

April 12, 2020

Mr. Mark Reavis
Heritage Preservation Officer
Flagstaff City Hall
211 W. Aspen Avenue
Flagstaff, AZ 86001
P: (928) 213-2633
Email: Mark.Reavis@flagstaffaz.gov

RE: Cultural Resource Investigation of 190 acres on Private Land near Fort Tuthill, Flagstaff, Coconino County, Arizona (EnviroSystems Management Project No. 2099-21)

Dear Mr. Reavis,

At the request of Mr. Stephen Eiss, Vice President, Construction & Real Estate Development with Northern Arizona Healthcare (NAH) and in compliance with City of Flagstaff (City) Zoning Code 10-30.30.050, EnviroSystems Management, Inc. (EnviroSystems/ESM) conducted a cultural resources inventory of 190 acres on private land proposed for development of new NAH facilities. The project area is located primarily on undeveloped private property located just north of Fort Tuthill Recreation Area, south of Flagstaff, Coconino County, Arizona. It is located within the NW¼ of Section 5, Township 20 North, Range 7 East; the SW¼ of Section 31, and the NW¼ and SW¼ of Section 32, Township 21 North, Range 6 East (*Figure 1*).

EnviroSystems conducted a records search of AZSITE (Arizona's cultural resources data base), General Land Office (GLO) maps, the National Register of Historic Places (NRHP or National Register), Coconino National Forest (COF), and in-house records at EnviroSystems. The records search revealed twelve previous archaeological inventories within the current project area (*Table 1*) and one previously recorded site, AZ I:14:303(ASM), a historic logging railroad grade/bed segment now part of the Flagstaff Urban Trail System (FUTS). See the site description below for a complete discussion of previous documentation. All previous archaeological projects are related to infrastructure and road improvement projects. Fort Tuthill is located immediately adjacent to the project area to the southwest and is listed on National Register of Historic Places as Site AZ I:14:343(ASM) (Lefthand 1998). No reference data was available on AZSITE for 2003-613.ASM or any of the nine previous project numbers provided by the COF.

On April 1, 2021, Crispin Wilson (ESM Archaeology Field Director), Blayne Brown (ESM Senior Archaeologist), and Abraham Ortega (Archaeology Field Technician) inventoried all 190 acres for the proposed NAH facility project. The project area was surveyed using parallel pedestrian transects spaced 20 meters (65 feet apart). To aid in navigation, the project area boundary was uploaded to a Trimble Global Positioning System (GPS) unit with sub-meter accuracy. Vegetation is ponderosa pine forest vegetation consisting primarily of ponderosa pine with an understory of mullein, sparse native grasses, annuals, and other forbs. Ground surface visibility ranges from 20% to 100% with an average of approximately 70%. The area is relatively flat with a general slope toward the north/northwest that varies slightly in direction and degree depending on the precise location within the project area. The substrate consists of grayish brown loam with some areas of exposed Kaibab limestone bedrock, often visible on the slopes of small hills and low ridges within the current project area.

Table 1. Previous Archaeological Investigations within the Proposed NAH Facility CRI project area.

Report No.	Report Title	Reference (Affiliation*)
1998-546.ASM*	SR 89A Realignment near Pulliam Airport, Flagstaff	Lefthand, Nathan J. 1998
1988-238.ASM*	<i>Cultural resources Technical Report for the US West Fiber Optic Cable Project between Dewey and Flagstaff, Arizona</i>	Bassett, et al 1991 (D&M)
2003-613.ASM*	SR 89A – JW Powell Blvd	No Data
R199803040050D**	APS 230-2KV TRANSMISSION LINE	No Data
R19185030400203**	BOYER SPECIAL USE ROAD	No Data
R199803040050K**	APS Coconino-Verde 230kV Fiber Optic Project	No Data
R198803040048C**	US WEST FIBER OPTIC CABLE (INV. TYPE?)	No Data
R198603040101D**	APS NW-5, VERDE-COCONINO, 69KV TRANSMISSION LINE PERMIT RENE	No Data
R198003040036A**	FLAGSTAFF CITY LIMITS BASELANDE	No Data
R199803040125A**	SR 89A 3 ALT ALIGN MP398.41-399.37 JW POWELL BLVD	No Data
R199803040125B**	SR89A NEW ALIGNMENT JW POWELL BLVD	No Data
R198603040054C**	APS NE-6 TRANSMISSION LINE SRVY	No Data

