# SUPPLEMENTAL DOCUMENT 8

## ARCHITECTURAL DESIGN REQUIREMENTS

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## Minimum Design and Construction Standards
## For New Construction and Rehabilitation Projects

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## INTRODUCTION

These Architectural Design Requirements establish and delineate the intent of the Los Angeles County Development Authority (LACDA) to produce high quality affordable housing. The Notice of Funding Availability (NOFA) and the Architectural Design Requirements apply to all new construction and rehabilitation projects.

Adherence to these requirements is required for all projects receiving financing. Staff will work with all project teams to ensure compliance during all phases of review described herein, and that the values expressed in the Architectural Design Requirements are realized in completed work.

Within the project, the design of the Special Needs and affordable units shall not be any different than other project units. The quality of spaces and materials, number and size of rooms, amount of closet space, amenities available, etc., shall be the same regardless of the population served.

These requirements are not a substitute for applicable building codes and applicants are expected to comply with all code requirements. If there is duplication in these instructions, it is to emphasize elements on which the LACDA places high value.

This document is not intended to limit the designers' creativity to any particular solution, instead, it is intended to promote and assist in the development of well-designed, quality, affordable housing in a cost-effective manner. Designers and development teams are encouraged to find innovative and creative design solutions to affordable housing projects.

Many design considerations request that the design team "consider" items that are identified as best practices. Such items should be taken as suggestions, based on what the LACDA considers valuable design elements, however, these items are not requirements. Instead, they should be treated as items for the design team to consider when planning the project.

## I. DESIGN REVIEW PROCESS & NOFA APPLICATION SUBMITTAL REQUIREMENTS

The design review process is initiated when a developer submits a completed NOFA application.

Design review continues throughout the application process, with reviews occurring at the following phases:

- NOFA Application;
- Design Review Meeting;
- Loan Committee Approval; and
- Prior to Construction Completion.

Applications are first reviewed for completeness during a Threshold Review, which contains required architectural design submittals. Threshold Review items are identified in NOFA application materials and below in the section titled “Required NOFA Application Submittals – Threshold Items”.

Upon notice of a funding award, the LACDA may contact all project teams to schedule a mandatory Schematic Design Review Meeting. The purpose of this meeting is to discuss the initial design review, establish project expectations, and confirm the design team’s response to design review comments. The Design Review Meeting is intended to address any major design issues with projects and to discuss design options that can help project teams meet NOFA architectural design requirements. The developer, the developer’s architect, the LACDA’s project manager, and the LACDA’s consulting architect will attend this meeting.

After this meeting, the project will proceed through further design review(s) as plans evolve to meet milestones for the Loan Committee review phase and eventually complete the design review process prior to closing the project’s construction financing. The goal of the design review process is to quickly and efficiently complete the review, minimizing the time spent by both the developer’s design team and LACDA staff. The LACDA staff will work with the development team to ensure a revised set of plans and project specifications are submitted and reviewed in a timely manner. The LACDA’s Design Review Sheet will be used by the design team to address reviewer issues and remarks resulting from the architectural design review process.

The following chart summarizes the design review process for projects that are recommended for funding award:

| DESIGN REVIEW PROCESS | | | |
|---|---|---|---|
| PHASE | REVIEW | SUBMITTALS | TIMEFRAME |
| NOFA Application | Technical Review/ evaluation of schematic design | Schematic Design | Results of the Technical Review provided approximately 45 days following application submission. |
| Design Review Meeting | Review responses to Technical Review | Resubmittals of NOFA documents with corrections. Submittals may include: initial CASp report, updated Project plans, Project specs, etc. | Following the Applicant's receipt of a tax credit award. Project teams shall review the results of the Technical Review and respond to design review comments with updated plans and the Design Compliance Review spreadsheet during the Design Review phase. A design review meeting shall be held to discuss how Project teams can come into compliance with LACDA design requirements. |
| Loan Committee Approval | Design development reviews | Design Compliance Review spreadsheet, initial CASp report, construction documents and specs. | Approximately three to four months before construction loan closing. |
| Prior to Construction Completion | Construction verification documents | Final CASp report, final energy model and TCAC Sustainable Building Methods workbook | Once Design Compliance Review is complete, a Field Verification Report is issued. |

## A. NOFA Application Phase: Threshold Review/Evaluation of Schematic Design

THRESHOLD REVIEW

Project applications are evaluated and determined to either meet or not meet the NOFA program and threshold requirements for architectural design. Should an application pass Threshold Review, it will move forward through the Design Compliance Review period, which must be completed prior to construction loan financing.

TECHNICAL REVIEW

Although the architectural design will not be scored, projects must satisfy the minimum requirements at application to be considered for funding.

REQUIRED NOFA APPLICATION SUBMITTALS – THRESHOLD ITEMS

The required application design submittals (listed below and in the Application checklist) are required for consideration for funding. A design review will be provided to applicants along with the notice of scoring results for the overall project. The design review includes the Design Compliance Review Report, which will reflect in detail the project's level of adherence to the Architectural Design Requirements.

Applicants for projects located in jurisdictions with a rigorous design review process that involves public comment are responsible for identifying this process in the Design Narrative of the NOFA application. This narrative must also state whether the jurisdiction's design review process resulted in any deviations from the LACDA's requirements.

Project teams are required to address all architectural design issues identified during the application scoring process prior to release of all loan funds. The LACDA may withhold loan funds until all issues are addressed to the reasonable satisfaction of staff.

Architectural drawings shall demonstrate compliance with the Architectural Design Requirements and, at minimum, must be at schematic design level for NOFA submission. All drawings and plans shall be titled and dated, drawn to scale, include a written and graphic scale, and a north arrow. PDF documents must be of high enough quality so that architectural features and colors are clearly legible.

Project submittals at the NOFA application stage shall include, at minimum, the following:

1. Title sheet that includes:
   a. An index of all drawings submitted.
   b. A project description including, but not limited to:
      - Construction and occupancy type.
      - Lot coverage, floor area ratio, and density.
      - Unit breakdown (unit mix).
      - Building zoning code analysis.

