



**Montezuma Castle National Monument
Camp Verde, Arizona**

**INTERDIVISIONAL MAINTENANCE FACILITY
FINDING OF NO SIGNIFICANT IMPACT**

Montezuma Castle National Monument, located in Yavapai County a few miles away from the town of Camp Verde, Arizona, was established in 1906 under the authority of the Antiquities Act to preserve a five-story, 20 room dwelling built by the Sinagua in the 13th century. Montezuma Castle (including the Montezuma Well Unit) and Tuzigoot National Monuments are administered as a single National Park Service (NPS) group. Of the three sites (Montezuma Castle, Montezuma Well, and Tuzigoot), Montezuma Castle has the highest annual visitation with 504,000 visitors (2009 data).

Since 1984, Montezuma Castle and Tuzigoot National Monuments have been leasing through the General Services Administration (GSA) a building located at the Cliff Castle Casino, off-site from the monuments. This leased building is where the Maintenance Division is located, which services both monuments. This lease will end in 2012, and renewing the lease would require substantial investment and extensive upgrades by the lessor: the electrical system is currently not-to-code; the information technology infrastructure is out of date; the HVAC system does not function efficiently; the roof needs repair; doors and windows need to be sealed and repaired; the worn and stained carpet needs to be replaced; vehicle and equipment storage areas have had security issues, and outside covered storage areas are not available.

An environmental assessment (EA) was prepared in 2010 to report on issues and options sought from the public about a maintenance facility, and to provide an opportunity for public comment on alternatives for a maintenance facility. Concerns identified during scoping and evaluated in the EA included tribal communications in case of inadvertent discoveries of cultural resources, and floodplain/wetland issues. The preferred alternative for the EA was selected after a careful review of resource and visitor impacts and public comment.

This document records 1) a Finding of No Significant Impact as required by the National Environmental Policy Act of 1969 and 2) a determination of no impairment as required by the NPS Organic Act of 1916.

PREFERRED ALTERNATIVE

The preferred alternative (selected action) will construct a 4000 sq. ft. maintenance facility and stabilize the historic maintenance shop. The new 4000 sq. ft. interdisciplinary maintenance facility will be constructed at a location approximately 200 ft. southeast of the existing 780 sq. ft. historic maintenance shop. The new building site including parking areas will cover approximately 0.55

acres. The newly built maintenance facility will provide the storage for all of the monument's divisions and cooperating association.

Non-historic alterations will be removed from the historic maintenance shop/garage. The historic maintenance building will be stabilized as part of the facility construction. The historic maintenance shop/garage will then be restored and rehabilitated to its original historic function as a maintenance garage and vehicle storage area.

The access road will be upgraded, paved, and widened to 22 ft. wide from the current dirt road in order to access this new facility and provide adequate transportation means for the various maintenance and delivery vehicles. The existing driveway between the historic maintenance building area and new building will also be widened to 22 ft. from the current dirt road.

MITIGATING MEASURES

- To minimize the amount of ground disturbance, staging and stockpiling areas will be located in previously disturbed sites, away from visitor use areas to the extent possible. All staging and stockpiling areas will be returned to pre-construction conditions following construction.
- Construction zones will be identified and fenced with construction tape, snow fencing, or some similar material prior to any construction activity. The fencing will define the construction zone and confine activity to the minimum area required for construction. All protection measures will be clearly stated in the construction specifications and workers will be instructed to avoid conducting activities beyond the construction zone as defined by the construction zone fencing.
- Revegetation and recontouring of disturbed areas will take place following construction, and will be designed to minimize the visual intrusion of the structure and enhance native species composition. Revegetation efforts will use native species and materials. All disturbed areas will be rehabilitated to reduce soil exposure. Weed control methods will be implemented to minimize the introduction of noxious weeds.
- Because disturbed soils are susceptible to erosion until revegetation takes place, standard erosion control measures such as silt fences and/or sand bags will be used to minimize any potential soil erosion.
- Fugitive dust generated by construction will be controlled by spraying water on the construction site, if necessary.
- To reduce noise and emissions, construction equipment will not be permitted to idle for long periods of time.
- To minimize possible petrochemical leaks from construction equipment, the contractor will regularly monitor and check construction equipment to identify and repair any leaks.
- Construction workers and supervisors will be informed about special status species. Contract provisions will require the cessation of construction activities if a species were discovered in the

project area, until park staff re-evaluates the project. This will allow modification of the contract for any protection measures determined necessary to protect the discovery.