*Arizona State Museum Report Number

**Coconino National Forest Report Number

Development/disturbances within the proposed NAH project area include three powerlines, five roads, four houses, and the FUTS/railroad grade (see Figure 1). Two southwest to northeast running powerlines cross the northern portion of the project area, and one north-south running powerline bisects the middle portion. Roads include Purple Sage Trail which winds through the project area roughly southeast to northwest, as well as at least three unnamed powerline roads, and an unnamed two-track which parallels S. Beulah Blvd within the eastern portion of the project area. There are two occupied residences just north of where Purple Sage Trail turns sharply west near the middle of the project area, and two unoccupied houses and associated outbuildings near the north-central portion of the project area, just east of the north-south oriented powerline. The railroad grade/FUTS trail has been excavated relatively recently for placement of a sewer line. Details on disturbance are described in more detail in the site description below.

Inventory of the proposed NAH facility project area resulted in the documentation of one new archaeological site (CW1), a newly recorded segment of Site AZ I:14:303(ASM), and four isolated occurrences (IO) (Table 2). Site CW1 is appears to be a historic fencerow marking the boundary of Fort Tuthill.

Table 2. Isolated occurrences recorded within the proposed NAH facility project area.

IO Number	UTM Coordinates	Description of Isolated Occurrence	Date Range
1	437618E, 3889719N	Historic 8oz. Pepsi bottle.	1940s (Stoddard 1991)
2	437942E, 3890204N	Crushed can, likely baking powder, and two flat top steel beverage cans, church key opened, in a 20 square meter area.	1935-1970s (Kimball 2009)
3	437402E, 3890680N	One hole-in-cap can (HIC), not represented in Simonis 1997. HIC cans generally date between 1880-1920.	1880-1920
4	437433E, 3890382N	One flat top steel beverage can, church key opened, marked “_____ Extra/Malt Liquor”.	1935-1970s (Kimball 2009)

CW1

Site Type: Historic Fencerow

Cultural/Temporal Affiliation: Euro-American / 1929-1940s

ARHP/NRHP Recommendation: Not eligible

Site CW1 is a segment of a longer row of historic masonry fenceposts, along the boundary with Fort Tuthill Recreation Area (Figure 2). The recorded segment measures 330 meters long and continues well to the south of the current project area. It is located along a powerline and associated two-track road which runs north-south between Sections 5 and 6 of Township 20 North, Range 7 East. Vegetation consists of moderately dense ponderosa pine forest with a sparse understory of mullein and native grasses and forbs. Cattail was also observed near a drainage pond near the south end of the recorded fencerow segment. Dense pine duff blankets approximately 90% of the ground surface, covering a grey/brown, semi-compact, shallow loam substrate over Kaibab limestone bedrock.

The fencerow is composed of posts, averaging 4 ft in height and constructed from shaped Kaibab limestone blocks laid into cement mortar (Figure 3). The posts typically measure 2 x 2 feet at their base and narrow to 1 x 1 feet at their peak. In the body of each post are two lengths of 4-inch-diameter ceramic pipe laid into the concrete to support fence rails. The stone posts are typically spaced about 13 feet apart. Over 60 stone posts were noted within the recorded segment, including partial and completely collapsed posts. Approximately one third of the posts have toppled over, and no fence rails remain. The site is bisected in its south-central portion by utility roads leading to powerline related structures. Aerial maps indicate the fencerow ends just north of where South Beulah Boulevard joins the State Route 89A (SR 89A) traffic circle and Fairgrounds Road and appears to have been partially demolished in this area during road construction. No artifacts were observed along the recorded segment.

