

COMPREHENSIVE PLAN INCLUDING PROJECT MANAGEMENT

Split Rock Studios is dedicated to producing interpretive exhibits of the highest quality, giving form and function to our clients' vision as they seek to provide distinctive interpretive museum experiences for their visitors. The Split Rock commitment to quality can be seen in the creative energy and flair we bring to each new project, in our proactive responses to client requests, and in our innovative designs, superb craftsmanship, and undying commitment to accuracy and detail and "getting it right."

Split Rock Studios is dedicated to performing exactly the type of work that is required under this contract. As both a design-build firm, and a company that provides fabrication and installation services, we are in the business of creating exhibits for interpretive centers and museums. We have experience working with the National Park Service submittal and contracting process. Many of the projects we have produced are in remote locations, and we know how to plan effectively for such situations. Our team brings all the skills and experience needed to successfully perform work under this contract.

Over 75% of our work is completed under design/build contracts. This experience gives us the ability to estimate costs at the start of a project, based on descriptions and size information provided by clients. Our record of projects completed on schedule and on budget, and client satisfaction, attests to our ability to successfully manage design build projects ranging from \$100,000 to over \$2 million dollars in size. We look forward to the opportunity to work with the National Park Service.

The design and production team will follow the guidelines in the NPS planning and production specifications and documents (Attachments A through P) to conduct all work and prepare all documentation and submittals for this contract. Work under this contract will proceed according to the following order of precedence: Contractors Comprehensive Plan; Section C, Description/ Specifications/ Work Statement; Section J, List of Documents, Exhibits, and Other Attachments; Section B, Supplies or Services and Prices/Costs; Section I, Contract Clauses; and Section K, Representations, Certifications, and Other Statements of Offerors.

Overall Contract Project Management

The overall project manager on this contract will be Lisa Friedlander. She was the overall contract manager on our IDIQ Contract # DACW41-01-D-0013 with the US Army Corps of Engineers Omaha District, to design and produce exhibits. From 2001 to 2005 Split Rock Studios was one of two exhibit companies on that contract. We produced 8 exhibits, all of which met their deadlines, came in within budget, and satisfied our clients at each project site.

Lisa has been with Split Rock Studios since 1997 and has managed projects ranging in scale from small outdoor interpretive signage projects to the \$1.5 million dollar contract for the Denali National Park exhibits. She is known for her keen attention to detail, excellent

communications with clients and in-house staff, and for keeping projects on schedule and on budget while maintaining our high quality standards.

In this special assignment, Lisa will report directly to President Craig Sommerville and be held accountable for keeping all Task Orders moving forward in a timely, cost-effective manner.

Lisa will be the first point of contact and will be available to respond to requests from the CO and COR promptly. All Task Orders received for this project will be routed through Lisa. She will immediately copy them to Dan Widerski, our primary estimator on this contract. Together they will review task orders and ask questions to gain complete understanding of the work required. She and Dan will provide cost and task order proposals within the time period designated for response.

When Split Rock Studios is awarded a task order, Lisa will work with the NPS Contracting Officer to complete the contracting paperwork. Once contract documents are in place, Lisa will work with Craig Sommerville to assign core project team members – the project manager, exhibit designer, exhibit developer, and graphic designer. Other team members including the estimator, writer, CAD detailer, lead artist, evaluator and subcontractors, will be selected at the start of a project, or as needed based on how the project develops. Our staff is comprised of a large team of experienced exhibit professionals who are used to working together will be working with you on each project. We have the necessary in-house full-time staff to handle multiple task orders.

As work proceeds, Lisa will track progress and quality on each project through regular meetings with the project team and informal one-on-one contact with department heads and individual staff members who are producing various components. She will keep the CO and COR informed of any concerns or changes throughout the life of the contract, and will submit the required contract status reports every 6 months.

Lisa will also assure that team members follow the National Park Service specifications and guidelines as shown in Attachments A through P. Lisa will have ultimate responsibility for making sure Split Rock Studios meets all the requirements and expectations of the National Park Service and that we complete every project to your satisfaction.

Lisa possesses the following skills, which we believe are essential for this contract:

- Management Skills
- Good Communication and Writing Skills
- Organizational skills
- Computer skills
- Knowledge of Exhibit Process
- Knowledge of Federal Government contracting procedures
- Skill with Fast Track Schedule, the software we use for tracking projects.

Performing the Work

Due to the open nature of an IDIQ contract, one of our four senior project managers will be assigned to exclusively run a particular project. To assure we can respond effectively, all our project managers will be available to work on projects we are awarded for the IDIQ contract. Our full-time dedicated project managers are committed to providing exemplary customer service, and keeping our project teams on task and motivated.

As soon as the task order is in place, Lisa will meet with the Split Rock Studios project team to get the project moving and hand off the information and materials provided by the NPS. The Project Manager, Exhibit Designer, and Exhibit Developer will review materials submitted with the task order and prepare to attend a start up meeting at the project site. The project manager will contact the COR to arrange and plan the meeting.

Throughout each individual project, the project manager will work with Craig Sommerville and Lisa Friedlander to prepare invoices, complete contract documents and reports, and keep SRS and NPS apprised of progress or concerns.

Our Project Management Team

On each individual project, Lisa, Erin Richardson, Tom “TK” Kleinert, or Mike Damiani will serve as the project manager and coordinate the flow of information between the National Park Service and the Split Rock Studios teams, ensuring that the project moves along in a timely manner. In all of our projects the communication link created between our project manager and the client is essential.