- All ground disturbance will be monitored by the park archeologist and/or archeological technicians. Should construction unearth previously undiscovered cultural resources, work will be stopped in the area of any discovery and the monument will consult with the Arizona State Historic Preservation Officer (SHPO) and the Advisory Council on Historic Preservation, as necessary, according to §36 CFR 800.13, Post Review Discoveries. In the event that human remains are discovered during construction, provisions outlined in the Native American Graves Protection and Repatriation Act (1990) will be followed.
- The National Park Service will ensure that all contractors and subcontractors are informed of the penalties for illegally collecting artifacts or intentionally damaging archeological sites or historic properties. Contractors and subcontractors will also be instructed on procedures to follow in case previously unknown paleontological or archeological resources are uncovered during construction.
- Construction workers and supervisors will be informed about the special sensitivity of monument's values, regulations, and appropriate housekeeping.
- 2006 National Park Service *Management Policies* emphasize constructing facilities with sustainable designs and systems to minimize potential environmental impacts. Development will not compete with or dominate monument's features, or interfere with natural processes, such as the seasonal migration of wildlife or hydrologic activity associated with wetlands. To the extent possible, the design and management of facilities will emphasize environmental sensitivity in construction, use of nontoxic materials, resource conservation, and recycling. The National Park Service also reduces energy costs, eliminates waste, and conserves energy resources by using energy-efficient and cost-effective technology. Energy efficiency is incorporated into the decision-making process during the design and acquisition of buildings, facilities, and transportation systems that emphasize the use of renewable energy sources.
- Construction activities generating high levels of noise will be avoided as much as possible during the sensitive wildlife breeding season of May-August.
- Activities generating potential soil runoff events will be avoided during the heavy monsoon periods of July.

ALTERNATIVES CONSIDERED

Alternatives considered included remaining in the current Cliff Castle Casino building with the existing conditions; constructing a 4000 sq. ft. maintenance facility including interdivisional storage and stabilizing the historic maintenance shop as a historic garage (the preferred alternative); constructing a 3188 sq. ft. maintenance facility and restoring the 780 sq. ft. historic maintenance shop as a storage area; constructing a 3188 sq. ft. maintenance facility as an addition to the 780 sq. ft. historic maintenance shop; and leasing a different maintenance facility in Camp Verde.

ENVIRONMENTALLY PREFERRED ALTERNATIVE

The preferred alternative, “Constructing a 4000 sq. ft. maintenance facility and stabilizing the historic maintenance shop as a historic garage,” is also the environmentally preferred alternative. The environmentally preferred alternative is the alternative that will promote the national environmental policy as expressed by §101 of the National Environmental Policy Act. This includes alternatives that:

- (1) fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;
- (2) assure for all generations safe, healthful, productive, and esthetically and culturally pleasing surroundings
- (3) attain the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences;
- (4) preserve important historic, cultural and natural aspects of our national heritage and maintain, wherever possible, an environment that supports diversity and variety of individual choice
- (5) achieve a balance between population and resource use that will permit high standards of living and a wide sharing of life’s amenities; and
- (6) enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

The “Constructing a 4000 sq. ft. maintenance facility and stabilizing the historic maintenance shop as a historic garage” alternative (the preferred alternative) will provide the maximum protection of park resources, park values, human health and safety; and best achieves a balance between beneficial and resource uses for Montezuma Castle and Tuzigoot National Monuments. As a permanent facility, the new maintenance facility will be used by future generations. By having the interdivisional storage in a single location and stabilizing the historic maintenance shop (later restoring the building to its original function as a garage/shop), this will both increase the efficiency of NPS as well as preserving the historic aspect. By separating the housing area from the new maintenance area, the preferred alternative promotes safe, healthful, productive, and esthetically pleasing surroundings. Building design for each action alternative will include environmentally sustainable features.

