



#### Agenda





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#### Purpose for Action

The purpose of this project is to improve the security and visitor flow at the Washington Monument in a manner that preserves the character and visitor experience of the Washington Monument and Grounds.



#### Need for Action

As the primary memorial to the nation's first president, the Monument is one of the most prominent icons in the nation and is toured by approximately one million visitors annually with millions more visiting the surrounding grounds. Its popularity, combined with its status as an icon, makes it a potential target for terrorist attack. A permanent perimeter vehicular barrier system was completed with landscape improvements in 2006. The project is needed because the existing visitor screening station, constructed at the Monument's base in 2001, was intended to be temporary and requires replacement in order to meet the long term security and cultural resource management requirements at the Monument.



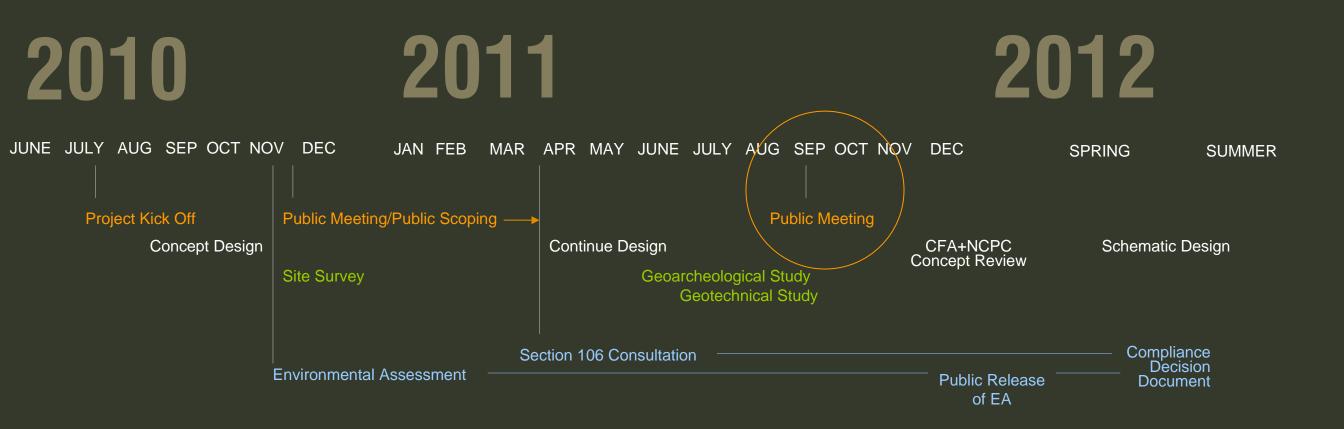
#### **Need for Action**

These long term security and cultural resource management requirements at the Monument include:

- visitor screening outside the walls of the Monument in order to ensure protection of human life and the structure in the event of a security breach
- preservation of the fabric of the Monument, which is a historic property
- consistency with the Washington Monument and Grounds cultural landscape with regard to views and vistas, buildings and structures, and circulation; and
- visitor use that has, since 1888, included access to the top of the Monument for views of the city of Washington.



### Project Timeline





#### Nation Act Policy Act

### Regulations

NEPA National Environmental Policy Act

The National Environmental Policy Act of 1969, as amended (42 U.S.C. 4321 et seq.)

CEQ Council on Environmental Quality

"Regulations for Implementing the Procedural Provisions of NEPA" (40 CFR 1500-1508).

DO-12 Department of the Interior, Director's Order 12

Director's Order #12: Conservation Planning, Environmental Impact Analysis, and Decision-making

#### **EA Process**

- 1. Public Notification
- 2. Define Purpose & Need
- 3. Data Collection
- 4. Define Preliminary Alternatives
- Internal and External Scoping
- 6. Public Scoping Meeting
- 7. Finalize Alternatives
- 8. Prepare draft Environmental Assessment (EA)
- 9. Release Final EA
- 10. 30-day Public Comment Period
- 11. Review all public comments received on the EA and respond to comments
- 12. Decision Document