This fencerow likely dates to the 1930s or 1940s as Fort Tuthill was established in 1928 as a field training facility for the 158th Infantry Regiment Arizona National Guard until 1948. Additionally, during the Great Depression federal programs such as the Federal Civil Works Agency (CWA), the Public Works Administration (PWA), and the Work Progress Administration (WPA), funded improvement projects in and around the fort. Site CW1 is likely a result of one of these depression-era projects which took place throughout the 1930s and 1940s. Fort Tuthill was designated a Coconino County park in 1955 and Fort

Tuthill Historic District (Site AZ I:14:34[ASM]) is listed on the National Register of Historic Places. The Fort Tuthill Historic District boundary was chosen to only include standing structures of the fort period (Ryden et al. 2004). Site CW1 falls outside of Historic District boundary, as the fencerow is located 50 meters east of the boundary.

The site is in poor condition with extensive degradation due to passive neglect. Other disturbances likely include purposeful demolition of the south end of the fencerow near the new traffic circle where Fairgrounds Road, South Beulah Boulevard., and SR 89A converge. Additionally, there is limited potential for intact and significant buried cultural material within the substrate. The site is likely related to a significant historic event related to the use of Fort Tuthill and possible Depression-Era works (Criterion A). However, as mentioned above, Site CW1 falls well outside of the Fort Tuthill Historic District, lacks definitive proof that it dates to this era, and is highly degraded. Site CW1 cannot be associated with an important historic person(s) (Criterion B); it does not embody the characteristics of a type, period, or method of construction (Criterion C), and it is unlikely to address important research questions related to the historic use of the Flagstaff area (Criterion D). Therefore, EnviroSystems recommends the site not eligible to the National Register.

AZ I:14:303(ASM)

Site Type: Historic Railroad Grade

Cultural/Temporal Affiliation: Euro-American / 1902–ca. 1937

ARHP/NRHP Recommendation: Not Eligible

GLO maps for the project-specific township and range were examined. The GLO map filed July 21, 1967, depicts a railroad running along the southern edge of Sinclair Wash in the N½ of the N½ of Section 32, and crossing the wash in the NW¼ of the NW¼ of Section 32 (see Figure 1). No resources were located specific to the railroad grade Section 31. This same railroad alignment shows up on the earlier Flagstaff West (1962), Arizona, USGS 7.5-munite quadrangle map. The alignment runs across the northwestern portion of the project area paralleling Purple Sage Trail to the west and is bisected by the road near where it turns into forest road 532.

A portion of this railroad bed, to the northeast of the current project area was recorded by EnviroSystems Management Inc. in 2019 (Brown 2019), and by Louis Berger and Associates in 1984 (Hohmann 1990). This previously recorded segment extends south from I-40 and is described as a railroad bed with many of the railroad ties remaining in place. The 1984 recording states that AZ I:14:303(ASM) is related to historic logging activities and is part of the 1909 Central Arizona Railroad System. The Coconino National Forest designation of this railroad bed as Site AR-03-04-03-700.

Received on January 25, 1995, Pat Stein completed an NRHP Multiple Property Documentation Form (MPDF) that includes lands logged in Coconino County using railroads constructed between 1887 and 1966 (See also, Stein 1993). These railroads were built and operated by the Arizona Lumber Company (later the Arizona Lumber and Timber Company which bought the Greenlaw Lumber Company), the Saginaw Lumber Company (later the Saginaw and Manistee Lumber Company), and the Flagstaff Lumber Manufacturing Company (eventually taken over by the W.M. Cady Lumber Company and Southwest Lumber Mills). This NRHP documentation form includes the railroad segment previously recorded as Site AZ I:14:303(ASM).