WHY THE PREFERRED ALTERNATIVE WILL NOT HAVE A SIGNIFICANT EFFECT ON THE HUMAN ENVIRONMENT

As defined in 40 CFR §1508.27, significance is determined by examining the following criteria:

Impacts that may be both beneficial and adverse. A significant effect may exist even if the agency believes that on balance the effect will be beneficial.

Minor impacts of the preferred alternative will result from construction activities for the new maintenance facility. The construction activities will disturb 1.3 acres of soil (some of which has already been disturbed with current and past storage of rock piles and heavy equipment). Plants and mesquite trees in the 1.3 acres will also be removed during construction. Mitigating measures include clearly identifying construction zones with tape or fencing to confine construction activities,

and revegetating areas with native plants following facility construction. Water quality downstream may be affected in the short-term during construction activities, but will be mitigated using standard erosion control measures such as silt fences and/or sand bags to minimize any potential soil erosion from disturbed soils. Activities generating potential soil runoff events will also be avoided during the heavy monsoon periods of July. Water quantity due to increase in water consumption is long-term and is estimated to be equivalent to a water consumption for a large house. Construction activities may affect sensitive wildlife species in the short-term and will be mitigated by avoiding construction activities generating high levels of noise as much as possible in the sensitive breeding season of May-August. Stabilizing, rehabilitating, and restoring the historic maintenance shop/garage back to a garage will result in a minor long-term beneficial effect. Having a single location for interdivisional storage will increase the efficiency in park operations, another beneficial effect.

Degree of effect on public health or safety

The preferred alternative will have an overall beneficial effect on public health and safety, particularly for the monument's employees that will regularly use the new maintenance facility. Employee health and safety is expected to increase due to the new maintenance facility building being up-to-code for the electrical and HVAC systems as well as being structurally sound and rodent-proof. Because the maintenance facility will be constructed in an administrative area where the general public is not allowed to enter, this project is not expected to cause an appreciable change in the number of visitor safety incidences. However, the preferred alternative will build a first aid area as part of the maintenance facility in order to treat visitors away from public view. This building was also described in the preferred alternative for the 2010 Montezuma Castle/Tuzigoot National Monuments' General Management Plan to increase employee and public safety (FONSI expected in October 2010).

Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas

As described in the EA, adverse effects to natural resources (soils, vegetation, water resources, and species of special concern) are negligible to minor while effects to cultural resources (historic structures) are minor beneficial. There are no prime farmlands, wetlands, floodplains, wild and scenic rivers, or ecologically critical areas affected by the preferred alternative.

Degree to which effects on the quality of the human environment are likely to be highly controversial

Throughout the environmental process, the proposal to construct a new maintenance facility has not been highly controversial, nor are the effects expected to generate future controversy. The low number of public comments (two letters during the public scoping period and one letter during the public review of the EA) supports the conclusion drawn in the EA that there are no highly controversial effects. This building was furthermore described in the preferred alternative for the 2010 Montezuma Castle/Tuzigoot National Monuments' General Management Plan and did not elicit any comments at that time (FONSI expected in October 2010).

Degree to which the possible effects on the quality of the human environment are highly uncertain or involve unique or unknown risks

The effects of building a park maintenance facility has occurred in many other park units, are fairly straightforward, and do not pose uncertainties. The environmental process has not identified any effects that may involve highly unique or unknown risks.

Degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration

This building was described in the preferred alternative for the 2010 Montezuma Castle/Tuzigoot National Monuments' General Management Plan (FONSI expected in October 2010). This was an issue for our commentor who expressed concern over "the possible proliferation of these types of buildings in the future." The site for the preferred alternative was selected because the area has already been partially disturbed and will require less disturbance of native materials than an undisturbed site. The preferred alternative also went through rigorous internal scoping processes to ensure that the immediate and expected future office and storage needs were addressed by this maintenance facility. Furthermore, the future National Register of Historic Places District Nomination for the Montezuma Castle Administrative Area project (listed under "Cumulative Effects" in the EA) will be listing historic buildings of the Administrative Area on the National Register which will identify historically significant details for the district. The preferred alternative is not expected to set a precedent for future actions with significant effects, especially as building a maintenance facility is not a new action in the National Park Service system, nor does preferred alternative represent a decision in principle about a future consideration.

Whether the action is related to other actions with individually insignificant but cumulatively significant impacts

No major (significant) cumulative effects were identified in the EA. A minor beneficial impact will be the combination of restoring the historic maintenance shop/garage to its original structure and purpose and its contribution to the future National Register of Historic Places District Nomination.

Degree to which the action may adversely affect districts, sites, highways, structures, or objects listed on National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.

The historic maintenance garage was determined eligible for the National Register of Historic Places on July 23, 1994 under Criterion C. Park staff met with the Arizona State Historic Preservation Office (SHPO) on April 20, 2010 to discuss project objectives. The Arizona SHPO supported the preservation and reuse of the historic garage and the finding of a "no adverse effect." Compliance with §106 of the National Historic Preservation Act was completed by SHPO concurrence with the NPS determination of "no adverse effect" on September 9, 2010.

Degree to which the action may adversely affect an endangered or threatened species or its critical habitat

The U.S. Fish and Wildlife Service indicated in a letter dated June 22, 2010 that there are no listed species that occur within or immediately adjacent to the proposed construction site for the preferred alternative.

Whether the action threatens a violation of Federal, state, or local environmental protection law

This action violates no federal, state, or local environmental protection laws.

APPROPRIATE USE

Sections 1.5 and 8.12 of NPS *Management Policies* underscore the fact that not all uses are allowable or appropriate in units of the National Park System. The proposed use was screened to determine consistency with applicable laws, executive orders, regulations, and policies; consistency with existing plans for public use and resource management; actual and potential effects to park resources; total costs to the Park Service; and whether the public interest will be served. Section 9.4.4 of NPS *Management Policies* titled “Maintenance Structures” states that

Maintenance structures will be consistent in design, scale, texture, and details with other park facilities. Optimally, they will be screened or located in areas remote from public use.

Therefore, the Park Service finds that the preferred alternative is an appropriate use. Because the application of mitigating measures is expected to be successful in ensuring that no major adverse impacts will occur and that satisfactory restoration of the disturbed area is expected to be achievable, implementation of the preferred alternative will not result in any unacceptable impacts.

As described in the EA, a maintenance operations facility is a common and vital structure in most park units. Proper location, sizing, as well as construction materials and methods will ensure that unacceptable impacts to park resources and values will not occur. The proposed interdivisional maintenance facility is consistent with the consistent with the 2010 Montezuma Castle/Tuzigoot National Monuments’ *General Management Plan* and other related park plans. With this in mind, the NPS finds that the use and construction of an interdivisional maintenance facility building is appropriate at Montezuma Castle National Monument.

IMPAIRMENT

National Park Service’s 2006 Management Policies require analyses of potential effects to determine whether or not actions would impair park resources. The fundamental purpose of the national park system, established by the Organic Act and reaffirmed by the General Authorities Act, as amended, begins with a mandate to conserve park resources and values. National Park Service managers must always seek ways to avoid, or to minimize to the greatest degree practicable, adversely impacting park resources and values.

However, the laws do give the National Park Service the management discretion to allow impacts to park resources and values when necessary and appropriate to fulfill the purposes of a park, as long as the impact does not constitute impairment of the affected resources and values. Although Congress has given the National Park Service the management discretion to allow certain impacts within park, that discretion is limited by the statutory requirement that the National Park Service must leave park resources and values unimpaired, unless a particular law directly and specifically provides otherwise.

