National Park Service
Harpers Ferry Center
Wayside Exhibit Planning and Design Specifications

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1. Programmatic Accessibility

1.1. General Requirements

Federal law requires products procured for use by federal employees or the general public to comply with American Disabilities Act (ADA) Section 508 Guidelines. The contractor shall supply all materials, including draft design documents, in fully accessible format.

In addition, the contractor shall design wayside exhibit projects for universal access and articulate how projects address programmatic accessibility requirements.

All work performed under this contract shall be in accordance with Attachment B, Programmatic Accessibility Guidelines.

1.2. Specific Requirements

The contractor shall prepare written recommendations (Universal Design Strategy) that clearly describe how the content and context of the proposed wayside exhibits will create interpretive connections to the resource via a balanced suite of modalities.

1.2.1. Audio Description

Audio description enables visitors who are blind or who have low vision to enjoy and make meaningful connections to national park site resources. Audio description provides an audible narrative that reveals not only the content of each wayside exhibit, its text and images, but also describes what sighted visitors see in the surrounding vistas.

1.2.2. Tactile Elements

For visitors with limited or no vision, tactile elements give greater access to the site's significance. For fully sighted visitors, tactile elements add richness that two-dimensional wayside exhibits do not provide.

In cases where tactile elements are recommended in the Accessibility Strategy, the contractor shall design appropriate tactile elements (three-dimensional touchable elements) integrated with other wayside graphics and text. Braille

For visitors with limited or no vision, braille text and labels give greater access to the site's significance. In cases where braille is recommended in the Accessibility Strategy, the contractor shall integrate braille labels and text into the wayside layouts with other graphics and text.

The contractor shall prepare Unified English Braille (UEB) labels and text in full conformance with the currently applicable codes set forth by the Braille Authority of North America (BANA). The BANA codebook is *English Braille, American Edition*.

Typesetting and fabrication of braille shall follow current guidelines set forth in the "ADA and Architectural Barriers Act Accessibility Guidelines" Chapter 7, Section 703, Signs, and the "Editorial Corrections".

2. Site Analysis

2.1. General Requirements for the Site Analysis

The contractor shall travel to the park site and meet with the park and project staff to analyze each potential wayside location. The contractor shall gather reference material, take site photos, and document discussions for the preparation of the Wayside Exhibit Proposal.

2.2. Specific Requirements for the Site Visit

The contractor shall analyze potential exhibit sites with park staff and subject-matter experts and perform the following tasks:

2.2.1. Evaluate site

Observe and note how visitors use, or ignore, existing interpretive media for guidance on wayside exhibit placement and focus. Work for consensus to determine the best location for each wayside exhibit and take note of specific features or events, available graphics, interpretive significance and meanings, and visitor flow.

Determine most accessible location. If location is not physically accessible, determine how subject interpretation will be provided to those with mobility disabilities.

2.2.2. Establish the message

Work for consensus and take notes on exactly what is the appropriate interpretive message for each site including notes on ideas discarded.

2.2.3. Review graphics

Review an initial selection of graphics in hand or based on knowledge of what is available to inform the on-site discussion. Review the graphic and content resources available including historic quotes, drawings, photos, or other sources provided by the park.

2.2.4. Check site conditions

Access and take note of each wayside exhibit location for safety, accessibility, including any landscaping or site hardening work required. Note archeological issues and other compliance requirements. Identify and note any existing signs that need to be removed when new waysides are ready.

2.2.5. Sketch Ideas

Offer several visual solutions, or options, to convey messages and ideas. Develop pencil sketches on-site to facilitate the discussion. Use these sketches to promote discussion and clarify the focus of each wayside.

2.2.6. Take Photos

Take geo-referenced site photos (photos that include latitude and longitude metadata) in the direction of view of each wayside, with a marker showing where the base will be installed and shoot additional images to document unique or unusual site or resource conditions.

