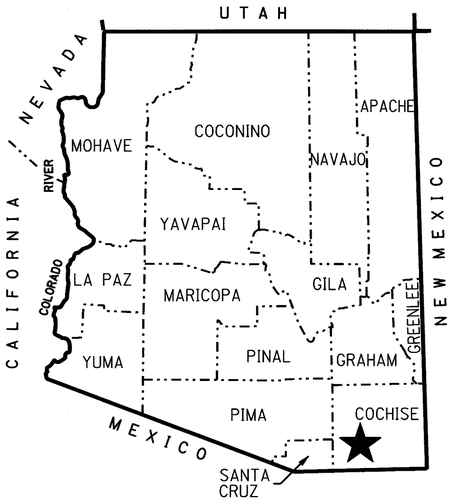
RIGHT OF WAY PLANS OF THE

WHETSTONE T.I. - JCT. S.R. 80 HIGHWAY
SAN PEDRO RIVER BRIDGE
090 CH 327 H6005 01R

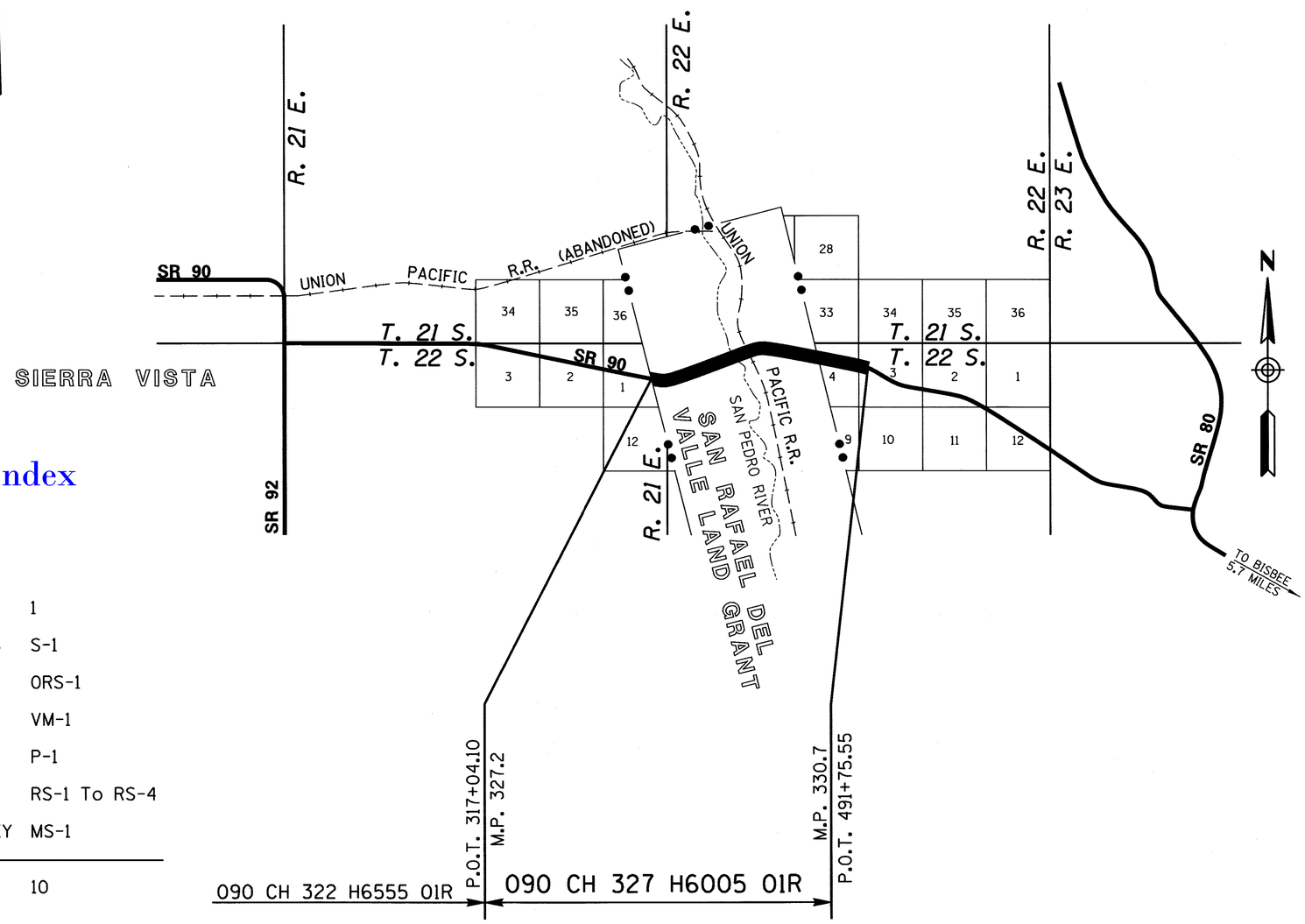
ARIZONA DEPARTMENT OF TRANSPORTATION
INTERMODAL TRANSPORTATION DIVISION

ADOT



★ PROJECT LOCATION

COUNTY NAME: COCHISE
LENGTH OF PROJECT: 3.5 MILES
ADOT DISTRICT: SAFFORD (S)
DRAWING NUMBER: D-02-T-507



Click here for SR 90 Index

SHEET INDEX

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RESULTS OF SURVEY	RS-1 To RS-4
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TOTAL SHEETS	10

APPROVED IN ACCORDANCE WITH
ARIZONA DEPARTMENT OF TRANSPORTATION BOARD
RESOLUTION 2010-01-A-006 DATED 1/15/10
RESOLUTION 2012-04-A-014 DATED 4/20/12

...\DGN\RW\090RW327_CVR.DGN

Registered Land Surveyor
CERTIFICATE NO.
15573
GERALD HUGHES
Date Signed 4/27/12
ARIZONA, U.S.A.
EXPIRES: 3/31/2015

eps group, inc.
Engineers, Planners & Surveyors

RIGHT OF WAY - STANDARD ABBREVIATIONS & SYMBOLS

A	
Acres	Ac.
Ahead	Ahd.
And Husband	et vir
And Others	et al
And Wife	et ux
Approximate	Approx.
Avenue	Ave.
B	
Back	Bk.
Book	Bk.
Boulevard	Blvd.
Brass Cap	B.C.
Bureau of Indian Affairs	B.I.A.
Bureau of Land Management	B.L.M.
Bureau of Reclamation	B.O.R.
C	
Calculated	(C)
Center	Ctr.
Centerline	℄
Construction	Constr.
Corner	Cor.
County	Co.
Curve Information	
Curve to Spiral	C.S.
Degree of Curve	D
Delta	Δ
Length of Curve	L
Point of Compound Curve	P.C.C.
Point of Curvature	P.C.
Point of Intersection	P.I.
Point of Reverse Curve	P.R.C.
Point of Reverse Spiral	P.R.S.
Point of Tangent	P.T.
Point on Curve	P.O.C.
Point on Tangent	P.O.T.
Point on Semi-Tangent	P.O.S.T.
Radius	R
Spiral rate of change	a
Spiral to Curve	S.C.
Spiral to Tangent	S.T.
Tangent Length	T
Tangent to Spiral	T.S.

D	
Degrees	°
Department	Dept.
Docket	Dkt.
Drainage Easement	DE
Drive	Dr.
E	
Easement	Esmt
East	E.
Electrical	Elec.
Equation	Equa.
Existing	Exist.
F	
Federal	Fed.
Feet	'
Flowage Easement	FE
Final Order of Condemnation	FOC
Found	Fd.
H	
Highway	Hwy.
Highway Easment Deed	HED
Homestead Entry Survey	HES
I	
Inch	In. or "
Irrigation	Irr.
J	
Junction	Jct.
L	
Lane	Ln.
Left	Lt.
Local Tangent Bearing	L.T.B.
M	
Measured	(M)
Mile Post	M.P.
Mineral Survey	M.S.
Minutes	'
Miscellaneous	Misc.
Monument	Mon.
N	
North	N.
Not to Scale	N.T.S.
Number	No.
P	
Page	Pg.
Parcel	Par.
Parkway	Pkwy.
Place	Pl.
Ponding Easement	PE
Public Utility Easement	PUE
Q	
Quit Claim Deed	QCD
R	
Railroad	R.R.
Range	R.
Record	(R)
Right	Rt.
Right of Way	R/W
Road	Rd.
S	
Seconds	"
Section	Sec.
Sheet	Sht.
Slope Easement	SE
South	S.
Special Warranty Deed	SWD
Square	Sq.
Square Feet	S.F.
State Route	S.R.
Station	Sta.
Street	St.
Subdivision	Subd.
T	
Telegraph	Tlg.
Telephone	Tel.
Township	T.
Temporary	Temp.
Temporary Construction Easement	TCE
Traffic Interchange	T.I.
U	
United States General Land Office	U.S.G.L.O.
W	
West	W.
Warranty Deed	WD

Boundary Lines
- City Limit Line
- County Line
- Forest-City Limit Line
- Forest-Reservation Line
- Land Grant Boundary Line
- National-State Boundary Line

Centerlines
- Exist. Centerline w/ticks
- Exist. Centerline wo/ticks
- New Constr. Centerline
- New Survey Centerline
- Railroad Centerline
- Centerline on Results of Survey

