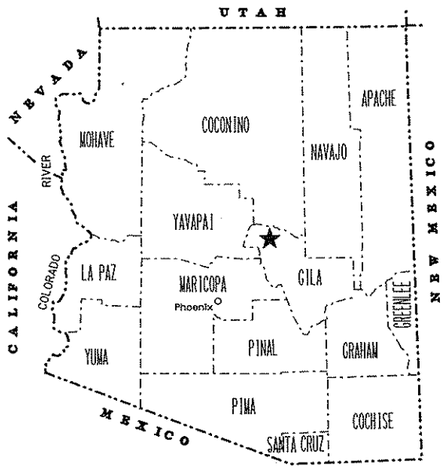
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	FINALIZED PLANS
9	ARIZ.	N-900-757	1	10	

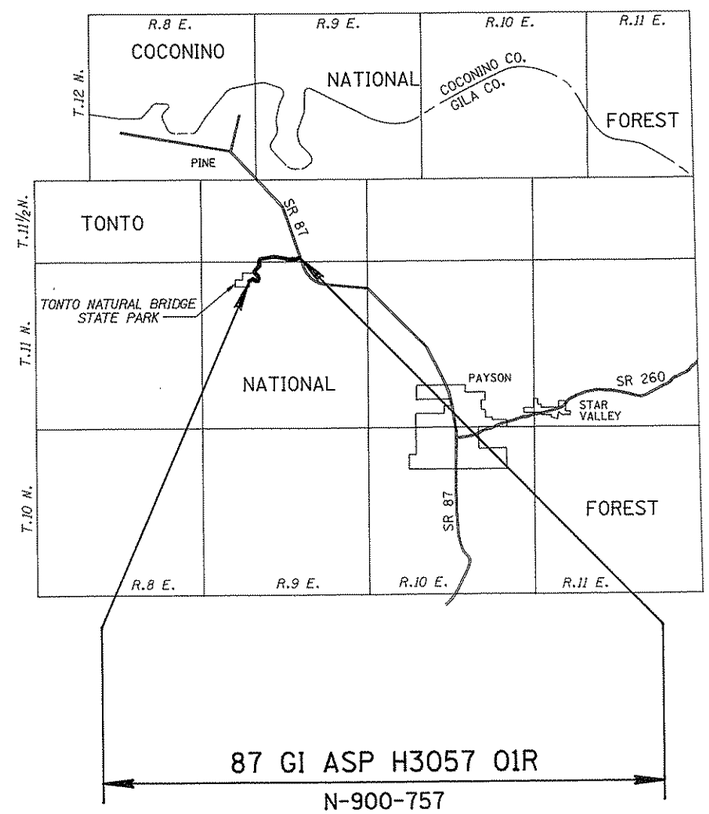


STATE OF ARIZONA
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

RIGHT OF WAY PLAN OF THE
JCT SR 87 - STATE PARK ACCESS ROAD
TONTO NATURAL BRIDGE STATE PARK
87 GI ASP H3057 01R
N-900-757

Click here for SR 87 Index

LENGTH OF PROJECT 2.74 MILES DISTRICT 3



ARIZONA DEPARTMENT OF TRANSPORTATION BOARD APPROVED FOR RIGHT OF WAY ACQUISITION IN ACCORDANCE WITH RESOLUTION N/A DATED N/A

GARY K. ROBINSON STATE ENGINEER

APPROVED IN ACCORDANCE WITH ROADWAY PLANS

DATE 3-24-94

CHIEF R/W AGENT

Robert Hernandez

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED DATE

DIVISION ADMINISTRATOR

PUBLIC HEARING REQUIREMENTS CERTIFIED	N/A
ENVIRONMENTAL CLEARANCE	N/A
C & S REVIEW	4-8-94
BID SET REVIEW	6-8-94

DRAWING NO. D-4-7-396

SHEET NO. 1 OF 10

① ACQUIRED IN THE NAME OF THE STATE PARKS BOARD.

ALL AREAS ARE DEFINED IN ACRES UNLESS OTHERWISE NOTED.

OWNERSHIP RECORD / ACQUISITION RECORD

PARCEL NUMBER	OWNER	DESCRIPTION	TOTAL AREA	AREA REQUIRED: GROSS INCLUDING EXISTING R/W	AREA REQUIRED: NET EXCLUDING EXISTING R/W	EASEMENT AREA	REMAINDER: LEFT	REMAINDER: RIGHT	SHEET NO.	CHIEF R/W AGENT APPROVAL	INSTRUMENT: TYPE	INSTRUMENT: DATE	RECORDED: DATE	RECORDED: DOCUMENT
4-390	UNITED STATES OF AMERICA TONTO NATIONAL FOREST	S½ SECTION 34, T. 11½ N., R. 9 E.			① 6.93	① 0.09 DE			4,5					
		S½ SECTION 33, T. 11½ N., R. 9 E.			① 11.59	① 0.05 DE			5,6					
		W½ SECTION 4, T. 11 N., R. 9 E.			① 8.85	① 0.09 DE			6,7,8					
		E½ SECTION 5, T. 11 N., R. 9 E.			① 3.99				7,8					

PRELIMINARY PRINT
FOR ENGINEERING USE ONLY
SUBJECT TO DESIGN CHANGES, ADDITIONS, ALTERATIONS & CORRECTIONS
DATE 8/17/94 BY CZ