2.2.7. Determine panel materials

For each wayside exhibit, discuss environmental conditions, potential vandalism, and the relative permanence of the information to be conveyed and note consensus on the panel material decisions.

2.2.8. Determine base structure

Assess and take note of each site's condition and note the team consensus on base style, color, and finish. Take note of any custom base and installation needs, including site-specific measurements and photographs.

2.2.9. Identify resources

Review park graphic collections and sources for any additional graphics located off-site. Identify resource materials, footnotes, and bibliographies, graphics, and artifact collections relevant to the wayside content. Record enough source information so they can be located and properly acquired when needed. Gather reference material for proposed illustrations and maps.

2.2.10. Identify partner resources

Meet with local historical societies, museums, or other relevant off-site partners and subject-matter experts to develop and refine wayside exhibit content.

2.3. Site Analysis Close-out Meeting and Documentation

2.3.1. Close-out Meeting

The contractor shall present a summary of the site visit, decisions made and any outstanding issues; review sketches and graphic direction for the waysides; review selected materials and other graphics needed; discuss custom installation or maintenance issues; review the schedule and next steps; and review any special site requirements with park maintenance staff.

2.3.2. Trip summary

Prepare a brief summary of site visit issues for discussion at closeout meeting. Review the summary with Contracting Officers Representative (COR) prior to closeout meeting.

2.3.3. Representative thumbnails

Based on notes and decisions made during the site-by-site analysis, the contractor shall create thumbnails as necessary for review at closeout meeting with park and/or stakeholders.

2.4. Format Requirements for Trip Report

The contractor shall provide the Site Analysis Trip Report in the following formats:

- Textual file and site photos in digital format.

3. Wayside Exhibit Proposal

3.1. General Requirements for the Wayside Exhibit Proposal

The Wayside Exhibit Proposal shall document the purpose and characteristics of each wayside. It shall include a detailed list of all wayside exhibits, a specific purpose statement for each wayside, size, materials, graphic and content needs, detailed site location data, and other data for each wayside; a summary narrative; detailed cost estimate; site map; proposed custom hardware drawings; and drawings of multi-panel bases such as kiosks.

3.2. Data Requirement for the Wayside Exhibit Proposal

The Harpers Ferry Center presently uses the Wayside Exhibit Planner (WEP) to produce the Wayside Exhibit Proposal. The contractor is encouraged to use the WEP. This WEP is currently designed to operate using FileMaker Pro for either Mac or PC. The Harpers Ferry Center will provide the WEP. The contractor must obtain FileMaker Pro to use the Wayside Exhibit Planner.

3.3. Format Requirements for the Wayside Exhibit Proposal

The contractor shall provide the Wayside Exhibit Proposal in the following formats:

3.3.1. Source file

File Maker Pro or as determined by the contractor.

3.3.2. PDF

Single Adobe PDF of the entire proposal (Report formats are included in the Wayside Planner database).

3.3.3. Printed

Printed bound copies of the proposal.

3.4. Content Requirements

The Wayside Exhibit Proposal shall include the following:

3.4.1. Narrative summary

A written narrative summarizing overall project goals, reoccurring themes, issues and concerns, and recommendations.

3.4.2. Accessibility Strategy

The Accessibility Strategy shall be included in the Wayside Exhibit Proposal. See Section 1.

3.4.3. Location Map

Show proposed wayside exhibit locations labeling each site with corresponding exhibit numbers. This includes snapshot Google Earth views from geo-tagged site photos of wayside locations or detailed site maps provided by the government or acquired by the contractor with manually located wayside locations.

A second map to show locations of existing wayside exhibit that are to be removed.

3.4.4. Numbered list of all proposed exhibits

List exhibit number, subject, location, panel material, mount type, and size.

3.4.5. Refined Sketches

Refine and annotate sketches to clearly and legibly represent the hierarchy, focus, proportions, and composition of elements for each wayside.

3.4.6. Custom Base Sketches

Prepare 3-dimensional Google SketchUp-style drawings for each proposed custom base, mount, or footer.