Control Lines
- Exist. Access Control Line
- New Access Control Line

Easement Lines
- Exist. Easement Line
- Exist. Drainage Easement Line
- New Perpetual Easement Line
- TCE Line

Misc. Lines
- Ditch-River Line
- Meander Line
- Mining Claim Line

Property Lines
- Lease Property Line
- Property Line
- Subdivision Property/Road Line
- Additional area to be acquired

Public Land Survey Lines
- Mid Section Line
- Section Line
- Sixteenth (1/16) Line
- Township-Range Line

R/W Lines
- Exist. ADOT R/W Line
- Exist. Non-ADOT R/W Line
- New R/W Line
- Railroad R/W Line
- Railroad-Highway R/W Line

Topographic Features
- Cut Slope Limit Line
- Exist. Fence Line
- Exist. Topo Line
- Fill Slope Limit Line
- New Fence Line

Break Line

Data Circle (1)

Data Hex (1)

Data Square [1]

Dimension Arrow

Dimension Tie

Exist. ADOT R/W Monument

New R/W Monument or R/W control point

Centerline Control or Supplemental Monument

Property Anchor Bar

Property-Lease & Unpatented Mining Claim Anchor Bar

Property Limit Arrow

Property-Lease & Unpatented Mining Claim Limit Arrow

Parcel Bubble (7-8858)

Survey Control Pt or Angle Point

T.1S. R.6E.

SECTION 7
MARICOPA CO.

North Arrow

31 | 32 / 6 | 5 — Found or Set Section Corner

4 3 — Found or Set Quarter Corner

(3) — Found or Set Center Quarter Corner

31 | 32 / 6 | 5 — Unfound Section Corner

4 / 9 — Unfound Quarter Corner

(3) — Unfound Center Quarter Corner

MP 1 1/2 5 — Mile Post Marker (approximate location)

Click here for SR 90 Index

...\DGN\RW\090RW327_STD.DGN

DRAWING NO.	D-02-T-507	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION RIGHT OF WAY PLANS SECTION
SURVEY	SEE ATTACHED SURVEY	HIGHWAY NAME: Whetstone TI - Jct SR 80
DRAWN/DATE	J. KRAFT/NOV 09	FEDERAL AID NO.: Unassigned
ADOT REVIEW	S. NELSON	PROJECT NO.: 090 CH 327 H6005 01R
eps group, Inc. Engineers, Planners & Surveyors		
ROUTE NO.: SR 90	LOCATION: San Pedro River Bridge	

Registered Land Surveyor CERTIFICATE NO. 15573 GERALD HUGHES Date Signed 4/23/13 ARIZONA, U.S.A.

EXPIRES: 3/31/2015

SHEET S-1

OWNERSHIP RECORD

NOTES	PARCEL NUMBER	OWNER	DESCRIPTION OF AREA REQUIRED	TOTAL AREA	AREA REQUIRED: GROSS (INCLUDING EXISTING R/W)	AREA REQUIRED: NET (EXCLUDING EXISTING R/W)	AREA REQUIRED: NEW EASEMENTS	REMAINDER: LEFT	REMAINDER: RIGHT	SHEET NO.	ACQUIRED: TYPE	ACQUIRED: DOCUMENT
(1)	2-1383	U.S.A. (Bureau of Land Management)	Pt. San Rafael Del Valle Land Grant			14,874	(1) 124,317 TCE			P-1	HED	2012-23855
	2-1385	Union Pacific Railroad Company	Pt. San Rafael Del Valle Land Grant				6,008 TCE			P-1		

(1) 6008 S.F. IS LOCATED WITHIN THE UNION PACIFIC RAILROAD COMPANY EASEMENT

ALL AREAS ARE IN SQUARE FEET UNLESS OTHERWISE NOTED

...\DGN\RW\090RW327_ORS.DGN

CHANGE ORDER REVISIONS

C.O. NO.	DATE	BY	DESCRIPTION OF REVISIONS
N/A	3/1/12	GM	Added TCE's to Parcel 2-1383
N/A	7/17/12	TJW	Added HED to Parcel 2-1383

DRAWING NO.	D-02-T-507
SURVEY	SEE ATTACHED SURVEY
DRAWN/DATE	J. KRAFT/NOV 09
ADOT REVIEW	S. NELSON

eps group, Inc. Engineers, Planners & Surveyors

ARIZONA DEPARTMENT OF TRANSPORTATION
INTERMODAL TRANSPORTATION DIVISION
RIGHT OF WAY PLANS SECTION

HIGHWAY NAME: Whetstone TI - Jct SR 80

FEDERAL AID NO.: Unassigned

PROJECT NO.: 090 CH 327 H6005 01R

ROUTE NO.: SR 90

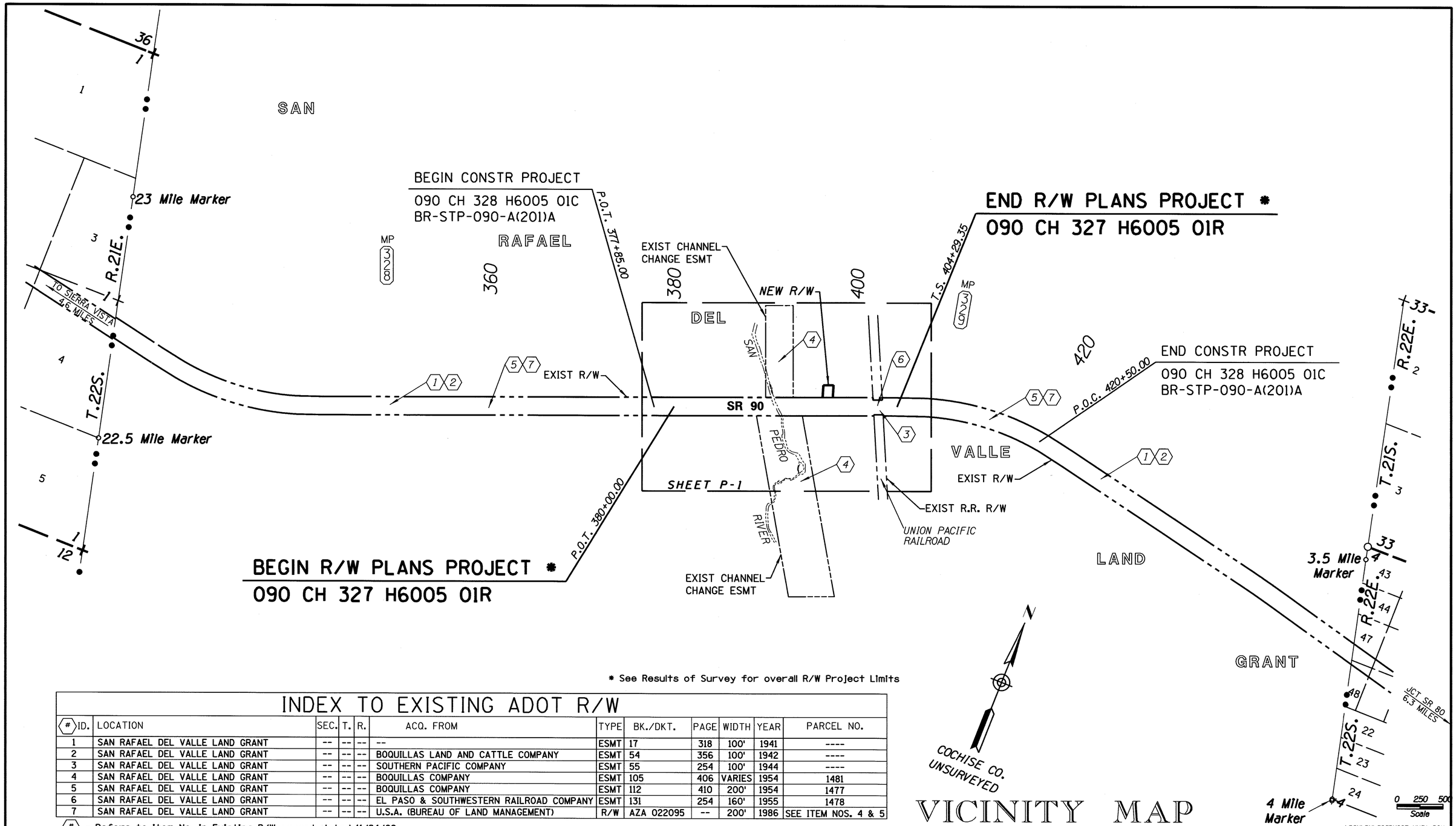
LOCATION: San Pedro River Bridge

Registered Land Surveyor CERTIFICATE NO. 15573 GERALD HUGHES Date Signed 11/13/13 ARIZONA, U.S.A.

