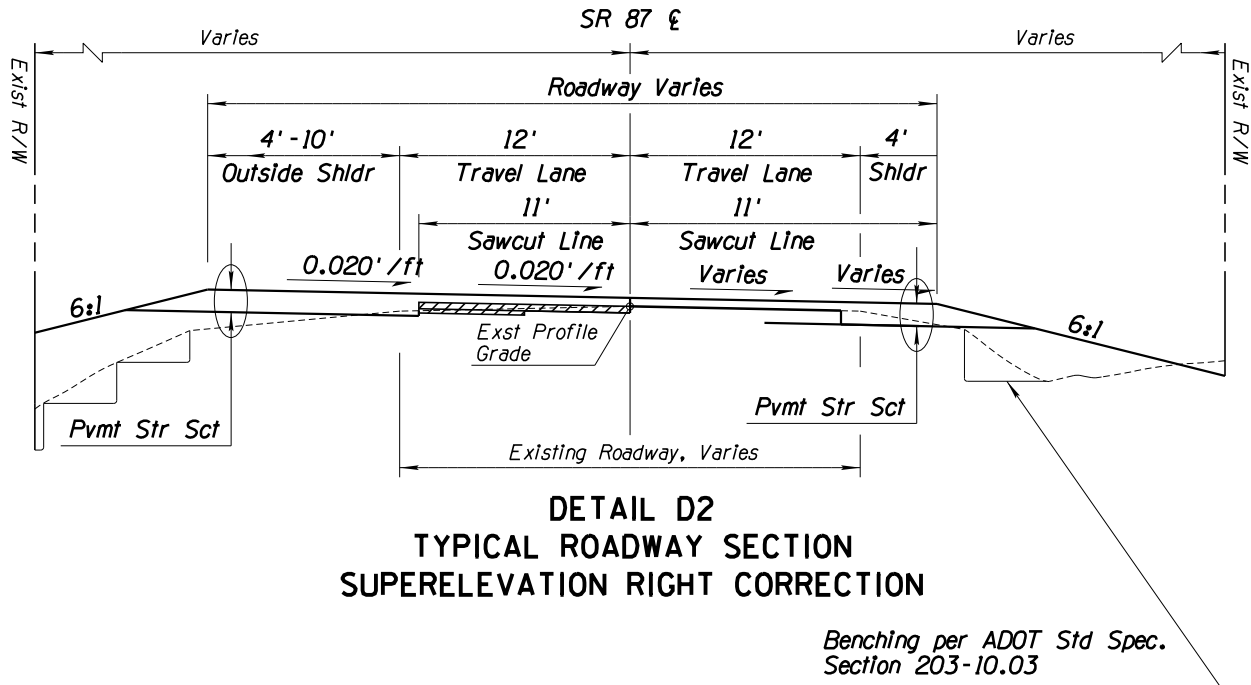
89. Southbound right-turn lane at the North Rye Crossover (MP 240.9)

ITEM NO	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
2010011	CLEARING AND GRUBBING	ACRE	1	\$5,000.00	\$5,000
2020029	REMOVAL OF ASPHALTIC CONCRETE PAVEMENT	SQ.YD.	55	\$35.00	\$1,925
2020201	SAW CUTTING	L.FT.	490	\$2.50	\$1,225
2030301	ROADWAY EXCAVATION	CU.YD.	440	\$10.00	\$4,400
3030022	AGGREGATE BASE, CLASS 2	CU.YD.	236	\$120.00	\$28,320
4090003	ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL)	TON	154	\$160.00	\$24,640
4110001	ASPHALTIC CONCRETE FRICTION COURSE (MISC.)	TON	12	\$120.00	\$1,440
6080101	MISCELLANEOUS WORK (SIGNS)	L.SUM	1	\$2,000.00	\$2,000
7041501	PAVEMENT MARKINGS	L.SUM	1	\$490.00	\$490
8050003	SEEDING (CLASS II)	ACRE	1	\$3,500.00	\$3,500
9240050	MISCELLANEOUS WORK (PUBLIC RELATIONS)	L.SUM	1	\$3,000.00	\$3,000
9280037	GROUND-IN RUMBLE STRIP (12 INCH)	L.FT.	490	\$1.50	\$735
Roadway Construction Subtotal					\$76,675
Unidentified Item Allowance (15%)					\$ 11,502
Subtotal					\$88,177
Water Supply/Dust Palliative (3%)					\$ 2,646
Maintenance And Protection Of Traffic (15%)					\$ 13,227
Erosion Control (1%)					\$ 882
Contractor Quality Control (2%)					\$ 1,764
Construction Surveying And Layout (2%)					\$ 1,764
Other Item Subtotal					\$108,460
Mobilization (12%)					\$ 13,016
Construction Subtotal					\$ 121,476
Engineering Design (10%)					\$ 12,148
Construction Engineering and Contingencies (20%)					\$ 24,296
Indirect Cost Allocation (10.02%)					\$ 12,172
Construction Total					\$ 170,092

ATTACHMENT 5: PRELIMINARY PLANS

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
-	ARIZ.	-	-	59	

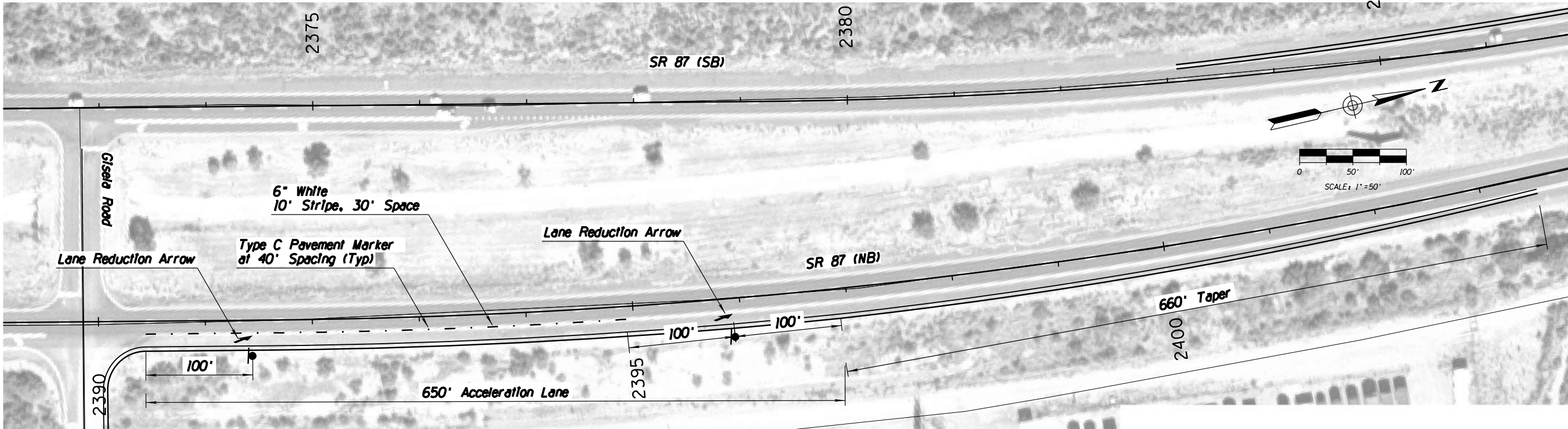
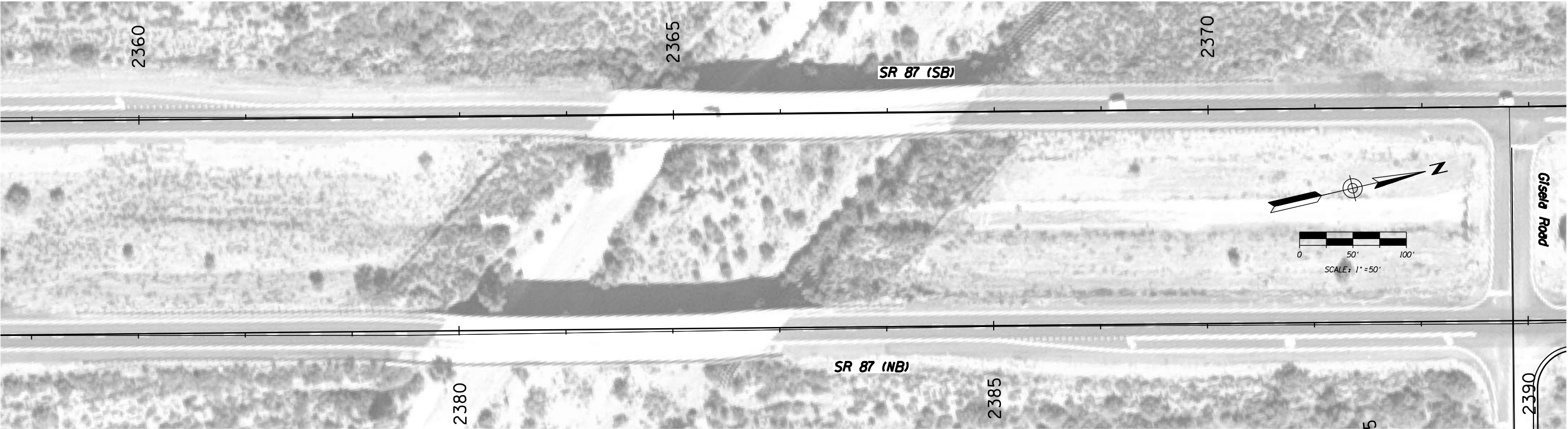
SR 87 MILE POST STATION			
MP NB	STATION	MP SB	STATION
196	101+73	196	101+18
197	155+53	197	154+02
198	207+69	198	207+94
199	261+02	199	259+13
200	314+21	200	311+72
201	367+73	201	364+06
202	419+18	202	417+81
203	471+36	203	470+65
204	526+28	204	523+10
205	577+70	205	575+84
206	630+73	206	628+30
207	682+81	207	680+28
208	736+47	208	734+12
209	788+55	209	786+62
210	842+08	210	839+50
211	894+91	211	890+40
212	942+20	212	939+42
213	998+65	213	995+55
214	1051+86	214	1050+06
215	1105+38	215	1095+77
216	1158+68	216	1147+95
217	1213+92	217	1199+48
218	1268+31	218	1250+20
219	1318+19	219	1304+12
220	1374+67	220	1359+76
221	1427+95	221	1412+99
222	1480+60	222	1465+84
223	1533+97	223	1518+89
224	1584+61	224	1570+72
225	1639+50	225	1625+29
226	1689+86	226	1676+32
227	1740+23	227	1726+14
228	1792+50	228	1778+04
229	1845+24	229	1831+98
230	1898+50	230	1884+70
231	1949+61	231	1933+71
232	1999+33	232	1985+29
233	2047+74	233	2033+06
234	2101+13	234	2085+05
235	2154+59	235	2137+29
236	2207+09	236	2189+44
237	2259+88	237	2240+86
238	2311+66	238	2293+85
239	2364+28	239	2344+91
240	2416+01	240	2397+41
241	2467+79	241	2448+96
242	2518+51	242	2496+68
243	2571+26	243	2549+70
244	2620+38	244	2601+82
245	2677+47	245	2655+01
246	2729+53	246	2703+04
247	2741+30	247	2747+68
248	2794+18	248	2801+15
249	2847+25	249	2854+41
250	2899+69	250	2906+58



	NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION URBAN PROJECT MANAGEMENT		PRELIMINARY STAGE I Review NOT FOR CONSTRUCTION OR RECORDING
DESIGN	T. Raddeman	8/19			
DRAWN	D. Klebosky	8/19			
CHECKED	V. Rodriguez	8/19			
Kimley»Horn © 2019 KIMLEY-HORN AND ASSOCIATES, INC.					
ROUTE	LOCATION				
SR 87	MP 190 TO MP 250				
TRACS NO. XXXXX XXX			XXX-X(XXX)X	___ <i>OF</i> ___	

SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE

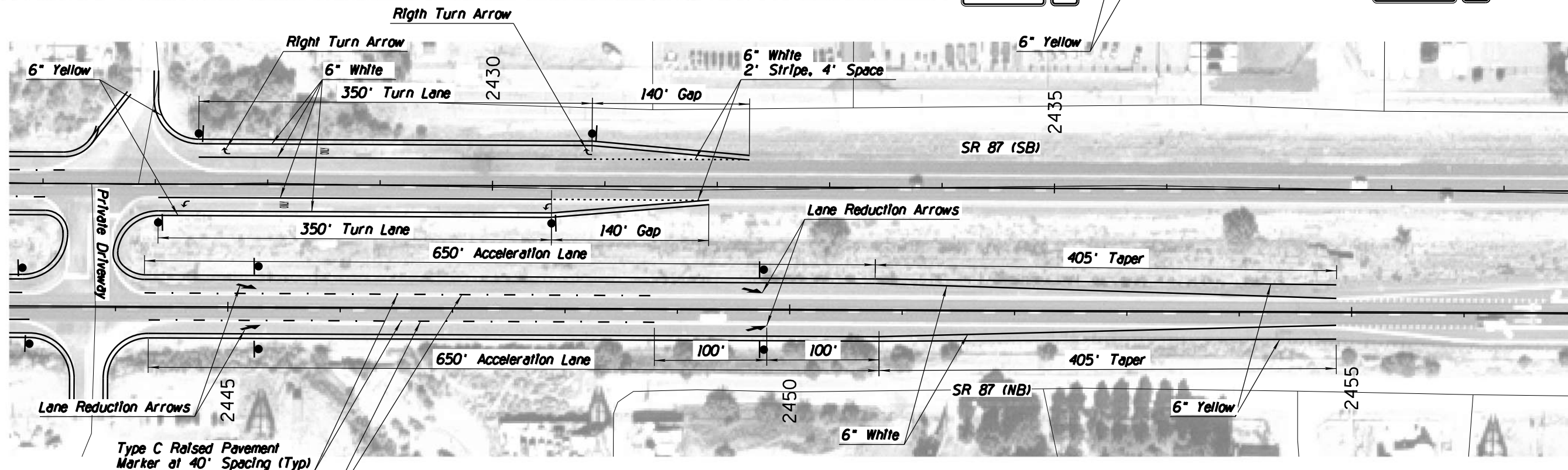
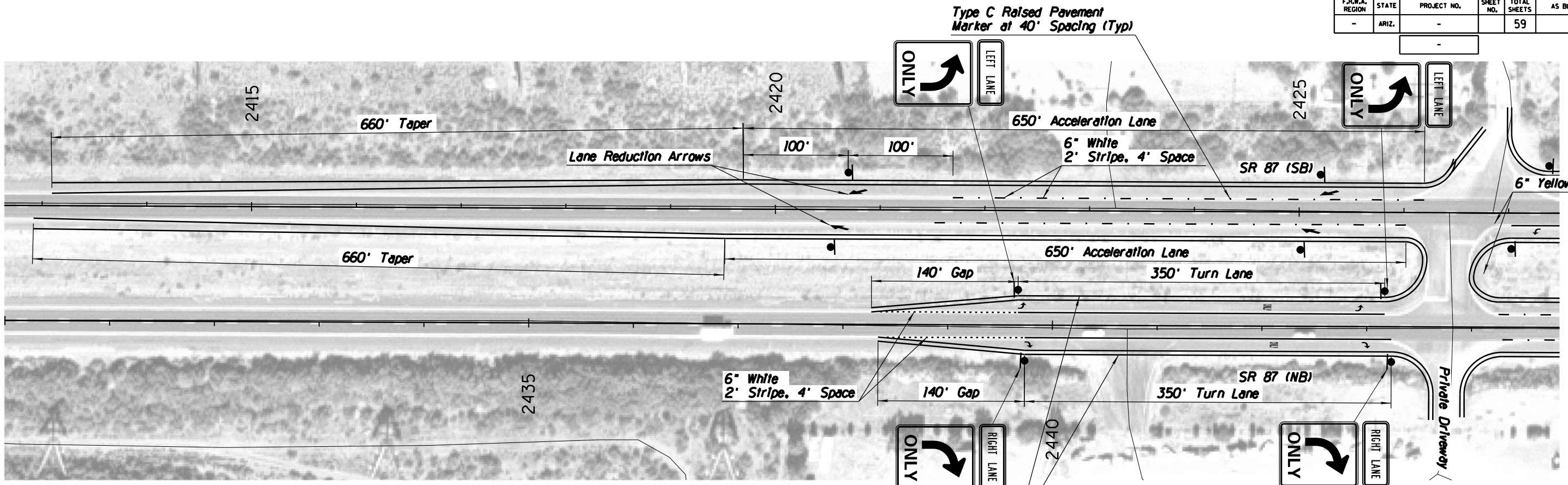
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
-	ARIZ.	-	-	59	



DESIGN	T. Raddeman	DATE	8/19	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION URBAN PROJECT MANAGEMENT	PRELIMINARY STAGE I Review NOT FOR CONSTRUCTION OR RECORDING
DRAWN	D. Klebosky	DATE	8/19		
CHECKED	V. Rodriguez	DATE	8/19		
Kimley»Horn <small>© 2019 KIMLEY-HORN AND ASSOCIATES, INC.</small>				PROJECT #9 RYE IMPROVEMENTS MP 239 TO 241	
ROUTE	SR 87	LOCATION	MP 190 TO MP 250		DWG NO. 8.1-01
TRACS NO. XXXXX XXX			XXX-X(XXX)X		OF

DATE- LOCATION- REVISIONS- SURVEY NO. DATE- LOCATION- REVISIONS- SURVEY NO.

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
-	ARIZ.	-	-	59	



DESIGN	NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION URBAN PROJECT MANAGEMENT	PRELIMINARY STAGE I Review NOT FOR CONSTRUCTION OR RECORDING
DRAWN	T. Raddeman	8/19	PROJECT #9 RYE IMPROVEMENTS MP 239 TO 241	DWG NO. 8.3-01
CHECKED	D. Klebosky	8/19		
Kimley»Horn © 2019 KIMLEY-HORN AND ASSOCIATES, INC.				
ROUTE	LOCATION			
SR 87	MP 190 TO MP 250			
TRACS NO. XXXXX XXX			XXX-X(XXX)X	OF

**PACKAGE PROJECT 10 –
NORTHBOUND IMPROVEMENTS
(MP 241-248)**

ADOT SR 87 Corridor Development Study

PRELIMINARY SCOPING REPORT

GENERAL PROJECT INFORMATION	
Date: 8/20/2019	ADOT Project Manager:
Project Name: Northbound Improvements (MP 241-248)	
City/Town: N/A	County: Gila
COG/MPO: CAG	ADOT District: Northcentral
Primary Route/Street: SR 87	
Beginning Limit: 241	
End Limit: 248	
Project Length: 8 Miles	
Right of Way Ownership(s) (where proposed project would occur): <i>(check all that apply)</i> <input type="checkbox"/> City/Town <input type="checkbox"/> County <input checked="" type="checkbox"/> ADOT <input type="checkbox"/> Private <input type="checkbox"/> Federal <input type="checkbox"/> Tribal <input type="checkbox"/> Other	
Adjacent Land Ownership(s): <i>(Check all that apply)</i> <input type="checkbox"/> City/Town <input type="checkbox"/> County <input type="checkbox"/> ADOT <input type="checkbox"/> Private <input checked="" type="checkbox"/> Federal <input type="checkbox"/> Tribal <input type="checkbox"/> Other	

PROJECT NEED
Shoulder widths are insufficient and slow-moving trucks on the uphill grade cause large speed differentials.

PROJECT PURPOSE			
What is the Primary Purpose of the Project?	<input type="checkbox"/> Preservation	<input checked="" type="checkbox"/> Modernization	<input checked="" type="checkbox"/> Expansion
Increase shoulder widths to current standards to create a consistent recovery area and provide access for emergency vehicles. Construct a climbing lane to remove slow-moving truck traffic from the through travel lanes.			

PROJECT RISKS	
Check any risks identified that may impact the project's scope, schedule, or budget:	
<input type="checkbox"/> Access/Traffic Control/Detour Issues	<input type="checkbox"/> Right-of-Way
<input type="checkbox"/> Constructability/Construction Window Issues	<input type="checkbox"/> Environmental
<input type="checkbox"/> Stakeholder Issues	<input type="checkbox"/> Utilities
<input type="checkbox"/> Structures & Geotech	<input type="checkbox"/> Other:
Risk Description: <i>(if a box is checked above, briefly explain the risk)</i> Click or tap here to enter text.	

POTENTIAL FUNDING SOURCE(S)				
Anticipated Project Design/Construction Funding Type: <i>(Check all that applied)</i>	<input type="checkbox"/> STBG	<input type="checkbox"/> TAP	<input type="checkbox"/> HSIP	<input checked="" type="checkbox"/> State
	<input type="checkbox"/> Local	<input type="checkbox"/> Private	<input type="checkbox"/> Tribal	<input type="checkbox"/> Other

COST ESTIMATE			
Design \$944,000.00	Right-of-Way \$0.00	Construction \$12,273,800.00	Total \$13,217,800.00

RECOMMENDED PROJECT DELIVERY
Delivery: <input type="checkbox"/> Design-Bid-Build <input type="checkbox"/> Design-Build <input checked="" type="checkbox"/> Other:
Design Program Year: Click or tap here to enter text.
Construction Program Year: Click or tap here to enter text.

ATTACHMENTS

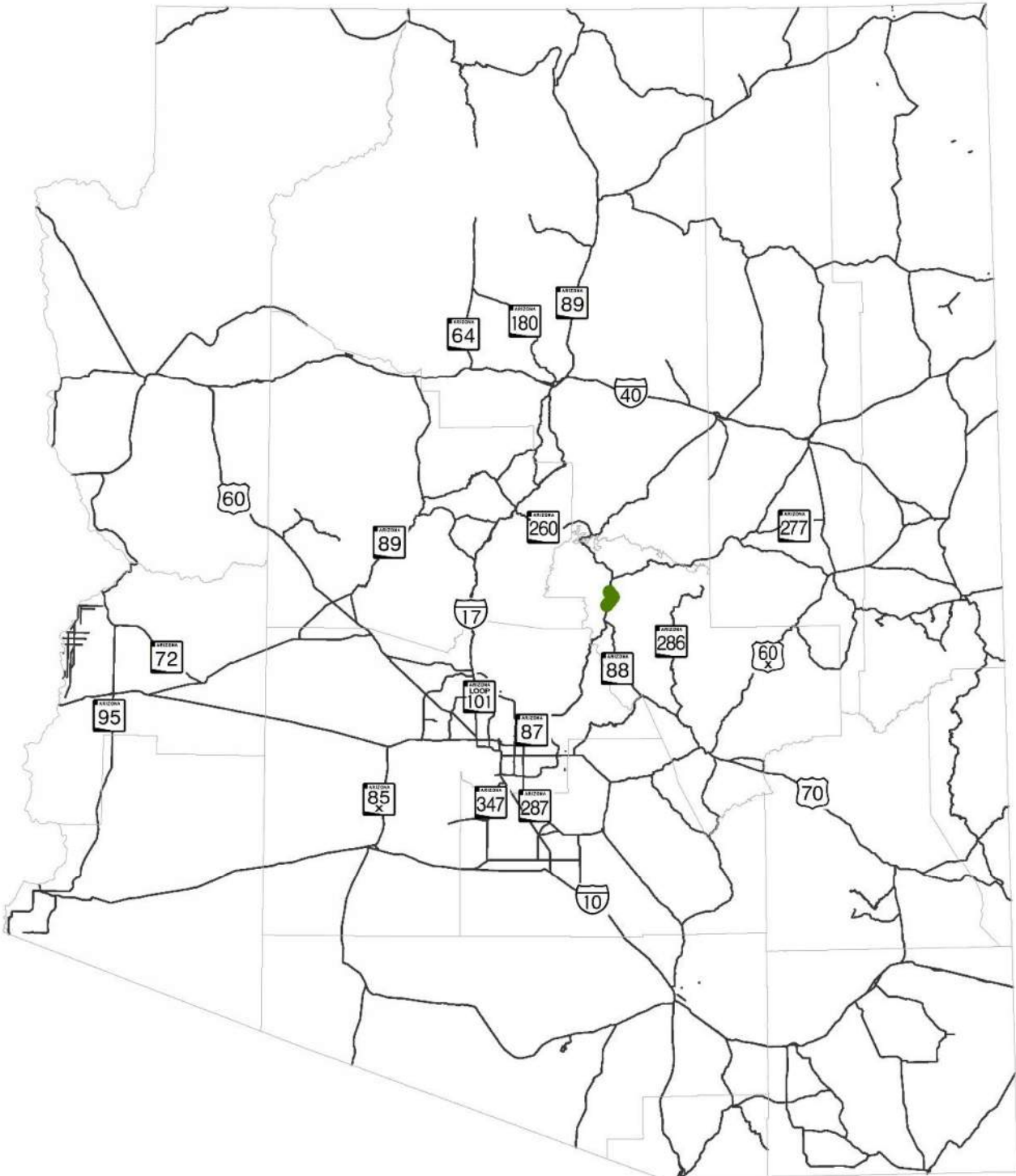
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|--|
| <ol style="list-style-type: none">1. Project Scope of Work2. State Location Map3. Project Vicinity Map4. Itemized Cost Estimates5. Conceptual Design Plans |
|--|

ATTACHMENT 1: SCOPE OF WORK

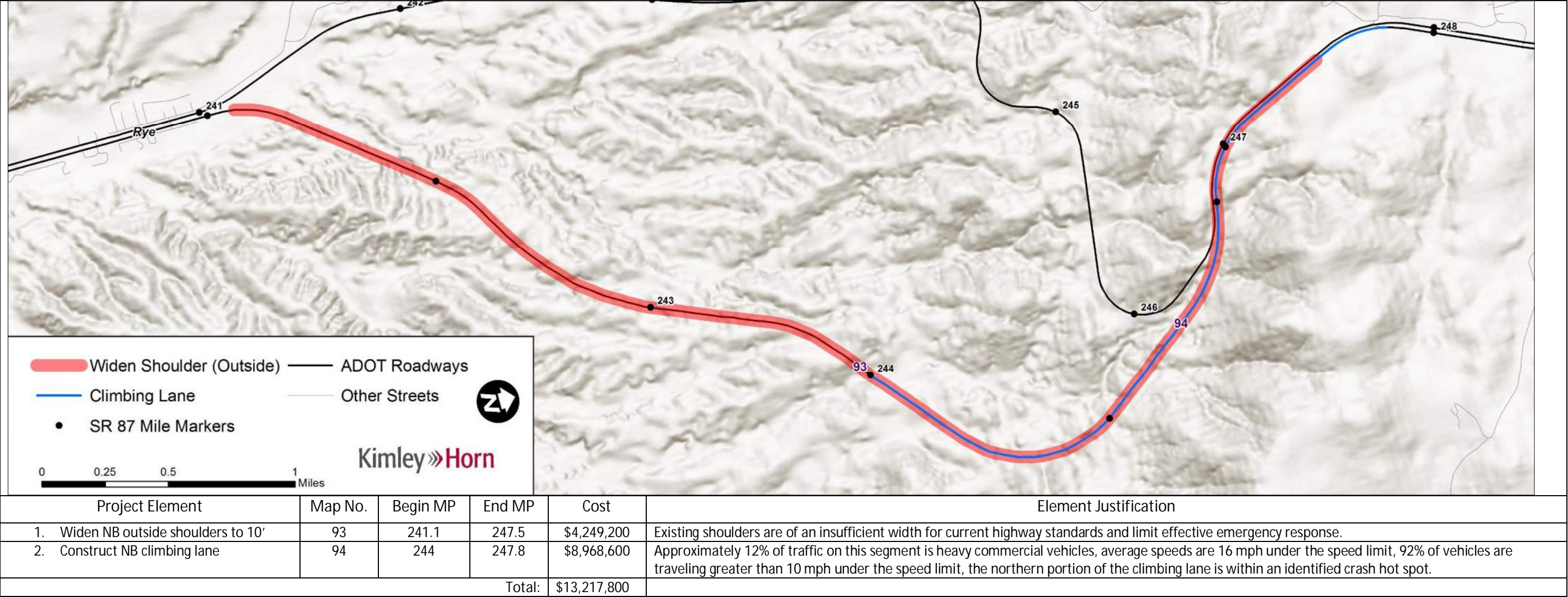
<i>(Provide a detailed breakdown of the project's scope of work using bullet form)</i>
--

- | |
|---|
| <ul style="list-style-type: none">• Widen northbound outside shoulder to ten feet (MP 241.1-247.5)• Construct a northbound climbing lane (MP 244-2247.8) |
|---|

ATTACHMENT 2: STATE LOCATION MAP



ATTACHMENT 3: PROJECT VICINITY MAP



ATTACHMENT 4: ITEMIZED COST ESTIMATES



SR87 Corridor Development Study ITEMIZED COST ESTIMATE

93. Widen outside shoulder to 10' – 241.1-247.5

Project Location: SR87 Corridor Development Study

ITEM NO	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
2010011	CLEARING AND GRUBBING	ACRE	8	\$5,000.00	\$40,000
2020029	REMOVAL OF ASPHALTIC CONCRETE PAVEMENT	SQ.YD.	3,593	\$20.00	\$71,860
2020053	REMOVE (GR TERMINAL)	EACH	4	\$400.00	\$1,600
2020071	REMOVE GUARD RAIL	L.FT.	8,083	\$5.00	\$40,415
2020201	SAW CUTTING	L.FT.	32,332	\$2.50	\$80,830
2030301	ROADWAY EXCAVATION	CU.YD.	47,900	\$7.00	\$335,300
3030022	AGGREGATE BASE, CLASS 2	CU.YD.	10,778	\$50.00	\$538,900
4090003	ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL)	TON	5,347	\$80.00	\$427,760
4110001	ASPHALTIC CONCRETE FRICTION COURSE (MISC.)	TON	318	\$90.00	\$28,620
6080101	MISCELLANEOUS WORK (SIGNS)	L.SUM	1	\$4,000.00	\$4,000
7041501	PAVEMENT MARKINGS	L.SUM	1	\$32,332.00	\$32,332
8050003	SEEDING (CLASS II)	ACRE	8	\$3,500.00	\$28,000
9050001	GUARD RAIL, W-BEAM, SINGLE FACE	L.FT.	8,083	\$30.00	\$242,490
9050026	GUARD RAIL TERMINAL (TANGENT TYPE)	EACH	4	\$2,500.00	\$10,000
9050036	GUARD RAIL, ANCHOR ASSEMBLY	EACH	4	\$800.00	\$3,200
9240050	MISCELLANEOUS WORK (PUBLIC RELATIONS)	L.SUM	1	\$6,000.00	\$6,000
9280037	GROUND-IN RUMBLE STRIP (12 INCH)	L.FT.	32,332	\$0.75	\$24,249
Roadway Construction Subtotal					\$1,915,556
Unidentified Item Allowance (15%)					\$ 287,334
Subtotal					\$2,202,890
Water Supply/Dust Palliative (3%)					\$ 66,087
Maintenance And Protection Of Traffic (15%)					\$ 330,434
Erosion Control (1%)					\$ 22,029
Contractor Quality Control (2%)					\$ 44,058
Construction Surveying And Layout (2%)					\$ 44,058
Other Item Subtotal					\$2,709,556
Mobilization (12%)					\$ 325,147
Construction Subtotal					\$ 3,034,703
Engineering Design (10%)					\$ 303,471
Construction Engineering and Contingencies (20%)					\$ 606,941
Indirect Cost Allocation (10.02%)					\$ 304,078
Construction Total					\$ 4,249,193

