

Introduction



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SECTION 1.01 BACKGROUND & PURPOSE

At Los Angeles World Airports (LAWA), our mission is “To serve the world – connecting people, places and cultures.”

- Safely and securely bringing people together, connecting Los Angeles with a global society
- Serving global customers and local communities
- Enriching quality of life for individual travelers, the community, and the region

Our vision – our collective ambition for the next 10 years – is “Gold Standard Airports... delivered.”

- Safe and secure airports to meet the demands of a global city
- All LAWA facilities of consistently high quality, delivered successfully and well-maintained
- Easy airport access via public or private transportation
- Services delivered flawlessly on a daily basis

In order to fulfill our mission & realize our vision, we established a new Strategic Plan in 2016 with our own unique core values, goals and objectives. Our Design & Construction Handbook (DCH) is one of our many tools to implement this Strategic Plan.

LAWA created the DCH in 2011 to ensure that all construction-activities on LAWA property conform to a consistent standard of safety, quality, sustainability, resiliency, maintainability, and efficiency. This consistency is imperative to the success of our operations, our guest experience, and our future.

Over the past 7 years, the DCH has been refined & updated based on policy changes, industry & technology changes, and lessons learned on past projects. LAWA strives for a culture of collaboration with our partners & stakeholders (airlines & tenants, designers & contractors, operations & maintenance staff, etc.) so we can learn from each project and continuously improve our DCH.

To that end, LAWA strongly encourages our stakeholders to recommend new ideas (alternatives to these standards) through our formal exemption-request process during the early planning & design stages of their project(s). As a standard practice, LAWA will evaluate all project-specific exemptions on an annual basis for possible updates to the DCH.

We are always looking for ways to do more with our limited resources, and we welcome the innovation & creativity that our stakeholders have to offer. We especially encourage the use of Life Cycle Cost Assessments and Alternatives Analysis in order to reach informed decisions regarding exemptions and/or updates to the DCH.

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SECTION 1.02 OVERVIEW OF THE DCH

We organized the DCH into ‘target-audiences’ based on the project life-cycle, so that each stage builds upon the previous stages;

Section	Primary Audience	Critical Info For...
Planning Criteria	Project Sponsor <i>(i.e. Tenant, Developer, etc.)</i>	Concept Development
Design Requirements	Design Team <i>(i.e. Architects, Engineers, etc.)</i>	Design Documents
Guide Specifications	Contractors & Subcontractors <i>(i.e. Those bidding on the project)</i>	Construction Documents
Construction Requirements	Construction Team <i>(i.e. CM, Superintendent, etc.)</i>	Delivery & Closeout
Project Management	Project Management Team <i>(i.e. PM, Project Controls Team, etc.)</i>	All Stages
Other / Miscellaneous	Miscellaneous <i>(All – Varies by Project)</i>	Varies by Project

The **Planning Criteria** section is reflective of LAWA’s long-term vision for our airports. For example, LAWA’s planning policies include, but are not limited to;

- All Passenger Facilities at LAX shall be designed & constructed to achieve a **Level of Service (LoS) Optimum** (formerly known as C+) as described in the Airport Development Reference Manual (ADRM) produced by the International Air Transport Association (IATA) and Airports Council International (ACI).
- All passenger facilities at LAX shall be designed & constructed as ‘**common use**’ assets to ensure operational flexibility.
- Planning & Programming shall be performed to maintain a **balanced capacity** across all airport functions (Drop-Off, Ticketing, BHS, SSCP, Holdrooms, Restrooms, Concessions, Gates, Airfield, FIS, Baggage Claim, Pick-up, etc.)
- All projects at LAX shall be designed & constructed in accordance with the LAX Design Guidelines to ensure a **consistent architectural statement** throughout the airport.

The **Design Requirements** section is reflective of LAWA’s design policies for some of our most critical and/or unique assets & infrastructure. This includes, but is not limited to;

- **Public Restroom Requirements:** This is a key contributor to the Guest Experience
- **Information Technology Requirements:** Unique systems at LAX (ACAMS, CCTV, Public WiFi, etc.)
- **Airside Requirements:** Various unique attributes of the LAX Airfield
- **Technical Requirements:** Various unique attributes of our infrastructure (Mechanical, Electrical, Plumbing, Structural, etc.)