EXPIRES: 3/31/2015

SHEET ORS-1

Click here for SR 90 Index



VICINITY MAP

* See Results of Survey for overall R/W Project Limits

INDEX TO EXISTING ADOT R/W

(#) ID.	LOCATION	SEC.	T.	R.	ACQ. FROM	TYPE	BK./DKT.	PAGE	WIDTH	YEAR	PARCEL NO.
1	SAN RAFAEL DEL VALLE LAND GRANT	--	--	--	--	ESMT	17	318	100'	1941	----
2	SAN RAFAEL DEL VALLE LAND GRANT	--	--	--	BOQUILLAS LAND AND CATTLE COMPANY	ESMT	54	356	100'	1942	----
3	SAN RAFAEL DEL VALLE LAND GRANT	--	--	--	SOUTHERN PACIFIC COMPANY	ESMT	55	254	100'	1944	----
4	SAN RAFAEL DEL VALLE LAND GRANT	--	--	--	BOQUILLAS COMPANY	ESMT	105	406	VARIES	1954	1481
5	SAN RAFAEL DEL VALLE LAND GRANT	--	--	--	BOQUILLAS COMPANY	ESMT	112	410	200'	1954	1477
6	SAN RAFAEL DEL VALLE LAND GRANT	--	--	--	EL PASO & SOUTHWESTERN RAILROAD COMPANY	ESMT	131	254	160'	1955	1478
7	SAN RAFAEL DEL VALLE LAND GRANT	--	--	--	U.S.A. (BUREAU OF LAND MANAGEMENT)	R/W	AZA 022095	--	200'	1986	SEE ITEM NOS. 4 & 5

(#) - Refers to Item No. in Existing R/W report dated 11/24/09

Click here for SR 90 Index

CHANGE ORDER REVISIONS

C.O. NO.	DATE	BY	DESCRIPTION OF REVISIONS
N/A	3/1/12	GM	Added TCE's to Parcel 2-1383

DRAWING NO.	D-02-T-507
SURVEY	SEE ATTACHED SURVEY
DRAWN/DATE	J. KRAFT/NOV 09
ADOT REVIEW	S. NELSON

eps group, Inc. Engineers, Planners & Surveyors

ARIZONA DEPARTMENT OF TRANSPORTATION
INTERMODAL TRANSPORTATION DIVISION
RIGHT OF WAY PLANS SECTION

HIGHWAY NAME: Whetstone TI - Jct SR 80

FEDERAL AID NO.: Unassigned

PROJECT NO.: 090 CH 327 H6005 01R

ROUTE NO.: SR 90

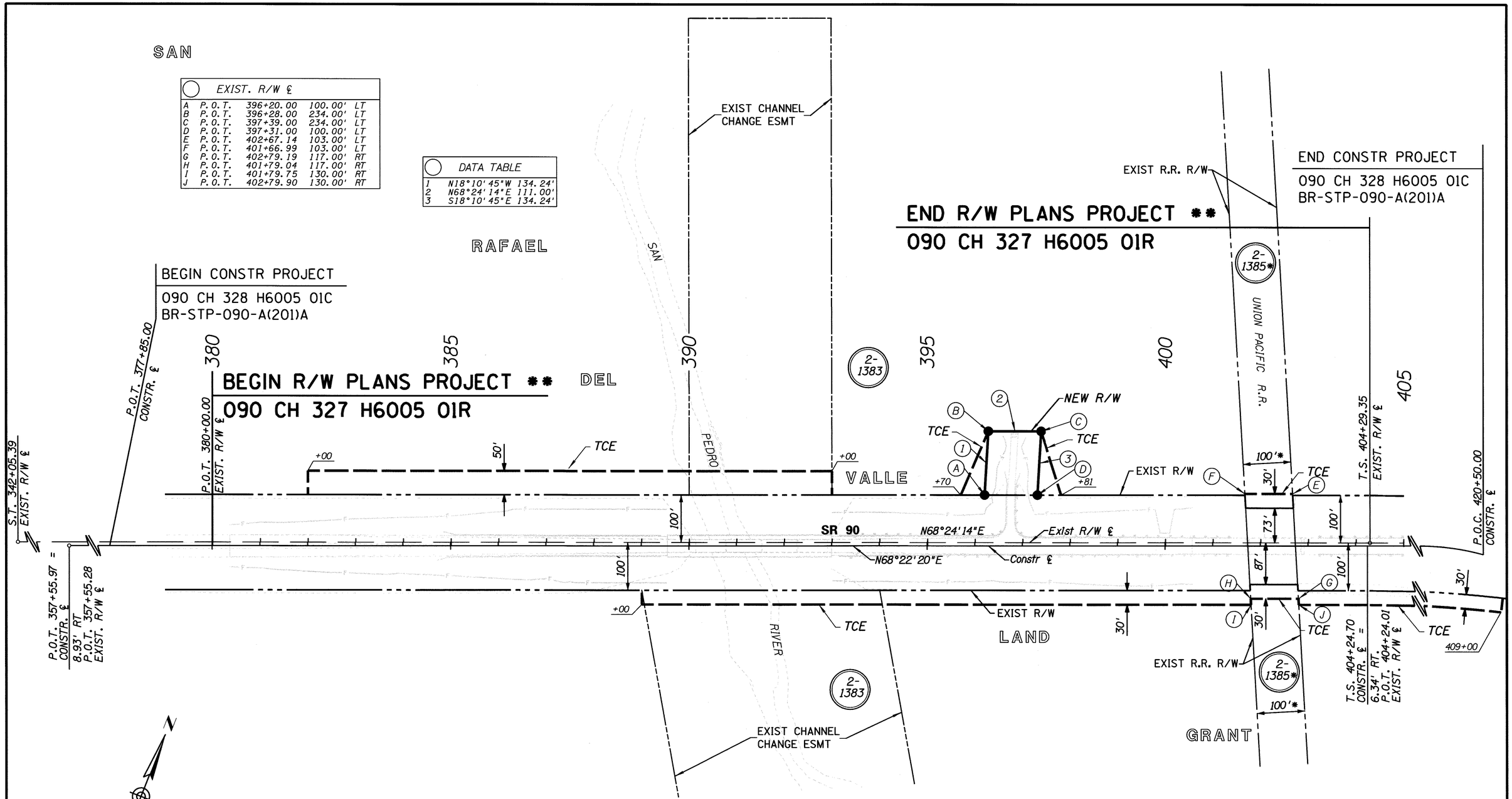
LOCATION: San Pedro River Bridge

Registered Land Surveyor
CERTIFICATE NO. 15573
GERALD HUGHES
Date Signed 4-4-12
ARIZONA, U.S.A.
EXPIRES: 3/31/2015

SHEET VM-1

EXIST. R/W ℄				
A	P.O.T.	396+20.00	100.00'	LT
B	P.O.T.	396+28.00	234.00'	LT
C	P.O.T.	397+39.00	234.00'	LT
D	P.O.T.	397+31.00	100.00'	LT
E	P.O.T.	402+67.14	103.00'	LT
F	P.O.T.	401+66.99	103.00'	LT
G	P.O.T.	402+79.19	117.00'	RT
H	P.O.T.	401+79.04	117.00'	RT
I	P.O.T.	401+79.75	130.00'	RT
J	P.O.T.	402+79.90	130.00'	RT

DATA TABLE	
1	N18°10'45"W 134.24'
2	N68°24'14"E 111.00'
3	S18°10'45"E 134.24'



* Railroad Easement Interest Only

** See Results of Survey for overall R/W Project Limits

Note: The Constr ℄ shown hereon was created for ADOT construction project 090 CH 328 H6005 01C. It is not the same as the original Constr ℄ shown on ADOT As-Built Plans S-SG-276 (1), S-276 (3), F024-1 (1) & Non F.A.S. 28 (1954). The original Constr ℄ is shown on the Results of Survey for this R/W Project.

0 50 100
Scale

...\DGN\RW\090RW327_P1.DGN

CHANGE ORDER REVISIONS			
C.O. NO.	DATE	BY	DESCRIPTION OF REVISIONS
N/A	3/1/12	GM	Added TCE's to Parcel 2-1383

DRAWING NO.	D-02-T-507
SURVEY	SEE ATTACHED SURVEY
DRAWN/DATE	J. KRAFT/NOV 09
ADOT REVIEW	S. NELSON
eps group, Inc. Engineers, Planners & Surveyors	
ROUTE NO.:	SR 90
LOCATION:	San Pedro River Bridge

