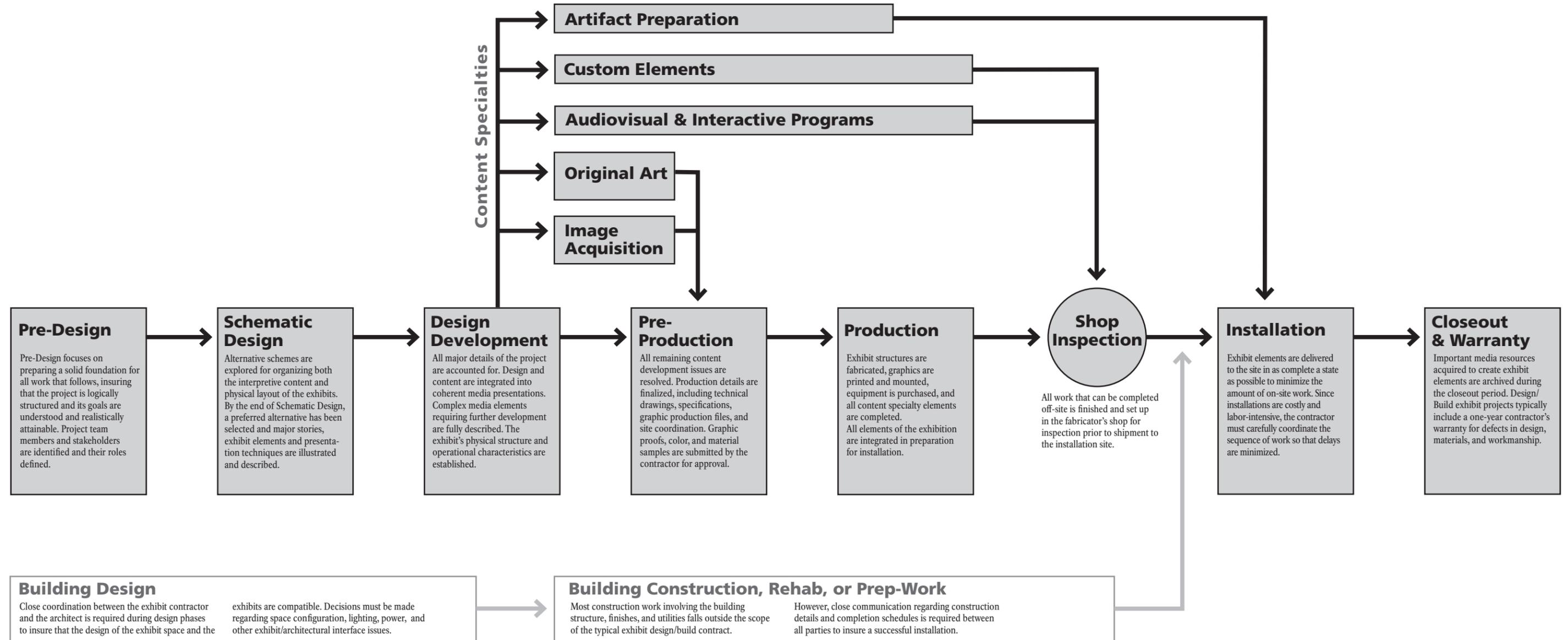




# Museum & Visitor Center Exhibit Design/Build Process

Flowchart (For detailed requirements see HFC Exhibit Design-Build Contract Scope of Work)





# Museum & Visitor Center Exhibit Design/Build Process

Summary Description (For detailed requirements see HFC Exhibit Design-Build Contract Scope of Work)

## Pre-Design

- Review planning documents.
- Conduct scoping study at site.
- Identify existing media resources.
  - Develop Resource Package Abstract.
- Evaluate architectural space.
- Conduct Exhibit Planning Workshop.
- Develop Project Brief including:
  - Current overview of project, including updated information and understandings.
  - Analysis of all project goals in terms of their effect on the development and successful completion of the exhibit.
  - Analysis of the media budget (including Class C cost estimate), project schedule, and all other known parameters affecting the development and successful completion of the project.
- Conduct Front-End Evaluation.

## Schematic Design

Schematic Design includes two sub-phases:

### Schematic I

- Conduct content research.
- Develop Resource Package Level I.
- Conduct Charette.
- Develop Design Alternatives including:
  - Bubble diagrams.
  - Written descriptions.
  - Preliminary sketches.
  - Class B and life-cycle cost estimates.

### Schematic II

- Participate in NPS Value Analysis process.
- Develop Preferred Alternative including:
  - Written exhibit walkthrough.
  - Overall design approach.
  - Floor plan with individual exhibit areas & major elements identified.
  - Sample elevations.
  - Conceptual renderings / visualizations.
  - Resource Package Level II (content to be used in each exhibit identified).
  - Updated Class B and life-cycle cost estimates for Preferred Alternative.