All questions from our design and production team will be brought to the project manager’s attention, who will work with the NPS COR or representatives to get answers. As work proceeds, the project managers will track progress and quality through regular meetings with the project team, and informal one-on-one contact with department heads and individual staff members who are producing various components. They will attend meetings and maintain regular communication with NPS via telephone, emails and submittals to keep everyone informed of progress.

Project Updates—the “Split Rock Reports”

The project managers will be responsible for ongoing communication, preparing meeting notes and documenting decisions, meetings, and discussions between the fabrication team and NPS during the entire process. This documentation and updating is crucial to the success of any project.

Our project managers possess the following skill set which we believe are essential for this contract:

- Management Skills
- Good Communication and Writing Skills
- Organizational skills
- Computer skills
- Knowledge of Exhibit Process
- Skill with Fast Track Schedule

The project managers overarching tasks will be to:

- Work with Craig Sommerville and Tim McGannon to oversee the assignment of appropriate departmental team members and develop the work plan that details the work flow process, schedule, and involvement of additional facilities and subcontractors.
- Develop and maintain the schedule and update all parties.
- Organize and attend project meetings, which may include on-site start up meetings, progress meetings, and conference calls.
- Document and coordinate all Split Rock submittals. (This documentation is crucial to ensuring the project is completed as envisioned with no last-minute misunderstandings and delays.)
- They will work directly with the designers, writers, production manager, CAD Detailers, departments heads for graphic design and artistic fabrication, the shop foreman, and with individual graphic designers, builders and artists as needed to make sure all information is communicated, questions are answered and exhibits produced to the design and specifications provided by the NPS.
- They will work directly with subcontractors. They will make sure the subcontractors have received the proper information, review their work and provide submittals to the NPS for review as needed.
- They will work with Dan Widorski, estimator, and Tim McGannon, production manager, to initiate purchase orders with major subcontractors.
- Once the proposals become actual jobs, project status will be reviewed at our regular Monday morning meetings, where weekly departmental workloads are continually evaluated and adjusted. The project manager will hold additional production meetings as needed to review project details among the team members.
- The project managers will make sure projects are on schedule and budget and will work with our in house staff and NPS to resolve any issues.
- They will review production of all elements in the shop and bring any quality concerns to the attention of the production manager, the shop foreman, and graphic and artistic department heads.
- They will work with the estimator when pricing information is needed throughout the project.

The day-to-day complexity of the project manager's role in carrying out these tasks cannot be overestimated. Throughout the project they manage the coordination, schedule and submittal process and coordinate any work provided by the client representative:

- Request photos, dimensions and other relevant information for artifacts, site conditions, and other existing materials or spaces. (Requests may be ongoing as the need for information arises.)
- Visit the client and examine client-supplied materials.
- Define a schedule for the client to provide production files and other original materials to us. (We will work with the client to clearly define parameters for original materials to be provided, including the type of original needed, size and format, production materials, etc.)
- Develop a schedule for submittals, and initiate and track all required submittals.

- Acquire original materials as necessary, tracking when material is received and returned, as well as sources, use fees, and credits as needed
- Make submittals to the NPS as required; document submittals and track responses and progress
- Work with and involve the client staff in artifact installation and mounting as required.
- Assure the project is being completed to NPS guidelines.

Production Manager/Quality Control Manager: Tim McGannon

Tim McGannon oversees the fabrication of every exhibit project in our shop. He will ensure the proper materials are being used and that the exhibit construction and finishing is of the highest quality. Tim will direct completion of CAD detail drawings, facilitate in house reviews and materials purchasing. Tim and Don Tessier, our shop foreman, will assign a lead builder and other builders to the project as necessary. The lead builder directs the day-to-day construction and installation team. The shop foreman reports to Tim who in turn works hand-in-hand with the project managers to see projects to completion.

At the start of fabrication, the production team (including project manager, production manager, lead builder, lead graphic artist, drafter/detailer, estimator, and lead artist) will, under Tim's direction:

- Review and evaluate drawings and specifications.
- Attend a start-up meeting with designers and client for a thorough review of the project, design and construction drawings, specifications, and other materials.
- Evaluate the designer's suggested construction techniques and suggest alternatives if appropriate.
- Clearly document changes on drawings and in writing as needed.
- Evaluate building services, access, and building construction schedule as related to exhibits.
- Coordinate installation with building owner/contractors. Make requests for building services (power, water, dumpsters, etc. as needed.)
- Take all on-site measurements as needed.
- Finalize production schedules. Review critical paths to assure that components are detailed and built in the proper order.
- Work with the project manager to evaluate submittal requirements and plan/schedule submittals.
- Meet with or talk with the project managers and subcontractors to set clear schedules, submittal requirements and expectations.

Throughout fabrication, the project manager will assist Tim in gaining the client approvals by performing the following tasks:

- Prepare submittals of detail drafting of typical construction techniques, exhibit areas and exhibit components as needed, for review and approval by designer/client.
- Make submittals for materials hardware, finishes and changes when necessary.
- Facilitate in-process shop inspections with the client and designer.

- Provide progress photos or videotapes for designer review and approval when shop visits are not feasible but review and approval are required.
- Coordinate subcontractor submittals and reviews with subcontractors, Split Rock Studios and client team members.
- Oversee modifications to construction and fabrication when needed, in consultation with designer and client, especially when original design or details will not achieve desired exhibit function.
- Promptly communicate change order issues and costs.