ARIZONA DEPARTMENT OF TRANSPORTATION
INTERMODAL TRANSPORTATION DIVISION
RIGHT OF WAY PLANS SECTION

HIGHWAY NAME: Whetstone TI - Jct SR 80

FEDERAL AID NO.: Unassigned

PROJECT NO.: 090 CH 327 H6005 01R

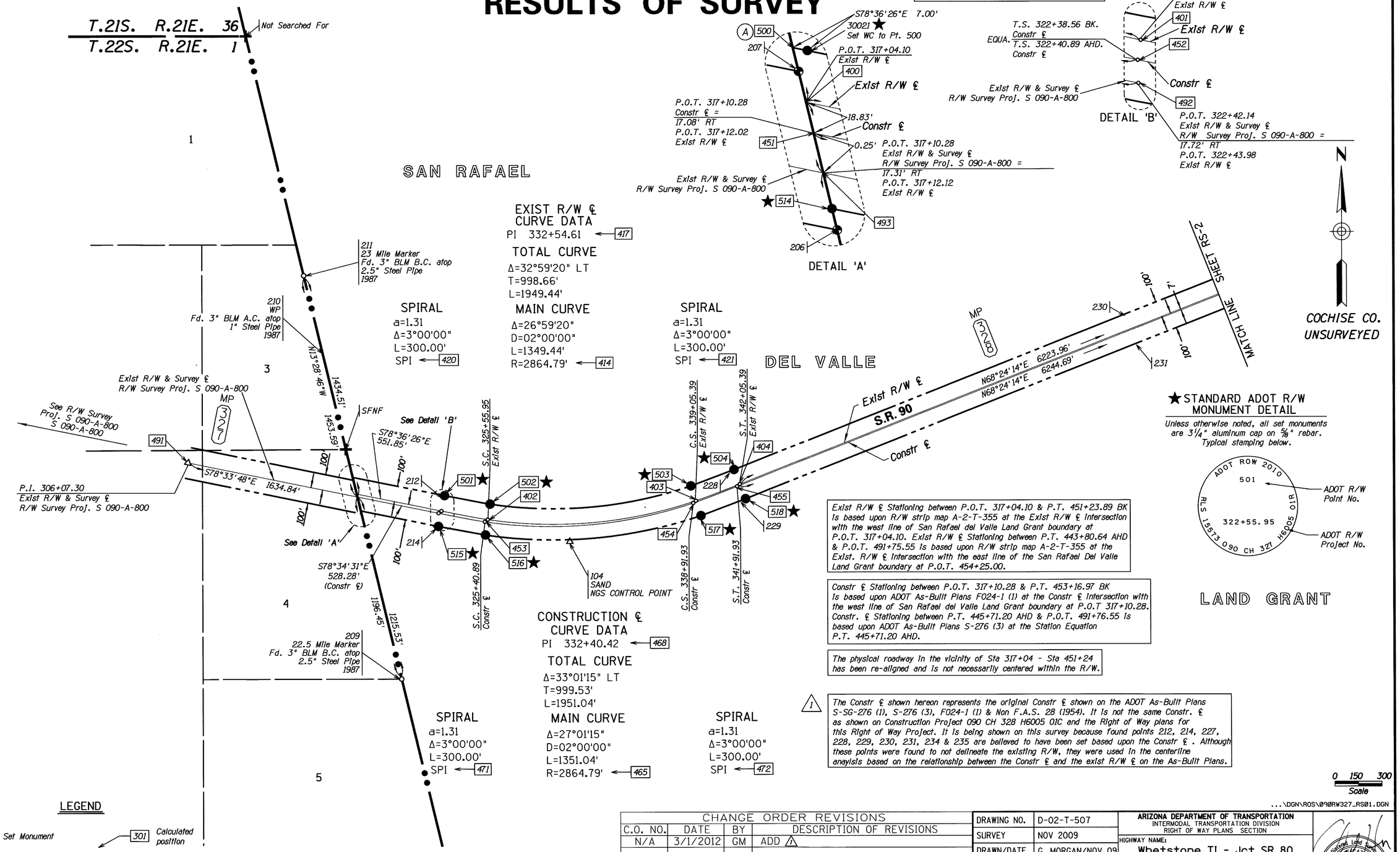
Registered Land Surveyor
CERTIFICATE NO. 15573
GERALD HUGHES
Date Signed 3/1/12
ARIZONA, U.S.A.
EXPIRES: 3/31/2015

SHEET P-1

Click here for SR 90 Index

Click here for SR 90 Index

RESULTS OF SURVEY



Exist R/W ℄ Stationing between P.O.T. 317+04.10 & P.T. 451+23.89 BK is based upon R/W strip map A-2-T-355 at the Exist R/W ℄ intersection with the west line of San Rafael del Valle Land Grant boundary at P.O.T. 317+04.10. Exist R/W ℄ Stationing between P.T. 443+80.64 AHD & P.O.T. 491+75.55 is based upon R/W strip map A-2-T-355 at the Exist. R/W ℄ intersection with the east line of the San Rafael Del Valle Land Grant boundary at P.O.T. 454+25.00.

Constr ℄ Stationing between P.O.T. 317+10.28 & P.T. 453+16.97 BK is based upon ADOT As-Built Plans F024-1 (1) at the Constr ℄ intersection with the west line of San Rafael del Valle Land Grant boundary at P.O.T 317+10.28. Constr. ℄ Stationing between P.T. 445+71.20 AHD & P.O.T. 491+76.55 is based upon ADOT As-Built Plans S-276 (3) at the Station Equation P.T. 445+71.20 AHD.

The physical roadway in the vicinity of Sta 317+04 - Sta 451+24 has been re-aligned and is not necessarily centered within the R/W.

1 The Constr ℄ shown hereon represents the original Constr ℄ shown on the ADOT As-Built Plans S-SG-276 (1), S-276 (3), F024-1 (1) & Non F.A.S. 28 (1954). It is not the same Constr. ℄ as shown on Construction Project 090 CH 328 H6005 01C and the Right of Way plans for this Right of Way Project. It is being shown on this survey because found points 212, 214, 227, 228, 229, 230, 231, 234 & 235 are believed to have been set based upon the Constr ℄ . Although these points were found to not delineate the existing R/W, they were used in the centerline anayisis based on the relationship between the Constr ℄ and the exist R/W ℄ on the As-Built Plans.

0 150 300
Scale

...\DGN\ROS\090RW327_RS01.DGN

LEGEND

- 302 Set Monument
- 300 Found Monument
- SFNF Searched for not found
- 301 Calculated position
- Existing ADOT R/W monument
- New R/W monument
- ★ Unless otherwise noted, set standard ADOT R/W monument at calculated position in July, 2010

CHANGE ORDER REVISIONS			
C.O. NO.	DATE	BY	DESCRIPTION OF REVISIONS
N/A	3/1/2012	GM	ADD 1

DRAWING NO.	D-02-T-507
SURVEY	NOV 2009
DRAWN/DATE	G. MORGAN/NOV 09
ADOT REVIEW	S. NELSON

eps group, Inc. Engineers, Planners & Surveyors

ARIZONA DEPARTMENT OF TRANSPORTATION
INTERMODAL TRANSPORTATION DIVISION
RIGHT OF WAY PLANS SECTION

HIGHWAY NAME: Whetstone TI - Jct SR 80
FEDERAL AID NO.: Unassigned
PROJECT NO.: 090 CH 327 H6005 01R
ROUTE NO.: SR 90
LOCATION: San Pedro River Bridge

Registered Land Surveyor
CERTIFICATE NO. 15573
GERALD HUGHES
Date Signed 4/23/15
ARIZONA, U.S.A.
EXPIRES: 3/31/2015

SHEET RS-1

RESULTS OF SURVEY

1

The Constr ℄ shown hereon represents the original Constr ℄ shown on the ADOT As-Built Plans S-SG-276 (1), S-276 (3), F024-1 (1) & Non F.A.S. 28 (1954). It is not the same Constr. ℄ as shown on Construction Project 090 CH 328 H6005 01C and the Right of Way plans for this Right of Way Project. It is being shown on this survey because found points 212, 214, 227, 228, 229, 230, 231, 234 & 235 are believed to have been set based upon the Constr ℄ . Although these points were found to not delineate the existing R/W, they were used in the centerline anayisis based on the relationship between the Constr ℄ and the exist R/W ℄ on the As-Built Plans.

