

Reclamation Manual

Directives and Standards

TEMPORARY RELEASE

(Expires 07/20/2022)

Subject:	Sustainable Construction, Renovation, Operations, and Leasing of Bureau of Reclamation Building Assets
Purpose:	The purpose of this Directive and Standard (D&S) is to establish Reclamation's roles, responsibilities, and procedures to construct, renovate, operate, and lease building assets to meet the Guiding Principles for High Performance and Sustainable Buildings (Guiding Principles). The benefits of implementing this D&S are: 1) more efficient building systems and operations; 2) decreased carbon footprint, energy, and water consumption; 3) reduced use of limited and non-renewable resources; 4) improved indoor environmental quality; and 5) protection of employees from exposure to harmful chemicals
Authority:	Energy Policy Act of 2005 (EPAAct) (Pub. L. 109-58; 119 Stat. 594; 42 USC 17001); Energy Independence and Security Act of 2007 (EISA) (Pub. L. 110-140; 121 Stat. 1492; 42 USC 15801)
Approving Official:	Director, Policy and Programs
Contact:	Environmental Compliance Division (84-53000)

1. **Introduction.** Building construction and operations account for significant environmental impacts, including the consumption of energy, water, and other natural resources; the generation of greenhouse gas (GHG) emissions, air pollutants, and solid and hazardous waste; and the destruction of habitat. To reduce the environmental impact of its 500,000 plus buildings, the Federal government has made sustainable building practices a top priority and has established a set of sustainable building performance requirements, known as the Guiding Principles, as the sustainable building standard for the Federal government. The Guiding Principles reflect sustainable building practices and performance standards required by statute, EO, and private-sector green building rating systems. In January 2010, Reclamation created a Sustainable Buildings Implementation Plan (SBIP) that outlines a plan of action for Reclamation to achieve compliance with the Guiding Principles. Reclamation then released Reclamation Manual (RM) Policy, Sustainable Buildings (ENV P08), which directs senior executives with responsibilities for managing Reclamation's building assets to ensure compliance with the Guiding Principles. This D&S establishes the detailed responsibilities and procedures for meeting the Guiding Principles at new building construction, major renovations, existing buildings, and direct-leased buildings.
2. **Applicability.** This D&S applies to directors responsible for managing Reclamation's building assets. The sustainable building requirements herein are applicable to building categories defined in ENV P08, Paragraph 2.

Reclamation Manual

Directives and Standards

TEMPORARY RELEASE

(Expires 07/20/2022)

3. **Sustainable Building Requirements.** This D&S is not intended to capture all requirements related to the design, construction, renovation, operation, and leasing of Reclamation buildings, but only those additional requirements necessary to achieve the Guiding Principles and related Federal sustainability goals. Directors shall ensure that sustainable building activities are conducted in accordance with applicable legal and other requirements, and RM Policy and D&S related to the design, construction, operation, and leasing of Reclamation building assets^{3,4}. For purposes of this D&S, the term director will be used to indicate RDs and other directors, as applicable, responsible for Reclamation's building assets. Federal laws such as EPCAct and EISA stipulate energy use, water use, metering, commissioning and leasing requirements, among others, for new and existing Federal buildings and facilities. Often, these legal requirements compliment the Guiding Principles. When Guiding Principle and other legal requirements differ or conflict, directors shall ensure that the more stringent requirement is met.
- A. **Guiding Principles.** The High Performance and Sustainable Buildings Guidance (HPSBG), December 2008 (or as subsequently amended), establishes Guiding Principle requirements for new construction and major renovation, existing, and direct-leased buildings.
- (1) **Renovations.** Reclamation has captured the HPSBG Guiding Principles for Sustainable New Construction and Major Renovations in the Reclamation Guiding Principle Checklist for New Construction (RGPC-NC). Project sponsors and managers, design and construction team leaders, field and area managers, and directors shall use the RGPC-NC to document the incorporation and review, certification, and approval of the Guiding Principles throughout the design, construction, and completion of the project in accordance with Paragraphs 6.B.-D.
 - (2) **Existing Buildings.** Reclamation has captured the HPSBG Guiding Principles for Sustainable Existing Buildings in the Reclamation Guiding Principle Checklist for Existing Buildings (RGPC-EB). Reclamation further defines each Guiding Principle requirement and the evidence necessary to claim compliance in the Interpretation of the Guiding Principles for Federal Leadership in High Performance and Sustainable Buildings – Existing Buildings (Guiding Principle Interpretations for Existing Buildings), July 2012. Assessment teams, regional SBT coordinators, building managers, field and area managers, and directors shall use the RGPC-EB to document the results of sustainable building assessments and the review, certification, and approval of existing building compliance to the Guiding Principles in accordance with Paragraphs 7.B.-C.
 - (3) **Direct-Leased Buildings.** Area managers, property managers, and leasing COs shall ensure, to the extent practicable, that new direct-leased buildings as defined