## Design Development

Design Development includes two sub-phases:

### Design Development I

- Develop design including:
  - Detailed floor plan and elevations.
  - Sample graphic layouts / typography.
  - Material, finish, and color proposals.
  - Architectural modifications.
- Develop content including:
  - Text Level I (titles and descriptions).
  - Identify major images and artifacts.
  - Describe AV and interactive elements.
  - Describe major content specialty elements such as natural history models, taxidermy, topographic maps, architectural models, sculpted or cast human figures, custom mechanical and electromechanical devices.
  - Establish Content Management System (i.e., database, numbering system).

### Design Development II

- Develop all content in detail including:
  - Text Level II (all text in draft form).
  - Specify all graphic images.
  - Specify all artifacts.
  - Finalize AV / interactive treatments.
  - Develop Reference Packages for all content specialty elements.
- Enter all content information into Content Management System.
- Create Graphic Layouts for all exhibits.
- Update Exhibit Design Drawings.
- Identify audiovisual and interactive equipment requirements.
- Refine Class B and life-cycle cost estimates.
- Conduct Formative Evaluation.

## Content Specialties

### Artifact Preparation

- Acquire and prepare artifacts used in exhibit including:
  - Finalize Artifact Schedule.
  - Follow NPS Conservation Guidelines.
  - Coordinate acquisition, storage, and transportation of artifacts as specified in the contract.
  - Contract or assign conservators for consultation and treatment of artifacts.
  - Repair damage and stabilize condition of artifacts as required.
  - Establish artifact environmental requirements and coordinate with display case design and fabrication.
  - Establish artifact mount requirements and coordinate with mount maker.

### Custom Elements

- Produce custom elements such as natural history models, taxidermy, topographic maps, architectural models, sculpted or cast human figures, custom electronic elements, specialty lighting, mechanical and electromechanical devices.
- Tasks include:
  - Provide project management.
  - Finalize Reference Packages.
  - Contract or assign specialty fabrication teams.
  - Provide creative direction.
  - Coordinate integration of custom elements with exhibit structures.

### Typical Building Preparation Elements

In most cases, construction involving building structure, finishes, and utilities falls outside the scope of exhibit design/build work.

However, on occasion, contracts may include one or more of these elements:

- Demolition / removal of old exhibits or other furnishings.
- New finishes for walls, floors, ceilings, and trim work as required.
- Modifications or upgrades to electrical,

### AV Programs

- Produce original audiovisual and electronic interactive programs including:
  - Provide project management.
  - Contract or assign AV production team.
  - Provide creative direction.
  - Coordinate AV equipment requirements.

### Original Art

- Produce original illustrations, maps, and photographs including:
  - Provide project management.
  - Finalize Reference Packages.
  - Contract or assign illustrators, cartographers, and/or photographers.
  - Provide creative direction.

### Image Acquisition

- Acquire all pre-existing images that are required for the exhibition including:
  - Research image sources.
  - Negotiate and purchase use rights, and provide documentation.
  - Obtain reproducibles (photos, scans) of suitable quality for exhibit use.
  - Return originals to owners as required.

## Pre-Production

- Complete all design and content revisions required for production.
- Prepare detailed fabrication and installation schedule.
- Inspect exhibit space and document any problems affecting exhibit installation.
- Prepare Class A Production Budget and updated life-cycle cost estimate.
- Prepare all graphic production files and generate printed proofs; inspect for content errors and technical quality.
- Prepare production color and material samples.
- Prepare shop drawings with fabrication details for all exhibit structures.
- Prepare audiovisual technical drawings.
- Prepare technical specifications and cut-sheets.
- Prepare any required prototypes or mock-ups.

## Production

- Output and mount final production graphics.
- Fabricate exhibit structures, including artifact cases, panels, walls, platforms, information desks, benches, audiovisual kiosks, etc.
- Integrate custom elements such as natural history models, topographic maps, cast human figures, taxidermy, mechanical interactive exhibits with exhibit structures.
- Fabricate custom artifact mounting hardware.
- Acquire audiovisual hardware; install AV software; test system operation.
- Prepare exhibits for shipment to site.

## Installation

- Finish any remaining, minor building prep work.
- Deliver exhibits. Set up staging area for unloaded exhibit elements.
- Designer provides on-site art direction as required.
- Install all large structures, such as platforms, walls, cases, large graphic panels and murals.
- Install smaller graphics, AV equipment, models, interactive exhibits.
- Clean work site of debris and dust, clean artifact cases, install artifacts, perform all other conservation requirements, and seal cases.
- Aim and adjust lighting fixtures.
- Walk-through inspection of completed exhibits.
- Develop punch-list.
- Supply maintenance manual and train staff in exhibit operation and maintenance.
- Correct punch-list items.
- Photograph completed exhibition.

## Closeout & Warranty

- Contractor submits closeout package including:
  - All Government-furnished materials.
  - Graphic production digital files.
  - "As-built" fabrication drawings.
  - "As-built" Content Management System data.
  - Copy of maintenance manual.
  - Other Contractor generated materials as required in contract.
- Graphic source material is checked to verify completeness, and filed for future exhibit rehabilitation.
- Quality issues with the exhibits are addressed under warranty.
- Summative / Remedial Evaluation and exhibit enhancements may be accomplished through a contract modification.
- Photographs, planning and design documents, budget documents, and exhibit closeout materials are kept on file by client for future reference.