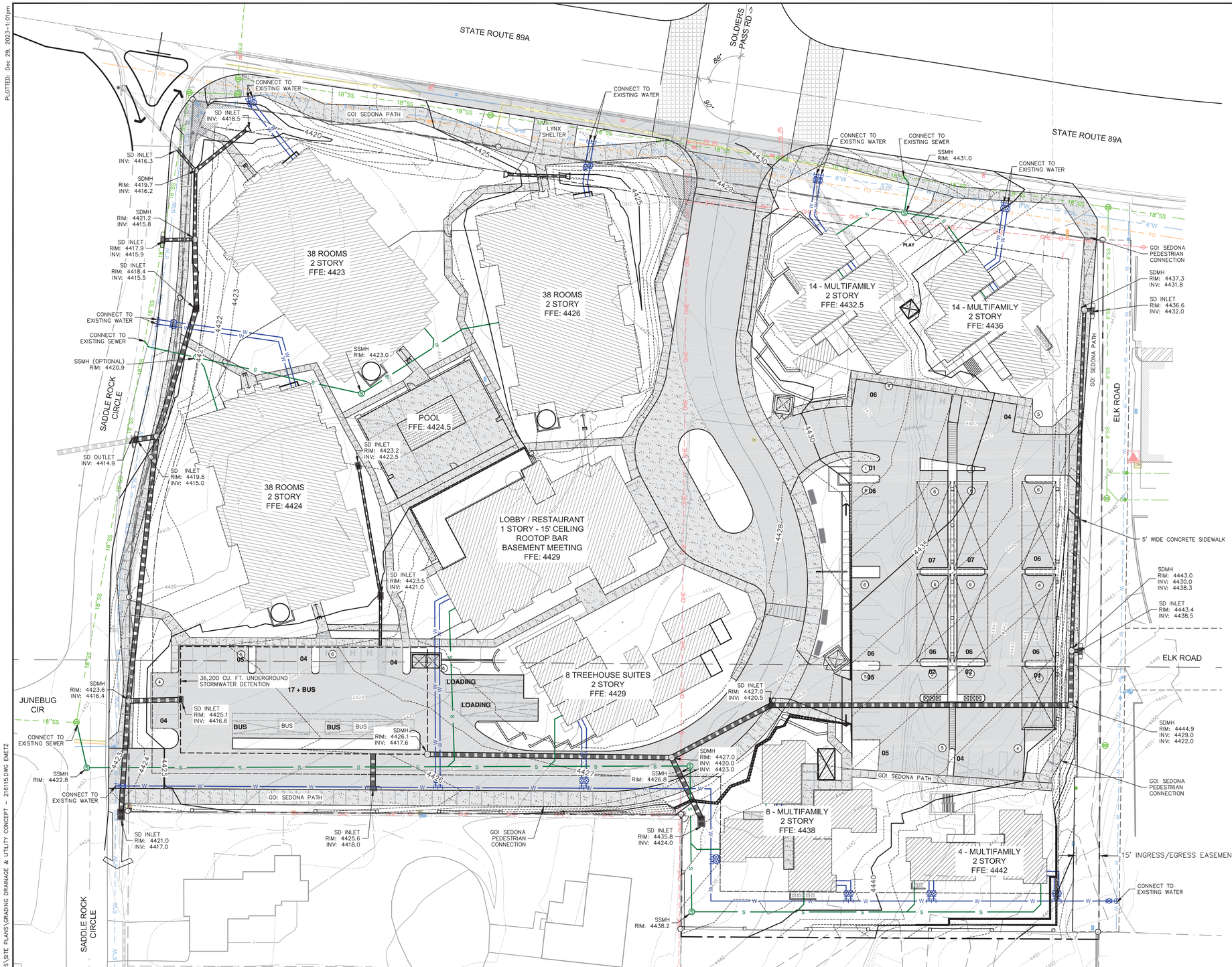
PLOTTED: Dec 29, 2023--1:01pm



PLAN

FILE: P:\2016\16034\DRAWINGS\SITE PLANS\GRADING DRAINAGE & UTILITY CONCEPT - 216115.DWG EMETZ

Contact Arizona 811 at least two full working days before you begin excavation

ARIZONA811 Call 811 or click Arizona811.com

REVISIONS			
NO.	DESCRIPTION	DATE	BY

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

JOB NO:	16034
DATE:	DEC 23
SCALE:	1"=30'
DRAWN:	MWJ/ADA
DESIGN:	JTL/AHB
CHECKED:	AHB

THE VILLAGE AT SADDLEROCK CROSSING — SEDONA ARIZONA

GRADING, DRAINAGE, & UTILITY CONCEPT

PRELIMINARY
NOT FOR CONSTRUCTION, BIDDING OR RECORDING

DRAWING NO. GC1

SHT NO. 1 OF 1

DAVIS

THE VILLAGE AT SADDLEROCK CROSSING

Sedona, AZ

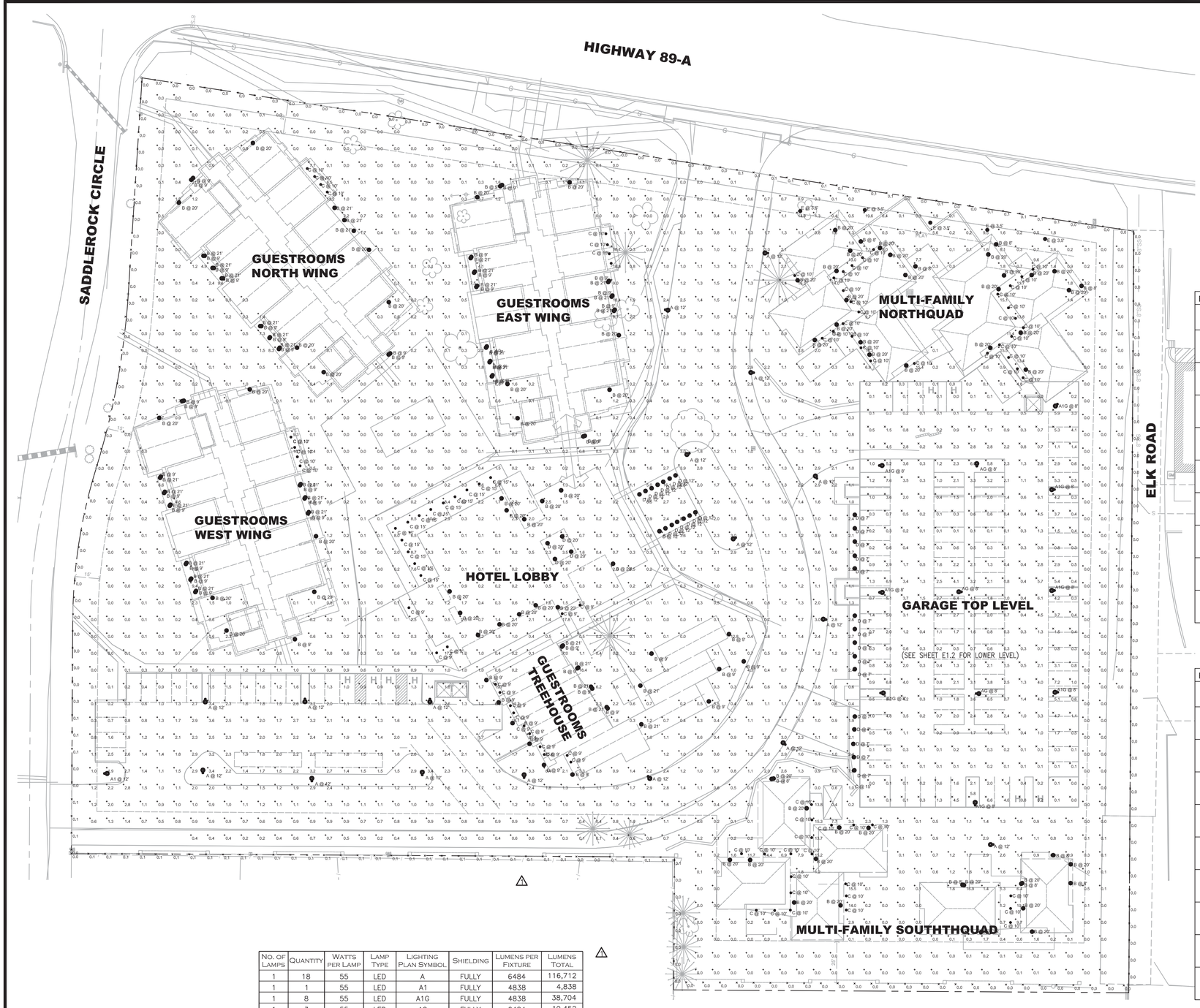
COMPREHENSIVE DESIGN SUBMITTAL

GRADING, DRAINAGE, UTILITY CONCEPT

A-59 [PAGE 59 OF 60]

23156 - 01/04/2024

Stephen Thompson Architect. Sedona/Del Mar
Studio@StephenThompsonArchitect.com
C: 928.301.5922



1 PHOTOMETRIC SITE PLAN
SCALE: 1"=30'-0"

PHOTOMETRIC NOTES

A. THE PHOTOMETRIC DATA ON THIS SHEET HAS BEEN REVIEWED BY THE ENGINEER FOR COMPLIANCE WITH APPLICABLE LIGHTING CODES. THE CALCULATIONS ARE PERFORMED BY LIGHTING SUPPLIER AND THE ENGINEER'S REVIEW IS NOT A GUARANTEE OF PERFORMANCE. SUBSTITUTIONS TO ANY FIXTURE WILL REQUIRE UPDATED PHOTOMETRICS WHICH WILL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE FIXTURE SCHEDULE SHOWN ON THIS SHEET IS FOR CALCULATION PURPOSES ONLY. DO NOT USE AS A BILL-OF-MATERIAL. REFER TO THE PROJECT FIXTURE SCHEDULE.