#### Section 106 Process

# Regulations

NHPA National Historic Preservation Act

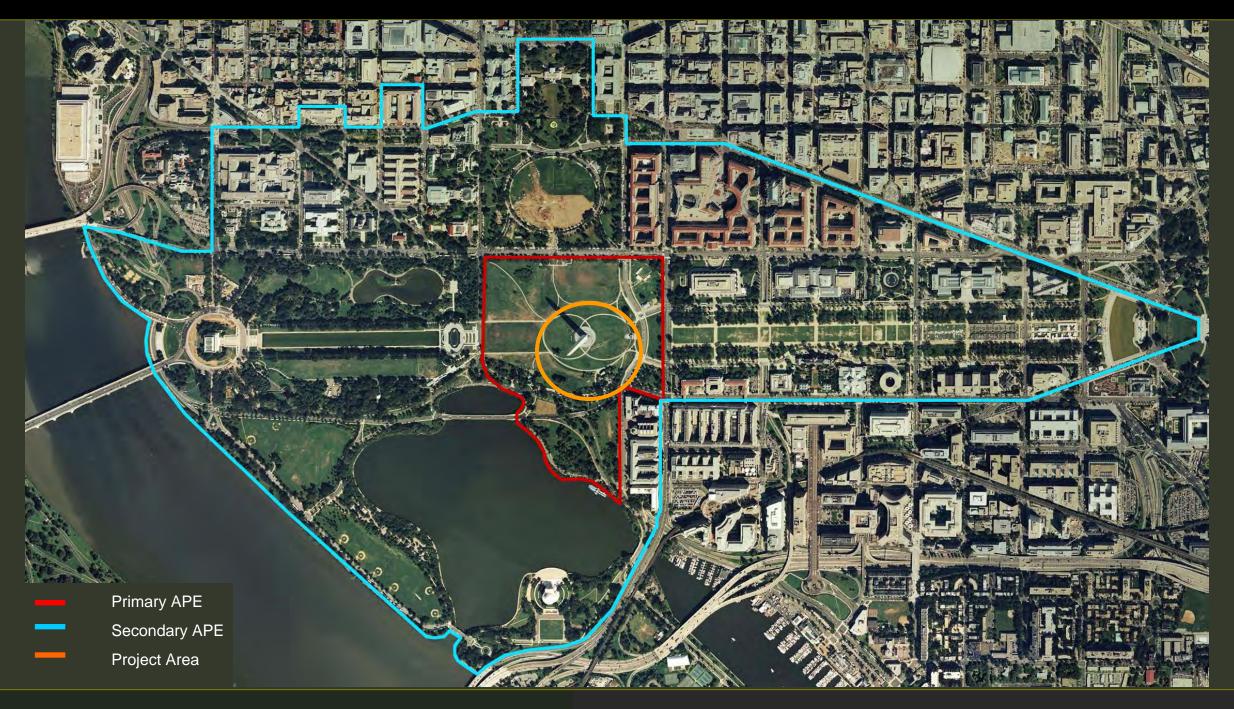
Section 106 regulations, 36 CFR Part 800

## Process

- 1. Define Undertaking / Initiate Section 106
- 2. Identify Consulting Parties
- 3. Involve the Public
- 4. Define Area of Potential Effect (APE)
- 5. Identify Significant Cultural Resources in APE
- 6. Assess Effects on Significant Resources
- 7. Apply Criteria Of Adverse Effect
- 8. Continue Consultation
- 9. Draft Agreement Document, if needed



### Area of Potential Effect





#### Washington Monument and Grounds Documentation

- National Register of Historic Places Nomination, 1980
- L'Enfant Plan for the City of Washington, D.C., National Register Nomination, 1997
- Washington Monument and Associated Structures: Historic Structures Report (HSR), 2004
- Washington Monument Grounds Cultural Landscape Report (CLR), 2008
- Washington Monument Grounds Cultural Landscapes Inventory (CLI), 2009









Prehistoric artifacts from the Washington Monument Site

#### **Background Information**

- Study area was on bank of Tiber Creek, an ancient waterway
- Prehistoric artifacts were recovered from the Monument Grounds in the 1880s, with artifacts indicating episodic Native American use of the for roughly 7000 years

#### Goals of the Geoarcheological Study

- Does the study area contain areas of natural landscape associated with the bank of the lower Tiber Creek?
- Is it likely that prehistoric or historic archeological resources are preserved in the study area?
- What effect have the processes of historic land use and formal landscaping of the Washington Monument grounds had on landscapes that might contain significant archeological resources?
- How extensive is the disturbance associated with existing utility lines in the study area?