Reclamation Manual

Directives and Standards

TEMPORARY RELEASE

(Expires 07/20/2022)

in ENV P08, Paragraph 2.D., meet the HPSBG Guiding Principles for Sustainable Leased Space in accordance with Paragraphs 8.B.-C.

B. Related Sustainable Building Requirements.

- (1) **New Construction.** Project managers and design team leads shall consult Reclamation's Sustainable Design Decision Guide to identify relevant sustainable design requirements for new buildings and major renovations based on project features.
- (2) **Existing Buildings.** Project managers, building managers, and sustainable building coordinators shall consult Appendix A of the Guiding Principle Interpretations for Existing Buildings for related sustainable building requirements for existing buildings.
- (3) **Direct-Leased Buildings.** Directors shall meet EISA 2007 requirements (as supplemented or amended) that stipulate that no Federal agency will enter into a lease if the space has not earned an ENERGY STAR® label, unless no such space is available that meets the functional needs of the agency; the agency is merely extending a lease for previously occupied space; the space is of historical, architectural, or cultural significance; or the lease is for space less than or equal to an area of 10,000 gsf.

C. Reclamation-Specific Initiatives and Focus Areas. The Department SBIP requires bureaus to identify cost-saving initiatives and focus areas to achieve sustainable building goals. Directors shall ensure that new construction, major renovation, and existing buildings incorporate Reclamation-specific initiatives and focus areas identified within the RGPC-NC and RGPC-EB checklists.

D. Third-Party, Sustainable Building Rating Systems. Certification of building sustainability by third-party rating systems (e.g., LEED) is neither required nor prohibited. However, if third-party certification of LEED Gold or above (or the equivalent level within another rating system) is sought for a building, directors shall consult with the Director, Policy and Administration, on Departmental approval and provide written justification that considers the building's:

- (1) significance, symbolism, and mission-related purpose,
- (2) public visibility (e.g., how often the building is used or viewed by the public), and;

Reclamation Manual

Directives and Standards

TEMPORARY RELEASE

(Expires 07/20/2022)

- (3) opportunity for sustainability education, outreach, and positive public image.
- E. Requirements for Historical Assets. Directors shall ensure that pursuit of compliance with the Guiding Principles and related sustainable building requirements avoids unnecessary harm to historic buildings. If sustainability measures are being considered at a historic property or historic landscape, directors shall comply with Section 106 of the NHPA (Pub. L. 89-655; 16 USC 470 et seq.) and regulation 36 CFR part 800, Protection of Historic Properties. In addition, directors shall also comply with the Secretary of the Interior's Standards for the Treatment of Historic Properties and other state and local preservation requirements to the extent possible. These actions must be implemented consistent with RM D&S, Cultural Resource Management (LND 02-01).
- F. Sustainable Building Procedures for New Construction and Major Renovations.
- (1) Applicable New Construction and Major Renovation Projects. The procedures within Paragraph 6 of this D&S shall be incorporated into the design and construction of new building and major renovation projects as defined in ENV P08, Paragraphs 2.A. and 2.B. New construction and major renovation projects above the thresholds defined in ENV P08 must meet all applicable Guiding Principles except when a major renovation is for the purpose of restoring a historic building or correcting existing health, sanitary or safety code violations identified by a professional to be the minimum actions necessary to assure safe conditions. New building and major renovation projects less than the thresholds defined in ENV P08 must meet the Guiding Principles where applicable and deemed cost-effective by management.
- (a) Planning and Design. The following procedures shall be integrated into the planning and design of applicable new construction and major renovation buildings.
- (i) Appraisal/Feasibility Study Designs. The design team shall consider compliance with the Guiding Principles in appraisal and feasibility studies. Appraisal and feasibility studies shall include identification of major design features necessary to meet the Guiding Principles and estimates of the associated costs.
- (ii) Budgeting. The appropriate manager level shall include estimates of the costs of achieving the Guiding Principles in requests for new building construction and major renovations, as applicable. Budget requests for sustainable building projects shall follow the Department's Capital Planning and Investment Control process at:

Reclamation Manual

Directives and Standards

TEMPORARY RELEASE

(Expires 07/20/2022)

http://www.doi.gov/pam/programs/asset_management/upload/CPICguide62107.pdf. If completion of the Office of Management and Budget's (OMB's) Circular A-11, Section 7, Exhibit 300: Capital Asset Plan and Business Case Summary is required, information on sustainable building techniques or practices such as energy efficiency, compliance with the Guiding Principles, and use of third-party rating systems must be documented for the building project in the Exhibit 300.

- (iii) Project Team. The project manager shall include on the project team or consult with persons with technical qualifications, practical experience, and professional judgment to review and assess compliance with the Guiding Principles.
- (iv) Integrated Design Team. The design team for a sustainable building construction or major renovation project shall employ an integrated design process. The integrated design team shall include:
 - (aa) one or more sustainable building professionals to ensure that the team possesses the required technical knowledge to implement sustainable building requirements;
 - (bb) team member(s) experienced in the Guiding Principles (the sustainable building professional and Guiding Principle representative may be the same person); and
 - (cc) a commissioning agent, as deemed appropriate.
- (v) Kick-Off Meeting. The design team lead shall commence a sustainability kick-off meeting or series of meetings with the project team. The purpose of this meeting(s) is to verify sustainable building requirements and establish client-specific project objectives to meet the Guiding Principles. The Guiding Principle objectives shall be captured in the OPR or another document.
- (b) Contracting for Design and Construction Services. The request for proposal to design and construct a sustainable building or major renovation must include the following:
 - (i) Project Statement of Work. The project manager is responsible for including the Guiding Principles in the project SOW either as a separate section or integrated into related requirements. All applicable Guiding

Reclamation Manual

Directives and Standards

TEMPORARY RELEASE

(Expires 07/20/2022)

Principles and related sustainable building requirements shall be addressed. At minimum, the RGPC-NC shall be included in the solicitation package for building design.

- (ii) Where contracting for construction is a separate and distinct step from the design process (e.g., design-bid-build), the SOW for construction shall include the sustainable building features of the final design.
- (c) Selection Criteria. Selection criteria shall include the bidders' competency and experience in sustainable building design and/or construction:
 - (i) Design. Selection criteria shall assess the feasibility, cost, technical soundness, and effectiveness of the building features proposed to meet the Guiding Principles and other sustainable building requirements such as reduced energy and water intensity, GHG emissions, resource consumption, operational costs and payback, and increased use of green materials.
 - (ii) Construction. Selection criteria shall assess contractor experience in constructing sustainable buildings, including assessment of proposed construction management measures to minimize disruptions to the building site, reduce waste, and prevent pollution of air, soil and waterways.
- (d) Final Contract. The CO verifies that the final contract for the design, construction, or renovation of sustainable building projects includes language to meet the Guiding Principles. The CO and the Project Manager shall also ensure that documentation of compliance with each Guiding Principle requirement through completion of the RGPC-NC is a contract deliverable and provided at key milestones during design and/or construction.
- (e) Design Development and Documentation. At each design submittal – 30, 60, 90, and 100 percent – the design team lead shall submit a RGPC-NC to the project manager for review, indicating which Guiding Principle requirements have been incorporated into the building design submittal, those that are not applicable, and those that are recommended for an exemption. See Paragraphs 9 and 10 of this D&S, respectively, for procedures identifying requirements as not applicable or exempt. The design team lead shall annotate the RGPC-NC and provide additional documentation and analysis on the design features being employed to meet the requirements. The project manager and team shall review the RGPC-NC and supporting design