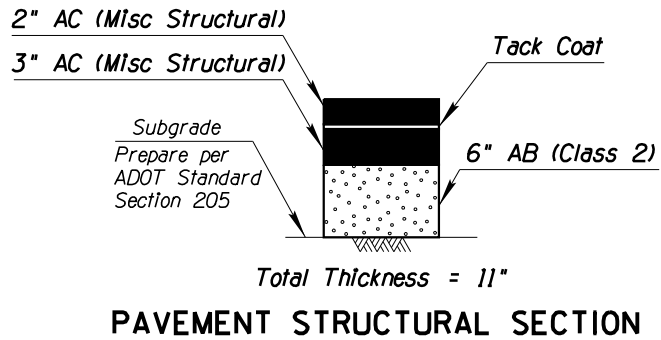
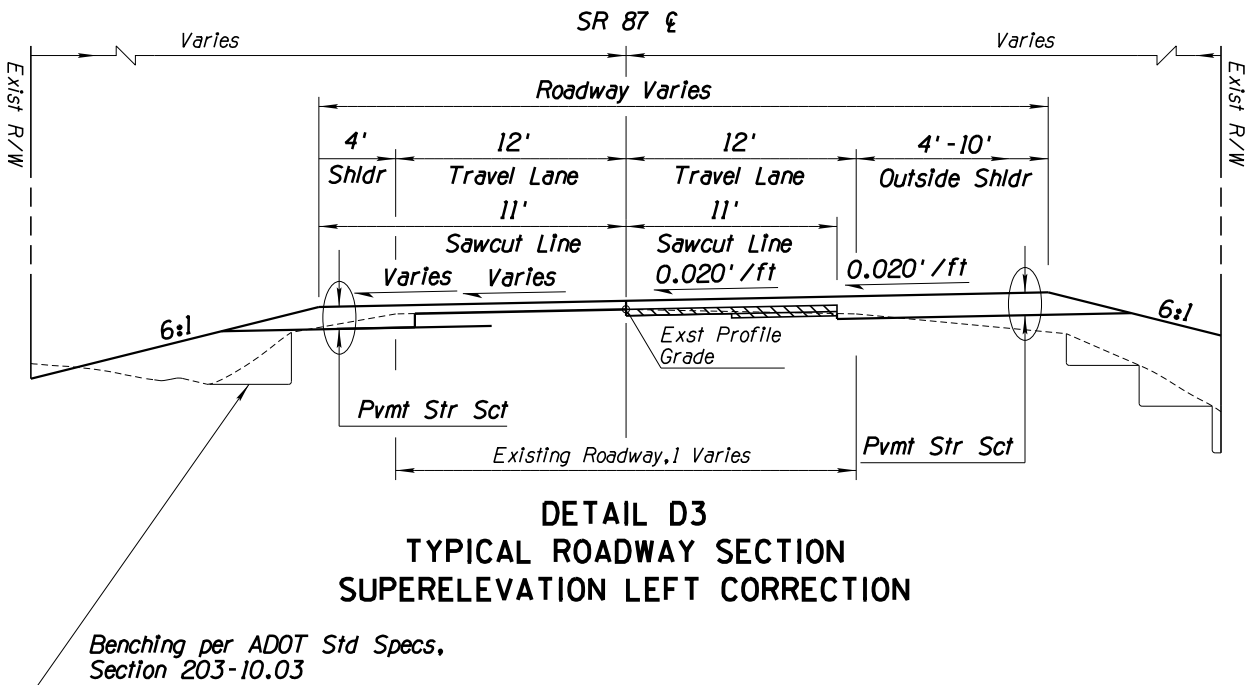
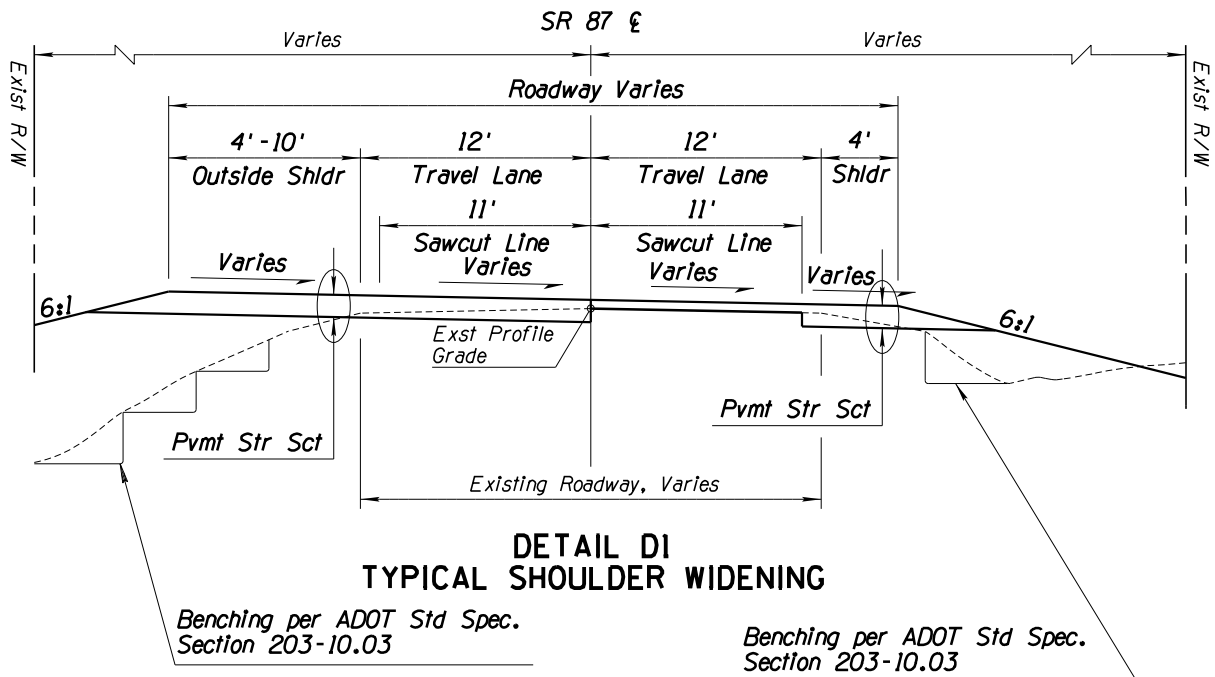
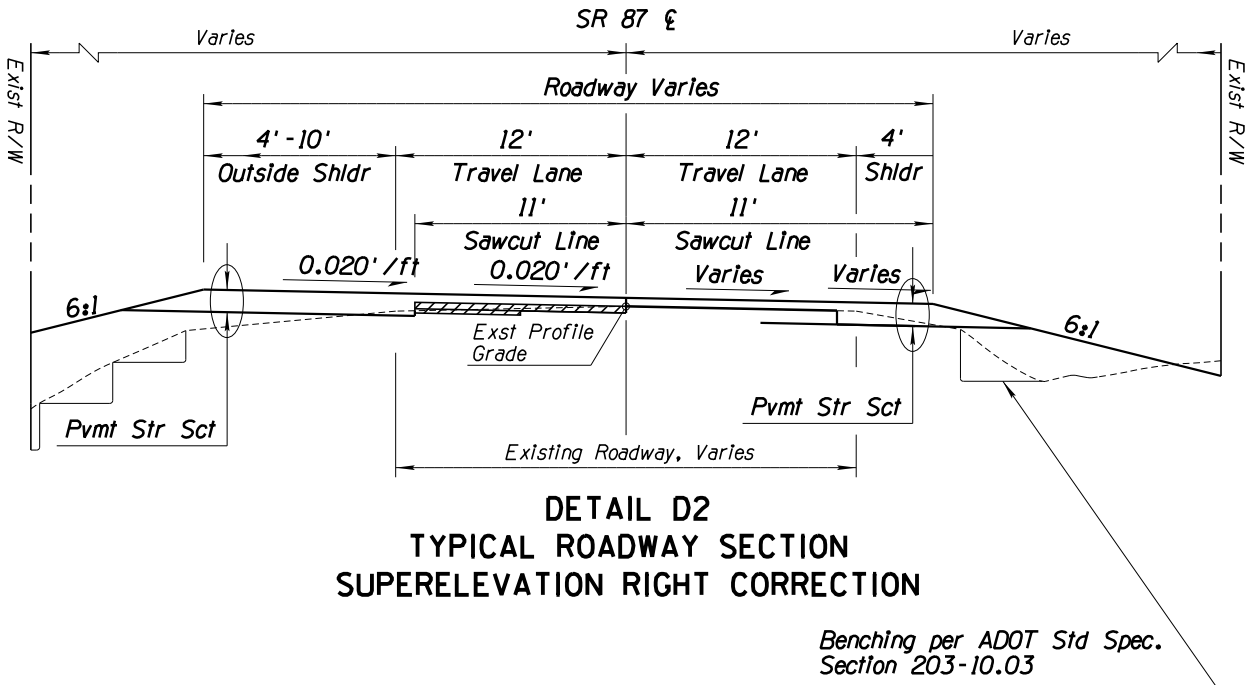
94. Construct climbing lane – (MP 244-247.8)

ITEM NO	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
2010011	CLEARING AND GRUBBING	ACRE	14	\$5,000.00	\$70,000
2020029	REMOVAL OF ASPHALTIC CONCRETE PAVEMENT	SQ.YD.	2,230	\$20.00	\$44,600
2020053	REMOVE (GR TERMINAL)	EACH	4	\$400.00	\$1,600
2020071	REMOVE GUARD RAIL	L.FT.	5,017	\$5.00	\$25,085
2020201	SAW CUTTING	L.FT.	20,065	\$2.50	\$50,163
2030301	ROADWAY EXCAVATION	CU.YD.	1,490	\$10.00	\$14,900
2030901	BORROW	CU.YD.	148,630	\$12.00	\$1,783,560
3030022	AGGREGATE BASE, CLASS 2	CU.YD.	14,120	\$50.00	\$706,000
4090003	ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL)	TON	10,692	\$80.00	\$855,360
4110001	ASPHALTIC CONCRETE FRICTION COURSE (MISC.)	TON	855	\$90.00	\$76,950
6080101	MISCELLANEOUS WORK (SIGNS)	L.SUM	1	\$4,000.00	\$4,000
7041501	PAVEMENT MARKINGS	L.SUM	1	\$20,064.00	\$20,064
8050003	SEEDING (CLASS II)	ACRE	14	\$3,500.00	\$49,000
9050001	GUARD RAIL, W-BEAM, SINGLE FACE	L.FT.	10,032	\$30.00	\$300,960
9050026	GUARD RAIL TERMINAL (TANGENT TYPE)	EACH	6	\$2,500.00	\$15,000
9050036	GUARD RAIL, ANCHOR ASSEMBLY	EACH	6	\$800.00	\$4,800
9240050	MISCELLANEOUS WORK (PUBLIC RELATIONS)	L.SUM	1	\$6,000.00	\$6,000
9280037	GROUND-IN RUMBLE STRIP (12 INCH)	L.FT.	20,065	\$0.75	\$15,049
Roadway Construction Subtotal					\$4,043,090
Unidentified Item Allowance (15%)					\$ 606,464
Subtotal					\$4,649,554
Water Supply/Dust Palliative (3%)					\$ 139,487
Maintenance And Protection Of Traffic (15%)					\$ 697,434
Erosion Control (1%)					\$ 46,496
Contractor Quality Control (2%)					\$ 92,992
Construction Surveying And Layout (2%)					\$ 92,992
Other Item Subtotal					\$5,718,955
Mobilization (12%)					\$ 686,275
Construction Subtotal					\$ 6,405,230
Engineering Design (10%)					\$ 640,524
Construction Engineering and Contingencies (20%)					\$ 1,281,047
Indirect Cost Allocation (10.02%)					\$ 641,805
Construction Total					\$ 8,968,607

ATTACHMENT 5: PRELIMINARY PLANS

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
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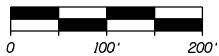
SR 87 MILE POST STATION			
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197	155+53	197	154+02
198	207+69	198	207+94
199	261+02	199	259+13
200	314+21	200	311+72
201	367+73	201	364+06
202	419+18	202	417+81
203	471+36	203	470+65
204	526+28	204	523+10
205	577+70	205	575+84
206	630+73	206	628+30
207	682+81	207	680+28
208	736+47	208	734+12
209	788+55	209	786+62
210	842+08	210	839+50
211	894+91	211	890+40
212	942+20	212	939+42
213	998+65	213	995+55
214	1051+86	214	1050+06
215	1105+38	215	1095+77
216	1158+68	216	1147+95
217	1213+92	217	1199+48
218	1268+31	218	1250+20
219	1318+19	219	1304+12
220	1374+67	220	1359+76
221	1427+95	221	1412+99
222	1480+60	222	1465+84
223	1533+97	223	1518+89
224	1584+61	224	1570+72
225	1639+50	225	1625+29
226	1689+86	226	1676+32
227	1740+23	227	1726+14
228	1792+50	228	1778+04
229	1845+24	229	1831+98
230	1898+50	230	1884+70
231	1949+61	231	1933+71
232	1999+33	232	1985+29
233	2047+74	233	2033+06
234	2101+13	234	2085+05
235	2154+59	235	2137+29
236	2207+09	236	2189+44
237	2259+88	237	2240+86
238	2311+66	238	2293+85
239	2364+28	239	2344+91
240	2416+01	240	2397+41
241	2467+79	241	2448+96
242	2518+51	242	2496+68
243	2571+26	243	2549+70
244	2620+38	244	2601+82
245	2677+47	245	2655+01
246	2729+53	246	2703+04
247	2741+30	247	2747+68
248	2794+18	248	2801+15
249	2847+25	249	2854+41
250	2899+69	250	2906+58



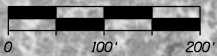
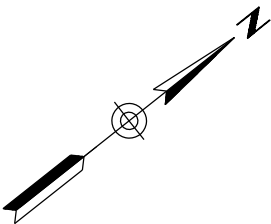
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CHECKED	D. Klebosky	8/19		
	V. Rodriguez	8/19		
Kimley»Horn				
ROUTE SR 87			LOCATION MP 190 TO MP 250	DWG NO.
TRACS NO. XXXXX XXX			XXX-X(XXX)X	OF

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
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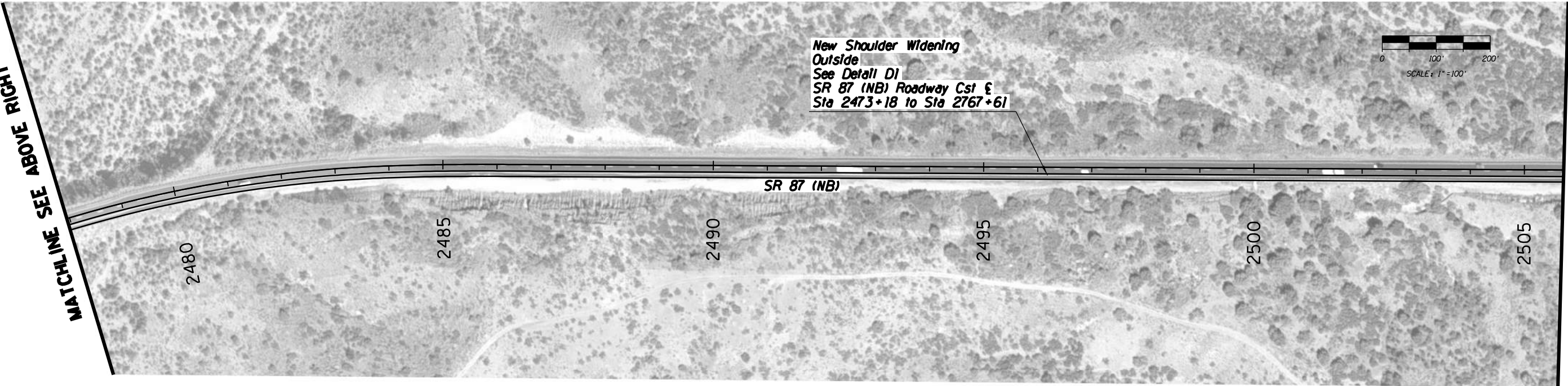
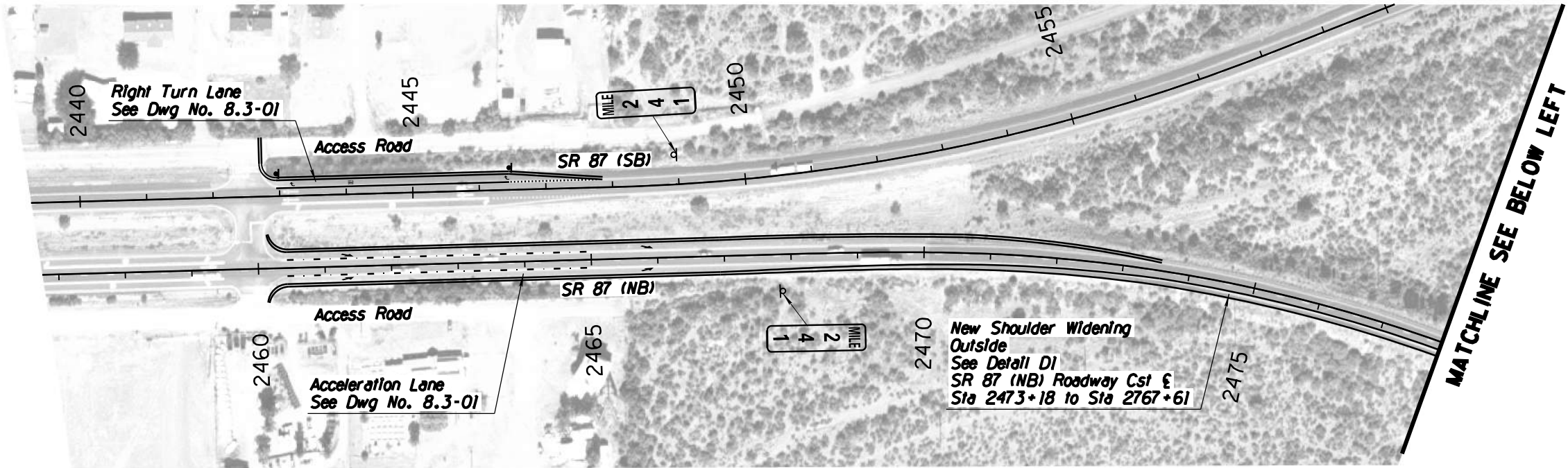
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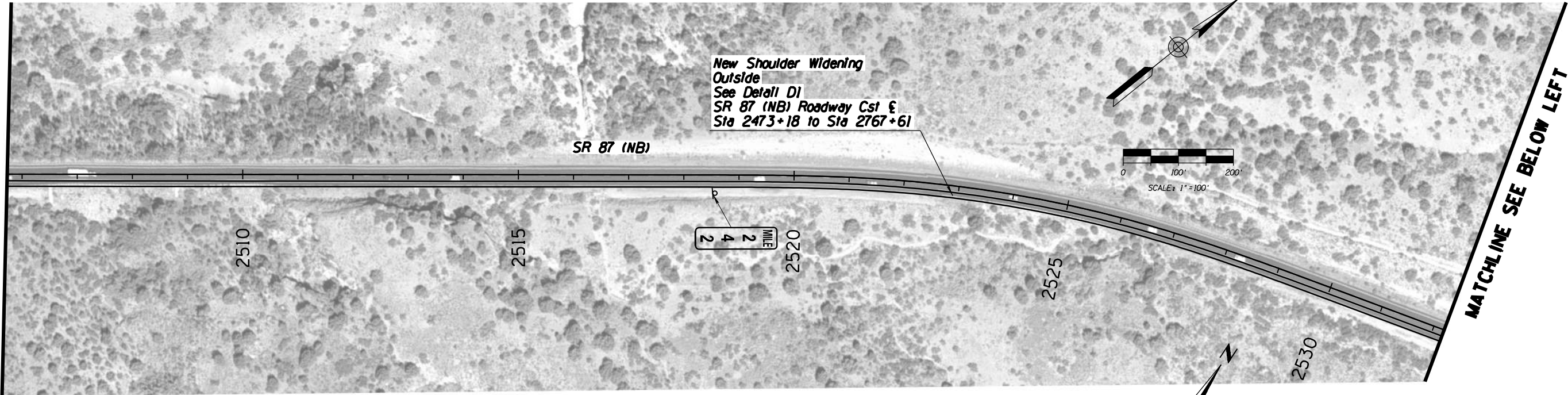
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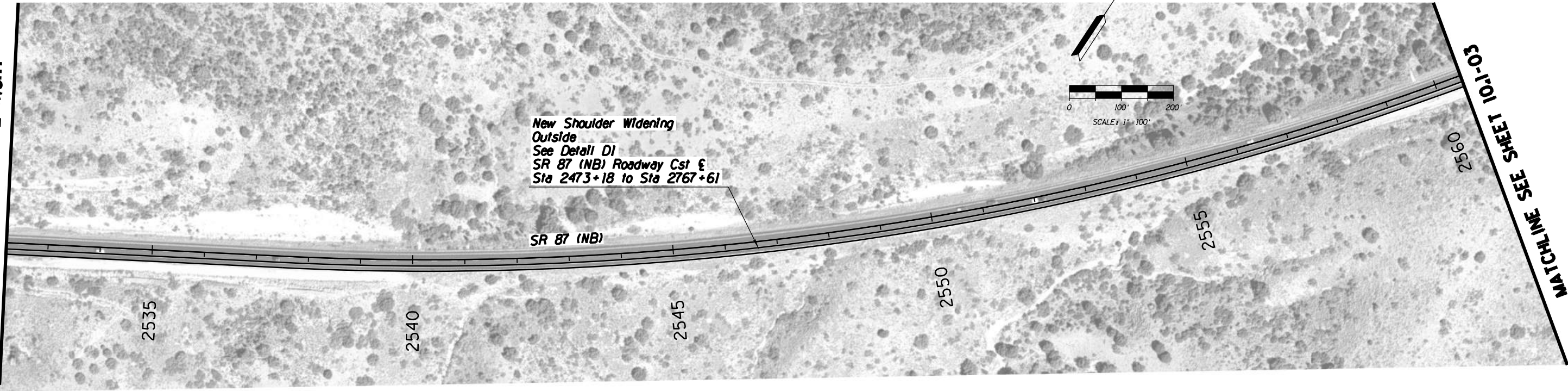
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DRAWN	D. Klebosky		8/19		
CHECKED	V. Rodriguez		8/19	PROJECT 10 NB IMPROVEMENTS MP 241 TO 247.8	
Kimley»Horn © 2019 KIMLEY-HORN AND ASSOCIATES, INC.					
ROUTE		LOCATION			
SR 87		MP 190 TO MP 250			
TRACS NO. XXXXX XXX			XXX-X(XXX)X		___ OF ___

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
-	ARIZ.	-	-	59	

MATCHLINE SEE SHEET 10.1-01

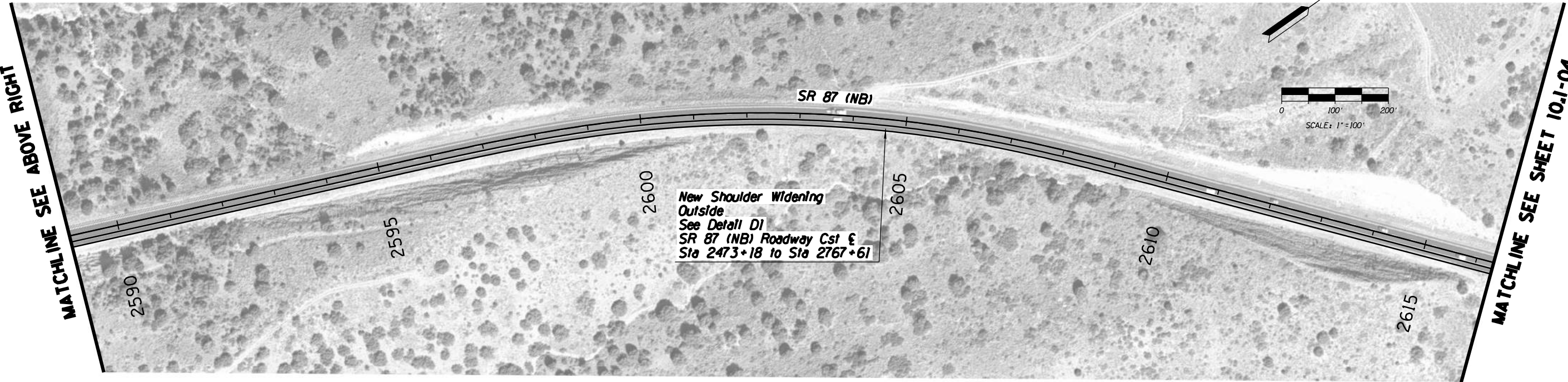
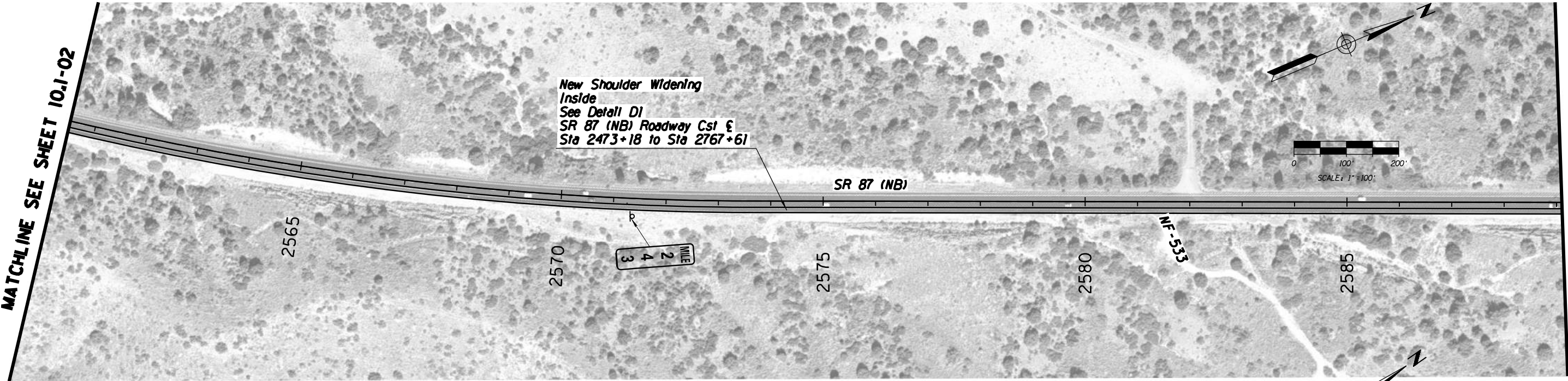


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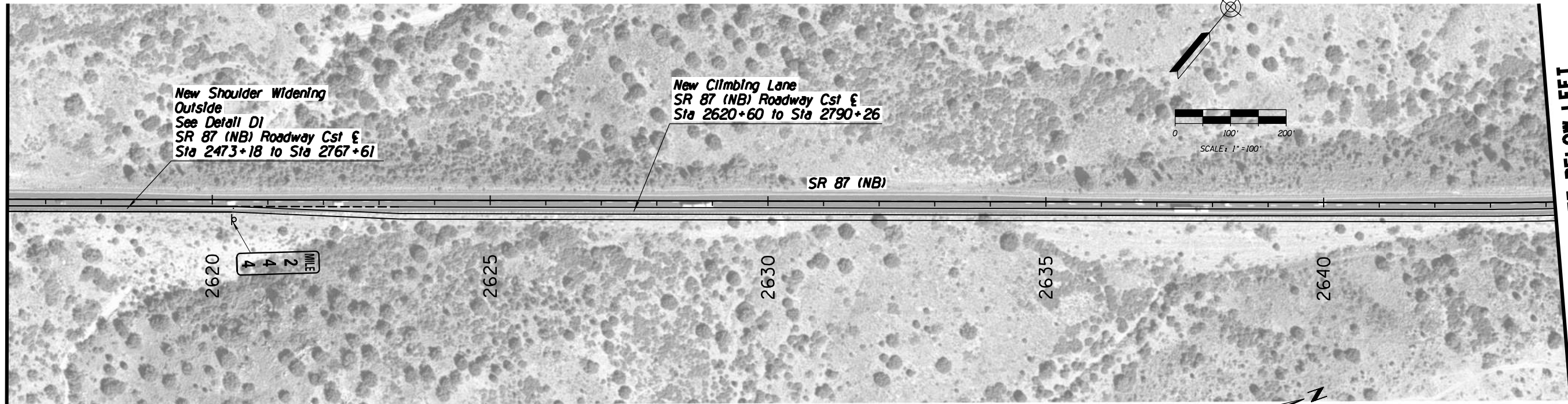
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DRAWN	D. Klebosky		8/19		
CHECKED	V. Rodriguez		8/19		
<div>Kimley»Horn</div> <div>© 2019 KIMLEY-HORN AND ASSOCIATES, INC.</div>				PROJECT #10 NB IMPROVEMENTS MP 241 TO 247.8	
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TRACS NO. XXXXX XXX			XXX-X(XXX)X		
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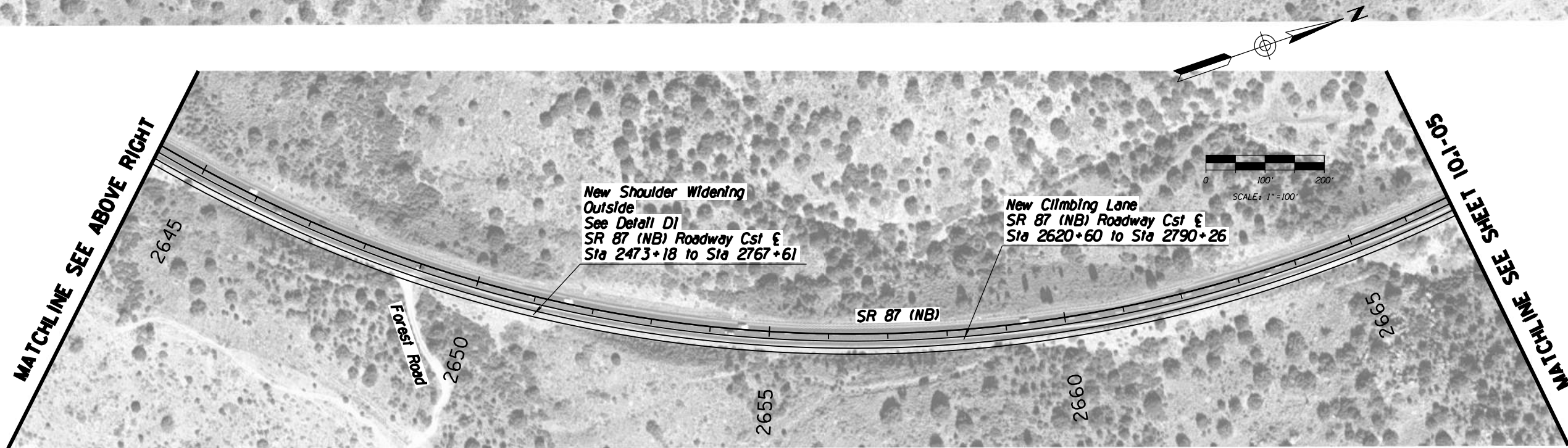