The prohibited impairment is an impact that, in the professional judgment of the responsible National Park Service manager, would harm the integrity of park resources or values, including the opportunities that otherwise would be present for the enjoyment of these resources or values. An impact to any park resource or value may, but does not necessarily, constitute an impairment, but an impact would be more likely to constitute an impairment when there is a major or severe adverse effect upon a resource or value whose conservation is:

- necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park;
- key to the natural or cultural integrity of the park; or
- identified as a goal in the park's general management plan or other relevant NPS planning documents.

An impact would be less likely to constitute an impairment if it is an unavoidable result of an action necessary to pursue or restore the integrity of park resources or values and it cannot be further mitigated. Impairment may result from National Park Service activities in managing the park, visitor activities, or activities undertaken by concessioners, contractors, and others operating in the park.

In analyzing impairments in the NEPA analysis for this project the NPS takes into account the fact that if an impairment were likely to occur, such impacts would be considered to be major or significant under CEQ regulations. This is because the context and intensity of the impact would be sufficient to render what would normally be a minor or moderate impact to be major or significant. Taking this into consideration, NPS guidance documents note that "Not all major or significant impacts under a NEPA analysis are impairments. However, all impairments to NPS resources and values would constitute a major or significant impact under NEPA. If an impact results in impairment, the action should be modified to lessen the impact level. If the impairment cannot be avoided by modifying the proposed action, that action cannot be selected for implementation." ("Interim Technical Guidance on Assessing Impacts and Impairment to Natural Resources," National Park Service, Natural Resource Program Center, July 2003.)

The NPS's threshold for considering whether there could be an impairment is based on whether an action would have major (or significant) effects. The environmental assessment for this project demonstrated that there would be less than major effects on all park resources and values. In addition, mitigation measures would further lessen the degree of impact to and help promote the protection of these resources and values. In conclusion, as guided by this analysis, good science and scholarship, advice from subject matter experts and others who have relevant knowledge and experience, and the results of public involvement activities, it is the Superintendent's professional judgment that there would be no impairment of park resources and values from implementation of the preferred alternative.

PUBLIC INVOLVEMENT

The environmental assessment was made available for public review and comment during a 30-day period technically ending August 26, 2010, but extended to September 1, 2010 due to an editorial error in a local newspaper. Only one response was received, even with the extended comment period.

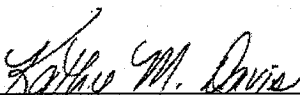
Substantive comments to the EA centered on 2 topics: (1) questioning if the off-site Camp Verde building was leased, why restoring the historic maintenance shop/garage back to its original function was not an option, and (2) possible proliferation of these types of buildings in the future beyond the maintenance facility project. These concerns resulted in no changes to the text of the environmental assessment but are addressed in errata sheets attached to this FONSI. The FONSI and errata sheets will be sent to all commentors.

CONCLUSION

As described above, the preferred alternative does not constitute an action meeting the criteria that normally require preparation of an environmental impact statement (EIS). The preferred alternative will not have a significant effect on the human environment. Environmental impacts that could occur are limited in context and intensity, with generally adverse impacts that range from localized to widespread, short- to long-term, and negligible to moderate. There are no unmitigated adverse effects on public health, public safety, threatened or endangered species, sites or districts listed in or eligible for listing in the National Register of Historic Places, or other unique characteristics of the region. No highly uncertain or controversial impacts, unique or unknown risks, significant cumulative effects, or elements of precedence were identified. Implementation of the action will not violate any federal, state, or local environmental protection law.

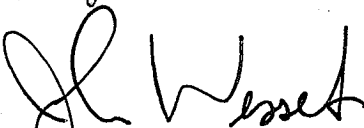
Based on the foregoing, it has been determined that an EIS is not required for this project and thus will not be prepared.

