Comprehensive Plan
Mystic Scenic Studios, Inc.

1. Overall Project Management
Mystic Scenic Studios, Inc.

Mystic Scenic Studios, Inc. (MSS) will be serving as the prime contractor; therefore will provide overall project management including establishing budgets and coordinating directly with the COR and any of the outside venders (i.e. A/E firms, Trade Contractors, etc.) as well as coordinating with principal subcontractors (MSD & BPI) as well as any other subcontractors needed to complete the scope of work.

Mystic Senior Project Manager (SPM)

Kevin Dahn, a Senior Project Manager (SPM) at Mystic, is extremely well versed in museum exhibits and has been responsible for managing some of the largest projects that Mystic has produced. His experience with design, estimating, layout, fabrication and supervision as well as his extreme attention to detail make him key to Mystic's success.

The Mystic SPM is involved with our design build projects from start to finish. During the entire course of a project, he will be the prime contact and readily available to all team members.

During the design process, the SPM would attend all meetings and will continually compare the project budget with the objectives of developed interpretive plan, the subsequent desired inventory of exhibit items, the desired level of interactive/AV as well as venue considerations such as overall square footage of the exhibit space.

As the project approaches pre-production, the SPM will oversee the all pre-production documentation (production schedule, shop drawings, finish and graphic samples, etc.) as well as address any potential site or schedule issues to the CR.

In Production the SPM will continually evaluate the production process in comparison to objectives set forth in the production schedule and utilize Mystic's Quality Assurance Program (included below) to facilitate quality control.

The SPM will coordinate all shop visits by the design team and coordinate with the MSS AV Project Manager and the AV subcontractor (BPI) to insure on time delivery of content and equipment and proper integration of media hardware into the exhibit components and the venue.

Finally, the SPM will supervise the handling/shipping and installation of exhibit elements, perform staff training, compile and submit maintenance manuals and perform any post installation follow up. Design / Build projects can have unique requirements, so he will also incorporate any special duties and/or responsibilities required as detailed in task orders or that become apparent in the development process.

Cost Management
From the onset of the project through final installation, it will be the SPM's responsibility to establish and maintain strict budget management.

Upon initial review of a task order, the SPM will review the production schedule and objectives with designer (MSD) to determine the level of effort and subsequent costs for the interpretive design and overall project management. These costs will be deducted from the overall budget and the balance will be utilized for multimedia production, media hardware, exhibit fabrication and exhibit installation.

Once this budget is established, and the design process proceeds, the SPM will be present during the design workshops and regularly review the design documentation to insure compliance with the agreed upon budget and when there is a disparity, contributing to the process to help find a cost effective solution that satisfies the overall goal. During the fabrication process, the SPM will receive and review weekly job cost reports from Mystic's account management to also insure all possible efficiencies are achieved.

Quality Control:
Mystic Scenic's SPM will oversee the quality control of the project in every phase and milestone. He will be immersed in the details of the design, construction and installation of the project, setting and maintaining quality control standards for all in-house and/or sub-contracted work. The standards established for the project will be documented and monitored on a regular basis with all team members and sub-contractors.

To further elaborate on our quality control, the following is a copy of Mystic Scenic Studios, Inc. **Quality Assurance Program**:

Mystic Scenic Studios takes a "company-wide quality" approach to quality improvement and control. This approach focuses on three areas, each of which is critical to maintaining quality for our customers:

1. Project Management, appropriate and accurate process and procedure, and accurate material sourcing;

2. Applying competent, knowledgeable craftsmen with appropriate skills for each task; and

3. Quality relationships, personal integrity, and motivation

<u>Project Management</u>
Overall, Mystic senior managers conduct both daily and weekly scheduling review meetings to insure that personnel and scheduling needs can be met for the overall workload in the company as a whole. In addition, our Operations Manager meets daily with each Project Manager to review pending and scheduled projects in order to anticipate shifts in workflow.

