

ELEVATION CERTIFICATE

Important: Follow the instructions on pages 1-9.

Copy all pages of this Elevation Certificate and all attachments for (1) community official, (2) insurance agent/company, and (3) building owner.

SECTION A – PROPERTY INFORMATION					FOR INSURANCE COMPANY USE	
A1. Building Owner's Name LLBG Investments LLC					Policy Number:	
A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 20 Zane Grey Lane					Company NAIC Number:	
City Sedona			State Arizona		ZIP Code 86336	
A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.) Lot 55 Cathedral Vista APN 408-16-055						
A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.)					Residential	
A5. Latitude/Longitude: Lat. 34° 49' 57.2" Long. 111° 48' 30"					Horizontal Datum: <input type="checkbox"/> NAD 1927 <input checked="" type="checkbox"/> NAD 1983	
A6. Attach at least 2 photographs of the building if the Certificate is being used to obtain flood insurance.						
A7. Building Diagram Number 1A						
A8. For a building with a crawlspace or enclosure(s):						
a) Square footage of crawlspace or enclosure(s)					N/A sq ft	
b) Number of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade N/A						
c) Total net area of flood openings in A8.b N/A sq in						
d) Engineered flood openings? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No						
A9. For a building with an attached garage:						
a) Square footage of attached garage					N/A sq ft	
b) Number of permanent flood openings in the attached garage within 1.0 foot above adjacent grade N/A						
c) Total net area of flood openings in A9.b N/A sq in						
d) Engineered flood openings? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No						
SECTION B – FLOOD INSURANCE RATE MAP (FIRM) INFORMATION						
B1. NFIP Community Name & Community Number Yavapai County- #040093				B2. County Name Yavapai		B3. State Arizona
B4. Map/Panel Number 04025C1435	B5. Suffix G	B6. FIRM Index Date 08-24-2021	B7. FIRM Panel Effective/ Revised Date 09-03-2010	B8. Flood Zone(s) AE	B9. Base Flood Elevation(s) (Zone AO, use Base Flood Depth) 3996.55	
B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in Item B9: <input type="checkbox"/> FIS Profile <input type="checkbox"/> FIRM <input type="checkbox"/> Community Determined <input checked="" type="checkbox"/> Other/Source: Luke Sefton Letter, 05/18/2023 LOMR 08/11/2011						
B11. Indicate elevation datum used for BFE in Item B9: <input type="checkbox"/> NGVD 1929 <input checked="" type="checkbox"/> NAVD 1988 <input type="checkbox"/> Other/Source:						
B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Designation Date: <input type="checkbox"/> CBRS <input type="checkbox"/> OPA						

BUILDING PHOTOGRAPHS

See Instructions for Item A6.

OMB No. 1660-0008

Expiration Date: November 30, 2022

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City State ZIP Code	Company NAIC Number

If using the Elevation Certificate to obtain NFIP flood insurance, affix at least 2 building photographs below according to the instructions for Item A6. Identify all photographs with date taken; "Front View" and "Rear View"; and, if required, "Right Side View" and "Left Side View." When applicable, photographs must show the foundation with representative examples of the flood openings or vents, as indicated in Section A8. If submitting more photographs than will fit on this page, use the Continuation Page.

Photo One

Photo One Caption

Photo Two

Photo Two Caption

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BUILDING PHOTOGRAPHS

Continuation Page

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Photo Three

Photo Three Caption

Photo Four

Photo Four Caption



Luke Sefton PE, CFM
Timothy Huskett, P.E., CFM
Dugan McDonald, R.L.S.
Clint Gillespie, R.L.S.
Sam Musser, Planner

May 18, 2023

Yavapai County Flood Control District
10 South 6th Street
Cottonwood, Arizona 86326

RE: 20 Zane Grey Lane – APN 408-16-055
Base Flood Determination

The purpose of this letter is to provide our finding regarding the effective 100-year Base Flood Elevation for the residential structure located at 20 Zane Grey Lane within the unincorporated portion of Yavapai County, Arizona. The information and opinion provided herein is based on engineering procedures and methodologies, in addition to sound engineering judgement and expertise. The residential structure falls within the 100-year floodplain of Carroll Canyon Wash located immediately south of Chavez Ranch Road as shown in the preliminary FEMA Flood Insurance Rate Map No. 04025C1435H, which is being reviewed by FEMA but has not been become “effective” at the time this evaluation was developed. The “effective” Flood Insurance Rate Map dated September 3, 2010, was amended thru a Letter of Map Revision (LOMR) which became effective August 11, 2011, which revised Carroll Canyon Wash from a Zone ‘A’, with no determined Base Flood Elevations, Special Flood Hazard Area to a Zone ‘AE’ with determined Base Flood Elevations. The HEC-RAS hydraulic model used for the LOMR was used to determine the effective 100-year Base Flood Elevation for this residential structure.

The residential structure falls between Cross Section 0.5492 and Cross Section 0.5606 within the HEC-RAS hydraulic model. Cross Section 0.5492 has a 100-year Base Flood Elevation of 3995.94 feet and Cross Section 0.5606 has a 100-year Base Flood Elevation of 3997.17 feet. The residential structure is 30 feet upstream of Cross Section 0.5492 at the furthest point therefore the calculated **100-year Base Flood Elevation is 3996.55 feet** immediately upstream of the residential structure. The Regulatory Flood Elevation is 3997.55 feet which is the minimum required Finished Floor Elevation.

The above recommendation is contingent upon current estimates of the water surface elevations of Carroll Canyon Wash adjacent to the property. The Base Flood Elevations used in the design statistically has a 1% chance of occurring or being exceeded in any given year. Floods with magnitudes greater than what is estimated can and may occur therefore it is imperative that the property owner maintain flood insurance.