Fixture Schedule

Symbol	Label	QTY	Manufacturer	Catalog Number
○ ▫	A	18	VISIONAIRE	ODN-1-L-T5WR-32LC-5-27K-UNV-VA110-S1-3 1/2-(FINISH)-C1/H6 / RSA 9.5' POLE W/ 3-1/2" O.D. X 4" TALL TENON TOP AND 2.5 BASE
○ ▫	A1	1	VISIONAIRE	ODN-1-L-T1-32LC-5-27K-UNV-VA110-S1-3 1/2-(FINISH)-C1/H6-CLS / RSA 5.5' POLE W/ 3-1/2" O.D. X 4" TALL TENON TOP AND 2.5 BASE
○ ▫	A1G	8	VISIONAIRE	ODN-1-L-T1-32LC-5-27K-UNV-VA110-S1-3 1/2-(FINISH)-C1/H6-CLS / RSA 5.5' POLE W/ 3-1/2" O.D. X 4" TALL TENON TOP AND 2.5 BASE
○ ▫	AG	3	VISIONAIRE	ODN-1-L-T5WR-32LC-5-27K-UNV-VA110-S1-3 1/2-(FINISH)-C1/H6 / RSA 5.5' POLE W/ 3-1/2" O.D. X 4" TALL TENON TOP AND 2.5 BASE
○	B	160	ANP	WDU514-(FINISH)-M012LD-D-N-27K-E33UE14
○	C	91	GOTHAM	EVO4 27/10 AR MD LSS
○	D	33	ANP	WDU516-(FINISH)-M012LD-D-N-27K-E33UE18
○ ▫	E	5	ANP	BL7803 FR M016LD W 27K (FINISH)
○	H	50	WAC Lighting	6061-2700

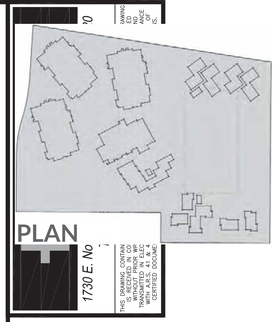
Fixture Schedule - Continued

Label	Description	Lamp	Filename	Lumens per Lamp	LLF	Wattage
A	20" DIA SMALL LED BELL HOUSING WITH T5 WIDE ROUND OPTIC, MOUNTED @12' AFG	2700K LED / 6484 LUMENS	ODN-1-L_T5WR_32LC_5_2700K.ies	6484	0.91	55
A1	20" DIA SMALL LED BELL HOUSING WITH TYPE 1 OPTIC & HOUSE SIDE SHIELD, MOUNTED @12' AFG	2700K LED / 4838 LUMENS	ODN-1-L_T1_32LC_5_2700K_UNV_CLS.ies	4838	0.91	54.7
A1G	20" DIA SMALL LED BELL HOUSING WITH TYPE 1 OPTIC & HOUSE SIDE SHIELD MOUNTED @8' AFG	2700K LED / 4838 LUMENS	ODN-1-L_T1_32LC_5_2700K_UNV_CLS.ies	4838	0.91	54.7
AG	20" DIA SMALL LED BELL HOUSING WITH T5 WIDE ROUND OPTIC, MOUNTED @8' AFG	2700K LED / 6484 LUMENS	ODN-1-L_T5WR_32LC_5_2700K.ies	6484	0.91	55
B	14" VINTAGE LAMP SHADE WITH INTEGRATED 12W CREE LED MODULE RATED FOR 60,000 HOURS	2700K LED / 550 LUMENS	LSU12M012LDDN40K.ies	550	0.91	11.73
C	EVO 4IN ROUND DOWNLIGHT, 80 CRI, 2700K, 1000LM, MED DIST, CLEAR SEMI-SPEC	2700K LED / 921 LUMENS	EVO4_27_10_AR_MD_LSS.ies	921	0.91	8.8
D	16" VINTAGE LAMP SHADE 12W CREE LED Module - Dome Lens	2700K LED / 550 LUMENS	LSU12M012LDDN40K.ies	550	0.91	11.73
E	BOLLARD	2700K LED / 2359 LUMENS		2359	0.5	16
H	LOCATIONS TBD	3000K LED / 275 LUMENS		275	1	6.5

No. of Lamps	Quantity	Watts per Lamp	Lamp Type	Lighting Plan Symbol	Shielding	Lumens per Fixture	Lumens Total
1	18	55	LED	A	FULLY	6484	116,712
1	1	55	LED	A1	FULLY	4838	4,838
1	8	55	LED	A1G	FULLY	4838	38,704
1	3	55	LED	AG	FULLY	6484	19,452
1	160	12	LED	B	FULLY	550	88,000
1	91	9	LED	C	FULLY	921	83,811
1	33	12	LED	D	FULLY	550	18,150
1	5	16	LED	E	FULLY	2359	11,795
1	50	7	LED	H	FULLY	275	13,750

6.36 ACRES — LUMEN TOTAL 395,212
70,000 MAX LUMENS PER ACRE — TOTAL LUMENS ALLOWED 445,200
445,200 TOTAL LUMENS ALLOWED

2 LUMEN CALCS
NO SCALE



PLAN

1730 E No

THIS DRAWING CONTAIN INFORMATION W RECEIVED IN CO WITH ARTICLE 21 & 47 BARR ASTC 21 & 47 CERTIFIED BOARD

01/02/2024
Registered Professional Engineer (Electrical)
CERTIFICATE NO.
30536
WILLIAM J. BETHURUM, IV
SEAL EXPIRES: 09/30/26

THE VILLAGE AT SADDLEROCK CROSSING

SOLDIERS PASS ROAD & HIGHWAY 89A
SEDONA, ARIZONA

REVISIONS
- 01/02/24 ISSUED FOR PERMIT
- 09/30/21 CITY COMMENTS
- 04/20/21 CITY COMMENTS

PROJECT # 811203.00
SCALE: AS NOTED
CHECKED BY: WB
DRAWN BY ETS
DATE 04/20/21

PHOTOMETRIC SITE PLAN

E1.1

01.02.2024

DAVIS

THE VILLAGE AT SADDLEROCK CROSSING
Sedona, AZ
COMPREHENSIVE DESIGN SUBMITTAL

PHOTOMETRIC SITE PLAN

A-60 [PAGE 60 OF 60]
23156 - 01/04/2024

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928.282.72058 fax

www.swiaz.com

Engineering an environment of excellence

PRELIMINARY DRAINAGE REPORT for THE VILLAGE AT SADDLEROCK CROSSING

APNs: 408-26-004B, 408-26-004C, 408-26-009A, 408-26-009C, 408-26-010, 408-26-011, 408-26-012, 408-26-013, 408-26-014, 408-26-086A and 408-26-088
Sedona, Arizona

Prepared for:
Baney Corporation
475 NE Bellevue Dr. Suite 210
Bend, OR 97701

Job # 16034

TABLE OF CONTENTS

APPENDIX

Vicinity Map
FEMA FIRM Panel
City of Sedona Flood Plain Management Study
City of Sedona Storm Water Master Plan
Pre-Developed Drainage Exhibit
NOAA Atlas 14 Point Precipitation Frequency Estimate Table
Grading and Utilities Concept Plan

Introduction

The proposed project site is located in Sedona, Arizona, south of State Route (SR)-89A, and between Saddlerock Circle and Elk Road. The project site is located on approximately 6.36 acres of vacant land, positioned in a portion of sections 12 & 13, Township 17 North, Range 5 East Gila and Salt River Meridian. A vicinity map is in the Appendix.

The proposed project consists of 4 hotel units, a lobby/restaurant building, 4 multifamily housing units, a parking structure, a parking lot, and the paving of a connector road from Saddlerock Circle to the intersection at Soldiers Pass Road and SR-89A. The proposed project is located on parcels 408-26-004B, 408-26-004C, 408-26-009A, 408-26-009C, 408-26-010, 408-26-011, 408-26-012, 408-26-013, 408-26-014, 408-26-086A and 408-26-088. The existing site has 70+ trees and shrubs, and one concrete driveway entrance along SR-89A on the north side of the site. An existing ditch on the west side of the property collects on-site and off-site runoff from the north, south, and east. The ditch has a 36" culvert which takes runoff west under Saddlerock Circle. Surrounding developments include the Saddlerock Homes subdivision to the west and south of the project site, commercial property to the west, north and east, and the Sedona Elks Lodge to the east.

The project is located in Zone X of the FEMA Flood Insurance Rate Map, map number 04025C1435G, effective September 3, 2010. Zone X is described as an area determined to be outside the 500-year floodplain. The preliminary FEMA Flood Insurance Rate Map number 04025C1435H, dated June 30, 2020, shows no changes to the flood hazard area designation for the site. The Appendix contains a portion of the FIRM near the project area.

The City of Sedona Flood Plain Management Study places part of the proposed project site within the 100-year floodplain boundary. This study also places the site in basin number 77, with a flow of 134 cfs for the 100-year storm event. The City of Sedona Storm Water Master Plan places the site in basin B77B, with a flow of 256 cfs for the 100-year event. Information from these studies can be found in the Appendix.