3.4.7. Standard Base Drawings

Include standard base hardware drawings. The NPS will provide existing drawings for standard wayside exhibit bases.

3.4.8. Cost Estimates

An itemized production cost estimate. This includes but is not limited to costs for graphics, photography, original art, maps, diagrams, and fabrication of tactical elements, panels, and bases. The contractor shall provide the most accurate pricing information available for the current stage of project development.

3.4.9. Information for each Wayside Exhibit shall include:

Exhibit Number

Subject

Purpose

View

Comments

Potential Graphics

Potential Map

Potential Illustrations

Potential Tactile Elements

Potential AV Elements

General Location

Specific Location

GPS Coordinates

Site Photo

Orientation

Access Issues

Site Prep Issues

Panel Size

Panel Material

Installation Notes

Inventory Notes

Base Category

Base Drawing

Base Style

Base Color

Base Material

Base Angle

Base Mount

Ancillaries

Panel Costs

Base Costs

Tactile Costs

Graphics Costs

Illustration Costs

Map Costs

4. Research And Graphic Acquisition

4.1. General Requirements for Research and Graphic Acquisition

Conduct research for all content including text, graphics, maps, illustrations, braille, foreign language translation, tactile elements, and audio description. Collect all potential resources/references for use in the creation of wayside exhibits. The contractor shall coordinate with the park to collect research material and gather references and images. The contractor shall track and document all sources, organized by exhibit, for potential acquisition in an asset management database.

4.2. Specific Requirements for Research and Graphic Acquisition

4.2.1. Resource Request List

The contractor shall prepare a list of text and graphic references needed from the NPS to develop a future Wayside Exhibit Plan. The format of this resource request list shall conform to that of Attachment F, Sample Graphic Request Letter. The details of the list shall be created upon acceptance of the Wayside Exhibit Proposal and follow-up discussion. For each proposed exhibit, the resource request list shall consist of a request for, but not limited to:

- Historical quotations, relevant site-specific descriptions of the story or subject matter to be presented on the exhibit
- All potential graphics to be used on the exhibit (historic photos, color transparencies, digital photographs)
- Art references for new original illustrations (historic photos, 1st person descriptions, uniforms, plant and wildlife identifications)
- Cartography references for new maps (GIS and other geo-referenced data)
- Tactile references (original objects, reproductions, photographs)
- Audio description (scene identification – names, distances)

4.2.2. Graphic Source List

The contractor shall prepare a list of all references, graphics, and existing artwork prior to acquisition that includes the following information:

- Negative or identification number
- Copy of the image or resource
- Description of image
- Wayside exhibit number for which the image is requested
- Acquisition cost for one-time educational use for the life of the wayside exhibit
- Notes on availability of image
- Maximum time frame image is available
- Format
- Size
- Collection
- Location data
- Source with addresses, indicating where the original is located
- Required lead-time on acquisition of image
- Contact person, including department
- Telephone number
- Credit line
- E-mail address
- Use Rights
- Estimated cost to acquire image

4.2.3. Graphics Acquisition

Based on the COR approved Graphic Source List, graphic acquisition and licensing will be conducted by contractor as specified in scope of work.

4.2.4. Provide Graphic License Information

For graphics acquired by the contractor, the contractor shall obtain the appropriate use rights for all approved graphics used in the wayside exhibits. The rights secured shall provide the NPS with one-time educational use, in perpetuity. Any license agreement which secures the specified use rights shall

clearly indicate that the contractor is acquiring the rights on behalf of the NPS. In addition, license agreements may NOT contain any of the following:

- Standard indemnification or hold harmless clauses which are typical in many license agreements.
- Any clause subjecting the NPS to arbitration. Any such clause shall be removed in its entirety.
- Any choice of law or choice of venue provisions subjecting the NPS to the laws or venue of a foreign country.
- Any provision requiring credit information on the wayside exhibit.