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<div>Kimley»Horn</div> <div>© 2019 KIMLEY-HORN AND ASSOCIATES, INC.</div>					
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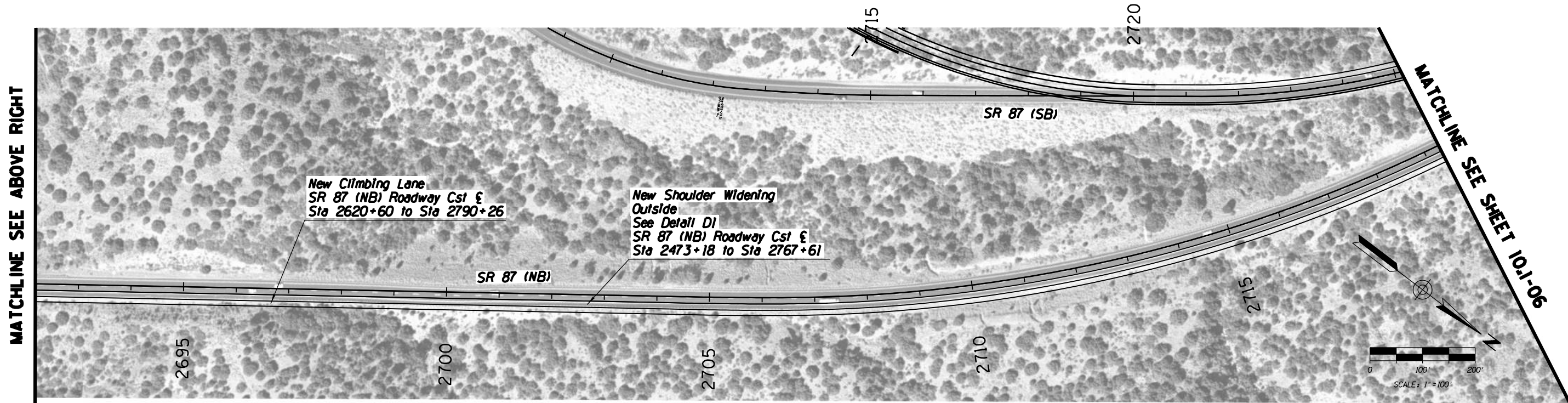
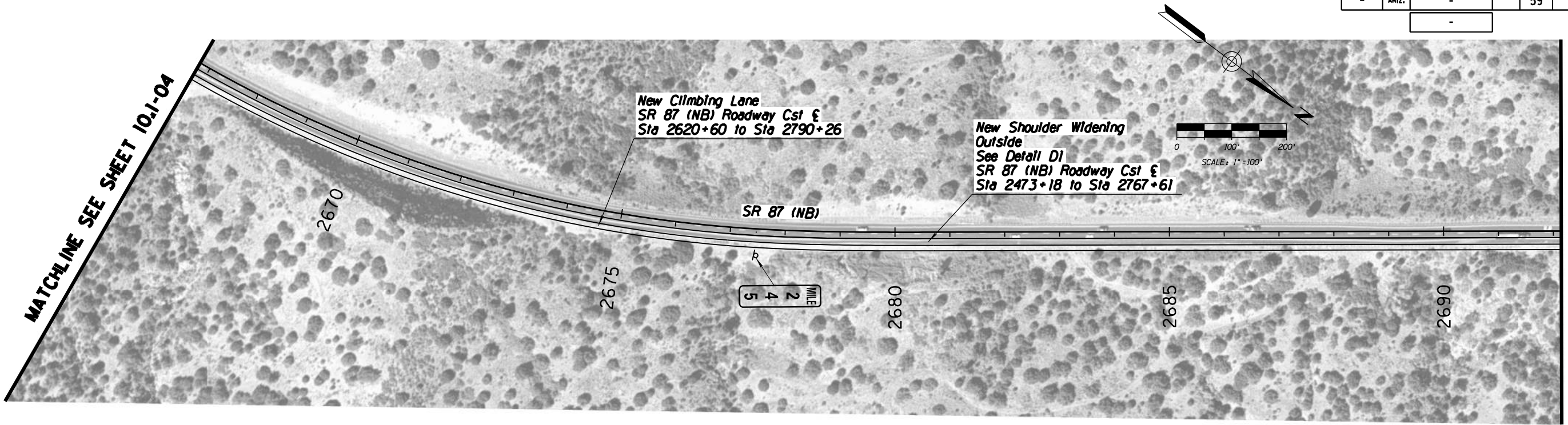


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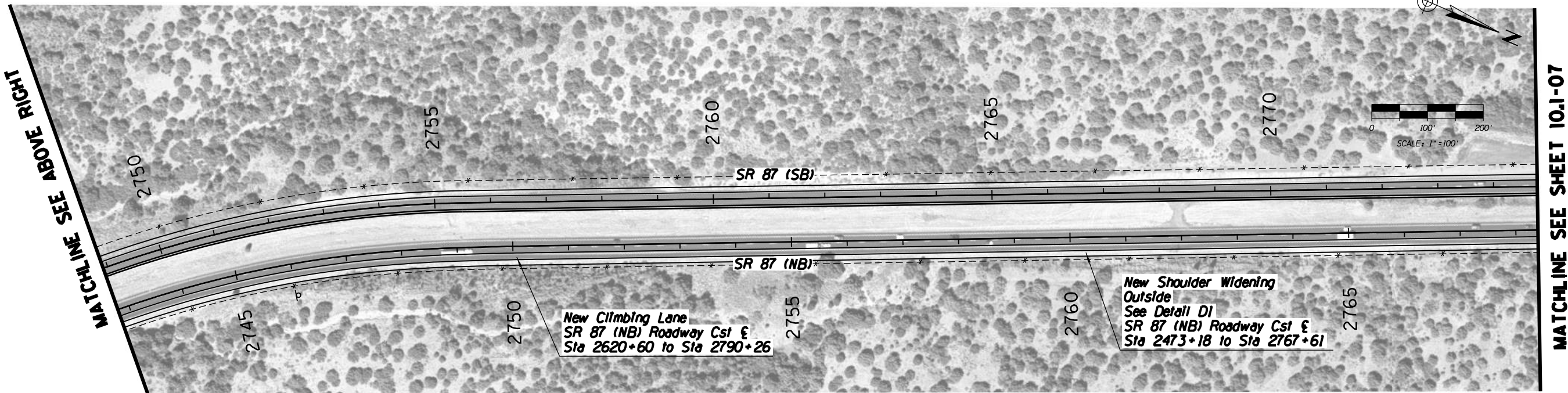
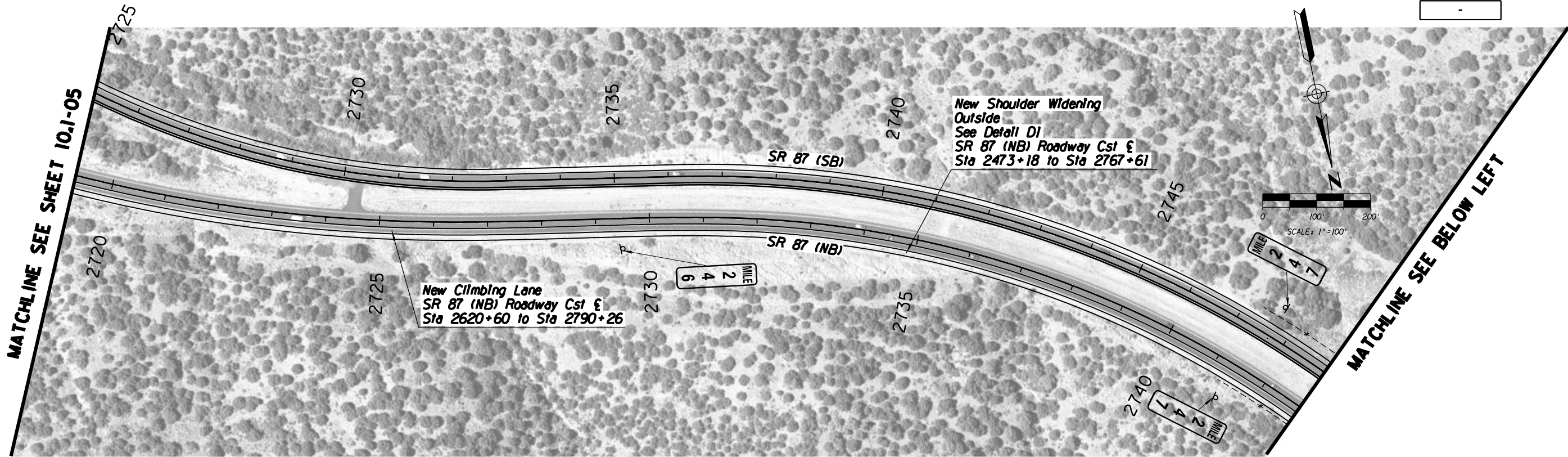
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CHECKED	V. Rodriguez		8/19		
Kimley»Horn © 2019 KIMLEY-HORN AND ASSOCIATES, INC.				PROJECT #10 NB IMPROVEMENTS MP 241 TO 247.8	DWG NO. 10.1-04
ROUTE SR 87		LOCATION MP 190 TO MP 250			
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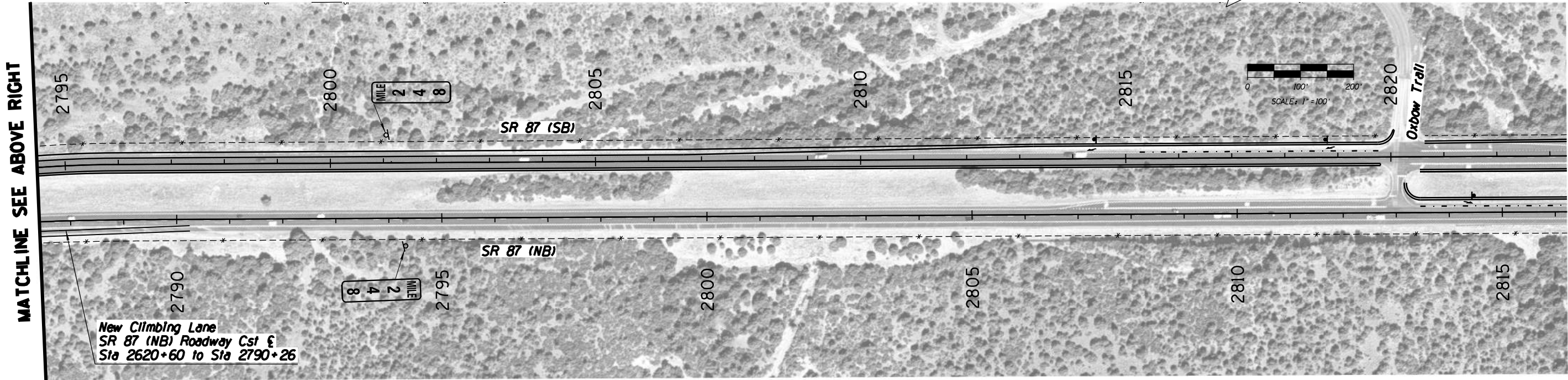
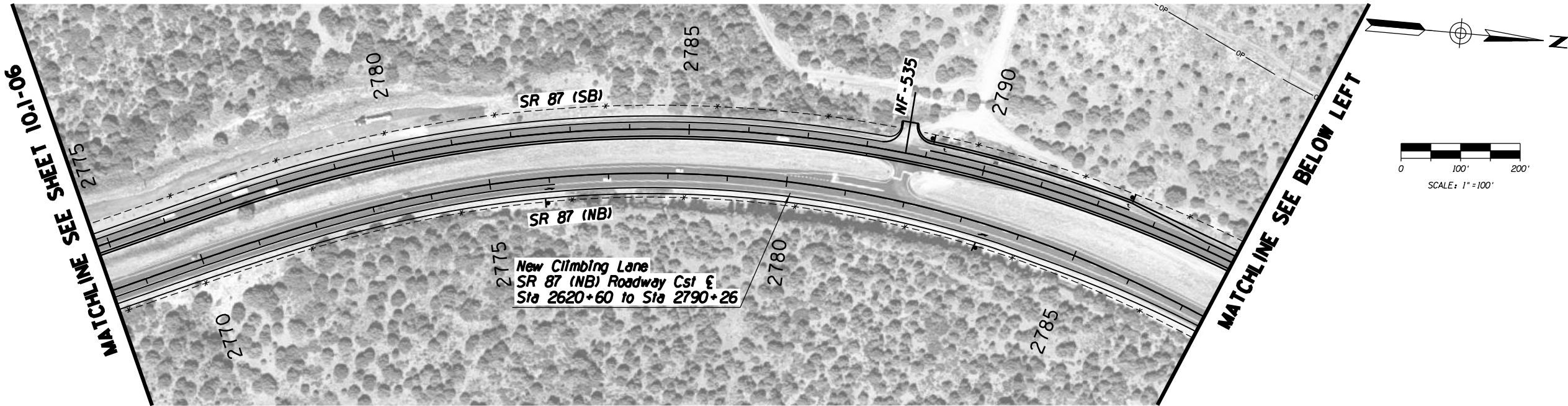
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Kimley»Horn © 2019 KIMLEY-HORN AND ASSOCIATES, INC.				PROJECT #10 NB IMPROVEMENTS MP 241 TO 247.8	
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F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
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DRAWN	D. Klebosky		8/19			
CHECKED	V. Rodriguez		8/19			
Kimley»Horn © 2019 KIMLEY-HORN AND ASSOCIATES, INC.				PROJECT #10 NB IMPROVEMENTS MP 241 TO 247.8		
ROUTE		LOCATION		MP 190 TO MP 250		
SR 87						
TRACS NO. XXXXX XXX				XXX-X(XXX)X	___ OF ___	

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
-	ARIZ.	-	-	59	
-					



DESIGN	T. Raddeman	8/19	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION URBAN PROJECT MANAGEMENT	PRELIMINARY STAGE I Review NOT FOR CONSTRUCTION OR RECORDING
DRAWN	D. Klebosky	8/19		
CHECKED	V. Rodriguez	8/19		
Kimley»Horn <small>© 2019 KIMLEY-HORN AND ASSOCIATES, INC.</small>			PROJECT 10 NB IMPROVEMENTS MP 241 TO 247.8	DWG NO. 10-1-07 OF
ROUTE SR 87		LOCATION MP 190 TO MP 250		
TRACS NO. XXXXX XXX			XXX-X(XXX)X	

**PACKAGE PROJECT 11 –
SOUTHBOUND IMPROVEMENTS
(MP 244-250)**

ADOT SR 87 Corridor Development Study

PRELIMINARY SCOPING REPORT

GENERAL PROJECT INFORMATION	
Date: 8/20/2019	Project Manager:
Project Name: Southbound Improvements (MP 244-250)	
City/Town: N/A	County: Gila
COG/MPO: CAG	ADOT District: Northcentral
Primary Route/Street: SR 87	
Beginning Limit: 241	
End Limit: 250	
Project Length: 9 Miles	
Right of Way Ownership(s) (where proposed project would occur): <i>(check all that apply)</i> <input type="checkbox"/> City/Town <input type="checkbox"/> County <input checked="" type="checkbox"/> ADOT <input type="checkbox"/> Private <input type="checkbox"/> Federal <input type="checkbox"/> Tribal <input type="checkbox"/> Other	
Adjacent Land Ownership(s): <i>(Check all that apply)</i> <input type="checkbox"/> City/Town <input checked="" type="checkbox"/> County <input type="checkbox"/> ADOT <input checked="" type="checkbox"/> Private <input checked="" type="checkbox"/> Federal <input type="checkbox"/> Tribal <input type="checkbox"/> Other	

PROJECT NEED
Improve safety and emergency access through roadway and shoulder improvements.

PROJECT PURPOSE			
What is the Primary Purpose of the Project?	<input type="checkbox"/> Preservation	<input checked="" type="checkbox"/> Modernization	<input checked="" type="checkbox"/> Expansion
Improve shoulders and roadway safety features to improve safety and emergency response times.			

PROJECT RISKS	
Check any risks identified that may impact the project's scope, schedule, or budget:	
<input type="checkbox"/> Access/Traffic Control/Detour Issues	<input type="checkbox"/> Right-of-Way
<input type="checkbox"/> Constructability/Construction Window Issues	<input type="checkbox"/> Environmental
<input type="checkbox"/> Stakeholder Issues	<input type="checkbox"/> Utilities
<input type="checkbox"/> Structures & Geotech	<input type="checkbox"/> Other:
Risk Description: <i>(if a box is checked above, briefly explain the risk)</i> Click or tap here to enter text.	

POTENTIAL FUNDING SOURCE(S)				
Anticipated Project Design/Construction Funding Type: <i>(Check all that applied)</i>	<input type="checkbox"/> STBG	<input type="checkbox"/> TAP	<input checked="" type="checkbox"/> HSIP	<input checked="" type="checkbox"/> State
	<input type="checkbox"/> Local	<input type="checkbox"/> Private	<input type="checkbox"/> Tribal	<input type="checkbox"/> Other

COST ESTIMATE			
Design \$1,170,000.00	Right-of-Way \$0.00	Construction \$15,211,900.00	Total \$16,381,900.00

RECOMMENDED PROJECT DELIVERY
Delivery: <input type="checkbox"/> Design-Bid-Build <input type="checkbox"/> Design-Build <input checked="" type="checkbox"/> Other:
Design Program Year: Click or tap here to enter text.
Construction Program Year: Click or tap here to enter text.

ATTACHMENTS

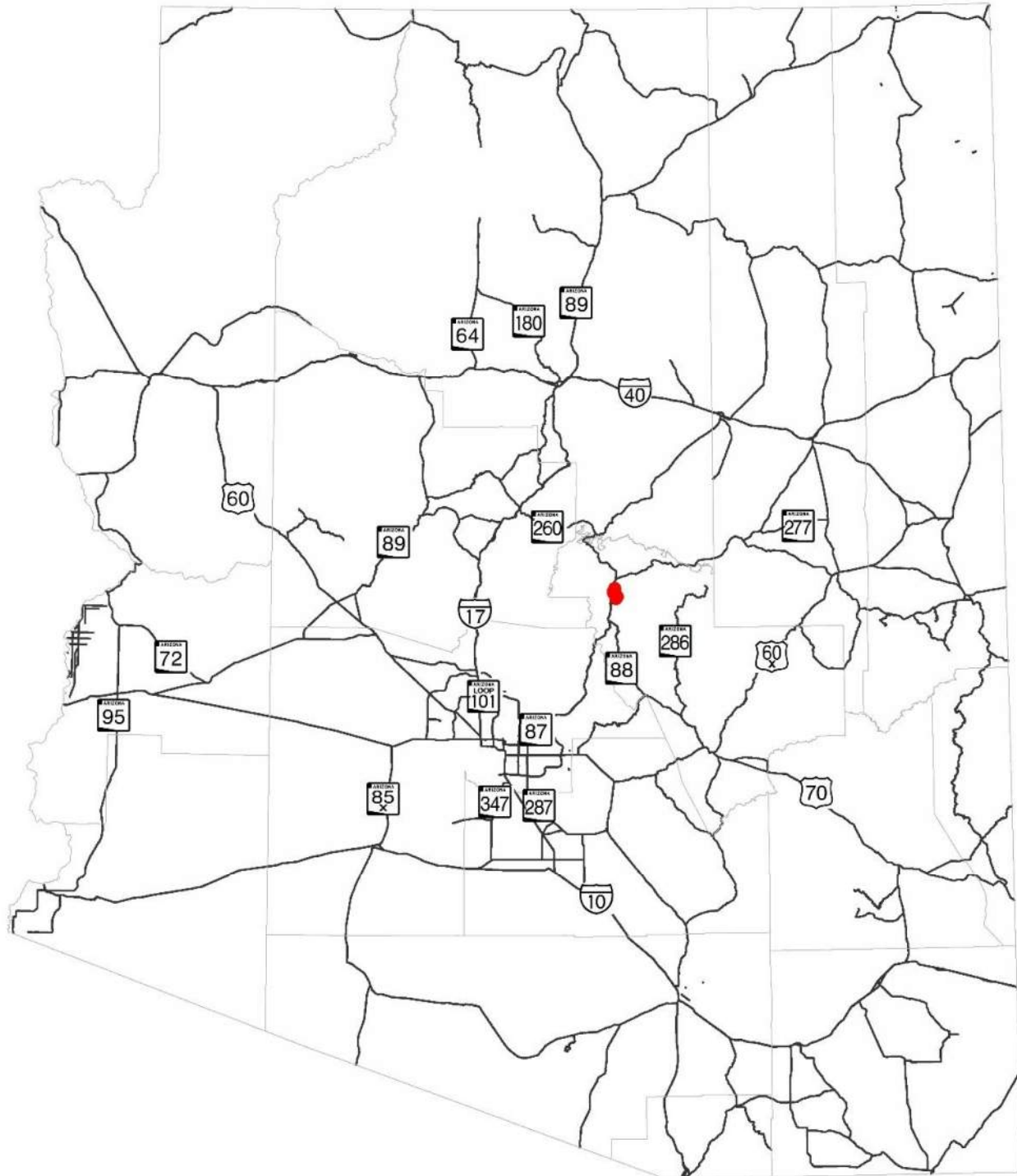
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| <ol style="list-style-type: none">1. Project Scope of Work2. State Location Map3. Project Vicinity Map4. Itemized Cost Estimates5. Conceptual Design Plans |
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ATTACHMENT 1: SCOPE OF WORK

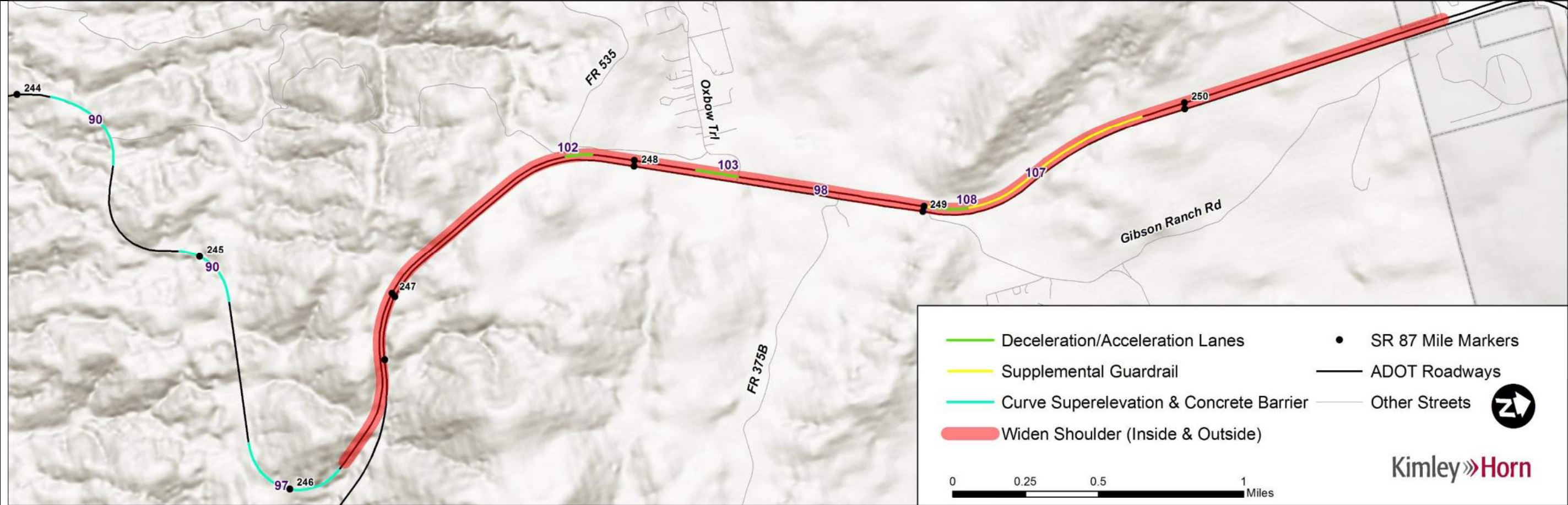
(Provide a detailed breakdown of the project's scope of work using bullet form)

- Address curve superelevation (MP 244.1-244.3 2, MP 244.9-245.2)
- Cut back slope and realign Corvair Curve as well as construct a concrete barrier on the east side of the curve (MP 245.8-246.2)
- Widen southbound inside and outside shoulders to 4 feet and 10 feet, respectively (MP 246.2-250.9)
- Southbound right-turn lane – FR 535 (MP 247.8)
- Southbound outside acceleration lane – Oxbow Trail (MP 248.4)
- Add southbound guardrail – west side (MP 249-249.9)
- Realign southbound left-turn lane and southbound inside acceleration lane – Gibson Ranch Road (MP 249)

ATTACHMENT 2: STATE LOCATION MAP



ATTACHMENT 3: PROJECT VICINITY MAP



Project Element	Map No.	Begin MP	End MP	Cost	Element Justification
1. Address curve superelevation, add concrete barrier	90	1: 244.1 2: 244.9	1: 244.3 2: 245.2	\$4,276,300	Improve the superelevation of curves to reduce run off the road crashes.
2. Add superelevation to Corvair Curve, add concrete barrier.	97	245.8	246.2	\$1,506,000	This location is the most significant crash hot spot within the SR 87 corridor with 63 crashes on the curve, including one fatality and one serious injury during the crash analysis period.
3. Widen SB inside and outside shoulders	98	246.2	250.9	\$8,849,000	Existing shoulders are of an insufficient width for current highway standards and limit effective emergency response.
4. SB right-turn lane at FR 535	102	247.8	247.8	\$275,000	Provide turn/deceleration lane where it does not currently exist, especially because of the high speeds measured at this location
5. SB outside acceleration lane at Oxbow Trail	103	248.4	248.4	\$591,800	Remove slow-moving traffic from through travel lanes.
6. Add SB guardrail, right side	107	249	249.9	\$418,900	Unprotected drop-off along the right side of the roadway.
7. Realign SB left-turn lane at Gibson Ranch Road	108	249	249	\$464,900	Realign the SB left-turn lane across the median to be adjacent to NB traffic to improve sight distance and address median grade issue. Two crashes occurred at this intersection during the crash analysis period.
Total:				\$16,381,900	

ATTACHMENT 4: ITEMIZED COST ESTIMATES



SR87 Corridor Development Study ITEMIZED COST ESTIMATE

90. Improve superelevation of curves (MP 244.1-244.3 and 244.9-245.2)

ITEM NO	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
2010011	CLEARING AND GRUBBING	ACRE	6	\$5,000.00	\$30,000
2020029	REMOVAL OF ASPHALTIC CONCRETE PAVEMENT	SQ.YD.	15,732	\$20.00	\$314,640
2020053	REMOVE (GR TERMINAL)	EACH	4	\$400.00	\$1,600
2020071	REMOVE GUARD RAIL	L.FT.	2,000	\$5.00	\$10,000
2030301	ROADWAY EXCAVATION	CU.YD.	82,800	\$7.00	\$579,600
3030022	AGGREGATE BASE, CLASS 2	CU.YD.	6,900	\$50.00	\$345,000
4090003	ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL)	TON	5,615	\$80.00	\$449,200
4110001	ASPHALTIC CONCRETE FRICTION COURSE (MISC.)	TON	465	\$90.00	\$41,850
6080101	MISCELLANEOUS WORK (SIGNS)	L.SUM	1	\$4,000.00	\$4,000
7041501	PAVEMENT MARKINGS	L.SUM	1	\$3,726.00	\$3,726
8050003	SEEDING (CLASS II)	ACRE	6	\$3,500.00	\$21,000
9050001	GUARD RAIL, W-BEAM, SINGLE FACE	L.FT.	3,726	\$30.00	\$111,780
9050026	GUARD RAIL TERMINAL (TANGENT TYPE)	EACH	2	\$2,500.00	\$5,000
9050036	GUARD RAIL, ANCHOR ASSEMBLY	EACH	2	\$800.00	\$1,600
9240050	MISCELLANEOUS WORK (PUBLIC RELATIONS)	L.SUM	1	\$6,000.00	\$6,000
9280037	GROUND-IN RUMBLE STRIP (12 INCH)	L.FT.	3,726	\$0.75	\$2,795
Roadway Construction Subtotal					\$1,927,791
Unidentified Item Allowance (15%)					\$ 289,169
Subtotal					\$2,216,960
Water Supply/Dust Palliative (3%)					\$ 66,509
Maintenance And Protection Of Traffic (15%)					\$ 332,544
Erosion Control (1%)					\$ 22,170
Contractor Quality Control (2%)					\$ 44,340
Construction Surveying And Layout (2%)					\$ 44,340
Other Item Subtotal					\$2,726,863
Mobilization (12%)					\$ 327,224
Construction Subtotal					\$ 3,054,087
Engineering Design (10%)					\$ 305,409
Construction Engineering and Contingencies (20%)					\$ 610,818
Indirect Cost Allocation (10.02%)					\$ 306,020
Construction Total					\$ 4,276,334

SR87 Corridor Development Study
ITEMIZED COST ESTIMATE

97. Cut back slope and realign Corvair Curve as well as a concrete barrier (MP 245.8-246.2)

ITEM NO	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
2010011	CLEARING AND GRUBBING	ACRE	3	\$5,000.00	\$15,000
2030301	ROADWAY EXCAVATION	CU.YD.	90,890	\$7.00	\$636,230
6080101	MISCELLANEOUS WORK (SIGNS)	L.SUM	1	\$4,000.00	\$4,000
7041501	PAVEMENT MARKINGS	L.SUM	1	\$4,090.00	\$4,090
8050003	SEEDING (CLASS II)	ACRE	3	\$3,500.00	\$10,500
9240050	MISCELLANEOUS WORK (PUBLIC RELATIONS)	L.SUM	1	\$6,000.00	\$6,000
9280037	GROUND-IN RUMBLE STRIP (12 INCH)	L.FT.	4,090	\$0.75	\$3,068
Roadway Construction Subtotal					\$678,888
Unidentified Item Allowance (15%)					\$ 101,834
Subtotal					\$780,722
Water Supply/Dust Palliative (3%)					\$ 23,422
Maintenance And Protection Of Traffic (15%)					\$ 117,109
Erosion Control (1%)					\$ 7,808
Contractor Quality Control (2%)					\$ 15,615
Construction Surveying And Layout (2%)					\$ 15,615
Other Item Subtotal					\$960,291
Mobilization (12%)					\$ 115,235
Construction Subtotal					\$ 1,075,526
Engineering Design (10%)					\$ 107,553
Construction Engineering and Contingencies (20%)					\$ 215,106
Indirect Cost Allocation (10.02%)					\$ 107,768
Construction Total					\$ 1,505,953