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REVISIONS

C.C. NO.	DATE	BY	DESCRIPTION
8816	01/13/94	GMTS	MODIFIED NEW R/W PARCEL 4-390 IN SECTION 5

DRAWING NO. D-4-T-396
HARD COPY
DRAWN/DATE 8/93 SG
CHECKED/DATE K.WILLIAMS
GMTS CORPORATION CONSULTING ENGINEERS

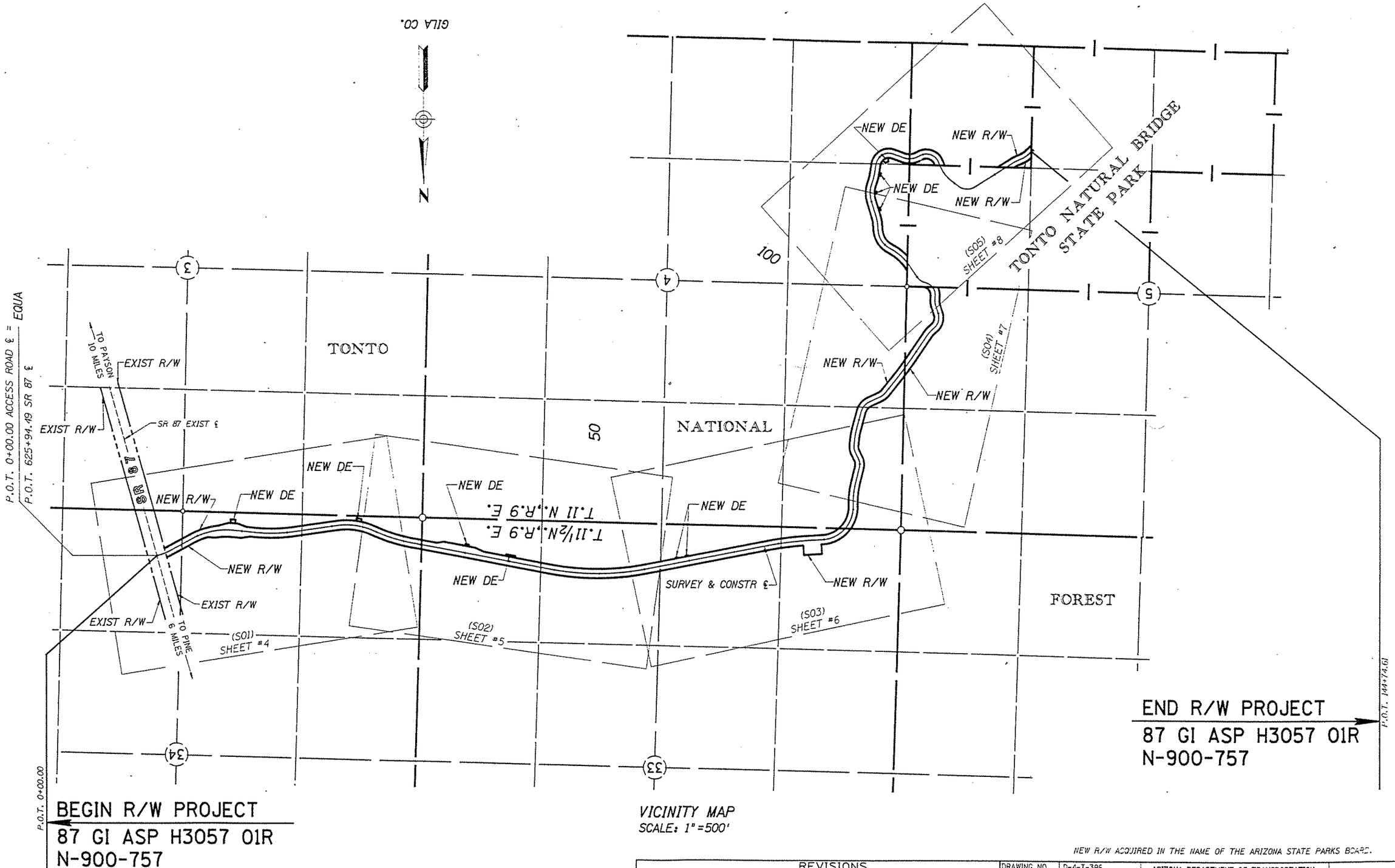
ARIZONA DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
RIGHT OF WAY PLANS SERVICES

HIGHWAY: JCT SR 87-STATE PARK ACCESS ROAD
PROJECT NO. N-900-757
ROUTE: S.R.87
LOCATION: TONTO NATURAL BRIDGE STATE PARK

SHEET 2 OF 10

TRACS NO. 87 GI ASP H3057 01R

•DGN•SPECIFICATION•••••
•SYSTIME•••••
VIEW NAME:



VICINITY MAP
SCALE: 1"=500'

NEW R/W ACQUIRED IN THE NAME OF THE ARIZONA STATE PARKS BOARD.

REVISIONS			
C.O. NO.	DATE	BY	DESCRIPTION
8816	01/13/94	GMTS	MODIFIED NEW R/W PARCEL 9-430 IN SECTION 5

DRAWING NO.	D-4-T-396
HARD COPY	
DRAWN/DATE	8/93 SG
CHECKED/DATE	K.WILLIAMS
GMTS CONSULTING ENGINEERS CORPORATION	
ROUTE	S.R.87
LOCATION	TONTO NATURAL BRIDGE STATE PARK

ARIZONA DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
RIGHT OF WAY PLANS SERVICES

