

NATIONAL PARK SERVICE
HARPERS FERRY CENTER
WAYSIDE EXHIBIT

PLANNING AND DESIGN

SPECIFICATIONS

NATIONAL PARK SERVICE
HARPERS FERRY CENTER
WAYSIDE EXHIBIT PLANNING
AND DESIGN SPECIFICATIONS

WAYSIDE EXHIBIT PLANNING AND DESIGN SPECIFICATIONS OUTLINE

- Section 1 Programmatic Accessibility
 - 1.1 General Requirements
 - 1.2 Specific Requirements

- Section 2 Site Analysis
 - 2.1 General Requirements
 - 2.2 Specific Requirements for the Site Visit
 - 2.3 Site Analysis Close-out Meeting and Documents
 - 2.4 Format Requirements for Trip Report

- Section 3 Wayside Exhibit Proposal
 - 3.1 General Requirements
 - 3.2 Data Requirements
 - 3.3 Format Requirements
 - 3.4 Content Requirements

- Section 4 Research and Graphic Acquisition
 - 4.1 General Requirements for Research and Graphic Acquisition
 - 4.2 Specific Requirement for Research and Graphic Acquisition
 - 4.3 Original Illustrations or Artwork
 - 4.4 Maps

- Section 5 Wayside Exhibit Plan
 - 5.1 General Requirements
 - 5.2 Data Requirements
 - 5.3 Format Requirements
 - 5.4 Specific Requirements for Graphic Design
 - 5.5 Specific Requirements for Writing and Editing
 - 5.6 Specific Requirements for Language Translations

- Section 6 Graphic Panel File Preparation
 - 6.1 General Requirements for Wayside Exhibit Production-Ready Package and Other Services
 - 6.2 Specific Requirements
 - 6.3 Develop Production-Ready Files

SECTION 1. PROGRAMMATIC ACCESSIBILITY

1.1. General Requirements

Park visitors who have physical, sensory, or cognitive disabilities have legally established civil rights to receive the same information and context that NPS interpretive media provide fellow citizens. The contractor shall develop an Accessibility Strategy for each wayside exhibit project that clearly addresses programmatic accessibility requirements.

All work performed under this contract shall be in accordance with the *Programmatic Accessibility Guidelines for NPS Interpretive Media* (Attachment B) and the *Wayside Exhibits: A Guide to Developing Outdoor Interpretive Exhibits* (Attachment C) also referred to as the *Wayside Guide*. The guidelines combine laws, policies, and best practices to offer design and presentation solutions that are acceptable in most situations. Additional and specific requirements may be required in individual task orders.

1.2 Specific Requirements

The contractor shall prepare written recommendations (Accessibility Strategy) that clearly describe how the content and context of the proposed wayside exhibits will be accessible to individuals with visual, hearing, mobility, and cognitive impairments.

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.

In cases where audio description is recommended in the Accessibility Strategy, the contractor shall prepare an Audio Description Production Plan. This document shall outline the audio descriptive elements of the wayside project and include recommendations for hardware to play the audio descriptive content according to the *Programmatic Accessibility Guidelines for NPS Interpretive Media* (Attachment B).

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. The contractor shall design tactile elements according to the *Programmatic Accessibility Guidelines for NPS Interpretive Media* (Attachment B).

1.2.3 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 contracted (grade 2) braille 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 ABA Accessibility Guidelines" Chapter 7, Section 703, Signs, and the "Editorial Corrections.

The contractor shall design braille elements according to the *Programmatic Accessibility Guidelines for NPS Interpretive Media* (Attachment B).

SECTION 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.
- 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. The NPS has a standard list of hardware specifications included in the *VIS and Wayside Hardware Specification Manual* (Attachment P). Any hardware outside of this manual is custom hardware.
- 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** 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 COR prior to closeout meeting.
- 2.3.2 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:

- 2.4.1** Textual file and site photos in digital format.
2.4.2 Printed copy of written Trip Report.

SECTION 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. See *Sample Wayside Exhibit Proposal* (Attachment D).

3.2 Data Requirement for the Wayside Exhibit Proposal

The Harpers Ferry Center presently uses the Harpers Ferry Center (HFC) Wayside Exhibit Planner (WEP) to produce the Harpers Ferry Center Wayside Exhibit Proposal. The contractor is encouraged to use the HFC Wayside Exhibit Planner. This HFC, WEP is currently designed to operate using FileMaker Pro for either Mac or PC. The Harpers Ferry Center will provide the HFC Wayside Exhibit Planner. The contractor must obtain FileMaker Pro to use the HFC 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** Wayside Planner Application file for the specific project or data as outlined in section 4.4 with instructions on how to import the data into the Wayside Planner Application.
- 3.3.2** Single Adobe PDF of the entire proposal (Report formats are included in the Wayside Planner database).
- 3.3.3** Printed bound copies of the proposal (number of copies specified in each task order).
- 3.3.4** Google Earth file (.KMZ) and Google Maps link (URL) with all wayside locations identified with latitude and longitude coordinates, exhibit numbers with alpha code, and site photos. Custom wayside Google icon will be provided by the NPS.

