

TUZIGOOT BRIDGE AND ADJACENT VERDE RIVER CROSS SECTION SURVEY

SECTION 21, TOWNSHIP 16 NORTH, RANGE 3 EAST,
GILA AND SALT RIVER MERIDIAN,
YAVAPAI COUNTY, ARIZONA

COORDINATE SYSTEM DETAIL:

LINEAR UNIT: INTERNATIONAL FEET
 GEODETIC DATUM: NAD 1983 (CONUS)
 VERTICAL DATUM: (SEE BELOW)
 SYSTEM: US STATE PLANE 1983
 ZONE: ARIZONA CENTRAL 0202
 PROJECTION:
 TRANSVERSE MERCATOR
 LATITUDE OF GRID ORIGIN: 31° 00' 0" N
 LONGITUDE OF CENTRAL MERIDIAN: 111° 55' 0" W
 NORTHING AT GRID ORIGIN: 0.00 FT
 EASTING AT CENTRAL MERIDIAN: 700,000.00 FT
 CENTRAL MERIDIAN SCALE FACTOR: 0.9999 EXACT

ALL MEASURED DISTANCES AND BEARINGS SHOWN HEREON ARE GRID VALUES BASED ON THE PRECEDING PROJECTION DEFINITION. THE PROJECTION WAS DEFINED SUCH THAT GRID DISTANCES ARE EQUIVALENT TO "GROUND" DISTANCES IN THE PROJECT AREA.

THE BASIS OF BEARINGS IS TRUE GEODETIC NORTH. NOTE THAT THE MEASURED GRID BEARINGS SHOWN HEREON (OR IMPLIED BY GRID COORDINATES) DO NOT EQUAL GEODETIC BEARINGS DUE TO MERIDIAN CONVERGENCE.

ORTHOMETRIC HEIGHTS (ELEVATIONS) WERE TRANSFERRED TO THE SITE FROM R18 NGS (PID# ES0478) USING GPS WITH NGS GEOID MODEL "GEOID03". ELEVATIONS SHOWN HEREON ARE REFERENCED TO THE PUBLISHED NAVD 88 ELEVATION OF THIS STATION.

THE SURVEY WAS CONDUCTED USING GPS REFERENCED TO THE NATIONAL SPATIAL REFERENCE SYSTEM A PARTIAL LIST OF POINT COORDINATES FOR THIS SURVEY IS GIVEN BELOW (ADDITIONAL COORDINATES ARE AVAILABLE UPON REQUEST). LOCAL NETWORK ESTIMATES ARE GIVEN AT THE 95% CONFIDENCE LEVEL AND ARE BASED ON AN APPROPRIATELY CONSTRAINED LEAST-SQUARES ADJUSTMENT OF OVER-DETERMINED AND STATISTICALLY INDEPENDENT OBSERVATIONS.

POINT #23 CP VERDE (1992) 3-1/4" SWI ALUM DISK IN CONCRETE STAMPED "VERDE" (DH5794)
 LATITUDE = 34°38'11.63440"N NORTHING = 1,323,031.34 FT ESTIMATED ACCURACY
 LONGITUDE = 111°56'10.17109"W EASTING = 694,137.01 FT HORIZ = FIXED
 ELLIPSOID HEIGHT = 3,155.512 FT ELEVATION = 3,240.43 FT VERT = FIXED

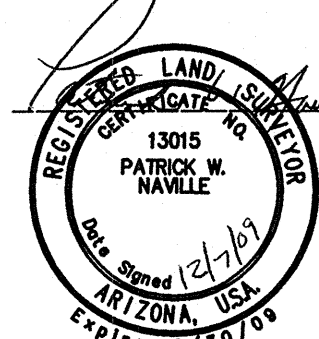
POINT #24 CP R 18 (1992) 3-3/4" USGS BRASS DISK IN BEDROCK STAMPED "R 18 1931" (ES0478)
 LATITUDE = 34°43'41.84276"N NORTHING = 1,356,417.55 FT ESTIMATED ACCURACY
 LONGITUDE = 111°58'50.37059"W EASTING = 680,773.11 FT HORIZ = FIXED
 ELLIPSOID HEIGHT = 3,283.301 FT ELEVATION = 3,367.35 FT VERT = FIXED

