



STATE OF MONTANA
DEPARTMENT OF ADMINISTRATION
ARCHITECTURE AND ENGINEERING DIVISION
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PERFORMANCE AND DOCUMENT REQUIREMENTS

(Revision Date – 10/30/2023)

This document forms an integral part of the Standard Form of Agreement Between Owner and Architect/Engineer. It will be used in addition to and in conjunction with the Owner's Basic Requirements and the High-Performance Building Standards adopted by the Department of Administration in accordance with §17-7-213 MCA. Terms not otherwise defined in this Agreement will be construed in accordance with the commercially reasonable understanding of the parties, taking into consideration common usage within the relevant industry or discipline.

1. **MASTER PLANNING**

- 1.1. Master Planning shall commence with the execution of the Agreement and shall be complete with the Owner's approval and acceptance of the completed Master Planning Document.
- 1.2. The Master Plan shall consist of five elements:
 - 1.2.1. Vision and direction of the agency and how the facilities master plan integrates and assists in the overall objectives and targets;
 - 1.2.2. Documentation of existing facilities, utilities, themes, roads, sidewalks, campus access, and structures;
 - 1.2.3. Available and potentially-available open space;
 - 1.2.4. Transportation and circulation for all types of transit and pedestrians; and,
 - 1.2.5. Defining potential future development and growth.
- 1.3. Open Space Objectives in the Master Plan. The Master Plan should conserve and enhance existing open spaces and views to and from facilities and look for opportunities to create additional safe and attractive open spaces. The Master Plan shall:
 - 1.3.1. Designate important open spaces and views and create policies to ensure their preservation and maintenance;
 - 1.3.2. Identify areas that could become safe and pleasant new open spaces;
 - 1.3.3. Propose opportunities to use landscape elements to strengthen the structure of the grounds;
 - 1.3.4. Identify areas where links between open spaces could be improved in order to achieve a cohesive and accessible open space network;

- 1.3.5. Incorporate accessibility as an integral part of the design that will increase safety and comfort in campus open spaces; and,
 - 1.3.6. Link the open space and circulation systems into the community and surrounding open space systems.
- 1.4. Transportation and Circulation Objectives in the Master Plan. The Master Plan should ensure access to and within the area by all modes of transportation and encouraging a safe and pleasant environment for pedestrians and bicyclists. The Master Plan shall:
- 1.4.1. Improve the pedestrian experience;
 - 1.4.2. Increase access for pedestrians and bicyclists, both to and within the area;
 - 1.4.3. Minimize conflicts between pedestrians, bicycles, and vehicles;
 - 1.4.4. Improve public transportation with the goal of minimizing vehicle trips and related parking requirements;
 - 1.4.5. Minimize the amount of new parking facilities while still providing parking for a variety of users, including the disabled, with the least impact on the area and the surrounding street system;
 - 1.4.6. Locate, landscape, and screen parking to prevent detracting from the overall quality of the campus/facility environment while promoting safety and security; and,
 - 1.4.7. Clearly identify access and improve signage around campus/facility.
- 1.5. Future Development Objectives of the Master Plan. Sites should be selected and developed to contribute to the enhancement of the campus/facility environment without detracting from the fundamental qualities of the area. Each potential site should be developed to:
- 1.5.1. Improve the environment with high quality architecture and open space integrated with the building design;
 - 1.5.2. Enhance and strengthen its context and the campus as a whole;
 - 1.5.3. Be in harmony with the immediate surroundings;
 - 1.5.4. Facilitate accessibility and pedestrian circulation;
 - 1.5.5. Accommodate service functions with minimal visual impact from pedestrian routes and open spaces, without causing safety conflicts;
 - 1.5.6. Provide a more environmentally sustainable landscape that promotes conservation of natural resources and systems;
 - 1.5.7. Provide an economically feasible and functional project, and,

1.5.8. Support greening and sustainability techniques.

2. PROGRAMMING

2.1. Programming shall commence with the execution of the Agreement and shall be complete with the Owner's approval and acceptance of the completed Programming Document.

2.2. The Architect/Engineering will provide the following as part of the Programming effort:

2.2.1. Develop and define the needs for the Project based on the Owner's Initial Information Document and/or other information obtained through the data gathering process, interviews, charrettes, surveys, and operational parameters;

2.2.2. Review, develop, and document detailed requirements for the Project, covering items such as Project goals and objectives, design objectives, limitations, and criteria, gross area and space requirements, spatial relationships, needs and options for flexibility or expandability, need for special equipment and systems, site requirements, and further development/alteration of the Project Schedule and budget requirements;

2.2.3. Review, develop, and document space concepts and flow diagrams, functional relationships, access, circulation, and flow patterns within the building and on the site;

2.2.4. For existing facilities, conduct additional research to review existing conditions, and identify and document areas to be involved in alterations, additions, repairs or demolition; and,

2.2.5. Define and develop programmatic and conceptual level documents (collectively, the "Programming Documents"), in consultation with the Owner and incorporating the following:

2.2.5.1. Architectural - recommendations regarding the programming and project requirements and preparation of conceptual site and building diagrams for each level or floor, investigation of alternative approaches, key diagrammatic sections, typical diagrammatic elevations, preliminary selection/recommendation of building systems and materials, development of approximate dimensions, areas and volumes, and review of any existing project documentation;

2.2.5.2. Structural - recommendations regarding structural materials and systems;

2.2.5.3. Mechanical and Electrical - for mechanical design, consideration and recommendations regarding systems and equipment, development of conceptual design solutions for energy sources/conservation and general space requirements. For electrical design, consideration and recommendations regarding basic electrical systems and equipment, analysis and development of conceptual design solutions for energy sources/conservation, service distribution, and general space requirements;

2.2.5.4. Civil - site planning analysis including layout of site features, building position, general topography, location of paving for walkways, driveways and parking. Also, must include connections for building utilities such as water, sewer, gas/steam and power;

2.2.5.5. Budget – further develop/refine the Project Budget in coordination with the Owner and assist in the review of soft costs and preliminary Estimate of Construction Cost. If the scope of work includes a conceptual level cost estimate, provide a conceptual level cost estimate based on the master plan concept designs; and,

- 2.2.5.6. Scheduling/Phasing – further develop/refine the Project Schedule in coordination with the Owner. Perform review, analysis, and adjustments to the Project Schedule and phasing plan(s) (if a phased project).
- 2.3. The Programming Documents will contain the following items:
- 2.3.1. Executive Summary with Project Statement;
 - 2.3.2. Project Summary and Design Goals;
 - 2.3.3. Space Program;
 - 2.3.4. Planning and Design Criteria including, but not limited to, codes, zoning, clustering and layout criteria, building massing, blocking and stacking diagrams, space planning module, dimensional criteria, envelope interface, physical accessibility and ADA, style issues and constraints;
 - 2.3.5. Building Performance Criteria including, but not limited to, general notes and comments on: building envelope, structure, interior construction, HVAC systems, plumbing systems, fire suppression systems, electrical systems, and information technology systems;
 - 2.3.6. Site Requirements including, but not limited to, preliminary building siting, site analysis, parking, traffic flow, grading and landscaping;
 - 2.3.7. Project Budget, including Estimates of Construction Cost, design fees, and all other identifiable costs; and,
 - 2.3.8. Schedules for funding, design, and construction.
- 2.4. The Programming Documents, upon completion and approval by the Owner, will become the Project Program.
- 2.5. For the purposes of Commissioning, if applicable, the Architect/Engineer will begin preparation of the Basis of Design Document, as defined by ASHRAE, describing the general scope of systems to be incorporated into the Project.
- 2.6. The Programming effort will incorporate into the Programming Documents and document compliance with the requirements of the High-Performance Building Standards and the Owner's Basic Requirements.

