

Ai

Architectural Index

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Architectural Index (Ai)

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This document consists of a series of loosely related policy ‘modules’ that provide detailed policy related support to the OHCS Architectural Standards (OAS) and to other department guidance documents.

The modules in this document are not paginated in a way that allow them to be located by a page number however, they are assembled sequentially in this document as listed below.

Refer to the **OAS Quick-Guide** for a high-level overview of the purpose and use of the Architectural Index and its relationship to the OAS and the funding application process.

Ai Module



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Module: **01.01**

**Baseline
Development Codes
And
Regulations**

Baseline Development Codes & Regulations

01.01-01 Overview

This Ai module covers broadly applicable project development codes and regulations that are mandated by federal, state, and local laws and that apply to all housing development projects undertaken in the State of Oregon irrespective of their association with OHCS funding. Some exceptions to this broad statement of applicability are identified within this Ai module. OHCS requires all applicable codes and regulations to be fully complied with on projects receiving any form of funding assistance from the department.

This Ai module should not be considered a comprehensive list of all laws and regulations that affect design and construction work connected with housing. OHCS requires funding program participants and their development teams to have the full range of knowledge and experience to competently navigate the complex regulatory environment associated with developing publicly subsidized housing.

Related Notes:

i. **OHCS Visitability**

Applies only to projects receiving funding from an OHCS administered program. See Section 01.01-04 of this Module for a more detailed applicability summary.

ii. **OHCS 'Baseline' Accessibility**

Applies only to projects receiving funding from an OHCS administered program. See Section 01.01-05 of this Module for a more detailed applicability summary.

Baseline Development Codes and Regulations are generally categorized as follows and are further defined in Sections 01.01-2 through 01.01-10 and 01.01-13 of this Ai Module:

- State and Local Jurisdiction Development Codes & Regulations
- OHCS Visitability
- OHCS Accessibility
- Federal Regulations Pertaining to Accessibility
- Natural Hazards Mitigation
- Construction Permits

01.01-02 (Reserved)

01.01-03 State and Local Jurisdiction Development Codes & Regulations

The Owner's Project Team is responsible for understanding how the codes and regulations listed in this section apply to their project and for ensuring that they are fully complied with.

1) State of Oregon Building Codes

As adopted and administered by the Department of Oregon Consumer & Business Services, Building Codes Division (BCD) and as applicable to each project.

2) Local Jurisdiction Building/Development Codes, Planning/Zoning Codes, and Other Local Development Related Ordinances and Regulations

Baseline Development Codes & Regulations

Based on the project site's location and the regulatory bodies having jurisdiction thereover and as applicable to each project.

01.01-04 OHCS Visitability

As required and defined by Oregon Revised Statutes ORS 456.506 through ORS 456.514 and Oregon Administrative Rules, Chapter 813, Division 310. Applies only to newly developed rental housing subsidized with funding via one or more programs administered by the Department (OHCS).

Important

Local development code jurisdictions, and/or project stakeholders or funders other than OHCS may have Visitability requirements separate from those identified in this section.

Related Notes:

- i. The excerpt below from OAR chapter 813, division 310 is included below as a quick reference only. The reader is referred to all ORS and OAR references cited in section 02.01-04 of this AI module.

Excerpt regarding applicability from OAR 813-310-0010

These rules [Visitability] apply to the new construction of one or more rental housing units receiving development subsidies from the Department (OHCS) as described in ORS 456.508(7). Covered housing units include Department subsidized townhouses as well as other forms of rental housing. These rules also apply to group homes. These rules do not apply to homeownership housing, to farmworker housing located on a farm or to the acquisition, alteration, renovation or remodeling of existing structures. The Visitability requirements are not the same as federal or state accessibility or adaptability requirements.

- ii. See **813-310-0020**, (17), (b) for applicability exceptions pertaining to projects funded with OHCS Bond Financing.
- iii. **Visitability Related Variance Requests**
Requests for a Variance or "Exemption" from Visitability requirements per ORS 456.513 must be made using OHCS Architectural Standards (OAS) **Form VR**. Form VR is available within the Applicant's project Workcenter.