4.2.5. Protect Original Materials

In some cases, original graphics are on loan from a commercial or private source for the purposes of evaluation or for reproduction (scan or slide/print duplicate). All non-digital graphics (transparencies and prints) shall be protected within archival sleeves with wayside exhibit graphic numbers, titles, negative or slide numbers, source information, credit line, and restrictions.

The contractor shall confirm the physical condition of all government-furnished graphics upon receipt and shall be responsible for any damage that occurs to these images while in their possession. Fees for damages or loss will be assessed on a per image basis and fall within the requirements set forth in the government-furnished property clause.

4.3. Original Illustrations or Artwork

The contractor shall create original illustrations according to Attachment C, Wayside Guide and the following specifications. All illustrations and rough preliminary sketches become property of the NPS.

4.3.1. Research

Provide research services to identify, locate, gather, originate, and validate reference materials necessary to develop an accurate depiction of the subject matter.

4.3.2. Sketches

Develop thumbnail sketches, rough preliminary sketches, and technique samples representing the finished medium in order to facilitate discussion with the project. Size for developmental materials and final artwork will be specified in scope of work.

4.3.3. Content

Render any number of subjects required for an individual job, or from job to job, that will include but are not limited to archeology, architecture, anthropology,

botany, cultural history, diagrams, geology, military history, period furnishings, and wildlife.

4.3.4. Style

Render subject matter in black and white or full color clearly and precisely in a technique that will reproduce well at final production size. Maintain a consistent rendering technique throughout the illustration, or series of illustrations despite the variety of reference materials employed or subjects covered.

4.3.5. Scans

Provide a reproducible quality archival 1:1 scan of the original reflective art suitable for large format reproduction.

4.4. Maps

The contractor shall create new wayside maps and modify existing maps according Attachment G, Wayside Map Standards and the following specifications.

4.4.1. Size and Scale

The contractor shall determine map scale based on the purpose, geographic area, and content of the wayside exhibit and map. The contractor shall specify map size (physical length and width) and the amount of geographic area represented within those dimensions (scale). The contractor shall mockup each map showing an accurate geographic area at the size and scale appropriate for and consistent with, wayside map standards.

4.4.2. NPS Standards

Attachment G, Wayside Map Standards include Frutiger and NPS Rawlinson fonts; pictographs, scale bars, north arrows, road shields, and other NPS symbols; light colors that coordinate with other brochure elements, such as photographs; generalized linework; and, where appropriate, lightly printing shaded relief. Wayside map labels shall be consistent with park signs and publications, and have a clean, uncluttered, and exceptionally legible appearance.

4.4.3. Map Accuracy and Generalization

Regardless of whether a map derives from geospatial or analogue sources, it shall be accurate. Putting information on maps by “eyeballing” it in is not permissible. Thematic data presented on maps shall derive from authoritative sources. Care shall be taken preparing base maps from geospatial data to generalize it appropriately depending on the map scale.

4.4.4. Place Names

All place names on US Government maps shall be spelled according to the US Board on Geographic Names: https://www.usgs.gov/core-science-systems/ngp/board-on-geographic-names.

4.4.5. Software

The contractor shall produce final vector maps using the latest Adobe Illustrator. Raster maps shall be delivered in the latest Adobe Photoshop software. Map information shall be organized in annotated layers for easy editing.

4.4.6. Revise existing NPS Maps

The contractor shall modify existing NPS produced maps. Modifications typically consist of color changes; label deletions and additions; removing or adding roads, trails, and other map lines; resizing maps; and, adding thematic information.

4.5. General Requirements

The Wayside Plan is a series of the actual graphic layouts with content integrated for each wayside panel. The contractor shall develop the Wayside Exhibit Plan from the approved Wayside Exhibit Proposal and approved Graphic Resource Package. All graphic layouts shall be created using NPS wayside grids according to the National Park Service grids at the webpage: https://www.nps.gov/subjects/hfc/wayside-planning.htm

The plan shall visually show the intentions for each exhibit panel. Multi-panel exhibits or exhibits with additional three-dimensional components shall be illustrated as a single scaled rendering in addition to each panel layout.