- Setbacks, variances.
- Parking requirements and parking provided.
    1) Include total number of parking spaces provided.
    2) Include total number of parking spaces required.
    3) Include total number of accessible parking spaces provided (van and standard).
    4) Include total number of accessible parking spaces required (van and standard).
- Electric Vehicle requirements (if applicable).
    1) Indicate parking spaces planned for future EV charger installation.
    2) Indicate Electric Vehicle Charging Station(s) (EVCS) where EV Charger will actually be installed.
- Indicate total number of accessible EVCS (van, standard, and ambulatory).

    A table identifying which unit numbers will satisfy accessible unit requirements (A minimum of 10% mobility units and 4% communication feature units) as well as any units satisfying the requirements for Universal Design (where applicable). This table must be clearly indicated in the title sheet.

2. Vicinity Map.

3. Site Survey.

4. Site Plan (1/16” scale minimum) that includes:
    a. Property line, adjacent streets, and the approximate location and number of stories of buildings on adjacent sites to provide sense of the local environment.

5. Landscape plan with conceptual plant list showing a minimum of 75% of plants (by area and clearly indicated in a table) are selected from a published drought-tolerant plant list for the appropriate project zone, or the local jurisdiction’s drought-tolerant list, if required. If a landscape plan is not yet developed at the time of the NOFA application, a statement acknowledging this requirement is sufficient.

6. Floor Plan(s) (1/8” scale minimum) that includes:
    a. Major project amenities (community room, recreation room, etc.).
    b. Enlarged floor plans of all proposed unit types, including parking plans, ground floor plan with site context, and roof plan showing screened mechanical equipment and any renewable energy equipment.
    c. Indicate which units will satisfy requirements for mobility and communication feature accessible units, as well as units satisfying the requirements for Universal Design (where applicable). This information shall be included on the architectural drawing coversheet, along with the project and unit count information.
    d. Indication of required accessible paths of travel.

7. Unit Plan(s) (1/4” scale minimum) that includes:
    a. Square footage of unit calculated from the interior of the unit exterior and demising walls.

b. Interior dimensions of all livable spaces.
c. Furniture layout, including required amenities such as trash/recycling and required storage.
d. Indication of required accessible path of travel.

8. All exterior elevations (1/8" scale minimum) that includes adjacent grade up to the property line, street, or 20 feet beyond building (for sites without nearby property lines).

9. At least two (2) major sections (1/8" scale minimum).

10. A signed and dated construction cost estimate.

11. Rehabilitation projects only:

    a. Applicants proposing a rehabilitation project must describe in the Design Narrative of the NOFA application the scope of work being proposed, including any major systems being replaced. Applicants are required to provide at minimum:
        i. A Property Needs Assessment report.
        ii. A Schedule of Values for the proposed work.
        iii. Rehabilitation plans that indicate the proposed improvements (i.e. the number of doors, windows, and/or fixtures to be replaced).

    b. A conceptual energy model, prepared and signed by the project Certified Energy Auditor (CEA), is required for rehabilitation projects. For the purposes of the NOFA submittal, the energy model shall reflect the project as presented in submitted architectural drawings. The energy model may be prepared using any acceptable methodology and software approved by the California Energy Code. A unit-by-unit energy model is not required as part of the initial NOFA application (simpler energy modeling protocols may be used), but the submitted energy model shall represent the means and methods proposed to achieve the specified margin.

    c. Applicants proposing rehabilitation projects, as defined in this NOFA, shall comply with the Architectural Design Requirements to the greatest extent possible.

**B. Loan Committee Phase: Review of Drawings and Specifications**

Projects that received a funding award are assigned to an LACDA Project Manager who will coordinate a more comprehensive Design Compliance Review in preparation of presenting the project to the LACDA's Loan Committee.

<u>DESIGN COMPLIANCE REVIEW</u>

Projects are expected to demonstrate compliance with all components of the Architectural Design Requirements, applicable building codes, and all applicable accessibility requirements, including, but not limited to: the California Building Code (CBC), California Disabled Access Compliance Manual, 2010 Americans with Disabilities Act Standards for

Accessible Design (2010 ADA standards), and the Fair Housing Act. Compliance with these requirements shall be documented throughout the project using the Design Compliance Review Report tool provided to awardees.

Funded projects shall adhere to the provisions of CBC Chapter 11(B), and Title II of the Americans with Disability Act (2010) regarding accessibility to privately-owned housing made available for public use. The LACDA funding carries those requirements, as applicable, including the LACDA's requirement of including a minimum of ten percent (10%) of project units with mobility features, and four percent (4%) with communications features. These units shall be distributed throughout the project consistent with 24 CFR Section 8.26.

All projects are subject to the LACDA's Design Review process. Projects that have successfully undergone the local jurisdiction's design review process, which included an opportunity for public comment, may be given special consideration only if the LACDA's requirements clearly conflict with those of a local jurisdiction.

Projects that go to the LACDA's Loan Committee while still in the early development stage may base the Design Review on Schematic Drawings or Design Development documents, draft specifications, and a conceptual Title 24 energy compliance report (for rehabilitation projects). However, these projects will require a follow-up review once construction documents and specifications are completed and the Title 24 energy compliance report is finalized (for rehabilitation projects). The Title 24 energy compliance report must be produced by a CEA.

REQUIRED SUBMITTALS

Depending on the design stage of the project, the Design Review will be based on either the project's schematic drawings, design development drawings, or construction documents in PDF format (or full-size hard copy if requested). All drawings shall be titled and coordinated with each other, with appropriate scale indicated. Each sheet shall be numbered, dimensioned, and dated with the appropriate consulting firm logo included. All submittals must demonstrate compliance with all Architectural Design Requirements. In anticipation of the LACDA's Loan Committee meeting, the project team shall submit the following list of required drawings and documents:

1. Title Sheet that includes:
    a. An index of all of the drawings submitted.
    b. Project description, data, requirements, and general notes.
    c. Vicinity map.
    d. The names, addresses, and phone numbers of all consulting firms for the project.
    e. Table of applicable codes and regulations.
    f. A brief narrative of any entitlement conditions of approval, variances or easements, if any.
    g. A summary table describing which units (by number and type) will satisfy applicable accessibility standards, Universal Design (where applicable), and any

other accessibility standards required by project funding sources.
h. The project's energy performance according to the conceptual Title 24 energy compliance report (for rehabilitation projects only).