Tim will work with the lead people from each department to plan the order in which elements will be produced, answer questions, and make any adjustments to our internal schedule to keep production proceeding properly.

Our project and production managers will be available to speak with all project team members as needed. We know it is important to everyone to make sure proper coordination takes place throughout production, to avoid problems at the end of a project.

DESIGN, ESTIMATING AND PRODUCTION

We advocate a team approach to exhibit development where designers, curators, artists, AV producers, and builders are involved in a project from start to finish. Since the artists and craftsmen have been familiar with the project during the design process, they understand the concepts involved and the exhibit can quickly move into production.

Exhibit Design Philosophy

Our goal is to create memorable experiences that help visitors discover your story. In developing exhibits, we stress the need to accommodate diverse types of audiences, various age groups and learning styles. We also emphasize the importance of utilizing a wide variety of media to convey the subject matter and make the “process of discovery” interactive and enjoyable. “Media” can include environments, casework, interactive multimedia or AV programs, audio, interpretive graphics, and interactives such as lift flaps and discovery drawers and flipbooks. Our designers will combine their creative skills and experience with your goals and themes. They will also draw on their years of experience to develop exhibit concepts that are appropriate to the site and materials, and within budget.

Ability to Listen

We believe that a truly successful design is the result of a collaborative effort between the client and the designer. We have found that the museum staff knows the audience, the content, and the concepts better than any outside consultant does. When we begin a new project, we work with our clients to determine which staff, board members, content experts and other stakeholders should be directly involved in the process to assure all important points of view are heard.

We understand that Split Rock Studios developers, writers, and other staff must expect to perform all research, development, and consultation with content experts, as needed to complete the work for each task order. While National Park Service staff may have expertise

in the subject matter and audience at each site, Park staff cannot be expected to provide significant research materials or information.

Split Rock Studios will perform all work necessary to develop accurate and engaging interpretive content, identify and select images, assemble reference materials for items to be fabricated or illustrated, create AV programs, select artifacts, and perform all the other tasks required to successfully complete any projects awarded under this contract. These are services we provide on almost all our projects; only occasionally do we work with clients who want to provide content development, final text or photo acquisition. Our developers and writers have years of experience developing effective interpretive experiences and broad backgrounds in cultural and natural history. They supplement their existing knowledge by researching the specific content information required for each new project and consulting with content experts. We are skilled at finding historic and natural history images, and acquiring them for reasonable use fees.

We understand that Park staff are already busy with their regular duties. We will listen carefully to Park Service staff at start up meetings and throughout the design process, to assure we take full advantage of any insight and expertise they can offer.

We take pride in our ability to listen and our reputation for being easy to work with. Across the country, we are known for quality and customer satisfaction, and firmly believe that an excellent client working relationship is the key to a successful project.

Teamwork

Many of our projects require coordination with architects, general contractors and building facilities staff to ensure proper integration of exhibits and exhibit services with the building. Our project managers, designers and production staff will work with you throughout the process to assure coordination and integration concerns are addressed throughout the process.

Budget Control

Another key to project success over the years has been our internal respect for the “fixed-fee” concept. Over 75% of the projects we complete are design/build contracts. We know our clients have a fixed budget and we work to their numbers. Our estimators review design and content materials throughout the process to assure projects are on budget. The project manager, designer, developer and estimator work together to value engineer exhibits in house to maintain the design integrity and stay within budget.

For complex or unusual interactives and media exhibits, we send design materials to potential vendors early in the process to assess budget and feasibility, and to incorporate their recommendations. We follow up with these vendors during design to assure we have a solid component, within budget, at the end of design. We have become expert at estimating costs up front, tracking in-house costs and anticipating budget problems *before* they occur. Whenever possible, we negotiate budget problems and changes so that change orders do not become an issue. We also look for ways to partner to stretch our clients budget, to assure we are making the most of the teams skills and funds. With the budget under control, we can truly pride ourselves on being easy to work with.

Coordination & Communication

The success of this project depends on effective coordination and collaboration between all of the groups involved. We have significant experience coordinating with multiple disciplines throughout the duration of an exhibit project.

Because the majority of work will be produced under one roof, project team members can check in with one another whenever the need arises to resolve the details that come up during production, ensuring exhibits are completed in the best way for all concerned. Our team will work together on a daily basis to make sure we have the information we need to ensure the project is moving ahead properly.

Submittals, Prototypes and Mockups

The project manager will work with the production manager, lead staff from department, and subcontractors to define what submittals are required and to facilitate submittals, reviews and approvals. Prototypes and mockups will be scheduled into the production process so they are completed in a timely fashion.

Graphic Design and Production

Graphic production is an important and possibly technical component of the projects to be completed under the IDIQ Contract. One of our full-time, in-house designers will be the lead designer for each project. The lead designer will begin working on the project during design and will perform a full range of services, from establishing the graphic look to creating final production layouts. She or he will work with project and production management, production staff and vendors to assure all graphics steps of the graphic process are completed. Our designers are skilled at creating interpretive graphics that are well organized, easy to read and support the exhibit story through the use of colors, fonts and imagery. Many of our projects have undergone ADA review by federal and state agencies, and we intuitively follow principles of good contrast and appropriate type size and font selection. In addition to their creative skills, our graphic designers are experienced creating production files, working with a wide variety of graphic media and in coordinating the unique requirements of interpretive exhibit graphics.