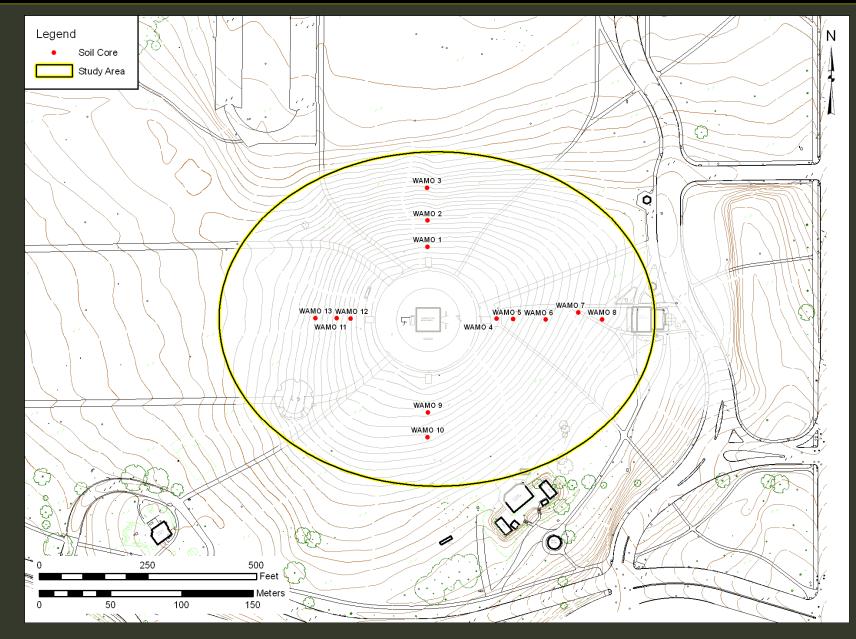


View of the Monument in 1880s, second phase of construction

#### Landscape History

- Monument constructed in two phases: 1848-1861 and 1880-1888
- After completion of foundation work in 1880, raised terraces were added
- Eventually the plaza and ground were expanded by the addition of large quantities of fill material
- During construction the site was crowded with shops and machinery
- Fills added to the grounds in the late 1800s creating lakes in the northwest area of the grounds
- Ponds were filled and grounds raised with filling of Potomac Flats
- Early twentieth-century landscape use featured swimming pools, ball fields, tennis courts, miniature golf, etc.
- 2004-2006 program for Visitor Security established elliptical security area surrounding monument; all areas within that area were re-graded and utilities were removed



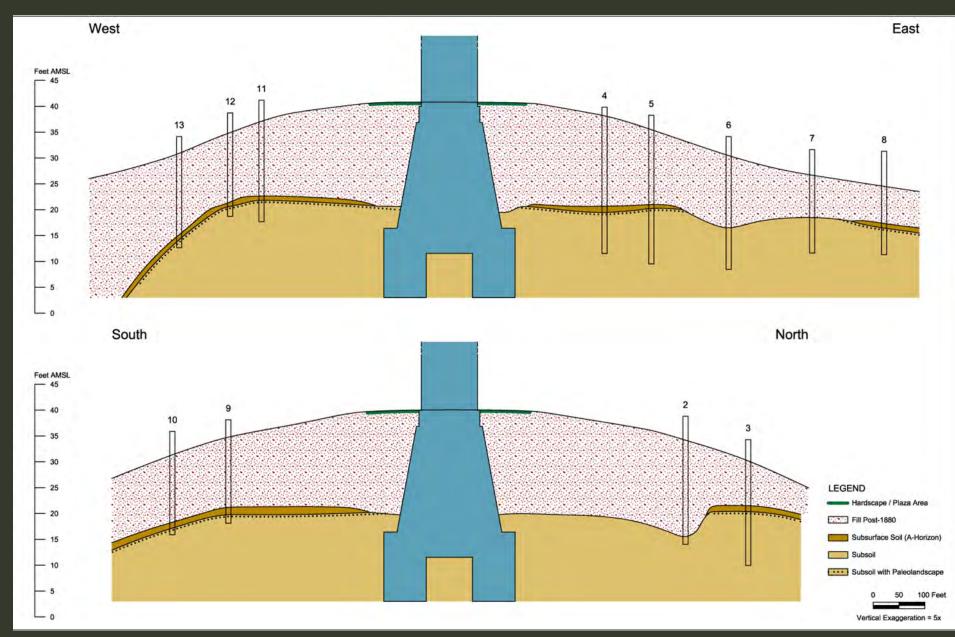


Field Testing Plan for Geoarcheological Investigation

#### Field Testing Plan

- Sample locations placed on north, east, west and south lines from monument
- More tests on east transect,
   between monument and lodge, to
   examine possible concourse
- Test locations adjusted to avoid utility lines—electric, gas, water, etc.
- A total of 12 cores were completed; one (WAMO-1) not excavated because of nearby water line that could not be precisely located
- No samples within plaza area





#### Field Results

- Eight of 12 cores across site contained a buried landscape surface, the surface that would have existed in historic and prehistoric times
- The buried A-horizon is present beneath varying amounts of post-1880 fill material: 8-18 feet
- Also a possible "paleolandscape" present
- Overall, results were surprising, given the landscape history of the monument grounds

Composite cross-sections across Monument Grounds, from geoarcheological coring



#### Geotechnical Investigation

Geotechnical Report for US Grant 3<sup>rd</sup> to support modifications to the grounds

Edward S. Barber to determine safe limitations on grading or new construction

Geotechnical Study to support a proposed interpretive facility

Settlement Analysis for an NPS improvement project

Geotechnical Study to support the proposed underground security/screening visitor center



**SEPTEMBER** 

1.2.3.4.5.6.7.8.9.10.11.12.13.14.15.16.17.18.19.20.21.22.23.24.25.26.27.28.29.30.31

Field Work August 4-17 Geotechnical Analysis August 22-September 16



#### Geotechnical Investigation

#### Anticipated Subsurface Conditions near the Monument

- 20 to 25 feet of recent fill at surface and overlying Monument foundations; may be locally deeper adjacent to foundations
- Fill consists of loose to medium compact sand and silt and medium stiff clay
- 80 to 90 feet of Pleistocene-age Terrace deposits consisting of clay, sand and gravel beneath fill
- Decomposed rock below Terrace deposits
- Water at El. -6, or about 45 feet below plaza level