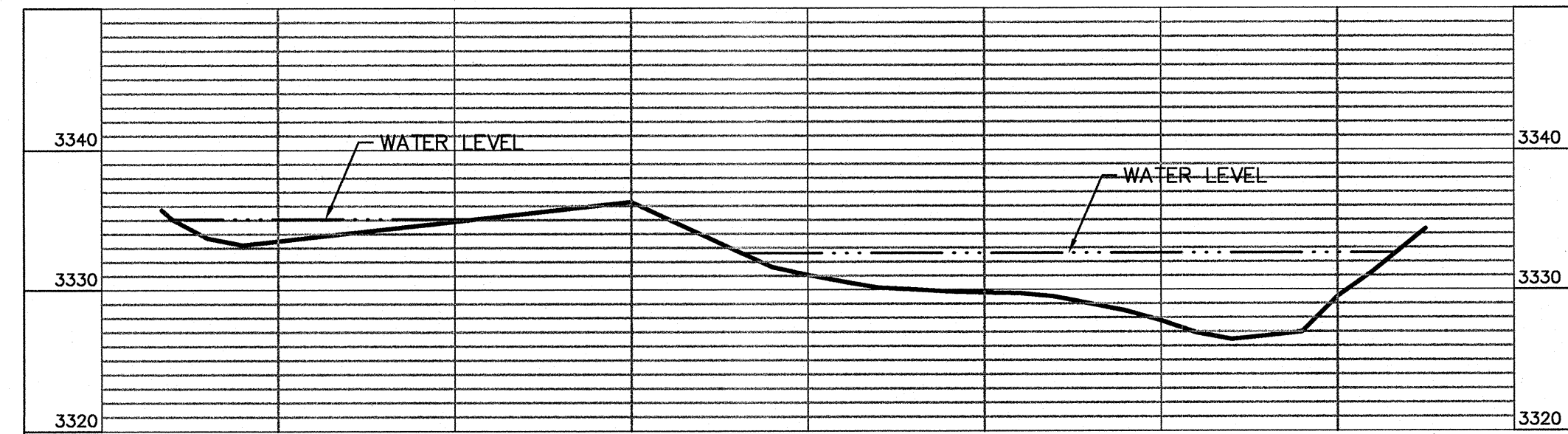
POINT #60 CP K 344 (1992) 3-1/2" CGS BRASS DISK IN CONC MON STAMPED "K 344 1959" (ES0586)
 LATITUDE = 34°34'13.02899"N NORTHING = 1,298,911.37 FT ESTIMATED ACCURACY
 LONGITUDE = 111°53'35.25648"W EASTING = 707,086.18 FT HORIZ = FIXED
 ELLIPSOID HEIGHT = 3,204.232 FT ELEVATION = 3,289.47 FT VERT = FIXED

POINT #64 CP PANORAMA (1992) 3-1/4" SWI ALUM DISK IN CONCRETE NO STAMPING (DH5792)
 LATITUDE = 34°45'39.99532"N NORTHING = 1,368,390.84 FT ESTIMATED ACCURACY
 LONGITUDE = 112°04'13.19670"W EASTING = 653,848.06 FT HORIZ = FIXED
 ELLIPSOID HEIGHT = 3,852.986 FT ELEVATION = 3,936.58 FT VERT = FIXED