For each project, a “virtual team” is created, including a Project Manager, Foreman, Account Executive, and site supervisor. For complex projects, additional staff may be added in specialized roles. Before a project begins fabrication, the team is assembled to review the construction needs, schedule, budget, and any items that anyone on the team believes merits discussion. All long lead-time items are identified at this point and orders are placed as appropriate. Special licensing, permitting, engineering and other approvals are also identified at this “kick-off” meeting, so that ample time is allowed to obtain the proper certifications.

If a Project Manual or “as-built” drawings are to be provided for a project, the process of gathering those documents begins at the kickoff meeting. This helps to insure that accurate records are maintained, facilitates warranty repairs, and reduces costs through the manufacturing process.

Skilled Craftspeople

Mystic’s policy is to hire and retain the best possible staff for each available position. We have incentive programs in place to cross-train employees to work in more than one discipline, as long as they are proficient in one primary trade (for instance, an experienced cabinetmaker can earn a premium for learning to weld, even if he is rarely called upon to work in the metal shop). In addition, we provide training and certification to our staff for AWI programs, AWS certification where appropriate, UL and NFPA workshops, and other educational opportunities as they arise.

Our business model includes a broad array of product areas; correspondingly, our staff is accustomed to working on an array of different types of projects. It has been our experience that the same basic skill sets can be applied to different product lines, as long as management understands the differences and staff see those differences as opportunities rather than obstacles.

Our approach to training has been to present employees with opportunities to enhance skills, and thus advance their careers (we take a similar approach to safety – education empowers employees to keep themselves and one another safe); this generally also increases both retention of skilled workers and referrals of other skilled workers.

Having skilled, educated workers is irrelevant, of course, if they are not properly assigned. Crew assignments are reviewed not only when a project is started, but on a weekly and sometimes daily basis throughout the project life cycle, in order to insure that the best possible employees, with the most relevant knowledge for each project, are available.

In addition, we are qualified to provide UL certification and American Welding Society certification when required, and our cabinetmakers follow Architectural Woodworking Institute QSI program standards. Even when UL certification or AWS or AWI certification are not required, our craftsmen and technicians can still provide the same level of quality, and communicate using the common language of the industry, to insure that the design professionals and clients know what is being produced.

Quality Relationships

Mystic's ownership and management team believes that providing quality depends not just on focusing on "what the customer needs and wants" but also on building quality relationships with and among our own staff. An atmosphere of mutual respect, motivation to excel, and personal integrity are critical to a high-performing workforce.

To this end, we have established a Policy Manual that outlines for our employees their privileges and responsibilities as employees, including our drug-free workplace policy and an extensive (29-point) Code of Conduct.

Coordination

As stated previously, the SPM will be involved in the development and design process, continually coordinating between the park staff, building trades, the architect and the interpretive design firm (MSD) to insure that all goals – interpretive and budgetary – are met. This will be accomplished with regularly scheduled production meetings and continual communication among team members.

The AV Producer from BPI will be in attendance at the design workshops and will be reporting directly to the Mystic's SPM in regard to media content development and all pre-production requirements as outlined in Section C of the RFP. Once in production, BPI personnel will also work directly with the Mystic Audiovisual Systems and Lighting System Specialist (David O'Brien) who will insure that the media components are appropriately integrated into exhibit components and the venue.

2. Exhibit Planning and Design

Main Street Design Inc.

Technical Approach Narrative

Coordination with Other Disciplines

Main Street Design (MSD) frequently works on multidisciplinary teams led by other designers, most often architects, zoo architects, or landscape architects. We believe in an integrated approach to interpretive planning and design, and we welcome the involvement of other disciplines in our creative process, especially during the conceptual stages of a project's development, when core design directions are being established. We work closely with project architects and engineers throughout the design process to ensure that architectural and interpretive design directions are well integrated, both in practical terms and in terms of their impact on the quality and character of the visitor experience. From building systems to esthetics, we work with our design partners to craft a unified approach.

Pre-Design

The purpose of pre-design planning is to establish a basic conceptual framework for the project as a whole, to define content priorities and individual conceptual directions for each of its major exhibits or zones, to produce an initial interpretive exhibit program and inventory of possible exhibit components, and to develop an associated set of preliminary sketches and drawings.