On April 1, 2021, EnviroSystems identified and recorded an 885-meter-long segment of the railroad grade along the eastern edge of the southern branch of Sinclair Wash, just west and north of Purple Sage Trail. The recorded portion of the railroad bed is generally raised between 1-foot or less at the north end and 3–4 feet at the south end, and measures 10–13 feet wide at the top of the flattened grade and 15–20 feet wide at the base in some places. A south branch of Sinclair Wash is located immediately to the west of the newly recorded segment. The entire length of the newly recorded segment was recently dug up for the installation of a sewer line (and possibly other utilities) and appears to have been rebuilt and bladed flat across the top and along its margins. Near the north end of the newly recorded segment the old railroad bed has been bladed nearly to ground level and is difficult to discern from the natural ground surface in places (*Figure 4*). Wattles for erosion control have been staked along the entire length of the west side of the newly recorded section. All of the newly recorded portion of the railroad is now in use as part of the Flagstaff Urban Trails System (FUTS).

There are no longer in-situ railroad ties as noted in the portion recorded in 1984; however, a local resident indicated that he occasionally finds railroad spikes when he mows the field to the north of the western end of the segment recorded in 2019 (Brown 2019). One small gauge railroad spike was located in the fill dirt between Purple Sage Trail and the newly recorded segment, just west of Tuthill Tank. Near where the newly recorded segment exits the north end of the project area a pile of partial railroad tracks and metal pipe were located between the west side of the newly recorded segment and the shallow bed of the south branch of Sinclair Wash (*Figure 5*).

The Arizona Lumber and Timber Company (AL&T), partly owned by the prominent Riordan brothers, began operation of a mill in Mill Town during the 1880s, located just west of today's South Milton Road in the City of Flagstaff (Stein 1993:20). The AL&T bought its first railroad for logging activities in 1888 from the Arizona Mineral Belt Railroad. The Arizona Mineral Belt Railroad, which ran southeast from Flagstaff (and eventually became the Clark Valley line), began operation in 1881 and was planned to run from Flagstaff to Globe; its intended goal was never completed (Irvin 1987). The AL&T continued to build and operate additional lines and spurs under the name of the Central Arizona Railway (CARY) until 1937. This system of railroad lines included Clark Valley (1887–1897), Rogers Lake South (ca 1900–1915), Greenlaw North (1917–1917), Greenlaw South (1918–1923), Rogers Lake North (1924–1926), Woody Ridge (1926–1927), and Munds Park and Howard Spring (1927–1931). Site AZ I:14:303(ASM), which ran south and southwest from what is now Flagstaff, was the head of several lines, and included Rogers Lake South line, Rogers Lake North line, Woody Ridge line (*Figure 6*), and Munds Park and Howard Springs line. Construction of this system began ca. 1902 (Ashworth 1991:86, in Stein 1993:22) as the Rogers Lake lines and was in use until 1926. At this time, the line was extended 1 mile to the south and became the Woody Ridge line. The Woody Ridge line was in use until roughly 1927 when cutting in this area was completed (Stein 1993:25). Immediately following this, the line was again extended further south, becoming the Munds Park-Howard Spring line, and was used until 1930/1931 (Stein 1993:30). Unlike many of the logging railroads, which were used solely for industrial purposes, some portions of CARY were also used as common passenger carriers (Stein 1993:9).