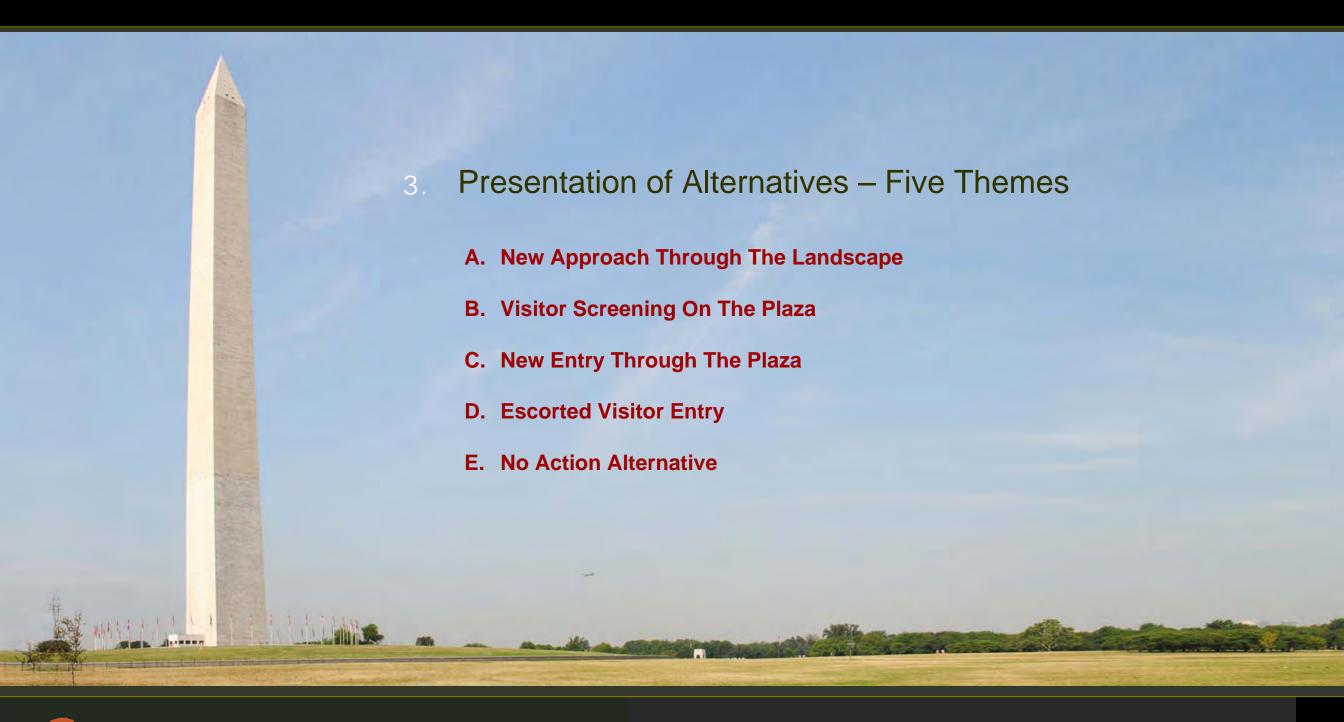
#### Anticipated Design Conditions

- Structures on plaza will derive their support from the fill
- Structures extending less than approximately 15 to 18 feet below grade will likely derive their support from the fill.
- Structures extending more than approximately 18 to 20 feet below grade could derive their support from the Terrace deposits.
- Structures within approximately 35 feet of any face of the Monument will bear on fill underlain by the foundations and buttresses of the Monument.
- For maximum structure depth of approximately 20 feet, groundwater will not be encountered.