2. Site Survey.

3. Site Plan that includes:
   a. Scaled site plan with scale noted.
   b. Notation scale, graphic scale, and north arrow.
   c. Metes and Bounds.
   d. Setbacks and easements.
   e. Preliminary grades, elevations, and percentage slope areas showing site accessibility and surface water drainage and retention.
   f. Dimensions noting building distance from property line.
   g. All streets and curbs.
   h. Table and keynotes indicating hardscape finishes, noting permeable pavers or concrete if applicable.

4. Demolition Plan (if needed).

5. Foundation Plans and details.

6. Floor Plans for each level that include:
   a. Drawings at 1/8" or 1/4" = 1'-0", with scale noted and graphic scale provided. All required information must be legible and easily shown.
   b. Drawing title, graphic scale, and north arrow.
   c. Primary building dimensions and overall building dimensions.
   d. Room identifiers, room dimensions, and room areas (calculated as described later in this section).
   e. Storage areas labeled and with a table of storage area/volume demonstrating compliance with the Fundamental Design Requirements.
   f. Doors and windows.
   g. Kitchens, showing all kitchen cabinets and appliances. Provide dimensions and a summary of base countertop lengths.
   h. Bathrooms, showing all fixtures and accessibility clearances where necessary (including "clearance boxes").
   i. Schedule of finishes for floors, walls, ceilings, bases, and cabinets.
   j. Floor plans of any other major project amenities.

7. Roof Plan that includes:
   a. Drawings at 1/8" or 1/4" = 1'-0", with scale noted.
   b. Drawing title, graphic scale, and north arrow.
   c. All slopes, with a slope arrow and note pitch.
   d. All rooftop equipment, such as mechanical, evaporative coolers, photovoltaic, and solar thermal equipment.
   e. Clearly labeled parapets or other mechanical screening devices.

8. Typical unit plans (drawn at a larger scale than floor plans).

9. Exterior Elevations that include:
   a. Elevations drawn at 1/8” or 1/4” = 1’-0”, with scale noted.
   b. Elevations of all sides and elevations that can be seen from beyond the property and those that cannot be seen, such as courtyard walls.
   c. Drawing title and graphic scale.
   d. Title of each elevation delineated.
   e. Vertical elevation dimensions starting at grade, indicating each floor level, plate line, and top of roof or parapets.
   f. Key notes for doors, windows, awnings, and all other exterior building materials and finishes, including accent trims and the like.

10. Interior elevations (kitchens and bathrooms).

11. Site Sections that include:
   a. A minimum of one cross section and one longitudinal section that best show the site and characteristics.
   b. Approximate location of adjacent site structures and significant site characteristics 20 feet from property line. Characteristics include and are not limited to steps in grade, retaining walls, etc.
   c. Partial site sections, if the site is complex.

12. Building Sections that include:
   a. Drawings at 1/8” or 1/4” = 1’-0”, with scale noted.
   b. A minimum of one cross section and one longitudinal section.
   c. Cross sections through courtyards.
   d. All mechanical equipment and required screening.
   e. Key notes per exterior elevations requirements.
   f. Vertical dimensions per exterior elevation requirements.

13. Landscape Plan (prepared and stamped by a landscape architect licensed in the State of California) that includes:
   a. Scaled landscape plan matching architectural site plan, with scale noted.
   b. Graphic scale and north arrow.
   c. All major trees, shrubs, and vine locations.
   d. Plant material list keyed to plans, using Latin and/or common names as found on the drought-tolerant plant list being used, or the local jurisdiction’s drought-tolerant plant list, if a local list is required.
   e. Table and calculations showing that 75% of the plant selections by area are taken from the applicable drought-tolerant plant list.
   f. Schedule of hardscape finishes, noting permeable pavers or concrete, if applicable.

14. Crime Prevention Through Environmental Design (CPTED) Documentation that includes:

a. Exterior lighting plan at parking areas, main entry, exterior exit doors, courtyards, and any at-grade areas used by residents.
b. Durable perimeter fence details. (Project teams may describe the perimeter fence as "steel perimeter fence to meet the LACDA's CPTED requirements.")
c. Note on plans that building will be pre-wired for closed-circuit surveillance cameras in parking areas, main entries, exterior exit doors, and common areas not directly adjacent to regularly occupied rooms.

15. Title 24 Energy Compliance Reporting (rehabilitation projects only) that includes:
a. A Title 24 energy report submitted for plan check, prepared by a CEA-certified professional, including reports CF-1R or PERF-1, ECON-1, and UTIL-1, in pdf format.
b. Energy efficiency program application information that may require coordination of energy modeling reporting.

16. Requirements for accessibility reporting, to be completed by an independent third-party California CASp:
a. The report must indicate that the plans have been reviewed at design development phase, or later, for compliance with all applicable accessibility standards, including, but not limited to the 2010 ADA Standards, Chapter 11(B) of the CBC, Section 504 of the Rehabilitation Act (as per HUD Document Deeming Notice 29671 dated May 23, 2014), and the Fair Housing Act. The report shall also specifically address and confirm conformance with Universal Design features if those are to be included in the project per Section III B of the Architectural Design Requirements. The report shall list:
    - The owner's sources of funding;
    - The accessibility standards triggered by each source of funding;
    - The units that will meet the mobility accessible unit criteria (A minimum of 10% of units, by unit bedroom number and type, to be distributed throughout the project consistent with 24 CFR Section 8.26 with at least one mobility unit per unit type);
    - The units that will meet the communication feature accessible unit criteria (A minimum of 4% of units, by unit bedroom number and type, to be distributed throughout the project consistent with 24 CFR Section 8.26 with at least one communication feature unit per unit type);
    - The total number of parking spaces provided;
    - The total number of accessible parking spaces;
    - The mandatory measures from the NOFA Architectural Design Requirements; and
    - The mandatory measures from the LACDA's Fair Housing and Accessibility Requirements.
b. At each review phase, the CASp consultant's report shall also include a description of the CASp's involvement in the design development and any elements that are out of compliance at the time of the review. The project developer shall include a statement outlining how any deficiencies identified by the CASp consultant will be addressed prior to the start of construction. The LACDA reserves the right to request backup documentation from the project's CASp consultant.