HIGHWAY: JCT SR 87-STATE PARK ACCESS ROAD
PROJECT NO. N-900-757

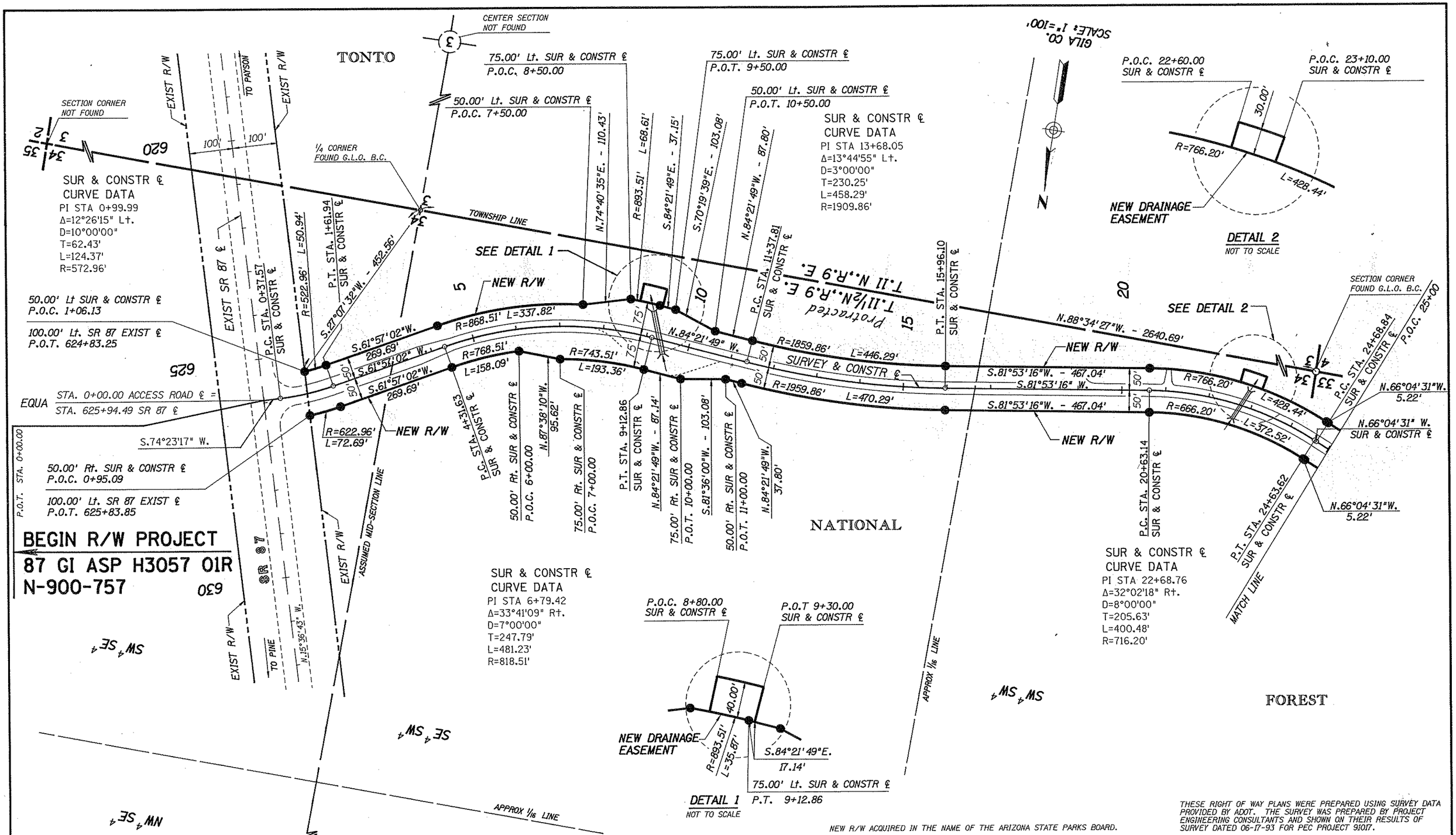
SHEET 3 OF 10

TRACS NO. 87 GI ASP H3057 01R

____ OF ____

Click here for SR 87 Index

*****DGN-SPECIFICATION*****
VIEW NAME:
*****SYSTIME*****



NEW R/W ACQUIRED IN THE NAME OF THE ARIZONA STATE PARKS BOARD.

THESE RIGHT OF WAY PLANS WERE PREPARED USING SURVEY DATA PROVIDED BY ADOT. THE SURVEY WAS PREPARED BY PROJECT ENGINEERING CONSULTANTS AND SHOWN ON THEIR RESULTS OF SURVEY DATED 06-17-93 FOR PEC PROJECT 91017.

REVISIONS			
C.O. NO.	DATE	BY	DESCRIPTION

DRAWING NO.	D-4-T-396
HARD COPY	
DRAWN/DATE	8/93 SG
CHECKED/DATE	K.WILLIAMS
GMTS CORPORATION CONSULTING ENGINEERS	
ROUTE	S.R.87
LOCATION	TONTO NATURAL BRIDGE STATE PARK

ARIZONA DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
RIGHT OF WAY PLANS SERVICES

HIGHWAY: JCT SR 87-STATE PARK ACCESS ROAD
PROJECT NO. N-900-757

REGISTERED LAND SURVEYOR CERTIFICATE NO. 19222 DAVID SHANE 11-20-93 ARIZONA, U.S.A.

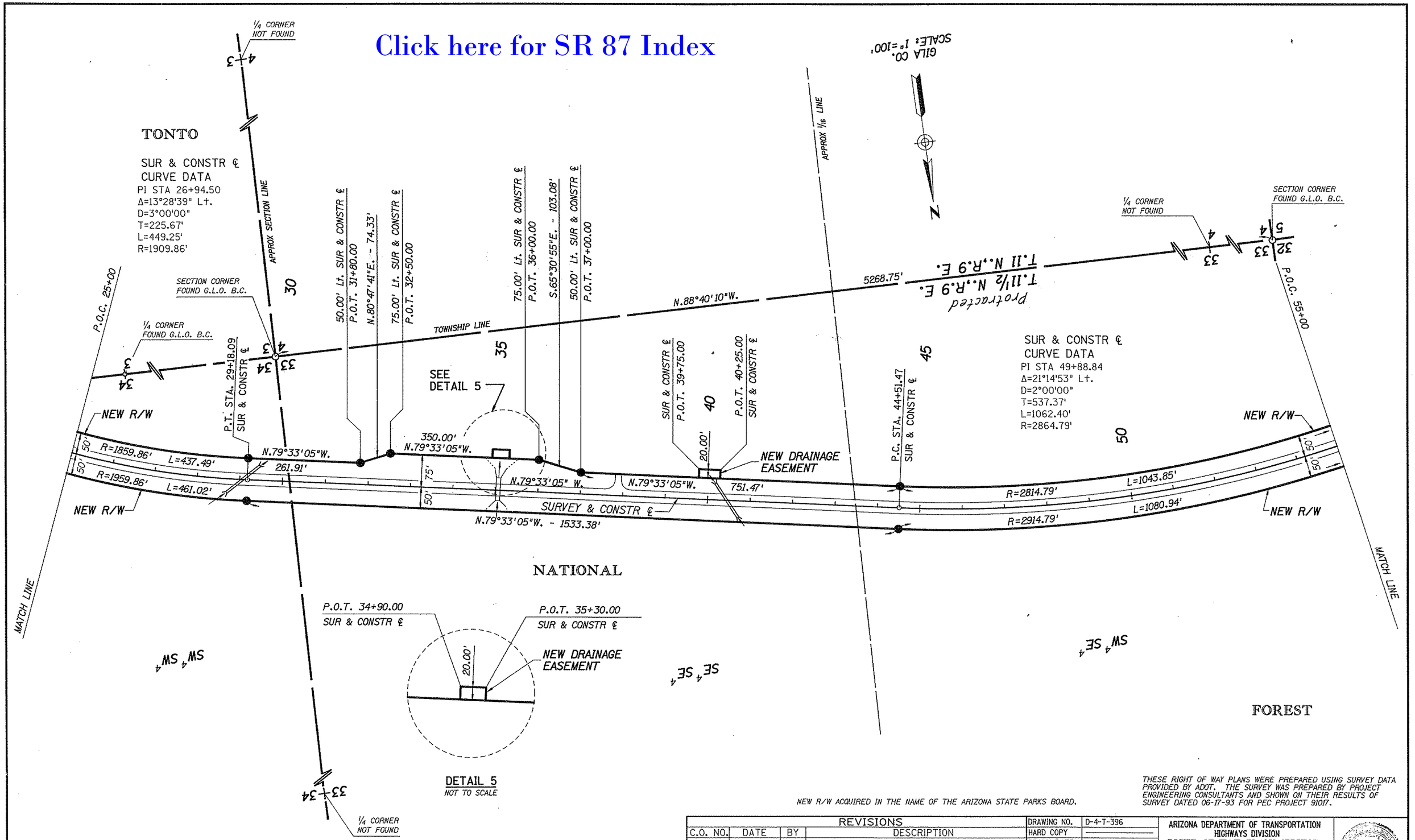
SHEET 4 OF 10

TRACS NO. 87 GI ASP H3057 01R

___ OF ___

Click here for SR 87 Index

Click here for SR 87 Index



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THESE RIGHT OF WAY PLANS WERE PREPARED USING SURVEY DATA PROVIDED BY ADOT. THE SURVEY WAS PREPARED BY PROJECT ENGINEERING CONSULTANTS AND SHOWN ON THEIR RESULTS OF SURVEY DATED 06-17-93 FOR PEC PROJECT 91017.