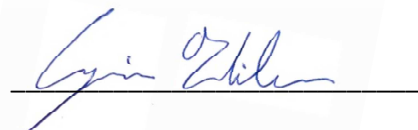
The entire CARY railroad system is eligible for listing to the National Register based on the previously completed MPDF. Of the two previously recorded segments of Site AZ I:14:303(ASM), one remains unevaluated (Hohmann 1990) and one is recommended as non-contributing (Brown 2019). The current

portion recorded by EnviroSystems is in poor condition. Despite the alignment's presence, it no longer retains any aspects of integrity due purposeful removal of railroad ties and recent extensive disturbances. Other than the railroad bed, which appears to have been rebuilt in places after the placement of a new sewer line, no features were identified and there is no indication of significant subsurface cultural deposits. Although the site can be associated with significant historic events (Criterion A); and can be related to the lives of important historic persons, specifically the Riordan family (Criterion B); the newly recorded portion of the site no longer embodies the characteristics of a type, period, or method of construction (Criterion C); in its current state it is unlikely to address research themes and related questions about the historic use of the Flagstaff region or north-central Arizona (Criterion D). EnviroSystems recommends this portion of Site AZ I:14:303(ASM) as non-contributing to the overall National Register eligibility recommendation.

In summary, on April 1, 2021, EnviroSystems conducted a cultural resources inventory of 190 acres of private land proposed for development of a new NAH facility, located south of Flagstaff and north of Fort Tuthill Recreation Area, to collect information on the distribution and character of all cultural resources, assess each site's condition and integrity, and evaluate site eligibility under the NRHP. The inventory resulted in the identification and documentation of 1 new archaeological site (CW1), a historic fencerow associated with Fort Tuthill Historic District (Site AZ I:14:34[ASM]); a newly recorded segment of a historic railroad grade, a portion of which has been previously recorded as Site AZ I:14:303(ASM); and 4 IOs. Although the recorded segment of site AZ I:14:303(ASM) meets Criteria A and B, it lacks the necessary elements of integrity to qualify for listing on the NRHP. Site CW1 is associated with Fort Tuthill, a portion of which is listed on the National Register and may also have been constructed by depression-era federal programs (Criterion A); however, the recorded segment lacks the necessary elements of integrity to qualify for listing on the NRHP. Therefore, neither portion of these two sites is recommended eligible. Isolated occurrences are typically not eligible to the National Register under any criteria.

Accordingly, no National Register eligible cultural resources (historic buildings and structures or archaeological materials) are present within the proposed NAH facility project area. Because there will be no adverse effect to any historic properties, EnviroSystems recommends that cultural resources clearance be granted and compliance with City Code 10-30.30.050 be considered complete. If you have any questions or require additional information, please do not hesitate to contact me or David Hart (Cultural Resources Management Division Director) at (928) 226-0236 or via email at cwilson@esmaz.com or dhart@esmaz.com.

