

Reclassification

Ministry

Arts, Culture and Status of Women

Describe: Basic Job Details

Position

Position ID

Position Name (30 characters)

Exhibit Fabrication Specialist

Current Class

Requested Class

Job Focus

Supervisory Level

Agency (ministry) code

Cost Centre

Program Code: (enter if required)

Employee

Employee Name (or Vacant)

Organizational Structure

Division, Branch/Unit

Current organizational chart attached?

Supervisor's Position ID

Supervisor's Position Name (30 characters)

Supervisor's Current Class

Design: Identify Job Duties and Value

Changes Since Last Reviewed

Date yyyy-mm-dd

Responsibilities Added:

Role is now focused on fabrication of exhibit components.

Responsibilities Removed:

The exhibit design-related responsibilities have been removed. The position is also now based in Edmonton (it was formerly expected to work independently out of Cardston) and therefore no longer requires the same degree of self-sufficiency. For this reason, it can now report to the Lead Exhibit Technician, instead of reporting directly to the Manager of Design, Production & Operations.

Job Purpose and Organizational Context

Why the job exists:

The Heritage Division operates a network of museums and historic sites to fulfill its mandate to lead the stewardship of Alberta's heritage resources. In collaboration with other branches within the Heritage Division, the Royal Alberta Museum (RAM) Branch is responsible for designing and producing galleries, exhibits, interpretive features, and promotional products at 18 of the Division's museums (including the

RAM), historic sites and interpretive centres located throughout Alberta. The RAM Branch's Visitor Experience unit is instrumental in leading this work.

Reporting to the Lead Exhibition Technician, the Exhibit Fabrication Specialist is a key member of a multidisciplinary team responsible for building, installing, and maintaining exhibits, galleries, and similar public spaces in museums, historic sites, and interpretive centres under the Division's leadership. This position's focus is on fabricating the specialized components needed to build or repair exhibits. The position requires creativity, agility, independent judgment, and technical knowledge across several functions, including installing and decanting exhibitions of various scales.

The Exhibit Fabrication Specialist is a creative thinker and problem solver, whose expertise enables them to fabricate the specialized components that exhibitions often require. They collaborate with team members in a shop to build prototypes, mock-ups, and the specially designed components scoped out earlier in the development process. The position's fabrication skills include carpentry, painting, and some metalwork. The incumbent often leads aspects of the work and mentors other team members, adhering to all relevant Occupational Health & Safety requirements and safety protocols.

This position collaborates with other team members in the unit to integrate exhibit products into a complete and functioning exhibition, aiming to achieve the objectives of the overall interpretive plan, foster continuous improvement, and sustain a culture of excellence and accountability.

Responsibilities

Job outcomes (4-6 core results), and for each outcome, 4-6 corresponding activities:

Fabricate components (such as props, mechanical interactive, display systems, etc.) for museum exhibits and related experiences.

- Using standard shop tools (e.g. table saw, band saw, domino wood joining system, planers, jointers, etc.) to fabricate and finish exhibit display components and prototypes.
- Programming and operating digital fabrication technologies (e.g. CNC router, laser cutter, 3D printer) to fabricate exhibit components.
- Using woodworking and metal working skills to produce artifact mounts, supports, simple mechanical interactives, exhibit props, and replicas.
- Using knowledge of colour theory, pigments, paint types, textures, brushes, brush and tool techniques to apply paint or finishing to components, prepare gallery walls, and other surfaces.
- Knowledge of prototyping materials and materials suppliers (plastics, composites, metals, woods).
- Working from detailed/measured drawings created by Exhibit Designers, prepares fabrication-related documents required to build exhibit components--this can include preparing shop drawings, preparing files for digital fabrication equipment, and writing installation manuals/instructions.
- Reviewing and providing feedback on shop drawings produced by others, and respond to requests for information, and suggest change orders as necessary.
- Mentor other staff members in fabrication-related skills, and provide instruction and guidance to other technicians on how to develop products or troubleshoot specific issues as needed.
- Oversee the maintenance of the tools and equipment in a fabrication shop.