REVISIONS			
C.O. NO.	DATE	BY	DESCRIPTION

DRAWING NO.	D-4-T-396
HARD COPY	
DRAWN/DATE	8/93 SG
CHECKED/DATE	K.WILLIAMS
GMTS CORPORATION CONSULTING ENGINEERS Tempe, Arizona	
ROUTE	S.R.87
LOCATION	TONTO NATURAL BRIDGE STATE PARK

ARIZONA DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
RIGHT OF WAY PLANS SERVICES

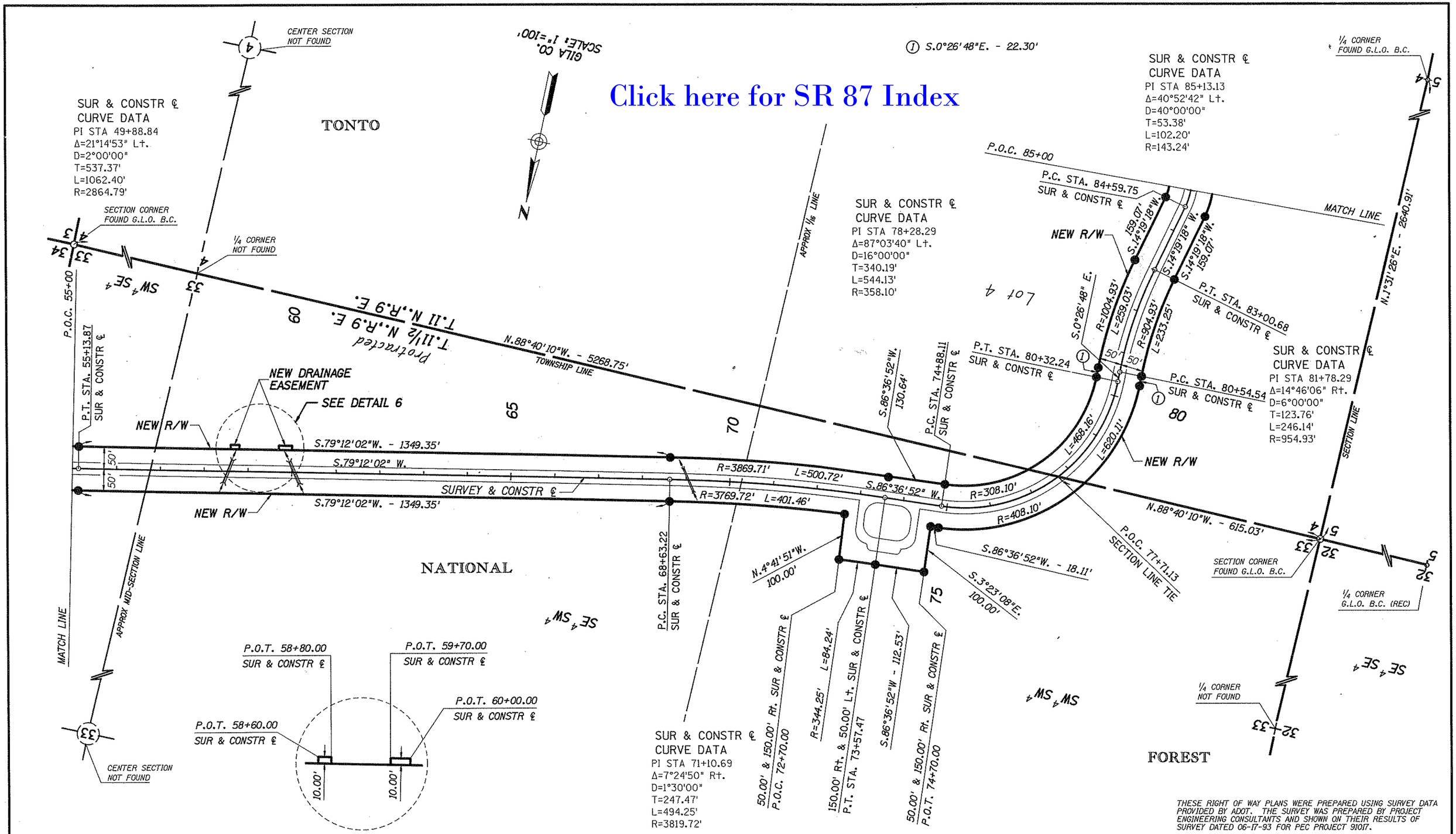
HIGHWAY: JCT SR 87-STATE PARK ACCESS ROAD

PROJECT NO. N-900-757

SHEET 5 OF 10

TRACS NO. 87 GI ASP H3057 01R

___ OF ___



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NEW R/W ACQUIRED IN THE NAME OF THE ARIZONA STATE PARKS BOARD.

REVISIONS			
C.O. NO.	DATE	BY	DESCRIPTION

DRAWING NO.	D-4-T-396
HARD COPY	
DRAWN/DATE	8/93 SG
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GMTS CORPORATION CONSULTING ENGINEERS Tempe, Arizona	
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ARIZONA DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
RIGHT OF WAY PLANS SERVICES