Reclamation Manual

Directives and Standards

TEMPORARY RELEASE

(Expires 07/20/2022)

document submittals to ensure that the Guiding Principles and related project objectives are being met. The design team lead, or sustainable building professional, shall sign the RGPC-NC at 100 percent design, affirming that Guiding Principles have been incorporated into the final design in accordance with this D&S. Per FAC 03-03, Paragraph 5.E.(1), design teams led by non-Reclamation entities are responsible for ensuring the technical adequacy of sustainable design features. Final sustainable building design features necessary to meet the Guiding Principles shall be incorporated into the BOD/design summary for the building. If additional reviews such as value engineering or design, cost estimating, and construction (e.g., DEC) reviews are required, the review team shall consider compliance with the Guiding Principles and related Federal sustainable building requirements and consult with persons with experience and knowledge of sustainable building concepts and the Guiding Principles.

2. Procedures - Construction. The following construction procedures assume a design-bid-build approach. In design-build cases, the construction procedures listed below shall be addressed in conjunction with the planning and design procedures described in Paragraph 6.B. above. All steps are required in some form whether implemented through design-bid-build or design-build process.
 - (a) Contracting. Contracting for construction services will occur in accordance with the requirements in Paragraph B. I. c
 - (b) Preconstruction Kick-off Meeting. Project objectives and design specifications related to the Guiding Principle requirements shall be discussed at the preconstruction kick-off meeting. The preconstruction meeting shall include the member of the internal project team with Guiding Principle expertise that was involved in the final design review.
 - (c) The Construction Phase. The Reclamation construction engineer/construction manager (CE/CM) shall confirm the incorporation of design features of the final design to meet the Guiding Principles (e.g., use of green building materials; installation of high-efficient heating, ventilation, air conditioning and cooling systems, appliances, windows and lighting; and implementation of construction waste management procedures). The CE/CM works with the lead for construction from the external entity to verify and document construction of sustainable design features at key intervals during the construction process. The CE/CM immediately informs the project manager of any deviation from the final design.

Reclamation Manual

Directives and Standards

TEMPORARY RELEASE

(Expires 07/20/2022)

- (d) Commissioning. Once building construction is complete, building performance, including conformance to Guiding Principle design requirements, shall be verified by a commissioning agent. If design requirements related to Guiding Principle requirements are not met, the project manager shall work with all applicable parties to remedy performance issues.
3. Certification of Compliance with Guiding Principles for New Construction and Major Renovations.
- (a) Review and Certification of Compliance. The project manager shall review and certify compliance with the Guiding Principles based on completion of the RGPC-NC by the design and construction entities, a coordinated evaluation by the project team, the commissioning results, and analysis by sustainable building professionals and Guiding Principle experts. Once the building is constructed, commissioned, and all non-exempted Guiding Principle requirements met, the project manager signs the RGPC-NC and routes it to the appropriate manager responsible for the building project (this is most likely the area or field office manager) for review and signature.
 - (b) Director Review and Signature. If all non-exempted Guiding Principle requirements are met, the director signs the RGPC-NC certifying that the Guiding Principles have been incorporated into the design and construction of the building. The director shall submit an electronic copy of the RGPC-NC to the Director, Policy and Administration, with a concurrence copy to the regional SBT member. The signed RGPC-NC shall be maintained as a record of compliance in accordance with Reclamation record retention requirements in RM D&S, Information Management (RCD 05-01).
 - (c) Sustainable Operation and Maintenance. The newly constructed or renovated building shall continue to be operated and maintained to meet the Guiding Principles. Newly constructed or renovated buildings shall be reassessed for compliance with Guiding Principles every 5 years from the date of director certification signature.

G. Sustainable Building Procedures for Existing Buildings

- (1) Applicable Building Projects. Sustainable building requirements for existing buildings apply to both reserved and transferred works buildings within the sustainable building inventory as defined in ENV P08, Paragraph 2.C. For other existing buildings, the Guiding Principles shall be implemented where applicable

Reclamation Manual

Directives and Standards

TEMPORARY RELEASE

(Expires 07/20/2022)

and deemed cost-effective by management. Reclamation shall give priority to reserved works buildings for compliance with the Guiding Principles, as the operation and maintenance activities for transferred works buildings are governed under contract.