Collaborate in the creation and execution of fabrication and installation plans for exhibits and other interpretive experiences, and in evaluating the success of exhibits once built.

- Conduct research on appropriate materials, finishes, hardware systems, fabrication methods, industrial finishes, assembly processes, and installation techniques; share key findings on new exhibit technologies, materials, and design trends with colleagues.
- Provide input based on knowledge of exhibit components and experience to exhibit designers in the development of new exhibits, display components, interpretive components and other physical requirements for building interior and exterior displays.
- Provide input into material selection, in collaboration with designers and other exhibit technicians, to make decisions on what can be built, and the methods involved.
- Provide recommendations on construction constraints and options affecting the construction of built components.
- Collaborate with Visitor Experience Researcher on the evaluation of effectiveness of exhibits with

the end goal of improving visitor experience outcomes.

- Conduct product/material/equipment research, testing and sourcing.

Install and disassemble exhibits and other interpretive experiences.

- Collaborate as a member of a team in the assembly, disassembly, transportation, storage, and coordination of exhibits (e.g., provide support and back-up as needed to others on the team, raise awareness to significant issues for resolution).
- Oversee the procurement of necessary goods and services, including obtaining design/budget approvals, quotes, preparing schedules, assisting with the development of purchase requisitions and contracts, managing contracts, and ensuring quality control.
- Install internally and externally manufactured exhibit components as per design plans and/or installation manuals.
- Confirm proper installation as per plans.
- Develop and implement rigging solutions for overhead or aerial display components within an exhibit.
- Drive restricted vehicles (e.g., single axle cube van, 5-tonne truck).

Contribute to development and achievement of Visitor Experience Unit Plans and Priorities.

- Collaborate with colleagues and project team members to meet each project's acceptance criteria in a safe, timely, and cost-effective manner.
- Lead and participate in project teams as assigned.
- Provide regular project status updates to the Manager, Lead Exhibit Technician, and/or Project Coordinator as requested.
- Maintain a safe, tidy workshop environment and maintain tools and equipment.
- Comply with all Occupational Health and Safety (OH&S) requirements to maintain a safe work environment.
- Document all work and correspondence, maintain project files, produce and/or maintain operational manuals and vendor source information according to the GoA records management policy.
- Participate in team meetings and other committees or project teams as assigned.
- Complete other related duties as assigned by the Manager and/or Lead Exhibit Technician.

Problem Solving

Typical problems solved:

The incumbent is a key member of teams responsible for developing, fabricating, installing, and decanting and disassembling exhibits or gallery spaces in museums, historic sites, or interpretive centres. This position plays a key role in the fabrication of exhibit and display components.

Each exhibit is a unique collection of products. The incumbent has an essential role in fabricating custom components and creating the technical documents, specifications, and computerized instructions required to do so. They also assemble and install a variety of these items in a gallery. They are expected to develop multiple options/solutions to address specific exhibit products and help others understand the pros and cons of each solution (e.g., high-cost, low-cost, etc.).

The complexity and diversity of this work requires the assimilation and integration of information from many sources, ability to work collaboratively and productively with colleagues and contractors (with a variety of skills and approaches to work), the ability to set priorities and manage a heavy workload, an understanding of the best uses of available resources, and the ability to create quality products that enhance the visitor experience. The incumbent requires excellent communication and problem-solving skills to collaborate with colleagues, and other stakeholders to proactively resolve problems that arise during the production, installation, and operation of exhibits. This work requires the ability to influence, lead and/or participate on multi-disciplinary teams of colleagues and stakeholders.