40 Stutz Bearcat Dr., Sedona, Arizona 86336 ~Phone: (928) 202-3999
Email: info@sefengco.com ~ www.SeftonEngineeringCompany.com

In affiliation with:

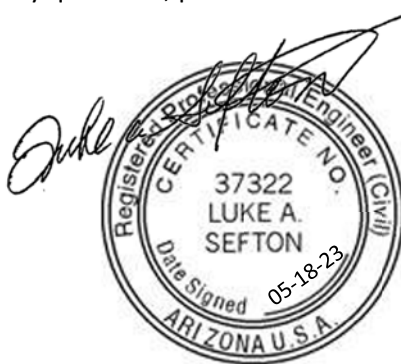
Heritage Land Surveying & Mapping, Inc. with office in Sedona, Camp Verde & Colorado



**Luke Sefton PE, CFM
Timothy Huskett, P.E., CFM
Dugan McDonald, R.L.S.
Clint Gillespie, R.L.S.
Sam Musser, Planner**

If you have any questions, please contact me at (928) 202-3999 or email me at ls@sefengco.com.

Sincerely,



Luke A. Sefton, P.E., CFM
Principle Engineer









Attachment: Floodplain Map
HEC-RAS Results

**YAVAPAI COUNTY
FLOOD CONTROL DISTRICT**
CARROLL CANYON WASH STUDY
UNINCORPORATED PORTION OF YAVAPAI COUNTY



YAVAPAI COUNTY FLOOD CONTROL DISTRICT
500 SOUTH MARINA STREET
PRESCOTT, ARIZONA 86303
(928) 771-3214

LEGEND:

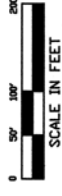
-  ZONE AE BASE FLOOD ELEVATION DETERMINED.
-  FLOODWAY IN ZONE AE
-  ZONE X AREAS
-  ZONE A AREAS
-  FLOODPLAIN BOUNDARY
-  FLOODWAY BOUNDARY
-  RIVER STATION MEASURED IN MILES FROM CONFLUENCE
-  REFERENCE MARKER

GENERAL NOTES:

THE 2-FOOT TOPOGRAPHY AND ADDITIONAL GIS DATA SUPPLIED BY YAVAPAI COUNTY IS BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 AND THE GEODETIC DATUM NORTH AMERICAN DATUM 1983 (NAD83) ARIZONA CENTRAL ZONE STATE PLAN COORDINATE SYSTEM.

BENCHMARK

NGS HEIGHT MODERNIZATION SURVEY STATION IDENTIFIED AS "VORTEX", PID A15657, WITHIN YAVAPAI COUNTY, ARIZONA ADJACENT TO THE RED ROCK HIGH SCHOOL IN WEST SEDONA. ELEVATION= 4465.1' (NAVD 88)



EXPIRES 3/31/2011

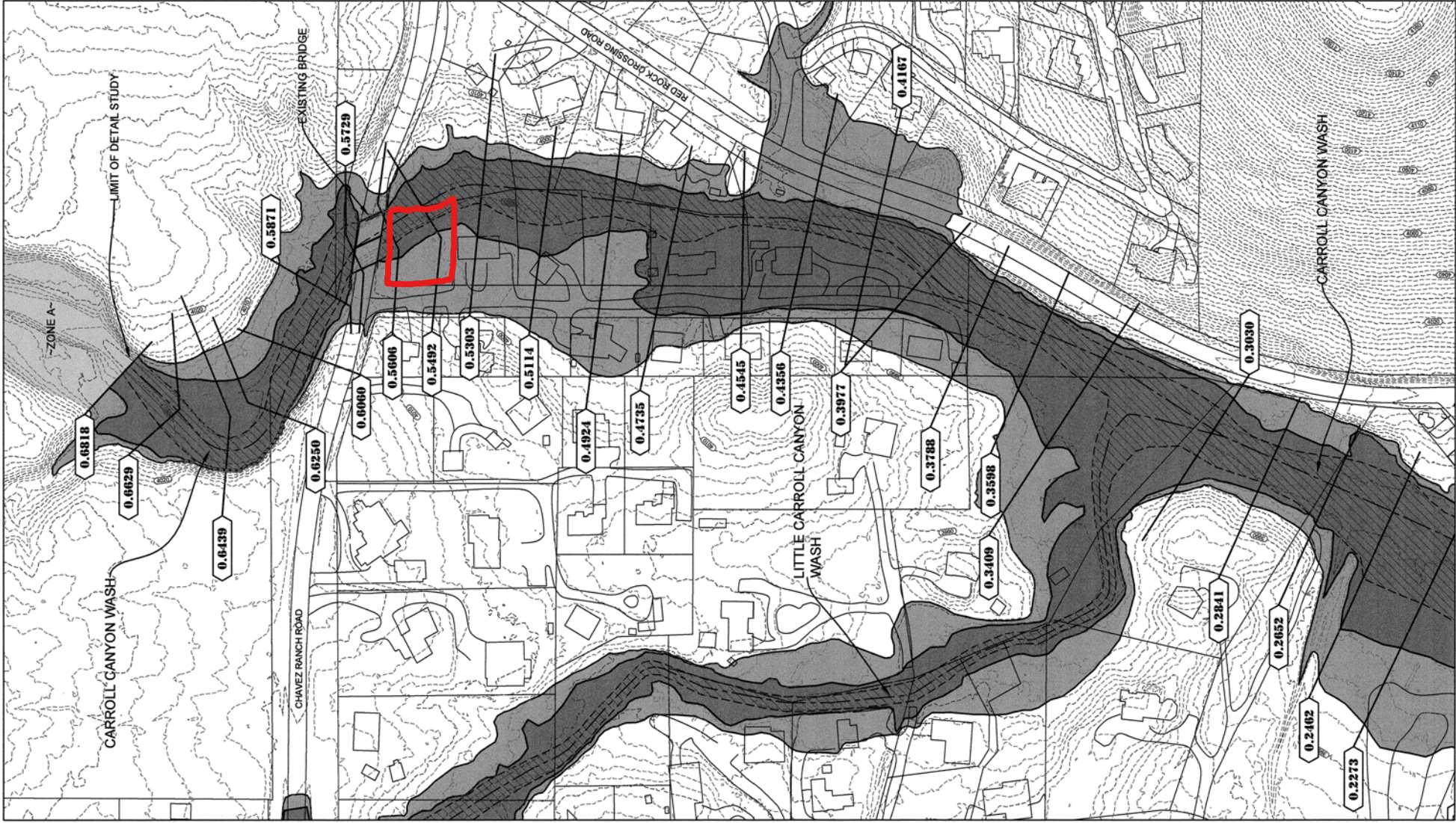
**EXHIBIT 5-1
FLOODPLAIN MAP**

SOUTHWEST ENVIRONMENTAL
CONSULTANTS, INC.