Artistic Fabrication Production

The production of artistic elements is one of Split Rock Studios signature services. Keith Koefod, our artistic fabrication department manager, will assign one of our lead artists, and other artists, to the project, and will monitor the project throughout production.

The lead artist will work closely with the project managers to develop a production schedule and prepare the submittals required for approval during design and production. He or she will work closely with the artists assigned to the project to make sure they have the references and materials they need, and will work with the project manager when questions arise which the National Park Service must answer.

We anticipate that models and dioramas that will be produced under the IDIQ contract will need to be realistic and durable. Animal, tree and landform models will be made of various materials including epoxy modeling compounds, fiberglass, foam and steel armatures, and

plywood substructures as appropriate. Intricate plant models will be created from specimen molds, silk parts, or directly modeled.

Throughout the entire process, our artists will work closely with the project manager and production manager to fabricate all of the individual artistic elements incorporated into the project. The artists assigned to the project will be experienced working in all of the materials and methods to be used.

CAD Detailing

Our in-house CAD detailers will work with the drawings and specification created during the design process to generate shop drawings, CNC files and other details needed to produce the exhibits. They will work closely with the production manager, shop foreman, lead graphic designer and artists to assure all components are properly detailed and assure coordinated among disciplines. They will bring any constructability concerns and solutions to the attention of the production manger and project manager.

Our CAD detailers will make sure electrical, AV, plumbing or other elements are located where needed and properly accommodated in casework. They will provide drawings to the project manager for submittal to the National Park Service. When approved, they will order specialty items and materials.

Our exhibit designers and CAD detailers will fill the need for lighting design services. They will also specify any electrical service needed within casework. Our exhibit designers will direct final focus of lighting during installation.

Shop Construction

Split Rock Studios' staff of full-time union cabinet builders all have a comprehensive backgrounds in exhibit fabrication, casework, laminating, veneering, graphic inlays, furniture construction, welding and electrical wiring. By using only the highest quality materials, and the right people for the job, Split Rock Studios is able to provide our clients with durable, museum-quality, conservatorial standard cabinets and exhibit furniture.

The Shop Foreman assigns work to each builder and reviews the drawings with him at the start of construction. The builders work with the shop foreman, production manager and the project manager to resolve any questions.

We have well-established working relationships with local vendors who provide high quality metal work, powder coating, acrylic vitrines, custom glass and other specialty materials we require.

Our cabinetmakers typically install electrical service within casework. We hire licensed electricians on site to do hardwire connections and AV wiring.

Maximize Shop Construction and Minimize Installation Time

For efficiency and cost effectiveness, we construct exhibits in our shop as completely as possible, to minimize the amount of on-site construction needed. It is more time and cost effective to build things in the shop, where all the tools, materials, staff and space needed are

available. One of the first things we check on is how big the building doors are so that we know the maximum piece sizes for any component, and then we engineer things to be assembled on site in a seamless fashion. Even artistic elements such as landforms and trees are built in this manner.

Interactives Designed for Durability

To be effective, interactives must work, and they must outlast thousands of pulls, pokes, tugs, twists, openings, and closings that are a natural part of hands-on exploration. Our experience has also taught us that interactives for visitor centers should be easy to fix. Reliability is the key, and we use only proven techniques and equipment. We build many simple mechanical interactives in house. We work with several trusted vendors and subcontractors when complex electro-mechanical or AV components are required. The project manager and production manager will work directly with AV or interactive vendors, as appropriate, during production. If a subcontractor is required to provide a specific exhibit element, we will submit qualifications to the COR for approval.

Artifacts and Conservation Guidelines

Split Rock Studios will provide conservation quality casework and artifact mounts as needed for each project. One of our designers attended a National Park Service *Designing for Conservation* seminar. Our design and CAD staff consult these materials when designing and detailing conservation casework.

Terry Brown will be our subcontractor for specialty artifact mounts. SRS Staff will also provide artifact mounting services. Our qualifications are explained more fully in Criteria C, Key Personnel. When conservator services are needed, we will work with the COR to select and approve a qualified contractor.

Audio Visual Hardware

Split Rock Studios has provided the NPS Hardware Specifications to our key subcontractors. This information will be followed when developing costs and technical proposals. Our project managers will work closely with the subcontractor to make sure all systems are produced to specification. The project manager will coordinate information and materials between the client, AV producer, CAD detailers, and AV hardware providers. We will assure all systems are fully operational when installation is complete.

Exhibit Installation

The same crew that fabricates the exhibits will carry out this installation. They are experienced with exhibit installations and are sensitive to their unique requirements. The lead builder will direct on-site work and will be available to provide quick and accurate on-site answers to your questions. We have found it best to also hire a local electrician (as needed) to work with our crews during the installation of the exhibit. We also try to find a local carpenter to work with us during installation, and who can then provide some follow up work on site. Specialty work is always done by Split Rock Studios staff.

For new construction, we prefer to install exhibits after the general contractor has completed construction and punch list work, and after the client has fully accepted the building. The reality of new construction is often that the GC is not done on the date that we need to

begin installation to meet our deadline. In these situations, we have worked with the client to find ways to make sure the exhibit spaces are complete, so we can work concurrently with the GC, without compromising either company's ability to complete their work on schedule. When necessary, we will phase installation work when exhibit components, such as rockwork, have to be fully integrated into building construction.

Managing Subcontractors & Additional Personnel

We are acutely aware of the importance of good coordination between teams to ensure the success of your exhibit project. We will work with the designer, NPS client, our in-house teams and subcontractors to make sure we all have a clear understanding of what is needed. We will supply drawings, written documentation, and even templates as needed to explain and perform coordination requirements.

