

## Categorical Exclusion

(Version: OCT06)

Compliance Tracking Number: 2007-032

PEPC Project Number: 17557

### A. PROJECT INFORMATION

**Title:** Wawona Tunnel Ventilation System Repairs

**Location:** Yosemite Valley, Mariposa County, California

**Project Manager:** Michael Pieper, Facilities Management, Yosemite National Park

### B. COMPLIANCE DETERMINATION

This project is an action that has been determined to result in no measurable environmental effects. It is therefore categorically excluded from further National Environmental Policy Act analysis under Categorical Exclusion: DO12 3.4 C (4) - *Routine maintenance and repairs to cultural resource sites, structures, utilities, and grounds if the action falls under an approved Historic Structures Preservation Guide or would not adversely affect the cultural resource.*

Necessary compliance coordination has been completed regarding the National Historic Preservation Act, the Wilderness Act, the Wild and Scenic Rivers Act, and the Endangered Species Act, as applicable. Environmental impacts will be negligible or less when the project is implemented with the conditions stipulated under **Project Mitigations and Conditions** in **Section I** at the end of the attached *Environmental Screening Form*.

Additional supporting information for this determination and the stipulated conditions can be found in the following attachments (when checked):

- ☒ *Environmental Screening Form*
- ☒ *Preservation Assessment Form (YOSE-XXX)*
- ☐ *Wilderness Minimum Requirement Analysis*
- ☐ *Wild and Scenic River Section 7 Determination*
- ☐ Other:

### C. DECISION

*On the basis of the environmental impact information in the statutory compliance file, with which I am familiar, I am categorically excluding the described project from further NEPA analysis. No exceptional circumstances or conditions in DO12 3.5 or 3.6 apply and the action is fully described in DO12, Section 3.4.*

//R.Kevin Cann//  
Michael J. Tollefson, Superintendent

3/22/07  
Date

Original: Statutory Compliance File  
cc: Project Proponent

Attachments (2)

*The signed original of this document is on file at the Environmental Planning and Compliance Office in Yosemite National Park.*



# United States Department of the Interior

NATIONAL PARK SERVICE

Yosemite National Park  
P.O. Box 577  
Yosemite, California 95389

IN REPLY REFER TO:  
L7617 (YOSE-PM)

## Memorandum

To: Michael Pieper, Project Manager, Facilities Management, Yosemite National Park

From: Superintendent, Yosemite National Park

Subject: Notice to Proceed, 2007-032 Wawona Tunnel Ventilation System Repairs

Your proposed project is an action that has been determined to result in no measurable environmental effects. It is therefore categorically excluded from further National Environmental Policy Act analysis under Categorical Exclusion: DO12 3.4 C (4) - *Routine maintenance and repairs to cultural resource sites, structures, utilities, and grounds if the action falls under an approved Historic Structures Preservation Guide or would not adversely affect the cultural resource.*

Necessary compliance coordination has been completed regarding the National Historic Preservation Act, the Wilderness Act, the Wild and Scenic Rivers Act, and the Endangered Species Act, as applicable. This project clearance is valid providing that you adhere to any conditions that may be stipulated in the enclosed *Categorical Exclusion Form* and associated documents when implementing this project.

//R.Kevin Cann//  
Michael J. Tollefson, Superintendent

3/22/07  
Date

Enclosure (with attachments)

cc: Statutory Compliance File

*The signed original of this document is on file at  
the Environmental Planning and Compliance  
Office in Yosemite National Park.*

## Environmental Screening Form

(Version: NOV06)

Compliance Tracking Number: 2007-032

PEPC Project Number: 17557

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### A. PROJECT INFORMATION

**Title:** Wawona Tunnel Ventilation System Repairs

**Location:** Yosemite Valley, Mariposa County, California

**Project Manager:** Michael Pieper, Facilities Management, Yosemite National Park

### B. PROJECT DESCRIPTION AND BACKGROUND

The project includes repairing the failed ventilation system in the Wawona tunnel and reducing the hazards associated with the tunnel's failed ventilation system. The work plan is to replace the existing ventilation fan motors and upgrade the existing hazardous gas monitoring system inside the tunnel. Currently, the hazardous gas monitoring system is inactive. The upgraded gas monitoring system will be tied into a remote sensor that would notify emergency response via the existing phone line in the tunnel. If the gas levels are hazardous it could also trigger an emergency alarm or phone call to the appropriate emergency response, such as dispatch. This will ensure that if the gas levels become hazardous, additional fans can be turned on or the tunnel will close until the gas levels are no longer hazardous to someone driving or walking through the tunnel. Were there a need to close the tunnel due to hazardous conditions we would try to activate the existing semaphore arms (gate) at the end of the tunnel. The upgraded gas monitoring systems would monitor the level of carbon monoxide and nitrous oxide emitted from vehicle exhaust fumes. If triggered, the exhaust fans would be activated to clear and maintain air quality and visibility. Exhaust fans can be independently operated to reduce the exhaust gas concentration. These fans generate a thrust that can propel air along the tunnel in either direction. Final design of exhaust fans will be in keeping with historical characteristics.