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.
- 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 planning, design, graphics, photography, original art, maps, diagrams, tactical elements, audio description and hardware, panel fabrication, and base fabrication. 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	Duplicated Needed
Subject/Exhibit Title	Duplicate Numbers
Purpose	Installation Notes
View	Inventory Notes
Comments	Base Category
Potential Graphics	Base Drawing
Potential Map	Base Style
Potential Illustrations	Base Color
Potential Tactile Elements	Base Material
Potential AV Elements	Base Angle
General Location	Base Mount
Specific Location	Ancillaries
GPS Coordinates	Panel Costs
Site Photo	Base Costs
Orientation	Ancillary Costs
Access Issues	Graphics Costs
Site Prep Issues	Illustration Costs
Panel Size	Map Costs
Panel Material	

SECTION 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 the *Reference and Graphic Request Sample* (Attachment E). 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 either the NPS or contractor as specified in each task order.

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 National Park Service 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 National Park Service. In addition, license agreements may NOT contain any of the following:

1. Standard indemnification or hold harmless clauses which are typical in many license agreements.
2. Any clause which should subject the National Park Service to arbitration. Any such clause shall be removed in its entirety.
3. Any choice of law or choice of venue provisions which would subject the National Park Service to the laws or venue of a foreign country.
4. 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 the *Wayside Guide* (Attachment C) 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 each task order.

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 in that particular task order.

4.3.5 Scans

Provide a reproducible quality archival 1:1 scan of the original reflective art suitable for large format reproduction. The scan shall be created according to the Digital Imaging Standards for Wayside Exhibits webpage: <http://www.nps.gov/hfc/pdf/digital-image-guide-dec06.pdf>.

4.4 Maps

The contractor shall create new wayside maps and modify existing maps according to the *NPS Wayside Map Standards* (Attachment G) 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

NPS Wayside Map Standards (Attachment G) 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.

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.

Map Projections

Standardized map projections are required. The UTM projection (the zone will vary according to location) and NAD83 datum are required for parks in Hawaii and the contiguous 48 states. Maps of Alaskan parks shall use the Alaskan Albers Equal-Area projection, NAD83 datum. Maps of the contiguous United States (U.S.) shall use the Albers Equal-Area projection, CONUS parameters. World maps shall avoid using cylindrical projections (i.e. Mercator, Miller, and Geographic) in favor of projections with less severe areal distortion, such as the Robinson or Winkel Tripel. Final map deliverables shall contain metadata specifying the projection type, projection parameters, and datum. Maps produced in Adobe Illustrator with the Avenza MAPublisher GIS plugin automatically contain projection information.

Place Names

All place names on U.S. Government maps shall be spelled according to the U.S. Board on Geographic Names: <http://geonames.usgs.gov/>

4.4.3 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.

4.4.4 NPS Starter Map Files

These layered Adobe Illustrator files contain all of the elements needed to design and produce maps in accordance with *NPS Wayside Map Standards* (Attachment G). For example, graphical styles assigned to layers automatically apply line weights and colors to roads, trails, and drainages; the contractor need only to draft (or paste) a line on the appropriate layer for the proper style to appear. Map elements found in Map Starter Files include north arrows; bar scales; pictographs; road shields, callout boxes; and area color schemes keyed to natural environments, such as deserts and forests.

4.4.5 Data Sources

Unless otherwise approved in advance by the COR, exhibit maps shall derive from accurate geospatial data sources. Typical exceptions to this requirement include simple maps that can be produced more efficiently by tracing existing maps in Adobe Illustrator; artistically rendered maps, such as a map in a fauxhistorical style; and diagrammatic maps. Most new maps shall derive from geospatial data sources with georeferencing, including but not limited to the following data types: ESRI shapefile, .e00, and geodatabase; AutoCAD DXF; Digital Chart of the World (DCW); Digital Line Graph (DLG); Digital Elevation Model (DEM); Digital Orthophoto Quadrangles (DOQ); Digital Raster Graphics (DRG); Spatial Data Transfer Standard (SDTS); and the full range of data formats offered online by the U.S. Geological Survey and other U.S. government agencies. The Contractor shall identify other available sources as required. All data sources shall be in the public domain unless approved in advance by the COR. See: <http://www.nps.gov/carto>

4.4.6 Metric units of measurement

In addition to Standard English measurements, the contractor shall include metric equivalents for labeled units of measurement. All conversions shall preserve the degree of precision of the original English measurement. For example, a label that lists a trail as 0.25 mile shall not include a metric equivalent of 402.33 meters; this implies a degree of exactness that the original English did not have. The dynamic equivalent of 0.25 mile would be about 400 meters. Road and trail distances below one kilometer shall be stated in rounded off hundreds of meters. Distances greater than one kilometer shall be stated in rounded off tenths of kilometers.

4.4.5 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.

