

**SECTION C**  
**DESCRIPTION/SPECIFICATIONS/AND WORK STATEMENT**

1. **BACKGROUND**

As one of the nation's principal conservation agencies, the National Park Service (NPS) has the responsibility to protect some of our most treasured natural and cultural resources. In order to preserve these treasures it is important that they be interpreted in ways that help NPS visitors experience them, understand them, and appreciate their value. It is also important that those who visit National Park sites be assured that their visits are safe and enjoyable.

Since its earliest days, the NPS has relied on a variety of interpretive media to assist in the effort to protect its resources and to assure the pleasure and safety of its visitors. Among the various media used by the NPS, wayside exhibits provide the most direct interpretation of park sites and features. Because they are located in a park's outdoor environment, "waysides" offer immediate -- and readily available -- sources of information tailored to a specific place and time. No other interpretive medium can match the power of direct association of information and resource, or the convenience of on-site location.

These contracts are designed to respond to a need to establish nationwide support services for different types of National Park Service outdoor panels. Projects range in scope of small to major.

2. **PURPOSE**

This contract is to meet the interpretive wayside exhibit panel requirements of the Department of the Interior, National Park Service, and occasionally other agencies of the government, by providing fabrication of exhibit quality high pressure laminate panels for outdoor use. All work performed under this contract will be directed by the issuance of Task Orders in accordance with procedures outlined in Section G of the resulting contract. In no event will the government be responsible for any work performed by the contractor that is not undertaken pursuant to a Task Order authorized by the Contracting Officer.

3. **SCOPE OF WORK**

Independently, and not as an agent of the government, the contractor shall provide all labor, materials, equipment and facilities (except as otherwise specified), necessary to fabricate interpretive wayside exhibit high pressure laminate panels for outdoor use.

Work under this contract will proceed according to the following order of precedence: Drawings; Scope of Work; Attachments; Supplies or Services and Prices/Costs; Contract Clauses; and Representations, Certifications, and Other Statements of Offerors.

Specifically, the following services are required:

A. **HIGH PRESSURE LAMINATE PANELS**

1. **Production of high pressure laminate (HPL) panels from government-furnished digital files or production-ready materials**

Outdoor Grade: High pressure laminate graphic sign material shall be composed of several layers of phenolic (opaque) resin impregnated kraft filler paper collated to a thickness from .093" and, surfaced by a layer of coated inkjet graphic image substrate, digitally imaged with ultra-violet (UV) resistant, pigment based process color inks, two UV resistant melamine (clear) overlay sheets, with a modified acrylock overlay for further UV resistance and hardness, which has been pre-consolidated with an industrial optical coating. The optical top coating assures UV resistance of over 97% of all harmful UV rays and further tempers the surface to resist vandalism and provides a surface that accommodates easy cleaning of graffiti without degrading the graphic surface. Layers of material shall be assembled and heat/pressure consolidated in laminate presses at approximately 1300 PSF at temperatures exceeding 295 degrees Fahrenheit. Once cooled, the paper shall completely absorb the melamine to assure a solid thermoset plastic.

Four-color CMYK images shall be printed on an ink jet printer using ultraviolet resistant pigmented inks. Images shall be printed on a specially formulated substrate capable of HPL embedment. The print shall be full-size all the way to the edges of the panel.

Full-size paper proofs and 8" x 10" pressed sections printed in the actual color to be used in production shall be submitted to the COR for review and approval prior to embedment.

The minimum requirements for the inkjet printer shall be 600 dpi image resolution with an output width capable of printing a 36" x 48" image in a single section.

All completed panels shall be trimmed 1/8" under nominal dimensions indicated in the scope of work with a tolerance of +/- of 1/32". The total thickness *of all assembled panel components shall not exceed 0.100"* for all panels.