Our project managers will maintain communication with our subcontractors and the NPS staff to insure work is proceeding on schedule and in compliance with project requirements. All subcontractors, in turn, will make regular submittals of progress information as defined in the project work plan, and all submittals will be approved before any work is started.

When necessary, our project or production manager will visit a subcontractor's facilities to review work in progress, or host regular progress meetings here in our offices.

For subcontractors located at the project site, such as those who might be providing demolition, drywall construction, electrical services or performing other on-site work, Tim will visit the site and meet with the subcontractors and NPS prior to their work beginning. Tim will facilitate a meeting between the subcontractors and National Park Service staff to review the work, make sure everyone is in agreement about what is to be done, the working conditions and hours, and other requirements. He will maintain regular communication with the subcontractors and client to make sure work is proceeding as planned, and to assure any unexpected problems are resolved to the National Park Service's satisfaction.

Schedule Control

Timeliness of Performance

Split Rock Studios works with our clients' timelines and needs throughout the entire project. Soon after contract award we will submit a project schedule. We will develop a work plan to set goals and deadlines for both the client and ourselves to follow. This schedule of progress, with submittals to the client at important project milestones, built-in review periods, and reasonable deadlines, ensures that each Split Rock project installs on time. We believe that a well-developed schedule and work plan allows the project to progress smoothly.

Once the proposals become actual jobs, the estimated job hours will be allocated at regular Monday morning meetings, where monthly departmental workloads are continually evaluated and balanced. If sufficient staffing is not immediately available, additional personnel are identified and recruited at once for the project team.

The methods we use to produce projects on time include:

- We keep as much of the fabrication work in-house as possible. This is easy for us to do because our production capabilities are so extensive. By keeping the work in-house we have much better control over the schedule.
- We ask for full cooperation from our clients. Generally speaking – we are able to move as fast as our clients can! Often exhibit projects fall on top of already full workloads, however if our clients are able to stay on board and provide feedback and approvals to our team in a timely manner, we are able to continue moving forward at an efficient pace.
- We fast-track certain elements into production. When we know we are working under a tight deadline we can fast-track those pieces that require longer fabrication times, such as hand-painted murals and sculpture. Of course, nothing goes into production without first receiving final approval on submittals.
- And last, but not least, we maintain a certain level of flexibility in-house in order to accommodate unforeseen schedule challenges along the way. Of the 100+ exhibit projects that we have completed, we have never missed a grand opening!

Throughout the timeline of the project the project manager is ultimately responsible for keeping the team focused and on track. Maintaining constant and open communication at all times is crucial and is just one of our project manager's strengths. They have the unique ability to keep track of the entire scope of work of a project and assist the team in setting priorities to allow the project to stay on schedule at all times.

TECHNICAL APPROACH

We will follow the process defined by the National Park Service to assess, plan, develop, construct and install interpretive exhibits. Your flow charts and specifications define a logical and thorough process, similar in many ways to how we already work.

Project team members each have specific roles in fulfilling the requirements of each step in the process. The project manager oversees the work, facilitates regular team meetings, and assures projects remain on schedule and on budget.

The following information describes the process and roles of each team member in completing projects within the specifications of the NPS Museum and Visitor Center Exhibit Design/Build Flowchart and Summary Description.

Throughout the process we will follow all of the guidelines for design, content, materials and fabrication, ADA compliance, AV hardware specifications, conservation and evaluation as defined in the Park Service guidelines.

PREDESIGN

The SRS project manager, exhibit designer, and developer will travel to the project site for a start-up meeting. This meeting will allow the SRS team to gain a clear understanding of the project's history, park resources, and the roles of team members and stakeholders.

As part of this meeting the SRS team will:

- Meet with NPS project team and stakeholders and conduct a planning workshop. The developer and exhibit designer will take the lead in learning about subject matter and information that will influence the content and design of the exhibits. The Project manager will take the lead in contractual issues and information.
- Inspect and document the site, exhibit space and resources available.
- Review work to date and government furnished materials.
- Discuss goals, objectives, themes and main messages.
- Discuss audience.
- Discuss the desired visitor experience and brainstorm exhibit ideas.
- Review materials already known to be available, including potential exhibit objects and images. Review existing video and other media. Review research materials that NPS can recommend that should be used to develop content.
- Review the budget and budget concerns.
- Review schedule and milestones
- SRS will request that NPS provide any available reference materials (images, artifact lists, etc.) to Split Rock Studios at this meeting. Split Rock Studios will perform our own research, however, we hope NPS will point us toward materials known to be particularly relevant if possible.
- Within 21 days after meeting, the SRS team will prepare a Project Brief that provides updated understanding and overview of project, including analysis of

- project goals; analysis of budget; updated project schedule and resource package abstract. The report will assess factors that will affect the successful outcome of the project.
- The project manager will submit this report.
 - The COR and Park staff will review and respond to this report. The project manager will respond to this response. If needed, SRS will suggest a conference call to discuss and clarify comments.
 - If required, SRS will conduct evaluation after receiving NPS comments.

Schematic Design:

Schematic design will be completed in 2 phases.

During **Phase I Schematic Design**, the designer and developer will work together to develop the required number of design alternatives.