3. SITE SERVICES

- 3.1. Access and Protection of Property. The Architect/Engineer shall contact the Agency for information regarding access to the site and shall take all reasonable precautions to prevent damage to property, visible and concealed, and shall reasonably restore the site to the condition existing prior to the Architect/Engineer's entry, including, but not limited to, repair of curbs, sidewalks, lawns, and plantings unless otherwise agreed to with the Owner.
- 3.2. Site and Topographical Surveys. The Architect/Engineer shall furnish surveys to describe physical characteristics, legal limitations and utility locations for the site of the Project, and a written legal description of the site unless such surveys are specifically provided by the Owner. The surveys and legal information shall include, as applicable, grades and lines of streets, alleys, pavements and adjoining property and structures; adjacent drainage; rights-of-way, restrictions, easements, encroachments, zoning, deed restrictions, boundaries and contours of the site; locations, dimensions and necessary data with respect to existing buildings, other

improvements and trees; and information concerning available utility services and lines, both public and private, above and below grade, including inverts and depths. All the information on the survey shall be referenced to a Project benchmark that is permanent and readily identifiable and incorporated into the Contract Documents.

3.2.1. Site Survey Requirements

- 3.2.1.1. Show boundary lines (if any), giving length and bearing (including reference of basis) on each straight line; interior angles; radius, point of tangency and length of curved lines. Where no monument exists, set permanent iron pin (monument) or other suitable permanent monument at property corners; drive pin into ground adequately to prevent movement, mark with wood stake; state on drawings whether corners were found or set and describe each;
- 3.2.1.2. Confirm or furnish a legal description which conforms to the Record Title Boundaries. Prior to making this survey, the Surveyor shall, insofar as possible, acquire data including, but not limited to, deeds, maps certificates or abstracts of title, section line and other boundary line locations in the vicinity;
- 3.2.1.3. Give area in square feet if less than one acre, in acres (to .001 acre) if over one acre;
- 3.2.1.4. Note identity, jurisdiction and width of adjoining streets and highways, width and type of pavement. Identify any landmarks;
- 3.2.1.5. Identify location of structures on the property and on adjacent property within 50 feet of the Project limits. Dimension perimeters in feet and inches to nearest ½ inch. State the character and number of stories. Dimension to property lines and other buildings. Vacant parcels shall be noted as VACANT;
- 3.2.1.6. Show encroachments, including cornices, belt courses, etc., either way across property lines;
- 3.2.1.7. Describe fences and walls, identify party walls and locate them with respect to property lines;
- 3.2.1.8. Show recorded or otherwise known easements and rights-of-way; state the owner of right of each;
- 3.2.1.9. Note possibilities of prescriptive rights-of-way and the nature of each;
- 3.2.1.10. Show individual lot lines and block numbers; show street numbers of buildings if available;
- 3.2.1.11. Show zoning of property; if more than one zone, show the extent of each. Show zoning of adjacent property and property across the street(s) or highway(s);
- 3.2.1.12. Give names of owners of adjacent property; and,
- 3.2.1.13. Reconcile or explain any discrepancies between the survey and the recorded legal description.

3.2.2. Topographical Survey Requirements:

- 3.2.2.1. Provide minimum of one permanent benchmark on site for each four acres; description and elevation to nearest .01';
- 3.2.2.2. Draw contours at 1foot intervals;

- 3.2.2.3. Spot elevation at each intersection of a grid covering the property at sufficient spacing to assure reasonable accuracy in constructing contour lines;
 - 3.2.2.4. Spot elevations at street intersections and at 20 foot intervals on curb, sidewalk and edge of paving, including far side of paving;
 - 3.2.2.5. Plot location of structures, above and below ground, man-made (e.g., paved areas) and natural features; all finished floor elevations at each entrance of buildings on the property. Include invert elevations of utility tunnel floors and overhead slabs;
 - 3.2.2.6. Location, size, depth and, where available, pressure of water and gas mains, central steam and other utilities including, but not limited to, buried tanks and septic fields serving, or on, the property;
 - 3.2.2.7. Location of fire hydrants available to the property and the size of the main serving each;
 - 3.2.2.8. Location and characteristics of power and communications systems above and below grade;
 - 3.2.2.9. Location, size, depth and direction of flow of sanitary sewers, combination sewers, storm drains, culverts serving, or on the property; location of catch basins and manholes, and inverts of pipe at each;
 - 3.2.2.10. Name of the operating authority of each utility;
 - 3.2.2.11. Flood plain, flood level of streams or adjacent bodies of water and analysis of site for potential flooding;
 - 3.2.2.12. Locations of test borings if ascertainable and the elevation of the top of the holes;
 - 3.2.2.13. Trees of 1½ inch and over (caliper 3' above ground); locate within 1' tolerance and give species where identifiable; and,
 - 3.2.2.14. Perimeter outline only of thickly wooded areas unless otherwise directed.
- 3.2.3. Accuracy Standards. Precision of the surveys shall be based on the Positional Accuracy Concept. The Architect/Engineer shall recommend positional accuracy limits and error of closure limits for the property being surveyed.
- 3.2.4. Drawing and File Requirements. The Architect/Engineer shall require the licensed Land Surveyor to sign and seal each drawing and certify to the best of the Surveyor's knowledge, information, and belief all information thereon is true and accurately shown. Drawings and drawing files shall contain written scale, graphic scale, North arrow (oriented to the top of the sheet), legend of symbols, and abbreviations used on the drawing(s), and all dimensions and elevations in English units. Spot elevations on pavement and other hard surfaces shall be to the nearest .01', on other surfaces to the nearest .05'. State elevation datum on each drawing. Use National Vertical Geodetic Datum and give location of benchmark used.

4. SITE PLANNING

- 4.1. Site Planning shall commence with the execution of the Agreement and shall be complete with the Owner's approval and acceptance of the completed Site Planning Document.
- 4.2. The Site Plan shall focus on five elements:

- 4.2.1. vision and direction of the agency and how the facilities master plan integrates and assists in the overall objectives and targets;
 - 4.2.2. documentation of existing facilities, utilities, themes, roads, sidewalks, campus access, and structures;
 - 4.2.3. available and potentially-available open space;
 - 4.2.4. transportation and circulation for all types of transit and pedestrians; and,
 - 4.2.5. defining potential future development and growth.
- 4.3. Open Space Objectives in the Site Plan. The Site Plan should conserve and enhance existing open spaces and views to and from facilities and look for opportunities to create additional safe and attractive open spaces. The Site Plan shall:
- 4.3.1. designate important open spaces and views and create policies to ensure their preservation and maintenance;
 - 4.3.2. identify areas that could become safe and pleasant new open spaces;
 - 4.3.3. propose opportunities to use landscape elements to strengthen the structure of the grounds;
 - 4.3.4. identify areas where links between open spaces could be improved in order to achieve a cohesive and accessible open space network;
 - 4.3.5. incorporate accessibility as an integral part of the design that will increase safety and comfort in campus open spaces; and,
 - 4.3.6. link the open space and circulation systems into the community and surrounding open space systems.
- 4.4. Transportation and Circulation Objectives in the Site Plan. The Site Plan should ensure access to and within the area by all modes of transportation and encourage a safe and pleasant environment for pedestrians and bicyclists. The Site Plan shall:
- 4.4.1. improve the pedestrian experience;
 - 4.4.2. increase access for pedestrians and bicyclists, both to and within the area;
 - 4.4.3. minimize conflicts between pedestrians, bicycles, and vehicles;
 - 4.4.4. improve public transportation with the goal of minimizing vehicle trips and related parking requirements;
 - 4.4.5. minimize the amount of new parking facilities while still providing parking for a variety of users, including the disabled, with the least impact on the area and the surrounding street system;
 - 4.4.6. locate, landscape, and screen parking to prevent detracting from the overall quality of the campus/facility environment while promoting safety and security; and,
 - 4.4.7. clearly identify access and improve signage around campus/facility.
- 4.5. Future Development Objectives of the Site Plan. Sites should be selected and developed to contribute to the enhancement of the campus/facility environment without detracting from the fundamental qualities of the area. Each potential site should be developed to:

- 4.5.1. improve the environment with high quality architecture and open space integrated with the building design;
- 4.5.2. enhance and strengthen its context and the campus as a whole;
- 4.5.3. be in harmony with the immediate surroundings;
- 4.5.4. facilitate accessibility and pedestrian circulation;
- 4.5.5. accommodate service functions with minimal visual impact from pedestrian routes and open spaces, without causing safety conflicts;
- 4.5.6. provide a more environmentally sustainable landscape that promotes conservation of natural resources and systems;
- 4.5.7. provide an economically feasible and functional project, and,
- 4.5.8. support greening and sustainability techniques

5. GEOTECHNICAL SERVICES

- 5.1. Access and Protection of Property. The Geotechnical Engineer shall contact the Agency for information regarding access to the site and shall take all reasonable precautions to prevent damage to property, visible and concealed, and shall reasonably restore the site to the condition existing prior to the Geotechnical Engineer's entry, including, but not limited to, repair of curbs, sidewalks, lawns, and plantings unless otherwise agreed to with the Owner.
- 5.2. Geotechnical Investigation and Reports. Services may include but are not limited to test borings, test pits, determinations of soil bearing values, percolation tests, evaluations of hazardous materials, soil corrosion/resistivity tests, including necessary operations for anticipating subsoil conditions, with reports and appropriate recommendations unless such services are specifically provided by the Owner.
 - 5.2.1. Reports and Drawing Requirements. The Geotechnical Engineer shall sign and seal each report and/or drawing and certify to the best of the geotechnical engineer's knowledge, information, and belief that all information thereon is true and accurately shown. Drawings and drawing files shall contain written scale, graphic scale, North arrow (oriented to the top of the sheet), legend of symbols and abbreviations used on the drawing(s), and all dimensions and elevations in English units.
 - 5.2.2. Investigation.
 - 5.2.2.1. The geotechnical engineer shall perform borings and subsurface investigations in accordance with accepted geotechnical engineering practices and in the quantity and location as coordinated with the Owner, or the Owner's Geotechnical Engineer, in order to determine the subsurface soil strata, obtain representative samples for laboratory analysis, investigate the in-situ soil conditions, and investigate the subsurface water conditions.
 - 5.2.2.2. All samples shall be classified in accordance with ASTM D-2488, "Standard Practice for Description and Identification of Soils."
 - 5.2.2.3. Testing shall be performed in accordance with but not limited to:

- 5.2.2.3.1. Standard Test Method for Penetration Test and Split Barrel Sampling of Soils, ASTM D-1586;
- 5.2.2.3.2. Thin-Walled Tube Sampling of Soils, ASTM D-1587;
- 5.2.2.3.3. Moisture Content Tests, ASTM D-2116;
- 5.2.2.3.4. Atterberg Limits, ASTM D-4318;
- 5.2.2.3.5. Sieve/Grain Size Analysis Tests, ASTM D-422 and C-136;
- 5.2.2.3.6. Consolidation/Swell, ASTM D-2438 and D-4546;
- 5.2.2.3.7. Shear Strength, ASTM D-2850, D-4767, and D-2166;
- 5.2.2.3.8. California bearing ratio, ASTM D 1883;
- 5.2.2.3.9. Proctor, ASTM D-698 and D-1557; and,
- 5.2.2.3.10. Corrosion tests such as resistivity, pH, and sulfates.
- 5.2.2.4. Percolation tests shall be performed in accordance with the Montana Department of Environmental Quality's currently accepted practices and procedures.
- 5.2.2.5. Other methods of investigation may be used upon prior approval of the Owner. Such methods include test pits, rotary borings, hand auger borings, subsurface strata delineation or other generally accepted geophysical methods.
- 5.2.3. Reports. Reports shall provide descriptive information of the scope of the investigation describing the tasks and analysis performed along with the following:
 - 5.2.3.1. Sub-surface investigation. General description of the samples taken, locations, elevations, the testing methods performed, site geology, subsurface soils profiles, and groundwater observations.
 - 5.2.3.2. Laboratory Investigations. General description of the examinations and classification of tests performed.
 - 5.2.3.3. Design and Construction Recommendations. General description of the Project to be constructed with loading information obtained from the Owner or the Owner's Design Team. The geotechnical engineer shall perform a historical search regarding any previous construction on the site. The Report shall provide design criteria and make recommendations for the performance of earthwork, foundations, slabs, pavement, flooring system, and all other geotechnical-related issues for the site and building based upon the loading information and the soil/geological conditions; seismic conditions and considerations; lateral earth pressures; and, site grading, drainage, and fill work; corrosion potential of buried metals and concretes; percolation rates; groundwater and surface water seepage; specification requirements for fill material, base course, concrete, materials testing, and other requirements as appropriate for the type of Project.

6. SCHEMATIC DESIGN

- 6.1. The Architect/Engineer will provide Schematic Design Documents based on the Programming effort (or the Initial Information Document and any additionally documented and agreed-upon parameters if no Programming services are provided), the Project Schedule, and the Project Budget, including the budgeted Construction Cost. Schematic Design Documents will establish

the design of the Project illustrating the scale and relationship of the Project components. The Schematic Design Documents will include an initial site plan and preliminary building plans, sections, and elevations. As coordinated between the Architect/Engineer and the Owner, the Schematic Design Documents may include study models, perspective sketches, electronic modeling, or combinations of these media. Preliminary selections of major building systems and construction materials will be noted on the drawings or described in writing.

6.2. The Schematic Design Phase effort will:

- 6.2.1. Define the specific technical needs for the Project based on the Project Program and subsequent changes to the concept and other data gathered from the Owner;
- 6.2.2. Define detailed requirements for the Project, covering items such as design objectives, limitations, and criteria; gross area and space requirements; spatial relationships; needs and options for flexibility or expandability; need for special equipment and systems; site requirements; the Project Schedule and budget requirements;
- 6.2.3. Define space concepts and flow diagrams, functional relationships, access, circulation, and flow patterns within the building and on the site; and,
- 6.2.4. Investigate and define data concerning existing conditions, assembling and reviewing information to identify and document areas to be involved in alterations, additions, repairs or demolition.