Objective

The objective of this report is to ascertain the impact the proposed development will have on the runoff characteristics of the site and to determine the detention volume needed to attenuate the additional post-development flows. The design of the proposed drainage control structures will be in accordance with City of Sedona and Yavapai County drainage criteria.

Procedure

The total project watershed is approximately 44.98 acres and is a mixture of developed residential housing, undeveloped native land, and previously graded vacant land. The project site slopes from east to west towards Saddlerock Circle, with an average slope of 5%. Off-site runoff from commercial property to the east drains west through the site. A catch basin on Saddlerock Circle collects runoff from SR-89A and flows through an 18" pipe to the ditch on the west side of the project site. Off-site flows from the neighborhood to the south of the site are routed through a network of ditches and culverts, which enters the ditch on the southwest corner of the site. Flow also enters the site from the cul-de-sac (end of Saddlerock Lane) and from the two properties to the east of Saddlerock Lane. When the pipe on Saddlerock Lane is full, runoff overtops the ditch on the east of Saddlerock Lane and enters the site at the cul-de-sac. On-site topographic survey was performed by Shephard Wesnitzer, Inc. in September 2018. Off-site topographic information was used from the 2007 City of Sedona Aerial Survey. The pre-development drainage map is provided in the Appendix.

The development of the project site includes the addition of approximately 3.66 acres of impervious surfaces. The resulting storm water runoff is proposed to be routed through a storm drain system from the east side of the project site across the proposed development to the west, where it then outlets into the existing 36" culvert under Saddlerock Circle. The proposed rainwater harvesting system, consisting of tanks collecting storm water from the hotel unit roofs, could potentially offset a portion of the direct storm runoff from the site, if approved. To mitigate increased peak flows from the development of the project site, an underground detention structure is proposed.

The design rainfall data was taken from the site specific NOAA Atlas 14 point precipitation frequency estimates table, as shown in the Appendix. The required storage volume of storm water runoff from the development of the site was determined based on retaining the storm runoff volume for the entire 100-year, 2-hour storm event from all added impervious areas of the project site, per the Yavapai County Drainage Manual.

Off-site flows from the northern portion of Saddlerock Circle and SR-89A will be collected through a catch basin and conveyed to the 36" culvert under Saddlerock Circle via a storm drain pipe. Off-site flows from the east along Elk Road will be collected through catch basins and directed under the proposed parking structure into the proposed storm drain system. Off-site flows from the south will also be conveyed to the proposed storm drain system through storm drain inlets. The development of the Village at Saddlerock Crossing project will not alter the existing off-site flowrate conditions with the proposed detention system.

Results

The underground detention structure is proposed to be located within the parking lot on the west side of the site, and will require approximately 36,200 ft.^{3} of volume to attenuate peak flows to pre-development rates. This volume can be attained through the placement of 1,280 ft. of 6' corrugated metal pipe beneath the parking lot. The first flush volume of approximately 6700 ft.^{3} will be retained below the basin outlet, with the excess storm water runoff being conveyed to the 36" culvert under Saddlerock Circle. Refer to the Grading and Utilities Concept Plan for preliminary details, grades, finished elevations, and locations.

Conclusion

A runoff volume for the 100-year, 2 hour storm event was calculated for the project watershed to determine a required detention volume of 36,200 ft^3. Runoff from the development of the site, along with the off-site flows to the west, east, and south will be conveyed into the proposed underground detention basin through a storm drain system. The underground detention structure will discharge to the west through the existing 36" culvert underneath Saddlerock Circle.

The design concepts in this report will ensure that the drainage integrity of the site is sustained with proper maintenance activity. Activities include frequent clearing of debris and sediment from the storm drain inlets and detention areas, disturbed slope treatment and erosion control. Frequent monitoring will ensure expedient remedies to common problems such as erosion, sedimentation, and flow obstructions.

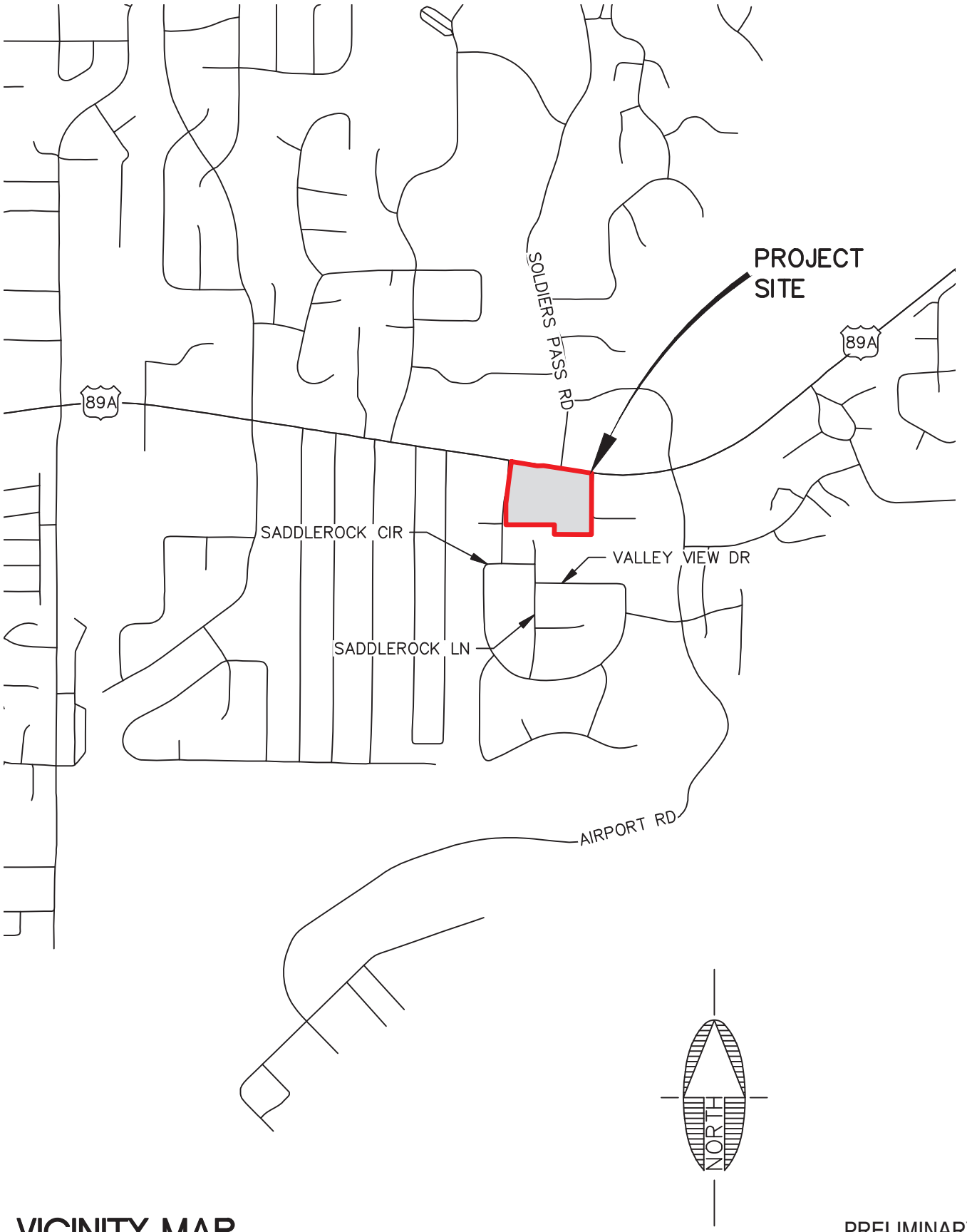
References

City of Sedona Flood Plain Management Study, City of Sedona, 1994

City of Sedona Storm Water Master Plan, City of Sedona, 2005

Yavapai County Drainage Design Manual, Yavapai County Flood Control District, 2015

APPENDIX



VICINITY MAP

NO SCALE

PRELIMINARY

NOT FOR CONSTRUCTION, BIDDING OR RECORDING

Shephard Wesnitzer, Inc.
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JOB NO.	16034
DATE	APR 21
SCALE	NO SCALE
DRAWN	EGM
DESIGN	JTL
CHECKED	JTL

THE VILLAGE AT SADDLEROCK CROSSING — SEDONA ARIZONA

VICINITY MAP

SHEET 1 OF 1

National Flood Hazard Layer FIRMette

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN — Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 — Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