The core work effort required for this process involves active collaboration between MSD and other members of the project team. Our collaboration occurs in the form of a face-to-face exhibit planning workshop accompanied by follow-up documentation and development and exchange of ideas. The work completed during this phase enables us to determine the spirit, style and character of each proposed exhibit or zone. It should also yield consensus as to the primary interpretive methodologies to be used, ranging from minimally interpreted environments to intensive, high-technology, media-rich experiences.

Products developed during this phase of work include preliminary outline program worksheets, location and circulation drawings, program plans, and illustrative sketches and renderings. These are submitted for review and response at regular intervals during their development. This phase of work also yields a project schedule and phasing plan, and concept-level design and implementation cost estimates for all proposed components.

Beginning with pre-design planning and continuing throughout all project planning and design phases, content research informs every aspect of Main Street's interpretive planning and design process, from core storyline development through project organization and circulation, and even the selection of appropriate media.

We utilize three basic strategies for content development:

First, we include staff interpretive planners on all of our dedicated project teams whose responsibility it is to research and manage project content resources. Our planners conduct initial content research to familiarize our project team with the overall thrust of a project, provide additional focused content research to support specific planning and design concerns, and coordinate research obtained from other sources (see below.)

Second, we work closely with our clients' content experts, including both staff members and other stakeholders. It has been our experience that using "localized" content development resources often yields a richer and more nuanced content matrix.

Third, whenever appropriate we engage independent content experts as project consultants, working in collaboration with our design team and members of our clients' team. Academics, industry professionals and practitioners and other "outside" experts can help to validate or refine internally developed content direction and are especially valuable in situations where content may be controversial or especially complex.

Main Street Design has extensive experience working with the NPS content management database system. At the start of work on the first task order assigned under this contract we will work with our COTR and appropriate HFC personnel to

ensure that our capabilities and software systems are consistent with current NPS standards. If necessary, we will send our staff planners to Harpers Ferry to participate in training.

Storyline development lies at the heart of the interpretive planning and design process, and it is obviously deeply intertwined with content development. As we develop a cohesive and interrelated set of messages and experiences, we work with our clients to clearly established and define the desired tone and character, and key message points, for each project.

In this context it is important to distinguish clearly from the outset between an interpretive project's *informational* goals and its *experiential* objectives – to understand the difference between what we want our guests to *know* when they depart, and what we want them to *feel* while they're there. Both are critically important to ensuring a quality visitor experience, and they can and should inform each other, but they are not the same.

Schematic Design

The purpose of the Schematic Design phase is to further develop each of the core themes and ideas identified during Pre-Design, with a particular focus on articulating and documenting specific exhibits and interpretive experiences. A focus of our work is on content development and coordination with our client's educational programs and activities.

During Schematic Design we delineate content priorities, educational goals and objectives, and individual conceptual directions for each of the project's major exhibits or interpretive experiences. The collaborative process initiated during Pre-Design continues during this phase, with brainstorming charrettes accompanied by follow-up documentation serving as the framework for our effort. Products developed include an interpretive program outline/visitor walkthrough and worksheets, preliminary audiovisual program and interactive multimedia component descriptions, revised location and circulation drawings and program plans, new and revised illustrative sketches and renderings, sample elevations, and preliminary graphic design directions. Also during this phase, a revised project schedule, phasing recommendations, and schematic design-level production and fabrication and life-cycle cost estimates for all proposed components are developed.

Design Development

During the Design Development phase we develop, review and revise specific and comparatively detailed exhibit design drawings, descriptions and specifications for all project components. These are prepared in plan and elevation form, with sections, details and notes as needed to clearly indicate the desired design direction of each proposed exhibit, for the purposes of evaluating its effectiveness and feasibility.

Also during this phase we work closely with team members to ensure appropriate integration of our separate planning and design efforts, and in consultation with them and other project consultants. Initial color and materials selections are made for all project components, and project graphic design directions are established, including

typography and graphic standards, proposed production methods, and image selection and interpretive draft copy writing.