Panels shall be able to withstand temperatures from –65° f. to 350°f. The panels shall have a minimum Barcol harness factor of 50, tensile strength of 12,000 psi, compressive strength of 20,000 psi, and flexural strength of 18,000 psi, minimum impact strength shall be 6 gt lbs/in notch with a fire resistance of 500°f. The face shall not be permanently defaced by seam, acid aromatics, scratching, inks, or paints and should be readily wiped clean with paint remover and solvents without affecting the appearance or legibility of finish or graphics. Face shall retain legibility and finished appearance when sprayed with a 10% solution of hydrochloric, nitric, or sulfuric acid for one half-hour or when scrubbed by a brush or medium hardness using common commercial cleaning compounds such as ammonia, laundry soaps, detergents, carbon tetrachloride, or petroleum based solvents.

Government-furnished property will include a CPP consisting of computer files, annotated printouts, and graphic materials for each of the wayside panels to be imaged.

Each panel layout shall be created at full-size and be delivered on a disk, CD, or other current technological storage medium as approved by the COR.

Computer file specifications and requirements include QuarkXPress or InDesign 3.0.1 or greater; Adobe Postscript Level III RIP compatible with Adobe transparency affects; Map/Graphic files created in Adobe Photoshop CS, Adobe Illustrator 10, RGB Adobe Photoshop layered files and other current or equal technology as approved by the COR.

Each computer file will be accompanied by an 11” x 17” color annotated descriptive printout of the panel layout. Each printout will contain illustrative images, (i.e., photographs and illustrations); text, graphic devices, and background; and written production instructions including PMS and other color specifications, notes regarding any image manipulation desired, and the kind of reproduction desired, i.e., full-color, black halftone and mezzotint.

2. **Image assessment, image manipulation and editing, and high resolution scanning**

The contractor shall be responsible for the following:

Image assessment that shall include accuracy of color compared to original proofs, text sharpness, gray scale reproduction, and quality of mass tones. Images shall be free of multiplexing patterns, printed on a single section without tiling, spurious writing, pixel drop-out, and other undesirable artifacts.

Image manipulation and editing shall include creation of digital files from government-furnished text, photographs, PMIS colors, and graphics, conversion of low resolution files to high resolution files, high resolution image editing to include, but not limited to, joining photographs to create panoramic images, image clean-up and restoration, lightening and darkening of image areas for legibility, and other image editing as specified in each individual task order. Image editing for the purpose of eliminating or altering photographic historical content is prohibited. Completed files shall be delivered as high-resolution (no less than 200 dpi at actual output size) RGB layered files. The contractor shall deliver original unaltered scan for COR comparison and approval. The contractor shall utilize computer equipment and software compatible with government standards and as specified in Paragraph B.1 above.

High-resolution scanning shall include high-resolution scanning services suitable for large format graphics which is no less than 200 dpi at actual output size and ability 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.

**B. GRAPHIC ADJUSTMENTS**

Graphic adjustments include the simple image alteration, or adjustment to existing graphic files typically required before output. These shall include, but are not limited to:

1. Replacing FPO images with high resolution scans;
2. Color management required to match PMS specifications;
3. Creating masks from clipping paths attached to FPO images; and
4. Retouching photographs to eliminate scratches or blemishes.

**C. LABELS**

The contractor shall produce weatherproof labels that shall be placed on the back side of the wayside graphic panels indicating the following specific information for every panel:

Panel Identification Number (ex: GUI5-332),  
Size (ex: 36x48),  
Material (ex: HPL),  
Date of Manufacture,  
Harpers Ferry Center, 304-535-5050.

The label shall also include a box with the words "Installation Date" above it so that the park staff can indicate the date of installation on the panel sticker. One sticker shall be secured to each panel prior to delivery of the panels to the COR.

D. **CLOSEOUT**

At the conclusion of all work, the contractor shall return the government-furnished property and all other outstanding materials as specified in the individual task order to the COR. All material generated by the contractor in the process of completing a task order is the property of the government.