01.01-05 OHCS 'Baseline' Accessibility

The passage of SB 1576 in the 2026 short legislative session added new Accessibility requirements to multifamily housing projects that use OHCS administered funding for their development. As of the publish date this version of the OHCS Architectural Index, SB 1576 can be accessed here: [SB1576](#). OHCS refers to these new requirements as, **OHCS Baseline Accessibility**.

Baseline Development Codes & Regulations

All OHCS funded new rental housing developments, regardless of the type of OHCS funding in the project, must be designed to comply with the new OHCS Baseline Accessibility requirements.

Scoping requirements for OHCS Baseline accessibility are as follows:

- Requires 5% of dwelling units to be accessible to mobility impaired persons.
- Requires an additional 2% of dwelling unit to be designed to include provisions for sight/hearing impaired persons (units designed with “communication” features).

Accessibility Standard to be Used: 2010 ADA Standards for Accessible Design

Though SB 1576 (2026) refers to 24 C.F.R. part 8, subpart C which, in turn, points to the Uniform Federal Accessibility Standard (UFAS), the department requires that the 2010 ADA Standards for Accessible Design be used in lieu of the UFAS. The department’s required approach is similar to what HUD allows as an approved alternate approach to meeting Section 504 Accessibility requirements on federally funded development projects. For fundamental department and program administrative reasons, the ADA Standards have been deemed by the department to be the required standard to be used to satisfy the requirements of SB 1576 (2026).

In addition to the foregoing, and similar to the HUD approved alternate to the UFAS, the ADA Standards must be deployed in combination with the “exceptions” listed under **section V** of the HUD Notice: 24 CFR Part 8 [Docket No. FR-5784-N-01] 2014-11844.pdf. The subject HUD notice is commonly referred to as the “deeming notice” in which HUD has deemed the 2010 ADA Standards to be an acceptable alternate to the UFAS.

OHCS has deemed that projects complying fully with section 01.01-05 of this Architectural Index Module to be in compliance with the Accessibility requirements of Senate Bill 1576 (2026).

Exception: Preference for Use of the UFAS

Use of the Uniform Federal Accessibility Standard (UFAS) in lieu of the ADA Accessible Standards, may be approved (in writing from the department) when HUD or USDA funding is used in the project. Requests to use the UFAS must be made to the department in writing prior to the development team commencing architectural design of the project.

Operative Date of the Baseline Accessibility Requirement

The Oregon legislature has set an “operative date” for this requirement of January 1, 2027. Prior to this date, OHCS will establish by Rule, policy, or by some other instructional basis, what constitutes compliance with the “operative date”.

01.01-06 Federal Regulations Pertaining to Accessibility

The Owner’s Project Development Team is responsible for understanding how the regulations listed in this section apply to their project and for ensuring that the laws and regulations referenced herein are fully complied with.

1) **Federal Accessibility Regulations Pertaining to All Projects Regardless of how they are Funded:**

Baseline Development Codes & Regulations

a) Fair Housing Act as Amended

Applicable to Covered Multifamily Housing Projects as defined in 24 CFR 100.201).
Implemented by 24 CFR 100.205.

Reference:

Prohibits discriminatory housing practices based on disability and family status. The Fair Housing Act also prohibits discrimination in the sale, rental, and financing of dwellings based on race, color, religion, sex and national origin. The Fair Housing Act establishes seven design and construction requirements for all covered multifamily dwellings consisting of four or more units designed and constructed for first occupancy on or after March 13, 1991. The sections of the regulations that address design and construction issues are 24 Code of Federal Regulations (CFR) 100.205 and some definitions are found in 24 CFR 100.201. Other portions of the regulations that deal with disability issues are in 24 CFR 100.201-.203.¹

b) Titles II and III of the Americans with Disabilities Act (ADA)

Implemented by 28 CFR parts 35 and 36. As applicable.