In addition, artifacts and images will be identified and organized into a reference package that meets NPS standards. We work with our clients to identify and engage appropriate artists (illustrators, sculptors, model makers, cartographers, photographers, etc.) to provide specific original artworks for the project exhibits. We direct the work of these contract artists and provide interim sketches, proofs, models, etc. for client review prior to the production of final artwork.

Content Specialties & Pre-Production
The Pre-Production phase yields a complete package of specific and detailed interpretive exhibit design drawings, along with descriptions and specifications for all project components sufficient to solicit accurate bids from qualified contractors for the production, fabrication, and installation of all proposed project components. All necessary sections, details and notes are provided so as to clearly indicate the desired design direction. Final design documents and specifications for audiovisual and/or multimedia programs are completed and included. Colors and materials specifications for all project components are finalized, as are graphic design directions and specifications, including typography and graphic standards; proposed graphic output methods and techniques; and graphics color specifications. Final exhibit text is written, and final photo and images are determined during this phase of work. All necessary exhibit notebooks and other supporting materials required for project production, fabrication and documentation also are included in the final Pre-Production package.

Production, Installation, Closeout & Warranty
During the Production phase Main Street Design provides on-going administration, coordination and supervision of the production, fabrication, and installation of project components. We work closely with the client's project staff, as well as with representatives of the project's architects and the general contractor for the building, to coordinate the completion and installation of exhibit components in an efficient and timely manner. As the designated point of contact between the exhibit fabricator and other members of the total project team, we ensure that production and fabrication remains on budget and on schedule, and that the completed project, after installation, meets or exceeds the client's and designer's expectations.

Comprehensive graphic standards and graphic design directions have been established for all exhibition graphics and signage elements during the project's basic design phases. The purpose of graphic production services is to prepare actual digital files ("camera ready artwork") for all exhibition graphics and signage components, and to provide continuing design supervision and coordination as graphic production and fabrication proceeds. Digital files for all graphic surfaces, with hard-copy output for reference, are submitted to the client team for review and approval prior to their actual fabrication.

Universal Design and Accessibility
MSD is committed to adhering to both the letter and the spirit of the Americans with Disability Act. We consult and follow NPS and Smithsonian Institution accessibility and universal design guidelines continuously through each design phase, and we also rely

on our own extensive professional experience to develop experiences and design directions that are fundamentally inclusive while retaining a wide variety of distinctively individualized activities and components. To ensure that all exhibits are effectively developed and designed in compliance with ADA guidelines for accessibility for visitors with limited mobility, all drawing sheets will be checked with an accurate assortment of scale-model mobility-impaired figures.

Visitor Studies and Evaluation
Main Street Design has often incorporated visitor studies and evaluation into our project planning and design process, including front end studies, formative evaluation of work-in-progress, and summative review of completed exhibits. In our experience, the success of any evaluation effort associated with an exhibit project depends on three factors:

1. Clearly delineated evaluative goals. We need to decide what we want to learn through evaluation, and craft both the evaluative protocols and the schedule accordingly.

2. Careful project scheduling. If front-end or formative evaluation studies are commissioned, the benefits of those research initiatives can only be incorporated into project planning and design directions if the overall project schedule makes that possible.

3. Budgeting funds for prototyping and remediation. In order to take full advantage of the information on exhibit effectiveness that might be gleaned through evaluation, a project's production budget must contain dedicated allowances both for prototyping and, if needed, remediation. These funds should not be commingled within a general project contingency allowance.

Quality Control
MSD's approach to providing technical quality assurance for interpretive exhibition projects is based on active, hands-on project management by experienced professionals; a flexible and responsive planning and design process; and a commitment to effective communications.

At each project stage the work we have done on previous stages provides the foundation for our recommendations, and our accumulative analysis and developing relationships with our clients and design team partners informs and enhance our choices about how best to move forward. Working closely with our clients and other members of the total project design team, we seek to ensure that project planning and design proceeds productively and efficiently, remaining on-schedule while still allowing for the possibility of crucial mid-course corrections.