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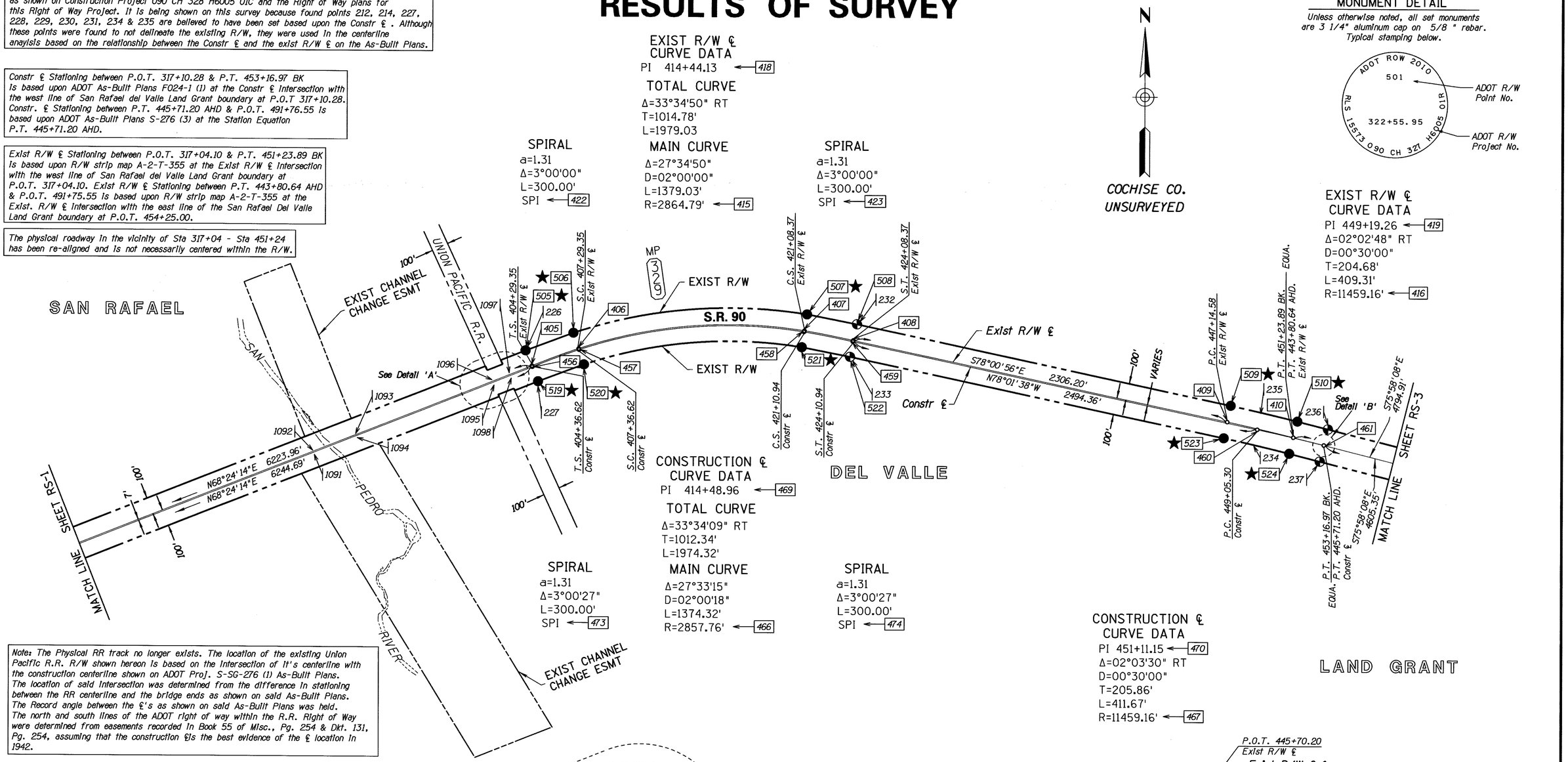
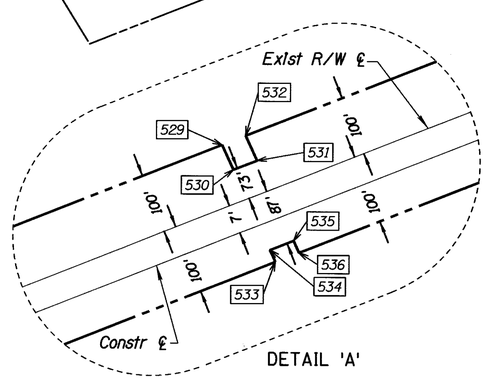
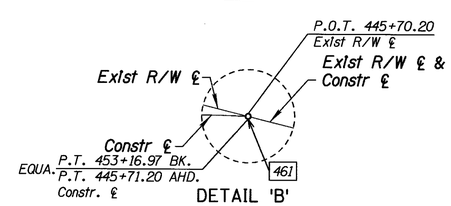


STANDARD ADOT R/W MONUMENT DETAIL

Unless otherwise noted, all set monuments are 3 1/4" aluminum cap on 5/8 " rebar. Typical stamping below.

Note: The Physical RR track no longer exists. The location of the existing Union Pacific R.R. R/W shown hereon is based on the intersection of it's centerline with the construction centerline shown on ADOT Proj. S-SG-276 (1) As-Built Plans. The location of said intersection was determined from the difference in stationing between the RR centerline and the bridge ends as shown on said As-Built Plans. The Record angle between the ℄'s as shown on said As-Built Plans was held. The north and south lines of the ADOT right of way within the R.R. Right of Way were determined from easements recorded in Book 55 of Misc., Pg. 254 & Dkt. 131, Pg. 254, assuming that the construction ℄is the best evidence of the ℄ location in 1942.





0 150 300
Scale

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LEGEND

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- New R/W monument
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CHANGE ORDER REVISIONS			
C.O. NO.	DATE	BY	DESCRIPTION OF REVISIONS
N/A	3/1/2012	GM	ADD 1

DRAWING NO.	D-02-T-507
SURVEY	NOV 2009
DRAWN/DATE	G. MORGAN/NOV 09
ADOT REVIEW	S. NELSON

eps group, Inc. Engineers, Planners & Surveyors

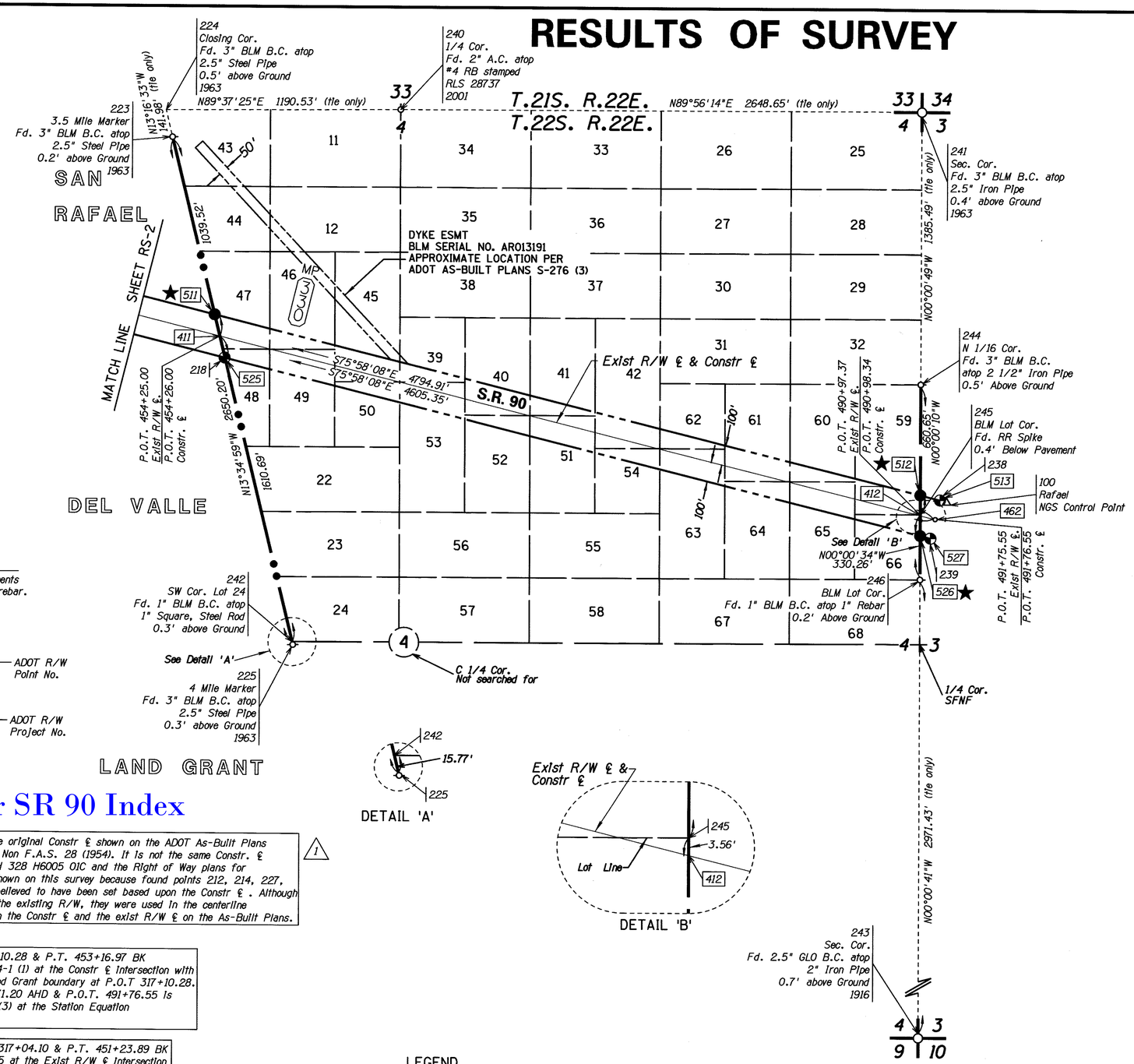
ARIZONA DEPARTMENT OF TRANSPORTATION
INTERMODAL TRANSPORTATION DIVISION
RIGHT OF WAY PLANS SECTION

HIGHWAY NAME: Whetstone TI - Jct SR 80
FEDERAL AID NO.: Unassigned
PROJECT NO.: 090 CH 327 H6005 01R
ROUTE NO.: SR 90
LOCATION: San Pedro River Bridge

Registered Land Surveyor, Certificate No. 15573, GERALD HUGHES, Date Signed 4/23/13, ARIZONA, U.S.A.
EXPIRES: 3/31/2015

SHEET RS-2

RESULTS OF SURVEY



Click here for SR 90 Index

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Constr ℄ Stationing between P.O.T. 317+10.28 & P.T. 453+16.97 BK is based upon ADOT As-Built Plans F024-1 (1) at the Constr ℄ intersection with the west line of San Rafael del Valle Land Grant boundary at P.O.T 317+10.28. Constr. ℄ Stationing between P.T. 445+71.20 AHD & P.O.T. 491+76.55 is based upon ADOT As-Built Plans S-276 (3) at the Station Equation P.T. 445+71.20 AHD.