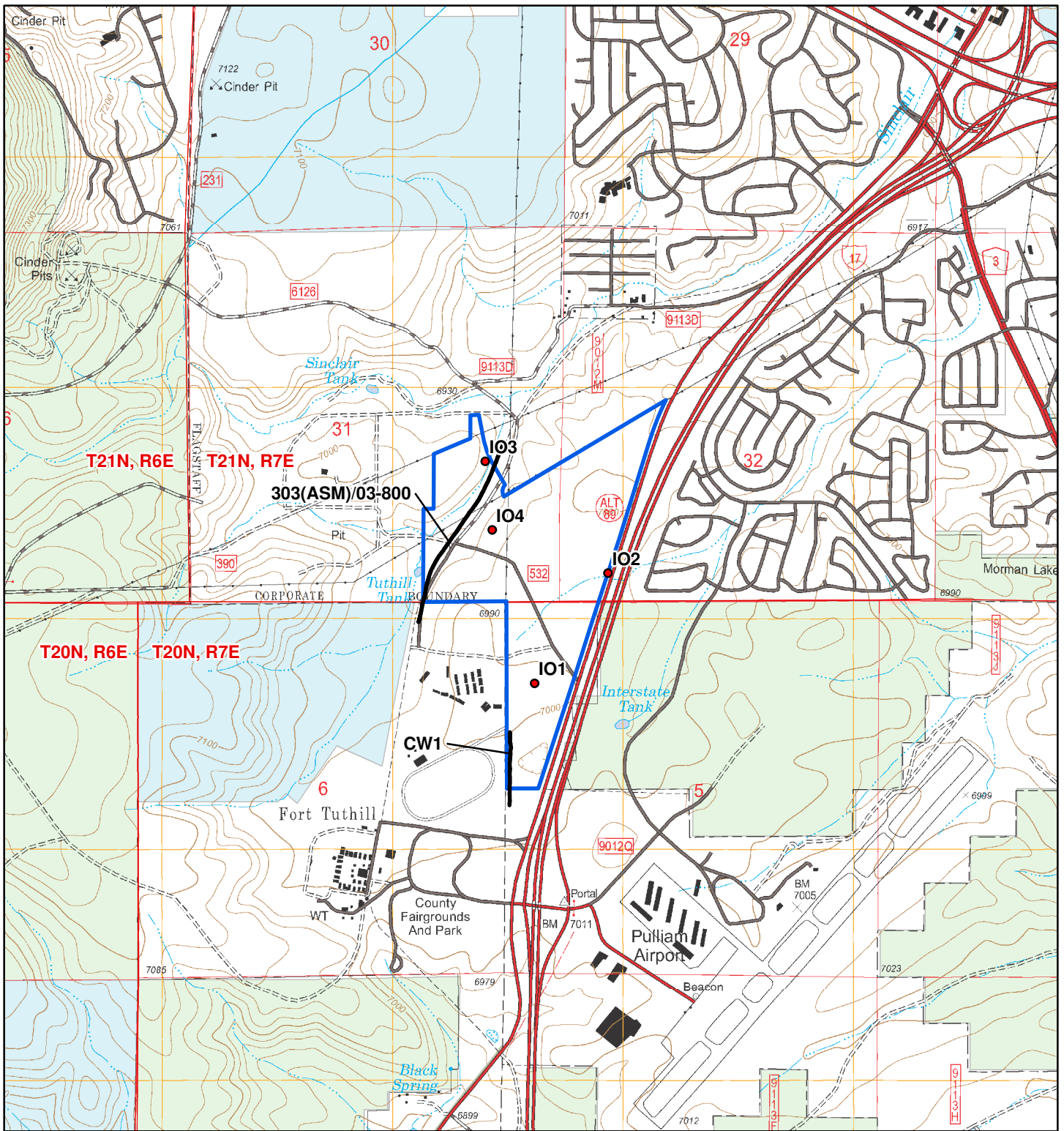
Sincerely,



Crispin Wilson Supervisory Archaeologist / Field Director
EnviroSystems Management, Inc.

REFERENCES

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**Proposed NAH Facility
Cultural Resources Inventory**

EnviroSystems Project No. 2099-21

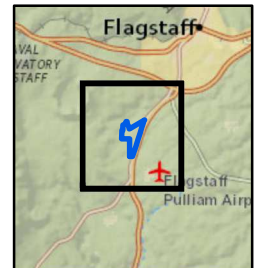
**Figure 1. Project area
and survey results.**



1:24,000

Legend

- Project area
- Linear site
- Isolated occurrence
- Private
- State
- CNF



0 0.25 0.5 Mile



0 0.25 0.5 Kilometer



Base map is Flagstaff West, AZ
(2009) USGS 7.5' quadrangle.





Figure 2. CW1, Historic row of stone and mortar fenceposts, facing southwest. 4/1/2021



Figure 3. CW1, Detail of complete stone and mortar fencepost. 4/1/2021



Figure 4. Site AZ I:14:303(ASM) overview near the northern project area boundary showing current disturbances (now part of the FUTS), facing south. 4/1/2021



Figure 5. Pile of steel railroad tracks and metal pipe along west side of historic railroad grade/FUTS. 4/1/2021