6.3. The Schematic Design Documents and associated services will at a minimum consist of the following:

- 6.3.1. Architectural Design - Services responding to the Project Program and requirements and consisting of preparation of a site plan and building plans for each level or floor, key sections, all elevations, preliminary selection of building systems and materials, development of approximate dimensions, areas and volumes, Project Program, Project Budget, and site soil investigation and surveys;
- 6.3.2. Structural Design - Recommendations regarding structural materials and systems, selection of the foundation system, outline structural systems plan, analysis and development of conceptual design solutions;
- 6.3.3. Mechanical Design - Consideration and recommendations regarding materials, systems and equipment, development of design solutions for energy sources/conservation, heating, ventilating and air conditioning, plumbing, fire protection and general space requirements;
- 6.3.4. Electrical Design - consideration and recommendations regarding basic electrical materials, systems and equipment, analysis and development of design solutions for power service, distribution, lighting, information technology, communication, fire detection, alarms and general space requirements;
- 6.3.5. Commissioning Assistance - The mechanical and electrical design is to be summarized to provide a comprehensive description of the operation of the mechanical and electrical systems in the building with specific reference to meeting the requirements included in the Design Intent Document. This document is to be revised as necessary throughout the design process and the original and all revisions are to be submitted to, and approved by, the Owner;
- 6.3.6. Civil Design - Site planning analysis including layout of site features, building position, preliminary grading, location of paving for walkways, driveways and parking. Also includes normal connections for building utilities such as water, sewer, gas/steam and power;

- 6.3.7. Project Budget/Estimate - Review the Project Budget and assist in the analysis of “soft” costs and refinement of the Project Budget, including the Estimate of Construction Cost. The detail of the estimate shall be applicable to the phase of Design. The format and level of detail of the estimate shall be approved by the Owner;
 - 6.3.8. Specifications - Outline specifications necessary to indicate the general scope of services that will form the basis of the specifications for the Construction Documents; and,
 - 6.3.9. Scheduling/Phasing - Review and analysis of the Project Schedule and phasing plan developed along with the Project Program.
- 6.4. If Programming services are included in this Agreement, the Architect/Engineer will provide revised and updated information for incorporation into the Programming Documents, which will be used to create the Schematic Design Documents. If Programming services are not included in this Agreement, the final Schematic Design Documents will contain a summary of the following as determined in coordination with the Owner as part of the Schematic Design process, which will then form the updated and agreed-upon Project Program:
- 6.4.1. Executive Summary with Project Statement;
 - 6.4.2. Project Summary and Design Goals;
 - 6.4.3. Planning and Design Criteria;
 - 6.4.4. Building Performance Criteria;
 - 6.4.5. Site Requirements;
 - 6.4.6. Project Budget; and,
 - 6.4.7. Project Schedule.
- 6.5. For the purposes of Commissioning, the Architect/Engineer will provide a Design Intent Document for review and approval by the Owner, for the commissioning of the Project, which will include the basis of the design in a room-by-room itemization of mechanical and electrical requirements as described in the Schematic Design Documents, as applicable, with the following information:
- 6.5.1. Temperature requirements;
 - 6.5.2. Humidity requirements (if special needs are identified);
 - 6.5.3. Exhaust requirements (e.g., fume hoods);
 - 6.5.4. Pressurization requirements;
 - 6.5.5. Maximum permissible sound level;
 - 6.5.6. Maximum occupancy;
 - 6.5.7. Schedule of occupancy;
 - 6.5.8. Number of computers or specialized equipment;
 - 6.5.9. Special power quality;
 - 6.5.10. Light levels; and,
 - 6.5.11. Special lighting systems or levels.

6.6. Assist the Owner with completing an initial draft of the Checklist for Minimum Requirements, as included in the High-Performance Building Standards.

7. DESIGN DEVELOPMENT (or Preliminary Design)

7.1. The Architect/Engineer and Owner may agree to have the Schematic Design and Design Development Phases combined into a single phase. This combination will be the Preliminary Design Phase and will consist primarily of services as identified within this Design Development Phase.

7.2. The Architect/Engineer will prepare, for review and approval by the Owner, Design Development Documents consisting of drawings, sketches, specifications, an Estimate of Construction Cost, and similar documents necessary to fix and describe the size and character of the entire Project as to the architectural, structural, mechanical, electrical systems and other elements within the scope of the Project.

7.3. Design Development Documents and Services will at a minimum consist of the following:

7.3.1. Architectural Design - Services consisting of the continued development and expansion of the Schematic Design Documents (or the Initial Information Document and any additionally documented and agreed-upon parameters if Preliminary Design and no Programming Documents are provided) in order to proceed with establishment of the final set of Construction Documents. Design Development Documents will consist of the final scope, relationships, forms, size and appearance. Building plans, sections and elevations, selection of building systems and materials, development of dimensions, areas and volumes will also be included;

7.3.2. Structural Design - Development of specific structural materials and systems, analysis and development of design solutions. Basic structural system and dimensions, design criteria, foundation design criteria, sizing of structural components and clearances;

7.3.3. Mechanical Design - Development of specific mechanical materials and systems, analysis and development of design solutions. Basic mechanical system and dimensions, design criteria for energy sources/conservation, heating, ventilating and air conditioning, plumbing, fire protection, vibration and acoustical control, visual impacts, equipment layouts, sizes and weights of major components, chases and specific space requirements;

7.3.4. Electrical Design - Development of specific electrical materials and systems, analysis and development of design solutions. Basic electrical system and dimensions, design criteria for energy sources/conservation, power service, distribution, lighting, information technology, communication, fire detection, alarms, chases, equipment layouts and clearances and specific space requirements;

7.3.5. Commissioning - Coordinate with and support the commissioning process; provide the commissioning authority with all necessary information, assist with development of the commissioning scope, provide an electronic design review set;

7.3.6. Civil Design - Basic civil engineering features regarding building position, preliminary grading, location of paving for walkways, driveways, parking, all utilities, easements, boundary conditions, property limits;

7.3.7. Project Budget/Estimate - Maintain the design development phase in accordance with the Project Budget, continually review the Project Budget to coordinate appropriate design factors and limitations. The detail of the estimate shall be applicable to the phase of Design. The format and level of detail of the estimate shall be approved by the Owner;

- 7.3.8. Specifications - Development and coordination of outline specifications necessary to delineate the appropriate functions and minimum quality of the Project; and,
- 7.3.9. Scheduling - Develop and maintain a Project Schedule of all activities to include investigations, data gathering, design phases, reviews, advertising, bidding, contract award, construction, construction phasing, punch list and Project completion. Perform reviews and revisions of schedule indicating all milestones and anticipated impacts on delivery of the Project based upon issues and factors discovered during the Design Development (or Preliminary Design) phase.
- 7.4. Assist the Owner with updating the draft of the Checklist for Minimum Requirements, as included in the High-Performance Building Standards.