98. Widen inside and outside shoulders (MP 246.2-250.9)

ITEM NO	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
2010011	CLEARING AND GRUBBING	ACRE	17	\$5,000.00	\$85,000
2020029	REMOVAL OF ASPHALTIC CONCRETE PAVEMENT	SQ.YD.	10,729	\$20.00	\$214,580
2020053	REMOVE (GR TERMINAL)	EACH	4	\$400.00	\$1,600
2020071	REMOVE GUARD RAIL	L.FT.	6,035	\$5.00	\$30,175
2020201	SAW CUTTING	L.FT.	48,280	\$2.50	\$120,700
2030301	ROADWAY EXCAVATION	CU.YD.	107,290	\$7.00	\$751,030
3030022	AGGREGATE BASE, CLASS 2	CU.YD.	23,246	\$50.00	\$1,162,300
4090003	ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL)	TON	15,082	\$80.00	\$1,206,560
4110001	ASPHALTIC CONCRETE FRICTION COURSE (MISC.)	TON	1,108	\$90.00	\$99,720
6080101	MISCELLANEOUS WORK (SIGNS)	L.SUM	1	\$4,000.00	\$4,000
7041501	PAVEMENT MARKINGS	L.SUM	1	\$24,140.00	\$24,140
8050003	SEEDING (CLASS II)	ACRE	17	\$3,500.00	\$59,500
9050001	GUARD RAIL, W-BEAM, SINGLE FACE	L.FT.	6,035	\$30.00	\$181,050
9050026	GUARD RAIL TERMINAL (TANGENT TYPE)	EACH	2	\$2,500.00	\$5,000
9050036	GUARD RAIL, ANCHOR ASSEMBLY	EACH	2	\$800.00	\$1,600
9240050	MISCELLANEOUS WORK (PUBLIC RELATIONS)	L.SUM	1	\$6,000.00	\$6,000
9280037	GROUND-IN RUMBLE STRIP (12 INCH)	L.FT.	48,280	\$0.75	\$36,210
Roadway Construction Subtotal					\$3,989,165
Unidentified Item Allowance (15%)					\$ 598,375
Subtotal					\$4,587,540
Water Supply/Dust Palliative (3%)					\$ 137,627
Maintenance And Protection Of Traffic (15%)					\$ 688,131
Erosion Control (1%)					\$ 45,876
Contractor Quality Control (2%)					\$ 91,751
Construction Surveying And Layout (2%)					\$ 91,751
Other Item Subtotal					\$5,642,676
Mobilization (12%)					\$ 677,122
Construction Subtotal					\$ 6,319,798
Engineering Design (10%)					\$ 631,980
Construction Engineering and Contingencies (20%)					\$ 1,263,960
Indirect Cost Allocation (10.02%)					\$ 633,244
Construction Total					\$ 8,848,982

102. Southbound right-turn lane at FR 535 (MP 247.8)

ITEM NO	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
2010011	CLEARING AND GRUBBING	ACRE	1	\$5,000.00	\$5,000
2020029	REMOVAL OF ASPHALTIC CONCRETE PAVEMENT	SQ.YD.	55	\$35.00	\$1,925
2020201	SAW CUTTING	L.FT.	490	\$2.50	\$1,225
2030301	ROADWAY EXCAVATION	CU.YD.	440	\$10.00	\$4,400
3030022	AGGREGATE BASE, CLASS 2	CU.YD.	400	\$120.00	\$48,000
4090003	ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL)	TON	316	\$160.00	\$50,560
4110001	ASPHALTIC CONCRETE FRICTION COURSE (MISC.)	TON	26	\$120.00	\$3,120
6080101	MISCELLANEOUS WORK (SIGNS)	L.SUM	1	\$2,000.00	\$2,000
7041501	PAVEMENT MARKINGS	L.SUM	1	\$490.00	\$490
8050003	SEEDING (CLASS II)	ACRE	1	\$3,500.00	\$3,500
9240050	MISCELLANEOUS WORK (PUBLIC RELATIONS)	L.SUM	1	\$3,000.00	\$3,000
9280037	GROUND-IN RUMBLE STRIP (12 INCH)	L.FT.	490	\$1.50	\$735
Roadway Construction Subtotal					\$123,955
Unidentified Item Allowance (15%)					\$ 18,594
Subtotal					\$142,549
Water Supply/Dust Palliative (3%)					\$ 4,277
Maintenance And Protection Of Traffic (15%)					\$ 21,383
Erosion Control (1%)					\$ 1,426
Contractor Quality Control (2%)					\$ 2,851
Construction Surveying And Layout (2%)					\$ 2,851
Other Item Subtotal					\$175,337
Mobilization (12%)					\$ 21,041
Construction Subtotal					\$ 196,378
Engineering Design (10%)					\$ 19,638
Construction Engineering and Contingencies (20%)					\$ 39,276
Indirect Cost Allocation (10.02%)					\$ 19,678
Construction Total					\$ 274,970

103. SB Outside Acceleration Lane at Oxbow Trail (MP 248.4)

ITEM NO	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
2010011	CLEARING AND GRUBBING	ACRE	1	\$5,000.00	\$5,000
2020029	REMOVAL OF ASPHALTIC CONCRETE PAVEMENT	SQ.YD.	292	\$20.00	\$5,840
2020201	SAW CUTTING	L.FT.	1,310	\$2.50	\$3,275
2030301	ROADWAY EXCAVATION	CU.YD.	1,170	\$10.00	\$11,700
3030022	AGGREGATE BASE, CLASS 2	CU.YD.	922	\$120.00	\$110,640
4090003	ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL)	TON	699	\$160.00	\$111,840
4110001	ASPHALTIC CONCRETE FRICTION COURSE (MISC.)	TON	56	\$120.00	\$6,720
6080101	MISCELLANEOUS WORK (SIGNS)	L.SUM	1	\$2,000.00	\$2,000
7041501	PAVEMENT MARKINGS	L.SUM	1	\$1,310.00	\$1,310
8050003	SEEDING (CLASS II)	ACRE	1	\$3,500.00	\$3,500
9240050	MISCELLANEOUS WORK (PUBLIC RELATIONS)	L.SUM	1	\$3,000.00	\$3,000
9280037	GROUND-IN RUMBLE STRIP (12 INCH)	L.FT.	1,310	\$1.50	\$1,965
Roadway Construction Subtotal					\$266,790
Unidentified Item Allowance (15%)					\$ 40,019
Subtotal					\$306,809
Water Supply/Dust Palliative (3%)					\$ 9,205
Maintenance And Protection Of Traffic (15%)					\$ 46,022
Erosion Control (1%)					\$ 3,069
Contractor Quality Control (2%)					\$ 6,137
Construction Surveying And Layout (2%)					\$ 6,137
Other Item Subtotal					\$377,379
Mobilization (12%)					\$ 45,286
Construction Subtotal					\$ 422,665
Engineering Design (10%)					\$ 42,267
Construction Engineering and Contingencies (20%)					\$ 84,533
Indirect Cost Allocation (10.02%)					\$ 42,352
Construction Total					\$ 591,817

107. Add guardrail on the west side of the SB lanes (MP 249-249.9)

ITEM NO	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
2010011	CLEARING AND GRUBBING	ACRE	1	\$5,000.00	\$5,000
2030301	ROADWAY EXCAVATION	CU.YD.	2,120	\$10.00	\$21,200
6080101	MISCELLANEOUS WORK (SIGNS)	L.SUM	1	\$4,000.00	\$4,000
8050003	SEEDING (CLASS II)	ACRE	1	\$3,500.00	\$3,500
9050001	GUARD RAIL, W-BEAM, SINGLE FACE	L.FT.	4,752	\$30.00	\$142,560
9050026	GUARD RAIL TERMINAL (TANGENT TYPE)	EACH	2	\$2,500.00	\$5,000
9050036	GUARD RAIL, ANCHOR ASSEMBLY	EACH	2	\$800.00	\$1,600
9240050	MISCELLANEOUS WORK (PUBLIC RELATIONS)	L.SUM	1	\$6,000.00	\$6,000
Roadway Construction Subtotal					\$188,860
Unidentified Item Allowance (15%)					\$ 28,329
Subtotal					\$217,189
Water Supply/Dust Palliative (3%)					\$ 6,516
Maintenance And Protection Of Traffic (15%)					\$ 32,579
Erosion Control (1%)					\$ 2,172
Contractor Quality Control (2%)					\$ 4,344
Construction Surveying And Layout (2%)					\$ 4,344
Other Item Subtotal					\$267,144
Mobilization (12%)					\$ 32,058
Construction Subtotal					\$ 299,202
Engineering Design (10%)					\$ 29,921
Construction Engineering and Contingencies (20%)					\$ 59,841
Indirect Cost Allocation (10.02%)					\$ 29,981
Construction Total					\$ 418,945

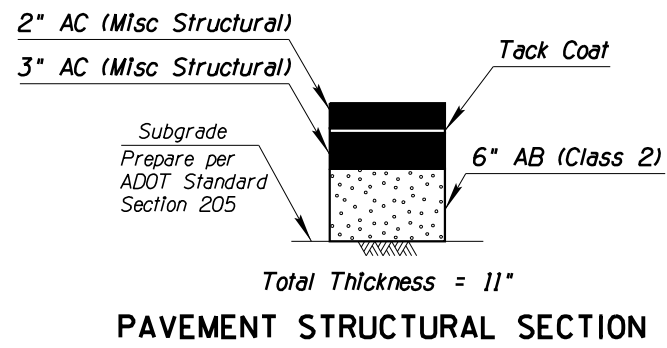
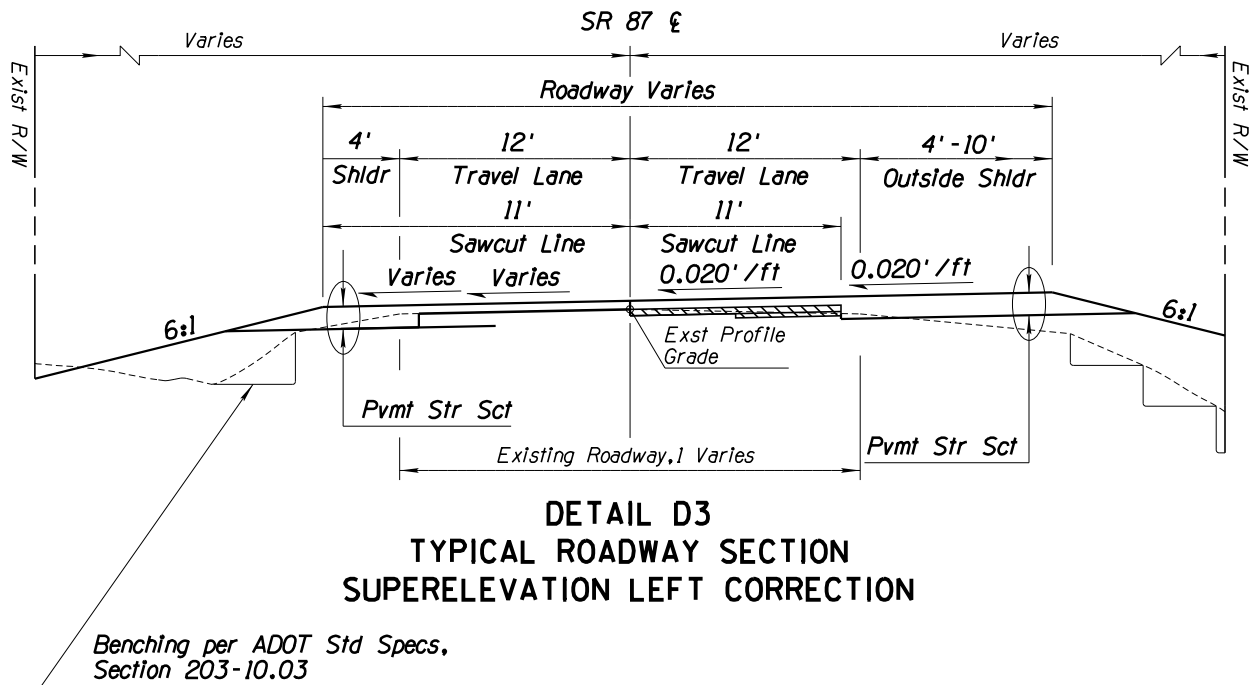
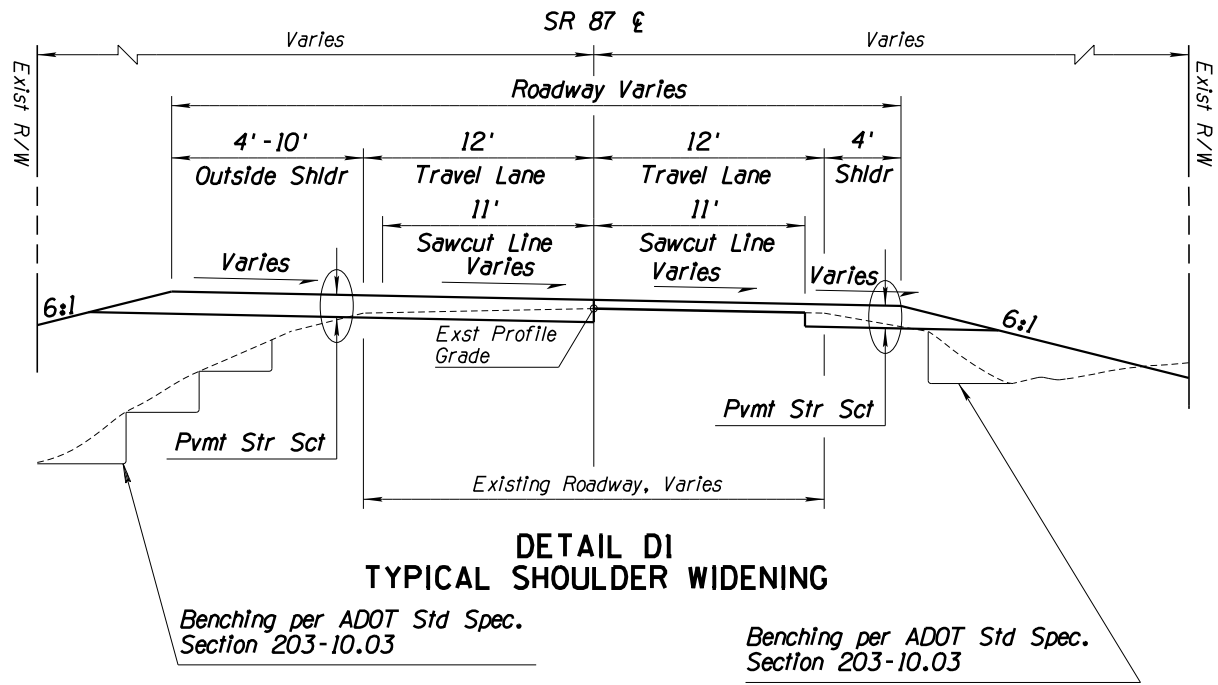
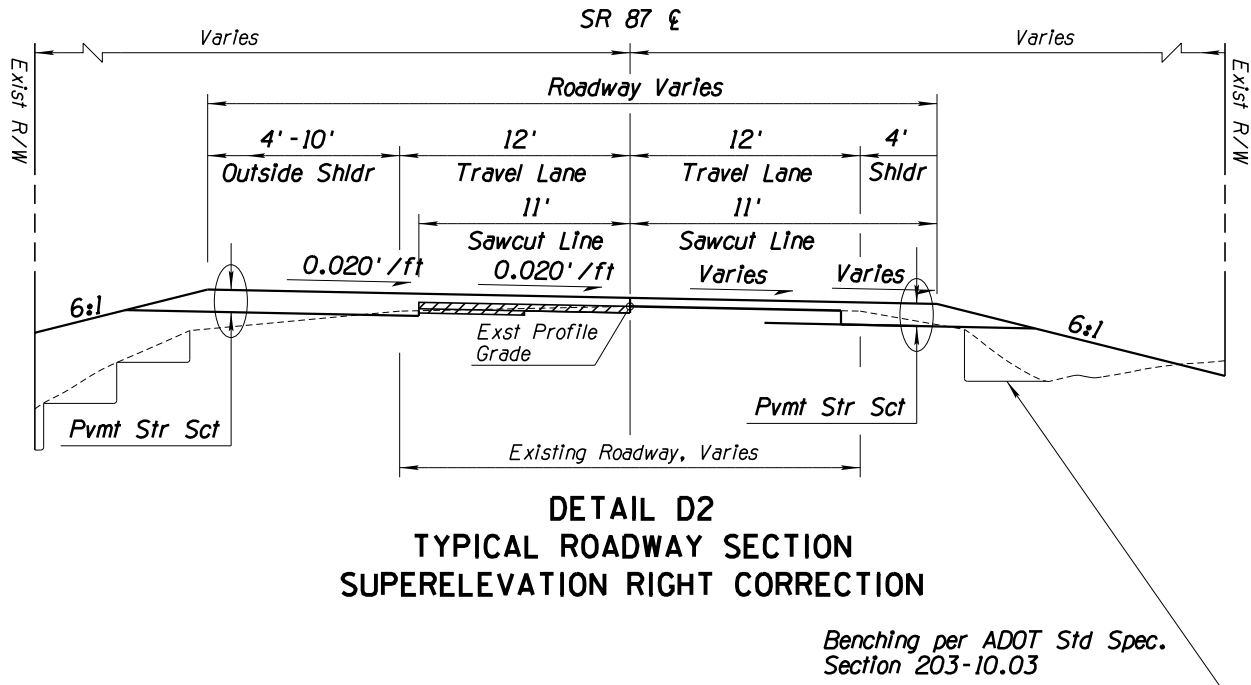
108. Realign SB left-turn lane at Gibson Ranch Road (MP 249)

ITEM NO	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
2010011	CLEARING AND GRUBBING	ACRE	1	\$5,000.00	\$5,000
2020029	REMOVAL OF ASPHALTIC CONCRETE PAVEMENT	SQ.YD.	1,695	\$20.00	\$33,900
2030301	ROADWAY EXCAVATION	CU.YD.	910	\$10.00	\$9,100
3030022	AGGREGATE BASE, CLASS 2	CU.YD.	588	\$120.00	\$70,560
4090003	ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL)	TON	482	\$160.00	\$77,120
4110001	ASPHALTIC CONCRETE FRICTION COURSE (MISC.)	TON	40	\$120.00	\$4,800
6080101	MISCELLANEOUS WORK (SIGNS)	L.SUM	1	\$2,000.00	\$2,000
7041501	PAVEMENT MARKINGS	L.SUM	1	\$610.00	\$610
8050003	SEEDING (CLASS II)	ACRE	1	\$3,500.00	\$3,500
9240050	MISCELLANEOUS WORK (PUBLIC RELATIONS)	L.SUM	1	\$3,000.00	\$3,000
Roadway Construction Subtotal					\$209,590
Unidentified Item Allowance (15%)					\$ 31,439
Subtotal					\$241,029
Water Supply/Dust Palliative (3%)					\$ 7,231
Maintenance And Protection Of Traffic (15%)					\$ 36,155
Erosion Control (1%)					\$ 2,411
Contractor Quality Control (2%)					\$ 4,821
Construction Surveying And Layout (2%)					\$ 4,821
Other Item Subtotal					\$296,468
Mobilization (12%)					\$ 35,577
Construction Subtotal					\$ 332,045
Engineering Design (10%)					\$ 33,205
Construction Engineering and Contingencies (20%)					\$ 66,409
Indirect Cost Allocation (10.02%)					\$ 33,271
Construction Total					\$ 464,930

ATTACHMENT 5: PRELIMINARY PLANS

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
-	ARIZ.	-	-	59	

SR 87 MILE POST STATION			
MP NB	STATION	MP SB	STATION
196	101+73	196	101+18
197	155+53	197	154+02
198	207+69	198	207+94
199	261+02	199	259+13
200	314+21	200	311+72
201	367+73	201	364+06
202	419+18	202	417+81
203	471+36	203	470+65
204	526+28	204	523+10
205	577+70	205	575+84
206	630+73	206	628+30
207	682+81	207	680+28
208	736+47	208	734+12
209	788+55	209	786+62
210	842+08	210	839+50
211	894+91	211	890+40
212	942+20	212	939+42
213	998+65	213	995+55
214	1051+86	214	1050+06
215	1105+38	215	1095+77
216	1158+68	216	1147+95
217	1213+92	217	1199+48
218	1268+31	218	1250+20
219	1318+19	219	1304+12
220	1374+67	220	1359+76
221	1427+95	221	1412+99
222	1480+60	222	1465+84
223	1533+97	223	1518+89
224	1584+61	224	1570+72
225	1639+50	225	1625+29
226	1689+86	226	1676+32
227	1740+23	227	1726+14
228	1792+50	228	1778+04
229	1845+24	229	1831+98
230	1898+50	230	1884+70
231	1949+61	231	1933+71
232	1999+33	232	1985+29
233	2047+74	233	2033+06
234	2101+13	234	2085+05
235	2154+59	235	2137+29
236	2207+09	236	2189+44
237	2259+88	237	2240+86
238	2311+66	238	2293+85
239	2364+28	239	2344+91
240	2416+01	240	2397+41
241	2467+79	241	2448+96
242	2518+51	242	2496+68
243	2571+26	243	2549+70
244	2620+38	244	2601+82
245	2677+47	245	2655+01
246	2729+53	246	2703+04
247	2741+30	247	2747+68
248	2794+18	248	2801+15
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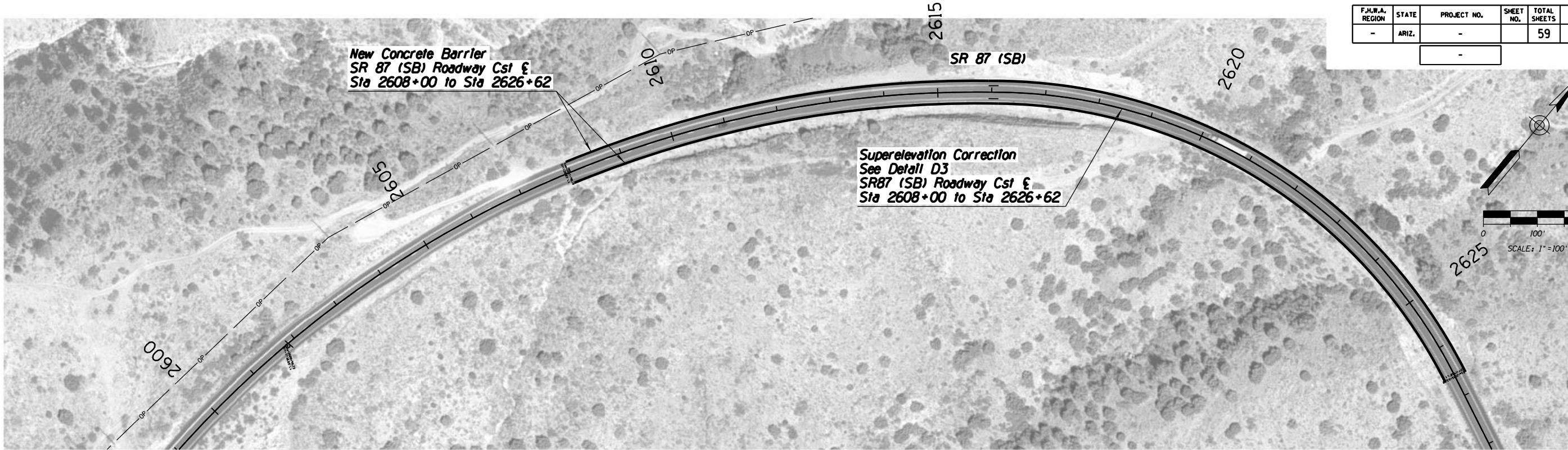
DESIGN	NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION URBAN PROJECT MANAGEMENT		PRELIMINARY
DRAWN	T. Raddeman	8/19			STAGE I
CHECKED	D. Klebosky	8/19			Review
					NOT FOR CONSTRUCTION OR RECORDING
					DWG NO.
					OF

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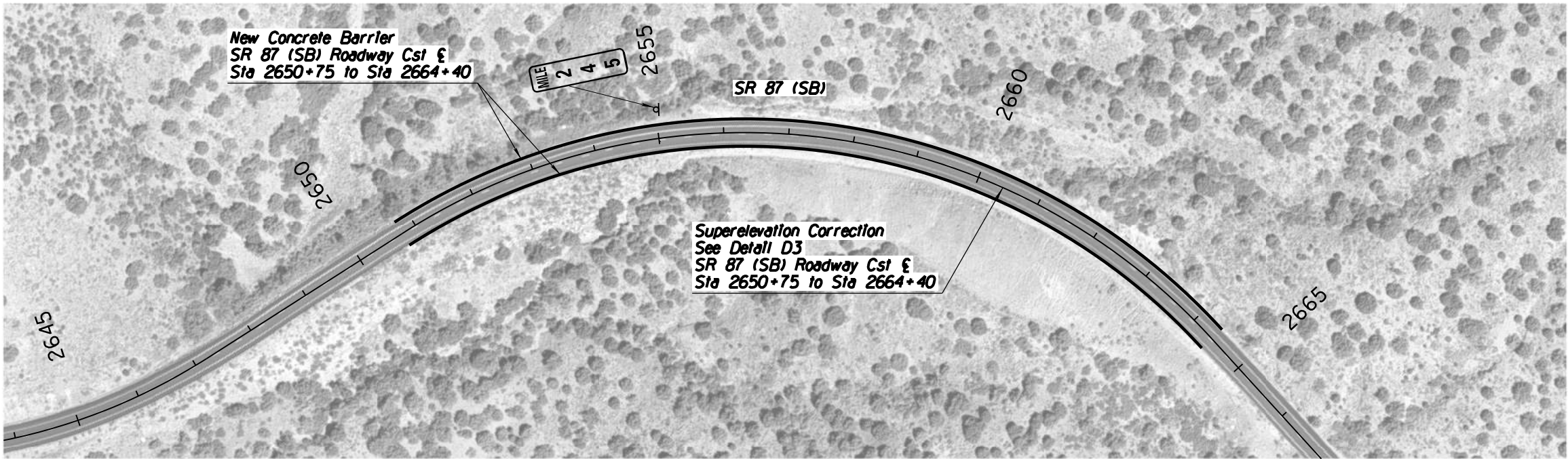
ROUTE	LOCATION
SR 87	MP 190 TO MP 250

TRACS NO. XXXXX XXX	XXX-X(XXX)X
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DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO. DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO.



F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
-	ARIZ.	-	-	59	

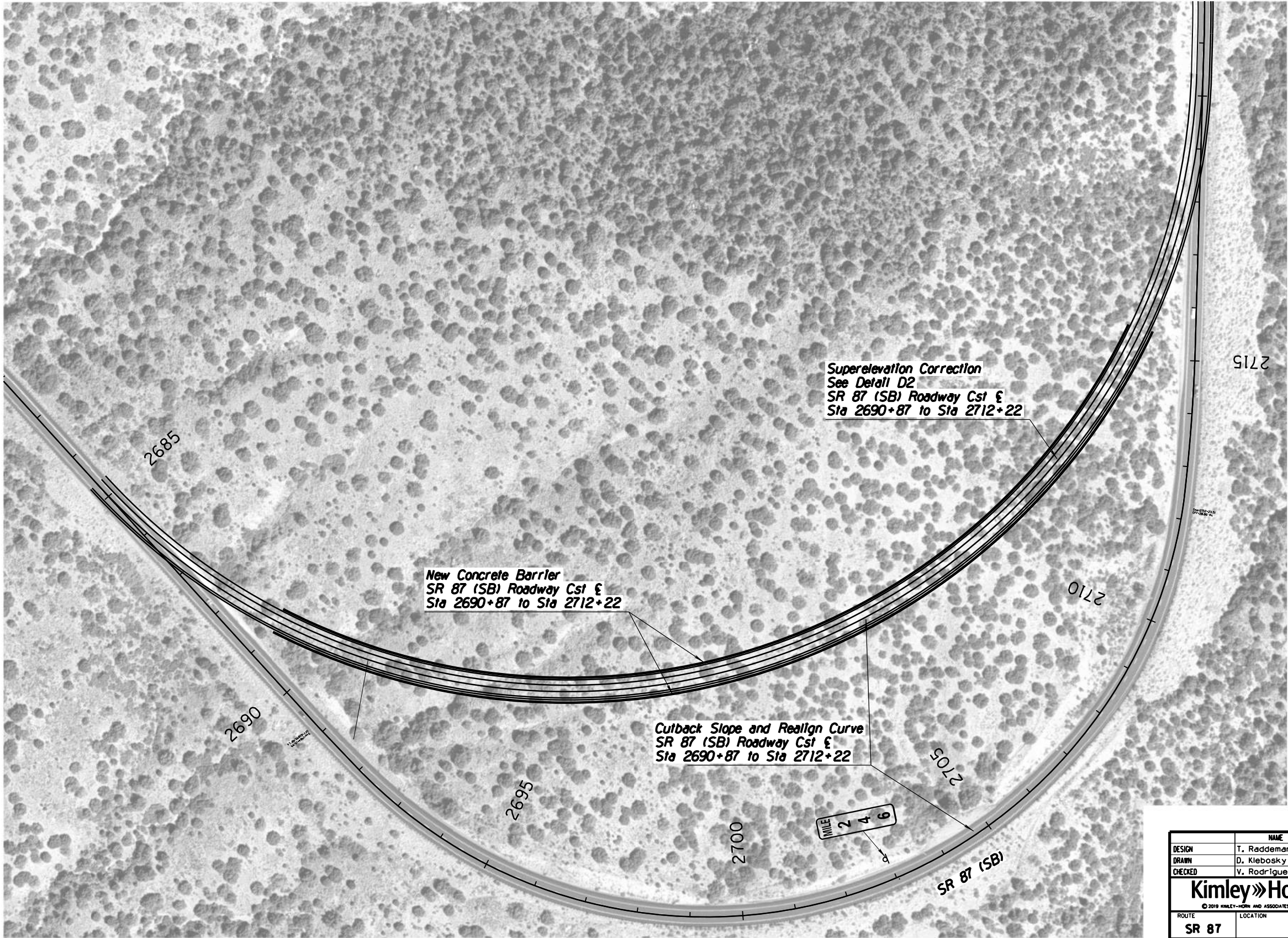
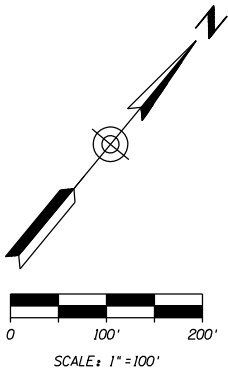


		NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION URBAN PROJECT MANAGEMENT	PRELIMINARY STAGE I Review NOT FOR CONSTRUCTION OR RECORDING
DESIGN	T. Raddeman		8/19		
DRAWN	D. Klebosky		8/19		
CHECKED	V. Rodriguez		8/19		
Kimley»Horn			PROJECT #11 SB IMPROVEMENTS MP 241 TO 250		
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ROUTE		LOCATION			
SR 87		MP 190 TO MP 250		DWG NO. 5.1-01	
TRACS NO. XXXXX XXX			XXX-X(XXX)X		___ <i>OF</i> ___

DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO. DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO.