If funding allows, the tunnel would be cleaned. Proposed cleaning activities include the use of a special tunnel washer truck with large rotating brushes (on an articulated arm) spreading a mixture of soap and water while scrubbing the tunnel walls. A flush truck would follow that sprays water from an arc of nozzles to remove the soap and grime and leaving behind clean surfaces. All of the soap and grime would be contained or filtered. The tunnel ventilation system is then turned up full blast to dry the roadway.

**Table B1 – Background Information**

	Yes	No	N/A	Explanation/Notes
1. Did NPS staff conduct a site visit? If yes, list attendees. If no, explain.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Facilities and Cultural Resources staff.
2a. Is the project providing compliance for an action associated with but not covered by an approved plan? (Identify the plan and provide a section or page citation.); OR	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2b. Is the project in an approved plan? (Identify the plan and provide a section or page citation.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2c. Is the project consistent with that plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2d. Is the Plan's CE, FONSI, or ROD current?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3a. Are there any interested or affected parties?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
3b. Has a diligent effort been made to communicate with them?	<input type="checkbox"/>			
4a. Are there any affected agencies or tribes?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
4b. Has consultation been completed?	<input type="checkbox"/>			

**Table B2 – Environmental Screening Form Attachments (provide Attachment letter—A, B, etc.)**

	Yes	No	N/A	Explanation/Notes
1. Maps: 2 required (vicinity map & site map)	<input checked="" type="checkbox"/>			Vicinity map; see Attachment A.
2. Drawings (e.g., design, construction)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Tunnel construction details; see Attachment B.
3. Site Plans	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
4. Photographs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Existing exhaust fans; see Attachment C.
5. Non-NEPA/NHPA Approvals (Explain)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
6. Other (Explain)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

### C. ASSESSMENT OF POTENTIAL RESOURCE EFFECTS

Are any impacts possible on the following resources?	Yes	No	N/A	Data Needed to Determine/Notes
1. Geologic resources: soils, bedrock, streambeds, etc	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. From geohazards	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
3. Air quality	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Negligible: temporary dust accumulation during project work.
4. Soundscapes	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Negligible: temporary noises during project work.
5. Water quality or quantity	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
6. Stream flow characteristics	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
7. Marine or estuarine resources	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
8. Floodplains or wetlands	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
9. Land use, including occupancy, income, values, ownership, type of use	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
10. Rare or unusual vegetation – old growth timber, riparian, alpine	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
11. Species of special concern (plant or animal; state or federal listed or proposed for listing) or their habitat	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
12. Unique ecosystems, biosphere reserves, World Heritage Sites	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Yosemite National Park is a World Heritage site; no historic properties would be adversely affected by implementing this project; see Section F, National Historic Preservation Act Checklist, below.
13. Unique or important wildlife or wildlife habitat	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
14. Unique or important fish or fish habitat	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
15. Introduce or promote non-native species (plant or animal)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	See Section D. Mandatory Criteria, below.
16. Recreation resources, including supply, demand, visitation, activities, etc.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
17. Visitor experience, aesthetic resources	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The Wawona Tunnel Ventilation System Repairs will improve the safety of all traffic through the tunnel.
18. Cultural resources including cultural landscapes, ethnographic resources	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Wawona Tunnel is on the List of Classified Structures; the assessment of effect is "No Effect; see Section F, National Historic Preservation Act Checklist, below, and the attached XXX.
19. Socioeconomics, including employment, occupation, income changes, tax base, infrastructure	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
20. Minority and low income populations, ethnography, size, migration patterns, etc.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
21. Energy resources	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
22. Other agency or tribal land use plans or policies	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
23. Resource, including energy, conservation potential	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
24. Urban quality, gateway communities, etc.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
25. Long-term management of resources or land/resource productivity	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
26. Other important environment resources (e.g. geothermal, paleontological resources)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>Comments, Mitigations and Conditions:</b>				
1. None				

**D. MANDATORY CRITERIA**

<b>If implemented, would the proposed action:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Data Needed to Determine/Notes</b>
1. Have material adverse effects on public health or safety?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. Have adverse effects on such unique characteristics as historic or cultural resources; park, recreation, or refuge lands; wilderness areas; wild or scenic rivers; national natural landmarks; sole or principal drinking water aquifers; prime farmlands; wetlands; floodplains; or ecologically significant or critical areas, including those listed on the National Register of Natural Landmarks?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Mitigated: see Section F, Historic Preservation Act Checklist, below
3. Have highly controversial environmental effects?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
4. Have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
5. Establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
6. Be directly related to other actions with individually insignificant, but cumulatively significant, environmental effects?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
7. Have adverse effects on properties listed or eligible for listing on the National Register of Historic Places?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
8. Have adverse effects on species listed or proposed to be listed on the List of Endangered or Threatened Species or have adverse effects on designated Critical Habitat for these species?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
9. Require compliance with Executive Order 11988 (Floodplain Management), Executive Order 11990 (Protection of Wetlands), or the Fish and Wildlife Coordination Act?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
10. Threaten to violate a federal, state, local, or tribal law or requirement imposed for the protection of the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
11. Involve unresolved conflicts concerning alternative uses of available resources (NEPA sec. 102(2)(E))?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
12. Have a disproportionate, significant adverse effect on low-income or minority populations (EO 12898)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
13. Restrict access to and ceremonial use of Indian sacred sites by Indian religious practitioners or adversely affect the physical integrity of such sacred sites (EO 130007)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
14. Contribute to the introduction, continued existence, or spread of federally listed noxious weeds (Federal Noxious Weed Control Act)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Mitigated: see Condition 1, below.
15. Contribute to the introduction, continued existence, or spread of non-native invasive species or actions that may promote the introduction, growth or expansion of the range of non-native invasive species (EO 13112)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Mitigated: see Condition 1, below.
16. Require a permit from a federal, state, or local agency to proceed, unless the agency from which the permit is required agrees that a CE is appropriate?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
17. Have the potential for significant impact as indicated by a federal, state, or local agency or Indian tribe?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
18. Have the potential to be controversial because of disagreement over possible environmental effects?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
19. Have the potential to violate the NPS Organic Act by impairing park resources or values?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