4.4.6 Map Types

The contractor shall provide a variety of maps including but not limited to the following:

3D Maps

These maps are sometimes called panoramas or birds-eye views, these digitally rendered views show natural landscapes (with three-dimensional terrain) and/or cultural landscapes (with three-dimensional buildings) from an oblique angle. The contractor shall use 3D software of their choice for rendering 3D maps, unless otherwise specified in the task order. The final 3D maps are presented on the flat two-dimensional surfaces of wayside exhibit panels.

Image maps

Maps created from aerial photographs or satellite images. The images may depict the park planimetrically (looking at the site from a point directly overhead) or obliquely as in a bird's-eye view.

Thematic maps

Base maps of parks and larger geographic regions overlaid with interpretive information. For example, a map of the Greater Yellowstone ecosystem depicting forest fires since 1980.

Trailhead maps

Maps depicting hiking routes starting at specific wayside exhibits. The map orientation is in the same direction as the outbound hiker on the trail.

A trailhead map can also be a 3D map, image map, or conventional planimetric map.

Tactile Maps

Maps that are fabricated with tactile or three-dimension layers including braille and other touchable elements. The contractor shall create tactile maps according to the *Tactile Map Guidelines* (Attachment H).

SECTION 5. WAYSIDE EXHIBIT PLAN

5.1 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* (Attachment D) 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: <http://www.nps.gov/hfc/products/waysides/way-grids.cfm> .

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.

5.2 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.

5.3 Format Requirements for the Wayside Exhibit Plan

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

5.3.1 Adobe PDF of the printed plan (see *Sample Wayside Exhibit Plan* Attachment I)

5.3.2 Printed 11x 17 bound copies (number of copies specified in each task order)

5.4. Specific Requirements for Graphic Design

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

5.4.1 Grids: Use the most current version of the NPS grids and associated guidelines and specifications located at <http://www.nps.gov/hfc/products/waysides/way-grids.htm>

5.4.2 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.

5.4.3 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 the National Park Service *Wayside Exhibits Typographic Standards*, Attachment J.

5.4.4 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. *File Naming Conventions* (Attachment K) and located at: <http://www.nps.gov/hfc/products/waysides/grids/way-file-naming.pdf>.

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

5.5 Specific Requirements for Writing and Editing

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

5.5.1 Purposes Met: Content must support the stated purpose of each wayside exhibit.

5.5.2 Text and Graphics: Submit layouts showing text and graphics working together.

5.5.3 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.

5.5.4 Word Count: Make sure that each wayside exhibit can be read in less than 45 seconds.

5.5.5 Language Choices: Write in plain English, avoiding jargon and buzzwords. Use active voice verbs. For safety rules, use direct, command-form instructions. Follow the *Harpers Ferry Center Editorial Style Guide* (Attachment M) for specific guidance on word choices and format issues.

- 5.5.6 Readability:** Write text test no more than a level 10 on the Flesch-Kincaid reading difficulty scale.
- 5.5.7 Structure:** Write text in logical hierarchies.
- 5.5.8 Neutral Point of View:** Avoid value judgments or subjective statements. Use an objective point of view to present interpretive messages in wayside exhibits.
- 5.5.9 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.
- 5.5.10 Editing:** Proofread to correct spelling, grammar, capitalization, and punctuation errors. Check all dates, facts, and labels. Examine text elements for consistency in treatment.

5.6 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 the *Language Translation Specifications* (Attachment N) and the following specifications:

- 5.6.1 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.
- 5.6.2 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. Two good resources are *Enciclopedia hispánica*, found at <http://mexico.planetasaber.com/> (for Spanish) and <http://www.encyclogediagermanica.com> (for German.)
- 5.6.3 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.
- 5.6.4 Edit Translated Text:** Proofread and correct spelling, grammar, capitalization, and punctuation errors, following the rules of the target language. For Spanish wayside texts, follow the NPS Spanish Style Guide <http://www.nps.gov/hfc/products/waysides/way-pdfs.htm> 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 10, *Foreign Languages* http://www.chicagomanualofstyle.org/ch10/ch10_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.

SECTION 6 GRAPHIC PANEL FILE PREPARATION

6.1 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.

6.2 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:

6.3 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.

6.3.1 Prepare production notes: The production-ready package shall include *Production Notes* (see sample Attachment O) that direct the fabrication of the wayside exhibits and document particular fabrication requirements or special attributes, for example multi-panel exhibit files (accessible by turning on and off layer combinations) or color specifications for porcelain enamel. The notes shall be accompanied by 11x17 color proofs of all the wayside exhibits to be produced and all the high-resolution production-ready files needed for fabrication. Each print shall accurately reflect the content and color of the production files.

6.3.2 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

the Graphic Requirements for Wayside Exhibits webpage <http://www.nps.gov/hfc/products/waysides/way-graphics.cfm>.

6.3.3 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. Specific panel material requirements are listed the Graphic Requirements for Wayside Exhibits webpage <http://www.nps.gov/hfc/products/waysides/way-graphics.cfm>.

6.3.4 Provide all digital source files including:

- Raw scans
- Photoshop layered edited files that may be 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