c. A determination that the project complies with all accessibility requirements, or if not, discrepancies are noted.
d. An inspection report by an independent third party CASp will also be required at the rough framing stage of construction (before sign-off by the building inspector) and at the end of construction. The report shall list the items indicated in item “a” above and shall include a description of any element out of compliance. Development teams will be required to submit a plan to correct out of compliance elements.

17. Other Documentation:
    a. Project specifications, in searchable PDF format (and hard copy if requested).
    b. Full specifications or final specifications addressing the specific items that are required for Loan Committee Phase review. The project team shall use the Design Compliance Review Report spreadsheet to indicate where in the specifications the required performance requirements can be found. Indicate that these are either "draft” or “final” construction specifications.
    c. Detail construction cost estimate or construction bids dated and signed.

At the start of construction, the project team shall, upon request, provide the LACDA with a stamped half-size set of Construction Documents, final specifications, and final Title 24 energy compliance reports (for rehabilitation projects) from consulting firms. Construction documents must include half-size prints of architectural, structural, mechanical, electrical, plumbing, landscape plans, irrigation, grading and drainage, and civil plans.

PROTOCOL FOR MODIFYING THE ORIGINAL DESIGN

The LACDA must be notified of material changes to the design from what was originally reviewed in the NOFA application. Changes considered material may include, but are not limited to, modifications to the unit mix, number of units, plan or elevation changes, value engineering, noncompliance with Architectural Design Requirements, Sustainable Building Methods, or Universal Design Requirements (if applicable), and changes in project material quality. All changes, whether they occur prior to or after obtaining the approval by the Loan Committee, will be subject to approval by LACDA staff and may trigger a re-review by the Loan Committee, or the re-evaluation of the project design. Should LACDA staff consider it necessary to re-evaluate the design, it will be done at the applicant’s expense. The LACDA reserves the right, at its sole discretion, to reduce or rescind its funding commitment if changes are found to be unacceptable.

## II. FUNDAMENTAL DESIGN REQUIREMENTS

The Fundamental Design Requirements represent the minimum design elements for all funded projects. Applicants shall utilize architectural design and construction materials that will provide for low maintenance and durability.

### A. Site Planning

1. Neighborhood/Site Characteristics

a. Identify neighborhood characteristics: Land use, height, scale, massing of existing structures and relationship of proposed project to the characteristics found in the neighborhood. Project teams shall provide a narrative description to meet this requirement.
b. Identify and mitigate adverse impacts from adjacent use. Project teams shall provide a narrative description to meet this requirement.
   Design landscaping and place building(s) in a manner that integrates with adjacent uses and views. Project teams shall provide a narrative description to meet this requirement.

2. Density
   a. Provide functional and comfortable habitable units; usable indoor common areas; and meaningful usable open spaces for residents of all ages, as appropriate. Project teams shall provide a narrative description to meet this requirement.
   b. Provide visual relief by modulating the building footprint and building mass. Project teams shall provide a narrative description to meet this requirement.
   c. Maintain or improve the pattern of building found within a neighborhood or community. Project teams shall provide a narrative description to meet this requirement.

3. Surroundings
   a. Consider the project location's traffic with respect to safety, noise, and ease of circulation when locating buildings, landscape, pedestrian walkways, and driveways. Project teams shall provide a narrative description to meet this requirement.
   b. Provide clear separation between pedestrian and vehicular traffic and incorporate appropriate warning and design measures to enhance the safety of pedestrians and others moving by and through the project. Project teams shall provide a narrative description to meet this requirement.

4. Noise Levels
   a. Design to minimize impact from noise sources using site (such as berms or other hard features) and architectural features.

5. Lot Configuration and Topography
   a. Consider size, slope, and shape of property to achieve proper placement and density of building on lot.

6. Neighborhood Amenities
   a. Consider adjacencies to cultural facilities if any, such as: museums, neighborhood and/or community parks, recreation areas, theaters, and sport venues.
   b. Preserve existing assets such as mature landscaping, and near or distant views whenever possible.

7. Access to Public Transit
   a. Consider logical pedestrian routes to public transportation such as bus, metro rail, and trains.

b. Locate senior housing projects within walking distance (maximum distance of 1,500 feet) of public transportation and clearly indicate compliance on site plan.

8. Open Space for New Construction – Private and Common areas
   a. Private Area (if provided): Private outdoor space shall be accessible as required by the CBC and by Universal Design, if applicable. Hinged or sliding patio doors shall provide 32" of clear width (34" at Universal Design Units), and clear approach space shall be shown on furnished plan(s). Compliance shall be explicitly confirmed in CASp report. A private area may be a patio, deck, porch, yard, or balcony. Primary access to private open space shall not be from any bedroom, with the exception of studios and one-bedroom units.
   b. Common Area: Shall provide amenities to residents that may include seating spaces, barbeque and tables, play area, etc. and shall include the required usable area below, the amount required by local zoning code, or other funding sources, whichever is greatest. Common areas do not include circulation or required front and side-yard setbacks, unless incorporated into larger usable common areas as described above.

| Number of Units | Required Space |
|---|---|
| 15 | 30 sq. ft./unit |
| 15-25 | 20 sq. ft./unit |
| 26-50 | 17.5 sq. ft./unit |
| 51+ | 15 sq. ft./unit |

9. Fencing/Site Walls
   a. Chain-link fencing shall not be used.

## B. Building Design (Exterior)

1. Setbacks
   a. Conform front, rear, and side setbacks to prevailing setbacks along street.
   b. Vary yard depths to provide visual interest and usable yard areas.