**Comments, Mitigations and Conditions:**

1. Ensure that all equipment and materials brought into the park are free of non-native, invasive plants and animals, and noxious weeds. All staff working on site shall be informed of and follow best management practices for preventing the introduction and spread of non-native, invasive species as described in Division 1 Specifications, Section 1355.

### E. SPECIAL STATUS SPECIES CHECKLIST

Within the area of potential effect, are there:	Yes	No	N/A	Data Needed to Determine/Notes
1. Listed or proposed threatened or endangered species (Federal or State)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. Species of special concern (Federal or State)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
3. Park rare plants or vegetation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
4. Potential habitat for any special-status species listed above?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
If "yes" to any of the above questions, a Special-Status Species Checklist must be completed and attached.				
<b>Comments, Mitigations and Conditions:</b>				
1. None				

### F. NATIONAL HISTORIC PRESERVATION ACT CHECKLIST

Within the area of potential effect:	Yes	No	N/A	Data Needed to Determine/Notes
1. Will there be ground disturbance?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. Are there any archeological sites?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
3. Are there any Native American Indian traditional cultural resources?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
4. Is there a historic property (a building, structure, feature, or all or any part of an archeological district or site, or a historic district or site, or any associated landscape element) that is listed or eligible for listing on the <i>National Register</i> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Wawona Tunnel is listed on the Multiple Properties Document: the assessment of effect is "No Effect;" see the attached XXX.
5. Is there a National Historic Landmark?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
6. Is there a structure(s) on the park's <i>List of Classified Structures</i> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Wawona Tunnel: the assessment of effect is "No Effect;" see the attached XXX.
7. Is there any cultural resource requiring an evaluation of eligibility as a historic property under NHPA, Section 106, before an affect determination can be made?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
8. Would there be alteration of any historic property or associated landscape element covered by 2-7, above?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
If "yes" to <u>any</u> of the above, then an Assessment of Effects form (YOSE-XXX) must be completed and attached.				
<b>Mitigations and Conditions:</b>				
1. None				

### G. WILDERNESS ACT CHECKLIST

Is the proposed project:	Yes	No	N/A	Data Needed to Determine/Notes
1. Within designated Wilderness?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. Within a Potential Wilderness Addition?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
If "yes" to either of the above, then a Wilderness Minimum Requirements Analysis must be completed and attached.				
<b>Mitigations and Conditions:</b>				
1. None				

## H. WILD AND SCENIC RIVERS ACT CHECKLIST

Does the proposed project:	Yes	No	N/A	Data Needed to Determine/Notes
1. Fall within a wild and scenic river corridor? If "yes", name the river(s)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Merced River
2. Fall within the bed and banks AND affect the free-flow of the river?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
3. Potentially affect water quality of the area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
4. Diminish or other wise change the values for which the river was designated as a Wild and Scenic River? If "yes", explain.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
5a. Fall on a tributary of a Wild and Scenic River?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
5b. If 5a is "yes", will the project affect the Wild and Scenic River corridor?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
5c. If 5a is "yes", will the project unreasonably diminish scenic, recreational, or fish and wildlife values?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If "yes" to questions 2, 5b, or 5c, then a WSRA Section 7 determination must be completed and attached.				
<b>Mitigations and Conditions:</b>				
1. None				



## I. NEPA Analysis and Approval Conditions

When implemented as detailed in the project description and following all Project Mitigations and Conditions listed below, this project meets the terms and conditions of a categorical exclusion to NEPA.

### Applicable Categorical Exclusion:

DO12 C (4) - Routine maintenance and repairs to cultural resource sites, structures, utilities, and grounds if the action falls under an approved Historic Structures Preservation Guide or would not adversely affect the cultural resource.

