ALCATRAZ – Preserving this American Landmark – The Secrets Revealed

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Introduction

- **Owner** – National Park Service
  - Pacific West Region
  - Golden Gate National Recreation Area
  - Alcatraz Island

- **Location** – San Francisco Bay

Photo Credit: Alcatraz-The Official Guide
Historical Background

Overall Chronology

- Prior to 1542: Native Americans (Unoccupied) / Bird Sanctuary
- 1542-1822: Spanish Empire
- 1822-1848: Republic of Mexico
- 1848-1853: United States-California Territory and State (1851)
- 1852-1854: First Lighthouse Constructed
- 1853-1900: Fortress Alcatraz
- 1900-1934: U.S. Military Prison
- 1934-1963: U.S. Federal Penitentiary
- 1963-1972: Abandoned Federal Property
- 1969-1971: Native American Occupation
- 1972-Present: National Park Service / Bird Sanctuary
Historical Background

Overall Chronology

Prior to 1542
Native Americans / Bird Sanctuary

1542-1822
Spanish Empire

1822-1848
Republic of Mexico

1848-1853
United States - California Territory and State (1851)

1852-1854
First Lighthouse Contructed

1853-1900
Fortress Alcatraz

1900-1934
U.S. Military Prison

1934-1963
U.S. Federal Penitentiary

1963-1972
Abandon Federal Property

1969-1971
Native American Occupation

1972-Today
National Park Service
Historical Background

- Military Fortress – 1853-1900
  - The “Citadel”
Historical Background

- Military Fortress – 1853-1900
  - A “Ring of Fire”
Historical Background

- Military Prison – 1900-1934
  - Fortress Converted to Prison (1900-1911)
  - The “New Prison” (1911-1934)
Historical Background

- Prison Cell Block Design and Construction (1907-1911)
  - Demolition
  - Foundations
  - Iron and Steel Superstructure
  - Concrete Encasement / Reinforced CIP Concrete
Historical Background

- Federal Penitentiary – 1934-1963
  - Structural Modifications
  - Security Improvements
  - Other Structures
  - World War II
Historical Background

- Post Prison Closure – 1963-1972
  - Deterioration and Neglect
  - Fire
  - Demolition
  - Occupation and Graffiti

Historical Background

- National Park Service Property – 1972-Present
  - Visitor Experience and Safety
  - Preservation Planning
  - Preservation Challenges
  - Preservation and Structural Assessments
Current Conditions

- Visitor Use
- Structural Stability Programs of Cellhouse
Structural Stability and Safety Improvement Program

Stabilize and Repair Cellhouse for Visitor and Resource Protection

- Phase 1 – Interior (On-Going)
- Phase 2 – Exterior (Future)
Phase 1: Interior (On-going)

- Shower Room
- Citadel
- Other
Phase 1: Stabilize and Repair
Pre-Construction Activities

- Submittal Documents
  1) Construction Schedule
  2) Photo Documentation
  3) Safety Plan
  4) Historic Preservation Treatment Plan
  5) Quality Control Plan
  6) Indoor Air Quality Management Plan
  7) Temporary Storm Water Pollution Prevention Plan
  8) Construction Waste Management and Disposal Plan
  9) Construction Work Plan
### Phase 1: Stabilize and Repair
Pre-Construction Activities (Cont’d)

#### Material Submittals

1. Lead-Based Paint Removal and Disposal
2. Shoring
3. Demolition
4. Concrete Removal / Surface Preparation
5. Concrete Patching
6. Concrete Crack Repair
7. Epoxy – Grouted Anchors
8. Metalized Cathodic Protection
9. Impressed Cathodic Protection
10. Reinforcing Steel
11. Cast-in-place Concrete
12. Brick Masonry Repair/Replacement
13. Structural Steel Repair/Replacement
14. Painting/Staining
Phase 1: Partial Plans
Phase 1: Partial Plans
Phase 1: Partial Plans
Phase 1: Partial Plans
Phase 1 Work Elements (Interior)

- **Shower Room**
  1) Column Repairs (Two Types)
  2) Beam Top Flange Repair
  3) Beam Encasement Repair
  4) Beam Replacement
  5) Beam Repair at B, C, D Blocks
  6) Soffit Repair
  7) Slab Soffit Patching
Phase 1 Work Elements (Cont’d)

- **Citadel**
  - 8) B-Block Cistern Area Beam Repair at Utility Corridors
  - 9) Beam Replacement at A and D Blocks
  - 10) Other Beam Repairs (7 Types)
  - 11) Brick Repair
  - 12) Miscellaneous Concrete Repair
Phase 2 Work Elements (Exterior)

- Window Repairs and Protection
- Pilaster Repairs
- Wall Repairs
- Wall Painting
- Staircase / Railings / Fencing Repairs
Work Element Challenges

- Visitor Safety / Control
- Natural Resources – Bird Sensitivity
- Cultural Resources – Historic Protection
- Logistics
- Night Work
- Worker Safety

- Worker Training / Control
- Hazardous Materials
- Waste Management
- Shoring
- Island Events
- Use of Local Small Businesses
Acknowledgements

- National Park Service – Denver Service Center
- National Park Service – Golden Gate National Recreation Area
- Wiss, Janney, Elstner Associates, Inc.
References / Read More About It

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6) Martini, John A.; *Alcatraz at War*; Golden Gate National Parks Association; 2002

7) Martini, John Arturo; *Fortress Alcatraz, Guardian of the Golden Gate*; Ten Speed Press; 2004

8) McHugh, Paul; *Alcatraz, The Official Guide*; Golden Gate National Parks Conservancy; 2007
Questions