20 STUTZ BEARGAT DRIVE SUITE 6
SEDONA, ARIZONA 86336
PHONE: 928-262-7787
WWW.SEC-CONSULTING.COM

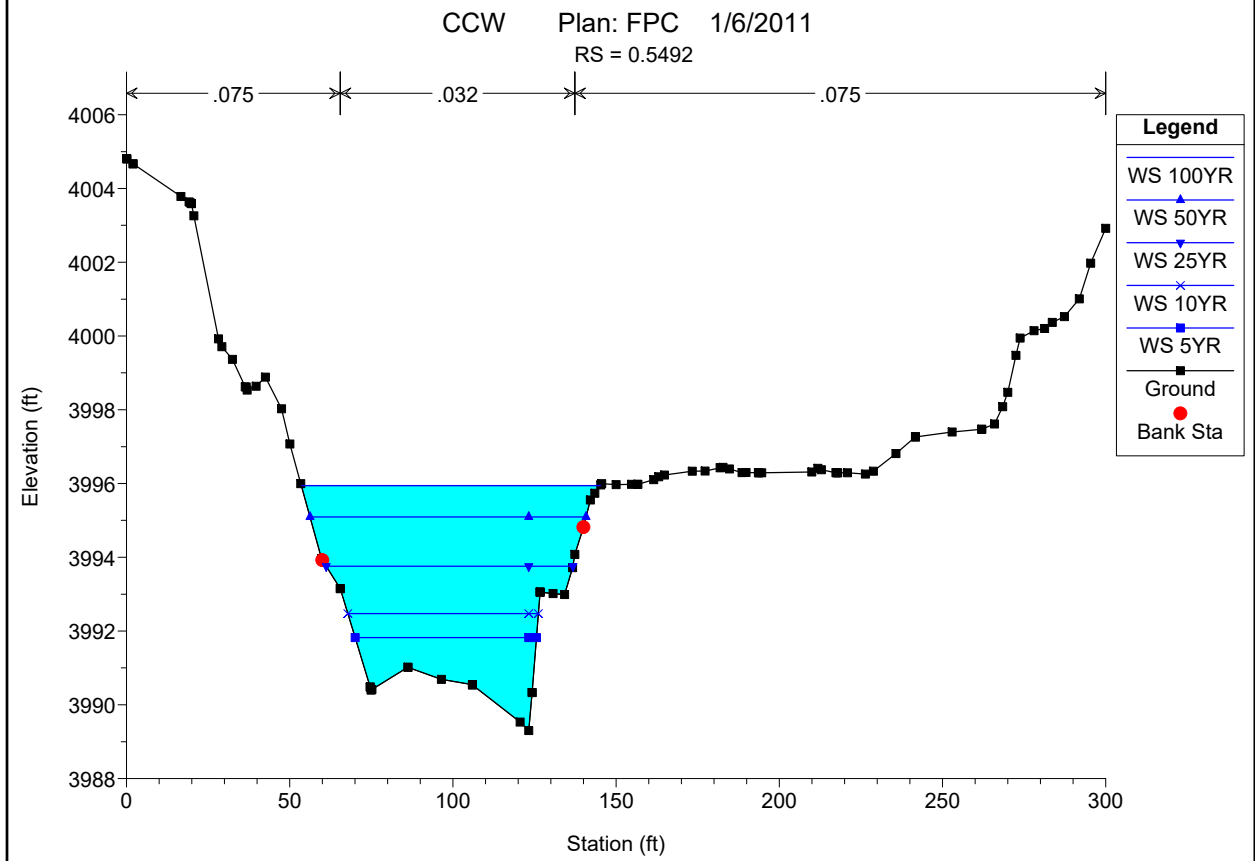
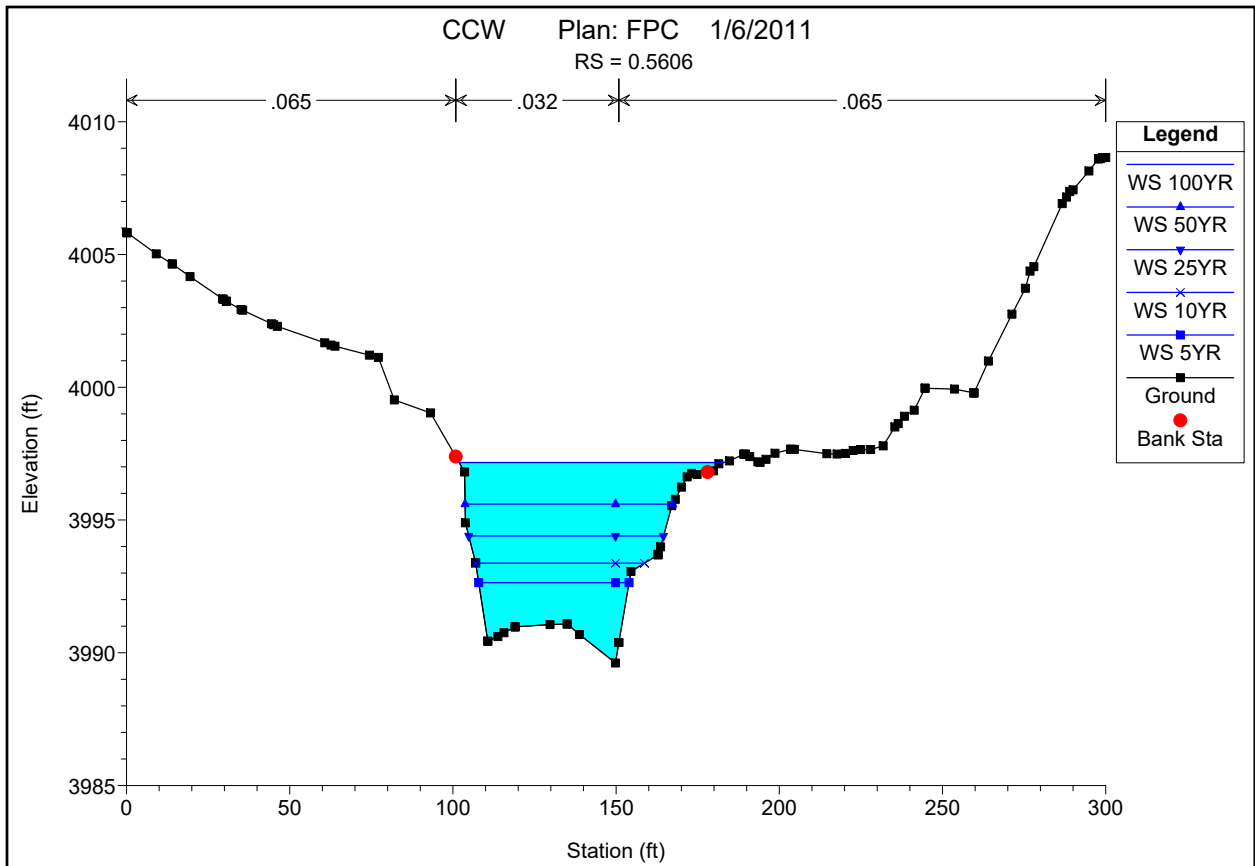
SHEET 2 OF 3
DATE: JANUARY 6, 2011
JOB NUMBER: 10-0310E
DRAWN BY: T.C.H.
CHECKED BY: L.A.S.