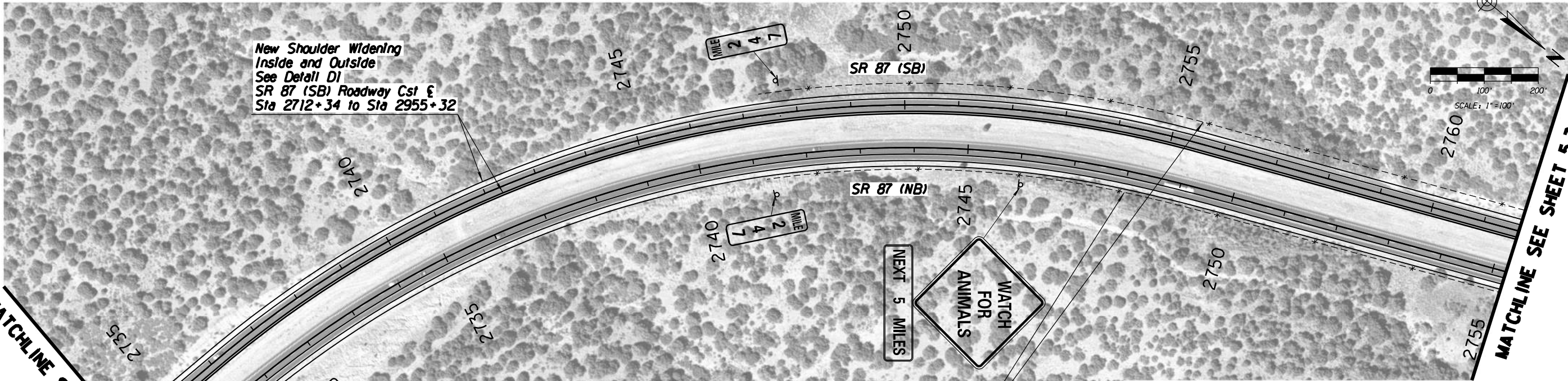
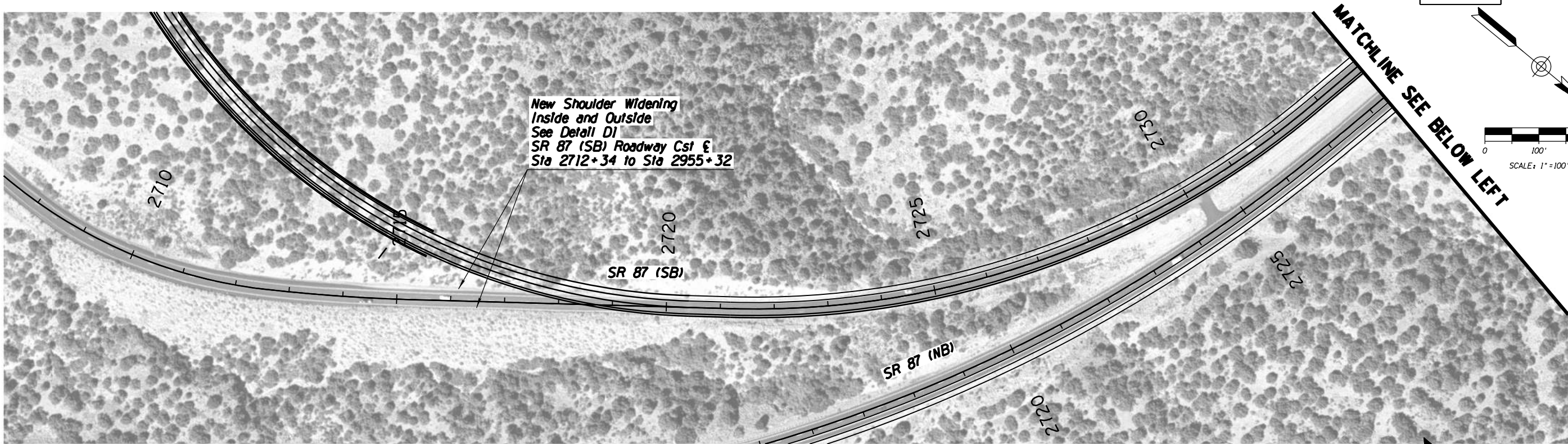
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
-	ARIZ.	-	-	59	

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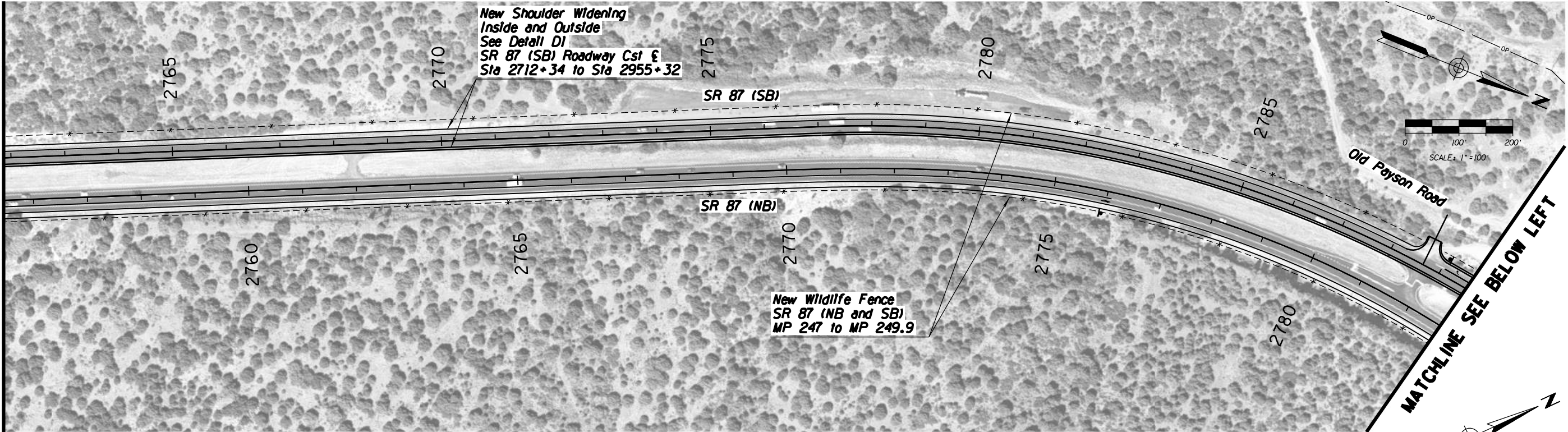
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DESIGN	T. Raddeman		8/19		
DRAWN	D. Klebosky		8/19		
CHECKED	V. Rodriguez		8/19	PROJECT #11 SB IMPROVEMENTS MP 241 TO 250	DWG NO. 5.2-01
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ROUTE		LOCATION			
SR 87		MP 190 TO MP 250			
TRACS NO. XXXXX XXX				XXX-X(XXX)X	___ OF ___

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
-	ARIZ.	-	-	59	



		NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION URBAN PROJECT MANAGEMENT PROJECT #11 SB IMPROVEMENTS & PROJECT #12 NB IMPROVEMENTS MP 241 TO 250	PRELIMINARY STAGE I Review NOT FOR CONSTRUCTION OR RECORDING
DESIGN		T. Raddeman	8/19		
DRAWN		D. Klebosky	8/19		
CHECKED		V. Rodriguez	8/19		
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ROUTE		LOCATION			
SR 87		MP 190 TO MP 250		DWG NO. 5.3-01	
TRACS NO. XXXXX XXX				XXX-X(XXX)X	___ OF ___

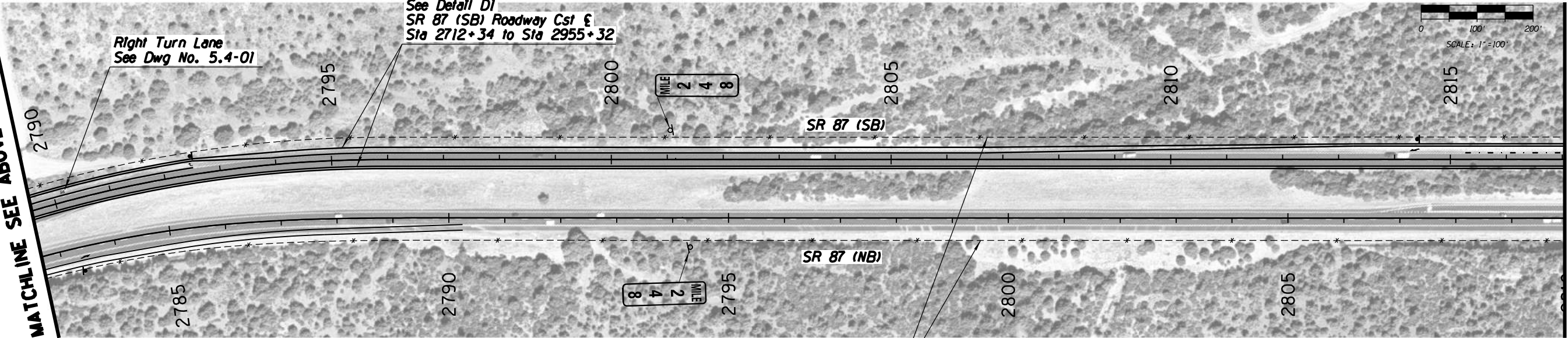
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F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
-	ARIZ.	-	-	59	

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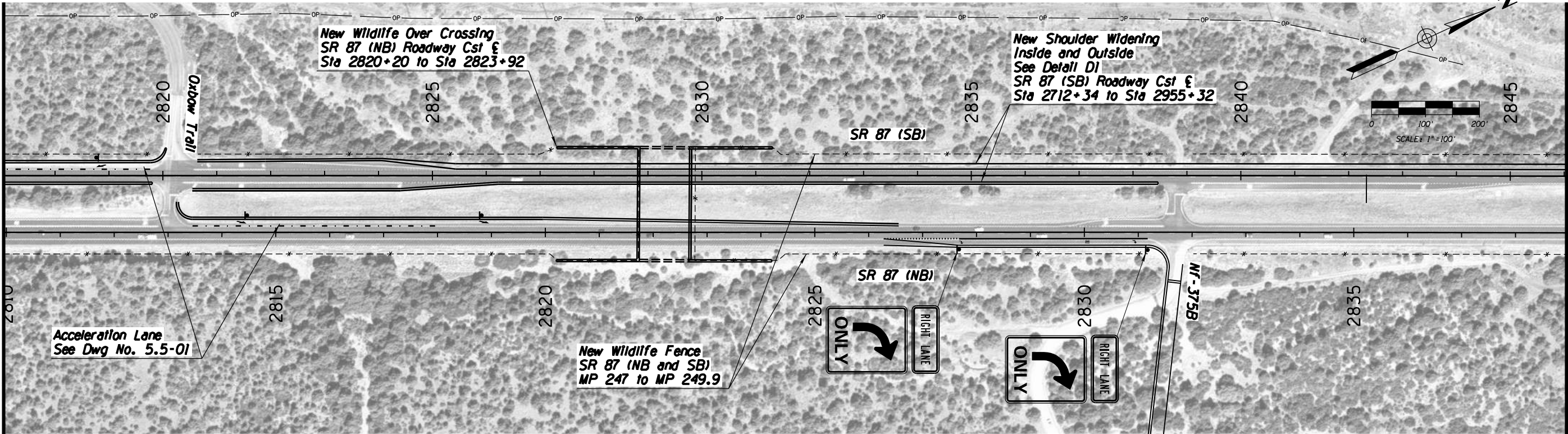
MATCHLINE SEE ABOVE RIGHT



MATCHLINE SEE SHEET 5.3-03

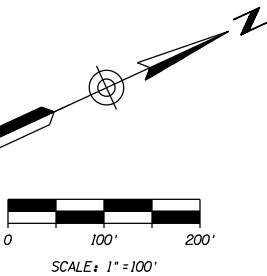
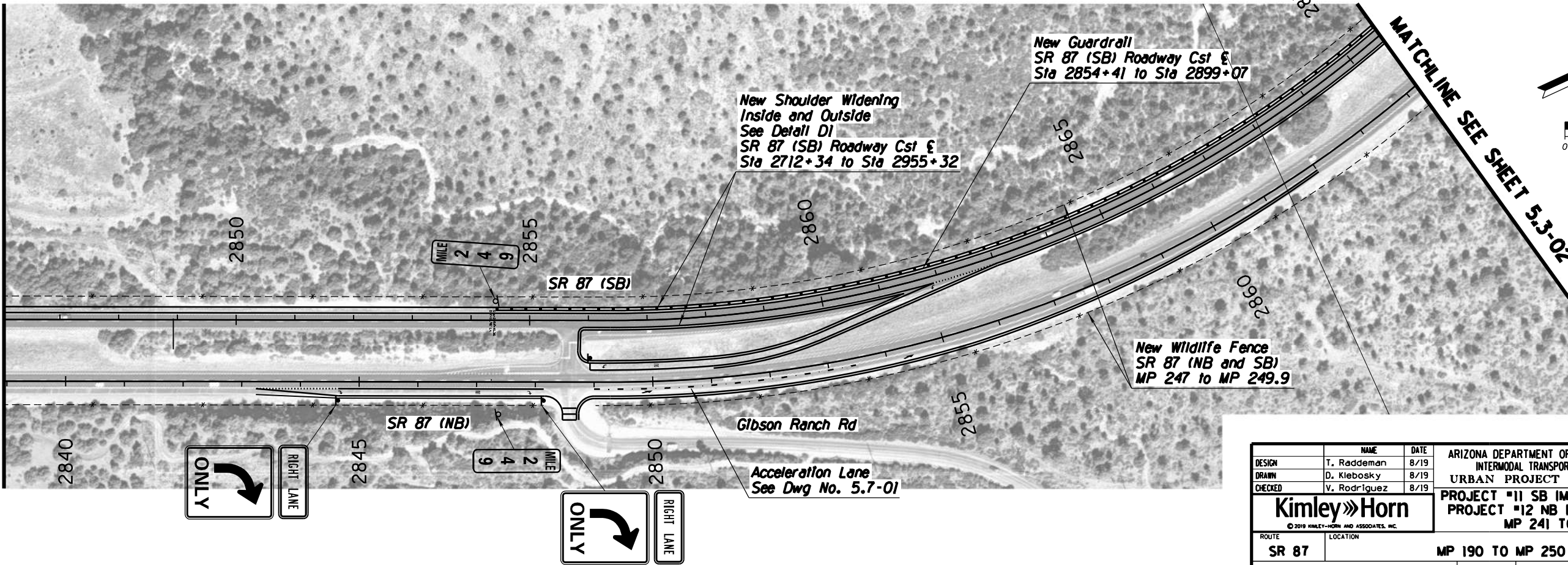
		NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION URBAN PROJECT MANAGEMENT PROJECT #11 SB IMPROVEMENTS & PROJECT #12 NB IMPROVEMENTS MP 241 TO 250	PRELIMINARY STAGE I Review NOT FOR CONSTRUCTION OR RECORDING DWG NO. 5.3-02 ___ <i>OF</i> ___
DESIGN	T. Raddeman		8/19		
DRAWN	D. Klebosky		8/19		
CHECKED	V. Rodriguez		8/19		
<div>Kimley»Horn</div> <div>© 2019 KIMLEY-HORN AND ASSOCIATES, INC.</div>					
ROUTE		LOCATION			
SR 87		MP 190 TO MP 250			
TRACS NO. XXXXX XXX			XXX-X(XXX)X		

MATCHLINE SEE SHEET 5.3-02



MATCHLINE SEE BELOW LEFT

MATCHLINE SEE ABOVE RIGHT



SCALE: 1"=100'

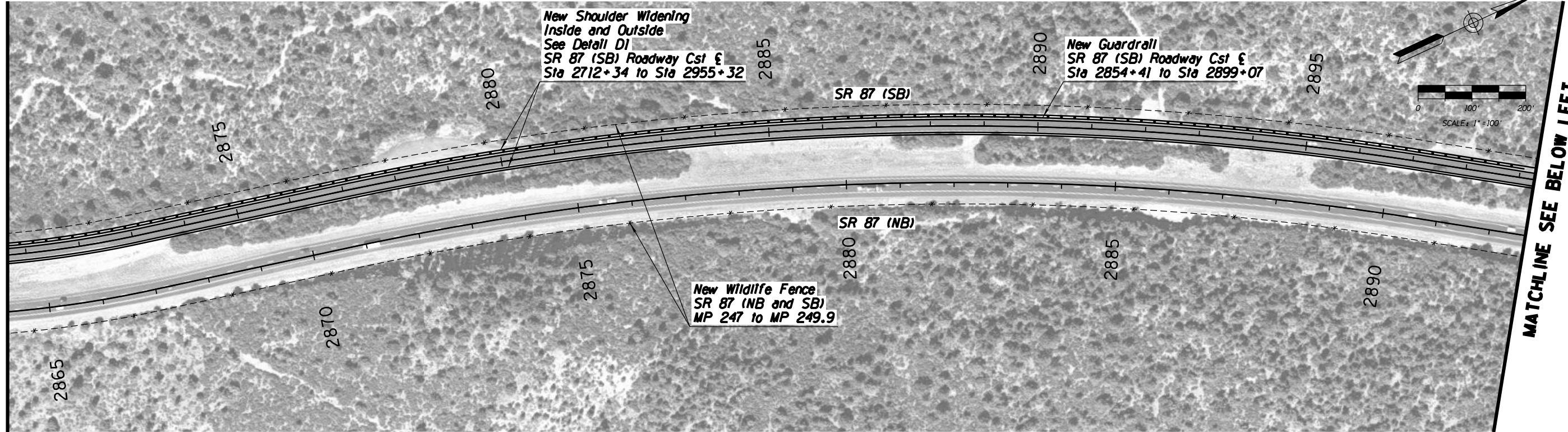
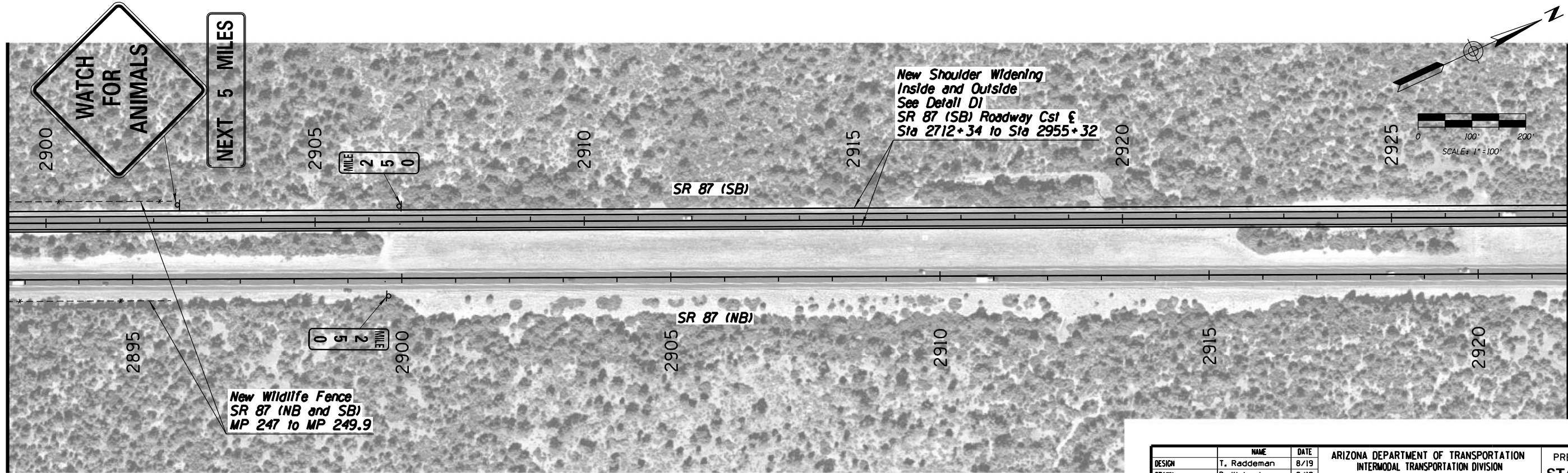
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MATCHLINE SEE SHEET 5.3-02

		NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION URBAN PROJECT MANAGEMENT	PRELIMINARY STAGE I Review NOT FOR CONSTRUCTION OR RECORDING
DESIGN	T. Raddeman		8/19		
DRAWN	D. Klebosky		8/19		
CHECKED	V. Rodriguez		8/19		
Kimley»Horn © 2019 KIMLEY-HORN AND ASSOCIATES, INC.				PROJECT #11 SB IMPROVEMENTS & PROJECT #12 NB IMPROVEMENTS MP 241 TO 250	
ROUTE		LOCATION			
SR 87		MP 190 TO MP 250			
TRACS NO. XXXXX XXX				XXX-X(XXX)X	___ <i>OF</i> ___

MATCHLINE SEE ABOVE RIGHT

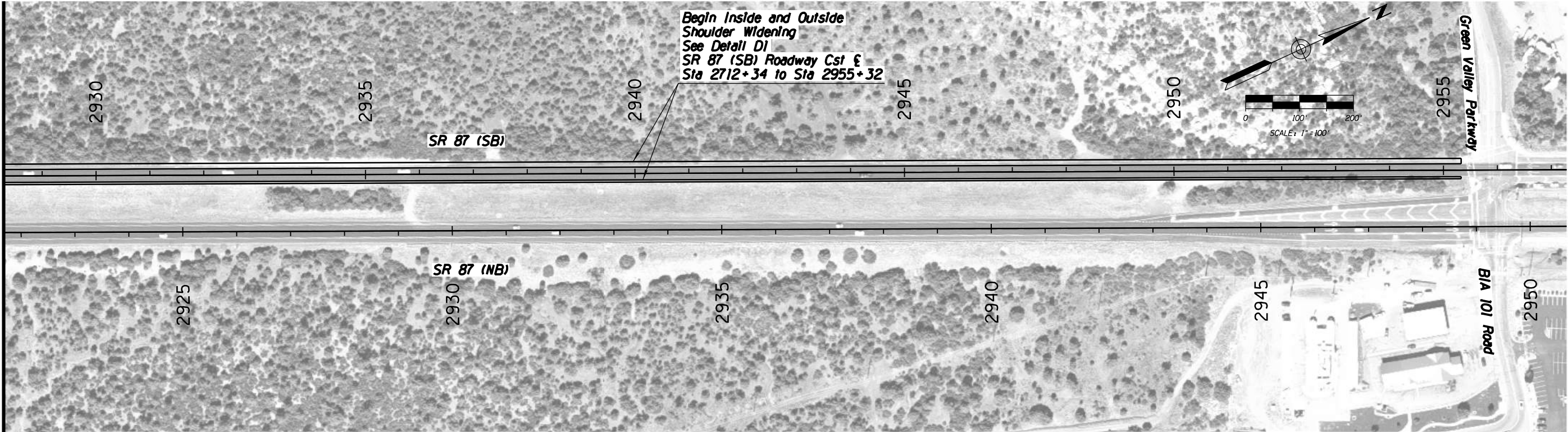
MATCHLINE SEE SHEET 5.3-03



F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
-	ARIZ.	-	-	59	

DESIGN	T. Raddeman	8/19	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION URBAN PROJECT MANAGEMENT	PRELIMINARY STAGE I
DRAWN	D. Klebosky	8/19	PROJECT #11 SB IMPROVEMENTS & PROJECT #12 NB IMPROVEMENTS MP 241 TO 250	Review NOT FOR CONSTRUCTION OR RECORDING
CHECKED	V. Rodriguez	8/19		DWG NO. 5.3-04
Kimley»Horn				
ROUTE	SR 87	LOCATION	MP 190 TO MP 250	
TRACS NO.	XXXXX XXX		XXX-X(XXX)X	OF

MATCHLINE SEE SHEET 5.3-04

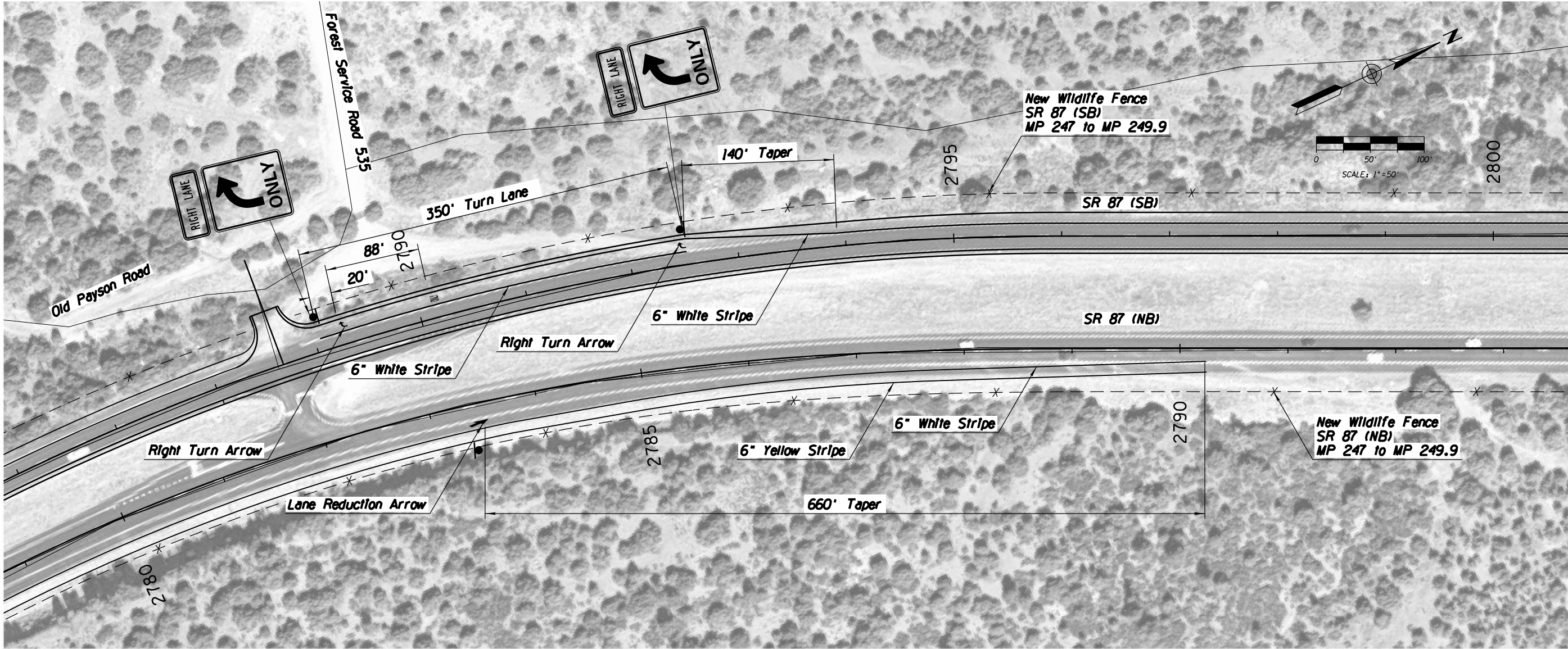


F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
-	ARIZ.	-	-	59	

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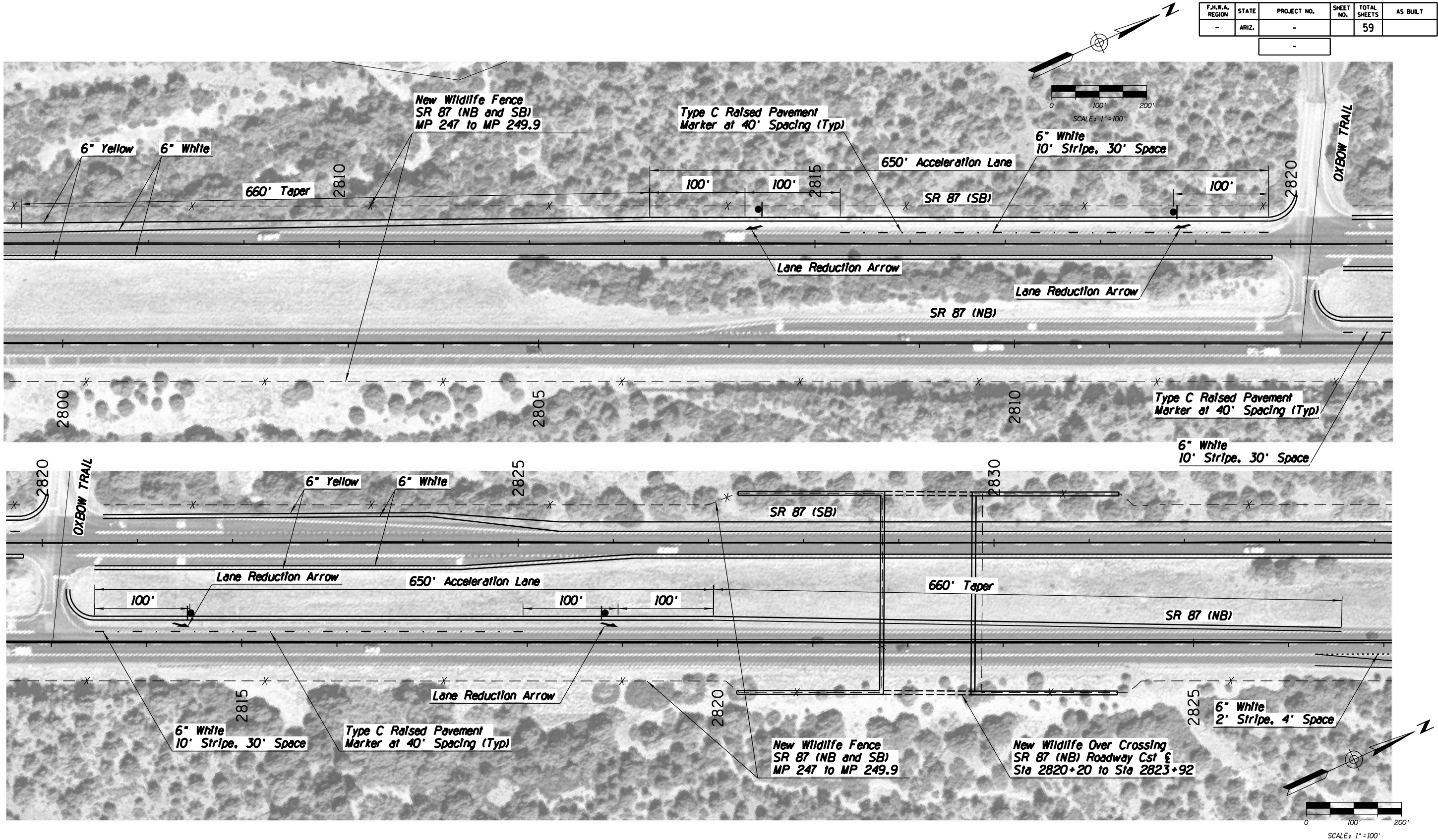
		NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION URBAN PROJECT MANAGEMENT PROJECT #11 SB IMPROVEMENTS & PROJECT #12 NB IMPROVEMENTS MP 241 TO 250	PRELIMINARY STAGE I Review NOT FOR CONSTRUCTION OR RECORDING
DESIGN		T. Raddeman	8/19		
DRAWN		D. Klebosky	8/19		
CHECKED		V. Rodriguez	8/19		
<div>Kimley»Horn</div> <div>© 2019 KIMLEY-HORN AND ASSOCIATES, INC.</div>					
ROUTE		LOCATION			
SR 87		MP 190 TO MP 250			DWG NO. 5.3-05
TRACS NO. XXXXX XXX			XXX-X(XXX)X		___ OF ___

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
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		NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION URBAN PROJECT MANAGEMENT PROJECT #11 SB IMPROVEMENTS & PROJECT #12 NB IMPROVEMENTS MP 241 TO 250	PRELIMINARY STAGE I Review NOT FOR CONSTRUCTION OR RECORDING
DESIGN		T. Raddeman	8/19		
DRAWN		D. Klebosky	8/19		
CHECKED		V. Rodriguez	8/19		
Kimley»Horn					
© 2019 KIMLEY-HORN AND ASSOCIATES, INC.					
ROUTE		LOCATION			
SR 87		MP 190 TO MP 250		DWG NO. 5.4-01	
TRACS NO. XXXXX XXX			XXX-X(XXX)X		___ OF ___

DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO. DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO.