2. Height/Scale
   a. Relate height and scale of new construction to the prevailing height and scale of existing neighborhood buildings. Project teams shall provide a narrative description to meet this requirement.
   b. Design shall reflect a human scale and shall integrate with, and enhance, the surrounding neighborhood. Project teams shall provide a narrative description to meet this requirement.

3. Massing
   a. Break up the mass of the building by using a variety of shapes to express the volume of the building. For example, it may be appropriate to step back the façade of the building to allow for a lower building height at street level, and a taller building height toward the middle or rear of the property. Project teams shall provide a narrative description to meet this requirement.

4. Materials and Colors
   a. Use materials that do not require extensive maintenance.
   b. Use of unconventional building materials is not discouraged, however, building materials and colors shall reinforce the residential character of the building.

5. Architectural Style
   a. Determine dominant architectural style of the neighborhood (e.g. California bungalow, Mediterranean, Spanish, post WWII era tract) and incorporate contextual elements of that style to create cohesion within the neighborhood.
   b. Make a stylistic change for the better when a neighborhood has no cohesive architectural style or if the surrounding structures are of a poor quality and style.
   c. Use architectural embellishment appropriately to give the building human scale, and to provide additional design interest and detail upon closer view of the building.
   d. Provide continuous visual interest by including architectural design elements to the sides and rear of the building – in addition to the front façade.

6. Building/Street Connection
   a. Maintain building/street connection by avoiding elevating a building above a parking level at grade, which results in blank walls facing the street and adjacent properties (maximum elevation of first floor above sidewalk grade shall not exceed four (4) feet).
   b. Consider the expectation of the pedestrian walking by the building by including a sidewalk, front yard, entry steps, front door, and windows that are equated with residential neighborhoods.

7. Outdoor Recreation Area
   a. Determine residents' needs and design to accommodate intended use.
   b. Provide secure outdoor spaces for tenants and a play area for children, as applicable.
   c. Secure areas shall have good visual connection with other areas of building.
   d. Address the unique and important needs of the adolescent community, as applicable, by providing a safe and stimulating environment, but respecting their sense of autonomy and satisfying their educational and recreational needs.

8. Landscape/Hardscape
   a. Use drought tolerant and California native plants, as much as possible. A minimum of 75% of plants (by area) must be selected from a published drought-tolerant plant list, or the local jurisdiction's drought-tolerant list (if required).
   b. Design landscape with low maintenance, durability, graffiti reduction, security, noise, and view considerations in mind.
   c. Confirm that hardscape areas (including surface parking) are either shaded during warm weather months (June through August) or have materials with initial solar reflectance of 0.33 or greater.
   d. Add pet-waste stations on property grounds at a ratio of 1 waste station for every 50 units.

e. Consider adding a dog run or a designated area where tenants may exercise their pets.

9. Trash Collection
   a. Trash collection area(s) shall be conveniently located in the building interior or exterior for residents and screened from view. Trash enclosures may not be located within the front yard setback, shall be screened from street view, and shall be located away (horizontally and vertically) from operable windows and habitable spaces.
   b. Trash enclosures for dumpsters shall have a concrete pad, CMU walls, and heavy-duty metal gates or durable doors. The gates at exterior trash enclosures shall be located six (6) inches off the ground to improve surveillance into the area to reduce loitering.
   c. Trash enclosures for dumpsters shall incorporate crash rails or curbs to prevent the bins from damaging the walls.
   d. Projects shall have an easily accessible recycling area that serves the entire building or shall provide a separate chute for recycling serving each floor. Trash/recycling areas shall be designed to minimize nuisance to nearby units.
   e. Projects of three (3) stories or more shall have trash and recycling chutes at each floor. Buildings with a ground-floor-only trash and recycling room shall be designed to comply with 2010 ADA Standards.

10. Ease of Maintenance
   a. Avoid using materials, landscaping, fixtures, or construction types that require excessive maintenance.

11. Environmentally Responsive Design
   a. Incorporate ecologically sound design principles that create quality living environments and resilient buildings by using renewable building methods and materials that are low-energy-consuming, non-toxic, site-compatible, and non-destructive to the environment, as much as financially feasible.
   b. Specify building products with recycled content.
   c. Utilize passive solar design principles that support Resilient Design[1] objectives, lower the building construction cost (i.e. smaller HVAC systems), and lower the cost of living for the residents of the building (i.e. lower utility bills). Take advantage of prevailing breeze to allow for natural "through ventilation." Maximize solar access in winter and minimize solar gain during summer. Consider providing exterior glare-controlled summertime direct solar gain protection at south and west windows for all rooms less than 150 SF in area.
   d. Consider elements in the design that provide natural ventilation and temperature mitigated spaces for residents in the event of power outages, or other events requiring sanctuary space for safe congregation of and/or services to residents.

[1] Resilient Design is the intentional design of buildings, landscapes, and communities in response to environmental vulnerabilities.

12. Value Engineering
    a. Integrate value engineering in the design process from the beginning to avoid costly designs and long-term problems from the point of view of the owner, manager, and end users. When value engineering is applied after the design is essentially complete, it typically results in stripping the project of amenities, which might otherwise have been afforded – such as reasonable finishes, landscaping, and materials of higher quality and lower maintenance cost.
    b. Value engineering in the design process must consider a cost-benefit between construction savings in the short-term and the cost of replacement, repair, and maintenance in the long-term. Project teams shall provide a value engineering matrix which documents the value engineering process; the matrix shall include which items were considered for value engineering, which items were chosen to be value engineered, and why items were chosen to be value engineered. The Matrix shall demonstrate that value engineering efforts are based on a 15-year payback period and include replacement, repair, and maintenance considerations.
    c. Minimize the number of different unit types and standardize kitchens and bathrooms whenever possible.