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HEC-RAS Plan: FPC River: Carrol Canyon Wa Reach: Lower (Continued)

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Lower	0.5729	25YR	1635.00	3992.00	3995.81	3994.48	3996.30	0.002852	5.64	290.06	77.19	0.51
Lower	0.5729	10YR	859.00	3992.00	3994.39	3993.63	3994.74	0.003668	4.76	180.31	77.19	0.55
Lower	0.5729	5YR	474.00	3992.00	3993.39	3993.11	3993.72	0.007014	4.61	102.88	77.18	0.70
Lower	0.5663		Bridge									
Lower	0.5606	100YR	4469.00	3989.61	3997.17	3997.17	3999.55	0.019310	12.40	361.29	81.03	1.00
Lower	0.5606	50YR	2877.00	3989.61	3995.60	3995.60	3997.61	0.017652	11.38	252.77	63.59	1.01
Lower	0.5606	25YR	1635.00	3989.61	3994.40	3994.24	3995.70	0.015594	9.15	178.73	59.68	0.93
Lower	0.5606	10YR	859.00	3989.61	3993.37		3994.17	0.011593	7.14	120.27	51.69	0.83
Lower	0.5606	5YR	474.00	3989.61	3992.64		3993.12	0.008015	5.56	85.31	46.06	0.72
Lower	0.5492	100YR	4469.00	3989.30	3995.95	3995.95	3998.20	0.012512	12.08	377.38	91.62	0.99
Lower	0.5492	50YR	2877.00	3989.30	3995.09	3994.74	3996.51	0.010298	9.56	302.88	84.59	0.87
Lower	0.5492	25YR	1635.00	3989.30	3993.76	3993.59	3994.84	0.011358	8.36	195.58	75.58	0.92
Lower	0.5492	10YR	859.00	3989.30	3992.47	3992.47	3993.42	0.012662	7.81	109.95	58.39	1.00
Lower	0.5492	5YR	474.00	3989.30	3991.82	3991.82	3992.48	0.014143	6.51	72.83	55.55	1.00
Lower	0.5303	100YR	4469.00	3987.39	3994.68	3994.68	3996.70	0.016246	11.47	409.46	117.12	0.96
Lower	0.5303	50YR	2877.00	3987.39	3993.50	3993.50	3995.11	0.019428	10.20	284.06	94.34	1.00
Lower	0.5303	25YR	1635.00	3987.39	3992.26	3992.26	3993.53	0.014844	9.06	180.41	72.15	1.01
Lower	0.5303	10YR	859.00	3987.39	3990.98	3990.98	3992.01	0.012584	8.14	105.56	51.69	1.00
Lower	0.5303	5YR	474.00	3987.39	3990.08	3990.08	3990.90	0.013845	7.27	65.19	40.67	1.01
Lower	0.5114	100YR	4469.00	3985.39	3993.35		3994.83	0.004327	10.20	561.65	137.39	0.71
Lower	0.5114	50YR	2877.00	3985.39	3991.57		3992.99	0.005893	9.70	337.87	114.10	0.80
Lower	0.5114	25YR	1635.00	3985.39	3990.04	3989.72	3991.17	0.007323	8.51	194.57	77.31	0.86
Lower	0.5114	10YR	859.00	3985.39	3988.26	3988.26	3989.44	0.011865	8.71	98.67	42.55	1.01
Lower	0.5114	5YR	474.00	3985.39	3987.42	3987.42	3988.26	0.013142	7.35	64.46	38.94	1.01
Lower	0.4924	100YR	4469.00	3982.56	3991.21	3991.21	3993.89	0.021434	13.22	353.21	80.10	1.00
Lower	0.4924	50YR	2877.00	3982.56	3990.89		3992.16	0.010914	9.06	328.42	76.16	0.70
Lower	0.4924	25YR	1635.00	3982.56	3989.23		3990.14	0.013163	7.68	213.24	62.93	0.72
Lower	0.4924	10YR	859.00	3982.56	3987.09		3988.10	0.011054	8.06	106.54	38.63	0.86
Lower	0.4924	5YR	474.00	3982.56	3986.05		3986.75	0.009510	6.72	70.54	29.90	0.77
Lower	0.4735	100YR	4469.00	3980.76	3990.89	3990.89	3992.53	0.005861	11.08	576.71	191.29	0.73
Lower	0.4735	50YR	2877.00	3980.76	3988.69	3988.69	3990.94	0.011344	12.06	246.40	79.52	0.96