### Project Mitigations and Conditions:

1. Ensure that all equipment and materials brought into the park are free of non-native, invasive plants and animals, and noxious weeds. All staff working on site shall be informed of and follow best management practices for preventing the introduction and spread of non-native, invasive species as described in Division 1 Specifications, Section 1355. (Environmental Planning and Compliance)
2. Ensure that the park Hazard Waste Monitor (Craig Anthony, 379-1064) is involved at the project inception. (Resource Management and Science)
3. Work with the Project Management and Planning Divisions to develop a strategy to combine project components associated with the Tunnel View area. (Resource Management and Science)

*This project has been reviewed in accordance with the above criteria and it has been determined that the project will result in no or minimal environmental effects. Therefore, it is categorically excluded from further environmental review required under the National Environmental Policy Act. Additionally, the necessary compliance coordination has been completed with regard to the National Historic Preservation Act, the Wilderness Act, the Wild and Scenic Rivers Act, and the Endangered Species Act.*

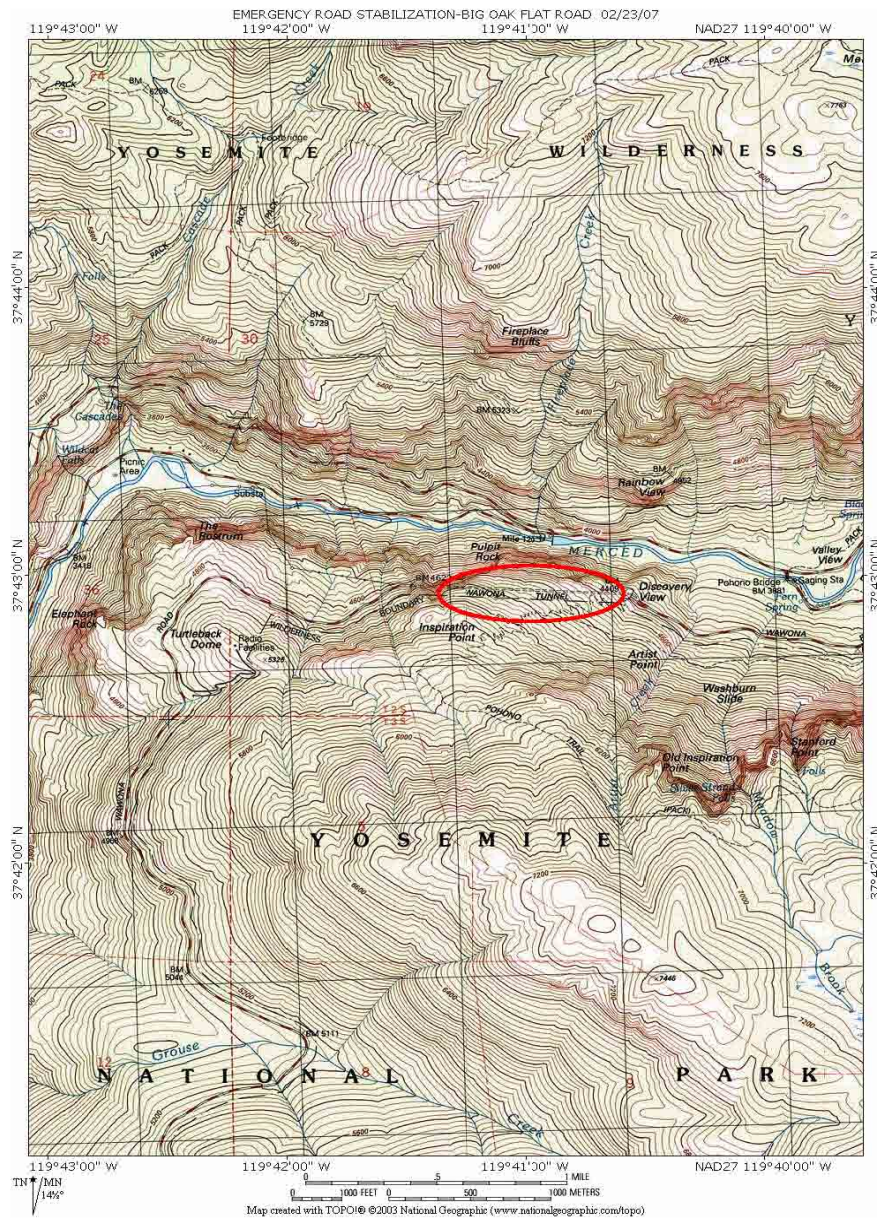
*//Elexis Mayer//* 3/12/07  
\_\_\_\_\_  
**Compliance Specialist** **Date**

*//Mark A Butler//* 3/14/07  
\_\_\_\_\_  
**Compliance Program Manager** **Date**