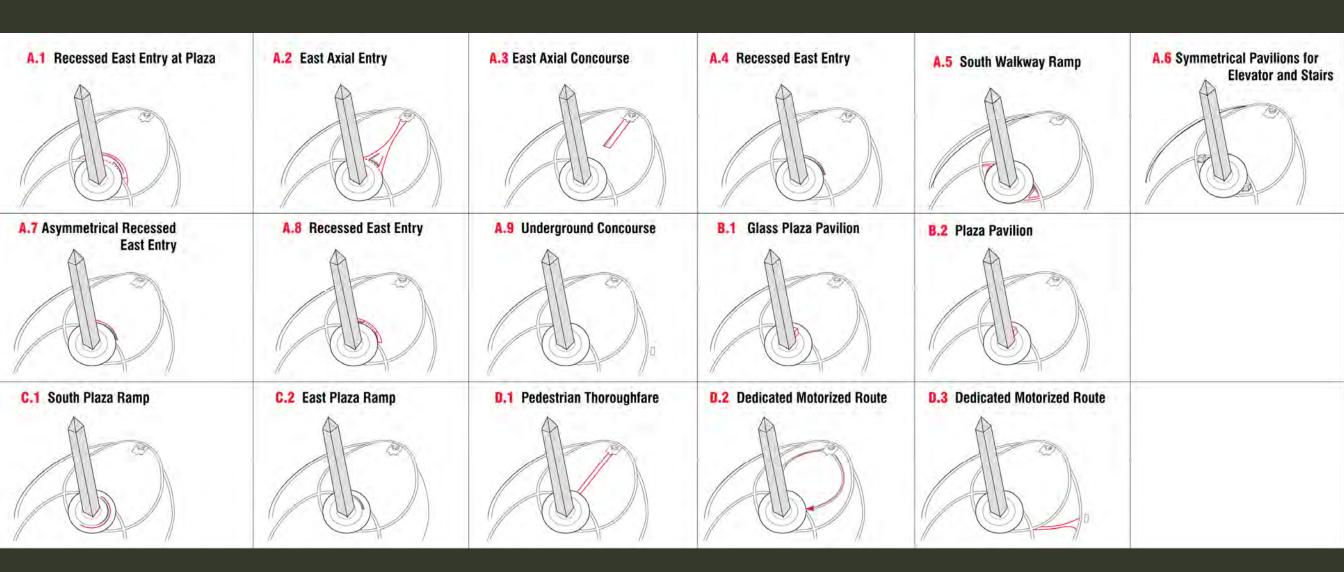








## Summary of Alternatives





## Alternatives



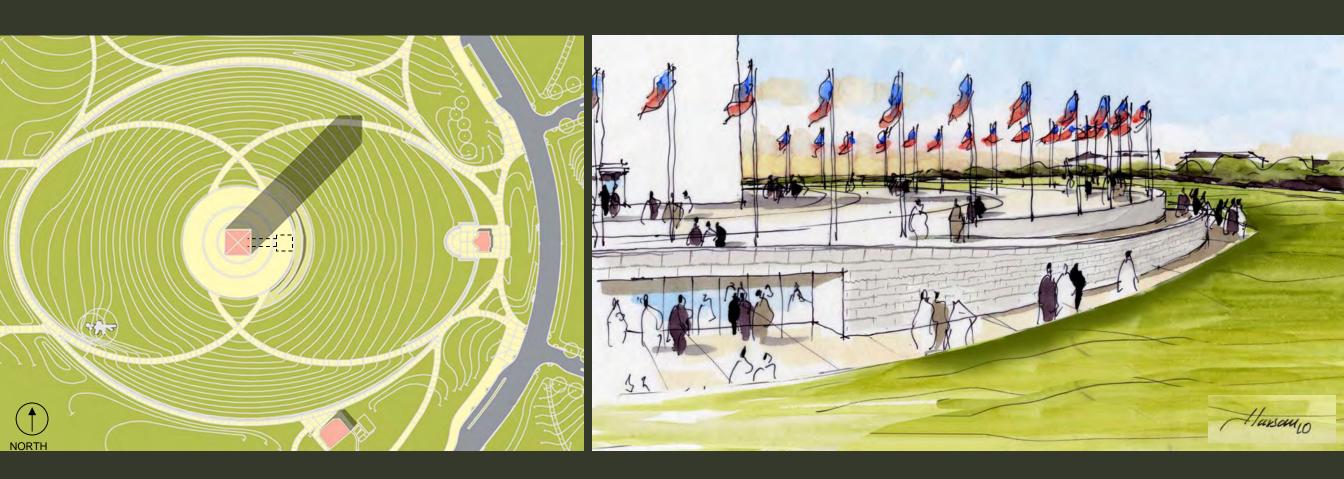


#### Alternatives





## Recessed East Plaza A.1





### East Axial Entry A.2

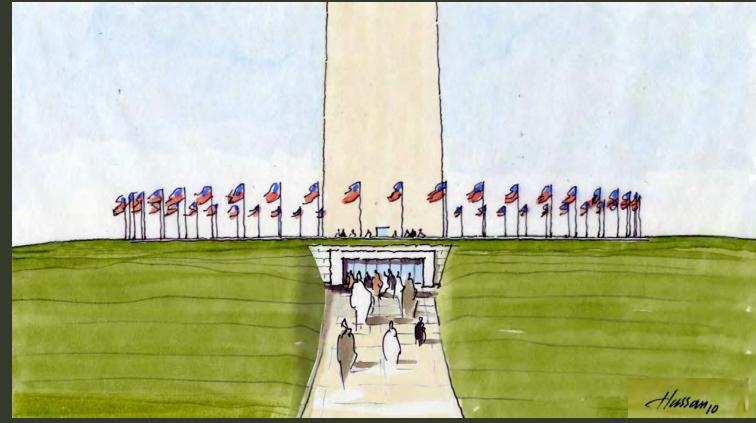






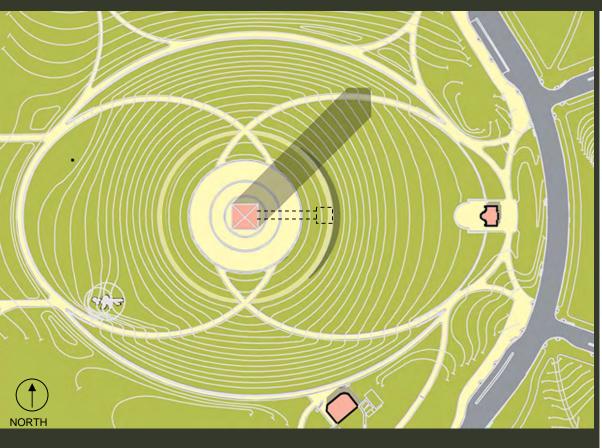
#### East Axial Concourse A.3

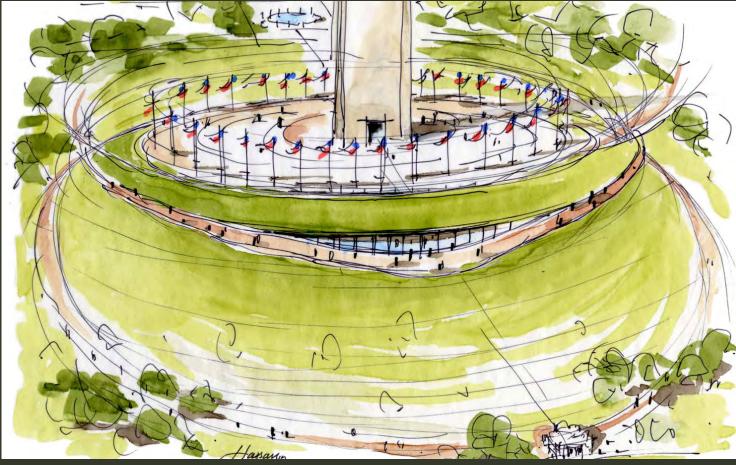