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A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.) <u>Residential</u>					
A5. Latitude/Longitude: Lat. <u>34° 49' 57.2"</u> Long. <u>111° 48' 30"</u> Horizontal Datum: <input type="checkbox"/> NAD 1927 <input checked="" type="checkbox"/> NAD 1983					
A6. Attach at least 2 photographs of the building if the Certificate is being used to obtain flood insurance.					
A7. Building Diagram Number <u>1A</u>					
A8. For a building with a crawlspace or enclosure(s):					
a) Square footage of crawlspace or enclosure(s) <u>N/A</u> sq ft					
b) Number of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade <u>N/A</u>					
c) Total net area of flood openings in A8.b <u>N/A</u> sq in					
d) Engineered flood openings? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
A9. For a building with an attached garage:					
a) Square footage of attached garage <u>N/A</u> sq ft					
b) Number of permanent flood openings in the attached garage within 1.0 foot above adjacent grade <u>N/A</u>					
c) Total net area of flood openings in A9.b <u>N/A</u> sq in					
d) Engineered flood openings? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
SECTION B – FLOOD INSURANCE RATE MAP (FIRM) INFORMATION					
B1. NFIP Community Name & Community Number Yavapai County- #040093			B2. County Name Yavapai		B3. State Arizona
B4. Map/Panel Number 04025C1435	B5. Suffix G	B6. FIRM Index Date 08-24-2021	B7. FIRM Panel Effective/ Revised Date 09-03-2010	B8. Flood Zone(s) AE	B9. Base Flood Elevation(s) (Zone AO, use Base Flood Depth) 3996.55
B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in Item B9: <input type="checkbox"/> FIS Profile <input type="checkbox"/> FIRM <input type="checkbox"/> Community Determined <input checked="" type="checkbox"/> Other/Source: <u>Luke Sefton Letter dated 05/18-023</u>					
B11. Indicate elevation datum used for BFE in Item B9: <input type="checkbox"/> NGVD 1929 <input checked="" type="checkbox"/> NAVD 1988 <input type="checkbox"/> Other/Source: _____					
B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Designation Date: _____ <input type="checkbox"/> CBRS <input type="checkbox"/> OPA					

ELEVATION CERTIFICATE

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City Sedona	State Arizona	ZIP Code 86336	Company NAIC Number

SECTION C – BUILDING ELEVATION INFORMATION (SURVEY REQUIRED)

C1. Building elevations are based on: Construction Drawings* Building Under Construction* Finished Construction

*A new Elevation Certificate will be required when construction of the building is complete.

C2. Elevations – Zones A1–A30, AE, AH, A (with BFE), VE, V1–V30, V (with BFE), AR, AR/A, AR/AE, AR/A1–A30, AR/AH, AR/AO. Complete Items C2.a–h below according to the building diagram specified in Item A7. In Puerto Rico only, enter meters.

Benchmark Utilized: ERM 36A Vertical Datum: 3965.54 (NAVD88)

Indicate elevation datum used for the elevations in items a) through h) below.

NGVD 1929 NAVD 1988 Other/Source: _____

Datum used for building elevations must be the same as that used for the BFE.

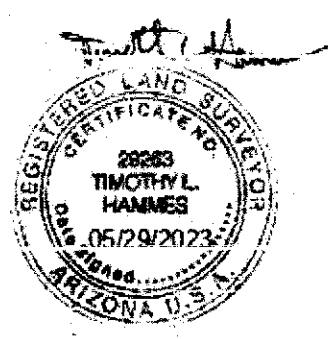
Check the measurement used.

- | | | | |
|---|--------|--|---------------------------------|
| a) Top of bottom floor (including basement, crawlspace, or enclosure floor) | 3997.7 | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| b) Top of the next higher floor | 4010.4 | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| c) Bottom of the lowest horizontal structural member (V Zones only) | N/A | <input type="checkbox"/> feet | <input type="checkbox"/> meters |
| d) Attached garage (top of slab) | N/A | <input type="checkbox"/> feet | <input type="checkbox"/> meters |
| e) Lowest elevation of machinery or equipment servicing the building
(Describe type of equipment and location in Comments) | 3999.3 | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| f) Lowest adjacent (finished) grade next to building (LAG) | 3995.2 | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| g) Highest adjacent (finished) grade next to building (HAG) | 3996.9 | <input checked="" type="checkbox"/> feet | <input type="checkbox"/> meters |
| h) Lowest adjacent grade at lowest elevation of deck or stairs, including structural support | N/A | <input type="checkbox"/> feet | <input type="checkbox"/> meters |

SECTION D – SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION

This certification is to be signed and sealed by a land surveyor, engineer, or architect authorized by law to certify elevation information. I certify that the information on this Certificate represents my best efforts to interpret the data available. I understand that any false statement may be punishable by fine or imprisonment under 18 U.S. Code, Section 1001.

Were latitude and longitude in Section A provided by a licensed land surveyor? Yes No Check here if attachments.

Certifier's Name Timothy L. Hammes	License Number L.S. 29263	
Title PRESIDENT		
Company Name HAMMES SURVEYING LLC		
Address 2100 VIA SILVERADO		
City CAMP VERDE	State Arizona	ZIP Code 86322
Signature TIM HAMMES	Date 05-29-2023	Telephone Ext. (928) 567-2833

Copy all pages of this Elevation Certificate and all attachments for (1) community official, (2) insurance agent/company, and (3) building owner.

Comments (including type of equipment and location, per C2(e), if applicable)

THIS CERTIFICATE IS FOR PERMIT # RES21-001675. FLOOD INFORMAIION: Plan Set. BASE AND REGULATOY FLOOD DETERMINED BY LUKE SEFTON. LETTER DATED 5/18/2023 AS NOTED IN ATTACHMENT.