Exist R/W ℄ Stationing between P.O.T. 317+04.10 & P.T. 451+23.89 BK is based upon R/W strip map A-2-T-355 at the Exist R/W ℄ intersection with the west line of San Rafael del Valle Land Grant boundary at P.O.T. 317+04.10. Exist R/W ℄ Stationing between P.T. 443+80.64 AHD & P.O.T. 491+75.55 is based upon R/W strip map A-2-T-355 at the Exist. R/W ℄ intersection with the east line of the San Rafael Del Valle Land Grant boundary at P.O.T. 454+25.00.

The physical roadway in the vicinity of Sta 317+04 - Sta 451+24 has been re-aligned and is not necessarily centered within the R/W.

LEGEND

- 302 Set Monument
- 300 Found Monument
- SFNF Searched for not found
- 301 Calculated position
- Existing ADOT R/W monument
- New R/W monument
- ★ Unless otherwise noted, set standard ADOT R/W monument at calculated position in July, 2010

GENERAL NOTES

SIX NGS CONTROL STATIONS WERE USED TO ESTABLISH THE CONTROL BASELINE FOR THIS SURVEY AND THEY ARE AS FOLLOWS:

RAFAEL NAD 83(1992) 31°32'56.96852"(N) 110°06'17.28622"(W)
Grid Coordinates N 199747.42606 E 719270.50120
Ground Coordinates (Pt. 100) N 199806.95079 E 719484.84381

BELLA VISTA NAD 83(1992) 31°35'51.89673"(N) 110°11'16.43251"(W)
Grid Coordinates N 217417.19331 E 693390.04121
Ground Coordinates (Pt. 102) N 217481.98363 E 693596.67144

SAN RAFAEL NAD 83(1992) 31°30'39.03405"(N) 110°06'19.48884"(W)
Grid Coordinates N 185810.62311 E 719087.70908
Ground Coordinates (Pt. 103) N 185865.99468 E 719301.99722

SAND NAD 83(1992) 31°32'45.42439"(N) 110°09'24.17910"(W)
Grid Coordinates N 198575.71896 E 703099.53993
Ground Coordinates (Pt. 104) N 198634.89452 E 703309.06359

SUTHERLAND NAD 83(1992) 31°35'53.91081"(N) 110°06'19.33271"(W)
Grid Coordinates N 217625.43838 E 719083.41233
Ground Coordinates (Pt. 105) N 217690.29076 E 719297.69919

MOSON NAD 83(1992) 31°30'39.70543"(N) 110°12'24.64577"(W)
Grid Coordinates N 185875.41999 E 687479.31517
Ground Coordinates (Pt. 108) N 185930.81087 E 687684.18401

THE FOLLOWING PARAMETERS WERE SET FOR THE BASIS OF THIS SURVEY:

SYSTEM:	UNITED STATES STATE PLANE 1983
ZONE:	ARIZONA EAST 0201
DATUM:	NORTH AMERICAN 1983 (CONUS) EQUIVALENT TO WGS-84
GEOID MODEL:	GEOID99 (CONTINENTAL US)

UNITS = INTERNATIONAL FEET (1 FOOT = 0.3048 METERS EXACTLY)

DIRECT SATELLITE OBSERVATIONS WERE MADE ON EACH POINT ON THE NORTH AMERICAN DATUM OF 1983 WITH AUTOMATIC TRANSLATIONS MADE TO THE STATE PLANE GRID SYSTEM.

GPS CALIBRATION AND TRANSLATION TO THE SURFACE WAS PERFORMED BY GPS SURVEY SOFTWARE A GRID ADJUSTMENT FACTOR OF 1.000298, AS OBTAINED FROM ADOT (ENGINEERING SURVEY SECTION JOB NO. LS 1097), AND SCALE ORIGIN VALUES OF N=0.00, E=0.00, WERE USED FOR THE TRANSLATION TO THE SURFACE.

ALL BEARINGS ARE GRID BEARINGS, DISTANCES ARE GROUND DISTANCES AND COORDINATES ARE GROUND COORDINATES.

THE INFORMATION SHOWN ON THIS "RESULTS OF SURVEY" WAS BASED ON AN OBSERVATION AND EVALUATION OF PHYSICAL CORROBORATING EVIDENCE IN THE FIELD; AND A REVIEW AND ANALYSIS OF EXISTING R/W PLANS, MAPS AND R/W TITLE DOCUMENTS AVAILABLE AT THE TIME THE SURVEY WAS PREPARED, AND MAY NOT REFLECT PRIOR OR PENDING ADOT DISPOSALS OR ACQUISITIONS THAT WERE NOT SHOWN ON SAID PLANS AND DOCUMENTS AT THE TIME SURVEY WAS PREPARED.

THIS RESULTS OF SURVEY IS ON FILE IN THE FILE ROOM OF THE RIGHT OF WAY PLANS SECTION OF THE ARIZONA DEPARTMENT OF TRANSPORTATION, 205 SOUTH 17TH AVENUE, MD 612E, PHOENIX, AZ 85007. (602) 712-7270. SEE ADOT R/W FILE COPY FOR MOST CURRENT ADDITIONS OR REVISIONS.

FOR ADDITIONAL INFORMATION ON SECTION CORNER DESCRIPTIONS, SEE CORNER RECOVERY SHEETS IN THE ADOT R/W PLANS SECTION RECORDS.

0 150 300
Scale

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CHANGE ORDER REVISIONS

C.O. NO.	DATE	BY	DESCRIPTION OF REVISIONS
N/A	3/1/2012	GM	ADD 1

DRAWING NO.	D-02-T-507
SURVEY	NOV 2009
DRAWN/DATE	G. MORGAN/NOV 09
ADOT REVIEW	S. NELSON

eps group, inc. Engineers, Planners & Surveyors

ARIZONA DEPARTMENT OF TRANSPORTATION
INTERMODAL TRANSPORTATION DIVISION
RIGHT OF WAY PLANS SECTION

HIGHWAY NAME: Whetstone TI - Jct SR 80
FEDERAL AID NO.: Unassigned
PROJECT NO.: 090 CH 327 H6005 01R
ROUTE NO.: SR 90
LOCATION: San Pedro River Bridge

Registered Land Surveyor
CERTIFICATE NO. 15573
GERALD HUGHES
Date Signed 4/13/12
ARIZONA, U.S.A.
EXPIRES: 3/31/2015

SHEET RS-3

RESULTS OF SURVEY

CALCULATED POINTS

PT.	NORTHING	EASTING
400	198939.68168	701948.94750
401	198830.67346	702489.92007
402	198776.56139	702784.96236
403	198895.45213	704116.66899
404	199000.97283	704397.45975
405	201291.77109	710184.50272
406	201397.29179	710465.29348
407	201511.71356	711826.24381
408	201454.55767	712120.71159
409	200975.68333	714376.65008
410	200883.55862	714775.44057
411	200630.35776	715788.63687
412	199740.00723	719351.42045
414	201610.67061	703203.10208
415	198682.07331	711378.86039
416	189766.28697	711997.20031
417	198633.40424	703468.90341
418	201665.27311	711128.04814
419	200933.18250	714576.86807
420	198791.16104	702686.00745
421	198927.34996	704211.47274
422	201365.39396	710370.48972
423	201496.09286	711925.04269
451	198921.37038	701953.33671
452	198816.72772	702471.15332
453	198762.45117	702766.16540
454	198881.10834	704099.45208
455	198986.62904	704380.24284
456	201285.05793	710186.56243
457	201390.56651	710467.35755
458	201504.73888	711823.67417
459	201447.65611	712118.15595
460	200930.21282	714558.25525
461	200837.59997	714959.34651
462	199721.04541	719427.29714
465	201596.32682	703185.88517
466	198681.89719	711378.33234
467	189720.32831	712181.10625
468	198618.74056	703450.87841
469	201657.66131	711127.83770
470	200887.50905	714759.63274
471	198777.10598	702667.21864
472	198913.00617	704194.25584
473	201358.68086	710372.54956
474	201489.15116	711922.47838
491	199139.83007	700872.31499
*491	199142.43190	700880.35590
492	198815.66817	702474.69474
*492	198818.26940	702482.73860
493	198921.12727	701953.39498
*493	198923.72880	701961.43730

CALCULATED POINTS

PT.	NORTHING	EASTING
500	199046.86887	701923.25480
★501	198928.70307	702509.67344
★502	198875.49047	702799.55819
★503	198990.23114	704084.77949
★504	199093.95298	704360.65360
★505	201384.75124	710147.69657
★506	201492.07079	710433.40398
★507	201610.48664	711841.86044
508	201552.37807	712141.47620
★509	201073.50373	714397.41469
★510	200980.57509	714799.68528
★511	200740.05664	715762.13226
★512	199843.08385	719351.41513
513	199818.06187	719451.54185
★514	198832.49450	701974.64020
★515	198732.64385	702470.16669
★516	198677.63232	702770.36653
★517	198800.67313	704148.55849
★518	198907.99269	704434.26590
★519	201198.79094	710221.30887
★520	201302.51278	710497.18298
★521	201412.94048	711810.62718
522	201356.73727	712099.94698
★523	200877.86293	714355.88547
★524	200786.54216	714751.19586
525	200520.65889	715815.14148
★526	199636.92764	719351.43766
527	199624.02895	719403.05243
529	201288.24935	709903.91231
530	201263.68871	709915.22424
531	201300.54997	710008.34359
532	201325.11060	709997.03167
533	201106.31871	709987.70436
534	201118.14420	709982.25788
535	201155.00546	710075.37724
536	201143.17996	710080.82372

* COORDINATES FROM RESULTS OF SURVEY ADOT R/W PROJ. NO. S 090-A-800, GAF=1.0003095235 FOR INFORMATION PURPOSES ONLY.