## Recessed East Entry A.4







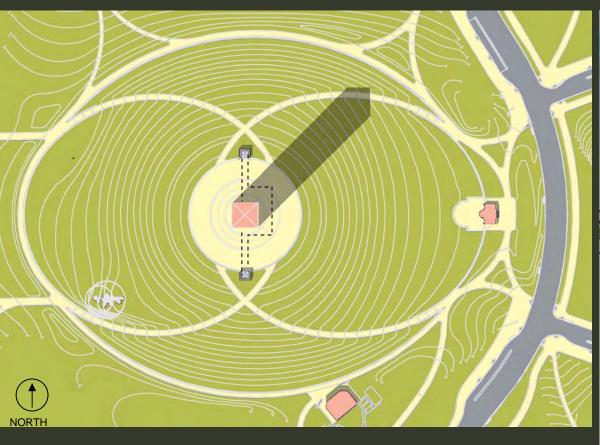
## South Walkway Ramp A.5







# Symmetrical Pavilions for Elevator and Stairs A.6

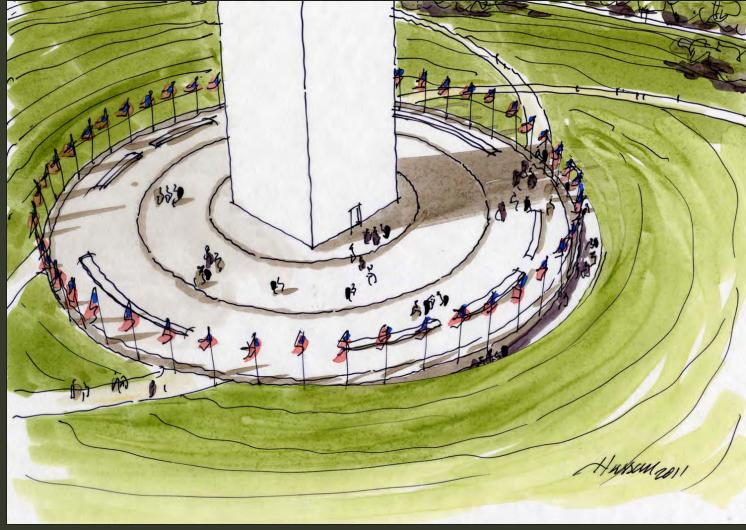






# Asymmetrical Recessed East Entry A.7







### Recessed East Entry A.8

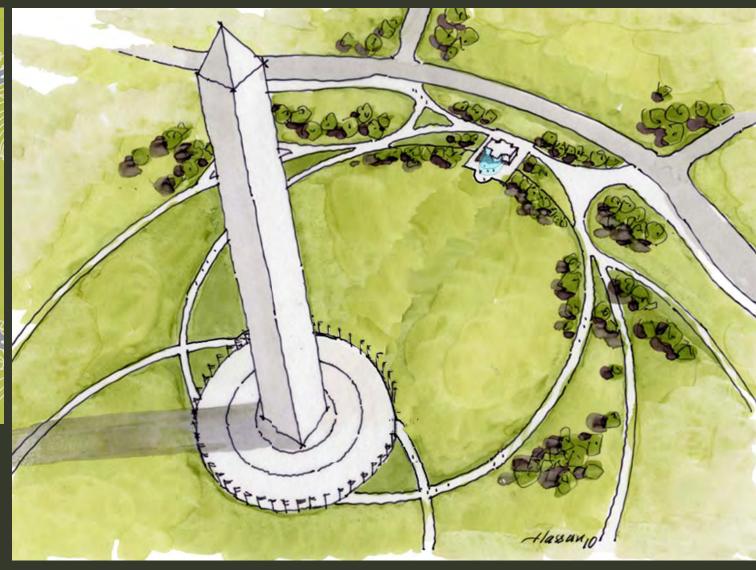






### Underground Concourse A.9





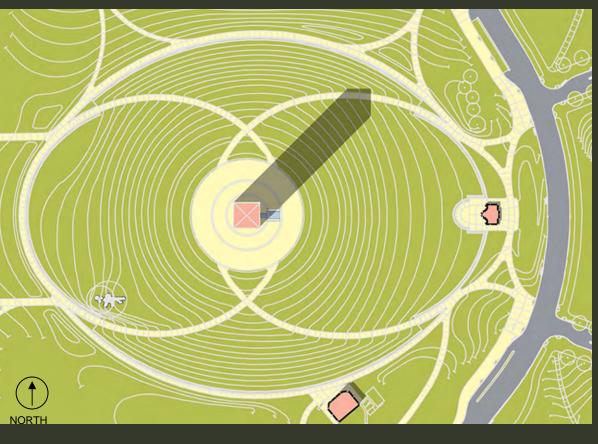