The **Guide Specifications** section is reflective of LAWA’s prescriptive requirements (i.e. acceptable vendors, products, testing-methods, etc.) in order to ensure a consistent level of resiliency & maintainability. These requirements are provided in accordance with the Construction Specifications Institute (CSI) format, to ensure “ease-of-use” by the Project Sponsor and designer of record. This includes, but is not limited to;

- **Division 8 (Openings):** Doors & Frames, Door Hardware, etc.
- **Division 9 (Finishes):** Tiling, Acoustical Panel Ceilings, Terrazzo Flooring, etc.
- **Division 10 (Specialties):** Toilet Compartments, Defibrillator Cabinets, etc.
- **Division 14 (Conveying Equipment):** Elevators, Escalators, Moving Walks, etc.
- **Division 22 (Plumbing):** Piping, Plumbing Fixtures, etc.
- **Division 23 (HVAC):** Air Handling Units (AHU), HVAC Ducts & Casings, HVAC Piping, etc.
- **Division 25 (Integrated Automation):** Building Automation System (BAS), Facilities Management & Control System (FMCS), etc.
- **Division 26 (Electrical):** Conductors & Cables, Grounding & Bonding, Ducts & Raceways, etc.

The **Construction Requirements** section is reflective of LAWA’s prescriptive requirements for all construction-activity at LAX in order to maintain airport operations, and to minimize risk to LAWA and our stakeholders. This includes, but is not limited to;

- **Area Shutdown Requests (ASR)**
- **Utility Shutdown Requests (USR)**
- **Temporary Signage Standards**
- **Temporary Barricade and Enclosure Standards**
- **Coordination, Phasing, and Logistics**

The **Project Management** section addresses formal & informal communication protocols, project controls, change management, acquisitions, and the dispute resolution & escalation process throughout the life of a project.

END OF SECTION

SECTION 1.03 PROCESSES

1.1 Summary

The following subsections will describe the processes to create, manage, and deliver a project:

- A. Project Initiation & Concept Review
- B. Design Development and Progress Reviews
- C. Construction Documents and Notice to Proceed (NTP) Review
- D. Construction, Activation and Closeout

1.2 Project Initiation & Concept Review

- A. To start a new project, the Tenant or Developer (aka Project Sponsor) shall submit a [Concept Request Form](#) to LAWA at projectapprovals@lawa.org. The Project Sponsor shall include the following attachments with their submission of a Concept Request Form:
 1. Project Map(s)
 - a. At a minimum, this shall include a copy of the Master Lease Exhibit (MLE) with markups clearly indicating the proposed 'Limits of Work' and the areas affected by the project
 - b. Existing Tenants may contact their Business Relationship Manager (BRM) for a copy of their current MLE
- B. Project Purpose
 1. At a minimum, this shall include a justification for the project (i.e. to improve the guest experience, to replace a broken/failing asset, etc.)
 2. If the Project Sponsor is seeking Capital Funding from LAWA, this shall also include a detailed business-case for why the proposed investment is justified (i.e. increased capacity of [X%], increased annual revenues of [\$Y], improved efficiency of [Z], etc.)
 3. If the Project Sponsor is seeking Capital Funding from LAWA, this shall also include a preliminary cost-breakdown for the proposed assets to be acquired by LAWA, and the proprietary assets to be provided by the Project Sponsor (at no cost to LAWA).
- C. Project Description
 1. At a minimum, this shall include a narrative description of the proposed scope of work and associated performance objectives (i.e. Renovate 10,000 ft² of existing space to convert abandoned office space into new retail space)
 2. Supplemental sketches, drawings, photographs, cut-sheets, etc. will ensure the most effective review and efficient approval processes moving forward
 3. If the Project Sponsor is seeking Capital Funding from LAWA, this shall also include their proposed 'Principles & Criteria' and a 'Proof of Concept'. This includes drawings, tables, etc. to demonstrate that the proposed scope of work can be delivered within the project constraints (budget, schedule, operational restrictions, etc.)
 4. If the Project Sponsor wishes to deviate from any section of the DCH, they shall provide a list of Exemption Requests as soon as possible with the associated justification (Life Cycle Cost Assessment, Alternatives Analysis, Cost-Benefit Analysis, etc.).

LAWA's Business Relationship Manager (BRM) will review the Concept Request Package for completeness within 5 business days of receipt. If the Package is complete, the BRM will distribute to LAWA's Project Evaluation & Review Team (PERT) for review. If the Package is incomplete, it will be returned to the Project Sponsor for revision & resubmission.

Upon completion of the PERT Review, the BRM will prepare & issue a Response Letter to the Project Sponsor. If the concept is approved, the letter will indicate the conditions of approval and the next steps required. The letter will also include a Comment Log from the PERT for the Project Sponsor to address in their next submittal. If the concept is denied, the letter will include an explanation from LAWA.

For small projects, LAWA's Concept Review period is typically 2-4 weeks. For large projects, the Concept Review period is typically 3-6 weeks and may include a workshop with the Project Sponsor and the PERT.