Within each phase of the project, MSD closely reviews the NPS Exhibit Design/Build Contract Scope of Work to ensure all interpretive planning and design meets the requirements.

Beginning with pre-design program confirmation and continuing all the way through post-design fabrication and installation coordination and supervision services, Main

Street balances its commitment to quality, innovation and creativity with its obligation to provide durable and cost-effective solutions. We identify and discuss with our clients both the key strengths and potential weaknesses of proposed project components and design directions, with an eye toward retaining valuable features while reducing life-cycle costs and improving overall quality and durability. Often, we engage technical consultants to evaluate the quality and appropriateness of proposed exhibits prior to proceeding with detailed design and documentation, and potentially problematic components may be eliminated based on these recommendations.

We also work closely with project architects and engineers throughout the design process to ensure that architectural and interpretive design directions are well integrated, both in practical terms and in terms of their impact on the quality and character of the visitor experience. From building systems to esthetics, we work with our design partners to craft a unified approach.

Finally, during the Pre-Production, Production, and Installation phases of our projects Main Street provides on-going administration, coordination and supervision of the production, fabrication, and installation of interpretive components. We work closely with client staff, as well as the project's architects and contractors, to coordinate the completion and installation of exhibit components in an efficient and timely manner. Our team will facilitate active communications among all designated vendors and sub-contractors, and (if necessary and as needed) between them and the project's architects and the client or client's representative. As the designated point of contact between the exhibit fabricator and other members of the total project team, we ensure that production and fabrication remains on budget and on schedule, and that the completed project, after installation, meets or exceeds the client's and designer's expectations. We monitor compliance with established project budgets and schedules, coordinate the installation process, and conduct a "punch-list" inspection of all project components during Closeout.

3. Audiovisual and Electronic Interactives
Boston Productions, Inc.

Boston Productions, Inc (BPI) will provide audiovisual design, production, and integration services. They will work with the MSS and MSD to develop and produce A/V presentations, interactives and immersive media experiences, specify hardware systems as well as provide budgeting development and tracking.

BPI Core Team

The core team on BPI projects consists of senior staff members. For most projects, it will include a Creative Director, Director of A/V Systems Integration, Associate Creative Director, and Executive Producer/ Project Manager. This core management team will be involved with the development of custom interactives and multimedia presentations and will collaborate with the exhibit designers, fabricators and outside audio-visual hardware systems vendors for any given project.

During the design development phase, the BPI core team will assist in developing the initial concepts for media exhibits as well as researching, specifying and engineering

all of the A/V hardware needed and installation management. Once the interactive and multimedia needs are defined, BPI will build a project team to complete production.

BPI Project Teams
We create project teams with other leading industry professionals and local experts to supplement the efforts of our core team. Most project teams will include researchers, creative writers, production crewmembers, installation technicians and on-going warranty personnel but can also include independent researchers, writers, designers, animators, programmers and systems integrators.

Facilities
Our state-of-the-art, in-house resources allow us to maximize creative output and be cost efficient. Our 9,000 square foot facility includes a fully equipped production stage, film and HD video shooting packages, three non-linear HD edit suites, a 5-station, computer graphics suite a FLASH and DIRECTOR development studio, a Pro-Tools 5.1 surround-sound audio mixing suite, a Sonic Solutions hardware-based DVD authoring suite and a dedicated multi-media prototyping lab.
As stated earlier, the AV Producer from BPI will be in attendance at the design workshops and will be reporting directly to the Mystic's SPM in regard to media content development and all pre-production requirements as outlined in Section C of the RFP. During the design process,the BPI producer will present to the team treatments for developed media as well as the estimates for production and hardware.

4. Fabrication Services
Mystic Scenic Studios, Inc.

Prototyping and COTR Review
During the development process, the SPM will determine exhibit components and/or interactive elements that require prototype testing for final specification and approval. The production and subsequent review of these elements will be incorporated within the final production schedule. Prototyped components will be available to display and demonstrate to the other team members for review and comment and prototyped components deemed acceptable may be incorporated into the final exhibit, if it is in the NPS's advantage to do so.