*//Bill Delaney//* 3/20/07  
\_\_\_\_\_  
**Chief, Project Management** **Date**

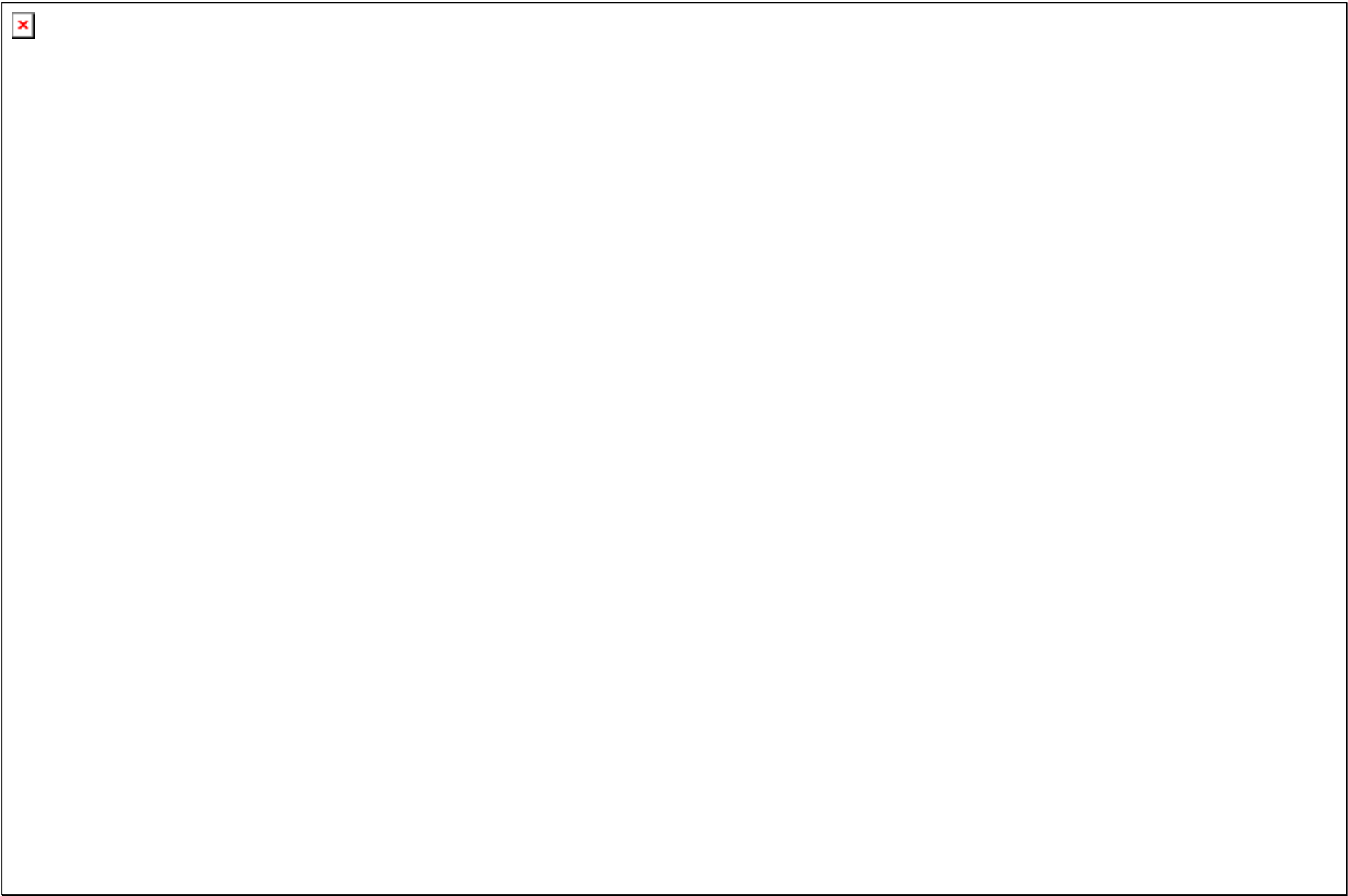
*The signed original of this document is on file at the Environmental Planning and Compliance Office in Yosemite National Park.*

## Attachment A



Map 1 – Wawona Tunnel

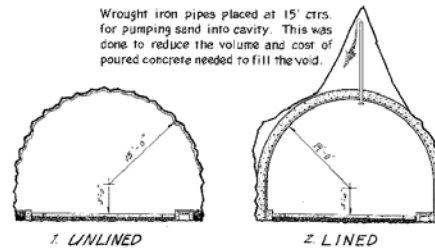
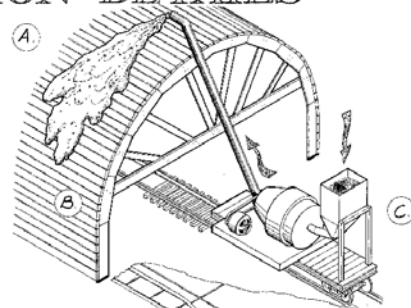
Attachment B