Reference:

The Americans with Disabilities Act, Titles II and III, may apply to housing. Title II applies to the activities of state and local governments, including housing. Title III applies to places of public accommodation, such as rental and sales offices.¹

c) Specific Considerations Related to the Applicability of **Title II of the ADA** to OHCS Funded projects

Important

Some OHCS funding programs use certain forms of state resources that make projects funded with those resources subject to Title II of the ADA. Title II of the ADA requires application of the ADA Accessible Design Guidelines to some (covered) multifamily residential facilities. Project Owners and Project Architects working on housing development projects funded with OHCS development resources must ensure that they are aware of all types of OHCS funding in the project and, importantly, confirm if any of those funding sources make the project subject to Title II of the ADA.

Additionally, housing development projects that are owned or managed by a Housing Authority (or by any local or state government entity) and are using any form of state or local government resources for the project are subject to Title II of the ADA.

Title II of the ADA requires application of **section 233** of the 2010 (or more current adopted version) of the ADA Standards for Accessible Design. When Title II of the ADA applies to a housing project, it imposes Accessibility scoping and technical requirements that exceed what is required in most multifamily housing projects that are subject only to the Accessibility requirements of Oregon's commercial building code (OSSC).

One or both factors listed below make an OHCS funded project subject to Title II of the ADA:

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- 1) The project has Article XI-Q Bond sourced funding in it such as those using **OHCS LIFT** and/or **OHCS PSH** program resources.
- 2) The project is owned by a **Housing Authority**.

2) Federal Accessibility Regulations and Standards that are Additional to Item 1) of this Section and Pertain Only to Projects using Federal Resources:

The two federal acts listed below require projects that are receiving federal subsidies to comply with the Uniform Federal Accessibility Standards (UFAS).

- a) Section 504 of the Rehabilitation Act of 1973
Implemented by 24 CFR Part 8 as applicable.

Reference:

Section 504 of the Rehabilitation Act bars recipients of federal funds from discriminating on the basis of disability. Section 504, is enforced by HUD. For recipients of funding from HUD, the law requires that in new construction and substantial alterations at least 5% of the housing units are accessible to people with mobility impairments and at least 2% of the housing units are accessible to people with vision or hearing impairments. In addition, Section 504 requires recipients to make reasonable accommodation, including structural changes, so that people with disabilities can use and enjoy housing. Section 504 covers all of the programs and activities of a recipient of federal financial assistance, and has additional requirements beyond those described here.¹

Related Notes:

- i. HUD 'Deeming Notice' Allowing Alternative Standard to UFAS (Federal Register Doc. 2014-11556)

The HUD Alternative Standard to UFAS allows the use of the 2010 ADA Standards for Accessible Design as a safe harbor substitute for the UFAS (some restrictions apply). The Alternative Standard to UFAS applies only to HUD subsidized projects. Projects teams working on projects with USDA Rural Development (RD) funding or other federal agency funding and where use of the UFAS alternative is desired, must first contact RD or the appropriate federal agency to determine if the HUD Alternative Standard to the UFAS is a permissible alternative.

Excerpt from HUD Notice, FR Doc. 2014-11556¹

In March 2011, the Department of Justice (DOJ), pursuant to its coordination authority under Section 504, advised Federal agencies that they may permit covered entities to use the 2010 ADA Standards for Accessible Design (2010 Standards) as an acceptable alternative to the Uniform Federal Accessibility Standards (UFAS)... except for certain specific provisions.

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The HUD Deeming Notice can be accessed, as of the publish date of this version of the Ai, via the following internet web address:

<https://www.gpo.gov/fdsys/pkg/FR-2014-05-23/pdf/2014-11844.pdf>

ii. Application of the UFAS and ICC A117.1 Standards

Though the UFAS and Chapter 11 of the OSSC² (based on the ANSI/ICC A117.1 standard) contain many overlapping or identical Accessibility related provisions there are critical differences. The Project Owner's Architect is expected to be familiar with the differences between the two standards, their applicability to the subject project, and the appropriate integration of the OSSC and UFAS requirements into projects subsidized with federal funding.

b) Architectural Barriers Act of 1968 (ABA) and Uniform Federal Accessibility Standards (UFAS)

Reference:

The Architectural Barriers Act is a general accessibility law that requires buildings owned, leased, or operated by the federal government, and those financed by a grant or loan from the federal government, to be accessible¹.

c) Additional Federal Accessibility Related Resources:

- United State Access Board

The U.S. Access Board can aid with interpretation of the federal laws pertaining to accessibility and can provide technical assistance with respect to approved pathways to achieving compliance with all federal laws and their respective accessibility requirements.