- The developer will conduct content and resources research. SRS will prepare and submit preliminary Research Notebooks.
- The Designer and developer will hold a design charette with the Park Service staff. Building on the results of the Pre-design Report, the group will discuss the desired visitor experience, clarify exhibit themes and messages, and brainstorm exhibit ideas.
- SRS will create drawings and written materials to describe the exhibit ideas, and work with our estimator and project manager to create a Class B and life-cycle cost analysis for each alternative.
- The project manager will assemble the submittal components and verify they meet the NPS requirements. He or she will submit multiple copies of the design materials for NPS review and comments. The project manager will prepare transmittal forms to document submittals.
- Depending on the size of the project, the designer and/or developer will present the submittal in person to the NPS team. Alternatively, SRS will arrange a conference call to present the schematic design.
- NPS will review and provide written comments. A preferred alternative will be identified.
- SRS will hold a conference call with the NPS team to review and clarify comments. We believe this ongoing discussion is critical to develop a team focus and common understanding of the reasoning behind how a project develops. The project manager will document this call as well as SRS response to comments.

Phase II begins after SRS receives written comments from the COR, holds a phone call for discussion and responds to NPS comments. During Phase II, the design team will further develop the preferred alternative.

- The exhibit developer will expand on the overall design concept and develop a narrative walkthrough.
- The exhibit designer will develop floorplans, elevations, and perspective drawings to more thoroughly define the exhibit design.

- The designer, developer, project manager and estimator will work together to update the cost analysis.
- The developer will begin to prepare the Resource Package Level II.
- The project manager will assemble the submittal components and verify they meet the NPS requirements. He or she will submit multiple copies of the design materials for NPS review and comments. The project manager will prepare transmittal forms to document submittals.
- The project manager will update the project schedule.
- The designer and project manager will identify building infrastructure needs and the project manager will document and communicate these to the COR.
- The design will be reviewed for ADA compliance by the project manager and designer.
- The exhibit designer will present the Phase II design materials in person.
- NPS will review and provide written comments.
- SRS will hold a conference call with the NPS team to review and clarify comments. The project manager will document this call and respond to NPS comments.
- If needed, the design will be modified to respond to NPS comments prior to proceeding to Design Development.
- SRS will participate in an NPS value analysis meeting, either in person or via phone. If by phone, the designer, developer, project manager and estimator will participate. If in a meeting. The designer will attend, along with the estimator or project manager as budget permits.

At the end of this step, the design direction will be determined, all major stories and media will be identified and the budget will be allocated to the exhibit elements.

Design Development:

During the two phases of Design Development, the exhibits are completely defined.

Phase I of Design Development: Each element of the Schematic Design is more clearly defined. Primary interpretive resources are identified.

- The exhibit developer may write the exhibit text. Or a separate writer/researcher will be added to the project team at this time and will take over for the developer. The writer will perform additional content research. Using the NPS **Content Management System**, the writer will develop the first draft of content. Interpretive goals for each exhibit will be solidified. All titles and descriptions of interpretive graphics will be written.
- Descriptions of interactives, AV and multimedia components will be written by the exhibit writer or the media producers.
- Major images and objects will be selected.
- The exhibit designer will more completely develop floor plan and elevations. These drawings will be coded so the content can be linked to the design.

- Murals, models, dioramas and other specialty elements will be further defined by the designer and writer, and sketches and reference materials will be assembled.
- The exhibit and graphic designers will select preliminary colors and materials.
- The graphic designer will select fonts, colors, and prepares preliminary graphic layouts. The estimator will review the design materials and prepare an updated budget.
- The project manager will continue to communicate with the designer, COR, Park staff, and architect to define and coordinate exhibit needs within the building infrastructure and site, such as wall finishes, power and data locations and services, lighting, carpeting, etc.
- The project manager, estimator, designer and writer will consult with subcontractors or other specialists for feasibility and further cost estimates.
- The project manager will update the project schedule.
- The project manager will document receipt of any materials from NPS, inspect it, assure it is delivered to the proper person, and alert to COR to any problems or damage.
- The project manager will assemble the submittal components and verify they meet the NPS requirements. He or she will submit multiple copies of the design materials for NPS review and comments. The project manager will prepare transmittal forms to document submittals.
- Depending on the size of the project, the designer and/or developer will present the submittal in person to the NPS team. Alternatively, SRS will arrange a conference call to present the design materials.
- NPS will review the submittal and provide written comments.
- SRS will hold a conference call with the NPS team to review and clarify comments. The project manager will document this call and respond to NPS comments.

Phase II of Design Development: Once written comments are received from the COR, SRS will hold a conference call to review and discuss comments. Decisions resulting from this call will be documented by the project manager. The design team will then modify the design documents based on comments and discussion. (An interim submittal will be provided if needed for approval of design revisions in order to complete the Phase II design.)

- The writer will complete the first draft of exhibit text and finalize the selection of images and objects.
- Content reference packages for specialty exhibits will be completed by the project manager, writer and designer.
- Written treatments of AV, Multimedia and other specialty exhibits will be completed, along with specification of all hardware.
- The exhibit designer will update and finalize the floor plans and all exhibit design drawings.
- The graphic designer will prepare draft layouts for all exhibits. FPO images will be used in layouts pending image approval.
- Approved images will be acquired and illustrations will be completed.