8. CONSTRUCTION DOCUMENTS

- 8.1. The Architect/Engineer will provide Construction Documents based on the approved Design Development Documents and updated Estimate of Construction Cost. The Construction Documents will set forth in detail the requirements for construction of the Project. The Construction Documents will include Drawings and Specifications that establish in detail the quality levels of materials and systems required for the Project.
- 8.2. During the development of the Construction Documents, the Architect/Engineer will review and assist the Owner in the development and preparation of: (1) bidding and procurement information; (2) bidding or proposal forms; and (3) the Conditions of the Contract for Construction (General, Supplementary and other Conditions). The Architect/Engineer also will compile the Project Manual (Specifications), which includes all of the Owner's "boiler plate" information and the Owner's Conditions for the Contract for Construction, as provided to the Architect/Engineer by the Owner, and the Architect/Engineer's specifications for the Project.
- 8.3. The Architect/Engineer will provide those services necessary to prepare final Construction Documents consisting of specifications, drawings and other documents of sufficient detail to fix and describe the final size and character of the Project for approval by the Owner.
- 8.4. Construction Document services consist of the following:
- 8.4.1. General – Review and checking of Design Development Documents to ensure all the Owner's criteria are incorporated. The Architect/Engineer will perform continuous review of the design and design process to ensure the highest level of quality control. 95% completion of Construction Documents is determined by reference to the total effort required by the Architect/Engineer and all consultants to produce Construction Documents that are ready for bidding. The effort to perform final coordination checking, final corrections, incorporation of comments, and inclusion of the Owner's boiler plate is estimated to constitute the remaining 5% of the total effort necessary to produce the Contract Documents but could account for more or less depending on the nature and extent of comments received. Final completion of the Construction Documents will include the completion of the following: Drawing index contains all drawings and all sheet titles conform to the Drawing index; all alternates have been identified and properly delineated; all details are referenced; all details are complete with dimensions, notations and materials; all details (Architectural Design, Structural Design, Mechanical Design, Plumbing Design, Electrical Design, Civil Design, etc.) are specific to the Project and have been edited to reflect the actual Project conditions.
- 8.4.2. Architectural Design Services - Continued development and expansion of the design in order to proceed with and result in the final Construction Documents. Construction Documents will consist of the final scope, relationships, forms, size and appearance.

Complete floor plans, sections and elevations, selection of building systems and materials, development of dimensions, areas and volumes are to be included. Reflected ceiling plans must contain all light fixtures and HVAC grilles, registers and diffusers. Door and room finish schedules must be complete. Floor plans, elevations, and sections must be completely dimensioned;

- 8.4.3. Structural Design - Continued development of specific structural materials and systems, analysis and development of design solutions. Complete and detailed structural system and dimensions, design, foundation, sizing of structural components and clearances, details, elevations, plans and specifications. All details are specific to the project and ready for fabrication drawing development. All plans have been coordinated and verified against architectural and mechanical drawings;
- 8.4.4. Mechanical Design - Continued development of utilities, specific mechanical materials and systems, analysis and development of design solutions. Complete and detailed mechanical system and dimensions, heating, ventilating and air conditioning, plumbing, fire protection, vibration and acoustical control, equipment details, sizes, elevations, schedules, plans and specifications. Coordination of utilities serving the building with locations shown on civil plans;
- 8.4.5. Electrical Design - Continued development of specific data systems, electrical materials and systems, analysis and development of design solutions. Complete and detailed electrical system and dimensions, power service, distribution, lighting, information technology, communication, fire detection, alarms, chases, equipment layouts, circuits, panel board schedules, plans and specifications. Coordination of utilities serving the building with locations shown on civil plans;
- 8.4.6. Civil Design – Incorporate completed site survey and geotechnical analysis including layout of the entire site. Complete and detailed civil design regarding building location, final grading, location of paving for walkways, driveways, parking, all utilities, easements, boundary conditions, property limits, plans and specifications. All benchmark information, building corners, essential topographical information has been included;
- 8.4.7. Project Budget/Estimate - Ensure the design is in accordance with the Project Budget. Continually review the Project Budget to coordinate appropriate design factors and limitations. The detail of the estimate shall be applicable to the phase of Design. The format and level of detail of the estimate shall be approved by the Owner;
- 8.4.8. Specifications - Complete development and coordination of all specifications necessary to describe and detail the entire Project and to achieve the level of quality acceptable to the Owner. All items in Division 1 of the specifications for the Project will relate specifically to the Project and will be edited for completeness and consistency with the other sections of the specifications, the Construction Documents, and the Project Manual. The index will contain all sections of the specifications, and all sections of the specifications will apply to the Project;
- 8.4.9. Scheduling - Maintain the established Project Schedule. Perform reviews and revisions of the Project Schedule indicating all milestones and anticipated impacts upon delivery of the Project based upon issues and factors discovered during the design;
- 8.4.10. Third-Party Coordination Review – The Owner may choose to have the documents reviewed through an independent third party. This does not relieve the Architect/Engineer from the responsibility to provide the Owner with a fully-coordinated set of Construction Documents that conforms to all applicable requirements;

- 8.4.11. Commissioning - Coordinate with the commissioning authority, provide the commissioning authority with all necessary information, assist with completion of the commissioning scope, provide one (1) design review set, and incorporate the commissioning specifications into the Project Manual.
- 8.5. The Architect/Engineer is expressly required to specify materials, supplies, equipment, and systems that are completely free of all forms of asbestos.
- 8.6. The Owner will assist the Architect/Engineer in filing the required documents for the approval of governmental authorities having jurisdiction over the Project. The Architect/Engineer will pay any applicable plan review fee, and the Owner will reimburse the Architect/Engineer for the fee.
- 8.7. The Architect/Engineer will request the "Boiler Plate" and essential bidding information from the Owner upon submission of the 95% complete Construction Documents for final review by the Owner. The Architect/Engineer will provide and then coordinate the Division One specifications with the Construction Contract, "Boiler Plate".
- 8.8. Prior to bidding, the Architect/Engineer will provide Construction Documents including the Estimate of Construction Cost for review and approval to the Owner. This review will constitute the 95% submission of the design effort where the remaining 5% consists of incorporation of final review comments and the Owner's "boiler plate" information, as described further above.
- 8.9. The Architect/Engineer will incorporate code review comments and make all corrections, additions, or deletions to the Construction Documents prior to distribution for bidding purposes, without the use of addenda, unless approved by the Owner in writing.
- 8.10. Assist the Owner with updating the draft of the Checklist for Minimum Requirements as included in the High-Performance Building Standards.

9. BIDDING

- 9.1. Unless approved by the Owner in writing, the Architect/Engineer will make all corrections, additions, or deletions to the final Construction Documents prior to distribution for bidding purposes and without the use of addenda. No documents will be distributed for bidding purposes without the prior written approval of the Owner.
- 9.2. The Architect/Engineer will coordinate distribution of bid sets to prospective bidders and all Montana plans exchanges. If hardcopies of the set(s) for bidding purposes is required, the Owner will reimburse the Architect/Engineer for the reasonable direct costs of reproduction and distribution. The Owner will reimburse the Architect/Engineer pursuant to this Agreement, subject to the Architect/Engineer's submittal of a request for payment to the Owner and otherwise in accordance with the terms and conditions of this Agreement. However, the Architect/Engineer and Owner will agree on the number of sets and the Architect/Engineer will not exceed that number without written approval of the Owner.
- 9.3. The Architect/Engineer, following the Owner's approval of the Construction Documents and the final Estimate of Construction Cost, will assist the Owner in obtaining bids and in awarding the Construction Contract(s). Any interpretation of the Construction Documents by the Architect/Engineer will be issued by addenda to all plan holders and Builders Exchanges. The Architect/Engineer will not issue any addenda within seven (7) calendar days of the bid opening without the written permission of the Owner.
- 9.4. The Architect/Engineer will arrange, attend, and conduct a pre-bid walk-through for the Project unless the Owner specifically declines a walk-through in writing. The pre-bid walk-through will be scheduled and conducted not less than ten (10) calendar days prior to the bid opening. The Architect/Engineer will prepare and submit to the Owner an agenda for the pre-bid walk-

through. As a minimum, the agenda will thoroughly address the Instruction to Bidders, Conditions of the Contract for Construction, site conditions, construction staging, permits, general scope of the Project, and all unique situations, as set forth in the Bidding Documents and any applicable addenda. The Architect/Engineer will require the attendance and participation of any consultants when the cost, size, or complexity of the Project in the opinion of the Owner necessitate their attendance. The Architect/Engineer will prepare and distribute a recap of items discussed at the pre-bid walkthrough via Addendum.