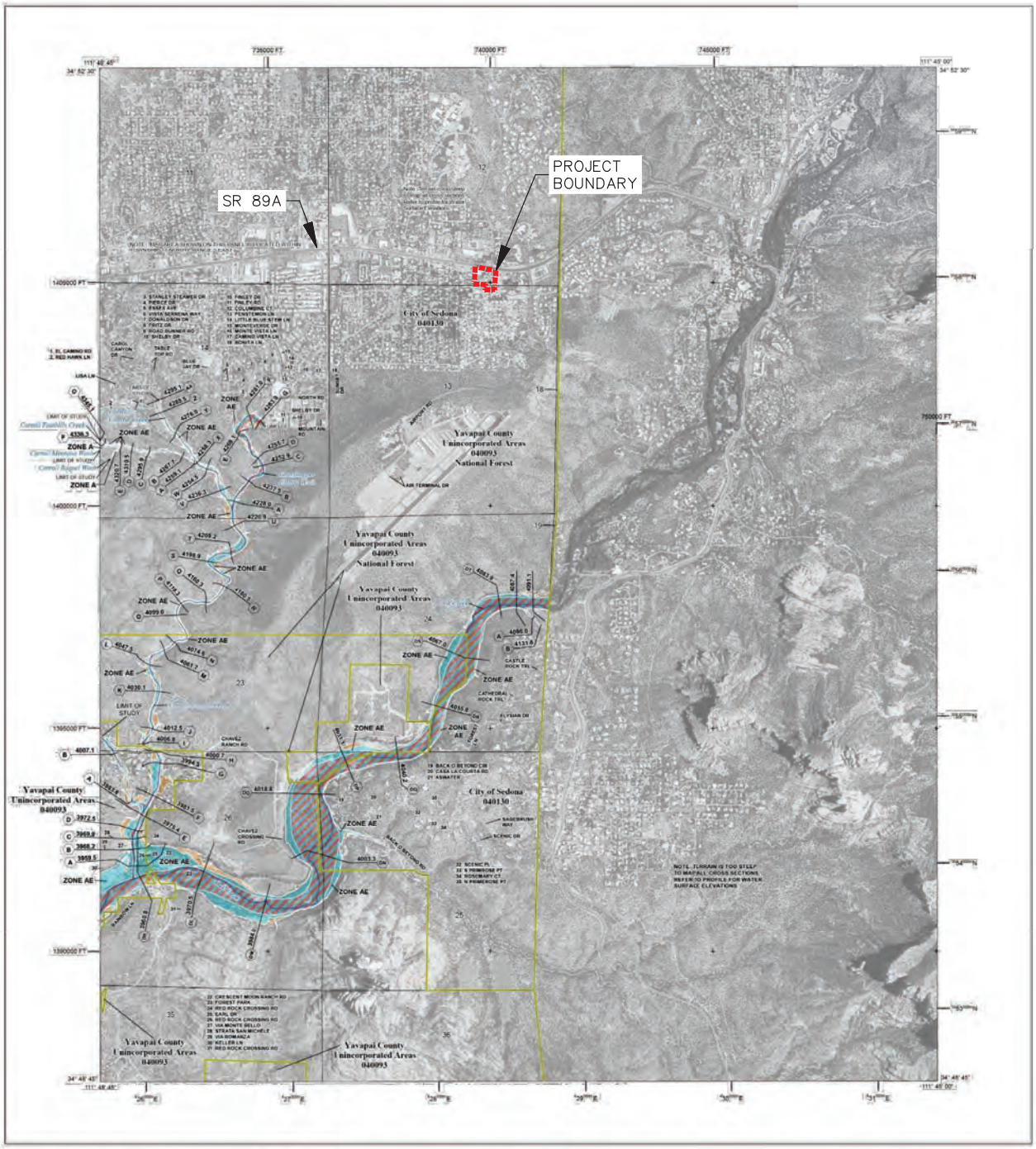
N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 10/26/2018 at 4:25:24 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.



FLOOD HAZARD INFORMATION

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT HTTPS://MSC.FEMA.GOV

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) Zone A, V, A99
- With BFE or Depth Zone AE, AO, AH, VE, AR
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
- Future Conditions 1% Annual Chance Flood Hazard Zone X
- Area with Reduced Flood Risk due to Levee See Notes. Zone X
- Area with Flood Risk due to Levee Zone D

OTHER AREAS
- NO SCREEN Areas of Minimal Flood Hazard Zone X
- Area of Undetermined Flood Hazard Zone D

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
- Coastal Transect
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary

NOTES TO USERS

For information and questions about this Flood Insurance Rate Map (FIRM), available products associated with this FIRM, including digital versions, the current map date for each FIRM panel, how to order products, or the National Flood Insurance Program (NFIP) in general, please call the FEMA Map Information eXchange (FMIX) at 1-877-FEMA MAP (1-877-336-2627) or visit the FEMA Flood Map Service Center website at https://msc.fema.gov. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the website.

Communities annexing land on adjacent FIRM panels must obtain a current copy of the adjacent panel as well as the current FIRM Index. These may be ordered directly from the Flood Map Service Center at the number listed above.

For community and countywide map dates, refer to the Flood Insurance Study Report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

Base map information shown on this FIRM was provided in digital format by the United States Geological Survey (USGS). This information was derived from digital orthophotography at 4.0 foot resolution from photography dated 2011.

SCALE

Map Projection: NAD 1983 StatePlane Arizona Central FIPS 0202 Feet; Western Hemisphere; Vertical Datum: NAVD 88