[Contact Us](#)

01.01-07 OHCS Program Specific Enhanced Accessibility (Enhanced Accessibility)

Enhanced Accessibility requirements refer to Accessibility requirements that are OHCS program specific and constitute an added layer (heightened level) of requirements. Not all funding programs have Enhanced Accessibility requirements.

When Enhanced Accessibility requirements apply to a development project, program participants will be made aware of these requirements via the program manual and by the inclusion of a program specific **OAS Form; Program Specific Supplement** in their project Workcenter.

At the time this version of the Ai was published, three OHCS programs had developed Program Specific Accessibility requirements as listed below. Other funding programs may have already or may yet develop Enhanced Accessibility requirements making it important for Applicants to always pay close attention to all applicable funding program requirements that apply at any given time.

- **Low Income Housing Tax Credit (LIHTC)**

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(Applicable only when used as a ‘tiebreaker’ as administered via the Qualified Allocation Plan (QAP))

- **Permanent Supportive Housing (PSH)**
- **Older Adult Housing Program (OAHP)**

01.01-08 Natural Hazards Mitigation

1) General

The department currently looks to the individual local jurisdictions (cities and counties) to define, implement and enforce Natural Hazard risk reduction or resilient building strategies appropriate for each region or jurisdiction. State law requires all jurisdictions to develop and enforce comprehensive plans and implementing ordinances that are in fundamental alignment with Oregon’s Statewide Land-Use Planning Program. Of particular relevance is Goal 7 of the Statewide Land-use Planning Program that calls for local jurisdictions to establish inventories, policies and ordinances that guide local development within and away from areas prone to natural hazards. Unless more stringent requirements apply to the project stemming from item 2 of this section, OHCS regards projects that have been designed and constructed in accordance with all applicable state and local development codes to have satisfied this department expectation.

2) HUD (Federal Funding Specific)

(Reserved)

01.01-09 Construction Permits

The appropriate building permits must be obtained from all required authorities having jurisdiction over the subject project prior to commencing construction.

01.01-10 Development Requirements Imposed by Other Regulatory Entities and Project Stakeholders

Project Partners and/or Stakeholders other than OHCS may have development related requirements in addition to those identified in this AI module. It is the responsibility of the Owner’s Development Team to identify and satisfy all project requirements expected from all project Stakeholders. Examples of other possible project stakeholders that may have development-related requirements include but are not necessarily limited to:

- **United States Department of Housing & Urban Development (HUD)**
Most notably; potential development related limitations stemming from a required NEPA review. Also see section 01.01-13.
- **United States Department of Agriculture (USDA) Rural Development**
- **LIHTC Equity Investor(s)**

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- **Lenders**
- **Other**
(Federal and State government Department, quasi-governmental, and/or private sector funding entities that have an interest in the project).

01.01-11 Reconciling Potential Regulatory Conflicts

It is the responsibility of the Owner and their Development Team to resolve any conflict that may be identified between applicable project requirements to the satisfaction of the entities that administer or enforce the requirements that are conflicting. By default, where project requirements are determined to be in conflict with one another, the more restrictive requirement shall take precedence however, both requirements must remain satisfied.

01.01-12 Project Owner Responsibility for Accurate, Complete, and Appropriate Application of all Applicable Laws and Regulations

The Project Owner is solely responsible for their Development Team's accurate, complete, and appropriate application of all applicable laws and regulations. Where project development related documents are submitted to the department for review and/or for record keeping purposes pursuant to the departments development related funding programs, such submittal of information to the department in no way obligates the department to determine that the documents are correct, complete, or in compliance with applicable laws, regulations and/or requirements established by regulatory entities or project stakeholders outside of OHCS.