- There will be ongoing discussions between the project manager, designer, writer and specialty subcontractors to assure all components are properly defined, drawn and priced.
- The estimator will prepare a final detailed Class B and life cycle cost estimates. Subcontractors will provide final quotes.
- To stay on schedule, some exhibit elements may be prioritized during Phase II so that they to go into production while the design of others is being completed. The project manager will coordinate this with the production manager and designer and make sure these items are identified in the Phase II submittal.
- The project manager will maintain communication with the COR to make sure all questions are answered and to maintain effective project coordination.
- The project manager will maintain communication with the designer and subcontractors to assure building infrastructure needs are understood and communicated to the COR, architect and park staff as needed.
- If needed, specialty subcontractors who are not part of our approved team will be identified and references submitted to the COR for approval.
- Evaluation will be completed if required.
- The estimator will prepare a revised budget and cost analysis.
- The project manager will update the project schedule.
- The project manager will assemble the submittal components and verify they meet the NPS requirements. He or she will submit multiple copies of the design materials for NPS review and comments. The project manager will prepare transmittal forms to document submittals.
- Depending on the size of the project, the designer and/or developer will present the submittal in person to the NPS team. Alternatively, SRS will arrange a conference call to present the design materials.
- NPS will review the submittal and provide written comments.
- SRS will hold a conference call with the NPS team to review and clarify comments. The project manager will document this call and respond to NPS comments. The project manager will distribute comments to subcontractors as appropriate.
- The project manager will work with the design team to identify which of the following tasks need to be performed during pre-production or Phase II design, as the project warrants.
 - Finalize artifact preparation and acquisition plans and coordinate with casework requirements. Props purchases.
 - Acquisition of images, scanning, and creation of original art.
 - Development of AV Programs
 - Produce custom elements such as sculpture, specialty electronic or mechanical elements.
- The project manager will work with the design team and the COR to reach agreement on what needs to be done, establish a schedule and identify suppliers. The project manager will generate contracts and purchase orders.
- The exhibit writer or project manager will perform image acquisition using documents provided by NPS to secure use rights. The project manager will work

with the writer and graphic designer to document the receipt of all originals, assure use rights are paid, assure scans are made and original materials returned as needed.

- The project manager will maintain communication with the COR and Park staff, bring any questions or problems to the attention of the COR for resolution.

PRE-PRODUCTION

Additional staff members will join the project team and prepare it to proceed from design to production. The project manager will work with the production manager, design team, department heads and subcontractors to coordinate work and maintain the project schedule. The project manager will work with the COR and Park team as needed to resolve questions as they come up.

During this phase all elements are prepared to move into production. The project may need to be organized so that some elements can be fast-tracked into a phased production schedule.

- The designer will make revisions and complete the design package.
- The writer will make corrections and finalize text and images.
- The project manager will hold a meeting with the design team, production manager, estimator, detailer and department heads to review the project and add preproduction staff.
- The exhibit detailer will be selected and will develop construction detail drawings. These drawings will be submitted for NPS review and approval. The detailer will assure that exhibits meet ADA and ABA guidelines.
- The graphic designer will prepare all production files and provide color and materials samples.
- The fabrication shop will produce color and material samples as needed.
- The artistic fabrication department will prepare models or sketches as needed.
- The estimator will prepare a Class A Production Budget and update life-cycle cost estimate.
- The project manager will direct subcontractors to begin/continue work on Audiovisual and Multimedia programs and hardware and will make submittals as required.
- The project manager will monitor the progress of all departments and update project schedule.
- The project manager will work with the COR, architect, park staff and others as needed to assure any necessary building modifications are defined and being taken care of. The project manager will provide coordination materials and information as needed.
- Prototypes will be assembled and tested as needed.
- References will be completed and submitted for sculptures, dioramas, models and other specialty items. References may include pencil and color drawings, scale models, photographs or other items. The project manager will coordinate these with the artists and COR, and generate transmittals.

- Illustrations, maps and other artwork will be created. The graphic designer and project manager will direct this work. Progress samples will be submitted in logical stages for review, comments and approvals by NPS.
- If artifact preparation and mounting is part of the project, the project manager will coordinate the work process with the COR, specialty subcontractors and artifact suppliers. The project manager will request, if possible, that artifacts be shipped to our shop for mounting. We maintain a secure and clean workspace for working with artifacts. If artifacts must be mounted on site, the SRS project manager will coordinate and schedule this work with the COR.
- The project or production manager, or lead builder, will visit the site and inspect the exhibit space. The project manager will be advised of any problems affecting exhibit installation, and they will be documented and communicated to the COR for resolution.
- The project manager will make all submittals necessary to the COR and NPS team to gain comments and approvals in order to proceed into production. These will include printed, fabricated and electronic materials. The project manager will prepare transmittal forms to document submittals. The project manager will receive all comments from the COR, will hold phone calls or clarify comments in writing, communicate comments to the appropriate staff members, and make resubmittals as needed.
- If possible, the project manager will arrange a review meeting at SRS with the COR and NPS team members to review physical samples, prototypes and submittals.

PRODUCTION

During production, the exhibit specialists in the wood shop and artistic fabrication department will construct and create all the exhibit components. They will work closely with the production manager, shop foreman, department heads, detailer, subcontractors, graphic designer and exhibit designer to assure all questions are answered and that construction is proceeding as the exhibit designer wishes and per the project documents. The designer and project manager will review progress frequently to assure quality and accuracy of the work. The project manager will review the project daily to assure it is proceeding properly, and will continue communication with the COR and NPS team as needed to answer questions and provide information.