1 inch = 1,000 feet 1:12,000

0 1,000 2,000 4,000 Feet

0 250 500 1,000 Meters

PANEL LOCATOR

FEMA

National Flood Insurance Program

NATIONAL FLOOD INSURANCE PROGRAM
FLOOD INSURANCE RATE MAP

YAVAPAI COUNTY, ARIZONA and Incorporated Areas

PANEL 1795 OF 3900

COMMUNITY	NUMBER	PANEL	SUFFIX
YAVAPAI COUNTY	040093	1795	F

PRELIMINARY
6/30/2020

VERSION NUMBER 2.4.3.5
MAP NUMBER 04025C1435H
MAP REVISED

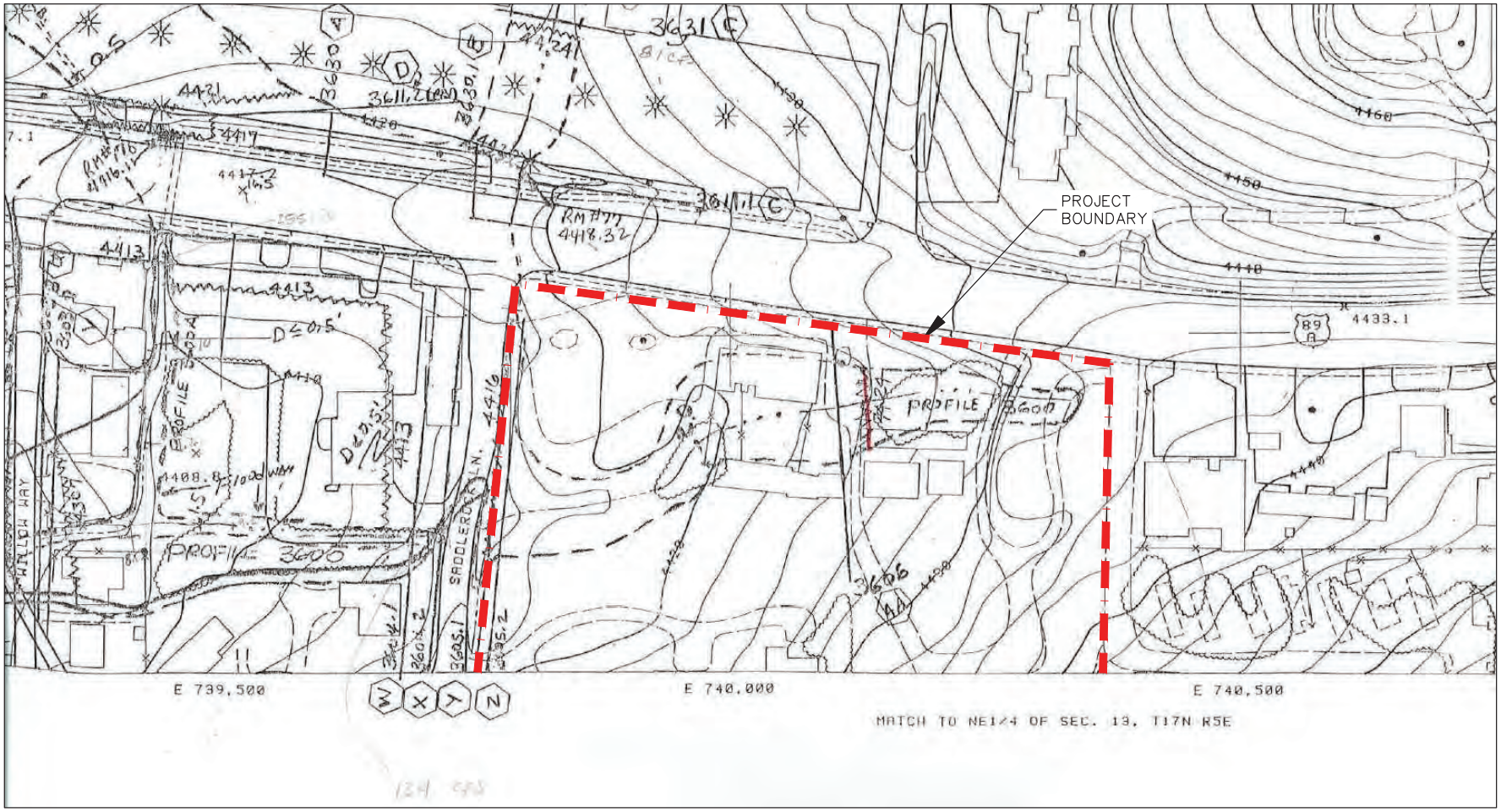
CITY OF SEDONA

FLOODPLAIN MANAGEMENT STUDY, 1994

NO SCALE

PORTION OF OVERALL DRAINAGE BASIN MAP

NORTH

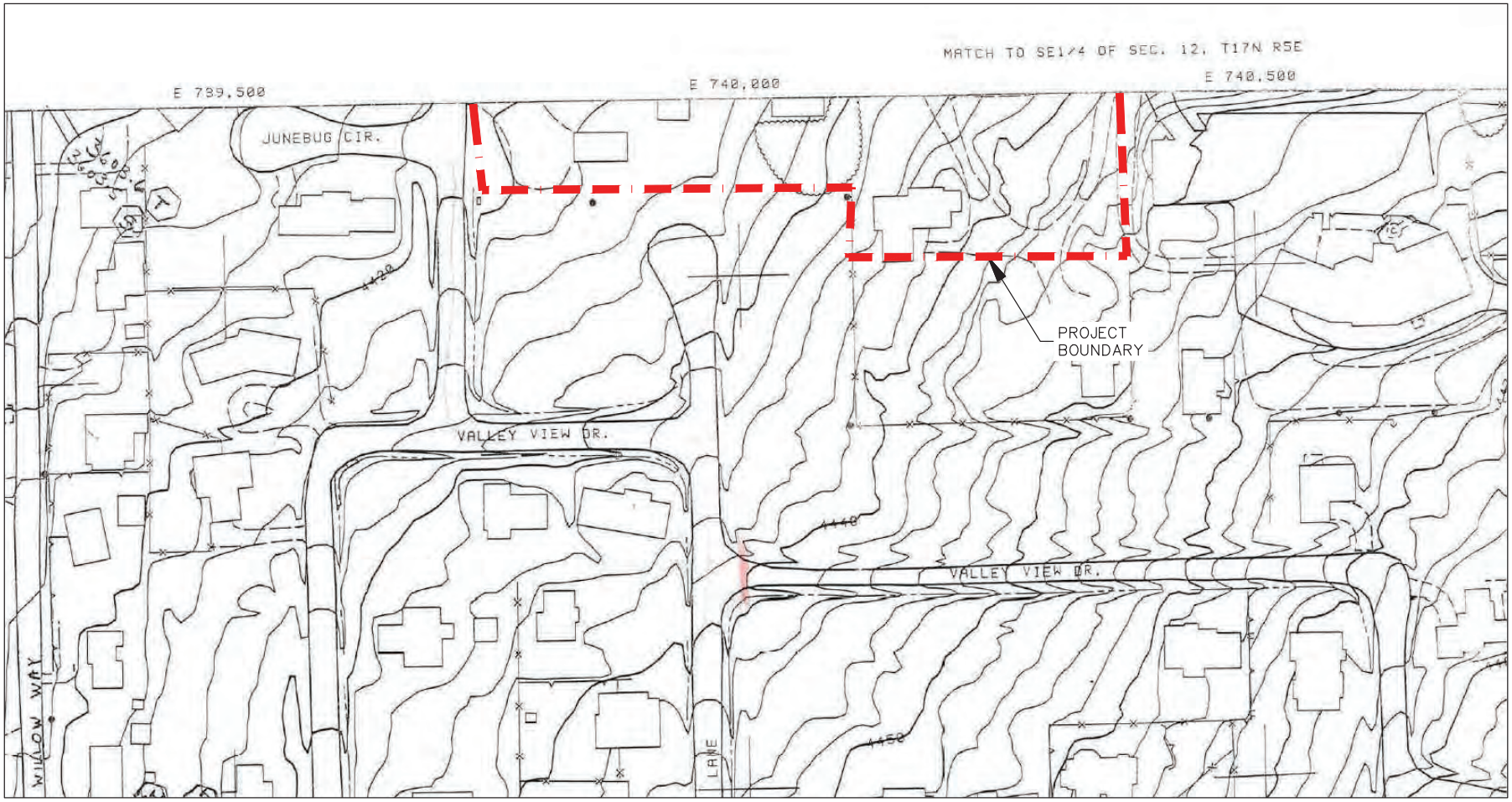


CITY OF SEDONA

FLOODPLAIN MANAGEMENT STUDY, 1994

NO SCALE

PORTION OF SE QUARTER SECTION 12 MAP



CITY OF SEDONA

FLOODPLAIN MANAGEMENT STUDY, 1994

NO SCALE

PORTION OF NE QUARTER SECTION 13 MAP

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GR4410.0   350.0

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GR4410.0   350.0

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* CROSS SECTION 3604.2 AT DOWNSTREAM CULVERT FACE- FLOW LIMITED TO CULVERT WIDTH
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GR4415.0   230.0  4415.0   330.0  4416.0   350.0  4418.0   380.0
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* CROSS SECTION 3605.1 AT UPSTREAM CULVERT FACE - FLOW LIMITED TO CULVERT WIDTH
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X3    10                                          4415.2  4415.2
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BT        1223.3  4415.7          1242.6  4416.1
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GR4418.0     0.0  4416.0    70.0  4415.7   115.0  4412.4   119.0  4412.4   122.0
GR4415.5   126.0  4416.0   320.0  4418.0   360.0

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NH     1   0.055  1261.8
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GR4426.6  1000.0  4424.6  1061.0  4423.8  1103.7  4423.2  1141.5  4422.7  1184.6
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EJ
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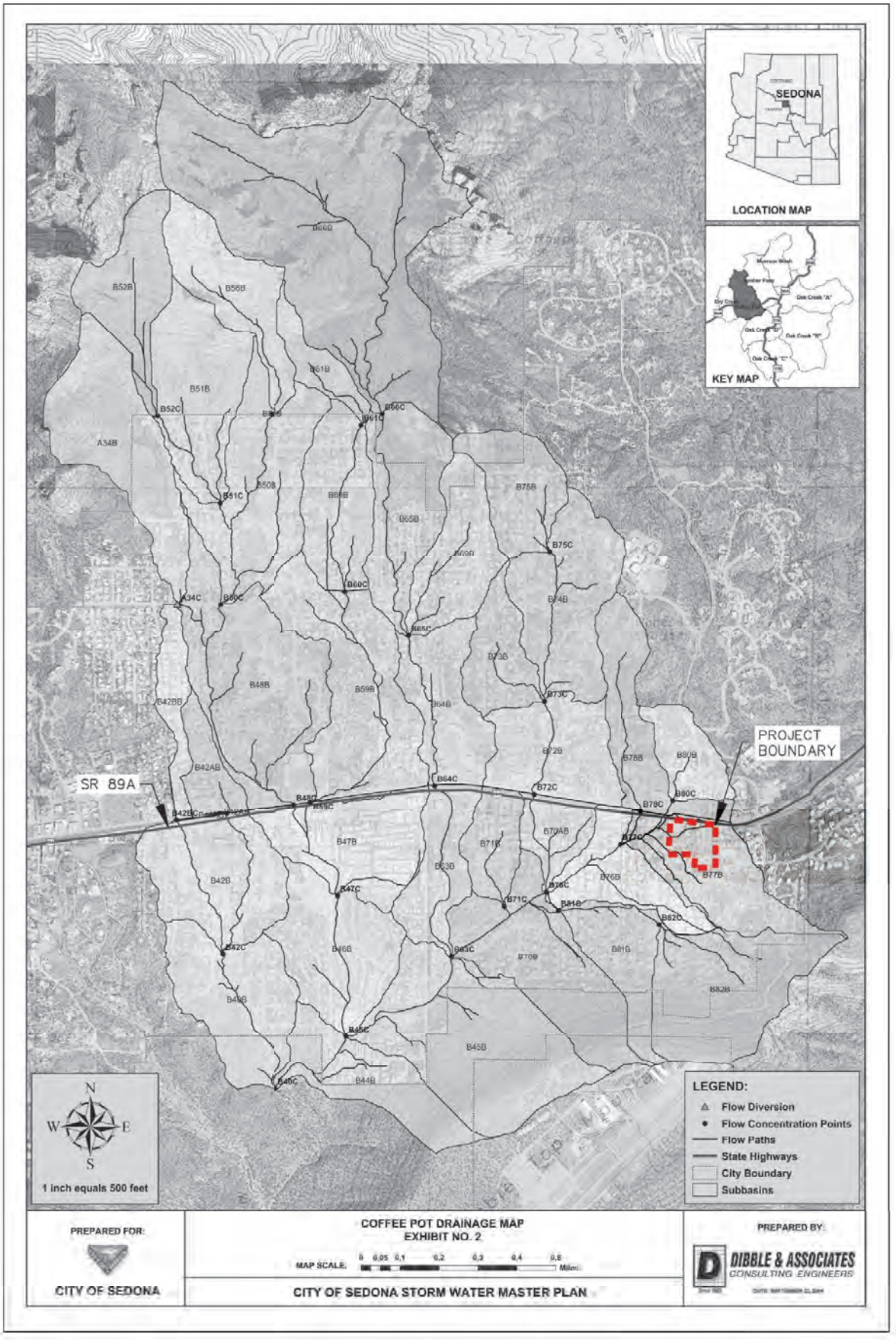
SEDONA
LOCATION MAP
KEY MAP
SR 89A
PROJECT BOUNDARY
B52B
B56B
B51B
B52C
B56C
B61C
A34B
B51C
B50B
B66B
B65B
B75B
B75C
B60C
A34C
B65C
B74B
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B70AB
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B77B
B63B
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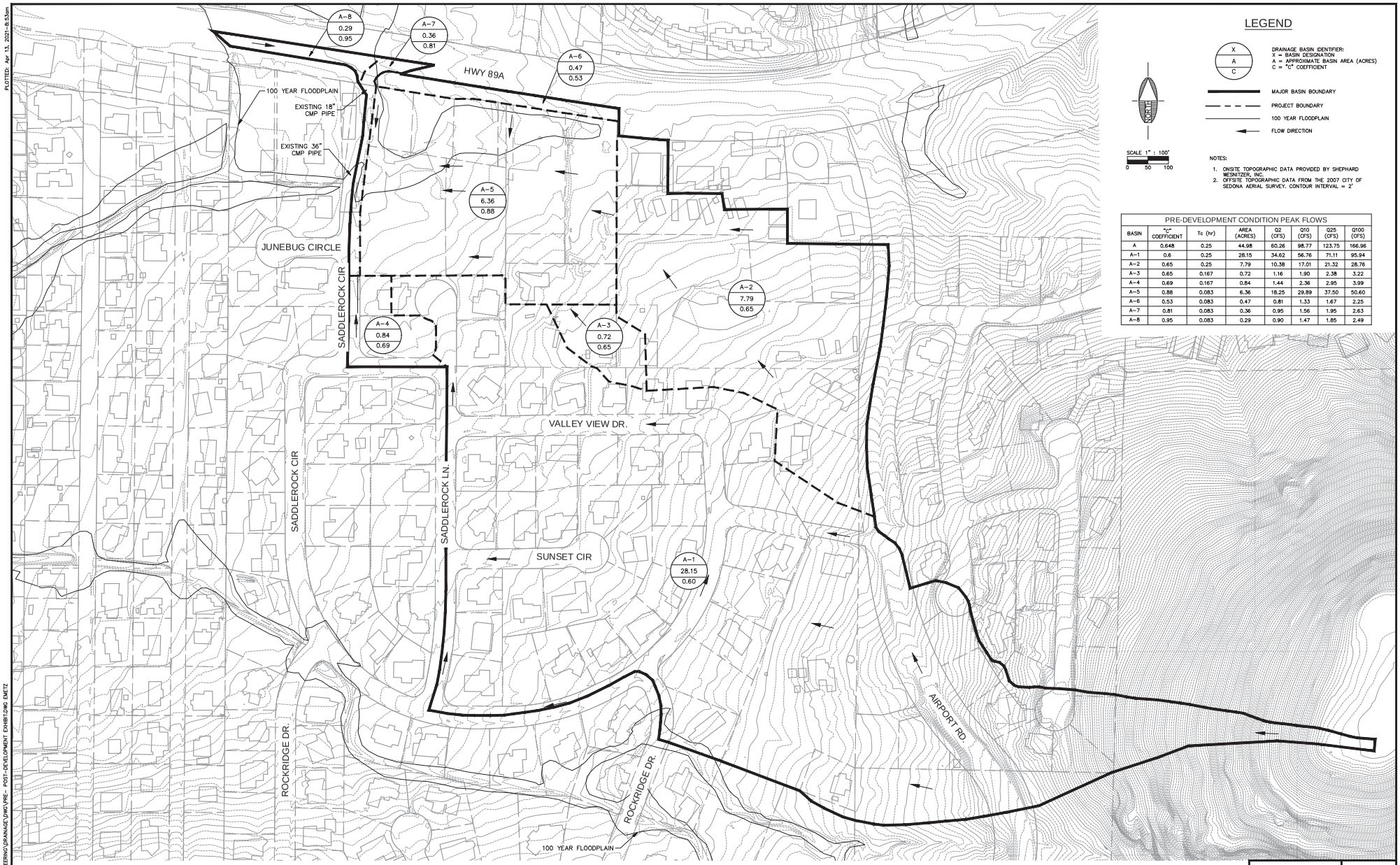
B42B
B47C
B76C
B71C
B81C
B62C
B42C
B46B
B63C
B70B
B81B
B82B
B46C
B45C
B45B
B40C
B44B
N
W
E
S
1 inch equals 500 feet
LEGEND:
Flow Diversion
Flow Concentration Points
Flow Paths
State Highways
City Boundary
Subbasins
PREPARED FOR:
CITY OF SEDONA
COFFEE POT DRAINAGE MAP
EXHIBIT NO. 2
MAP SCALE:
0 0.05 0.1 0.2 0.3 0.4 0.5 Miles
CITY OF SEDONA STORM WATER MASTER PLAN
PREPARED BY:
DIBBLE & ASSOCIATES
CONSULTING ENGINEERS