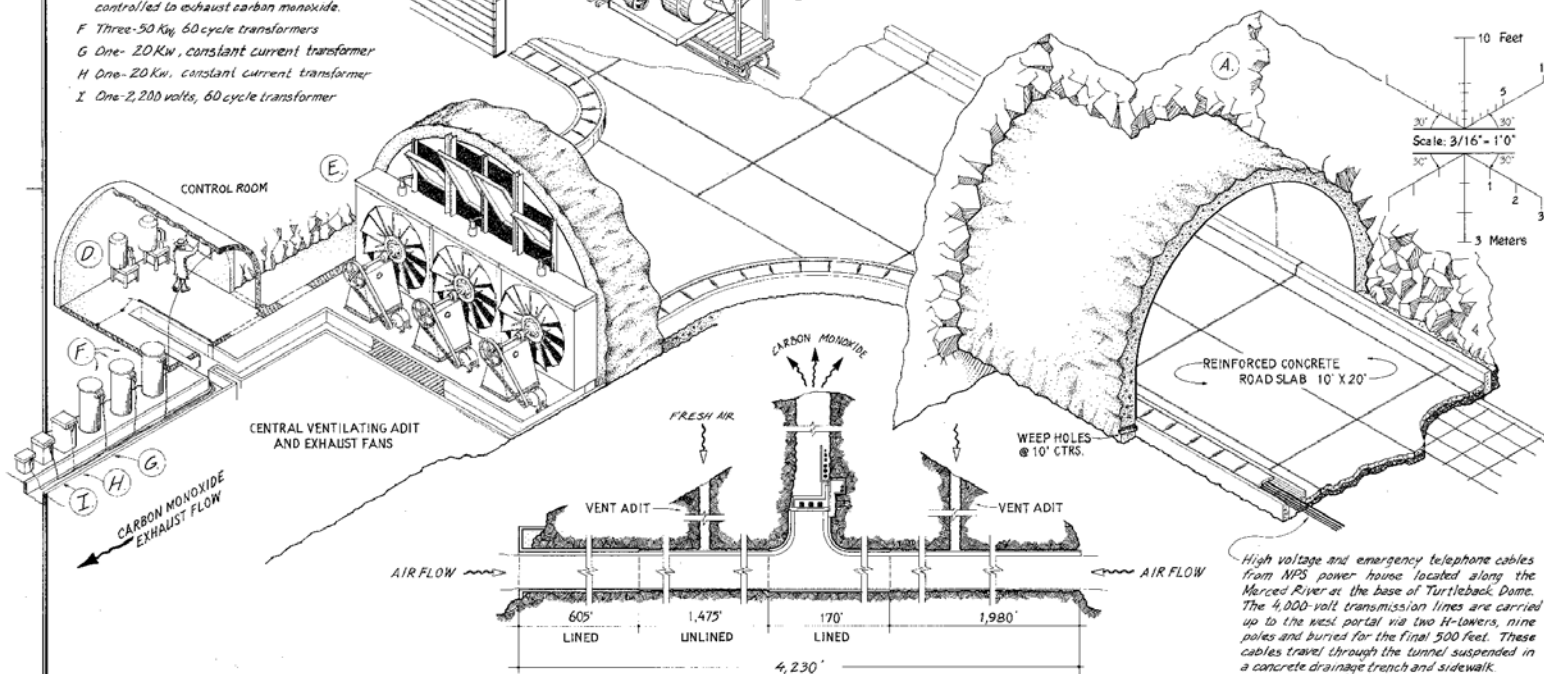


# WAWONA TUNNEL CONSTRUCTION DETAILS

- A Tunnel drilled & blasted to rough dimension
- B Wood falsework constructed as single moveable unit . . . (10-foot sections)
- C Concreting machine, on temporary railroad, elevated mixture for pouring.
- D Carbon monoxide detectors, located at tunnel crown, analyze increasing levels and activate ventilation fans.
- E Three 8'x0" diam fans are automatically controlled to exhaust carbon monoxide.
- F Three 50 Kw, 60 cycle transformers
- G One 20 Kw, constant current transformer
- H One 20 Kw, constant current transformer
- I One 2,200 volts, 60 cycle transformer



- ① Where structurally stable, the drilled rock tunnel wall was left exposed. Areas prone to small fragmentation and water seepage were sealed with gumite (a sprayed on concrete coating applied to the exposed surface).
  - ② Where areas of fractured, unstable rock existed, reinforced concrete liners were constructed to provide structural support for the tunnel walls.
- Drawing based on field measurements, historic photographs and original design documents. . . . See NPS drawing file



High voltage and emergency telephone cables from NPS power house located along the Merced River at the base of Turtleback Dome. The 4,000-volt transmission lines are carried up to the west portal via two H-towers, nine poles and buried for the final 500 feet. These cables travel through the tunnel suspended in a concrete drainage trench and sidewalk.

WAWONA TUNNEL - 1933  
CALIFORNIA HIGHWAY 41 EAST OF TURTLEBACK DOME  
MARIPOSA COUNTY  
Yosemite National Park  
TODD A. CROTEAU 1991  
Yosemite Roads and Bridges  
RECORDING PROJECT  
UNIVERSITY OF CALIFORNIA LIBRARY

## Attachment C



## Preservation Assessment Form (YOSE XXX)

(Version: AUG06)