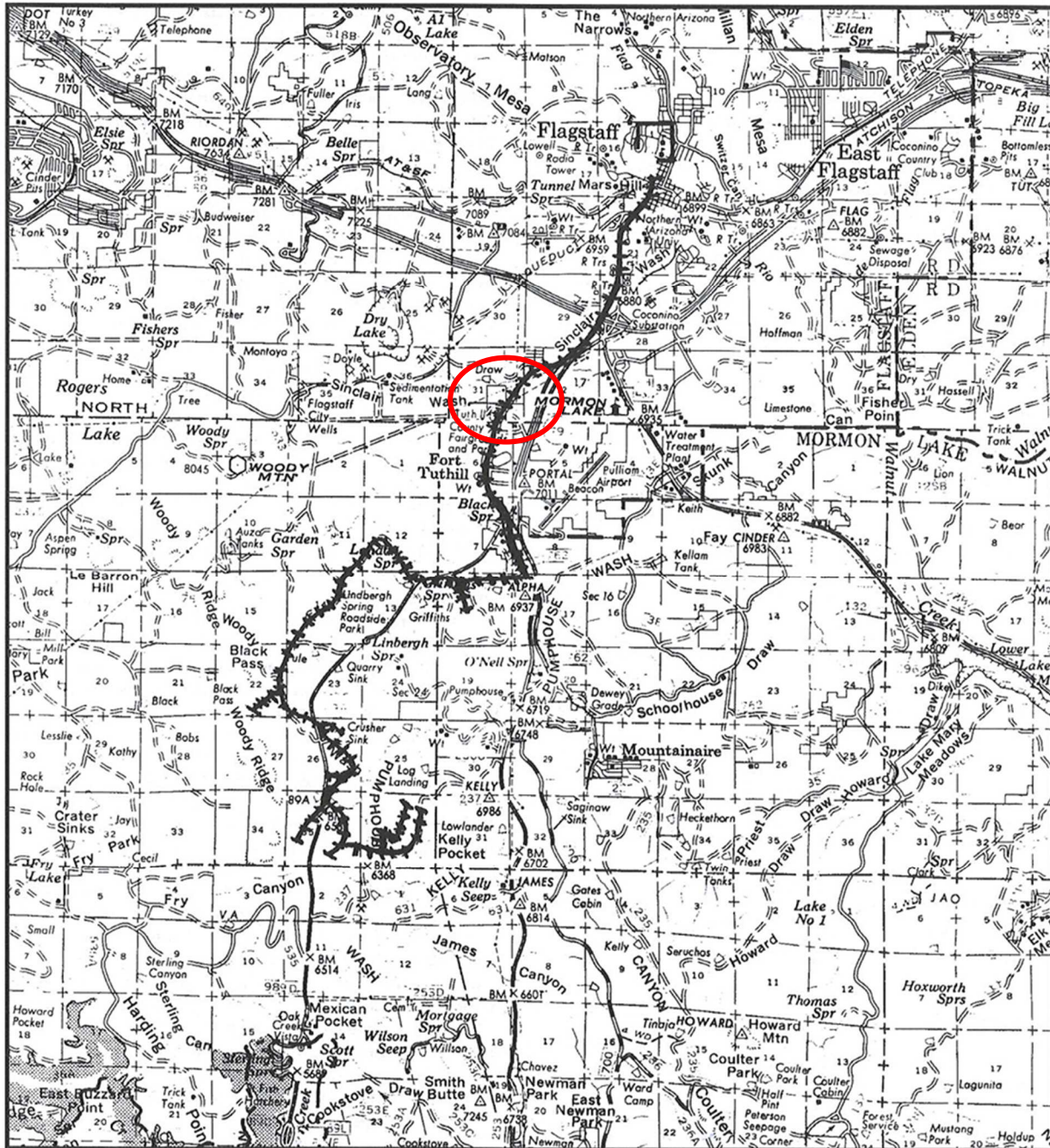


Figure 6. Woody Ridge line (Figure 14 from Stein 1993:23). The red oval indicates where the railroad bed crosses the southwest quarter of Section 31 within the project area.