4.6. Data Requirement for the Wayside Exhibit Plan

Layouts for digital design and production-ready work shall be accessible on Macintosh or Windows PC, using Adobe Creative Suite Design Standard software (Adobe InDesign, Adobe Photoshop, Adobe Illustrator, and Adobe Acrobat). The contractor shall be responsible for software upgrades over the course of the contract.

4.7. Format Requirements for the Wayside Exhibit Plan

The contractor shall provide the Wayside Exhibit Plan in the following formats.

- Adobe PDF of the printed plan
- Printed 11 x 17 bound copies

4.8. Specific Requirements for Graphic Design

The contractor shall design wayside exhibits according to Attachment C, Wayside Guide and the following specifications.

4.8.1. Grids

Use the most current version of the NPS grids and associated guidelines https://www.nps.gov/subjects/hfc/wayside-planning.htm

4.8.2. NPS Identity Standards

NPS wayside grids show the correct NPS Identity Standards. Logos other than the NPS arrowhead shall not be used in the black band. The NPS logo/emblem is only logo to be used in the black band.

4.8.3. Type Fonts

The government requires the use of the Adobe Frutiger and NPS Rawlinson, a proprietary NPS face used throughout the park system. The contractor shall acquire a license from the Adobe for the open type version of Frutiger light, light italic, roman, roman italic, bold, bold italic, black, black italic, and ultra-black. NPS Rawlinson will be provided by the government with guidelines. The guidelines will describe the circumstances as to how the faces are utilized and the importance of ensuring graphic consistency for all NPS wayside exhibits. The contractor shall develop typography in accordance with the most current version of Attachment J, Typographic Standards.

4.8.4. File Naming

The National Park Service has created a digital-file naming convention for all wayside exhibits that shall be used for all files delivered to the government. The naming convention assures compatibility with all computer platforms and archiving systems and ensures unique file names regardless of the creator. See Attachment K, File Naming Guide.

4.8.5. Color Management

The contractor shall adopt a color-managed workflow to ensure color accuracy and consistency. See Attachment L, Color Management Guide.

4.9. Specific Requirements for Writing and Editing

The contractor shall develop and edit wayside exhibit text according to Attachment C, Wayside Guide and the following specifications:

4.9.1. Purposes Met

Content must support the stated purpose of each wayside exhibit.

4.9.2. Text and Graphics

Submit layouts showing text and graphics working together.

4.9.3. Site-specific Messages

Provide wayside exhibits where texts link visitors with the landscape in front of them and connect the landscape with the interpretive story.

4.9.4. Word Count

Make sure that each wayside exhibit can be read in less than 45 seconds.

4.9.5. Language Choices

Write in plain English, avoiding jargon and buzzwords. Use active voice verbs. For safety rules, use direct, command-form instructions. Follow Attachment, M, Style Guide for specific guidance on word choices and format issues.

4.9.6. Readability

Write text test no more than a level 10 on the Flesch-Kincaid reading difficulty scale.

4.9.7. Structure

Write text in logical hierarchies.

4.9.8. Neutral Point of View

Avoid value judgments or subjective statements. Use an objective point of view to present interpretive messages in wayside exhibits.

4.9.9. Research to Support Content Development

Do background research to be able to interpret the wayside exhibit topics in projects where government-provided references are not adequate to do the task thoroughly and with factual accuracy. Where appropriate, use historical quotes to support the story being told. Quotes must be accurate and referenced.

4.9.10. Editing

Proofread to correct spelling, grammar, capitalization, and punctuation errors. Check all dates, facts, and labels. Examine text elements for consistency in treatment.