HIGHWAY: JCT SR 87-STATE PARK ACCESS ROAD

PROJECT NO. N-900-757

SHEET 6 OF 10

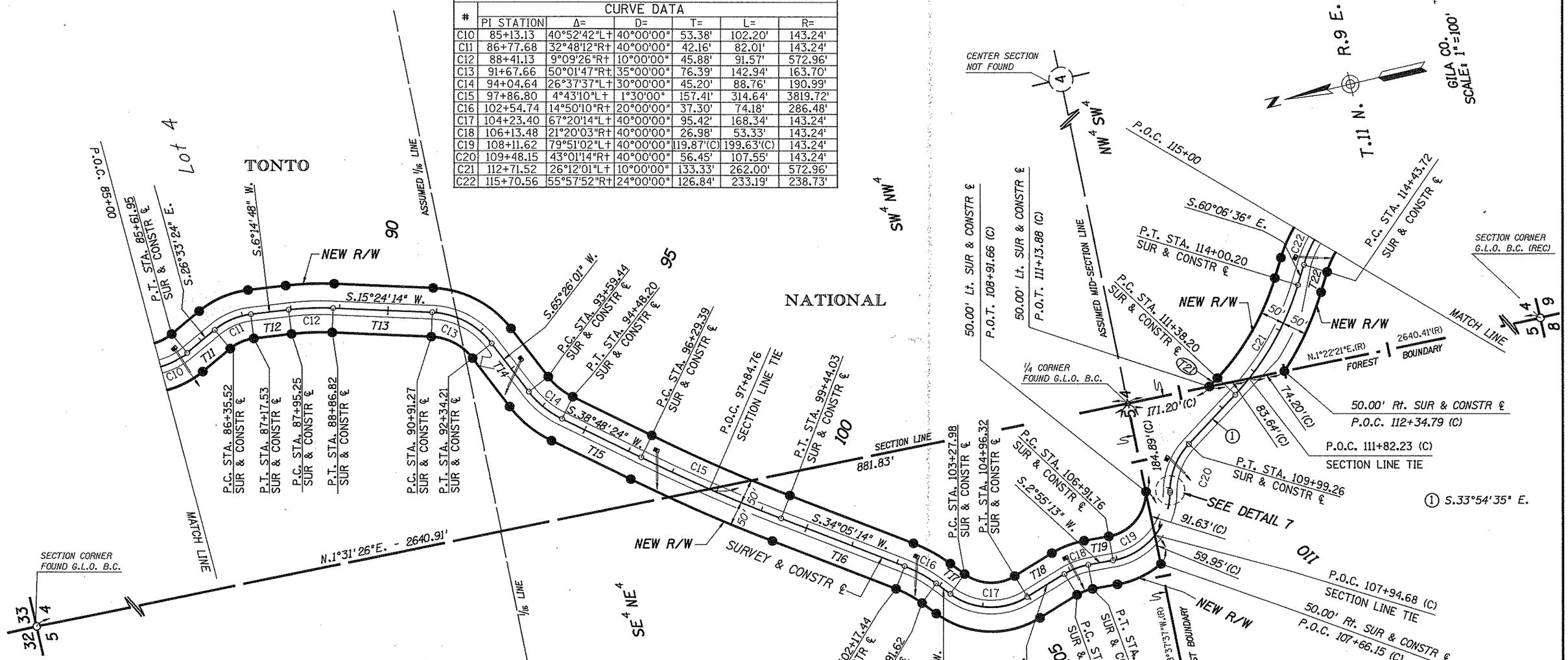
TRACS NO. 87 GI ASP H3057 01R

___ OF ___

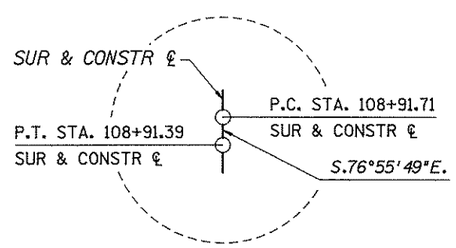
VIEW NAME:

Click here for SR 87 Index

SURVEY & CONSTR ℄						
#	CURVE DATA					
	PI STATION	Δ=	D=	T=	L=	R=
C10	85+13.13	40°52'42"L†	40°00'00"	53.38'	102.20'	143.24'
C11	86+77.68	32°48'12"R†	40°00'00"	42.16'	82.01'	143.24'
C12	88+41.13	9°09'26"R†	10°00'00"	45.88'	91.57'	572.96'
C13	91+67.66	50°01'47"R†	35°00'00"	76.39'	142.94'	163.70'
C14	94+04.64	26°37'37"L†	30°00'00"	45.20'	88.76'	190.99'
C15	97+86.80	4°43'10"L†	1°30'00"	157.41'	314.64'	3819.72'
C16	102+54.74	14°50'10"R†	20°00'00"	37.30'	74.18'	286.48'
C17	104+23.40	67°20'14"L†	40°00'00"	95.42'	168.34'	143.24'
C18	106+13.48	21°20'03"R†	40°00'00"	26.98'	53.33'	143.24'
C19	108+11.62	79°51'02"L†	40°00'00"	119.87'(C)	199.63'(C)	143.24'
C20	109+48.15	43°01'14"R†	40°00'00"	56.45'	107.55'	143.24'
C21	112+71.52	26°12'01"L†	10°00'00"	133.33'	262.00'	572.96'
C22	115+70.56	55°57'52"R†	24°00'00"	126.84'	233.19'	238.73'



NEW R/W DIMENSIONS				
#	LEFT		RIGHT	
C10	R=93.24'	L=66.52	R=193.24'	L=137.87'
T11	S.26°33'24"E.	73.57'		
C11	R=193.24'	L=110.63'	R=93.24'	L=53.38'
T12	S.6°14'48"W.	77.72'		
C12	R=622.96'	L=99.56'	R=522.96'	L=83.58'
T13	S.15°24'14"W.	204.45'		
C13	R=213.70'	L=186.60'	R=113.70'	L=99.28'
T14	S.65°26'01"W.	125.23'		
C14	R=140.99'	L=65.52'	R=240.99'	L=111.99'
T15	S.38°48'24"W.	181.19'		
C15	R=3769.72'	L=310.53'	R=3869.72	L=318.76'
T16	S.34°05'14"W.	273.41'		
C16	R=336.48'	L=87.13'	R=236.48'	L=61.23'
T17	S.48°55'24"W.	36.36'		
C17	R=93.24'	L=109.58'	R=193.24'	L=227.10'
T18	S.18°24'50"E.	90.19'		
C18	R=193.24'	L=71.95'	R=93.24'	L=34.72'
T19	S.2°55'13"W.	51.92'		
C19	R=93.24'(C)	L=130.14'(C)	R=193.24'(C)	L=100.36'(C)
T21	S.33°54'35"E.(C)	24.32'(C)		
C21	R=522.96'	L=239.14'	R=622.96'(C)	L=179.84'(C)
T22	S.60°06'36"E.	43.52'		
C22	R=288.73'	L=282.02'	R=188.73'	L=184.35'



DETAIL 7
NOT TO SCALE

NEW R/W ACQUIRED IN THE NAME OF THE ARIZONA STATE PARKS BOARD.

THESE RIGHT OF WAY PLANS WERE PREPARED USING SURVEY DATA PROVIDED BY ADOT. THE SURVEY WAS PREPARED BY PROJECT ENGINEERING CONSULTANTS AND SHOWN ON THEIR RESULTS OF SURVEY DATED 06-17-93 FOR PEC PROJECT 91017. DIMENSIONS SHOWN AS CALCULATED (C) ARE BASED ON DATA SHOWN AS RECORD ON THE RESULTS OF SURVEY.

REVISIONS			
C.O. NO.	DATE	BY	DESCRIPTION

DRAWING NO.	D-4-T-396
HARD COPY	
DRAWN/DATE	8/93 SG
CHECKED/DATE	K.WILLIAMS
GMTS CORPORATION CONSULTING ENGINEERS Tempe, Arizona	
ROUTE	S.R.87
LOCATION	TONTO NATURAL BRIDGE STATE PARK

ARIZONA DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
RIGHT OF WAY PLANS SERVICES