#### Alternatives





#### Glass Plaza Pavilion B.1







#### Plaza Pavilion B.2







#### Alternatives





## South Plaza Ramp C.1







# East Plaza Ramp C.2







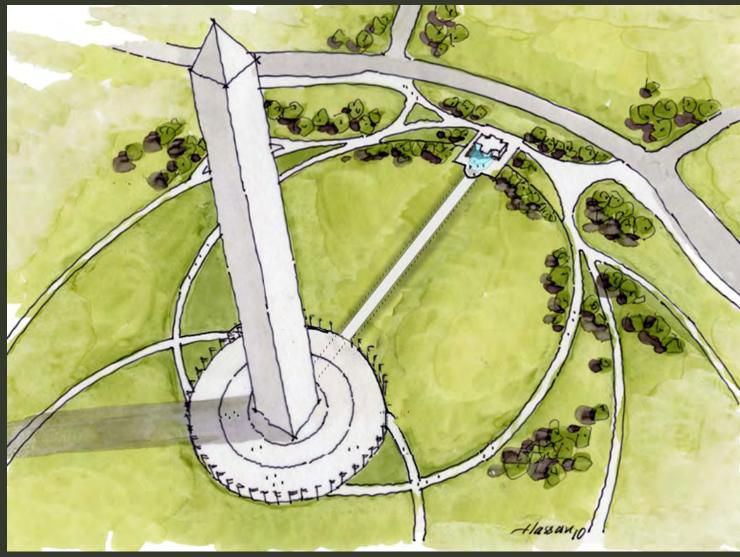
### Alternatives





## Pedestrian Thoroughfare D.1

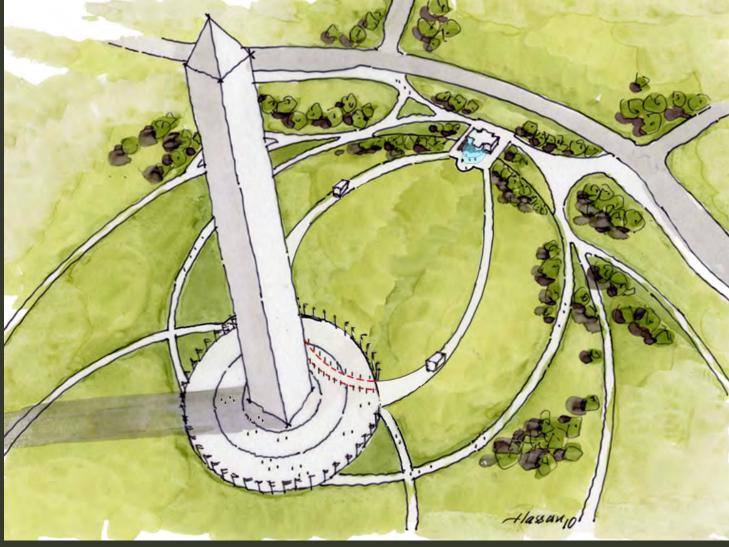






## Dedicated Motorized Route D.2

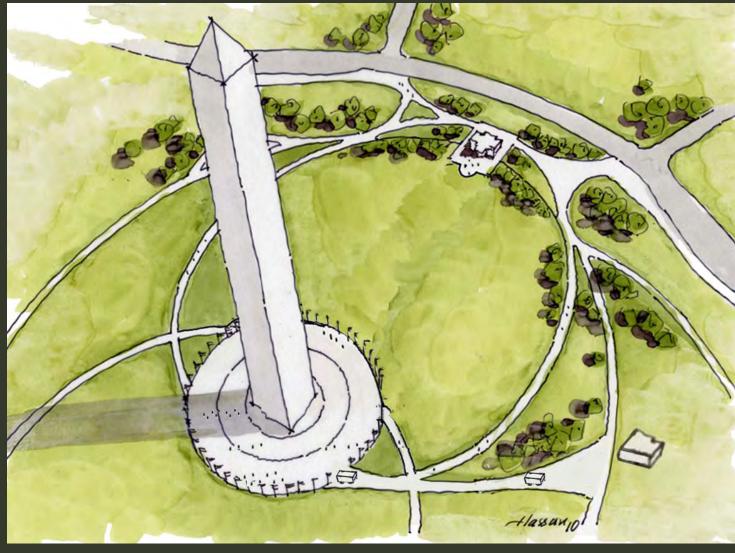






# Dedicated Motorized Route from Sylvan Theater D.3





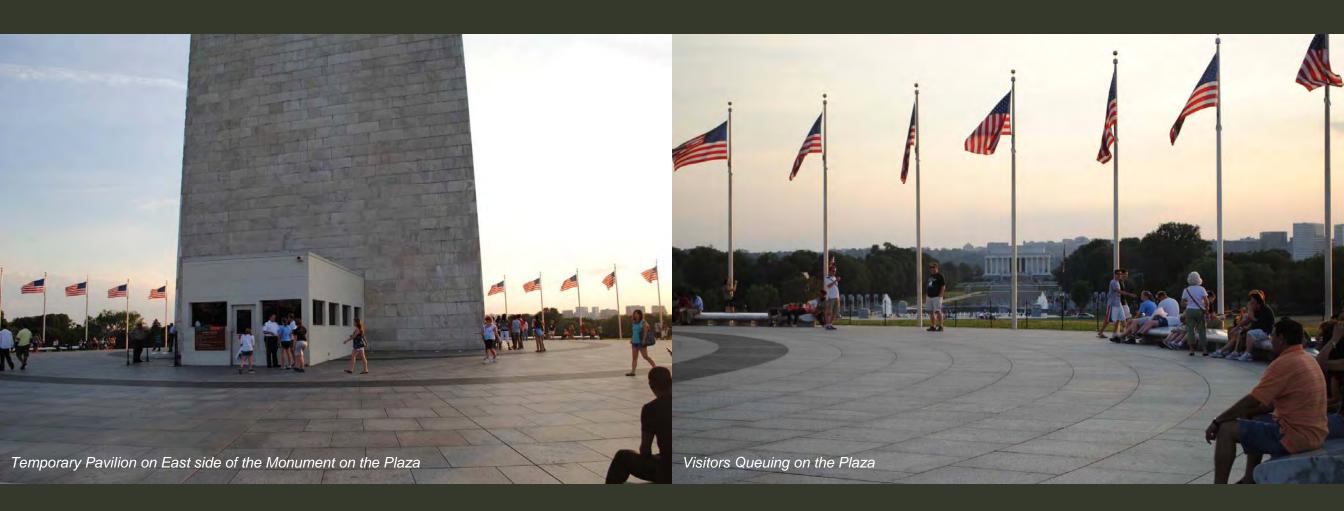