Compliance Tracking Number: 2007-032

PEPC Project Number: 17557

### A. DESCRIPTION OF UNDERTAKING

**Title:** Wawona Tunnel Ventilation System Repairs

**Project Location and Area of Potential Effect:**

Yosemite Valley, Mariposa County, California

Wawona Tunnel, Highway 41

**Project Manager:** Michael Pieper, Facilities Management, Yosemite National Park

**Project Description:** The project includes repairing the failed ventilation system in the Wawona tunnel and reducing the hazards associated with the tunnel's failed ventilation system. The work plan is to replace the existing ventilation fan motors and upgrade the existing hazardous gas monitoring system inside the tunnel. Currently, the hazardous gas monitoring system is inactive. The upgraded gas monitoring system will be tied into a remote sensor that would notify emergency response via the existing phone line in the tunnel. If the gas levels are hazardous it could also trigger an emergency alarm or phone call to the appropriate emergency response, such as dispatch. This will ensure that if the gas levels become hazardous, additional fans can be turned on or the tunnel will close until the gas levels are no longer hazardous to someone driving or walking through the tunnel. Were there a need to close the tunnel due to hazardous conditions we would try to activate the existing semaphore arms (gate) at the end of the tunnel. The upgraded gas monitoring systems would monitor the level of carbon monoxide and nitrous oxide emitted from vehicle exhaust fumes. If triggered, the exhaust fans would be activated to clear and maintain air quality and visibility. Exhaust fans can be independently operated to reduce the exhaust gas concentration. These fans generate a thrust that can propel air along the tunnel in either direction. Final design of exhaust fans will be in keeping with historical characteristics.

If funding allows, the tunnel would be cleaned. Proposed cleaning activities include the use of a special tunnel washer truck with large rotating brushes (on an articulated arm) spreading a mixture of soap and water while scrubbing the tunnel walls. A flush truck would follow that sprays water from an arc of nozzles to remove the soap and grime and leaving behind clean surfaces. All of the soap and grime would be contained or filtered. The tunnel ventilation system is then turned up full blast to dry the roadway.

1. Attached Sensitive Information**	Yes	No	Explanation/Source/Notes
a. Maps	<input checked="" type="checkbox"/>	<input type="checkbox"/>	CR GIS Map
b. Drawings	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
c. Site Plans	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
d. Photographs	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
e. Sample	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
f. List of Materials	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
g. Other (Explain)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

\*\* Sensitive documents not for duplication or distribution beyond park management, subject matter experts, and the project statutory compliance file.



## B. DESCRIPTION OF EFFECTS

	Yes	No	N/A	Explanation/Notes
<b>1. Has the Area of Potential Effect been surveyed to identify historic properties?</b> If Yes, provide reference for the Survey (s).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	MPD
a. Would the proposed action affect a known historic property?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Historic components not affected.
<b>2. List all Historic Properties in the Area of Potential Effect:</b>	<b>Affected?</b> Yes	No		<b>Explanation/Notes</b>
a. LCS# 005839	<input type="checkbox"/>	<input checked="" type="checkbox"/>		Historic components not affected.
b.	<input type="checkbox"/>	<input type="checkbox"/>		
c.	<input type="checkbox"/>	<input type="checkbox"/>		
<b>3. List resources in the Area of Potential Effect to which American Indians attach cultural and religious significance:</b>	<b>Affected?</b> Yes	No		<b>Explanation/Notes</b>
a. none	<input type="checkbox"/>	<input type="checkbox"/>		
b.	<input type="checkbox"/>	<input type="checkbox"/>		
c.	<input type="checkbox"/>	<input type="checkbox"/>		
<b>4. The proposed action will:</b>	Yes	No	N/A	<b>Explanation/Note</b>
• Destroy, remove, or alter features or elements from a historic structure	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
• Replace historic features/elements in kind	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
• Add nonhistoric features/elements to a historic structure	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
• Alter or remove features/elements of a historic setting or environment (including terrain)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
• Add nonhistoric features/elements (including visual, audible, or atmospheric) to a historic setting or cultural landscape	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
• Disturb, destroy, or make archeological resources inaccessible, or alter associated terrain	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
• Disturb, destroy, or make ethnographic resources inaccessible, or alter associated terrain	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
• Begin or contribute to the deterioration of historic fabric, terrain, setting, landscape elements, or archeological or ethnographic resources	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
• Involve a real property transaction affecting historic cultural properties (i.e., the exchange, sale, or lease of land or structures)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
• Potentially affect presently unidentified historic resources	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
• Other	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	



**5. Describe any measures that are incorporated as part of this project that will be taken to prevent or minimize loss or impairment of prehistoric or historic fabric, setting, integrity, or data:**

Cultural review will include a submission of the prefinal design to the Yosemite National Park Cultural Resource staff so they can review and comment on the the prefinal (approx. 95% design) design. The cultural comments will then be reviewed for incorporation into the final design.

**Checklist prepared by:** Jeannette Simons

**Date:** 01/08/07

**Title:** Historic Preservation Officer

### C. SPECIALIST SECTION

**Specialists:** Your comments here (or attached) show that you have reviewed this proposal for conformity with requirements of *National Historic Preservation Act, Section 106*; with the 1995 *Service-wide Programmatic Agreement* (if applicable); with applicable parts of the *Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation*; with the NPS *Management Policies* and *Cultural Resource Management Guideline*; and have given your best professional advice about this project and the issues relevant to the Section 106 process, including identification and evaluation of historic properties and further consultation needs.