01.01-13 Other Regulatory Requirements

Items listed in this section refer to project requirements that may apply depending on the nature of the project and/or the funding being used.

NEPA Review

For projects using or seeking HUD funding assistance via a department administered Program, OHCS is required, as a HUD designated Responsible Entity, to perform an Environmental Review of the project to determine compliance with the National Environmental Policy Act (NEPA) and other related Federal and State environmental laws. The NEPA review can lead to additional project requirements based on the project's projected natural and cultural resource impacts. For more information regarding the NEPA review, contact the OHCS Federal Programs Manager.

State and Federal Prevailing Wage Rate (PWR) Laws

Depending on project characteristics, some affordable housing projects may be subject to Davis Bacon Act and/or State of Oregon Bureau of Labor & Industry (BOLI) labor related requirements. Because these laws are complex and because they can have significant financial and legal impacts on a project, it is important that the Project Owner be clearly aware of when and how these laws apply. An OHCS project

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Analyst or Program Manager can assist in determining the applicability of these laws to a given project or provide guidance on where additional information on applicable labor laws can be obtained.

End Notes:

1. Information cited is from the Fair Housing Accessibility First web site:
<http://www.fairhousingfirst.org/resources/laws.html>
2. OSSC : Oregon Structural Specialty Code

Module: **03.01**



Capital Needs Assessment (CNA)

03.01-01 Overview

When a Capital Needs Assessment (CNA) is required by the department, the required CNA must, at a minimum, comply with the provisions of this Ai Module.

03.01-02 Purpose of the CNA & Department Expectations

Of the several important functions the CNA serves, one of its most critical functions is to provide an independent, neutral party assessment of the existing conditions of the site and its improvements from which a scope of work for the planned rehabilitation will be developed. Because the CNA plays a central role in rehabilitation projects, the department expects a high level of CNA Provider neutrality and objectivity. CNA Provider neutrality and objectivity is essential to the development of efficient, value driven scopes of work and budgets in keeping with the public's and other project stakeholder expectations.

03.01-03 Owner Identification & Coordination of Stakeholder Users of the CNA

Multiple project stakeholders will likely require access and use of the project's CNA making it critically important that all parties interested in the CNA be identified by the Owner prior to engaging a CNA Provider. Each interested party may have a number of unique requirements that will need to be satisfied by the CNA. Further, some interested parties may maintain an approved list of CNA Providers that determine whose services and work products they will accept. Currently, the department does not maintain an Approved Provider List for CNA Providers and requires only that the requirements of this Appendix Section be complied with when CNAs are required by the department.

03.01-04 Importance of Early Project Owner/CNA Provider Contact & Engagement

Capital Needs Assessments are detailed, time intensive capital planning and risk assessment based analyses. The Project Owner is encouraged to make early contact with a qualified CNA Provider to determine appropriate timing and coordination of the needed CNA with the CNA Provider's projected workload. When planning for the CNA it is particularly important to consider potential lead-time impacts due to surges in CNA requests that often coincide with cyclical funding deadlines established by the department and other entities that require CNAs in conjunction with their involvement in housing development and rehabilitation projects.

03.01-05 Baseline Standard

The department requires the CNA to be performed following ASTM E2018-15; Standard Guide for Property Condition Assessments protocols. The ASTM Standard may be exceeded as long as it remains satisfied by the approach taken.

Certain parts of these OHCS CNA Standards contain requirements that are supplemental to those defined in ASTM E2018-15. If a conflict is identified between the ASTM standards and the requirements

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that are unique to OHCS, the more demanding or restrictive requirement is intended and shall be followed.

03.01-06 CNA Provider Qualifications

The CNA Provider must comply with the following Qualification Standards:

- a) CNA Provider Certifications: The CNA Provider must possess a State of Oregon Architect license, a State of Oregon Professional Engineer license, or State of Oregon Commercial Construction Contractor license.