LEGEND

DRAINAGE BASIN IDENTIFIER:
X = BASIN DESIGNATION
A = APPROXIMATE BASIN AREA (ACRES)
C = "C" COEFFICIENT

- MAJOR BASIN BOUNDARY
- PROJECT BOUNDARY
- 100 YEAR FLOODPLAIN
- FLOW DIRECTION

SCALE 1" : 100'
0 50 100

NOTES:
1. ONSITE TOPOGRAPHIC DATA PROVIDED BY SHEPHARD WESNITZER, INC.
2. OFFSITE TOPOGRAPHIC DATA FROM THE 2007 CITY OF SEDONA AERIAL SURVEY. CONTOUR INTERVAL = 2'

PRE-DEVELOPMENT CONDITION PEAK FLOWS

BASIN	"c" COEFFICIENT	Tc (hr)	AREA (ACRES)	Q2 (CFS)	Q10 (CFS)	Q25 (CFS)	Q100 (CFS)
A	0.648	0.25	44.98	60.26	98.77	123.75	166.96
A-1	0.6	0.25	28.15	34.62	56.76	71.11	95.94
A-2	0.65	0.25	7.79	10.38	17.01	21.32	28.76
A-3	0.65	0.167	0.72	1.16	1.90	2.38	3.22
A-4	0.69	0.167	0.84	1.44	2.36	2.95	3.99
A-5	0.88	0.083	6.36	18.25	29.89	37.50	50.60
A-6	0.53	0.083	0.47	0.81	1.33	1.67	2.25
A-7	0.81	0.083	0.36	0.95	1.56	1.95	2.63
A-8	0.95	0.083	0.29	0.90	1.47	1.85	2.49

PLOTTED: Apr 13, 2021-8:53am

FILE: P:\2016\16034\ENGINEERING\DRAINAGE\DWG\PRE- POST-DEVELOPMENT EXHIBIT.DWG EMETZ

Call at least two full working days before you begin excavation.
ARIZONA 811
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)

REVISIONS			
NO.	DESCRIPTION	DATE	BY

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

JOB NO:	16034
DATE:	APR 21
SCALE:	1"=100
DRAWN:	AKC/EGM
DESIGN:	AKC
CHECKED:	AHB

THE VILLAGE AT SADDLEROCK CROSSING
SEDONA ARIZONA

PRELIMINARY DRAINAGE REPORT
DRAINAGE MAP
PRE-DEVELOPMENT

PRELIMINARY
NOT FOR CONSTRUCTION, BIDDING OR RECORDING

DRAWING NO. D1

SHT NO. 1 OF 1

NOAA Atlas 14, Volume 1, Version 5
Location name: Sedona, Arizona, USA*
Latitude: 34.8621°, Longitude: -111.7837°
Elevation: 4438.28 ft**
* source: ESRI Maps
** source: USGS

POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sarah Dietz, Sarah Heim, Lillian Hiner, Kazungu Maitaria, Deborah Martin, Sandra Pavlovic, Ishani Roy, Carl Trypaluk, Dale Unruh, Fenglin Yan, Michael Yekta, Tan Zhao, Geoffrey Bonnin, Daniel Brewer, Li-Chuan Chen, Tye Parzybok, John Yarchoan

NOAA, National Weather Service, Silver Spring, Maryland

PF_tabular | PF_graphical | Maps_&_aerials

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches)[1]

Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	**0.211** (0.176-0.252)	**0.272** (0.227-0.325)	**0.366** (0.304-0.437)	**0.445** (0.371-0.530)	**0.558** (0.461-0.661)	**0.652** (0.534-0.773)	**0.753** (0.612-0.894)	**0.862** (0.691-1.03)	**1.02** (0.804-1.22)	**1.16** (0.897-1.39)
10-min	**0.321** (0.269-0.383)	**0.414** (0.345-0.494)	**0.557** (0.463-0.665)	**0.678** (0.564-0.807)	**0.849** (0.701-1.01)	**0.992** (0.813-1.18)	**1.15** (0.932-1.36)	**1.31** (1.05-1.56)	**1.56** (1.22-1.86)	**1.76** (1.37-2.12)
15-min	**0.398** (0.333-0.475)	**0.513** (0.428-0.612)	**0.691** (0.574-0.824)	**0.840** (0.699-1.00)	**1.05** (0.869-1.25)	**1.23** (1.01-1.46)	**1.42** (1.16-1.69)	**1.63** (1.30-1.94)	**1.93** (1.52-2.31)	**2.18** (1.69-2.63)
30-min	**0.537** (0.448-0.639)	**0.691** (0.575-0.824)	**0.930** (0.773-1.11)	**1.13** (0.942-1.35)	**1.42** (1.17-1.68)	**1.66** (1.36-1.96)	**1.91** (1.56-2.27)	**2.19** (1.76-2.61)	**2.60** (2.04-3.11)	**2.94** (2.28-3.54)
60-min	**0.664** (0.554-0.791)	**0.855** (0.712-1.02)	**1.15** (0.957-1.37)	**1.40** (1.17-1.67)	**1.75** (1.45-2.08)	**2.05** (1.68-2.43)	**2.37** (1.93-2.81)	**2.71** (2.17-3.23)	**3.21** (2.53-3.85)	**3.63** (2.82-4.38)
2-hr	**0.782** (0.680-0.910)	**0.990** (0.853-1.16)	**1.31** (1.13-1.52)	**1.58** (1.35-1.83)	**1.96** (1.67-2.27)	**2.28** (1.92-2.65)	**2.63** (2.19-3.07)	**3.02** (2.47-3.51)	**3.58** (2.88-4.17)	**4.04** (3.20-4.72)
3-hr	**0.840** (0.738-0.972)	**1.06** (0.937-1.23)	**1.36** (1.19-1.57)	**1.62** (1.41-1.87)	**1.99** (1.72-2.30)	**2.31** (1.98-2.66)	**2.66** (2.25-3.08)	**3.05** (2.54-3.52)	**3.61** (2.96-4.20)	**4.07** (3.27-4.77)
6-hr	**1.02** (0.913-1.13)	**1.27** (1.14-1.41)	**1.57** (1.41-1.75)	**1.85** (1.65-2.05)	**2.24** (1.98-2.49)	**2.55** (2.24-2.84)	**2.90** (2.52-3.23)	**3.26** (2.80-3.65)	**3.80** (3.21-4.29)	**4.24** (3.52-4.82)
12-hr	**1.31** (1.18-1.45)	**1.62** (1.47-1.80)	**1.98** (1.78-2.19)	**2.28** (2.04-2.51)	**2.68** (2.40-2.96)	**3.00** (2.67-3.30)	**3.33** (2.93-3.68)	**3.66** (3.19-4.05)	**4.13** (3.55-4.60)	**4.51** (3.84-5.05)
24-hr	**1.65** (1.50-1.81)	**2.05** (1.87-2.27)	**2.55** (2.32-2.82)	**2.96** (2.68-3.27)	**3.52** (3.17-3.88)	**3.96** (3.56-4.36)	**4.41** (3.94-4.87)	**4.88** (4.34-5.39)	**5.51** (4.86-6.12)	**6.01** (5.25-6.70)
2-day	**1.92** (1.75-2.12)	**2.39** (2.17-2.64)	**2.97** (2.71-3.28)	**3.44** (3.12-3.79)	**4.08** (3.70-4.50)	**4.59** (4.14-5.05)	**5.12** (4.59-5.63)	**5.66** (5.04-6.25)	**6.41** (5.64-7.09)	**6.98** (6.10-7.75)
3-day	**2.06** (1.88-2.27)	**2.57** (2.34-2.83)	**3.20** (2.92-3.53)	**3.72** (3.38-4.09)	**4.44** (4.02-4.88)	**5.01** (4.51-5.50)	**5.60** (5.02-6.15)	**6.22** (5.53-6.85)	**7.07** (6.23-7.81)	**7.74** (6.77-8.59)
4-day	**2.21** (2.02-2.42)	**2.75** (2.51-3.03)	**3.44** (3.14-3.78)	**4.00** (3.64-4.40)	**4.79** (4.35-5.25)	**5.42** (4.89-5.94)	**6.09** (5.46-6.68)	**6.77** (6.03-7.44)	**7.74** (6.82-8.54)	**8.50** (7.43-9.43)
7-day	**2.59** (2.37-2.83)	**3.22** (2.95-3.53)	**3.99** (3.65-4.36)	**4.62** (4.23-5.06)	**5.50** (5.02-6.02)	**6.20** (5.64-6.79)	**6.93** (6.27-7.60)	**7.69** (6.91-8.43)	**8.73** (7.77-9.62)	**9.55** (8.42-10.5)
10-day	**2.95** (2.70-3.23)	**3.66** (3.35-4.02)	**4.51** (4.13-4.94)	**5.18** (4.74-5.68)	**6.09** (5.54-6.65)	**6.79** (6.16-7.43)	**7.50** (6.76-8.22)	**8.21** (7.37-9.01)	**9.17** (8.17-10.1)	**9.90** (8.77-10.9)
20-day	**3.81** (3.50-4.16)	**4.72** (4.34-5.16)	**5.72** (5.27-6.26)	**6.48** (5.95-7.07)	**7.45** (6.83-8.13)	**8.17** (7.46-8.91)	**8.87** (8.08-9.69)	**9.54** (8.66-10.4)	**10.4** (9.38-11.4)	**11.0** (9.89-12.1)
30-day	**4.58** (4.20-5.00)	**5.68** (5.21-6.19)	**6.85** (6.27-7.47)	**7.74** (7.08-8.42)	**8.87** (8.09-9.64)	**9.68** (8.81-10.5)	**10.5** (9.49-11.4)	**11.2** (10.1-12.3)	**12.2** (11.0-13.3)	**12.8** (11.5-14.1)
45-day	**5.41** (4.94-5.97)	**6.72** (6.13-7.41)	**8.12** (7.41-8.94)	**9.19** (8.38-10.1)	**10.6** (9.62-11.6)	**11.6** (10.5-12.7)	**12.6** (11.4-13.8)	**13.5** (12.2-14.9)	**14.7** (13.2-16.2)	**15.6** (13.9-17.2)
60-day	**6.31** (5.75-6.91)	**7.82** (7.14-8.57)	**9.40** (8.57-10.3)	**10.6** (9.62-11.6)	**12.0** (10.9-13.2)	**13.1** (11.9-14.3)	**14.1** (12.7-15.4)	**15.0** (13.6-16.5)	**16.2** (14.5-17.7)	**17.0** (15.2-18.7)

[1] Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

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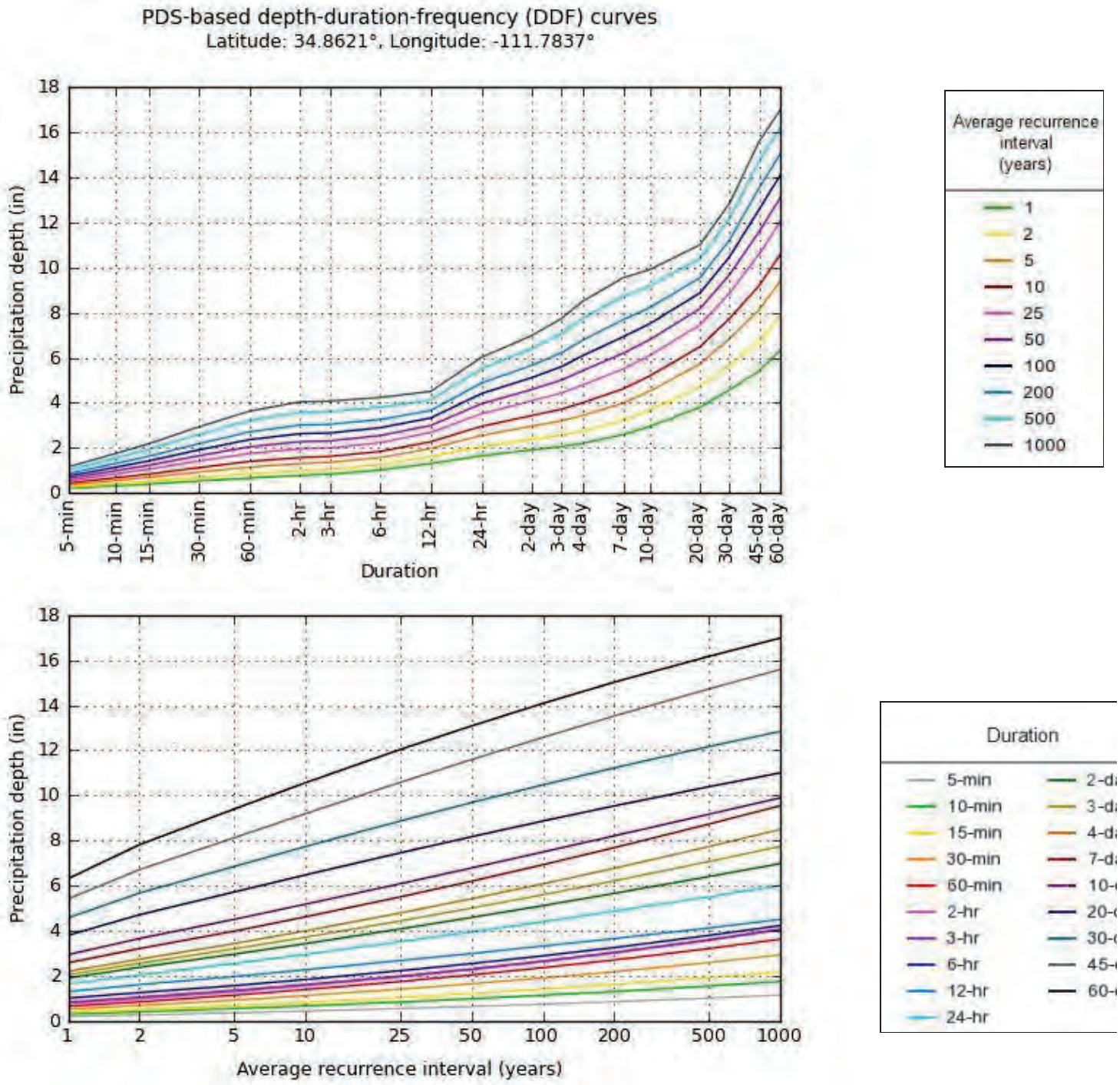
PF graphical