9.5. The Architect/Engineer will provide bidding services to include the following:

- 9.5.1. Organizing, coordinating, publishing, handling and distribution of all Bidding Documents, including addenda, and receipt and return of deposits if necessary;
- 9.5.2. Assist the Owner in obtaining either competitive bids or negotiated proposals and maintaining the plan holders' list, assist in contacting and informing prospective bidders;
- 9.5.3. Coordinate responses between the disciplines for all questions, clarifications, and addenda;
- 9.5.4. Continue to coordinate with, and support, the commissioning process. The commissioning authority (CxA) may make a presentation during the pre-bid walkthrough to explain the commissioning process to all interested parties;
- 9.5.5. Preparation and distribution of addenda as may be required including any and all supplementary drawings, specifications, instructions, and notices of changes. No addenda will be issued by the Architect/Engineer within seven (7) calendar days before the bid date unless approved in writing by the Owner;
- 9.5.6. Project Budget/Estimate - Remain aware of bidding climate and perform analysis of possible bid results in comparison to the Project Budget if market conditions vary from the final Estimate of Construction Cost or if errors/omissions are discovered in the final Estimate of Construction Cost;
- 9.5.7. Substitutions - Consideration, analysis, comparisons, and recommendations relative to requested substitutions proposed by bidders;
- 9.5.8. Bid Evaluation - Perform validation of the bids received and provide formal recommendations regarding the award of contract to the proposed contractor to the Owner.
- 9.5.9. Coordinate and conduct negotiations in coordination with the Owner and the proposed Contractor in the event that the bids received exceed the Fixed Limit but are within the statutory 15% deductive negotiating range, as described in this Agreement, if the Owner exercises such option. If negotiations are successful, develop all documentation, drawings, drawing revisions, specifications, changes, and alterations including all related pricing in a manner similar to an addendum for formal pricing and signature by the Contractor; and,
- 9.5.10. Redesign - Perform redesign in coordination with the Owner and publication of Construction Documents for re-bidding or after negotiations if the Project is not awardable within the Owner's Project Budget. The Architect/Engineer shall provide these services at no additional cost to the Owner.
- 9.5.11. Construction set of bid documents – If significant revisions have been made to the bid set via addendum during the bidding process, the Architect/Engineer shall provide the Contractor with a construction set that incorporates all the revisions made per the addendum. The Architect/Engineer shall provide these services at no additional cost to the Owner.

10. CONSTRUCTION ADMINISTRATION

- 10.1. The Architect/Engineer will provide administration of the Construction Contract as set forth in the Agreement. The Architect/Engineer will provide those services necessary to perform Construction Contract Administration to deliver a quality Project for the Owner, which includes but is not limited to the following:
- 10.1.1. Construction contract administration involves all aspects of consultation, communication, progress reports, observations, meetings, and functions necessary to maintain the quality of the Project, the Project Budget, and the Project Schedule, in accordance with this Agreement and the Construction Contract;
 - 10.1.2. Upon issuance of the Notice To Proceed from the Owner to the Contractor, coordinate and conduct, in consultation with the Owner, a pre-construction conference including the Owner, Agency, and the Contractor and appropriate subcontractors. The Owner will provide the agenda and the Architect/Engineer will review and add items as necessary. The Architect/Engineer will take minutes and distribute typewritten copies to all parties attending the pre-construction conference within five (5) calendar days;
 - 10.1.3. Continue to coordinate with, and support, the commissioning process. The commissioning authority (CxA) may make a presentation during the pre-construction conference to explain the commissioning process to all interested parties, including by taking direct questions regarding commissioning to the CxA. One (1) copy of approved submittals, as approved by the Architect/Engineer, related to the CxA's efforts will be routed to the CxA for use in developing inspections and tests. Presence of the CxA on the job does not in any way alter or limit the Architect/Engineer's responsibilities under this Agreement;
 - 10.1.4. Coordination – Coordinate services among all disciplines involved in the design of the Project;
 - 10.1.5. Documents - Maintain sufficient sets of all documents required under or otherwise related to the Construction Contract, including but not limited to, all requests for information, requests for clarification, change orders, addenda, pay requests, shop drawings, submittals, and other documents necessary to deliver a quality Project within budget and schedule and in accordance with the Construction Contract. Services consist of but are not limited to preparation, reproduction, and distribution of all clarification / information / change order documents, etc. in response to the Contractor or the Owner. Documents will describe in sufficient detail, all work to be added, deleted, modified, review of proposals, review recommended changes for impacts on substantial completion date;
 - 10.1.6. Shop Drawings and Submittals - Perform review and comparison of all drawings and submissions by the Contractor for conformance to the Construction Contract. Provide appropriate responses or actions as set forth below in a timely fashion in order to inform the Contractor regarding the shop drawings and submittals, but in all instances such responses or actions will be provided within fourteen (14) calendar days of the applicable request or submittal from the Contractor:
 - 10.1.6.1. Review and approve or take appropriate action upon the Contractor's submittals such as Shop Drawings, Product Data and Samples, checking for conformance with information given and the design intent expressed in the Construction Contract. Review of such submittals is not conducted for the purpose of determining the accuracy and completeness of other details such as dimensions and quantities, or for substantiating instructions for installation or performance of equipment or systems, all of which remain the responsibility of the Contractor as required by the Construction Contract. The Architect/Engineer's review will not constitute approval

of safety precautions or, unless otherwise specifically stated by the Architect/Engineer, of any construction means, methods, techniques, sequences, or procedures. The Architect/Engineer's approval of a specific item will not indicate approval of an assembly of which the item is a component;