CERTIFICATE OF LAND SURVEYOR

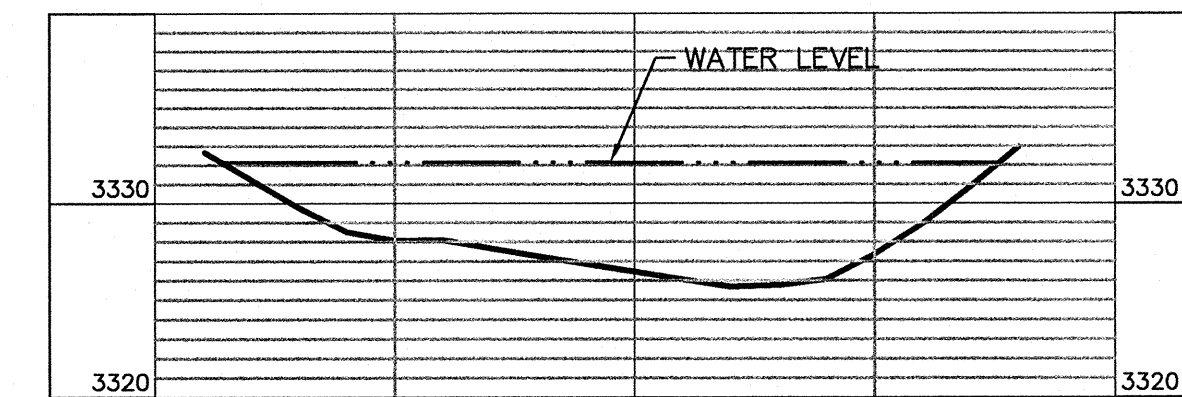
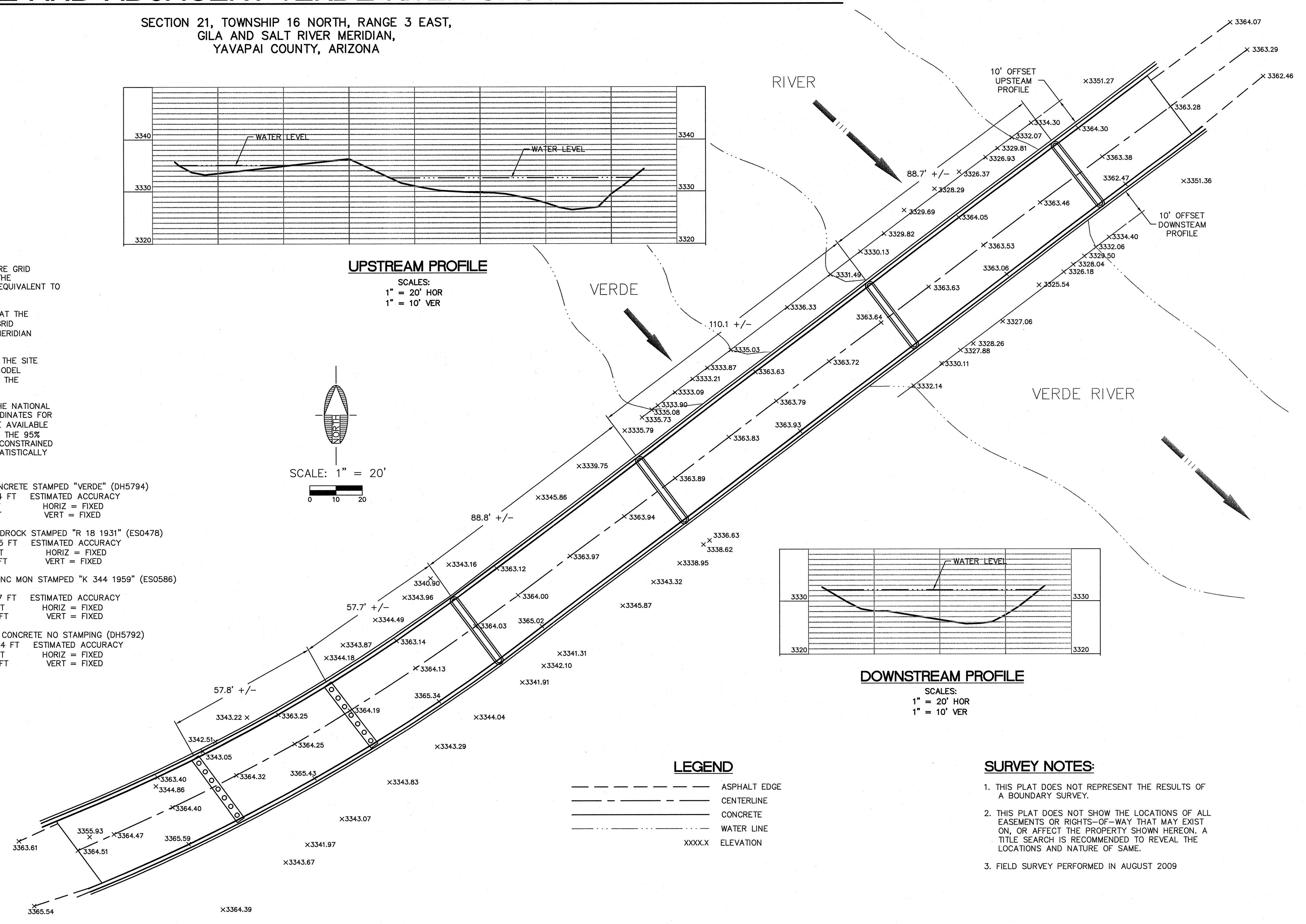
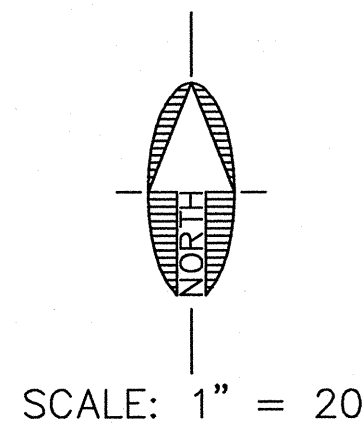
I HEREBY CERTIFY THAT THE SURVEY SHOWN HEREON WAS DONE UNDER MY DIRECT SUPERVISION AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