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**Archeologist**

Name: **Laura Kirn**

Date: 2/14/07

Comments:

Ground Disturbance Involved      Yes: ☐      No: ☐

Assessment of Effect: **"No Effect"**

Recommended Conditions:

Signature of Archeologist: //S. Montague//

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**Cultural Anthropologist**

Name: **Sonny Montague**

Date: 2/14/07

Comments:

Assessment of Effect: **"No Effect"**

Recommended Conditions:

Signature of Cultural Anthropologist: //S. Montague//

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**Curator**

Name: **Jonathan Bayless**

Date:

Comments:

Assessment of Effect: **<Choose Effect> or write it here >>**

Recommended Conditions:

Signature of Curator: \_\_\_\_\_

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**Historian**

Name: **Charles Palmer**

Date: 2/14/07

Comments:

Assessment of Effect: **"No Effect"**

Recommended Conditions:

Signature of Historian: //Charles Palmer//

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**Historic Architect**

Name: **Sueann Brown**

Date:

Comments:

Assessment of Effect: **<Choose Effect> or write it here >>**

Recommended Conditions:

Signature of Historic Architect: \_\_\_\_\_

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**Historic Landscape Architect**

Name: **Dave T. Humphrey**

Date: 2/14/07

Comments:

Assessment of Effect: **"No Effect"**

Recommended Conditions:

Signature of Historic Landscape Architect: //David T. Humphrey//

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**Preservation Specialist**

Name: **Rod Kennec**

Date: 2/14/07

Comments:

Assessment of Effect: **"No Effect"**

Recommended Conditions: Recommended Conditions

Signature of Preservation Specialist: //Rod B Kennec//

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**Native American Liaison**

Name: **Jeannette Simons**

Date:

Comments:

Assessment of Effect: **<Choose Effect> or write it here >>**

Recommended Conditions:

Signature of Native American Liaison: \_\_\_\_\_

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**<Enter Specialist Title>**

Name:

Date:

Comments:

Assessment of Effect: **<Choose Effect> or write it here >>**

Recommended Conditions:

Signature of <Enter Specialist's Title>: \_\_\_\_\_

**D. RESOURCES MANAGEMENT AND SCIENCE DIVISION AND PARK 106  
COORDINATOR REVIEWS AND RECOMMENDATIONS**

- 1. Review by specialists:** The appropriate subject-matter experts have reviewed the project and entered their comments and recommendations in Section C, above.

*The foregoing assessment is adequate: the proposed action is consistent with all applicable NPS management policies, standards, guidelines, or US DOI standards and guidelines, Rehabilitation of Historic Buildings, or others, and incorporates measures to avoid Adverse Effects.*

**Reviewed and Accepted by:**

**Signature:** //Niki Stephanie Nicolas//  
Chief of Resources Management & Science Division

**Date:** 2/21/07

- 2. Compliance Requirements:** The following is the park's assessment of Section 106 process needs and requirements for this undertaking.

☐ **Standard 36 CFR Part 800 Consultation**

Consultation under 36 CFR is needed subsequent to the preparation of this form and its review by appropriate historic resource management advisors.

☒ **Undertaking related to the 1995 NPS Programmatic Agreement**

The above action meets all conditions for a programmatic exclusion under Stipulation IV. A of the 1995 NPS programmatic agreement, and is listed in Stipulation IV. B, as:

3. Installation of Environmental Monitoring Units (such as those for water and air quality).

☐ **Plan-Related Undertaking**

Consultation and review of the proposed undertaking were completed in the context of a plan review process, in accordance with the 1995 NPS programmatic agreement and 36 CFR Part 800.

☐ **Undertaking Related to Another Agreement**

The proposed undertaking is covered for Section 106 purposes under a document such as a statewide agreement written in accordance with 37 CFR Part 800.7 or counterpart regulations.

**Agreement:** <Enter Agreement Information>

☐ **Flood-Recovery Related Undertaking**

The proposed undertaking is covered for Section 106 purposes under the letter-based agreement between the NPS, the State Historic Preservation Office, and the Council for Historic Preservation for "Highwater 97" flood repair and recovery

☒ **Undertaking Related to the 1999 Yosemite Programmatic Agreement**

The proposed undertaking is covered for Section 106 purposes under the park's 1999 programmatic agreement for planning, design, construction, operations and maintenance; the undertaking meets the stipulations identified in Article VII.C.2.

**3. Assessment of Effects: No Effect**

**4. Project Stipulations and Conditions**

Following are listed any stipulations or conditions necessary to ensure that the assessment of effects above is consistent with 36 CFR 800 criteria of effect or to mitigate potential adverse effects:

- a. None

**Recommended by Park Section 106 Coordinator:**

Name: **Jeannette Simons**

Title: **Historic Preservation Officer**

Signature: //Jeannette Simons// Date: 2/21/07

**E. SUPERINTENDENT'S APPROVAL**

*The proposed work conforms to NPS Management Policies and NPS-28 and I approve the recommendations, stipulations, and conditions noted in Section B of this form.*

Signature of Superintendent: //R. Kevin Cann// Date: 3/22/07  
Michael J. Tollefson

*The signed original of this document is on file at  
the Environmental Planning and Compliance  
Office in Yosemite National Park.*