F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
-	ARIZ.	-	-	59	

DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO. DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO.

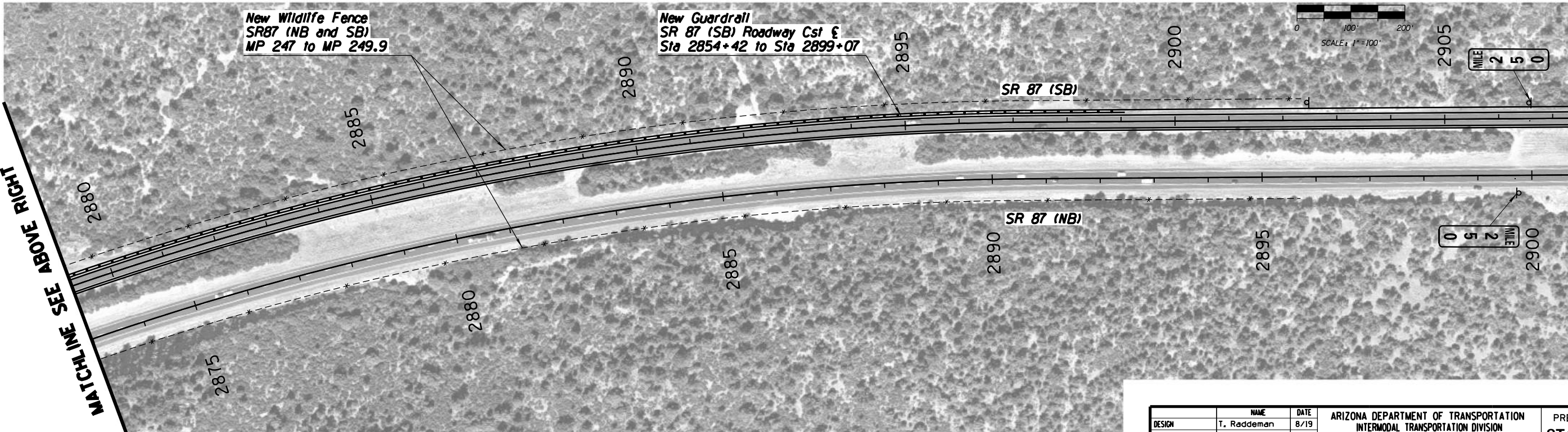
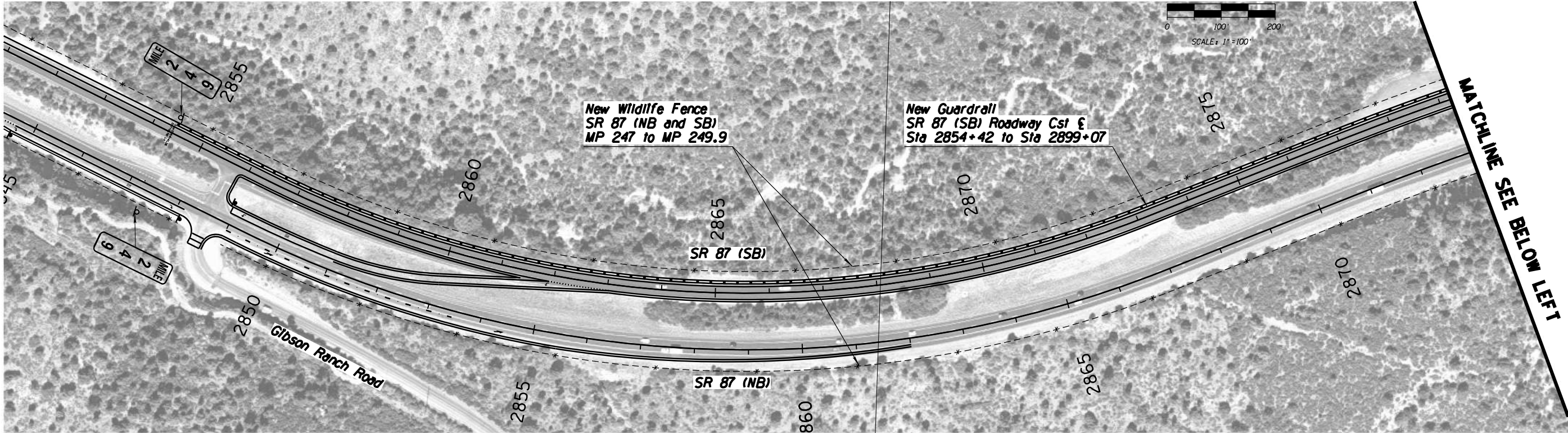
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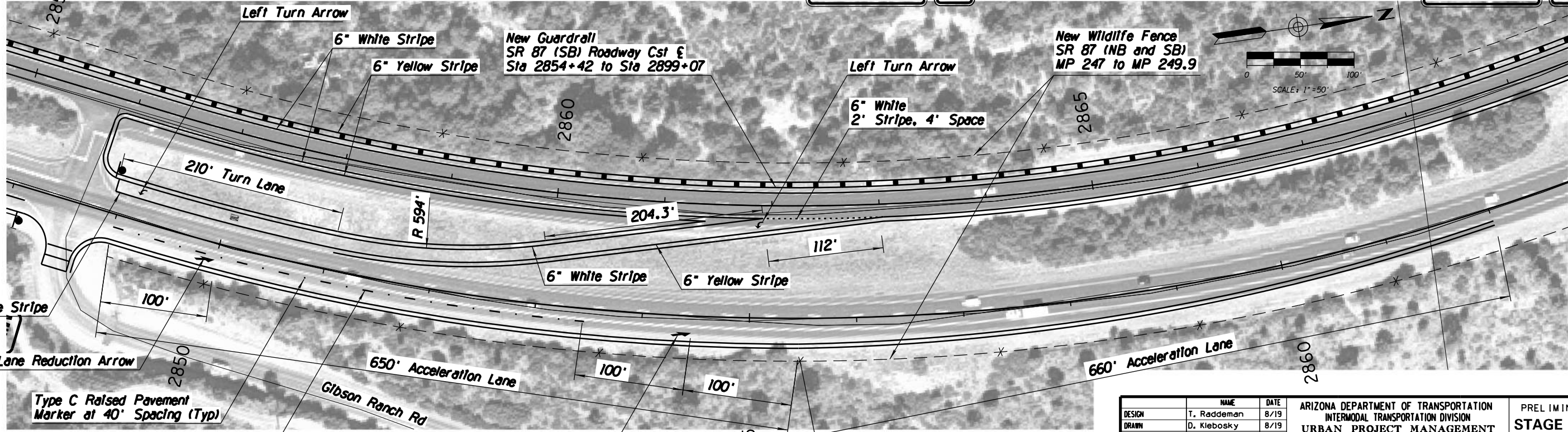
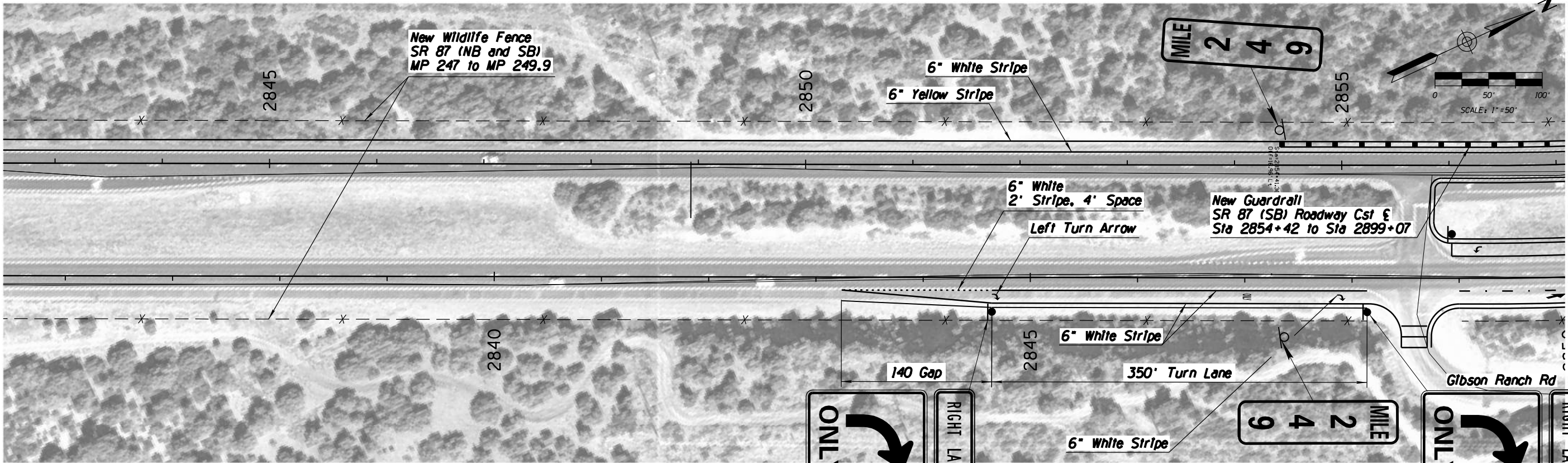
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DESIGN	T. Raddeman	8/19		STAGE I	
DRAWN	D. Klebosky	8/19			Review
CHECKED	V. Rodriguez	8/19			NOT FOR
<div>Kimley»Horn</div> <div>© 2019 KIMLEY-HORN AND ASSOCIATES, INC.</div>			CONSTRUCTION		
			OR RECORDING		
ROUTE	LOCATION	MP 190 TO MP 250		DWG NO. 5.5-01	
SR 87					
TRACS NO. XXXXX XXX			XXX-X(XXX)X	___ OF ___	

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
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		NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION URBAN PROJECT MANAGEMENT	PRELIMINARY STAGE I Review NOT FOR CONSTRUCTION OR RECORDING
DESIGN	T. Raddeman		8/19		
DRAWN	D. Klebosky		8/19		
CHECKED	V. Rodriguez		8/19		
<div>Kimley»Horn</div> <div>© 2019 KIMLEY-HORN AND ASSOCIATES, INC.</div>				MAINLINE SIGN LOCATIONS STA 2408+00 TO STA 2460+00	
ROUTE		LOCATION			
SR 87		MP 190 TO MP 250		DWG NO. 5.6-01	
TRACS NO. XXXXX XXX			XXX-X(XXX)X		___ OF ___

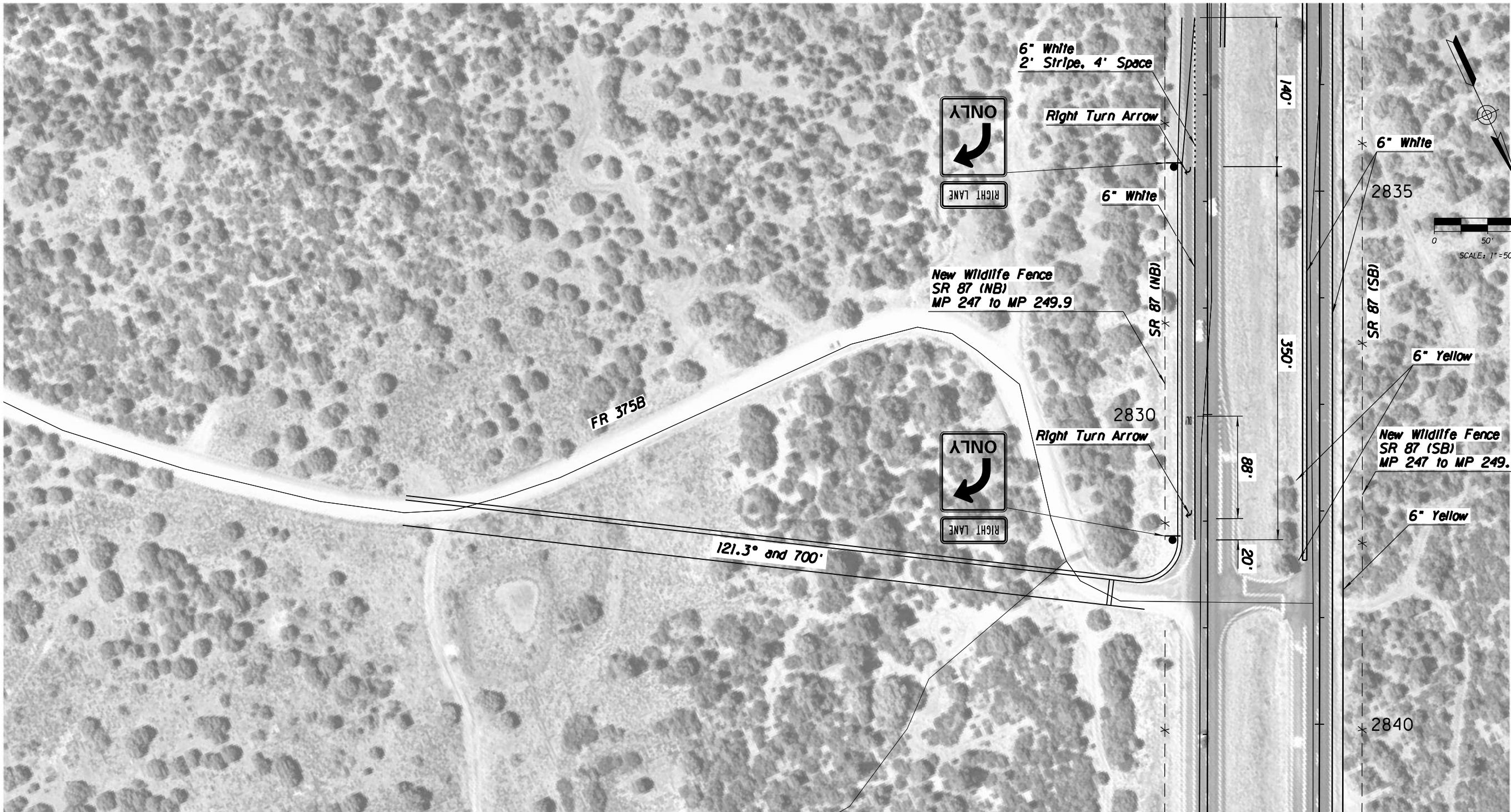
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
-	ARIZ.	-	59		



		NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION URBAN PROJECT MANAGEMENT PROJECT #11 SB IMPROVEMENTS & PROJECT #12 NB IMPROVEMENTS MP 241 TO 250	PRELIMINARY STAGE I Review NOT FOR CONSTRUCTION OR RECORDING
DESIGN	T. Raddeman		8/19		
DRAWN	D. Klebosky		8/19		
CHECKED	V. Rodriguez		8/19		
ROUTE		LOCATION		MP 190 TO MP 250	
SR 87					
TRACS NO. XXXXX XXX			XXX-X(XXX)X		___ OF ___

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
-	ARIZ.	-	-	59	

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		NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION URBAN PROJECT MANAGEMENT PROJECT #11 SB IMPROVEMENTS & PROJECT #12 NB IMPROVEMENTS MP 247 TO 249	PRELIMINARY STAGE I Review NOT FOR CONSTRUCTION OR RECORDING
DESIGN	T. Raddeman		8/19		
DRAWN	D. Klebosky		8/19		
CHECKED	V. Rodriguez		8/19		
<div>Kimley»Horn</div> <div>© 2019 KIMLEY-HORN AND ASSOCIATES, INC.</div>					
ROUTE		LOCATION			
SR 87		MP 190 TO MP 250			DWG NO. 7.3-01
TRACS NO. XXXXX XXX			XXX-X(XXX)X		___ OF ___

**PACKAGE PROJECT 12 –
NORTHBOUND IMPROVEMENTS
(MP 247-250)**

ADOT SR 87 Corridor Development Study

PRELIMINARY SCOPING REPORT

GENERAL PROJECT INFORMATION	
Date: 8/20/2019	ADOT Project Manager:
Project Name: Northbound Improvements (MP 247-250)	
City/Town: N/A	County: Gila
COG/MPO: CAG	ADOT District: Northcentral
Primary Route/Street: SR 87	
Beginning Limit: 247	
End Limit: 250	
Project Length: 3 Miles	
Right of Way Ownership(s) (where proposed project would occur): (check all that apply) <input type="checkbox"/> City/Town <input type="checkbox"/> County <input checked="" type="checkbox"/> ADOT <input type="checkbox"/> Private <input type="checkbox"/> Federal <input type="checkbox"/> Tribal <input type="checkbox"/> Other	
Adjacent Land Ownership(s): (Check all that apply) <input type="checkbox"/> City/Town <input checked="" type="checkbox"/> County <input type="checkbox"/> ADOT <input checked="" type="checkbox"/> Private <input checked="" type="checkbox"/> Federal <input type="checkbox"/> Tribal <input type="checkbox"/> Other	

PROJECT NEED
This location has experienced a high number of accidents involving wildlife, there are also sight distance and grade issues at several intersections.

PROJECT PURPOSE			
What is the Primary Purpose of the Project?	<input type="checkbox"/> Preservation	<input checked="" type="checkbox"/> Modernization	<input type="checkbox"/> Expansion
Prevent wildlife-involved crashes by adding wildlife fencing, signage, and an overpass, address sight distance issues at intersections through side street realignments and turn lane improvements.			

PROJECT RISKS	
Check any risks identified that may impact the project's scope, schedule, or budget:	
<input type="checkbox"/> Access/Traffic Control/Detour Issues	<input type="checkbox"/> Right-of-Way
<input type="checkbox"/> Constructability/Construction Window Issues	<input type="checkbox"/> Environmental
<input type="checkbox"/> Stakeholder Issues	<input type="checkbox"/> Utilities
<input type="checkbox"/> Structures & Geotech	<input type="checkbox"/> Other:
Risk Description: (if a box is checked above, briefly explain the risk) Click or tap here to enter text.	

POTENTIAL FUNDING SOURCE(S)				
Anticipated Project Design/Construction Funding Type: (Check all that applied)	<input type="checkbox"/> STBG	<input type="checkbox"/> TAP	<input checked="" type="checkbox"/> HSIP	<input checked="" type="checkbox"/> State
	<input type="checkbox"/> Local	<input type="checkbox"/> Private	<input type="checkbox"/> Tribal	<input type="checkbox"/> Other

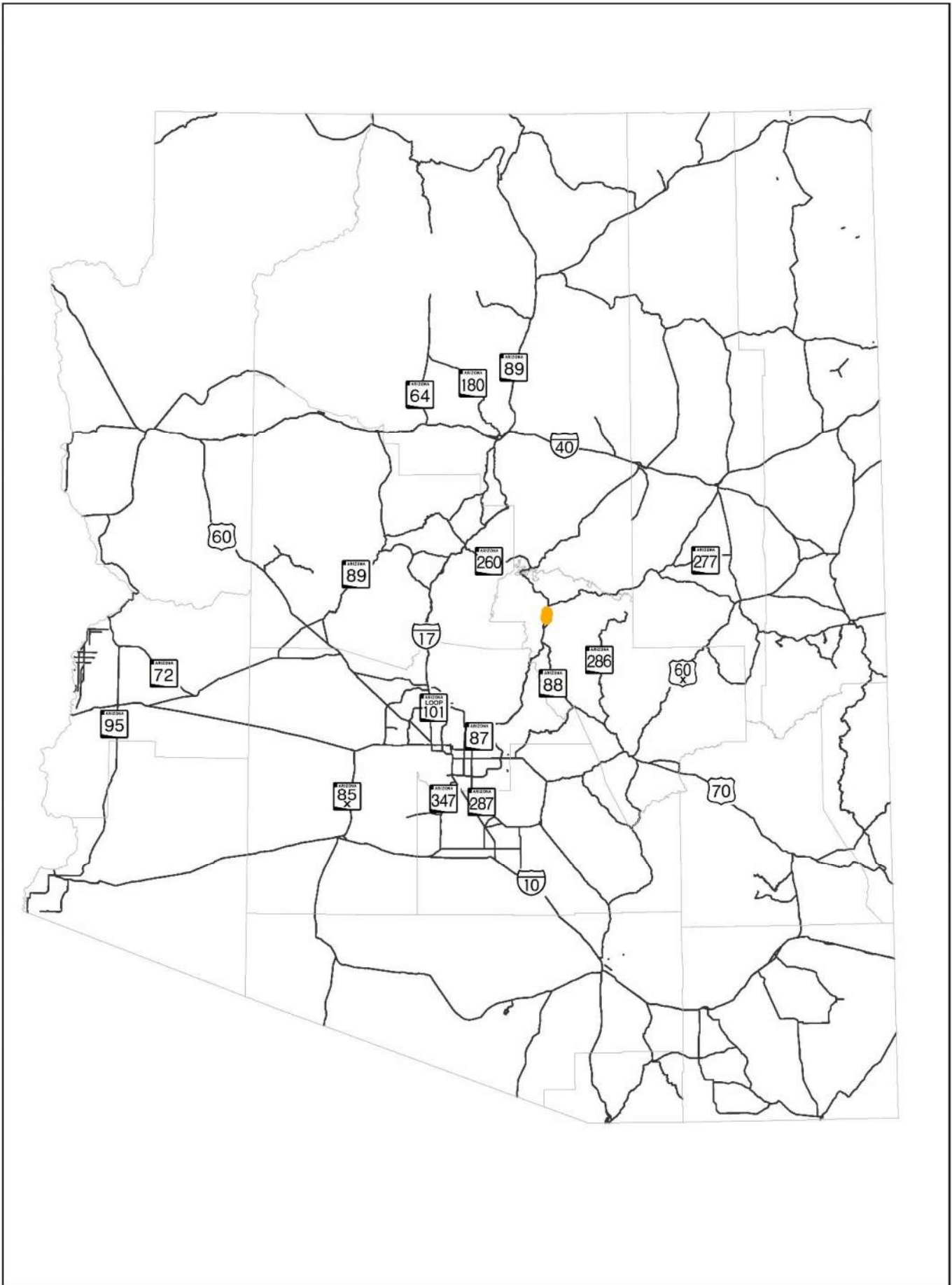
COST ESTIMATE			
Design \$578,840.00	Right-of-Way \$0.00	Construction \$5,209,560.00	Total \$5,788,400.00

RECOMMENDED PROJECT DELIVERY
Delivery: <input type="checkbox"/> Design-Bid-Build <input type="checkbox"/> Design-Build <input checked="" type="checkbox"/> Other:
Design Program Year: Click or tap here to enter text.
Construction Program Year: Click or tap here to enter text.

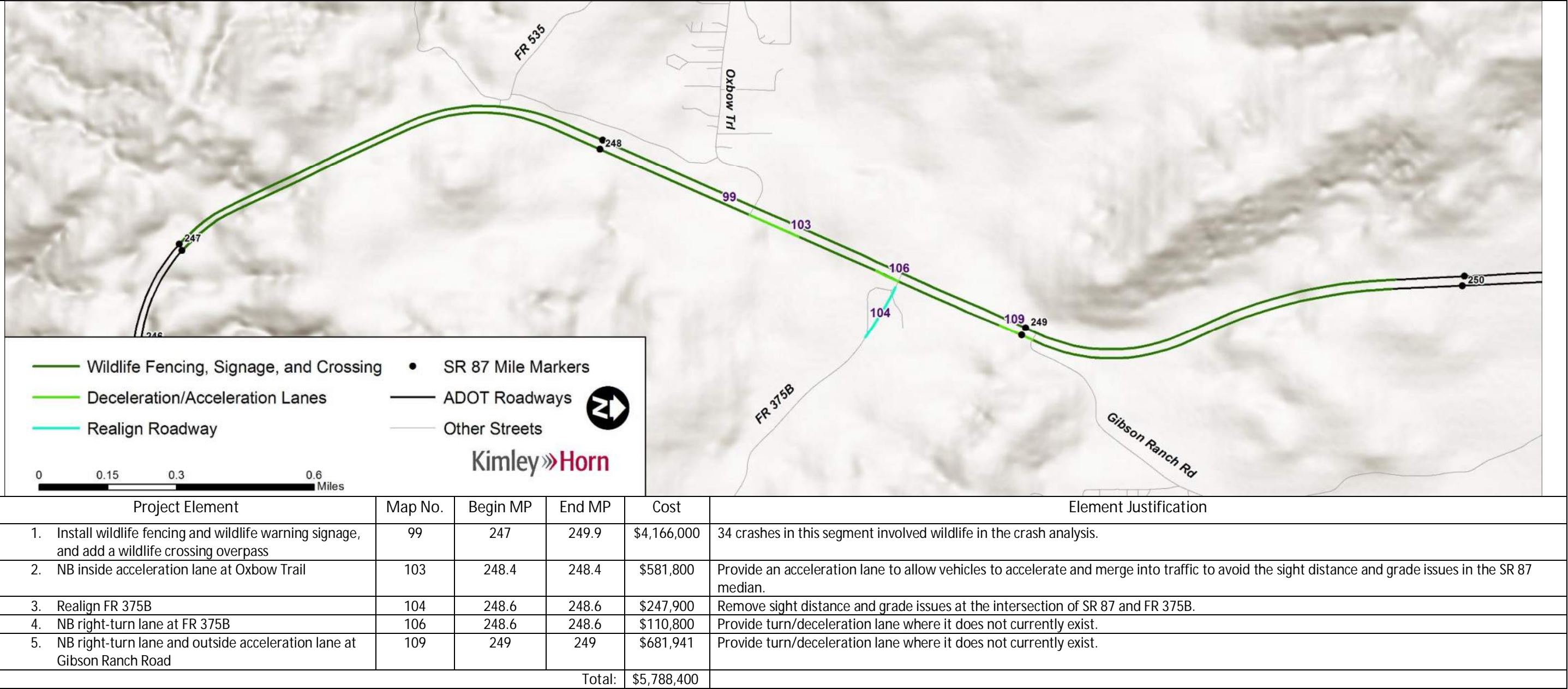
ATTACHMENTS	
1.	Project Scope of Work
2.	State Location Map
3.	Project Vicinity Map
4.	Itemized Cost Estimates
5.	Conceptual Design Plans

ATTACHMENT 1: SCOPE OF WORK	
<i>(Provide a detailed breakdown of the project's scope of work using bullet form)</i>	
•	Install wildlife Fencing and wildlife warning signage, and add a wildlife crossing overpass (MP 247-249.9)
•	Construct northbound inside acceleration lane at Oxbow Trail (MP 248.4)
•	Realign FR 375B east of SR 87 (MP 248.6)
•	Construct northbound right-turn lane at FR 375B (MP 248.6)
•	Construct northbound right-turn lane and outside acceleration lane at Gibson Ranch Road (MP 249)

ATTACHMENT 2: STATE LOCATION MAP



ATTACHMENT 4: PROJECT VICINITY MAP



ATTACHMENT 4: ITEMIZED COST ESTIMATES



SR87 Corridor Development Study ITEMIZED COST ESTIMATE

103. Northbound inside accel lane at Oxbow Trl (MP 248.4)

ITEM NO	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
2010011	CLEARING AND GRUBBING	ACRE	1	\$5,000.00	\$5,000
2020029	REMOVAL OF ASPHALTIC CONCRETE PAVEMENT	SQ.YD.	320	\$20.00	\$6,400
2020201	SAW CUTTING	L.FT.	1,440	\$2.50	\$3,600
2030301	ROADWAY EXCAVATION	CU.YD.	1,280	\$10.00	\$12,800
3030022	AGGREGATE BASE, CLASS 2	CU.YD.	1,014	\$60.00	\$60,840
4090003	ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL)	TON	768	\$160.00	\$122,880
4110001	ASPHALTIC CONCRETE FRICTION COURSE (MISC.)	TON	62	\$120.00	\$7,440
6080101	MISCELLANEOUS WORK (SIGNS)	L.SUM	1	\$2,000.00	\$2,000
7041501	PAVEMENT MARKINGS	L.SUM	1	\$1,440.00	\$1,440
8050003	SEEDING (CLASS II)	ACRE	1	\$3,500.00	\$3,500
9240050	MISCELLANEOUS WORK (PUBLIC RELATIONS)	L.SUM	1	\$3,000.00	\$3,000
9280037	GROUND-IN RUMBLE STRIP (12 INCH)	L.FT.	1,440	\$1.50	\$2,160
Roadway Construction Subtotal					\$231,060
Unidentified Item Allowance (15%)					\$ 34,659
Subtotal					\$265,719
Water Supply/Dust Palliative (3%)					\$ 7,972
Maintenance And Protection Of Traffic (15%)					\$ 39,858
Erosion Control (1%)					\$ 2,658
Contractor Quality Control (2%)					\$ 5,315
Construction Surveying And Layout (2%)					\$ 5,315
Other Item Subtotal					\$326,837
Mobilization (12%)					\$ 39,221
Construction Subtotal					\$ 366,058
Engineering Design (10%)					\$ 36,606
Construction Engineering and Contingencies (20%)					\$ 73,212
Indirect Cost Allocation (10.02%)					\$ 36,680
Construction Total					\$ 512,556

104. Realign FR 375B to take out sharp curvature (MP 248.6)

ITEM NO	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
2010011	CLEARING AND GRUBBING	ACRE	1	\$5,000.00	\$5,000
2020029	REMOVAL OF ASPHALTIC CONCRETE PAVEMENT	SQ.YD.	23	\$35.00	\$805
2020201	SAW CUTTING	L.FT.	100	\$2.50	\$250
2030301	ROADWAY EXCAVATION	CU.YD.	90	\$10.00	\$900
3030022	AGGREGATE BASE, CLASS 2	CU.YD.	645	\$120.00	\$77,400
4090003	ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL)	TON	109	\$160.00	\$17,440
4110001	ASPHALTIC CONCRETE FRICTION COURSE (MISC.)	TON	10	\$120.00	\$1,200
6080101	MISCELLANEOUS WORK (SIGNS)	L.SUM	1	\$2,000.00	\$2,000
7041501	PAVEMENT MARKINGS	L.SUM	1	\$100.00	\$100
8050003	SEEDING (CLASS II)	ACRE	1	\$3,500.00	\$3,500
9240050	MISCELLANEOUS WORK (PUBLIC RELATIONS)	L.SUM	1	\$3,000.00	\$3,000
9280037	GROUND-IN RUMBLE STRIP (12 INCH)	L.FT.	100	\$1.50	\$150
Roadway Construction Subtotal					\$111,745
Unidentified Item Allowance (15%)					\$ 16,762
Subtotal					\$128,507
Water Supply/Dust Palliative (3%)					\$ 3,856
Maintenance And Protection Of Traffic (15%)					\$ 19,277
Erosion Control (1%)					\$ 1,286
Contractor Quality Control (2%)					\$ 2,571
Construction Surveying And Layout (2%)					\$ 2,571
Other Item Subtotal					\$158,068
Mobilization (12%)					\$ 18,969
Construction Subtotal					\$ 177,037
Engineering Design (10%)					\$ 17,704
Construction Engineering and Contingencies (20%)					\$ 35,408
Indirect Cost Allocation (10.02%)					\$ 17,740
Construction Total					\$ 247,889