 Patrick W. Naville, RLS 13015



UPSTREAM PROFILE

SCALES:
 1" = 20' HOR
 1" = 10' VER



DOWNSTREAM PROFILE

SCALES:
 1" = 20' HOR
 1" = 10' VER

LEGEND

- ASPHALT EDGE
- CENTERLINE
- CONCRETE
- WATER LINE
- XXXX.X ELEVATION

SURVEY NOTES:

1. THIS PLAT DOES NOT REPRESENT THE RESULTS OF A BOUNDARY SURVEY.
2. THIS PLAT DOES NOT SHOW THE LOCATIONS OF ALL EASEMENTS OR RIGHTS-OF-WAY THAT MAY EXIST ON, OR AFFECT THE PROPERTY SHOWN HEREON. A TITLE SEARCH IS RECOMMENDED TO REVEAL THE LOCATIONS AND NATURE OF SAME.
3. FIELD SURVEY PERFORMED IN AUGUST 2009

REVISIONS			
NO.	DESCRIPTION	DATE	BY

SWI
 Shephard Wesnitzer, Inc.

75 Kallof Place
 Sedona, AZ 86336
 928.282.1061
 928.282.2058 fax
 www.swiaz.com

JOB NO:	09114
DATE:	DEC. 2009
SCALE:	1" = 20'
DRAWN:	JMK
DESIGN:	N/A
CHECKED:	PWN

HDR-YC FLOOD CONTROL
 YAVAPAI COUNTY ARIZONA

EXHIBIT

DRAWING NO.		1
SHT NO.	OF	1 1

CALL TWO WORKING DAYS BEFORE YOU DIG
 1-800-STAKE-IT