Samples & Proofing
In the initial phase of the project, Mystic will provide samples of the suggested graphic processes, substrates and finish techniques (over-laminations, edge treatments for cut-outs, etc.) as well as samples of case components, paint finishes and wood finishes.

Image Acquisition / Original Art Commission
If required, Mystic will acquire all pre-existing images (i.e. historic photos / art as well as stock photography) required for the exhibition. We will verify all sources, availability and restrictions on use of the required images and consult with COR to select replacement images where necessary. We will negotiate and purchase use rights and provide the appropriate documentation, in advance, for approval by the COR. Once approved, we will procure images that are of good, reproducible, quality for whatever the intended use.

Also, if required, we will also commission original art (i.e. photo shots, illustrations or maps) for use and / or reproduction.

Graphic Production

Mystic will coordinate the receipt of files, templates and images, compile the appropriate production files, create proofs for approval, have color samples created for approval and coordinate with any graphic production subcontractor to insure successful graphic fabrication.

Shop Drawings

Upon the completion of the design phase, MSS will generate a set of detailed construction drawings for review. Additions and/or changes to the drawings will be submitted and upon receipt of final approval, construction will begin. It is entirely possible that this process will happen in overlapping phases, where construction of one exhibit area will begin prior to receiving approval of others. This is not unusual for a project of this scope and past experience has prepared us for this inevitability.

Fabrication

Once the construction drawings are approved, fabrication will begin. The SPM will coordinate all activities among MSS production team members and subcontractors. He will maintain a production schedule, detailing activities and completion times. He will direct periodic reviews of exhibit components in production by the team during the fabrication phase, culminating in a final pre-installation inspection. During this final visit the, the team will have the opportunity to inspect and operate several (if not all) of the exhibit components prior to their final installation.

Graphics Fabrication

With approved samples, image placement/text proofs and color proofs, we will begin the graphic fabrication. This will involve both our in house graphic fabrication capabilities (silk-screening, CNC routing for dimensional signage / cut outs and die cut vinyl) as well as those of any digital graphic production subcontractor. We will coordinate with the exhibit fabrication to confirm sizes and mounting techniques and upon completion, inspect all finished graphics.

Onsite Coordination

In both the Shop Drawing process and the Exhibit Fabrication, many details will need to be finalized by verifying site dimensions and conditions. We will coordinate with the client team (park staff, COR and building trades) to confirm site conditions and clarify much of the details at onsite production meetings, thus insuring “seamless integration” of the completed exhibit components.

Shipping and Installation

In accordance with the pre-approved project schedule, the SPM will plan the expeditious delivery and installation of the exhibits. In addition to scheduling, he will take an active, hands-on role in overseeing and monitoring this phase of the project, including the daily removal of all waste materials and tools. More often than not, personnel that are sent to perform the installation are the same team members that helped to build the exhibit.

Installation will be executed in a timely and expeditious manner without interfering with normal client operations. Our procedures will also include provisions for protective materials where necessary. Our final task during this phase is clean up. We will remove all tools, equipment, protective coverings and trash, and restore the sites to a condition similar to (or better than) when we began.

Training and Maintenance

During the final stages of the installation, Mystic personnel will be on hand to give instruction and training for the operation and maintenance of all exhibits. In addition, we will provide exhibit manuals detailing the operation and maintenance of the exhibits along with a catalog of information specifying paint colors, finishes, replacement parts, their warranties and sources.

Additionally, at your request, a Mystic technician will visit the center shortly after opening to review the condition and performance of the exhibits. Any adjustments, repairs or retouching that may be necessary will be discussed and performed in a timely manner.

The SPM will also make himself available to offer first-hand advise and instruction to NPS Staff members to answer questions and offer instruction on the proper operation of each component.

Post Installation Follow Up:

With the project completed and opened to the public, the SPM will schedule a post-installation site visit. He will inspect the overall condition and operational qualities of each exhibit and will report to the COR on his findings. Reports will include information on the general condition of the exhibit, usage and/or damage assessment (if applicable) and proposed course of action.