LOWEST ELEVATION OF MACHINERY OR EQUIPMENT SERVICING BUILDING IS FOR A ELEVATED A/C.

BUILDING PHOTOGRAPHS

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Photo One Caption

Photo Two

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Photo Three Caption

Photo Four

Photo Four Caption



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Timothy Huskett, P.E., CFM
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May 18, 2023

Yavapai County Flood Control District
10 South 6th Street
Cottonwood, Arizona 86326

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The purpose of this letter is to provide our finding regarding the effective 100-year Base Flood Elevation for the residential structure located at 20 Zane Grey Lane within the unincorporated portion of Yavapai County, Arizona. The information and opinion provided herein is based on engineering procedures and methodologies, in addition to sound engineering judgement and expertise. The residential structure falls within the 100-year floodplain of Carroll Canyon Wash located immediately south of Chavez Ranch Road as shown in the preliminary FEMA Flood Insurance Rate Map No. 04025C1435H, which is being reviewed by FEMA but has not been become “effective” at the time this evaluation was developed. The “effective” Flood Insurance Rate Map dated September 3, 2010, was amended thru a Letter of Map Revision (LOMR) which became effective August 11, 2011, which revised Carroll Canyon Wash from a Zone ‘A’, with no determined Base Flood Elevations, Special Flood Hazard Area to a Zone ‘AE’ with determined Base Flood Elevations. The HEC-RAS hydraulic model used for the LOMR was used to determine the effective 100-year Base Flood Elevation for this residential structure.

The residential structure falls between Cross Section 0.5492 and Cross Section 0.5606 within the HEC-RAS hydraulic model. Cross Section 0.5492 has a 100-year Base Flood Elevation of 3995.94 feet and Cross Section 0.5606 has a 100-year Base Flood Elevation of 3997.17 feet. The residential structure is 30 feet upstream of Cross Section 0.5492 at the furthest point therefore the calculated **100-year Base Flood Elevation is 3996.55 feet** immediately upstream of the residential structure. The Regulatory Flood Elevation is 3997.55 feet which is the minimum required Finished Floor Elevation.

The above recommendation is contingent upon current estimates of the water surface elevations of Carroll Canyon Wash adjacent to the property. The Base Flood Elevations used in the design statistically has a 1% chance of occurring or being exceeded in any given year. Floods with magnitudes greater than what is estimated can and may occur therefore it is imperative that the property owner maintain flood insurance.

40 Stutz Bearcat Dr., Sedona, Arizona 86336 ~Phone: (928) 202-3999
Email: info@sefengco.com ~ www.SeftonEngineeringCompany.com

In affiliation with:

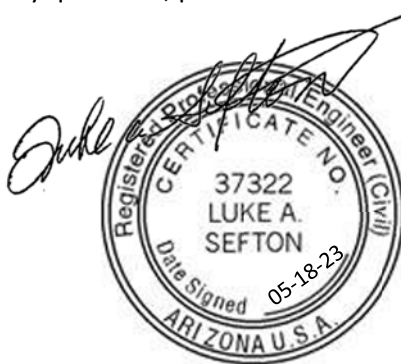
Heritage Land Surveying & Mapping, Inc. with office in Sedona, Camp Verde & Colorado



Luke Sefton PE, CFM
Timothy Huskett, P.E., CFM
Dugan McDonald, R.L.S.
Clint Gillespie, R.L.S.
Sam Musser, Planner

If you have any questions, please contact me at (928) 202-3999 or email me at ls@sefengco.com.

Sincerely,



Luke A. Sefton, P.E., CFM
Principle Engineer









Attachment: Floodplain Map
HEC-RAS Results

**YAVAPAI COUNTY
FLOOD CONTROL DISTRICT**
CARROLL CANYON WASH STUDY
UNINCORPORATED PORTION OF YAVAPAI COUNTY



YAVAPAI COUNTY FLOOD CONTROL DISTRICT
500 SOUTH MARINA STREET
PRESCOTT, ARIZONA 86303
(928) 771-3214

LEGEND:

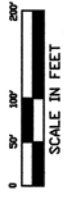
-  ZONE AE BASE FLOOD ELEVATION DETERMINED.
-  FLOODWAY IN ZONE AE
-  ZONE X AREAS
-  ZONE A AREAS
-  FLOODPLAIN BOUNDARY
-  FLOODWAY BOUNDARY
-  RIVER STATION MEASURED IN MILES FROM CONFLUENCE
-  REFERENCE MARKER

GENERAL NOTES:

THE 2-FOOT TOPOGRAPHY AND ADDITIONAL GIS DATA SUPPLIED BY YAVAPAI COUNTY IS BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 AND THE GEODETIC DATUM NORTH AMERICAN DATUM 1983 (NAD83) ARIZONA CENTRAL ZONE STATE PLANNING COORDINATE SYSTEM.

BENCHMARK

NGS HEIGHT MODERNIZATION SURVEY STATION IDENTIFIED AS "VORTEX", PID A15657, WITHIN YAVAPAI COUNTY, ARIZONA ADJACENT TO THE RED ROCK HIGH SCHOOL IN WEST SEDONA. ELEVATION= 4465.1' (NAVD 88)