Types of guidance available for problem solving:

Integral to success in this position is the ability to explore, consult, and collaborate with knowledge

experts and creative colleagues to identify and resolve design concerns and issues. Working collaboratively enables the incumbent to gather advice and expertise from a wide variety of teammates, including those in conservation, curatorial roles, collections management, graphic design, media design, technical services, interpretive planning, and visitor experience research. Regular interactions with the Lead Exhibition Technician, Project Coordinator, Exhibition Designers and other members of the team are essential to ensure that project work progresses in a timely manner and aligns with operational plans and quality standards, while closely liaising with exhibition designers about key priorities for each exhibit. The role provides recommendations on construction constraints and options that impact the construction of built components.

Guidance for problem-solving is offered by existing exhibit design plans, OH&S and other safety requirements, and operating requirements for various exhibit components. While the incumbent can seek guidance from other exhibit technicians, exhibit designers, and exhibit technologists, and the Lead Exhibit Technician, the incumbent will often be the most experienced and knowledgeable team member involved in developing a solution.

A high degree of creativity and problem-solving skills are required, especially when dealing with limited resources, community expectations, and the diverse needs of various sites and museums. This involves understanding the underlying intentions and designs of an exhibit, including the logistics, production, and maintenance of traveling exhibitions on Alberta's history and historical resources.

Direct or indirect impacts of decisions:

The work of this position impacts:

- The function and appearance of the exhibits within the Heritage Division's museums, historic sites and interpretive centres. Regular exhibit maintenance and redevelopment is important to help ensure public satisfaction and positive visitor experiences. Exhibits need to be creative, engaging, and evocative so that visitors are impressed, intrigued, and enticed to make subsequent visits.
- The department's priority to maintain and enhance the existing Heritage Division infrastructure through the design of accessible exhibits for galleries in museums, historical sites, and interpretive centres.
- The function and appearance of the exhibits within the Heritage Division's museums, historic sites, and interpretive centres. Regular exhibit maintenance and redevelopment is important to help ensure public satisfaction and positive visitor experiences.
- Budgets to develop, install, and maintain exhibits through safe management of exhibit products. There are significant costs associated with executing designs correctly in the production phase. Production deals with expensive materials that if broken, damaged, or spec'd improperly can be very costly (e.g., glass panels). When dealing with invaluable objects from museum collections, the incumbent must work diligently and carefully to ensure no damage. Most of the costs associated with an exhibition design is actually spent/incurred at the production phase.
- The ongoing collaborative culture of the Visitor Experience unit. Moving an exhibit idea from concept to design plan, to product development, and then to execution/implementation, relies on the knowledge, skills, and input from all roles within the Visitor Experience unit, and in some cases other roles outside the unit. Success is dependent on teamwork and effective communication across interconnected roles. The position also contributes to the development of, and compliance with, health and safety-related standards and procedures.

Key Relationships

Major stakeholders and purpose of interactions:

Internal Stakeholders

- Visitor Experience Team Members - Collaborate extensively with all members of the team on the design, implementation, and maintenance of exhibitions and other products.
- Lead Exhibition Technician - Receive direction and coordinate work; respond to queries; provide advice on technical issues; offer insights and inputs to operational plans.
- Exhibit Technicians and Graphic Production Technician - Ensure work is coordinated and completed safely; mentor and train others as needed.

- Project Coordinator - Collaborate regularly to create and update work schedules.
- Project Team Members - Interpret exhibit designs and provide guidance and consultation to accomplish the assigned projects. Collaborate with multidisciplinary teams to develop and maintain exhibits. Teams can include members from any unit within the branch and from any branch within the Heritage Division.
- Museum/Historic Site/Interpretive Centre Staff - Consult and collaborate to understand the products they require within an exhibit; coordinate the execution of work.
- Alberta Infrastructure - Collaborate on changes required to AI buildings to accommodate/support new exhibits.
- Conservation Team - Work closely on a regular basis, moving heavy artifacts upon request.

External Stakeholders

- Contractors and Vendors - Provide input to procurement processes, lead straightforward procurements, develop and/or administer contracts; work with and provide direction as needed to contractors.
- Industry - Maintain awareness of new developments, leading practices, and standards for exhibit design; engage for complex problem-solving as needed.