106. Northbound right-turn lane at FR 375B (MP 248.6)

ITEM NO	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
2010011	CLEARING AND GRUBBING	ACRE	1	\$5,000.00	\$5,000
2020029	REMOVAL OF ASPHALTIC CONCRETE PAVEMENT	SQ.YD.	23	\$35.00	\$805
2020201	SAW CUTTING	L.FT.	200	\$2.50	\$500
2030301	ROADWAY EXCAVATION	CU.YD.	300	\$10.00	\$3,000
3030022	AGGREGATE BASE, CLASS 2	CU.YD.	97	\$120.00	\$11,640
4090003	ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL)	TON	63	\$160.00	\$10,080
4110001	ASPHALTIC CONCRETE FRICTION COURSE (MISC.)	TON	5	\$120.00	\$600
6080101	MISCELLANEOUS WORK (SIGNS)	L.SUM	1	\$2,000.00	\$2,000
7041501	PAVEMENT MARKINGS	L.SUM	1	\$200.00	\$200
8050003	SEEDING (CLASS II)	ACRE	1	\$3,500.00	\$3,500
9050001	GUARD RAIL, W-BEAM, SINGLE FACE	L.FT.	200	\$30.00	\$6,000
9050026	GUARD RAIL TERMINAL (TANGENT TYPE)	EACH	1	\$2,500.00	\$2,500
9050036	GUARD RAIL, ANCHOR ASSEMBLY	EACH	1	\$800.00	\$800
9240050	MISCELLANEOUS WORK (PUBLIC RELATIONS)	L.SUM	1	\$3,000.00	\$3,000
9280037	GROUND-IN RUMBLE STRIP (12 INCH)	L.FT.	200	\$1.50	\$300
Roadway Construction Subtotal					\$49,925
Unidentified Item Allowance (15%)					\$ 7,489
Subtotal					\$57,414
Water Supply/Dust Palliative (3%)					\$ 1,723
Maintenance And Protection Of Traffic (15%)					\$ 8,613
Erosion Control (1%)					\$ 575
Contractor Quality Control (2%)					\$ 1,149
Construction Surveying And Layout (2%)					\$ 1,149
Other Item Subtotal					\$70,623
Mobilization (12%)					\$ 8,475
Construction Subtotal					\$ 79,098
Engineering Design (10%)					\$ 7,910
Construction Engineering and Contingencies (20%)					\$ 15,820
Indirect Cost Allocation (10.02%)					\$ 7,926
Construction Total					\$ 110,754

109. Northbound right-turn lane at Gibson Ranch Rd (MP 249)

ITEM NO	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
2010011	CLEARING AND GRUBBING	ACRE	1	\$5,000.00	\$5,000
2020029	REMOVAL OF ASPHALTIC CONCRETE PAVEMENT	SQ.YD.	23	\$35.00	\$805
2020201	SAW CUTTING	L.FT.	200	\$2.50	\$500
2030301	ROADWAY EXCAVATION	CU.YD.	300	\$10.00	\$3,000
3030022	AGGREGATE BASE, CLASS 2	CU.YD.	97	\$120.00	\$11,640
4090003	ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL)	TON	63	\$160.00	\$10,080
4110001	ASPHALTIC CONCRETE FRICTION COURSE (MISC.)	TON	5	\$120.00	\$600
6080101	MISCELLANEOUS WORK (SIGNS)	L.SUM	1	\$2,000.00	\$2,000
7041501	PAVEMENT MARKINGS	L.SUM	1	\$200.00	\$200
8050003	SEEDING (CLASS II)	ACRE	1	\$3,500.00	\$3,500
9240050	MISCELLANEOUS WORK (PUBLIC RELATIONS)	L.SUM	1	\$3,000.00	\$3,000
9280037	GROUND-IN RUMBLE STRIP (12 INCH)	L.FT.	200	\$1.50	\$300
Roadway Construction Subtotal					\$40,625
Unidentified Item Allowance (15%)					\$ 6,094
Subtotal					\$46,719
Water Supply/Dust Palliative (3%)					\$ 1,402
Maintenance And Protection Of Traffic (15%)					\$ 7,008
Erosion Control (1%)					\$ 468
Contractor Quality Control (2%)					\$ 935
Construction Surveying And Layout (2%)					\$ 935
Other Item Subtotal					\$57,467
Mobilization (12%)					\$ 6,897
Construction Subtotal					\$ 64,364
Engineering Design (10%)					\$ 6,437
Construction Engineering and Contingencies (20%)					\$ 12,873
Indirect Cost Allocation (10.02%)					\$ 6,450
Construction Total					\$ 90,124

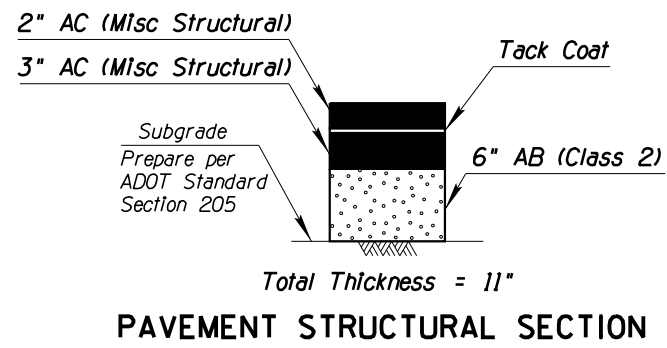
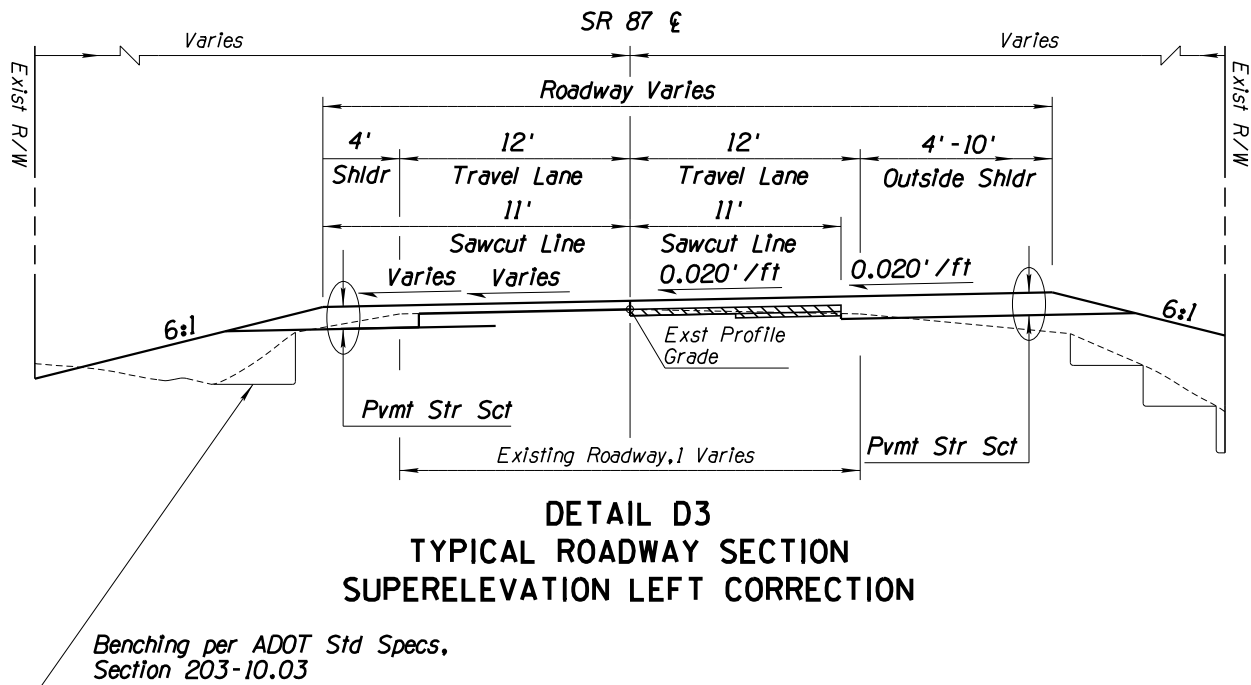
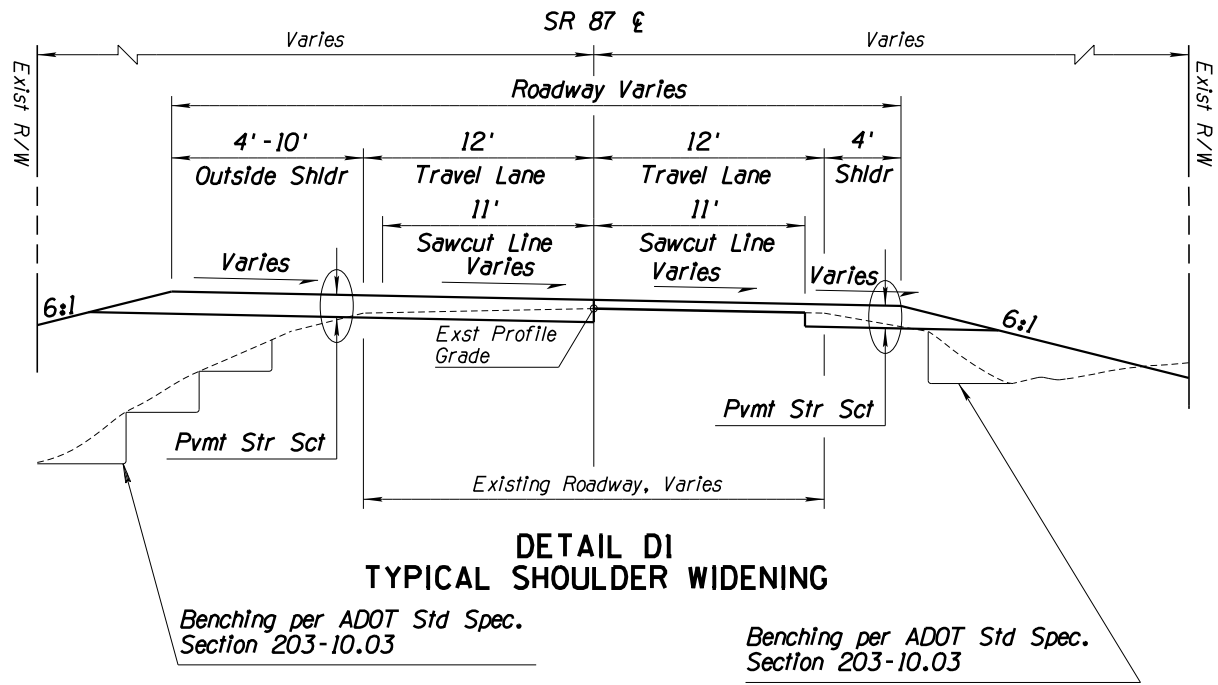
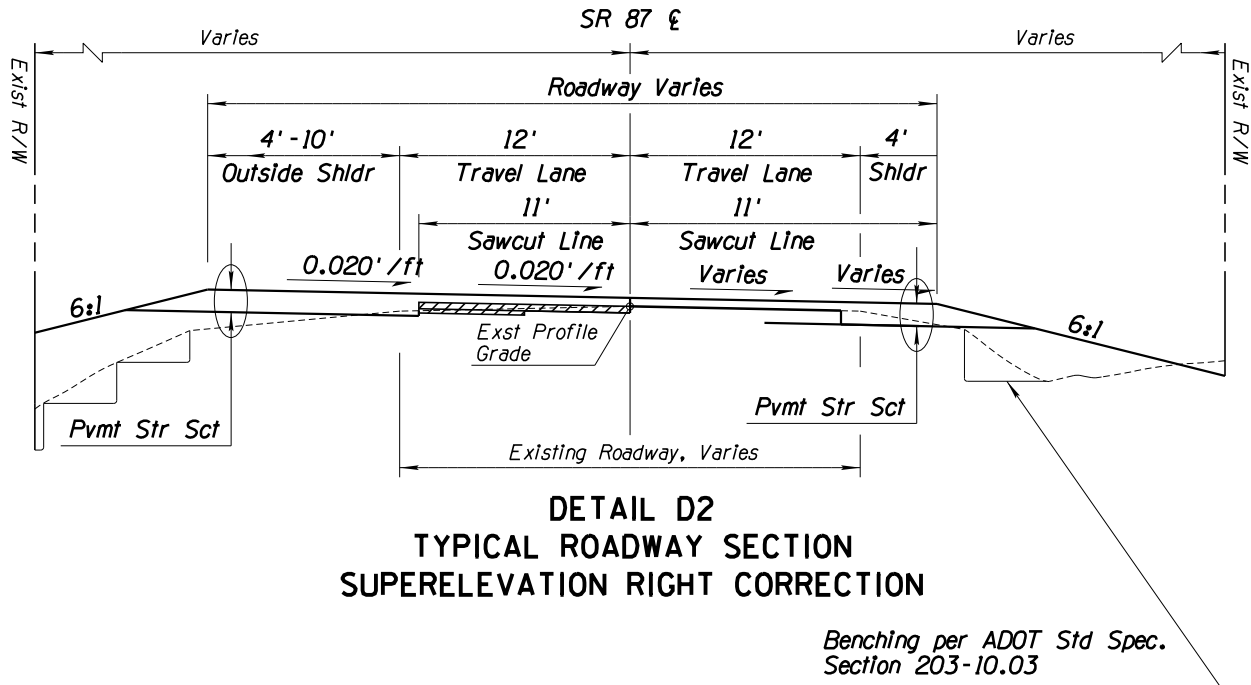
109. NB outside acceleration lane - Gibson Ranch Road (MP 249)

ITEM NO	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
2010011	CLEARING AND GRUBBING	ACRE	1	\$5,000.00	\$5,000
2020029	REMOVAL OF ASPHALTIC CONCRETE PAVEMENT	SQ.YD.	292	\$20.00	\$5,840
2020201	SAW CUTTING	L.FT.	1,310	\$2.50	\$3,275
2030301	ROADWAY EXCAVATION	CU.YD.	1,170	\$10.00	\$11,700
3030022	AGGREGATE BASE, CLASS 2	CU.YD.	922	\$120.00	\$110,640
4090003	ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL)	TON	699	\$160.00	\$111,840
4110001	ASPHALTIC CONCRETE FRICTION COURSE (MISC.)	TON	56	\$120.00	\$6,720
6080101	MISCELLANEOUS WORK (SIGNS)	L.SUM	1	\$2,000.00	\$2,000
7041501	PAVEMENT MARKINGS	L.SUM	1	\$1,310.00	\$1,310
8050003	SEEDING (CLASS II)	ACRE	1	\$3,500.00	\$3,500
9240050	MISCELLANEOUS WORK (PUBLIC RELATIONS)	L.SUM	1	\$3,000.00	\$3,000
9280037	GROUND-IN RUMBLE STRIP (12 INCH)	L.FT.	1,310	\$1.50	\$1,965
Roadway Construction Subtotal					\$266,790
Unidentified Item Allowance (15%)					\$ 40,019
Subtotal					\$306,809
Water Supply/Dust Palliative (3%)					\$ 9,205
Maintenance And Protection Of Traffic (15%)					\$ 46,022
Erosion Control (1%)					\$ 3,069
Contractor Quality Control (2%)					\$ 6,137
Construction Surveying And Layout (2%)					\$ 6,137
Other Item Subtotal					\$377,379
Mobilization (12%)					\$ 45,286
Construction Subtotal					\$ 422,665
Engineering Design (10%)					\$ 42,267
Construction Engineering and Contingencies (20%)					\$ 84,533
Indirect Cost Allocation (10.02%)					\$ 42,352
Construction Total					\$ 591,817

ATTACHMENT 5: PRELIMINARY PLANS

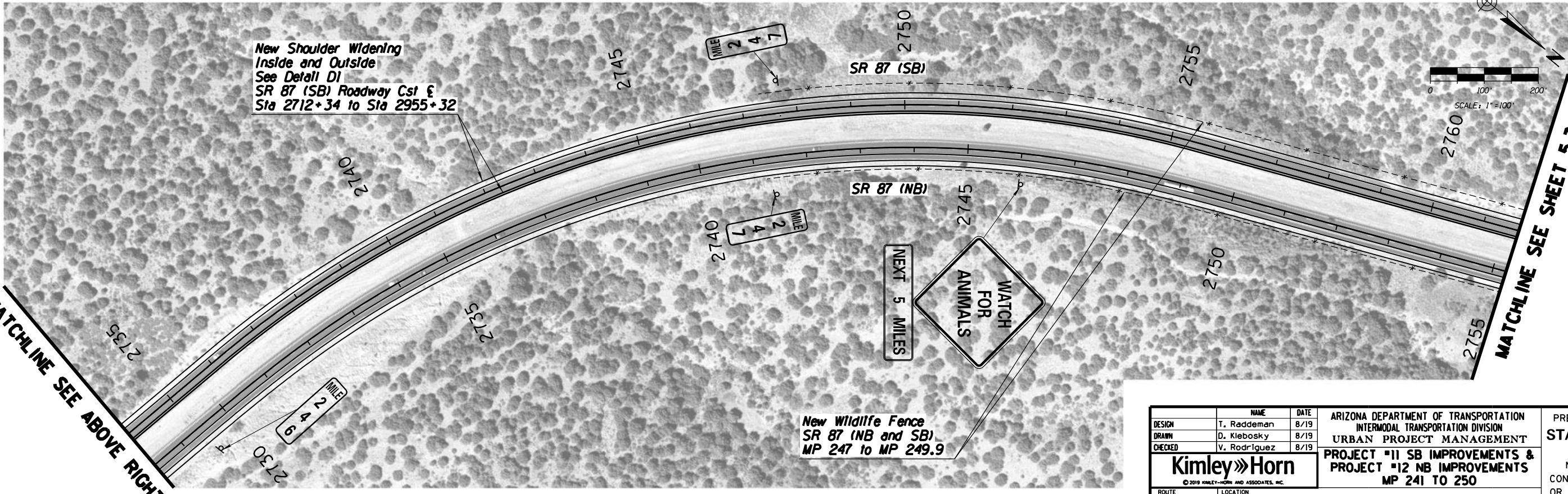
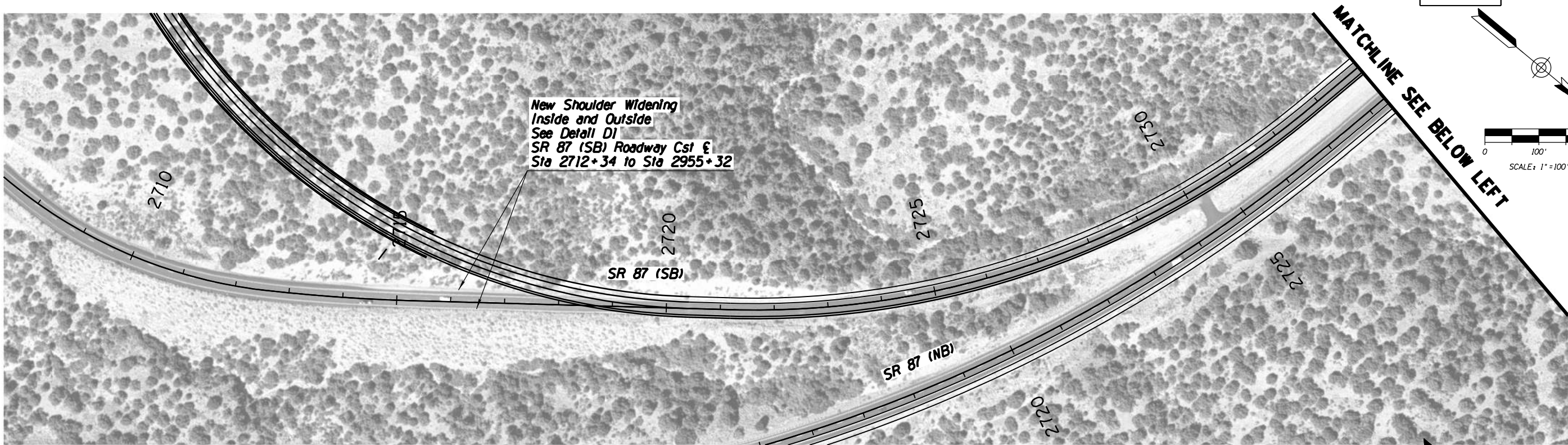
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
-	ARIZ.	-	-	59	

SR 87 MILE POST STATION			
MP NB	STATION	MP SB	STATION
196	101+73	196	101+18
197	155+53	197	154+02
198	207+69	198	207+94
199	261+02	199	259+13
200	314+21	200	311+72
201	367+73	201	364+06
202	419+18	202	417+81
203	471+36	203	470+65
204	526+28	204	523+10
205	577+70	205	575+84
206	630+73	206	628+30
207	682+81	207	680+28
208	736+47	208	734+12
209	788+55	209	786+62
210	842+08	210	839+50
211	894+91	211	890+40
212	942+20	212	939+42
213	998+65	213	995+55
214	1051+86	214	1050+06
215	1105+38	215	1095+77
216	1158+68	216	1147+95
217	1213+92	217	1199+48
218	1268+31	218	1250+20
219	1318+19	219	1304+12
220	1374+67	220	1359+76
221	1427+95	221	1412+99
222	1480+60	222	1465+84
223	1533+97	223	1518+89
224	1584+61	224	1570+72
225	1639+50	225	1625+29
226	1689+86	226	1676+32
227	1740+23	227	1726+14
228	1792+50	228	1778+04
229	1845+24	229	1831+98
230	1898+50	230	1884+70
231	1949+61	231	1933+71
232	1999+33	232	1985+29
233	2047+74	233	2033+06
234	2101+13	234	2085+05
235	2154+59	235	2137+29
236	2207+09	236	2189+44
237	2259+88	237	2240+86
238	2311+66	238	2293+85
239	2364+28	239	2344+91
240	2416+01	240	2397+41
241	2467+79	241	2448+96
242	2518+51	242	2496+68
243	2571+26	243	2549+70
244	2620+38	244	2601+82
245	2677+47	245	2655+01
246	2729+53	246	2703+04
247	2741+30	247	2747+68
248	2794+18	248	2801+15
249	2847+25	249	2854+41
250	2899+69	250	2906+58



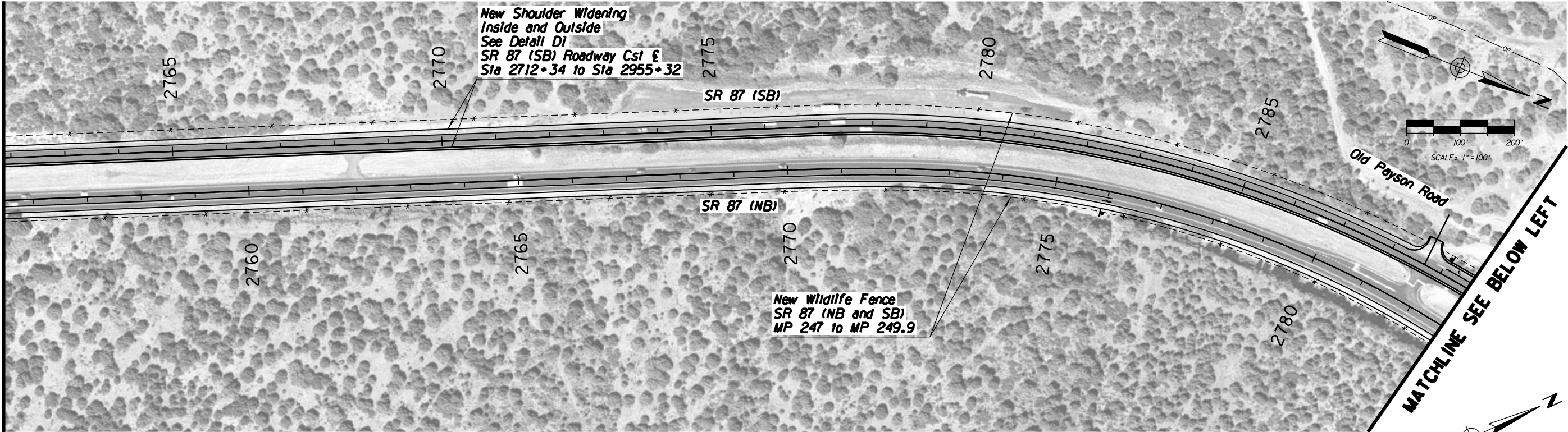
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DRAWN	T. Raddeman	8/19		
CHECKED	D. Klebosky	8/19		
	V. Rodriguez	8/19		
Kimley»Horn				
ROUTE SR 87			LOCATION MP 190 TO MP 250	DWG NO.
TRACS NO. XXXXX XXX			XXX-X(XXX)X	OF

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
-	ARIZ.	-	-	59	



DESIGN	T. Raddeman	DATE	8/19	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION URBAN PROJECT MANAGEMENT	PRELIMINARY STAGE I Review NOT FOR CONSTRUCTION OR RECORDING
DRAWN	D. Klebosky	DATE	8/19		
CHECKED	V. Rodriguez	DATE	8/19		
Kimley»Horn <small>© 2019 KIMLEY-HORN AND ASSOCIATES, INC.</small>				PROJECT #11 SB IMPROVEMENTS & PROJECT #12 NB IMPROVEMENTS MP 241 TO 250	DWG NO. 5.3-01
ROUTE		LOCATION			
SR 87		MP 190 TO MP 250			
TRACS NO. XXXXX XXX				XXX-X(XXX)X	OF

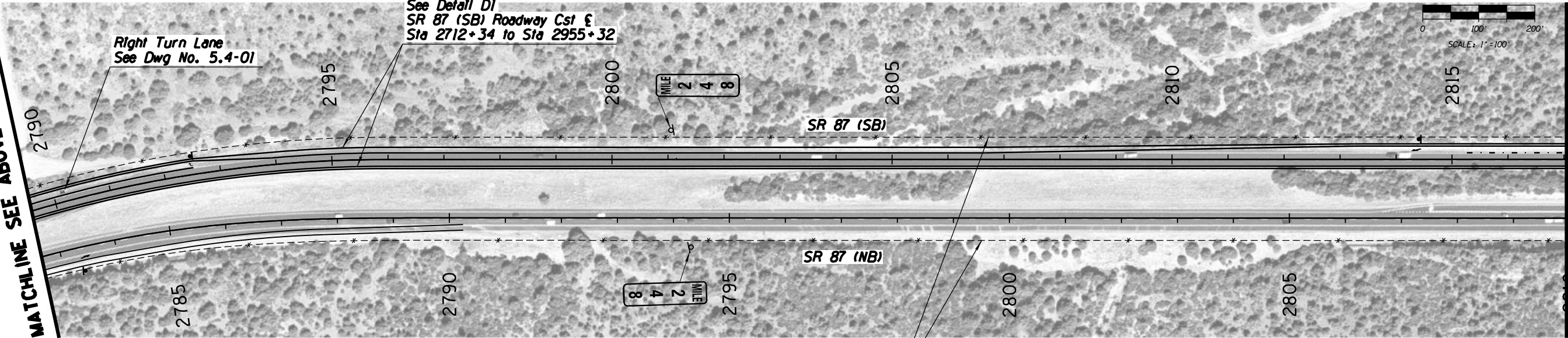
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F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
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MATCHLINE SEE ABOVE RIGHT

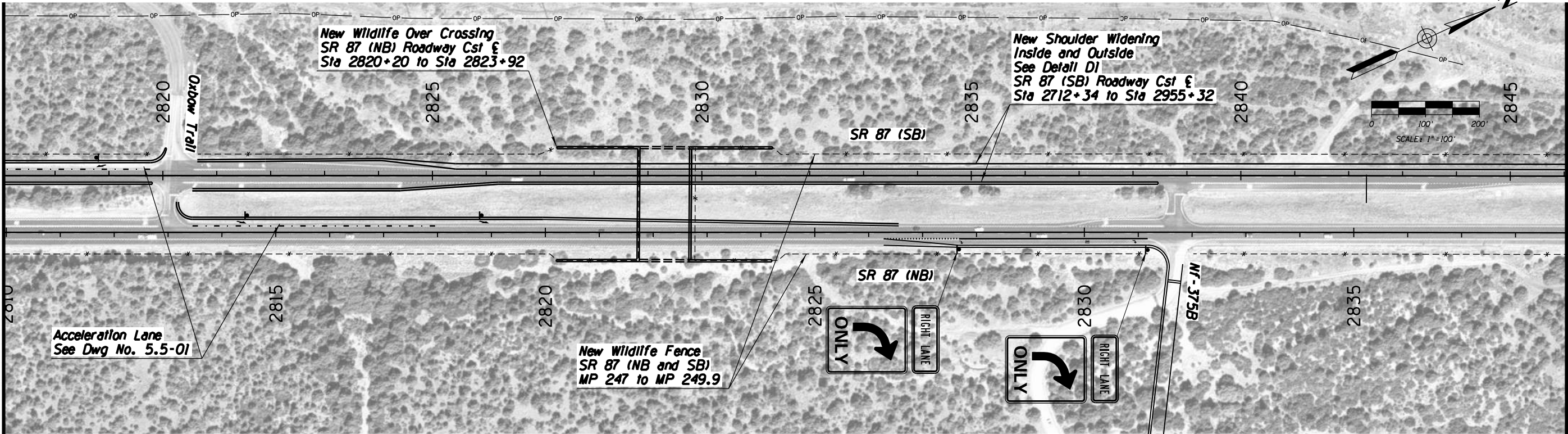


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DRAWN	D. Klebosky		8/19		
CHECKED	V. Rodriguez		8/19		
<div>Kimley»Horn</div> <div>© 2019 KIMLEY-HORN AND ASSOCIATES, INC.</div>					
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SR 87		MP 190 TO MP 250			
TRACS NO. XXXXX XXX			XXX-X(XXX)X		

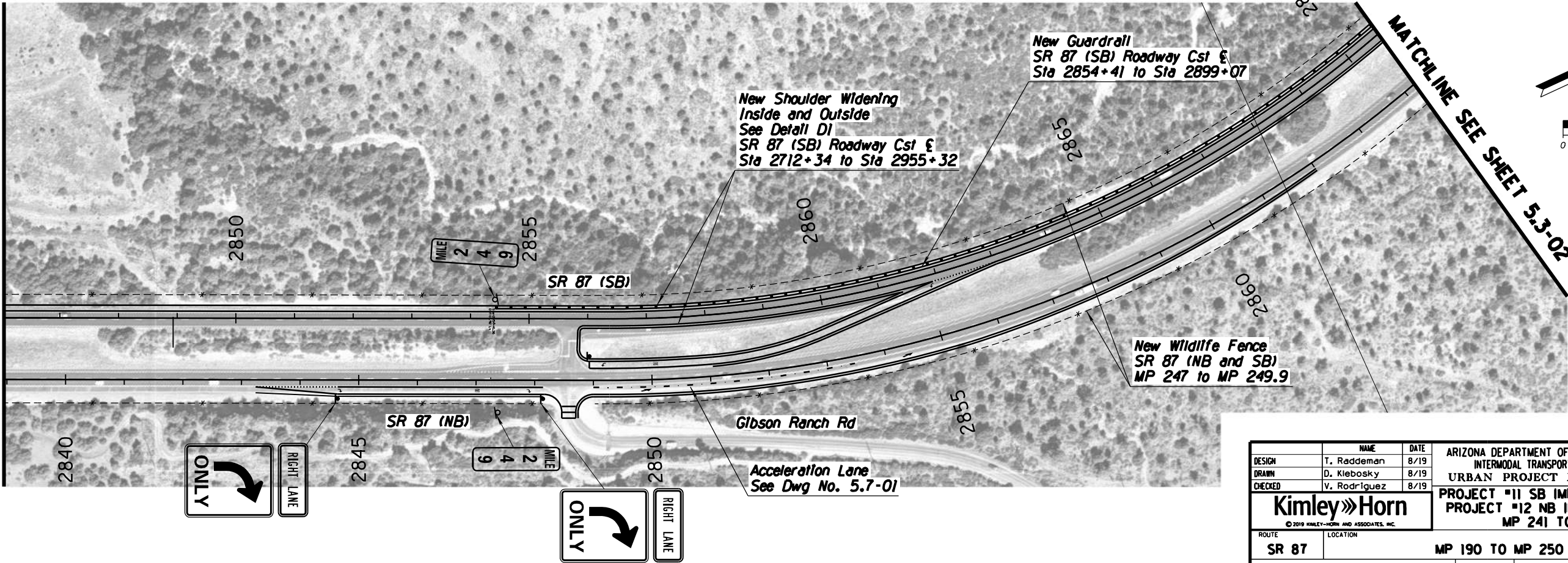
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
-	ARIZ.	-	-	59	