13. Parking
    a. Locate parking towards the rear of the site, where possible, to minimize its impact on the street.
    b. Projects with structured decks shall screen parking with building program elements or shall propose a means to screen the parking.
    c. Projects with at-grade parking below a structured deck shall design the project to the greatest extent possible to take some attention off of the garage.
    d. Parking areas shall be safe and secure environments, consistent with CPTED standards. The design shall minimize the walking distance to the units.
    e. Use landscaping to soften the visual impact of large parking areas.
    f. Unavoidable blank walls facing streets shall have decorative artwork, display cases, or vines, and good quality, durable materials to minimize graffiti and deterioration.
    g. Parking area and overall site shall have adequate and uniformly distributed lighting.
    h. Senior housing developments shall provide for a convenient shuttle bus stop and/or pedestrian drop-off area.

14. Roofs
    a. Roofing shall carry a three-year subcontractor guarantee and at minimum 20-year manufacturer's warranty.

## C. Building Design (Interior)

1. Entry Condition
    a. Provide well-defined, safe entry into building from street and parking area. Utilize transitional elements: steps, landings, porches, lamps, seating, doorways, and lobby area.

b. Provide either a front desk area or a management office near the entryway that controls security for the building, including entry and exits for guests, fire safety system monitoring, and communication with residents.
c. Provide secure entry system (i.e. intercoms, key cards, combination pads, etc.).

2. Common Laundry
   a. Common laundry area shall have one (1) washer and dryer for every 10 units. Senior developments shall have one (1) washer and dryer for every 15 units.
   b. Provide adequate natural light and ventilation.
   c. Provide visibility and access to outdoor recreation space or community room for supervision of children.
   d. Provide a utility sink.
   e. Provide 36" of folding space for every five (5) washers and dryers.
   f. Provide a high degree of visibility from adjacent circulation spaces into the laundry room.

3. Recreation Room
   a. Provide lounge space for residents to informally congregate and to build community, including secure indoor, flexible, recreational space for children (as applicable).
   b. Provide an indoor flexible multipurpose common space that can be used for community meetings and employment activities and include a kitchen area for meal preparation.
   c. Provide a high degree of visibility from adjacent circulation spaces into the recreation room.

4. Unit Access/Corridors
   a. Unbroken length of corridors shall be minimized with length not exceeding 100 feet in any instance.
   b. Provide natural lighting and ventilation in corridors where corridors are adjacent to the exterior envelope
   c. Individualize unit entrances on corridors by recessing unit doorways or through other significant architectural means.
   d. Avoid the use of carpeting in corridors and hallways, keeping long-term maintenance in mind.

5. Building Entrance Areas
   a. Provide a prominent, visible, entry with overhead protection, adequate space for side by side approach/egress, appropriate lighting, and design elements that reinforce project identity.
   b. Provide transitional space, such as an entry porch, to help make the transition from public space to semi-private or private space.

6. Manager's Unit and Office
   a. The manager's unit and office shall be centrally located in order to enhance security for the building residents.

b. Consider providing additional amenities for the manager's unit to attract the best possible manager(s) for the project to assure the long-term success of the project.
c. Provide offices for property management and social service staff.
d. Show how early input from supportive and social service staff in office design and location was included in the design by providing a statement of certification and/or letter from supportive and social service staff.

7. Unit Mix
   a. Locate large family units at building corners to take advantage of the additional exposure to exterior wall areas.

8. Unit Sizes and Standards
   a. Unit sizes shall conform to the standards required by the California Tax Credit Allocation Committee; however, SRO units are not permitted.
   a. The minimum width of a bedroom shall be nine (9) feet.

9. Unit/Room Adjacencies
   a. Room adjacencies between units should be of like functions, as incompatible unit adjacencies, such as laundry rooms or office spaces next to bedrooms, can cause problems including loss of privacy, noise and leakage problems, and conflicts created between neighbors. Should an incompatible unit adjacency exist, the project shall provide a minimum Sound Transmission Class ("STC") rating of 53 (with 55 STC being a higher standard) and/or continuous acoustical caulk.
   b. Laundry rooms shall have a floor assembly with proprietary sound mat to achieve a minimum 57 Impact Isolation Class ("IIC") at this condition.

10. Elevators
    a. All residential buildings with more than three (3) floors of public access (including garage) must have an elevator.
    b. Residential buildings of two (2) or more stories that house seniors or residents with greater mobility needs must have an elevator.

11. Community Room
    a. A minimum of 400 sq. ft. for developments of 15 units.
    b. A minimum of 600 sq. ft. for developments of 16 units or more.
    c. A public restroom is required.

## D. Unit Design

1. Unit Plan Room Relationships, Proportions, and Features
   a. Design circulation to avoid walking patterns that require passing through or across one space to reach another.
   b. Maximize usable space by minimizing circulation, minimizing vestibules and by using appropriate room proportions.
   c. If recycling and solid waste bins are provided, they shall be conveniently located, accessible, and adequate space shall be provided for their storage.

d. Delineate public areas (entry, kitchen, dining, and living rooms) from private areas (bedrooms and bathrooms).
e. Consider locating the kitchen near entry and avoid having the entrance corridor pass through kitchen.
f. Provide distinct areas for dining and living and assure that these areas do not conflict with circulation or entries.
g. Provide (at a minimum) a full bathroom, including lavatory, toilet, and tub/shower (or shower) in each unit.
h. Locate bathrooms in such a way that they are not visible from entry.
i. Consider separating the lavatory from the toilet/tub to allow use by more than one person at a time for bedrooms sharing bathrooms.

2. Light and Ventilation
   a. Seek to maximize day-lighting and natural ventilation.
   b. Kitchens and bathrooms shall have windows wherever possible.
   c. Plant-on mullions are not acceptable.
   d. Consider ways to screen and physically separate ground floor windows from the sidewalk to provide privacy and security by providing screening, landscaping or by other means.
   e. ENERGY STAR exhaust fans shall be installed in bathrooms.
   f. Exterior shading or glare control is recommended for south facing windows.