★ UNLESS OTHERWISE NOTED, SET STANDARD ADOT R/W MONUMENT AT CALCULATED POSITION IN JULY, 2010. SEE SHEETS RS-1 TO RS-3 FOR DETAILED MONUMENT INFORMATION.

PUBLIC INFORMATION USED IN PREPARATION OF SURVEY

ADOT & RAILROAD RIGHT-OF-WAY PLANS AND AS-BUILTS

PROJECT	DRAWING NO.	DESCRIPTION	DATE
F.A.S. 28 & S276	A-2-T-355	FORT HUACHUCA - BISBEE HWY: R/W STRIP MAP	1954
F-024-1(1)	A-2-T-380	FORT HUACHUCA - BISBEE HWY: R/W STRIP MAP	1958
S 090-A-800	D-02-T-501	WHETSTONE T.I. - JCT SR 80: RESULTS OF SURVEY	2005
S-SG-276 (1)	---	FORT HUACHUCA - BISBEE HWY: AS BUILT PLANS	1954
Non FAS 28 (1954)	---	FORT HUACHUCA - BISBEE HWY: AS BUILT PLANS	1954
Non FAS 28 (1955) A	---	FORT HUACHUCA - BISBEE HWY: AS BUILT PLANS	1955
S-276 (3)	---	FORT HUACHUCA - BISBEE HWY: AS BUILT PLANS	1956
F024-1 (1)	---	FORT HUACHUCA - BISBEE HWY: AS BUILT PLANS	1955
S-090-A-501	---	FORT MUACHUCA - BISBEE HWY: AS BUILT PLANS	2002
---	2-B-136	SOUTHERN PACIFIC CO. LEWIS SPRINGS HEREFORD AGREEMENT WITH COUNTY OF COCHISE	1941

G.L.O. & B.L.M. PLATS

PLAT NO.	NAME	DATE
2500	T.22S., R.21E. G. & S.R.M. ORIGINAL TOWNSHIP SURVEY	1-28-1913
2500-AA	T.22S., R.21E. G. & S.R.M. DEPENDENT RESURVEY	5-16-1991
2501	T.22S., R.22E. G. & S.R.M. ORIGINAL TOWNSHIP SURVEY	5-29-1920
2500-A	T.22S., R.22E. G. & S.R.M. SUPPLEMENTAL PLAT OF SECTION 4	4-15-1959
2500-B	T.22S., R.22E. G. & S.R.M. SUPPLEMENTAL PLAT OF SECTIONS 3& 4	5-11-1962
2500-C	T.22S., R.22E. G. & S.R.M. SUBDIVISON OF SECTION 4	8-13-1963

G.L.O. & B.L.M. FIELD NOTES

BOOK	PAGES	DATE
2338	24	1911
4664	1B, 4, 5, 13, 14	1963

NO RECORDED PLATS OR SURVEYS RELEVANT TO THIS SURVEY WERE DISCOVERED IN A SEARCH OF THE COCHISE COUNTY RECORDS.

MISCELLANEOUS MONUMENTS

PT.	NORTHING	EASTING	DESCRIPTION
212*	198913.72660	702494.53000	3" ADOT BC
214*	198717.83610	702454.62760	3" ADOT BC
227*	201194.20480	710220.71070	ANGLE IRON
228*	199071.73450	704332.29260	ANGLE IRON
229*	198884.86840	704404.85930	ANGLE IRON
230*	200075.07730	706861.50220	ANGLE IRON
231*	199888.79820	706935.57150	ANGLE IRON
234*	200832.45870	714537.55360	ANGLE IRON
235*	201027.98390	714579.08440	ANGLE IRON
1091	200752.17370	708875.55709	BRIDGE DECK CORNER
1092	200776.31000	708866.14761	BRIDGE DECK CORNER
1093	200878.17084	709123.95831	BRIDGE DECK CORNER
1094	200854.24392	709133.35175	BRIDGE DECK CORNER
1095	201175.79610	709956.62280	BRIDGE DECK CORNER
1096	201207.17170	709944.05620	BRIDGE DECK CORNER
1097	201248.52430	710048.00160	BRIDGE DECK CORNER
1098	201217.13360	710060.49280	BRIDGE DECK CORNER

* SEE NOTE 1 ON SHEETS RS-1 TO RS-3

SET R/W MONUMENTATION

PT.	NORTHING	EASTING	DESCRIPTION
★30021	199045.48613	701930.11687	SET STD R/W MON FOR WC

EXISTING R/W LINE

THE FOLLOWING LIST OF POINTS REPRESENTS THE EXISTING RIGHT OF WAY LINE AS DETERMINED BY AN ANALYSIS OF MONUMENTATION FOUND DURING THE COURSE OF THIS SURVEY AND THE EXISTING DOCUMENTATION LISTED HEREIN.

LEFT SIDE			RIGHT SIDE		
PT.	STATION	OFFSET	PT.	STATION	OFFSET
500	316+57.74	100.00 LT	514	317+50.46	100.00 RT
501	322+55.95	100.00 LT	515	322+55.95	100.00 RT
502	325+55.95	100.00 LT	516	325+55.95	100.00 RT
414	RADIUS PT.	-----	414	RADIUS PT.	-----
503	339+05.39	100.00 LT	517	339+05.39	100.00 RT
504	342+05.39	100.00 LT	518	342+05.39	100.00 RT
529	401+67.16	100.00 LT	533	401+78.10	100.00 RT
530	401+68.63	73.00 LT	534	401+77.39	87.00 RT
531	402+68.78	73.00 LT	535	402+77.54	87.00 RT
532	402+67.31	100.00 LT	536	402+78.25	100.00 RT
505	404+29.35	100.00 LT	519	404+29.35	100.00 RT
506	407+29.35	100.00 LT	520	407+29.35	100.00 RT
415	RADIUS PT.	-----	415	RADIUS PT.	-----
507	421+08.37	100.00 LT	521	421+08.37	100.00 RT
508	424+08.37	100.00 LT	522	424+08.37	100.00 RT
509	447+14.58	100.00 LT	523	447+14.58	100.00 RT
416	RADIUS PT.	-----	416	RADIUS PT.	-----
510	451+23.89 BK.	100.00 LT	524	451+23.89 BK.	100.00 RT
510	443+80.64 AHD.	100.00 LT	524	443+80.64 AHD.	100.00 RT
511	453+72.69	100.00 LT	525	454+77.31	100.00 RT
512	490+72.35	100.00 LT	526	491+22.35	100.00 RT
513	491+75.55	100.00 LT	527	491+75.55	100.00 RT

ALL STATIONS & OFFSETS LISTED ABOVE ARE FROM THE EXISTING R/W ℄.

EXISTING R/W MONUMENTATION

PT.	NORTHING	EASTING	DESCRIPTION	STATION	OFFSET
206	198813.53270	701979.51290	ANGLE IRON	317+58.98	117.63 RT
*206	198816.32720	701987.58820	ANGLE IRON	---	---
207	199028.00760	701927.90080	ANGLE IRON	316+66.02	82.43 LT
*207	199030.45260	701935.99100	ANGLE IRON	---	---
218	200520.86610	715814.00080	ANGLE IRON	454+76.15	100.08 RT
226	201383.95000	710145.50020	ANGLE IRON	404+27.01	100.06 LT
232	201552.01390	712143.25950	RAIL	424+10.19	100.01 LT
233	201356.39090	712101.51100	RAIL	424+09.98	100.01 RT
236	200934.37654	714983.78524	ANGLE IRON	445+70.45	99.81 LT
237	200740.82608	714934.89702	ANGLE IRON	445+69.94	99.81 RT
238	199818.28681	719451.28022	ANGLE IRON	491+75.25	100.15 LT
239	199623.80401	719403.31406	ANGLE IRON	491+75.86	100.15 RT

ALL STATIONS & OFFSETS LISTED ABOVE ARE FROM THE EXISTING R/W ℄. STATION & OFFSETS OF ANGLE IRONS ARE TO THE FIELD LOCATION POINT SHOWN IN THE "ANGLE IRON DETAIL"

* COORDINATES FROM RESULTS OF SURVEY ADOT R/W PROJ. NO. S 090-A-800, GAF=1.0003095235 FOR INFORMATION PURPOSES ONLY.