- (2) Procedures – Sustainable Building Assessment. The region shall assess buildings within its sustainable building inventory to establish baseline levels of performance to the Guiding Principles, identify deficiencies, propose strategies to achieve compliance, and certify compliance. Sustainable building assessments shall be conducted in accordance with the following procedures:
- (a) Identification of Buildings for Assessment. In consultation with the regional SBT member, the appropriate area or field manager shall identify buildings within the sustainable building inventory for an assessment based on their potential level of compliance with the Guiding Principles, energy and water savings, costs savings, and other criteria.
 - (b) Prior to conducting sustainable building assessments, the appropriate manager shall refer to the Federal Real Property Profile (FRPP) and consult with the appropriate regional and/or area office cultural resource management professional(s) to determine the historic status of the subject buildings.
 - (c) Qualified Assessors. The sustainable building assessments shall be conducted by an internal or external sustainable building professional or a professional engineer with knowledge of the Guiding Principles and experience and expertise to recommend building modifications, operational changes, programs, and policies necessary to achieve the Guiding Principles.
 - (i) The assessor shall perform an on-site assessment, where necessary, to verify building features and operational performance, and to gather required evidence for compliance with the Guiding Principles. Buildings that are occupied, have water and energy-using systems, and are metered shall be given higher priority for comprehensive, on-site assessments than buildings that are unoccupied and have minimal to no systems.
 - (ii) The assessor shall evaluate compliance with each Guiding Principle requirement in accordance with Reclamation’s Guiding Principle Interpretations for Existing Buildings. The assessor shall document the level of building compliance with each Guiding Principle in the RGPC-

Reclamation Manual

Directives and Standards

TEMPORARY RELEASE

(Expires 07/20/2022)

EB, indicating which Guiding Principle requirements are met, not applicable, and those that are recommended for an exemption.

- (iii) The assessor must sign and submit the completed RGPC-EB, along with supporting documentation as required in Reclamation's Guiding Principle Interpretations for Existing Buildings, to the manager of the requesting office and the regional SBT member.
- (d) **Determination of Compliance.** If the assessment determines that 100 percent compliance with the Guiding Principles is not achieved, the assessor shall provide additional analysis and recommend actions to achieve compliance with each Guiding Principle, including the associated estimated costs and environmental benefits of each action. When an assessment by an internal or external assessor demonstrates that compliance with the Guiding Principles is achieved (including exemptions), the appropriate manager shall review and certify compliance in accordance with Paragraph 7.C. below.
- (e) **Implementation of Recommended Strategies.** Area office and building managers shall implement the recommended actions or alternative measures at buildings targeted to achieve compliance with the Guiding Principles as deemed feasible and in accordance with law and RM Policy and D&S. Where achievement of a Guiding Principle requirement is not feasible, the appropriate manager shall request an exemption to the specific Guiding Principle requirement in accordance with procedures in Paragraph 10 of this D&S.
- (f) **Reassessment.** The appropriate manager shall, using qualified internal or external staff, reassess the building for compliance with the Guiding Principles after recommended actions or alternatives have been implemented. The results of the reassessment shall be captured in the RGPC-EB. If the building is reassessed and found to be in compliance with the Guiding Principles, the region shall follow the procedures in Paragraph 7.C. below. If compliance is not yet achieved, the appropriate manager shall repeat the procedures described in Paragraphs 7.B.(2) – (5) of this D&S.
- (g) **Certification of Compliance.**
 - (i) **Manager Review and Certification of Compliance.** When an assessment by an internal or external assessor demonstrates that compliance with the Guiding Principles is achieved (including exemptions), the appropriate manager shall review and sign the RGPC-EB. The

Reclamation Manual

Directives and Standards

TEMPORARY RELEASE

(Expires 07/20/2022)

appropriate manager routes the signed RGPC-EB to the director for final review and approval.

- (ii) Director Review and Signature. The director shall review and sign the completed RGPC-EB, certifying that the Guiding Principles have been met, and submit an electronic copy to the Director, Policy and Administration, with a concurrence copy to the regional SBT member. The signed RGPC-EB and supporting documentation shall be maintained as record of compliance in accordance with Reclamation record retention requirements in RCD 05-01 and maintained in the building file.
- (iii) Sustainable Building Assessment Frequency. Once a director has signed the RGPC-EB and certified an existing building to be in compliance with the Guiding Principles, the building is considered in compliance for 5 years from the date of signature. To reaffirm compliance, a building must be reassessed within 5 years of the date of director signature of the RGPC-EB, and the reassessment must provide evidence that the building continues to meet the Guiding Principles.