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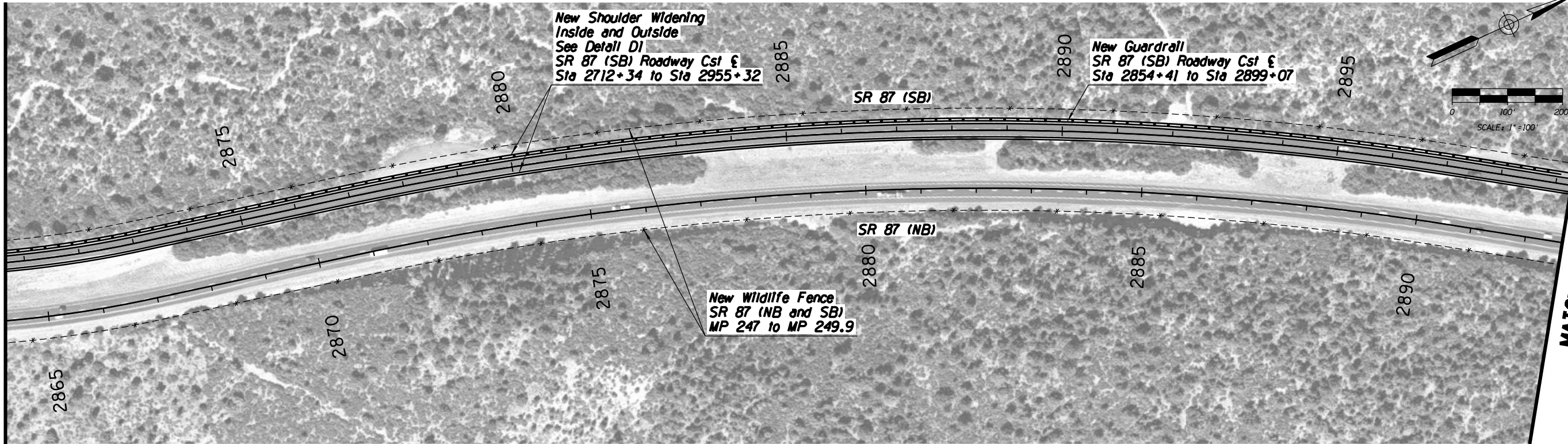
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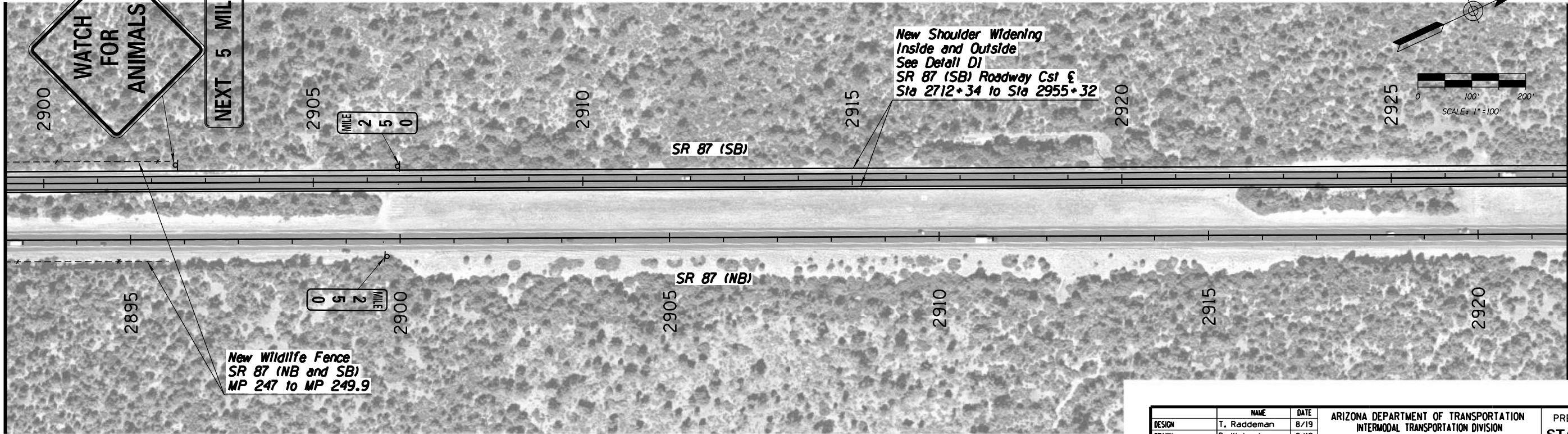
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DRAWN	D. Klebosky		8/19		
CHECKED	V. Rodriguez		8/19	PROJECT #11 SB IMPROVEMENTS & PROJECT #12 NB IMPROVEMENTS MP 241 TO 250	DWG NO. 5.3-03
Kimley»Horn © 2019 KIMLEY-HORN AND ASSOCIATES, INC.					
ROUTE		LOCATION			
SR 87		MP 190 TO MP 250			
TRACS NO. XXXXX XXX				XXX-X(XXX)X	___ <i>OF</i> ___

MATCHLINE SEE SHEET 5.3-03



F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
-	ARIZ.	-	-	59	

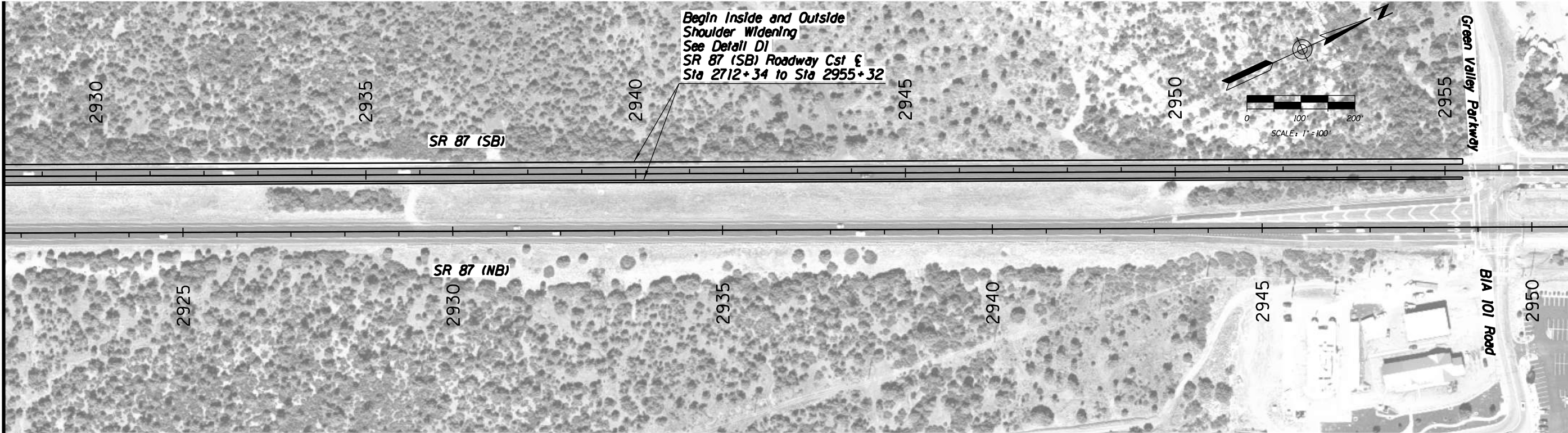
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MATCHLINE SEE SHEET 5.3-05

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DESIGN	T. Raddeman	8/19		
DRAWN	D. Klebosky	8/19		
CHECKED	V. Rodriguez	8/19		
Kimley»Horn © 2019 KIMLEY-HORN AND ASSOCIATES, INC.				
ROUTE		LOCATION		
SR 87		MP 190 TO MP 250	DWG NO. 5.3-04	
TRACS NO. XXXXX XXX			XXX-X(XXX)X	___ <i>OF</i> ___

MATCHLINE SEE SHEET 5.3-04

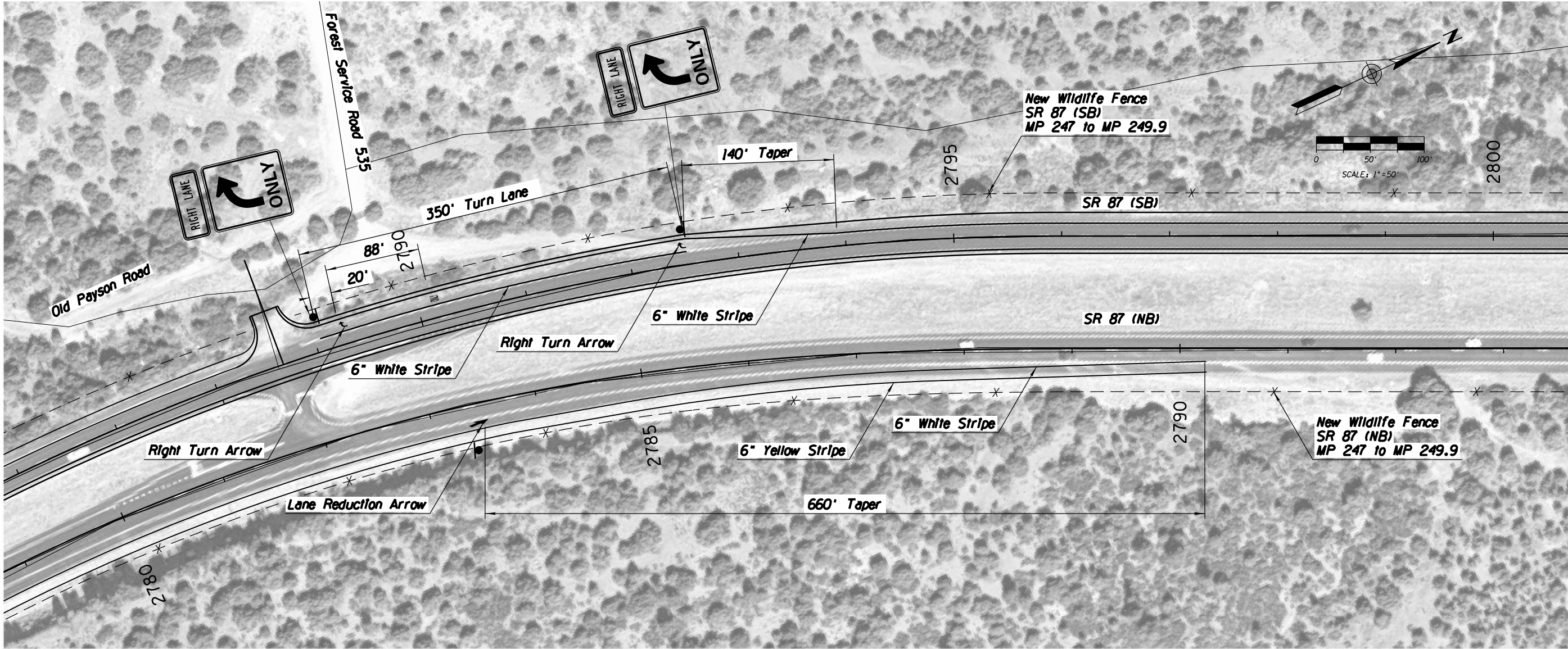


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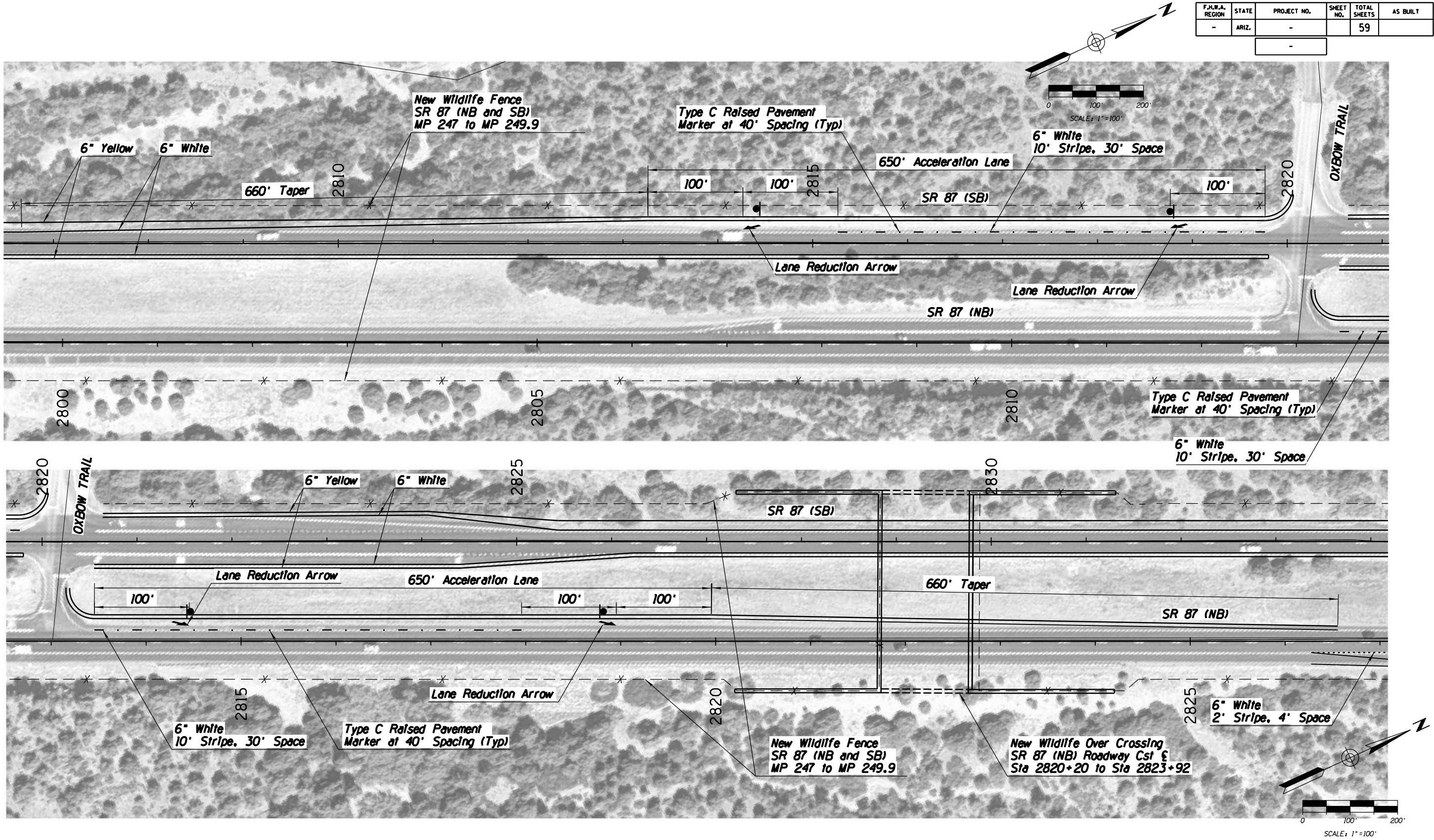
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DESIGN		T. Raddeman	8/19		
DRAWN		D. Klebosky	8/19		
CHECKED		V. Rodriguez	8/19		
<div>Kimley»Horn</div> <div>© 2019 KIMLEY-HORN AND ASSOCIATES, INC.</div>					
ROUTE		LOCATION			
SR 87		MP 190 TO MP 250		DWG NO. 5.3-05	
TRACS NO. XXXXX XXX				XXX-X(XXX)X	___ OF ___

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
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		NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION URBAN PROJECT MANAGEMENT PROJECT #11 SB IMPROVEMENTS & PROJECT #12 NB IMPROVEMENTS MP 241 TO 250	PRELIMINARY STAGE I Review NOT FOR CONSTRUCTION OR RECORDING
DESIGN		T. Raddeman	8/19		
DRAWN		D. Klebosky	8/19		
CHECKED		V. Rodriguez	8/19		
Kimley»Horn © 2019 KIMLEY-HORN AND ASSOCIATES, INC.					
ROUTE		LOCATION			
SR 87		MP 190 TO MP 250		DWG NO. 5.4-01	
TRACS NO. XXXXX XXX				XXX-X(XXX)X	___ OF ___

DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO. DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO.



F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
-	ARIZ.	-	-	59	

DESIGN	T. Raddeman	8/19
DRAWN	D. Klebosky	8/19
CHECKED	V. Rodriguez	8/19

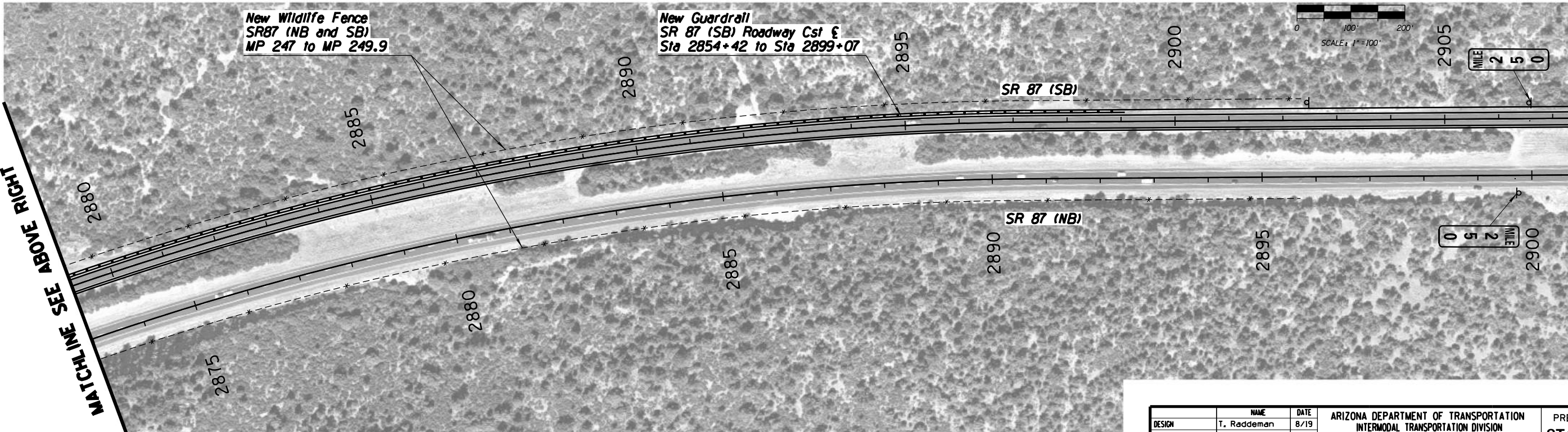
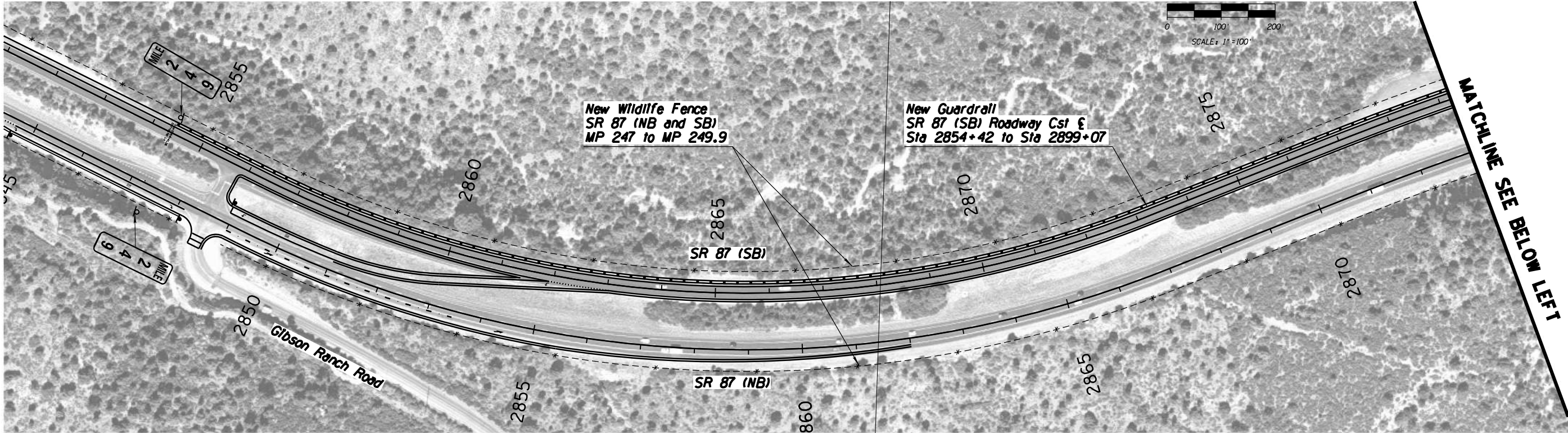
Kimley»Horn	
© 2019 KIMLEY-HORN AND ASSOCIATES, INC.	

ROUTE	LOCATION
SR 87	MP 190 TO MP 250

TRACS NO. XXXXX XXX	XXX-X(XXX)X
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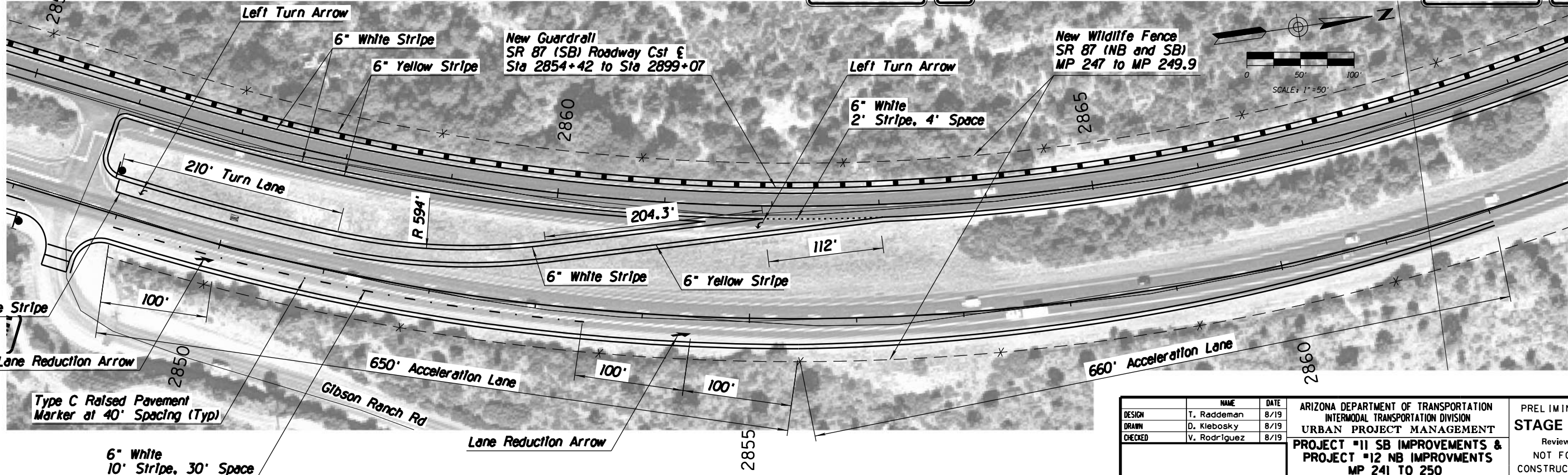
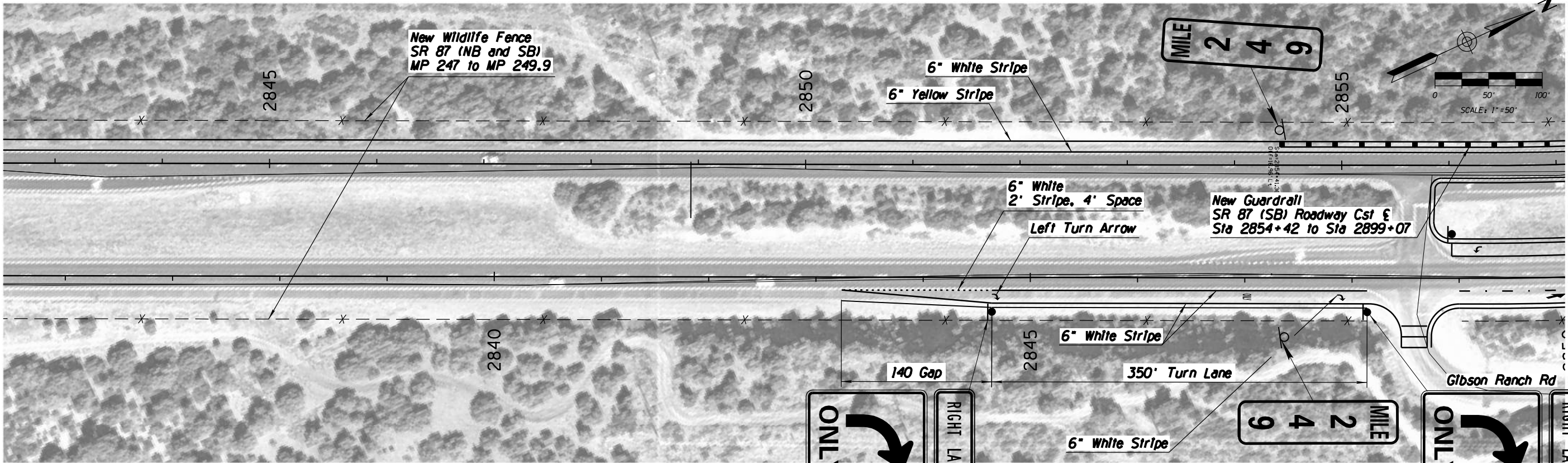
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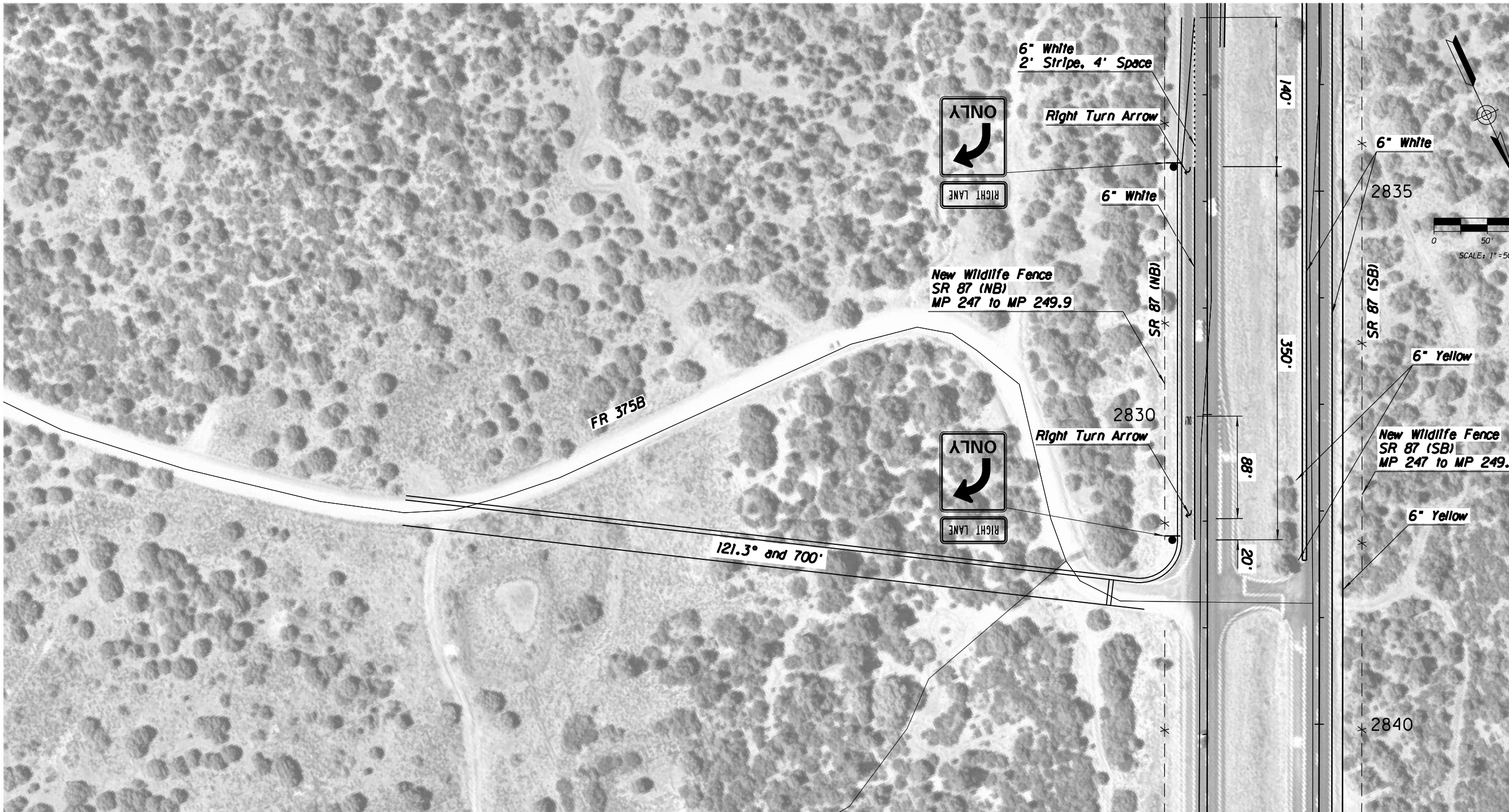
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DRAWN	D. Klebosky		8/19			
CHECKED	V. Rodriguez		8/19			
<div>Kimley»Horn</div> <div>© 2019 KIMLEY-HORN AND ASSOCIATES, INC.</div>				MAINLINE SIGN LOCATIONS STA 2408+00 TO STA 2460+00		
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SR 87				DWG NO. 5.6-01		
TRACS NO. XXXXX XXX			XXX-X(XXX)X		___ OF ___	

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
-	ARIZ.	-	59		



		NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION URBAN PROJECT MANAGEMENT PROJECT #11 SB IMPROVEMENTS & PROJECT #12 NB IMPROVEMENTS MP 241 TO 250	PRELIMINARY STAGE I Review NOT FOR CONSTRUCTION OR RECORDING
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CHECKED	V. Rodriguez		8/19		
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TRACS NO. XXXXX XXX				XXX-X(XXX)X	___ OF ___

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
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		NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION URBAN PROJECT MANAGEMENT PROJECT #11 SB IMPROVEMENTS & PROJECT #12 NB IMPROVEMENTS MP 247 TO 249	PRELIMINARY STAGE I Review NOT FOR CONSTRUCTION OR RECORDING
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DRAWN		D. Klebosky	8/19		
CHECKED		V. Rodriguez	8/19		
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ROUTE		LOCATION		MP 190 TO MP 250	DWG NO. 7.3-01
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