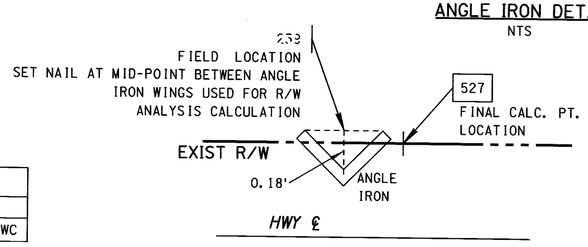
SECTION/LAND GRANT CORNERS

PT.	NORTHING	EASTING	DESCRIPTION
209	197757.63110	702232.28430	BLM BC
*209	197760.21890	702240.27750	
210	199838.58130	701733.43450	BLM BC
211	200334.67610	701614.56820	BLM BC
*211	200337.28880	701622.67150	
223	201640.79990	715544.50150	BLM BC
224	201778.99040	715511.89620	BLM BC
225	199064.72000	716166.91440	BLM BC
240	201786.81117	716702.40528	AC
241	201789.71122	719351.05836	BLM BC
242	199080.04494	716163.21170	BLM BC
243	196441.88138	719352.07185	BLM BC
244	200404.21928	719351.38845	BLM BC
245	199743.57000	719351.41986	RR SPIKE
246	199413.31324	719351.47499	BLM BC

* COORDINATES FROM RESULTS OF SURVEY ADOT R/W PROJ. NO. S 090-A-800, GAF=1.0003095235 FOR INFORMATION PURPOSES ONLY.

ANGLE IRON DETAIL

NTS



NOTE: DETAIL IS CONCEPTUAL ONLY. ACTUAL LOCATIONAL RELATIONSHIP BETWEEN THE ANGLE IRON, FINAL CALC. PT. AND R/W LINE VARIES FOR EACH POINT

THE METHODOLOGY AND ANALYSIS REGARDING ITEMS SHOWN HEREON IN THE EXISTING R/W MONUMENTATION TABLE AND THE ANGLE IRON DETAIL ARE BASED ON HISTORICAL ADOT R/W MONUMENTATION STANDARDS AND PRACTICES. REFERENCE IS MADE TO HISTORICAL ADOT MONUMENT DETAIL A-1 (1939) AND C-1 (1955)

CHANGE ORDER REVISIONS

C.O. NO.	DATE	BY	DESCRIPTION OF REVISIONS
N/A	3/1/2012	GM	ADD 1 NOTE & ASTERISKS

...\DGN\ROS\090RW327_RS04.DGN

DRAWING NO.	D-02-T-507	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION RIGHT OF WAY PLANS SECTION
SURVEY	NOV 2009	HIGHWAY NAME: Whetstone TI - Jct SR 80
DRAWN/DATE	G. MORGAN/NOV 09	
ADOT REVIEW	S. NELSON	FEDERAL AID NO.: Unassigned
eps group, Inc. Engineers, Planners & Surveyors		PROJECT NO.: 090 CH 327 H6005 01R
ROUTE NO.: SR 90	LOCATION: San Pedro River Bridge	

Registered Land Surveyor CERTIFICATE NO. 15573 GERALD HUGHES ARIZONA, U.S.A. Date Signed 4/26/12

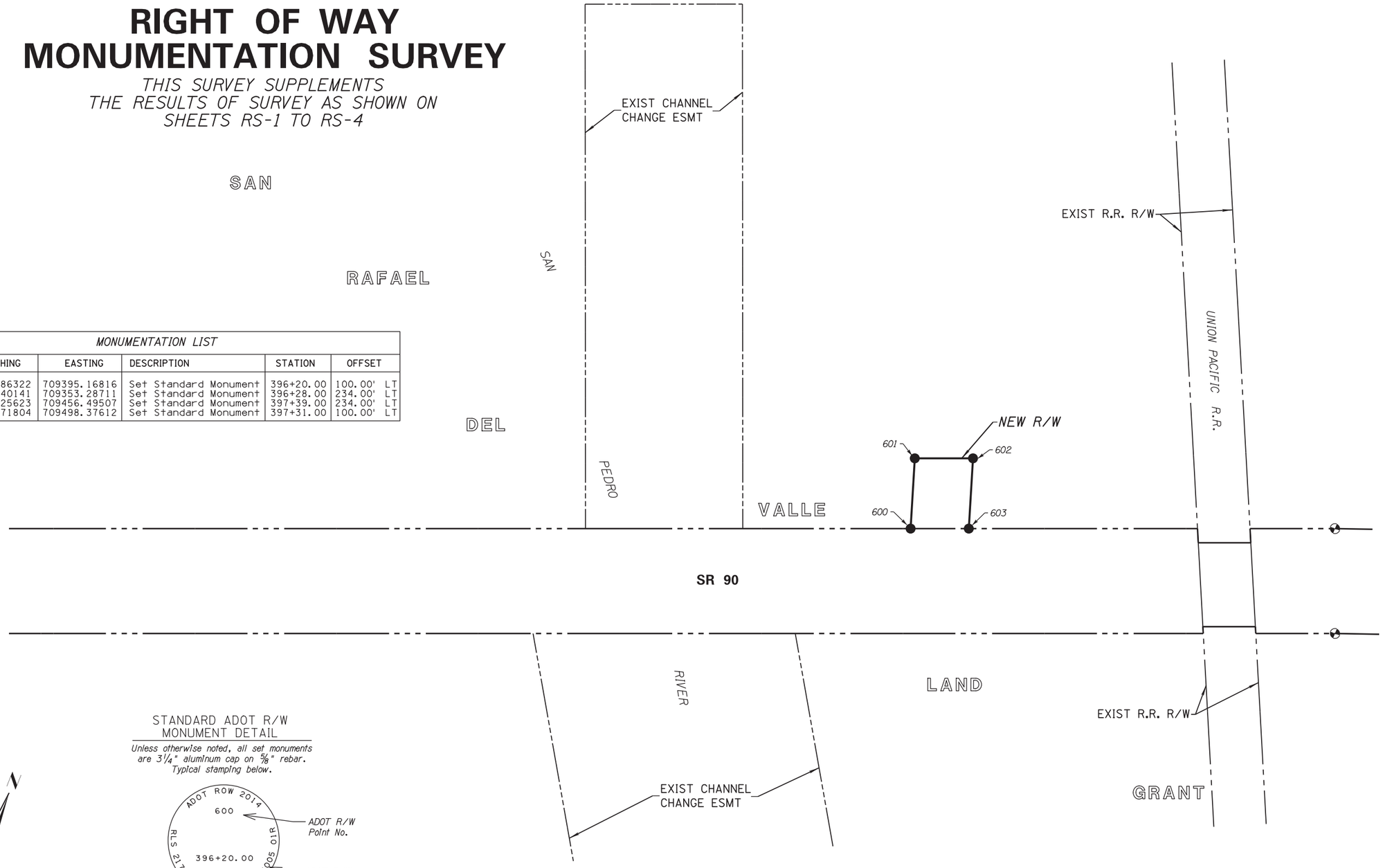
EXPIRES: 3/31/2015

SHEET RS-4

Click here for SR 90 Index

RIGHT OF WAY MONUMENTATION SURVEY

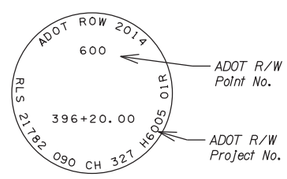
THIS SURVEY SUPPLEMENTS THE RESULTS OF SURVEY AS SHOWN ON SHEETS RS-1 TO RS-4

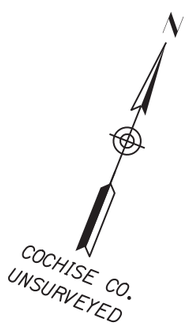


MONUMENTATION LIST					
PT.	NORTHING	EASTING	DESCRIPTION	STATION	OFFSET
600	201086.86322	709395.16816	Set Standard Monument	396+20.00	100.00' LT
601	201214.40141	709353.28711	Set Standard Monument	396+28.00	234.00' LT
602	201255.25623	709456.49507	Set Standard Monument	397+39.00	234.00' LT
603	201127.71804	709498.37612	Set Standard Monument	397+31.00	100.00' LT

STANDARD ADOT R/W MONUMENT DETAIL

Unless otherwise noted, all set monuments are 3 1/4" aluminum cap on 5/8" rebar. Typical stamping below.





LEGEND

- 302 Set Monument
- 300 Found Monument
- New R/W monument
- 301 Calculated position
- Existing R/W monument

Click here for SR 90 Index

0 50 100
Scale
090RW327_MS1.DGN

CHANGE ORDER REVISIONS			
C.O. NO.	DATE	BY	DESCRIPTION OF REVISIONS

DRAWING NO.	D-02-T-507
SURVEY	MARCH 2014
DRAWN/DATE	MGB/MARCH 14
ADOT REVIEW	D. FORNEY

Baker
MICHAEL BAKER JR. INC.
2929 N CENTRAL AVENUE, SUITE 800
PHOENIX, ARIZONA 85012
602.279.1234 • FAX 602.279.1411
www.MBAKERCORP.com

ARIZONA DEPARTMENT OF TRANSPORTATION
INTERMODAL TRANSPORTATION DIVISION
RIGHT OF WAY PLANS SECTION

HIGHWAY NAME: Whetstone TI - Jct SR 80
FEDERAL AID NO.: Unassigned
PROJECT NO.: 090 CH 327 H6005 01R
ROUTE NO.: SR 90
LOCATION: San Pedro River Bridge

Professional Land Surveyor AZ No. 21782
Digitally signed by Scott A. Nelson
Date: 2014.04.15 08:55:56 -07'00'
(Expires 9-30-15)
ELECTRONIC SEAL
http://www.btr.state.az.us/

SHEET MS-1

4/15/2014 8:55:26 AM H:\PDATA\139988_H6005 SAN PEDRO RIVER BRIDGE\CADD\MAPPING\RWMAP\090RW327_MS1.DGN