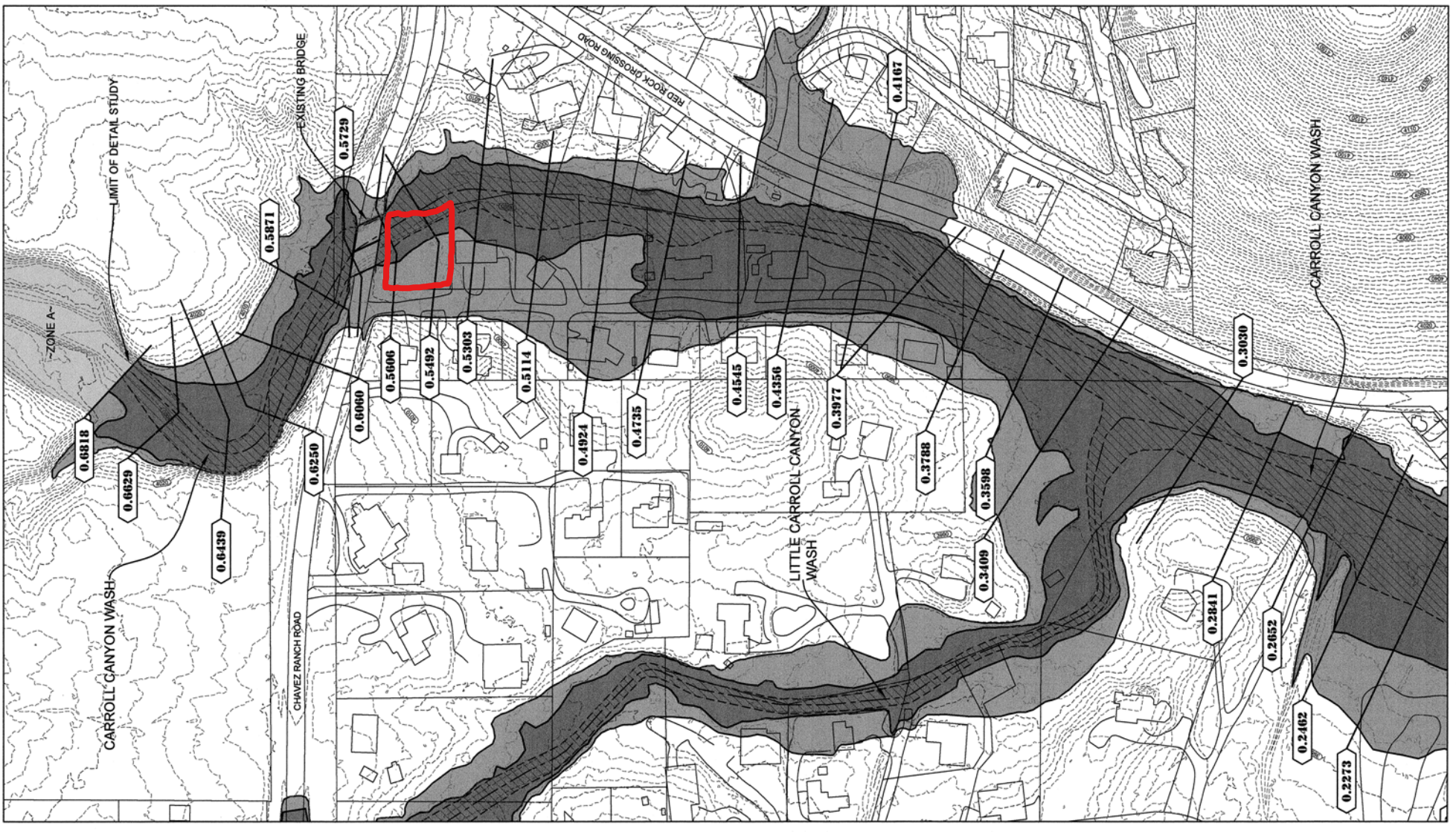
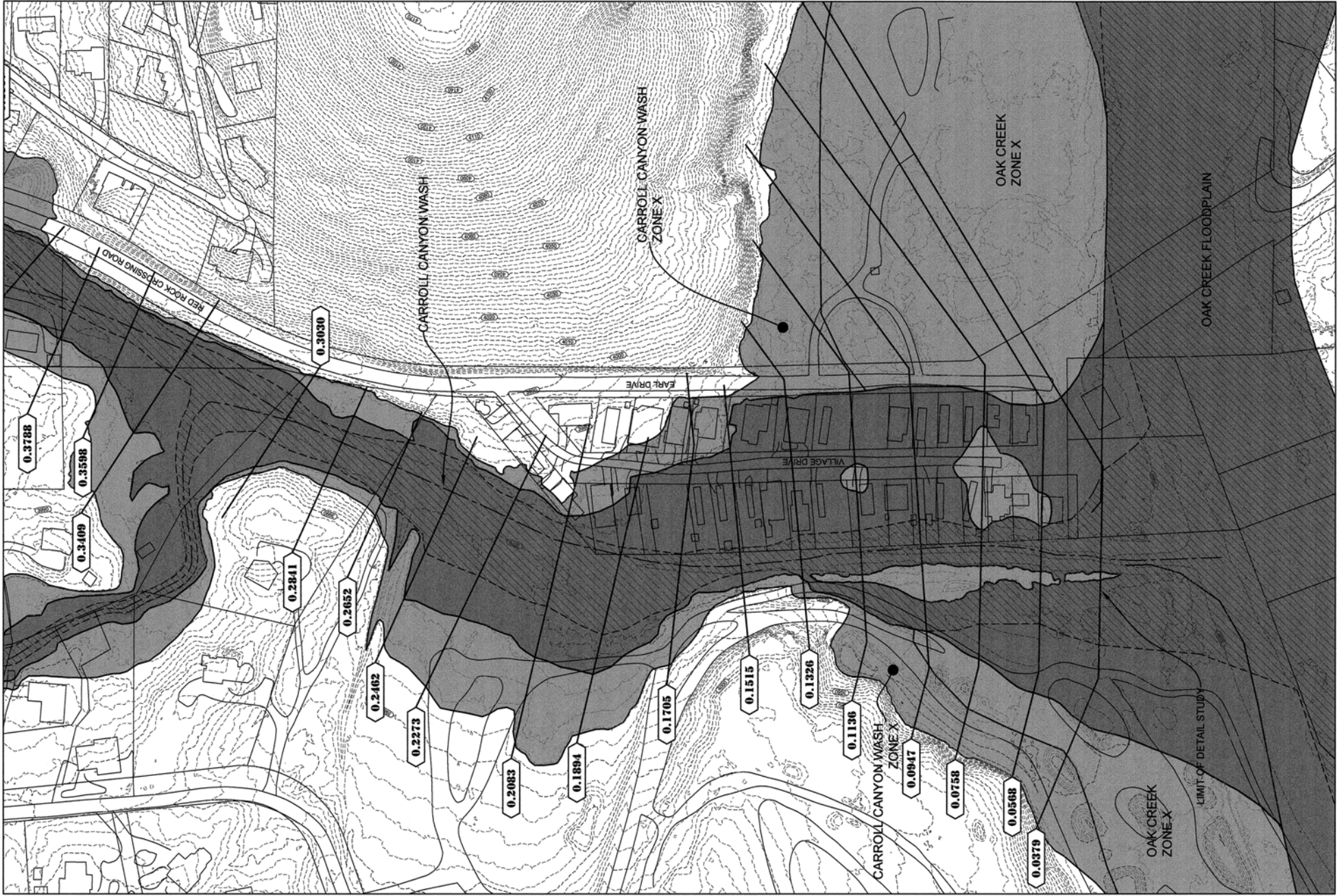
EXPIRES 3/31/2011