- The production manager and project manager will hold a production start up meeting at SRS. The designers, detailers, estimators shop foreman, builders and artists will attend this meeting to assure everyone has a clear understanding of the entire project. Construction will begin after this meeting.
- Shop drawings will be reviewed and materials will be ordered from specialty suppliers.
- Most exhibit elements will be constructed in our 40,000 SF facility. Shop staff members will be assigned to individual components. The Shop Foreman will coordinate with production staff to assure all elements are built to quality and project specifications, fit together properly and are built to be shippable and installable.

- The designer and project manager will review progress frequently to assure quality and accuracy of the work.
- The project manager will monitor the project schedule and progress to assure the project is on schedule and on budget.
- The graphic designer will complete production layouts. The exhibit writer will proofread layouts and make any adjustments to text needed to perfect the layouts. The project manager will submit hard copies for approval prior to output. The graphic designer will work directly with the shop foreman and output vendors to assure materials are ordered and that SRS-furnished materials are delivered to vendors. The designer and project manager will inspect completed graphics for quality and correctness.
- The project manager will make regular submittals to the COR to demonstrate progress. These submittals will generally be photos sent via email. The project manager will prepare transmittal forms to document submittals.
- Progress submittals for AV programs will be sent on CD or DVD.
- Progress submittals for Multimedia exhibits will be submitted online or via CD.
- The SRS project manager will work with subcontractors to oversee progress and will request photos be submitted that will be forwarded to the NPS team. As needed, the SRS project manager will visit the subcontractor to review progress in person. The COR or NPS team will be invited to attend these review meetings.
- AV hardware will be purchased and systems sub-assembled and tested. Components will be integrated into casework as appropriate. When substitutions are necessary, the project manager will alert the COR and gain approval.
- The project manager will inspect and document receipt of all elements received from the NPS and from subcontractors. The project manager will promptly report deviations or problems to the COR.
- The COR and NPS client team will be invited to visit SRS and review progress in the shop. They may be invited to visit at several key milestones, or no later than three weeks before the project is scheduled to ship.
- Evaluation will be conducted during preproduction and production as specified.
- The project manager will work with the COR, architect, park staff and others as needed to assure the building is ready for exhibit installation.
- The project manager will work with the COR to schedule installation, work hours, etc.
- Some on-site work may need to be completed before the main installation. For example, concrete groundforms, AV systems or other special elements may need to be done early. This will be coordinated with the Park and COR and approved during the production process. The SRS project manager, production manager or lead artist will be on site to supervise this work.

SHIPPING, INSTALLATION AND PROJECT CLOSE-OUT

The same team that builds the exhibits will install them. We have found this is the most effective way to assure exhibit components are built so they are easy to install, and with an eye to any field modifications that may be required due to actual building conditions. This also assures an efficient installation because the installers are already familiar with the project and components. When we work in remote locations, we try to find a local carpenter who can work with us during installation, and will then be available to help with any warranty or maintenance issues over time.

- For shipping, exhibit elements will be wrapped in foam, strip-crated, or blanket wrapped and transported in dedicated tractor-trailers to the exhibit site. If exhibits are to be installed outside the contiguous 48 states, exhibits will be packed into dedicated shipping containers with appropriate padding, crating and desiccant materials to assure safe arrival.
- Prior to installation, the entire project team meets to assure all questions are answered and the installation staff has all the necessary information and materials to complete the project.
- The lead builder will meet with the NPS on-site contact on arrival. The project manager or production manager will be on-site if needed; typically the lead builder is the main contact and manages the on-site installation.
- Any required pre-installation meetings will be held on site. Safety and start-up meetings will be held as needed.
- SRS crew will arrive with the truck. They will assist with unloading and placement of exhibit elements within the building.
- SRS staff will install the exhibits in a logical and efficient order. The project manager will arrange to schedule for subcontractors such as on-site electricians, as well as for work to be done on site by IDIQ subcontractors.
- Subcontractors will install exhibit components as appropriate.
- The project manager will be in regular communication with the lead builder. The lead builder will work directly with NPS staff on site to resolve any problems during installation. Issues will be elevated to the project manager, designer and COR as needed.
- The lead builder will walk through the project with the NPS site representative periodically during installation to identify and remedy any potential punch list items. Our goal is to complete the installation with no outstanding punchlist.
- Artifact mounting and installation of delicate AV equipment will be done once major construction work is complete, the exhibits are clean, and it is and safe to install delicate objects. The project manager will coordinate this work with the production team, subcontractors and COR.
- The designer or project manager will come to the site toward the end of installation to assure all exhibit elements are completed to the project requirements.
- The exhibit designer or lead builder will provide final focus of lighting.

- The project manager will schedule a walk through with the COR for final inspection of the exhibits and will create a punch-list if needed. The PM will assure all punch list items are remedied and will perform additional inspections with the COR if needed.
- The project manager will create the maintenance and close-out manual(s). He or she will review these with the staff and COR. Any corrections that need to be made to the manuals will be completed and revised copies will be emailed or hard copies sent.
- SRS staff and subcontractors will conduct training to instruct staff on the care and upkeep of exhibits.
- The project manager will return all original and closeout materials and documentation to the COR at completion of the project.
- SRS will provide a one-year warranty on all exhibits. The project manager will remain the main point of contact to resolve any warranty issues.

Split Rock Studios team members will work within the NPS guidelines to design and build exhibit projects awarded under this contract. We will provide all services and submittals to assure successful completion of all task orders awarded under this contract.

Our exhibit developers have some experience with the National Park Service Content Management System, They have suggested that, if we are awarded this contract, we request a training session with someone from NPS who can quickly help us learn how to make best use of this system.