### Alternatives



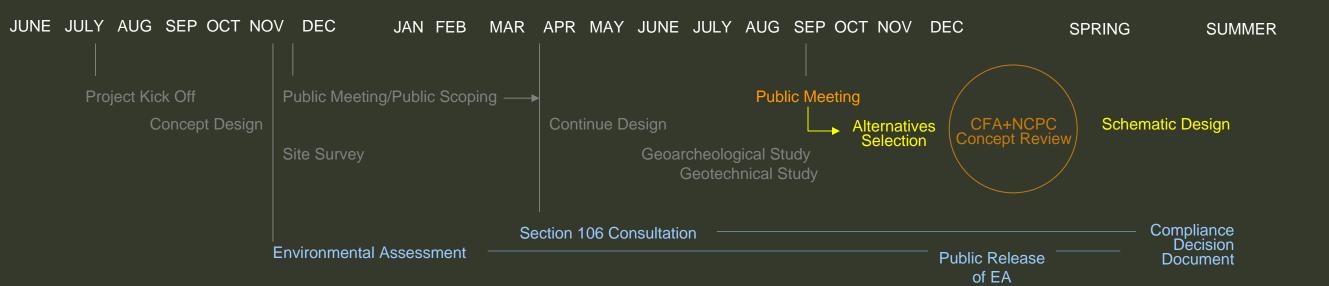


#### No Action Alternative



**Existing Conditions** 







#### Opportunities to Comment

NPS welcomes comments by October 23, 2011

#### Online:

http://parkplanning.nps.gov/NAMA

#### Email:

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#### Mail:

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