3. Exterior Unit Doors
   a. Insulated or solid core, flush, paint or stain grade exterior doors shall be made of metal clad or hardwood faces, with a standard one-year guarantee and all six (6) sides factory primed.

4. Windows/Window Coverings
   a. All windows shall be equipped with a National Fenestration Rating Council (NFRC) label (for field inspection) showing the U-value and Solar Gain Coefficient.
   b. Screens shall be provided on all operable windows.
   c. Provide window treatments at all glazed exterior openings. Metal horizontal blinds are not permitted.

5. Kitchens
   a. Provide kitchen facilities appropriate for the household size. Kitchens shall minimally include a refrigerator, a stovetop oven (or stove/oven combination), kitchen sink, and storage cabinets.
   b. Unvented hoods shall not be used.
   c. Range hoods shall be centered over the stove.
   d. Kitchen drawers shall have steel or aluminum ball-bearing drawer slides with a minimum capacity of 75 pounds.
   e. Provide kitchen counters appropriate for household size.
   f. Cabinets with doors shall be provided at all kitchen cabinets (except where cabinets are required to be removed for accessibility). No particle board or medium-density fiberboard (MDF) is permitted, except for shelving.

g. Upper cabinets (or full-height pantries) shall be provided over all countertops installed against a full-height wall. Installation of a cabinet over the kitchen sink is optional.
h. Provide recycling and solid waste bins built into accessible lower cabinets at a minimum of 18”x24”.

6. Appliances
   a. ENERGY STAR appliances are required (whether new or replacement - does not include range hoods).
   b. Stovetop ovens (or stove/oven combination) are required.
   c. Refrigerators are required.
   d. Consider maintenance and care when selecting appliances.
   e. Locate water heater in a place that will reduce damage in case of a leak or rupture.

7. Bathtubs, Shower Enclosures, and Backing Materials
   a. Projects employing cast iron tubs with tile surrounds must install adequate structural reinforcement backing within the wall framing. Shower enclosures must also include reinforcement for the future installation of the fold-down seat.

8. Floor Coverings
   a. For light and medium traffic areas, vinyl or linoleum shall be at least 3/32” thick. For heavy traffic areas, it shall be at least 1/8” thick. A hard, water resistant, cleanable surface shall be required for all kitchen and bath areas. Carpet complying with the U.S. Department of Housing and Urban Development or Federal Housing Administration UMD, or alternatively, cork, bamboo, linoleum, or hardwood floors shall be provided in all other floor spaces.

9. Storage/Closet Space
   a. A clothes closet in each bedroom shall be provided. Bedroom closets shall not be dual purposed to meet other storage requirements.
   b. Provide 5 x 2 ft. minimum primary bedroom closet space per adult assuming two (2) occupants per bedroom, and 5 x 2 ft. minimum closet space per person for other bedrooms.
   c. A multi-use storage closet or closets which total not less than 8 square feet in area shall be provided in all two (2) bedroom and larger units. Multi-use closets shall be equipped with shelving at multiple heights. Closet(s) shall be appropriate for storage of coats, linens, and general items. Multi-use storage closet space may be accommodated within primary bedroom closet space (additional storage area required) in one-bedroom and studio units.

10. Furniture Layout
    a. Ensure that all rooms can be reasonably furnished for the use intended.
    b. Window and wall relationships, and room size and proportion shall be appropriate for furniture layout and circulation.
    c. The dining area shall be of sufficient size to accommodate two chairs per bedroom plus an additional two chairs with an appropriately sized table in family units that are three-bedroom units or larger.

d. Provide furnishings for Homeless and Special Needs units, including at a minimum a bed, dresser, dining table with chairs, a lamp, and window coverings. Please note that No Place Like Home Assisted units shall also include a couch and a coffee table along with the minimum furnishings for Homeless and Special Needs units. If a project combines No Place Like Home funds and other LACDA funds, the No Place Like Home furnishing requirements shall be required. A Furnishings table should be provided within the plans indicating matching furnished plans for these units. Furnished unit plans shall include actual sizing of furnishings to be provided.

11. Finish Materials
    a. Consider using materials that facilitate the performance of routine maintenance tasks by the residents.
    b. Provide low-maintenance, high-durability materials.
    c. Mill finish shall not be used for any exterior exposed aluminum products.

12. Heating and Air Conditioning
    a. Central heating and cooling systems are encouraged. Wall heaters shall not be used in new construction.
    b. Provide air conditioning throughout the building, in residential units, common areas, and offices.
    c. If the project includes ceiling fans in bedrooms or studio units, ENERGY STAR rated fans shall be used.

13. Water Heater
    a. For units with individual water heaters, minimum capacities are to be 30 gallons for one- and two-bedroom units and 40 gallons for three-bedroom units or larger.

14. Communication Wiring
    a. Provide a telephone jack in all bedrooms and in one (1) common area.
    b. Provide infrastructure for broadband internet access to at least (1) location per unit or demonstrate that a broadband internet signal is provided to all areas in each unit. Broadband infrastructure is defined as cables, fiber optics, wiring, or other permanent (integral to the structure) infrastructure - including wireless infrastructure - as long as the installation results in broadband infrastructure in each dwelling unit meeting the Federal Communications Commission's (FCC's) definition in effect at the time the pre-construction estimates are generated.

15. Cable Television
    a. Provide at least one (1) jack in the living room for units with two (2) bedrooms or less.
    b. Provide a minimum of one (1) jack in at least one (1) bedroom plus one (1) jack in the living room for units of three (3) bedrooms or more.
    c. Provide Cable Television Service (CATV) for all developments with basic free service. If free basic service is not provided, a basic television connection must be provided.

## E. Crime Prevention Through Environmental Design (CPTED)

The LACDA supports creating safe neighborhoods through the implementation of CPTED. The basic premise of CPTED is that the nature of buildings and layout of a community can attract offenders and make it easier for them to commit crimes and escape arrest. CPTED focuses on eliminating these features at the design stage to reduce crime and the fear of crime. CPTED compliance is required of all projects. Project teams shall submit required documentation as outlined above.