Required Education, Experience and Technical Competencies

Education Level	Focus/Major	2nd Major/Minor if applicable	Designation
Bachelor's Degree (4 year)	Other		

If other, specify:

Industrial Design or equivalent

Job-specific experience, technical competencies, certification and/or training:

Education and Experience

- Post Secondary education in industrial design or equivalent, plus at least three (3) years experience in fabricating custom products, ideally for a museum or science centre.
- Several years experience working in a fabrication shop, using both standard shop tools and operating computer-aided fabrication equipment (e.g., programing and operating a CNC machine).
- Work experiences related to one of the team's fabrication-related functions (such as carpentry, glazing, welding, theatrical lighting or set making), at a museum or art gallery being an asset.
- Experience in procurement (requesting and comparing bids, contracting of services).

Technical Competencies, certification and/or training

- Superior ability to work both independently and in a team environment; ability to balance numerous projects simultaneously.
- High degree of accuracy and attention to detail.
- Proficiency with Windows PC platform, computer aided design programs (CAD, 3D modeling, etc.), Adobe Creative Suite, Microsoft 365, and comfort with learning a variety of new computer program software.
- Understanding of basic mechanics and engineering techniques
- Ability to interpret detailed exhibit drawings, architectural/engineering blueprints, and create technical drawings and fabrication documents based on those specifications.
- Some degree of competence and skill across all exhibit technician functions, and a level of expertise in one or more fabrication-related functions, which can include, carpentry, metalwork, casting; along with knowledge of finishes, assembly processes and installation techniques.
- Effective project planning and management skills; self-motivated, strong organizational skills, and ability to coordinate the work related to numerous projects simultaneously.
- Strong interpersonal skills to work effectively with product reps, suppliers, fabricators, designers, colleagues, and stakeholders.
- Superior ability to work both independently and in a team environment; ability to balance numerous projects simultaneously.
- Highly skilled and able to suggest solutions on materials and fabrication processes used in display production and indoor/outdoor signage.
- Self-motivated, strong organizational skills.

- Working knowledge of all stages of planning, fabrication, and production for all types of exhibits.
- Knowledge of safety standards and material handling practices, including those stipulated by Alberta's OH&S requirements and the Workplace Hazardous Materials Information System.
- Ability to operate Mobile Elevated Work Platforms, forklift, pallet jacks, and maintain necessary certifications.
- Valid class 5 driver's license and experience loading, unloading, and operating cube vans and 5-ton trucks.
- Teamwork, collaboration skills and interpersonal skills to work effectively with colleagues, vendors, suppliers, etc.
- Demonstrated genuine respect of others' expertise and willing to learn from others.
- Able to lift and handle 25 kg.

Behavioral Competencies

Pick 4-5 representative behavioral competencies and their level.

Competency	Level					Level Definition	Examples of how this level best represents the job
	A	B	C	D	E		
Creative Problem Solving	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Engages the community and resources at hand to address issues: <ul style="list-style-type: none"> • Engages perspective to seek root causes • Finds ways to improve complex systems • Employs resources from other areas to solve problems • Engages others and encourages debate and idea generation to solve problems while addressing risks 	Each exhibit often presents unique problems, requiring different solutions. There is no cut and paste. They may need to bring in specific knowledge experts depending on the product being designed.
Systems Thinking	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Considers inter-relationships and emerging trends to attain goals: <ul style="list-style-type: none"> • Seeks insight on implications of different options • Analyzes long-term outcomes, focus on goals and values • Identifies unintended consequences 	Ability to review plans and understand what questions to ask to increase likelihood of successful implementation.
Drive for Results	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Takes and delegates responsibility for outcomes: <ul style="list-style-type: none"> • Uses variety of resources to monitor own performance standards • Acknowledges even indirect responsibility • Commits to what is good for Albertans even if not immediately accepted 	Exhibit Technicians must take initiative to identify and resolve problems, and are required to self manage their work, and manage multiple exhibit products with often overlapping time frames.