HIGHWAY: JCT SR 87-STATE PARK ACCESS ROAD

PROJECT NO. N-900-757

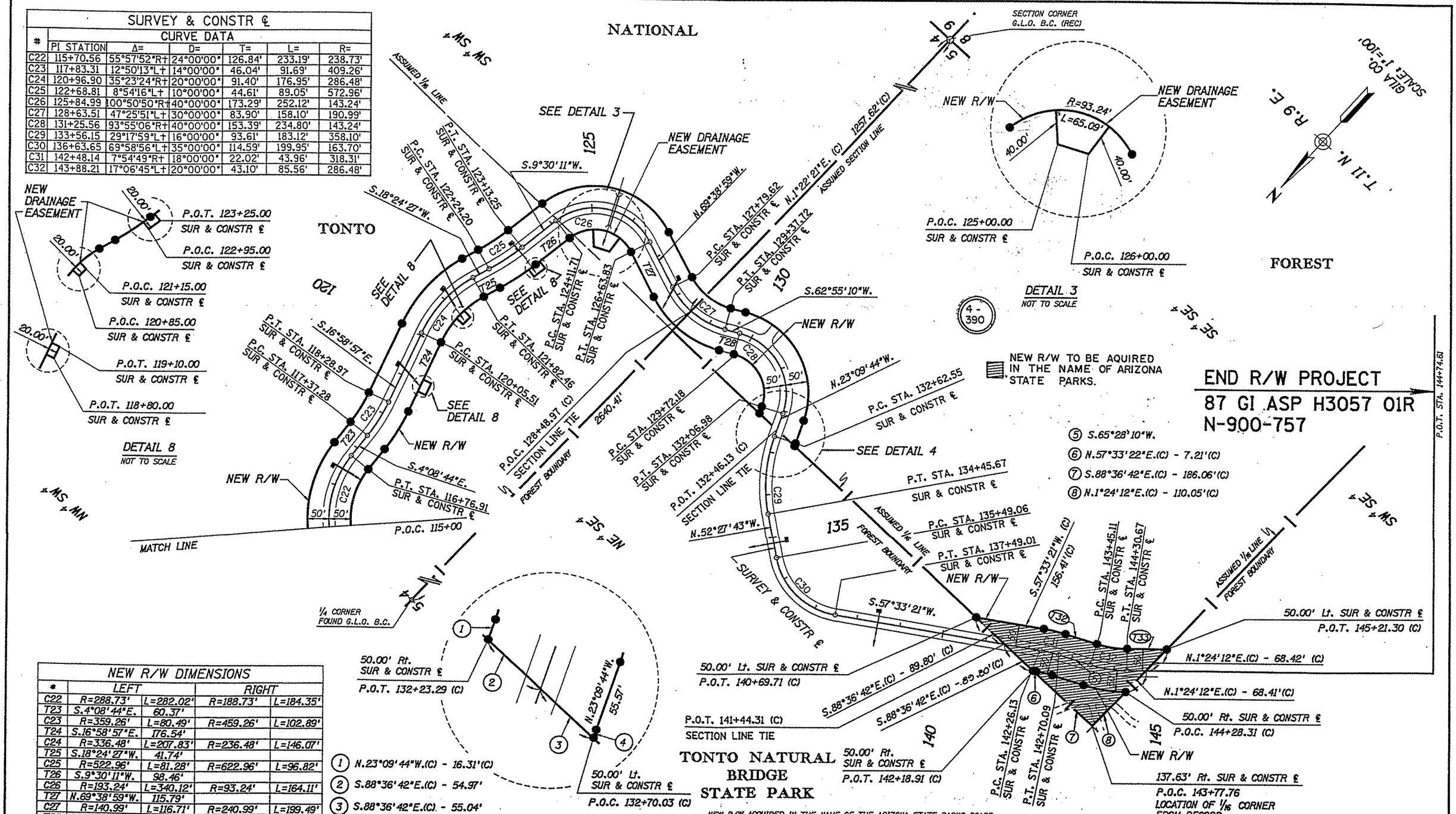
SHEET 7 OF 10

TRACS NO. 87 GI ASP H3057 01R

___ OF ___

Click here for SR 87 Index

SURVEY & CONSTR ℄						
#	CURVE DATA					
	PI STATION	Δ=	D=	T=	L=	R=
C22	115+70.56	55°57'52"R+	24°00'00"	126.84'	233.19'	238.73'
C23	117+83.31	12°50'13"L+	14°00'00"	46.04'	91.69'	409.26'
C24	120+96.90	35°23'24"R+	20°00'00"	91.40'	176.95'	286.48'
C25	122+68.81	8°54'16"L+	10°00'00"	44.61'	89.05'	572.96'
C26	125+84.99	100°50'50"R+	40°00'00"	173.29'	252.12'	143.24'
C27	128+63.51	47°25'51"L+	30°00'00"	83.90'	158.10'	190.99'
C28	131+25.56	93°55'06"R+	40°00'00"	153.39'	234.80'	143.24'
C29	133+56.15	29°17'59"L+	16°00'00"	93.61'	183.12'	358.10'
C30	136+63.65	69°58'56"L+	35°00'00"	114.59'	199.95'	163.70'
C31	142+48.14	7°54'49"R+	18°00'00"	22.02'	43.96'	318.31'
C32	143+88.21	17°06'45"L+	20°00'00"	43.10'	85.56'	286.48'



NEW R/W DIMENSIONS				
#	LEFT		RIGHT	
C22	R=288.73'	L=282.02'	R=188.73'	L=184.35'
T23	S.4°08'44"E.	60.37'		
C23	R=359.26'	L=80.49'	R=459.26'	L=102.89'
T24	S.16°58'57"E.	176.54'		
C24	R=336.48'	L=207.83'	R=236.48'	L=146.07'
T25	S.18°24'27"W.	41.74'		
C25	R=522.96'	L=81.28'	R=622.96'	L=96.82'
T26	S.9°30'11"W.	98.46'		
C26	R=193.24'	L=340.12'	R=93.24'	L=164.11'
T27	N.69°38'59"W.	115.79'		
C27	R=140.99'	L=116.71'	R=240.99'	L=199.49'
T28	S.62°55'10"W.	34.46'		
C28	R=193.24'	L=316.75'	R=93.24'	L=152.84'
C31	R=368.31'	L=50.87'	R=268.31'	L=37.06'
T32	S.65°28'10"W.	75.02'		
C32	R=236.48'	L=70.63'	R=336.48'	L=97.74'
T33	S.48°21'25"W.	90.64'		

① N.23°09'44"W.(C) - 16.31'(C)
② S.88°36'42"E.(C) - 54.97'
③ S.88°36'42"E.(C) - 55.04'
④ R=308.10'(C) L=6.44'(C)

THESE RIGHT OF WAY PLANS WERE PREPARED USING SURVEY DATA PROVIDED BY ADOT. THE SURVEY WAS PREPARED BY PROJECT ENGINEERING CONSULTANTS AND SHOWN ON THEIR RESULTS OF SURVEY DATED 06-17-93 FOR PEC PROJECT 91017. DIMENSIONS SHOWN AS CALCULATED (C) ARE BASED ON DATA SHOWN AS RECORD ON THE RESULTS OF SURVEY.

REVISIONS			
C.O. NO.	DATE	BY	DESCRIPTION
8816	01/13/94	GMTS	MODIFIED NEW R/W PARCEL 4-390 STA. 142+18 TO STA. 144+28
9314	3/04/99	C.J.K.	ADDED NOTE & ZIP BET. STA. ±140+70 TO ±145+21.