H. Direct Leases.

- (1) Applicable Buildings. The following procedures apply to new direct-leased buildings as defined in ENV P08, Paragraph 2.D. and to other direct leases, including renegotiated or extended direct leases, as applicable and deemed cost-effective by management.
- (2) Procedures – Sustainable Lease Solicitation and Selection.
 - (a) Solicitation. The appropriate manager shall consult with the regional SBT member on Guiding Principle requirements prior to issuing solicitations for applicable new direct leases. The leasing CO shall include a preference for meeting the Guiding Principles for Sustainable Leased Space and other Federal sustainable leasing requirements (e.g., EISA, Section 435) in solicitations for new direct-leased buildings for Reclamation occupancy and ensure that a building's level of current or proposed compliance with the Guiding Principles for Sustainable Leased Space is considered in the selection criteria of potential properties for a direct-lease.
 - (b) Budgeting. Costs for leasing buildings in compliance with the Guiding Principles shall be considered in budgeting for new direct building leases.

Reclamation Manual

Directives and Standards

TEMPORARY RELEASE

(Expires 07/20/2022)

- (c) Assessing Guiding Principle Compliance. Compliance with Guiding Principles for Sustainable Leased Space can be met in two ways:
 - (i) the proposed building for direct-lease undergoes an assessment by an internal or external assessor with qualifications stated in Paragraph 7.B.(2) and is determined to be in compliance; or
 - (ii) the building has been certified by an American National Standards Institute-accredited sustainable building rating system (e.g., LEED certified building) any time within the last 5 years.
 - (d) Selection. Reclamation shall lease a building meeting the Guiding Principles over leasing a noncompliant building, where other legal and owner requirements are met, unless no such building is available, the cost per square foot of leasing such a building is more than 10 percent higher than the cost per square foot of leasing the noncompliant building, or the total costs for leasing such a building would cause Reclamation to exceed its 2010 leasing cost baseline.
 - (e) Certification of Compliance. The appropriate manager shall use the lease agreement as record of compliance with Guiding Principles for Sustainable Leased Space. A copy of the lease agreement or relevant sections shall be maintained at the appropriate office level and an electronic copy shall be provided to the regional SBT member and to the Director, Policy and Administration.
- I. Guiding Principles That Are Not Applicable. Some new building construction or renovation projects, existing buildings, and direct-leased buildings will not have features evaluated by the Guiding Principles (e.g., a warehouse may not have running water or a ventilation system). In these cases, the Guiding Principle requirement is not applicable, and the appropriate project or design team lead or building assessor shall record this determination in the applicable Guiding Principles checklist. Requirements identified as not applicable shall be considered and counted as compliant with the Guiding Principles.
- (1) Guiding Principle Exemptions. In some cases, a Guiding Principle requirement is applicable, but cannot be met due to technical feasibility, legal requirements that prohibit building modifications, or significant cost with little expected environmental benefit. In these cases, the appropriate manager shall propose an exemption and request review by Reclamation's SBT. The SBT does not act as an oversight or approving body but shall review every exemption requested in

Reclamation Manual

Directives and Standards

TEMPORARY RELEASE

(Expires 07/20/2022)

Reclamation to provide feedback and guidance and ensure consistency in the application of this D&S and Reclamation Guiding Principle interpretations. Ultimately, the director approves requested exemptions as part of their review and approval of certifications of compliance.