1.3 Design Development & Progress Reviews

- A. When LAWA approves a Concept Request, the Response Letter will indicate the interim Design-Milestones for which LAWA will offer Progress Reviews. These are typically offered by LAWA at \approx 30%, 60% and/or 90% design milestones.
- B. The Project Sponsor shall submit these Design Packages to projectapprovals@lawa.org and cc their LAWA Project Manager (PM), unless otherwise directed by LAWA. Each Design Package Submittal shall include a written response to each comment from all previous submittals. The responses shall indicate how each comment was addressed, and where each correction and/or change is reflected in the current Design Package. Each Design Package Submittal shall also include a list of Exemption Requests and the associated justification (Life Cycle Cost Assessment, Alternatives Analysis, Cost-Benefit Analysis, etc.).
- C. If the Project Sponsor is seeking Capital Funding from LAWA, Design Package Submittals shall also include an updated cost-breakdown for the proposed assets to be acquired by LAWA, and the proprietary assets to be provided by the Project Sponsor (at no cost to LAWA).
- D. LAWA's PM will review the Design Package Submittals for completeness within 5 business days of receipt. If the Package is complete, the PM will distribute to LAWA's Project Evaluation & Review Team (PERT) for review. If the Package is incomplete, it will be returned to the Project Sponsor for revision & resubmission.
- E. Upon completion of the PERT Review, the PM will prepare & issue a Response Letter to the Project Sponsor. The letter will indicate the conditions of approval and the next steps required. The letter will also include an updated Comment Log from the PERT for the Project Sponsor to address in their next submittal.
- F. For small projects, LAWA's Design Review period is typically 2-4 weeks. For large projects, the Design Review period is typically 3-6 weeks and may include a workshop and/or Page-Turn with the Project Sponsor and the PERT.

1.4 Construction Documents & Notice To Proceed (NTP) Review

- A. Prior to starting construction, the Project Sponsor shall submit their Construction Documents Package to projectapprovals@lawa.org and cc their LAWA Project Manager (PM), unless otherwise directed by LAWA.
- B. The Construction Documents Package Submittal shall include a written response to each comment from all previous submittals. The responses shall indicate how each comment was addressed, and where each correction and/or change is reflected in the Construction

- Documents. The Submittal shall also include a list of Exemption Requests and the associated justification (Life Cycle Cost Assessment, Alternatives Analysis, Cost-Benefit Analysis, etc.).
- C. If the Project Sponsor is seeking Capital Funding from LAWA, the Construction Documents Package Submittal shall also include a detailed cost-breakdown for the proposed assets to be acquired by LAWA, and the proprietary assets to be provided by the Project Sponsor (at no cost to LAWA).
 - D. LAWA's PM will review the Construction Documents Package Submittal for completeness within 5 business days of receipt. If the Package is complete, the PM will distribute to LAWA's Project Evaluation & Review Team (PERT) for review. If the Package is incomplete, it will be returned to the Project Sponsor for revision & resubmission.
 - E. Upon completion of the PERT Review, the PM will prepare & issue a response to the Project Sponsor. If the package is approved, LAWA will issue a Notice to Proceed (NTP) Letter, indicating the conditions of approval to proceed with construction and the next steps required. The letter will also include a Comment Log from the PERT for the Project Sponsor to address prior to acquisition. **The Project Sponsor shall address all comments & conditions as soon as possible so as not to put undue risk to the project and/or future acquisition payments.**
 - F. If the package is denied, LAWA will issue a response letter with an explanation.
 - G. For small projects, LAWA's NTP Review period is typically 2-4 weeks. For large projects, the NTP Review period is typically 3-6 weeks and may include a workshop and/or Page-Turn with the Project Sponsor and the PERT.

1.5 Construction, Activation and Closeout

- A. Prior to starting construction, the Project Sponsor shall host a Pre-Construction Meeting with the LAWA Project Manager and other Project Stakeholders (as identified by the LAWA Project Manager). The agenda shall include, but not be limited to;
 - 1. Safety
 - 2. Project Team & Escalation Structure
 - 3. Roles & Responsibilities
 - 4. Project Overview (Scope, Schedule, Budget)
 - 5. Phasing & Logistics
 - 6. Communication Procedures
 - 7. Shutdown Procedures (ASR/USR/SCC)
 - 8. Quality Control Procedures
 - 9. Quality Assurance / Inspection Procedures
 - 10. Testing & Activation Procedures
 - 11. Asset Management
 - 12. Acquisition & Payment Procedures (if applicable)
 - 13. Other / Miscellaneous (Bonds & Insurance, Change Management, etc.)

- B. Every project has its own unique challenges & procedures, especially during the construction, activation and closeout stages. At a minimum, the lead project representatives from the Owner, Architect, and Contractor (OAC) typically hold a progress meeting on a weekly basis with the LAWA Project Manager.

The Project Sponsor and LAWA Project Manager shall jointly establish the content, audience and frequency of routine meetings & reporting, and shall supplement those routines as needed to enhance communication and ensure the success of the Project.

END OF SECTION