- 10.1.6.2. Review of shop drawings and submittals will also include verification that materials, products, and systems being proposed by the Contractor are not asbestos-containing materials, products, or systems.
- 10.1.6.3. If professional design services or certifications by a design professional related to systems, materials, or equipment are specifically required of the Contractor by the Construction Contract, the Architect/Engineer will specify appropriate performance and design criteria that such services must satisfy. Shop Drawings and other submittals related to the work designed or certified by the design professional retained by the Contractor will bear such professional's written approval when submitted to the Architect/Engineer. The Architect/Engineer will be entitled to rely upon the adequacy, accuracy and completeness of the services, certifications or approvals performed by such design professionals, provided that it complies with this Agreement; and,
- 10.1.6.4. The costs and expenses to the Architect/Engineer for making exhaustive reviews of each Shop Drawing, Product Data item, sample, or submittal of the Contractor may be billed by the Architect/Engineer directly to the Contractor in accordance with the Construction Contract or, if otherwise agreed by the Owner in writing, may be reimbursed by the Owner to the Architect/Engineer and deducted from the Contractor's contract via change order by the Owner. The Owner will not be liable to the Architect/Engineer for multiple reviews.
- 10.1.6.5. Prepare and maintain a submittal schedule to track the status of all submittals.
- 10.1.7. Representation - Serve as the representative of the Owner throughout the duration of the Project, protecting the Owner's interest in obtaining delivery of the Project in accordance with the Construction Contract. The Architect/Engineer will be the representative of the Owner throughout the duration of the Construction Contract and will perform the Architect/Engineer's duties as the representative of the Owner in accordance with this Agreement and in consultation with the Owner. Unless prior written approval is received from the Owner, the Architect/Engineer has no authority to and may not give the Contractor direction that affects the monetary amount or term of the Construction Contract or the Project Schedule. The Architect/Engineer will have authority to act on behalf of the Owner to the extent provided in the Construction Contract except as provided otherwise in writing by the Owner;
- 10.1.8. Schedules - Monitor the Contractor's progress relative to the Project Schedule and make status reports to the Owner accordingly. Compare the Contractor's schedule to current pay requests for accuracy and stage of completion. Although the Architect/Engineer may not approve any modifications to the term of the Construction Contract or the Project Schedule, the Architect/Engineer will provide comments to the Contractor that identify concerns, inaccuracies, conflicts, or other feedback related to the Project Schedule;
- 10.1.9. Pay Requests - Review and take appropriate action on all pay requests, giving due consideration to the Contractor's Schedule of Values, Progress Schedule, stored materials and stage of construction observed. Provide recommendations to the Owner with regard to payment of the Contractor based on observations at the site and the Contractor's Form 101, Periodic Estimate for Partial Payment request, determine the amount owing to the

Contractor, and act upon the Contractor's Periodic Estimate for Partial Payment within seven (7) calendar days of receipt. Certification of the Contractor's Form 101 will constitute a representation by the Architect/Engineer to the Owner that the work has progressed to the point indicated; that to the best of the Architect/Engineer's knowledge, information and belief, the quality of the work is in accordance with the Construction Contract; and that the Contractor is entitled to payment in the amount certified. If in the Architect/Engineer's opinion the Contractor is not entitled to the amount indicated on Form 101, the Architect/Engineer will evaluate what percentage is due and revise the form accordingly and forward it to the Owner or return the Periodic Estimate for Partial Payment to the Contractor for revision. The Architect/Engineer will send the Contractor a copy of any revised pay request forwarded to the Owner;

- 10.1.10. Change Orders - Prepare, reproduce, and distribute all change orders for the requisite approvals. Perform estimates of cost, negotiate price, and determine impacts upon the Contractor and the Project Schedule;
 - 10.1.10.1. The Architect/Engineer will comprehensively complete the "Justification for Change," "Justification for Cost Adjustment," and the "Justification for Schedule Adjustment" on the Change Order form prescribed by the Owner.
 - 10.1.10.2. It is the Architect/Engineer's responsibility to review Change Order pricing and time extension requests for their appropriateness and to make recommendations to the Owner.
 - 10.1.10.3. The Architect/Engineer may authorize minor changes in the Project not involving an adjustment in any monetary amounts due under the Construction Contract, the term of the Construction Contract, or the Project Schedule, which are consistent with the intent of the Construction Contract. If necessary, the Architect/Engineer will prepare, reproduce and distribute Drawings and Specifications to describe any work related to the Project to be added, removed, or modified.
 - 10.1.10.4. Prepare and maintain a change order log to track the status of all costs.
- 10.1.11. Construction Change Directives - Prepare, reproduce and distribute construction change directives in accordance with the Construction Contract for those items where time is critical, or a reasonable price cannot be negotiated with the Contractor. If the Contractor and Owner cannot agree on price or the change but the Owner directs that it be performed, price or time will be negotiated at a later date;
- 10.1.12. Prepare and maintain a construction change directive log to track the status of all costs.
- 10.1.13. The Architect/Engineer will visit the Project site as specified in the Agreement at appropriate stages of construction and/or as required/necessary:
 - 10.1.13.1. to become generally familiar with and to keep the Owner informed about the progress and quality of the portion of the work completed;
 - 10.1.13.2. to endeavor to guard the Owner against defects and deficiencies in the work; and,
 - 10.1.13.3. to determine in general if the work is being performed in a manner indicating that the work, when fully completed, will be in accordance with the Construction Contract.
 - 10.1.13.4. The Architect/Engineer is responsible for the professional quality, technical accuracy, and coordination of all concepts, programming, reports, designs, drawings, specifications, and other services furnished under this Agreement. The

Architect/Engineer shall, without additional compensation, correct or revise any errors, deficiencies, or omissions in concepts, programming, reports, designs, drawings, specifications, estimates, and other services including making additional site visits.

10.1.13.5. The Architect/Engineer shall make any/all code or local jurisdiction required inspections.

10.1.14. Meetings - The Architect/Engineer will create and distribute a meeting agenda and conduct progress meetings at mutually agreed upon times with the Contractor, the Owner, and any other parties designated by the Owner. The Architect/Engineer will take minutes of each meeting and distribute typewritten copies to all parties attending the meeting within five (5) calendar days. The format and detail of the agenda and meeting minutes are subject to approval by the Owner.

10.1.15. Field Observations – The Architect/Engineer will conduct site visits at intervals appropriate to the stage of construction and as otherwise generally agreed in order to become familiar with the overall progress and quality of the work in accordance with the Construction Contract. The Architect/Engineer will maintain a photographic log of the progress of the work. The Architect/Engineer and their sub consultants will furnish the Owner with written field reports within five (5) calendar days of each Project site visit. The format and detail of the written field report is subject to approval by the Owner. Any representative of the Architect/Engineer sent to the Project site will be subject to the Owner's approval prior to entry of the Project site and will act in accordance with applicable policies and procedures of the Owner at all times while present on the Project site; The Architect/Engineer will report to the Owner known deviations from the Construction Contract and from the most recent construction schedule submitted by the Contractor.

10.1.16. Requests For Information (RFI) – The Architect/Engineer will investigate and respond to Contractor requests for information in a timely fashion and in no instance in more than seven (7) calendar days. Should an RFI require additional time, the Architect/Engineer will inform the Owner and Contractor of the need for additional times, and the reasons for such need, within the seven (7) day period. The Owner will not be liable to the Architect/Engineer for the Contractor's failure to carefully investigate, study, or compare the Construction Contract and its components or if the Contractor should use the request for information process to seek extensions of the Construction Contract, additional compensation, or hinder the work in any manner;

10.1.17. Prepare and maintain an RFI log to track the status of all RFI's.

10.1.18. Project Closeout:

10.1.18.1. Services to be initiated upon notice from the Contractor that the work is substantially complete, in accordance with the Construction Contract, to permit beneficial occupancy or utilization, and consisting of a detailed inspection for conformity of the work performed under the Construction Contract, compilation of a punch list, inspection of punch list items as completed by the Contractor, issuance of certificate of substantial completion, final inspections, review and approval of operations and maintenance manuals, receipt and transmittal of warranties, affidavits, lien waivers, and permits, issuance of the certificate of final acceptance and final certificate for payment.