- (2) Reporting. The director shall report compliance with the Guiding Principles in the FRPP database in the appropriate data elements, and to the Director, Policy and Administration, as requested. At a minimum, reports shall include data on buildings within the sustainable building inventory that are in compliance with the Guiding Principles.
4. **Definitions.** The following definitions applicable to this D&S are in addition to the definitions in ENV-P082.
- A. Approving Official. The approving official approves and signs certifications of compliance with the Guiding Principles. For purposes of this D&S, the approving official is the director responsible for the building asset.
- B. Basis of Design. The Basis of Design (BOD) includes design information necessary to accomplish the Owner's Project Requirements (OPR) and meet applicable codes, standards, regulations, and guidelines. In Reclamation, the information documented in the BOD may also be referred to as the "design summary."
- C. Commissioning. In general, commissioning is the process of ensuring that a building performs according to its design intent and the needs of its owners and occupants. In new buildings, commissioning ensures through design reviews, functional testing, system documentation, and operator training that systems and equipment in new buildings are operating properly. Commissioning most often occurs after construction, but for complex new construction projects, may occur throughout the project, from design development through the warranty phase. In existing buildings, commissioning verifies and restores equipment operations in accordance with original design intent and/or to meet current operating requirements.
- D. Commissioning Agent. The commissioning agent is the person who leads, plans, schedules, and coordinates the commissioning team to implement the commissioning process. The commissioning agent may be from within Reclamation or an external party and shall meet the minimum criteria below: a Bachelor of Science degree in mechanical or electrical engineering from an accredited university; at least 3 years of experience in conducting Preliminary, Level I, and Level II Analysis as outlined in the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (i.e., ASHRAE) Procedures for Commercial Building Energy Audits; documented lead

Reclamation Manual

Directives and Standards

TEMPORARY RELEASE

(Expires 07/20/2022)

commissioning agent experience; and technical understanding and knowledge of building systems; digital control systems as applied to building operations, safety, and security; building maintenance procedures, standards, and codes; construction quality assurance/quality control; and scheduling procedures.

- E. Design-Bid-Build. This is a construction project delivery method in which the building owner contracts with separate entities for the design and construction phases of a project. Design-bid-build is the traditional method for project delivery that allows the owner to have full control over the design and differs in several substantial aspects from design-build.
- F. Design-Build. This is a construction project delivery method in which the building owner contracts with a single entity for both the design and construction of a project. Design-build fosters a single point of responsibility for the design-build work, minimizes risk for the building owner, and reduces the delivery schedule by overlapping the design and construction phases of a project.
- G. Direct-Leased Buildings. Direct-leased buildings are those for which Reclamation directly contracts with a building owner for occupancy and does not use a third party leasing agency such as the General Services Administration (GSA). Direct-lease authority must be delegated from GSA and comply with applicable Federal Acquisition Regulations and GSA leasing requirements.
- H. Integrated Design. An integrated design process includes the active and continuing participation of users and building occupants, code officials, building technologists, contractors, cost consultants, civil engineers, mechanical and electrical engineers, structural engineers, specifications specialists, and consultants from many specialized fields.
- I. Owner's Project Requirements. The OPR is a written document that details the ideas, concepts, and criteria determined by the building owner to be important to the success of the project. The OPR is initially defined in the sustainable design kickoff meeting and is updated, as necessary, to reflect owner requirements throughout the project.
- J. Sustainable Building Inventory. The sustainable building inventory is comprised of Reclamation-owned building assets greater than 5,000 gross square feet (gsf).
- K. Sustainable Building Professional. The sustainable building professional is an individual with expertise in sustainable building design and engineering, the Guiding Principles, and other Federal sustainable building requirements. The sustainable building professional may be an individual from within Reclamation or from an

Reclamation Manual

Directives and Standards

TEMPORARY RELEASE

(Expires 07/20/2022)

external private sector entity. The sustainable building professional shall meet the following qualifications: is a Leadership in Energy and Environmental Design (LEED™) Accredited Professional or has similar accreditation from another sustainable building rating system (e.g., Green Globes); a minimum of 3 years of experience in their profession and experience with at least one sustainable building project; and application and understanding of life-cycle cost analysis.

RECLAMATION MANUAL TRANSMITTAL SHEET

Effective Date: _____

Release No. _____

Ensure all employees needing this information are provided a copy of this release.

Reclamation Manual Release Number and Subject

Summary of Changes

NOTE: This Reclamation Manual release applies to all Reclamation employees. When an exclusive bargaining unit exists, changes to this release may be subject to the provisions of collective bargaining agreements.

Filing instructions

Remove Sheets

Insert Sheets

All Reclamation Manual releases are available at <http://www.usbr.gov/recman/>

Filed by: _____

Date: _____