DRAWING NO.	D-4-T-396
HARD COPY	
DRAWN/DATE	8/93 SG
CHECKED/DATE	K.WILLIAMS
GMTS CORPORATION CONSULTING ENGINEERS	
ROUTE	S.R.87
LOCATION	TONTO NATURAL BRIDGE STATE PARK

ARIZONA DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
RIGHT OF WAY PLANS SERVICES

HIGHWAY: JCT SR 87-STATE PARK ACCESS ROAD
PROJECT NO. N-900-757

SHEET 8 OF 10

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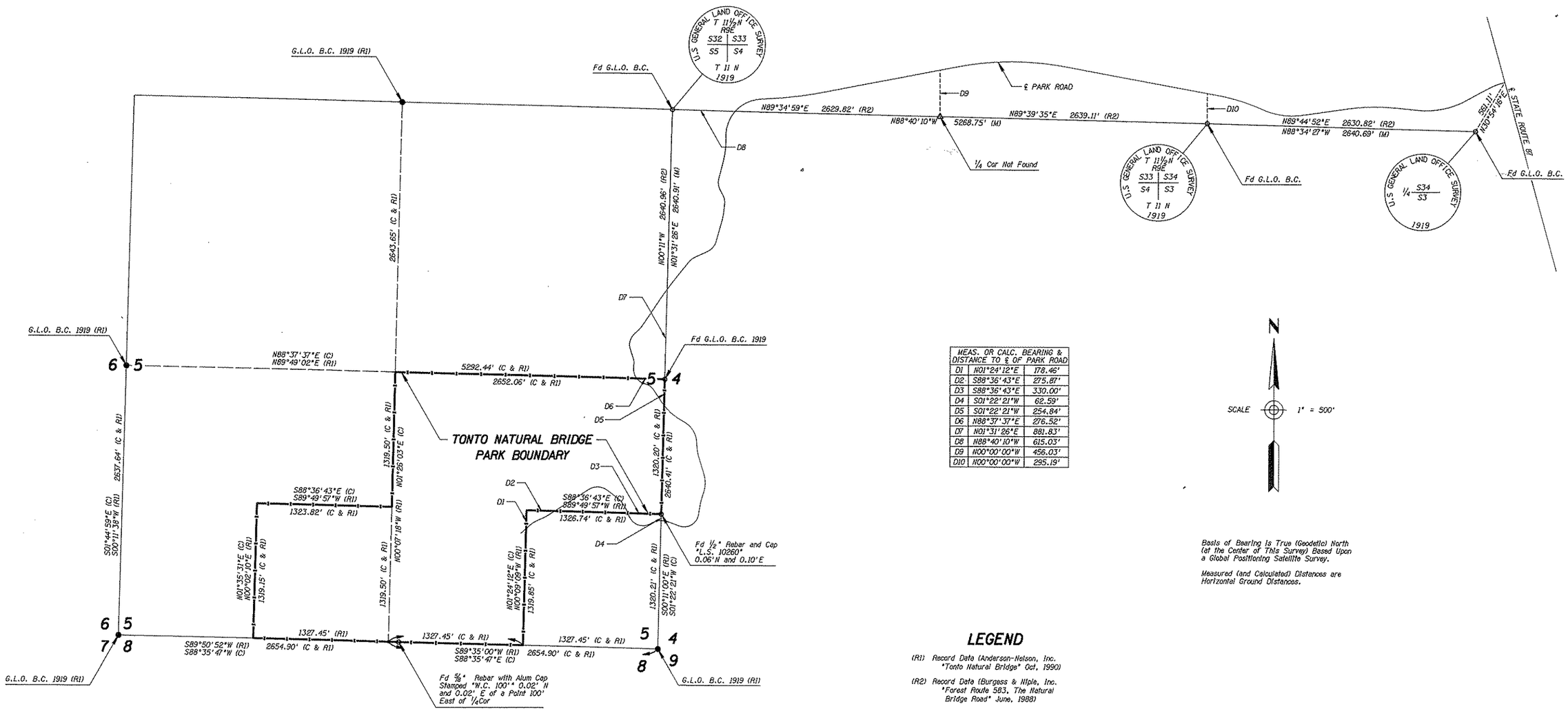
RESULTS OF SURVEY

ACROSS SECTIONS 3,4 & 5, TOWNSHIP 11 NORTH, RANGE 9 EAST,
GILA AND SALT RIVER MERIDIAN



MEAS. OR CALC. BEARING & DISTANCE TO ℄ OF PARK ROAD		
D1	N01°24'12"E	178.46'
D2	S88°36'43"E	275.87'
D3	S88°36'43"E	330.00'
D4	S01°22'21"W	62.59'
D5	S01°22'21"W	254.84'
D6	N88°37'37"E	276.52'
D7	N01°31'26"E	881.83'
D8	N88°40'10"W	615.03'
D9	N00°00'00"W	456.03'
D10	N00°00'00"W	295.19'

N

SCALE 1" = 500'

Basis of Bearing is True (Geodetic) North (at the Center of This Survey) Based Upon a Global Positioning Satellite Survey.

Measured (and Calculated) Distances are Horizontal Ground Distances.

LEGEND

(R1) Record Data (Anderson-Nelson, Inc. "Tonto Natural Bridge" Oct, 1990)

(R2) Record Data (Burgess & Niple, Inc. "Forest Route 583, The Natural Bridge Road" June, 1988)

(C) Calculated

(M) Measured

● Found Monument (R1 or R2)

○ Found Monument as Noted

△ Monument Not Found

PROJECT ENGINEERING CONSULTANTS, LTD.
3130 N. 35th Avenue, Suite 1
Phoenix, Arizona 85017 Phone (602) 484-7691