10.1.18.1.1. If the Contractor calls for a substantial completion inspection and the completion is not at that stage, the costs, and expenses to the Architect/Engineer of more than one (1) substantial completion and one (1)

final acceptance inspection may be billed by the Architect/Engineer directly to the Contractor in accordance with the Construction Contract. The Owner will not be liable to the Architect/Engineer for multiple inspections to validate Substantial Completion or Final Acceptance. The Architect/Engineer will include in their fee the cost of making multiple substantial completion inspections due to complexity, phasing, size, etc. of a project and,

10.1.18.1.2. The Architect/Engineer will conduct inspections as part of contracted site visits to determine Substantial Completion and Final Acceptance. The Architect/Engineer will distribute typewritten copies of the punchlist within five (5) calendar days of the inspection(s). The Architect/Engineer will not authorize Substantial Completion or Final Completion without the prior approval of the Owner. Final payment will not be approved by the Architect/Engineer prior to receipt and approval of all closeout items and consent of the Owner. The Architect/Engineer will make all reasonable efforts to ensure that the Contractor completes all punch list items within thirty (30) calendar days of Substantial Completion;

10.1.18.1.3. Commissioning Report - The CxA will prepare the final commissioning report for submittal to the Owner, Architect/Engineer, Contractor, and the Agency. The Architect/Engineer will respond to issues in the commissioning report.

10.1.18.2. Record Documents — Refer to Record Document Requirements. The Architect/Engineer will furnish digital sets of final as-built Record Drawings that have incorporated changes made during the construction process and which reflect the as-built conditions of the Project. The Architect/Engineer shall provide the Record Drawings in digital format as follows:

Record Drawings in AutoCAD DWG format utilizing AutoCAD's eTransmit function;

- Revit BIM model (if drawings were created in Revit) utilizing Revit's eTransmit function;
- Full set of Record Drawings in PDF format; and,
- Project Manuals (Specifications) in PDF format

One (1) set in digital format of Record Drawings shall be sent to the Owner and

One (1) set in digital format of Record Drawings shall be sent to the Agency.

All items will be provided not more than thirty (30) calendar days after the date of Final Acceptance.

The Owner will not make payment to the Architect/Engineer until the Records Drawings have been submitted and verified by the Owner.

10.1.18.3. O&M Manuals - Process, review and take appropriate action on Operations and Maintenance Manuals provided by the Contractor. Approved O&M Manuals are to be provided to the Owner and Agency;

10.1.18.4. The Architect/Engineer will ensure receipt from the Contractor of and forward to the Owner: with the final pay request:

10.1.18.4.1. consent of surety or sureties to reduction in or partial release of retainage or the making of final payment; and,

10.1.18.4.2. affidavits, receipts, releases and waivers of liens, or bonds indemnifying the Owner against liens; and,

10.1.18.4.3. certificate of final acceptance.

11. **WARRANTY**

11.1. Warranty Period – The warranty period commences upon substantial completion and continues for a period of one (1) year from the date of Final Acceptance as defined in the General Conditions of the Contract for Construction. Except for roof systems which have a warranty period of two (2) calendar years from the date of Final Acceptance. All warranty work or repairs will be under the direction of the Architect/Engineer. The Architect/Engineer shall perform the following duties:

11.1.1. Investigate problems which arise during the warranty period. Notify the Owner and Contractor in writing within seven (7) calendar days of defects, and whether or not the defective work is covered by the warranty. Document and track warranty items including completion of corrective action taken by the Contractor to remedy the defect.

11.1.2. Conduct a warranty inspection within thirty (30) calendar days prior to the expiration of the applicable warranty period to determine if any defects in the work exist. Notify the Owner and Contractor in writing within seven (7) calendar days of defects, and whether or not the defective work is covered by the warranty. Verify that all defects found during the warranty inspection were completed and notify the Owner and Contractor in writing of such.

12. **MISCELLANEOUS**

12.1. All interpretations, responses to requests for information, and decisions concerning the Construction Contract will be in writing and issued to the Contractor and Owner by the Architect/Engineer. The Architect/Engineer will not be responsible for the Contractor's failure to perform the work in accordance with the requirements of the Construction Contract. The Architect/Engineer will be responsible for the Architect/Engineer's negligent acts, errors, or omissions, or any other failure to perform this Agreement, but will not by virtue of this Agreement have control over or charge of and will not be responsible for acts or omissions of the Contractor, subcontractors, or their agents or employees, or of any other persons or entities performing portions of the work, unless expressly provided otherwise in this Agreement.

12.2. The Architect/Engineer will have authority to reject work that does not conform to the Construction Contract. Whenever the Architect/Engineer considers it necessary or advisable, the Architect/Engineer will have authority to require inspection or testing of the work in accordance with the provisions of the Construction Contract, whether or not such work is fabricated, installed, or completed. However, neither this authority of the Architect/Engineer nor a decision made in good faith either to exercise or not to exercise such authority will give rise to a duty or responsibility of the Architect/Engineer to the Contractor, subcontractors, material and equipment suppliers, their agents or employees, or other persons or entities performing portions of the work. The Architect/Engineer will advise the Owner of any and all rejected work and whether or not it may be necessary to stop work. The Owner will issue any Stop Work Orders to

12.3. The Architect/Engineer will reasonably interpret the requirements of the Construction Contract on written request of the Owner or the Contractor. The Architect/Engineer's response to such requests will be made in writing within any applicable time limits and in all cases with reasonable promptness.

- 12.4. Interpretations, responses to requests for information, and decisions of the Architect/Engineer with respect to the Construction Contract will be consistent with the intent of and reasonably inferable from the Construction Contract and will be in writing or in the form of drawings.
- 12.5. The Architect/Engineer will render initial decisions on claims, disputes, or other matters in question between the Owner and Contractor as provided in the Construction Contract.
- 12.6. The Architect/Engineer will assist the Owner with completing the final Checklist for Minimum Requirements as included in the High-Performance Building Standards.
- 12.7. The Architect/Engineer shall endeavor to specify more than one material or product and not sole brand and/or sole source materials or products. The Architect/Engineer shall obtain approval from the Owner in writing prior to including a sole source and/or sole brand material or product in the design documents.
- 12.8. Delegated Design of a Particular System or Component to the General Contractor or Subcontractor:
 - 12.8.1. If the Architect/Engineer is going to delegate to a contractor or subcontractor the design of a particular system or component, then the Architect/Engineer shall provide in the bid documents all required performance and design criteria which will be incorporated into the project. The contractor or subcontractor shall not be responsible for the adequacy of such performance and design criteria. The contractor or subcontractor shall not be required to provide design services which may violate requirements of applicable federal and state laws.
 - 12.8.2. The Architect/Engineer shall submit for the Owner's review and approval a list of any particular systems or components, the design of which the Architect/Engineer is proposing to be delegated.
 - 12.8.3. The Architect/Engineer shall clearly note in the bid documents a list of any particular systems or components, the design of which the Architect/Engineer is being delegated
- 12.9. Plan sheets and/or specifications must contain the following items:
 - 12.9.1. Project Title and A/E # (on title sheet and all subsequent sheets of drawings, specs cover page and all subsequent spec sheets).
 - 12.9.2. DOA A&E as Owner and A&E Project Manager information (contact, address, phone number, email address etc.)
 - 12.9.3. Agency information (campus, contacts, address, phone numbers, email address etc.)
 - 12.9.4. Design Team (architect, engineer(s), specialty consultants, etc.) contact information.
 - 12.9.5. Vicinity map(s) – Project location in the state of MT, within the community or city, and project address location (recommend Google map image).
 - 12.9.6. Index of drawings.
 - 12.9.7. Professional stamps.
 - 12.9.8. Drawing Phase - Indicate if preliminary, bid documents or record drawings.

[END OF PERFORMANCE AND DOCUMENT SUBMISSION REQUIREMENTS]