4.10. Specific Requirements for Language Translations

Where national parks require bilingual or trilingual wayside exhibits, the contractor shall translate approved English wayside exhibit text into target languages according to Attachment N, Language Translation Specifications and the following specifications:

4.10.1. Avoid Word-for-Word Translations

Dynamic translation of key ideas is more important than following the word order of the original writing. Non-English wayside texts must engage visitors' interest effectively. Interpretive meanings and intent must survive translation and remain clear to both audiences.

4.10.2. International Standards, not Regional Dialects

Match the vocabularies and complexity heard on news broadcasts on cable television; or compare translated texts to encyclopedia websites in the target language to gauge wayside text complexity.

4.10.3. Provide Visual Parity

Keep in mind that many languages require more space in print than English. Develop bilingual wayside exhibit content so that no visitor is short-changed, regardless of what language they read best. Side-by-side text block placement avoids non-English readers feeling insulted.

4.10.4. Edit Translated Text

Proofread and correct spelling, grammar, capitalization, and punctuation errors, following the rules of the target language. For Spanish wayside texts, follow Attachment E, Spanish Style Guide for detailed word choices, park-specific natural history and military vocabularies, and formatting decisions that have been used in many NPS interpretive media projects. For other languages, use the Chicago Manual of Style, Chapter 11, Languages Other than English https://www.chicagomanualofstyle.org/book/ed17/part2/ch11/toc.html for initial guidance on the differences in punctuation and capitalization rules. Style guides for major non- English newspapers can also be found on the Internet for most languages used in NPS wayside exhibits.

5. Graphic Panel File Preparation

5.1. General Requirements for Wayside Exhibit Production-Ready Package and Other Services

Based on the approved Wayside Exhibit Plan, the contractor shall create a production- ready package from which wayside exhibits can be fabricated.

5.2. Specific Requirements

The production-ready package consists of the production-ready digital layout files, high-resolution graphic files, color proofs, and production notes. The following specifications shall direct the development and handling of the files:

5.3. Develop production-ready files

The contractor shall create production files that are prepared properly for the intended fabrication technique. Each exhibit shall be created as unique InDesign files except in cases where only a “You Are Here” or small site-related change is made. InDesign Layers or separate graphic files are used to distinguish the multiple panels in a single layout file. Files including all InDesign layouts (Wayside Exhibit Grids are all built at 1:1 scale), Adobe Illustrator map files, and all Adobe Photoshop graphic files shall be developed at full scale and at resolution appropriate for the intended panel material (see URL on panel material specifications). All high-resolution links and final text elements shall be placed in the InDesign layouts. Production files shall be delivered via optical media (CD/DVD formatted for both Mac/Pc) or through an FTP or HTML link.

5.3.1. Edit digital images

Provide high-resolution image editing services. The contractor shall edit high-resolution scans for use on wayside exhibits. This includes, but is not limited to:

joining photographs to create panoramic images, image clean-up and restoration, lightening and darkening image areas for legibility, and the creation of complex masks for sky addition and object or figure isolation. Image editing for the purpose of altering photographic historical content is prohibited. Completed files shall be delivered as high-resolution RGB layered Photoshop files. The contractor shall deliver original unaltered scan for comparison and approval. Specifications for color and resolution are outlined in Attachment L, Color Management Guide.

5.3.2. Provide high-resolution scanning

The contractor shall provide high-resolution scanning services suitable for large format graphics and have the capability to handle a wide variety of original media including: transparencies/negatives (35mm, all sizes of 2.25, 4x5, 8x10) and prints of all sizes, including original art that may exceed 3 x 2 feet. Each high-resolution scan shall be provided to the COR with a color proof that accurately reflects the color and detail of the scan.

5.3.3. Provide all digital source files including:

Raw scans.

Photoshop layered edited files that may been flattened to create the final production files.

Data files acquired or created in the creation of maps including GIS shapefiles, geo-referenced imagery, original layered renders, USGS vector data, Digital Elevation Models (for shaded relief), and other accurate digital sources in the public domain

Native source files for 3-dimensional illustrations and maps