RESULTS of SURVEY
TONTO NATURAL BRIDGE

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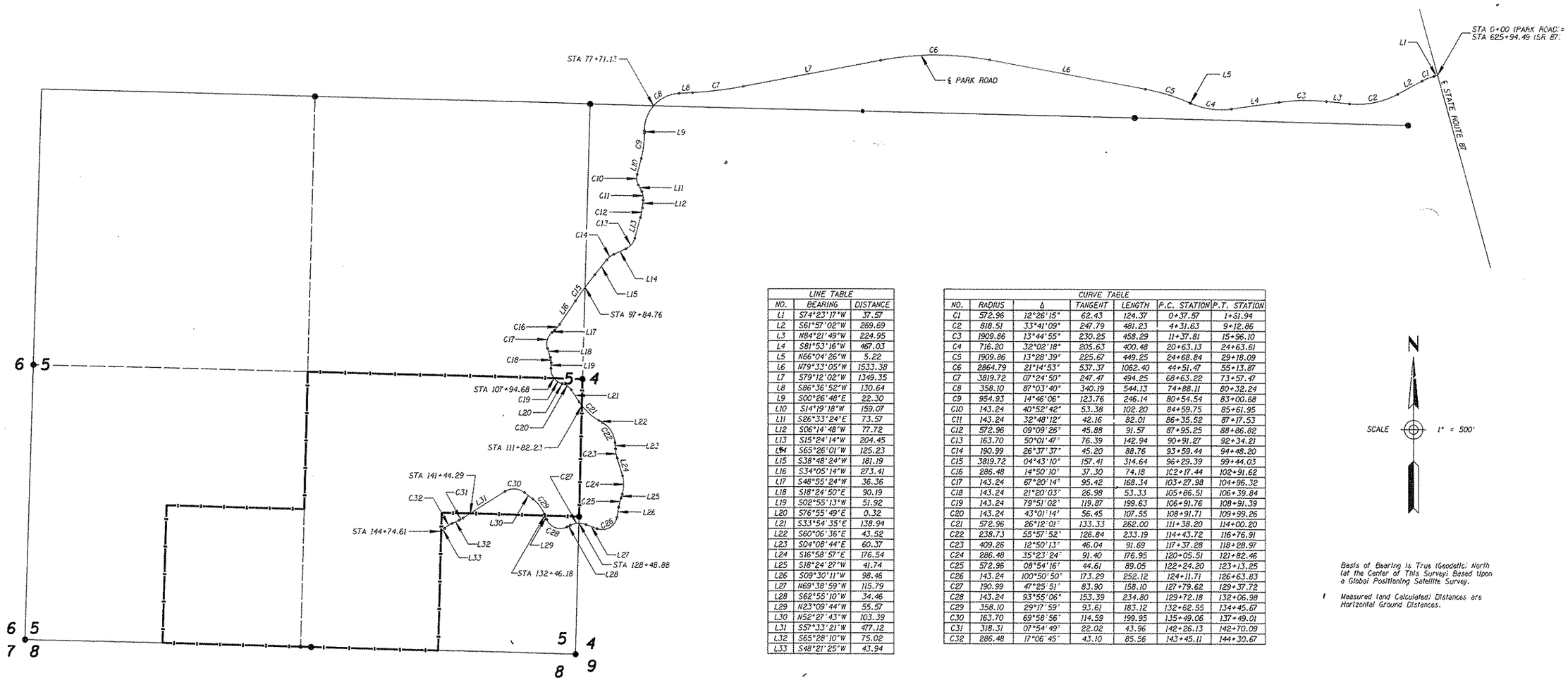

LINE TABLE		
NO.	BEARING	DISTANCE
L1	S74°23'17"W	37.57
L2	S61°57'02"W	269.69
L3	N84°21'49"W	224.95
L4	S81°53'16"W	467.03
L5	N66°04'26"W	5.22
L6	N79°33'05"W	1533.38
L7	S79°12'02"W	1349.35
L8	S86°36'52"W	130.64
L9	S00°26'48"E	22.30
L10	S14°19'18"W	159.07
L11	S26°33'24"E	73.57
L12	S06°14'48"W	77.72
L13	S15°24'14"W	204.45
L14	S65°26'01"W	125.23
L15	S38°48'24"W	181.19
L16	S34°05'14"W	273.41
L17	S48°55'24"W	36.36
L18	S18°24'50"E	90.19
L19	S02°55'13"W	51.92
L20	S76°55'49"E	0.32
L21	S33°54'35"E	138.94
L22	S60°06'36"E	43.52
L23	S04°08'44"E	60.37
L24	S16°58'57"E	176.54
L25	S18°24'27"W	41.74
L26	S09°30'11"W	98.46
L27	N69°38'59"W	115.79
L28	S62°55'10"W	34.46
L29	N23°09'44"W	55.57
L30	N52°27'43"W	103.39
L31	S59°33'21"W	477.12
L32	S65°28'10"W	75.02
L33	S48°21'25"W	43.94

CURVE TABLE						
NO.	RADIUS	Δ	TANGENT	LENGTH	P.C. STATION	P.T. STATION
C1	572.96	12°26'15"	62.43	124.37	0+37.57	1+31.94
C2	816.51	33°41'09"	247.79	481.23	4+31.63	9+12.86
C3	1909.86	13°44'55"	230.25	458.29	11+37.81	15+96.10
C4	716.20	32°02'18"	205.63	400.48	20+63.13	24+63.61
C5	1909.86	13°28'39"	225.67	449.25	24+68.84	29+18.09
C6	2864.79	21°14'53"	537.37	1062.40	44+51.47	55+13.87
C7	3819.72	07°24'50"	247.47	494.25	68+63.22	73+57.47
C8	358.10	87°03'40"	340.19	544.13	74+88.11	80+32.24
C9	954.93	14°46'06"	123.76	246.14	80+54.54	83+00.68
C10	143.24	40°52'42"	53.38	102.20	84+59.75	85+61.95
C11	143.24	32°48'12"	42.16	82.01	86+35.52	87+17.53
C12	572.96	09°09'26"	45.88	91.57	87+95.25	88+86.82
C13	163.70	50°01'47"	76.39	142.94	90+91.27	92+34.21
C14	190.99	26°37'37"	45.20	88.76	93+59.44	94+48.20
C15	3819.72	04°43'10"	157.41	314.64	96+29.39	99+44.03
C16	286.48	14°50'10"	37.30	74.18	102+17.44	102+91.62
C17	143.24	67°20'14"	95.42	168.34	103+27.98	104+96.32
C18	143.24	21°20'03"	26.98	53.33	105+86.51	106+39.84
C19	143.24	79°51'02"	119.87	199.63	106+91.76	108+91.39
C20	143.24	43°01'14"	56.45	107.55	108+91.71	109+99.26
C21	572.96	26°12'01"	133.33	262.00	111+38.20	114+00.20
C22	238.73	55°57'52"	126.84	233.19	114+43.72	116+76.91
C23	409.26	12°50'13"	46.04	91.69	117+37.28	118+28.97
C24	286.48	35°23'24"	91.40	176.95	120+05.51	121+82.46
C25	572.96	08°54'16"	44.61	89.05	122+24.20	123+13.25
C26	143.24	100°50'50"	173.29	252.12	124+11.71	126+63.83
C27	190.99	47°25'51"	83.90	158.10	127+79.62	129+37.72
C28	143.24	93°55'06"	153.39	234.80	129+72.18	132+06.98
C29	358.10	29°17'59"	93.61	183.12	132+62.55	134+45.67
C30	163.70	69°58'56"	114.59	199.95	135+49.06	137+49.01
C31	318.31	07°54'49"	22.02	43.96	142+26.13	142+70.09
C32	286.48	17°06'45"	43.10	85.56	143+45.11	144+30.67

N

SCALE 1" = 500'

Basis of Bearing is True (Geodetic) North (at the Center of This Survey) Based Upon a Global Positioning Satellite Survey.

(Measured (and Calculated) Distances are Horizontal Ground Distances.

REGISTERED LAND SURVEYOR
CERTIFICATE NO.
16870
STEVEN L. MORTENSEN

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RESULTS of SURVEY

TONTO NATURAL BRIDGE