NOAA Atlas 14, Volume 1, Version 5

Created (GMT): Thu Feb 4 21:19:51 2021

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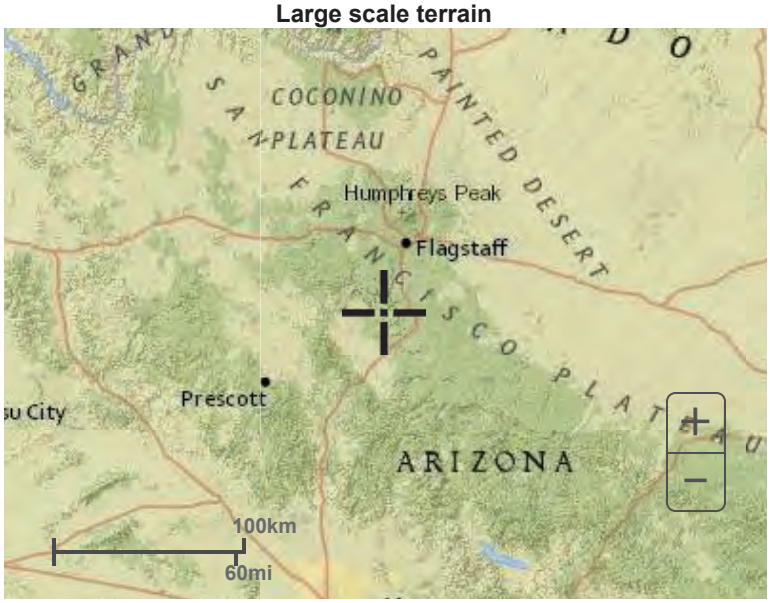
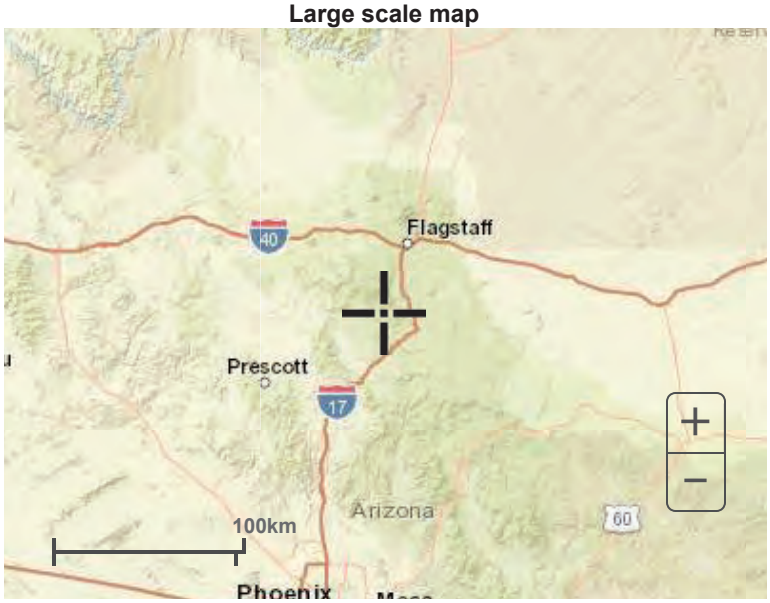
Maps & aerials

Small scale terrain

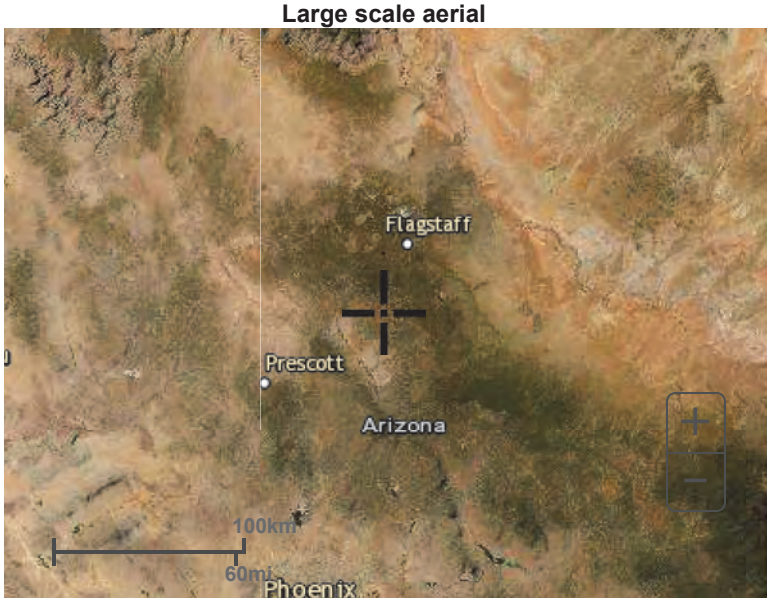
Large scale terrain



Large scale map



Large scale aerial



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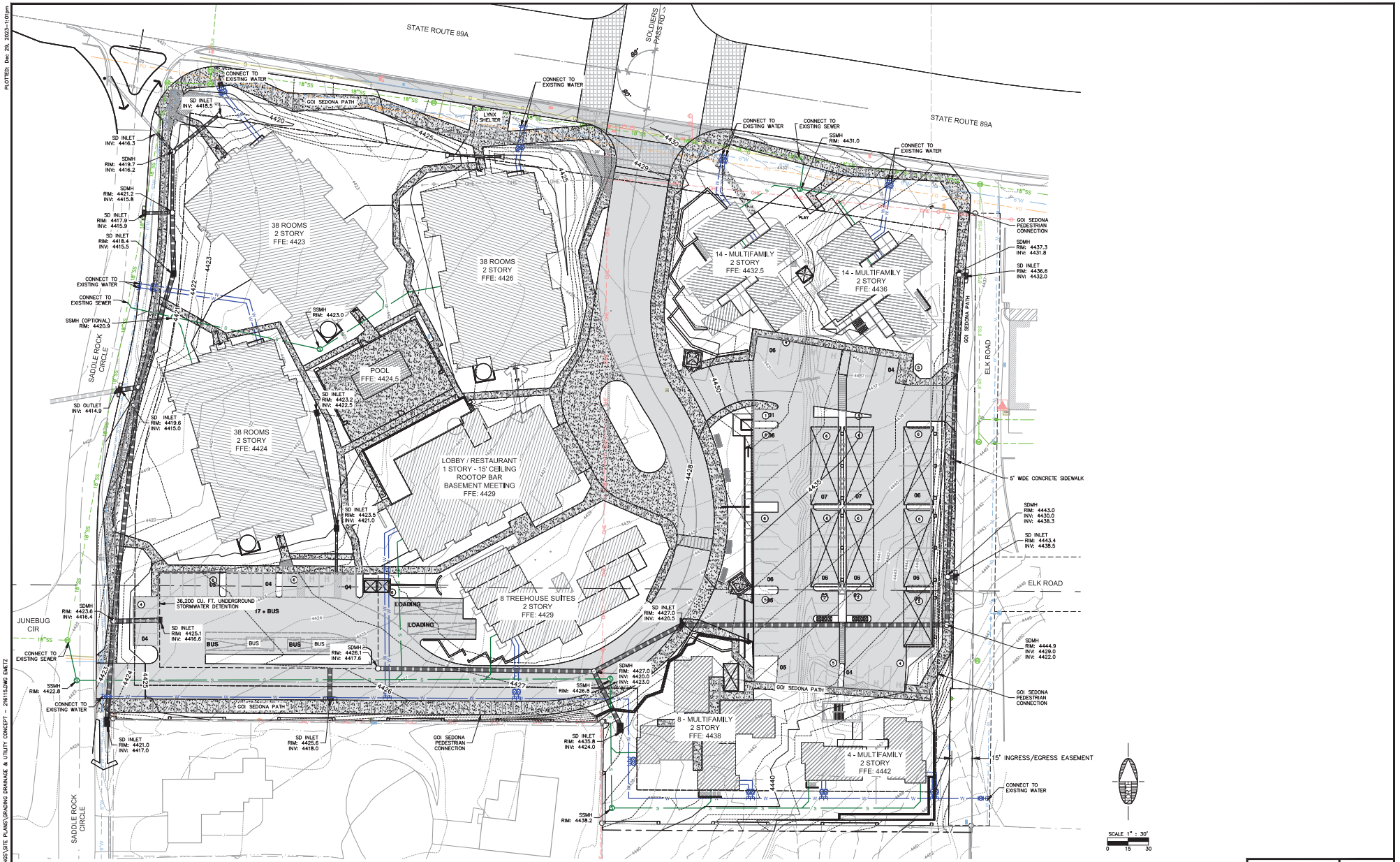
National Oceanic and Atmospheric Administration
National Weather Service
National Water Center
1325 East West Highway
Silver Spring, MD 20910
Questions?: HDSC.Questions@noaa.gov



Contact Arizona 811 at least two full working days before you begin excavation

Call 811 or click Arizona811.com

REVISIONS			
NO.	DESCRIPTION	DATE	BY

Shephard Wesnitzer, Inc.

75 Kaloof Place
Sedona, AZ 86336
928.282.1061
928.282.2058 fax

www.swiaz.com

JOB NO:	16034
DATE:	DEC 23
SCALE:	1"=30'
DRAWN:	MWJ/ADA
DESIGN:	JTL/AHB
CHECKED:	AHB

THE VILLAGE AT SADDLEROCK CROSSING — SEDONA ARIZONA

GRADING, DRAINAGE, & UTILITY CONCEPT

PRELIMINARY

NOT FOR CONSTRUCTION, BIDDING OR RECORDING

DRAWING NO. GC1

SHT NO. 1 OF 1