The five (5) overlapping concepts or strategies incorporated in CPTED are:

1. Access Control
2. Surveillance
3. Territorial Reinforcement
4. Activity Support
5. Image and Maintenance

1. Project design teams shall:
   a. Provide clear border definitions of controlled space.
   b. Clearly mark transitional zones that indicate movement from public, to semi-public, to private space.
   c. Design and locate gathering areas that provide natural surveillance.
   d. Locate indoor and outdoor activity areas at safe locations where natural surveillance and access control is possible.
   e. Design spaces to increase natural surveillance.
   f. Carefully plan a reduced number of entry points.
   g. Place signage at each entry (pedestrian and vehicle) to advise visitors of access restrictions and where they must go if they are authorized to enter your territory (ex: “PRIVATE PROPERTY – Visitors must check in at front desk”).
   h. Eliminate blind spots around the project site where individuals approaching the site cannot be observed.
   i. Include vision glazing for occupant safety for common area spaces (trash rooms, stairwells, laundry rooms, storage) that provides a clear view to all areas of those rooms from adjacent circulation areas, landings, or rooms. This is a requirement that is not related to fire safety requirements and generally will require glazing areas that exceed the 100 sq. ft. in aperture door vision glazing that is typically specified. Where this glazing has fire rating requirements note that rated assemblies are available that provide appropriate view into these spaces.
   j. Include fencing and landscaping to direct the circulation flow of persons to a select observable pathway.
   k. Make sure that landscape plant material will not block windows and eliminate opportunities for natural surveillance.
   l. Plant low vegetation with thorns or other repelling qualities adjacent to first floor windows to prevent outsiders from approaching windows.
   m. Provide good outdoor lighting standards that illuminate pathways evenly and without shadow pockets. Ensure that exterior lighting is uniformly designed. Exterior brightness ratios shall not exceed 10:1 and shall be clearly indicated on a

photometric plan (non-egress) that shows all exterior and courtyard areas of the project.

n. Pre-wire for future surveillance cameras and include, at a minimum, all exterior entries, parking garages, and areas used for public storage. The installation of digital closed-circuit television (CCTV) cameras and recording equipment is recommended. Facial recognition systems are not allowed.

## III. STANDARD ACCESSIBILITY REQUIREMENTS

### A. Mandatory Accessibility Requirements

Applicants are responsible for ensuring their project design team understands and adheres to all applicable accessibility requirements. The LACDA will require project teams to demonstrate adherence to all accessibility requirements as part of the comprehensive design review process to be completed prior to the start of construction. For more information on mandatory accessibility requirements and mandatory project certifications, see the LACDA's Fair Housing and Accessibility Requirements, which are included as a Supplemental Document to the NOFA.

### B. Universal Design Requirements

The LACDA recognizes the need to create living spaces that do not disadvantage any group of residents, accommodates a wide range of resident preferences and abilities, and allow residents to age in place. Universal Design is not a code or standard, but a set of features that shall be integrated into the design of a unit to both meet the needs of residents that require accessibility features and to assist an aging population. The Universal Design Requirements incorporate TCAC Regulations Section 10325(c)(8)(B) – "Enhanced Accessibility and Visitability". For more information on Universal Design Requirements, see the LACDA's Fair Housing and Accessibility Requirements, which are included as a Supplemental Document to the NOFA.

## IV. SENIOR HOUSING REQUIREMENTS

In addition to conforming to the Fundamental Design Requirements, CPTED, Universal Design Principles, and Sustainable Building Methods, applicants are required to integrate Senior Housing Requirements to respond to the specific needs of the senior population. These needs are based upon the recognition of the senior residents' changing physical conditions, the need for design clarity, and accommodation of the wide range of senior residents' mobility and visual perception capabilities. A well-designed Senior Housing development should also support the feeling of community and encourage interaction among its residents through thoughtful and creative design, enhancing the immediate neighborhood.

Senior Housing projects will be evaluated in three (3) basic categories (Mobility, Clarity, and Inclusiveness) that are outlined in the LACDA's Fair Housing and Accessibility Requirements, which are included as a Supplemental Document to the NOFA.

In addition to Mobility, Clarity, and Inclusiveness, design teams may also consider design that aims to optimize senior resident health and well-being with the presence of the novel Coronavirus 2019 (COVID-19), its variants, and other future pandemics or public health crises.

## V. SUSTAINABLE BUILDING METHODS

The LACDA encourages sustainable building methods and efficient developments that take advantage of new renewable energy, energy efficiency, and water-saving technologies and practices. These efforts reduce a project's energy use, water use, and operational costs. All projects must incorporate the Required Sustainable Building Methods items identified below and design teams are encouraged to include additional sustainability measures, as permitted by project budgets.

Both the applicant and the project architect must certify in the initial NOFA application that the items have been included and/or that the sustainability goals have been met or exceeded. To guarantee the fulfillment of approved design and sustainability measures identified during the application scoring process, the LACDA may withhold loan funds until all issues are addressed to the reasonable satisfaction of staff.

### Table of Required Sustainable Building Methods

| REQUIRED SUSTAINABLE BUILDING METHODS |
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| Minimum Energy Efficiency: All Rehabilitation projects must be designed to meet the minimum construction requirements as defined by current TCAC Regulations. |
| Outdoor water conservation measures shall include: |

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|---|
| 1) Specify native or drought-tolerant plants for a minimum of 75% of landscaped area with the exception of edible landscaping.<br>2) Conventional grass/turf shall not exceed 25% of landscaped area.<br>3) Group plants with similar watering needs (hydrozones).<br>4) Install high efficiency irrigation system with smart irrigation controls for all landscaping. |
| The project shall divert a minimum of 70% of non-hazardous construction and demolition debris from landfill either by recycling or by salvage efforts. Note that daily cover at landfill is neither recycling nor salvage for the purpose of this requirement. |
| All projects shall provide an easily accessible recycling area for tenant use that serves the entire building. |