Recommended:


Superintendent

09/10/2010
Date

Approved:


Regional Director, Intermountain Region

9/17/10
Date

ERRATA SHEETS

INTERDIVISIONAL MAINTENANCE FACILITY ENVIRONMENTAL ASSESSMENT MONTEZUMA CASTLE NATIONAL MONUMENT

Substantive comments to the EA centered on 2 topics: (1) questioning if the off-site Camp Verde building was leased, why restoring the historic maintenance shop/garage back to its original function was not an option, and (2) possible proliferation of these types of buildings in the future beyond the maintenance facility project.

TEXT CHANGES

None.

SUBSTANTIVE COMMENTS

Why Alternative E (Another Lease at Camp Verde) does not include restoring the historic maintenance shop/garage

Comment:we would like to see additional consideration of Alternative E as it will have the least impact on park resources by utilizing offsite maintenance facilities and therefore limiting development and ground disturbance. Ideally, it could be coupled with the restoration of the historic maintenance garage/shop, which would include the removal of non-historic alterations as well as stabilization and rehabilitation of the structure. The EA states: "Restoring the historic maintenance shop/garage back to its original function as a garage or as a storage area would not be an option in this alternative because there would be no temporary or permanent location at the monument that could store the volume of the park and cooperating association's items currently in storage." It is unclear to us why the restoration and use of this facility could not be accommodated with the offsite facility. Perhaps the NPS could provide some additional information on this.

Response: There are 780 sq. ft. of storage currently in the non-historic additions for the historic maintenance garage/shop. This storage is currently used by our cooperating association (Western National Parks Association) and by all of our divisions, accessed frequently throughout the day by different personnel for the Montezuma Castle Visitor Center operations. The Visitor Center at Montezuma Castle has the highest visitation of all of our sites (over 500,000 visitors annually).

In order to restore the historic maintenance shop/garage, the non-historic additions must be removed/demolished. If a building were leased by the monument in Camp Verde (Alternative E) and the historic maintenance shop/garage's non-historic additions were removed, there would be no location to place the volume of materials stored in the 780 sq. ft. of storage. While off-site storage could be possible, this would greatly lessen the efficiency for visitor center operations and increase the carbon footprint, as the storage areas are accessed by both the Western National Parks Association and park staff frequently during the day. Because there are no locations at Montezuma Castle National Monument to store the volume of materials located in the 780 sq. ft. additions, the non-historic additions to the historic maintenance shop/garage could not be removed were the monument to lease an off-site maintenance facility in Camp Verde.

The preferred alternative allows the park to move the volume of stored materials from the 780 sq. ft. non-historic additions into the new maintenance facility. With the non-historic additions no longer providing a necessary function, these additions can be removed/demolished and the historic maintenance shop/garage can be restored.

Concern for future cumulative effects

Comment: The Preferred Alternative, Alternative B, does create a limited amount of ground disturbance and overall, if constructed properly, should have a minimal impact on the monuments. One key concern however, is the possible proliferation of these types of buildings in the future. We have seen this happen in other parks and monuments, so want to encourage a minimalist approach to development in the monument.

The list of cumulative projects looking out five to ten years listed in the EA includes a Determination of Eligibility for the National Register for the Montezuma Castle Historic District, Rehabilitate Historic House Unit #5, Integrated Pest Management Plan/Environmental Assessment for Montezuma Castle and Tuzigoot, Rehabilitate Montezuma Castle Visitor Center Bookstore Addition, and Upgrade Montezuma Castle Visitor Center Toilets. The 2010 Montezuma Castle and Tuzigoot General Management Plan (FONSI pending) only lists the maintenance facility building (the preferred alternative) for new building construction projects at Montezuma Castle National Monument. Finally, this maintenance facility building was described in the preferred alternative for the 2010 Montezuma Castle/Tuzigoot National Monuments' General Management Plan (FONSI expected in October 2010).

Were a construction project planned in the future, the National Environmental Policy Act would require the park to inform the public and conduct separate environmental analyses.