**EXHIBIT 5-1
FLOODPLAIN MAP**



SOUTHWEST ENVIRONMENTAL
CONSULTANTS, INC.
20 STUTZ BEARGAT DRIVE SUITE 6
SEDONA, ARIZONA 86336
PHONE: 928-282-7787
www.sec-az.com

SHEET 2 OF 3
DATE: JANUARY 6, 2011
JOB NUMBER: 10-0310E
DRAWN BY: T.C.H.
CHECKED BY: L.A.S.



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HEC-RAS Plan: FPC River: Carrol Canyon Wa Reach: Lower (Continued)

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Lower	0.5729	25YR	1635.00	3992.00	3995.81	3994.48	3996.30	0.002852	5.64	290.06	77.19	0.51
Lower	0.5729	10YR	859.00	3992.00	3994.39	3993.63	3994.74	0.003668	4.76	180.31	77.19	0.55
Lower	0.5729	5YR	474.00	3992.00	3993.39	3993.11	3993.72	0.007014	4.61	102.88	77.18	0.70
Lower	0.5663		Bridge									
Lower	0.5606	100YR	4469.00	3989.61	3997.17	3997.17	3999.55	0.019310	12.40	361.29	81.03	1.00
Lower	0.5606	50YR	2877.00	3989.61	3995.60	3995.60	3997.61	0.017652	11.38	252.77	63.59	1.01
Lower	0.5606	25YR	1635.00	3989.61	3994.40	3994.24	3995.70	0.015594	9.15	178.73	59.68	0.93
Lower	0.5606	10YR	859.00	3989.61	3993.37		3994.17	0.011593	7.14	120.27	51.69	0.83
Lower	0.5606	5YR	474.00	3989.61	3992.64		3993.12	0.008015	5.56	85.31	46.06	0.72
Lower	0.5492	100YR	4469.00	3989.30	3995.95	3995.95	3998.20	0.012512	12.08	377.38	91.62	0.99
Lower	0.5492	50YR	2877.00	3989.30	3995.09	3994.74	3996.51	0.010298	9.56	302.88	84.59	0.87
Lower	0.5492	25YR	1635.00	3989.30	3993.76	3993.59	3994.84	0.011358	8.36	195.58	75.58	0.92
Lower	0.5492	10YR	859.00	3989.30	3992.47	3992.47	3993.42	0.012662	7.81	109.95	58.39	1.00
Lower	0.5492	5YR	474.00	3989.30	3991.82	3991.82	3992.48	0.014143	6.51	72.83	55.55	1.00
Lower	0.5303	100YR	4469.00	3987.39	3994.68	3994.68	3996.70	0.016246	11.47	409.46	117.12	0.96
Lower	0.5303	50YR	2877.00	3987.39	3993.50	3993.50	3995.11	0.019428	10.20	284.06	94.34	1.00
Lower	0.5303	25YR	1635.00	3987.39	3992.26	3992.26	3993.53	0.014844	9.06	180.41	72.15	1.01
Lower	0.5303	10YR	859.00	3987.39	3990.98	3990.98	3992.01	0.012584	8.14	105.56	51.69	1.00
Lower	0.5303	5YR	474.00	3987.39	3990.08	3990.08	3990.90	0.013845	7.27	65.19	40.67	1.01
Lower	0.5114	100YR	4469.00	3985.39	3993.35		3994.83	0.004327	10.20	561.65	137.39	0.71
Lower	0.5114	50YR	2877.00	3985.39	3991.57		3992.99	0.005893	9.70	337.87	114.10	0.80
Lower	0.5114	25YR	1635.00	3985.39	3990.04	3989.72	3991.17	0.007323	8.51	194.57	77.31	0.86
Lower	0.5114	10YR	859.00	3985.39	3988.26	3988.26	3989.44	0.011865	8.71	98.67	42.55	1.01
Lower	0.5114	5YR	474.00	3985.39	3987.42	3987.42	3988.26	0.013142	7.35	64.46	38.94	1.01
Lower	0.4924	100YR	4469.00	3982.56	3991.21	3991.21	3993.89	0.021434	13.22	353.21	80.10	1.00
Lower	0.4924	50YR	2877.00	3982.56	3990.89		3992.16	0.010914	9.06	328.42	76.16	0.70
Lower	0.4924	25YR	1635.00	3982.56	3989.23		3990.14	0.013163	7.68	213.24	62.93	0.72
Lower	0.4924	10YR	859.00	3982.56	3987.09		3988.10	0.011054	8.06	106.54	38.63	0.86
Lower	0.4924	5YR	474.00	3982.56	3986.05		3986.75	0.009510	6.72	70.54	29.90	0.77
Lower	0.4735	100YR	4469.00	3980.76	3990.89	3990.89	3992.53	0.005861	11.08	576.71	191.29	0.73
Lower	0.4735	50YR	2877.00	3980.76	3988.69	3988.69	3990.94	0.011344	12.06	246.40	79.52	0.96