Exception:

The department may, at its sole discretion, accept a provider who does not have one of the required credentials listed under this item provided their qualifications are otherwise deemed acceptable to the department and they have the experience required under item b) of this section. Department acceptance of a provider not meeting the criteria under item a) of this section must be in writing and must occur prior to the project owner's engagement of the CNA provider.

- b) CNA Provider Experience: The CNA Provider must have a minimum of 3 years of previous experience in Capital/Physical Needs Assessment which includes work on at least two projects of similar or greater size, scope, and complexity as the subject project.
- c) CNA Provider Sub-Consultants: Specialized sub-consultants may be used to provide expertise on specific elements of the CNA. All CNA Provider sub-consultant contributors must possess the qualifications required by the specific disciplines or work scopes described in these CNA Requirements or if not specifically defined, then at a minimum, they must have performed similar services on at least two prior projects of similar size, scope and complexity as those proposed for the subject project. CNA Contributors must have entered into a formal prime/sub-consultant contractual relationship with the Principal Provider for the proposed services.
- d) Resume: The CNA must include a resume or brief professional biography for each of the major individual contributors (Principal Contributors) to the CNA including the Principal Provider and any sub-consultants tasked with providing specialized CNA related services. For each Principal Contributor, their resume or professional bio must list a minimum of two prior projects that are similar or greater in size, scope, and complexity to the subject project and in which professional services similar to those being proposed were rendered. The resume or professional bio must also, at a minimum, identify the number of years that the individuals have been performing the services they propose and must identify any pertinent and current licenses they hold including the license number, license expiration date, and the name of the license issuing authority as applicable.

Capital Needs Assessment (CNA)

- e) Identity of Interest: The individuals providing CNA services, and their firms, must not have an identity of interest with the Project Owner, the Owner's property, or any management entity for the property and further must not provide other services (services outside the scope of the CNA, e.g. architectural design, construction, etc.) on the same project. If any pending litigation or claims exist against any of the involved firms or individuals related to their professional service (either as the primary consultant or as sub-consultant), these must be disclosed in writing to the Project Owner and to OHCS prior to engagement of services.

03.01-07 Format of the CNA Report

The CNA report can be organized as deemed most appropriate by the CNA provider but should follow standard industry practices.

03.01-08 Accepted Period of Validity

The CNA must have been originally performed or "updated" no more than 12 months prior to the submission deadline for the CNA Report to the Department. CNA reports that are not more than 12 months old from the original date of the report to the department's deadline for receiving the report do not require updating. CNA reports that are older than 12 months at the time they are received by the department must be updated per section 03.01-09 of these requirements.

03.01-09 CNA Updates

- a) Updates to the CNA, when applicable per c) and d) below, must be performed by a CNA provider with the qualifications required by section 03.01-06.
- b) When updated, the CNA must conspicuously identify that it is an update, it must clearly highlight any changes from the original report, and it must give the date of the update. Additionally, the update must address any new CNA requirements and/or any modifications to the CNA requirements that have taken effect since the CNA was originally prepared.
- c) CNA reports that are originally dated 24 months (730 days) or less prior to the date the report is issued to the department may be a desk-based update provided that maintenance and repair records have been carefully maintained since the time the original assessment was performed. Sufficiency of the records to qualify the CNA for a desk-based update as opposed to a full site review based update will be determined by the department.

Desk-Based Update: Means the assessment does not necessarily require a physical visit to the site, if, in the CNA providers opinion, reasonable assumptions can be drawn from conversations, review of documents, etc. that can occur remotely.

- d) CNAs that are originally dated more than 24 months (730 days) from the date they will be issued to the department must be updated based on a full site-based review of the

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property. In such cases, the degree of site review needed for the update will be determined by the department with the CNA Provider's input. At a minimum, the site-based update must be of sufficient depth and detail to accurately reflect actual current conditions and current replacement reserve needs.

03.01-10 Element and Systems Descriptions and Conditions

The CNA report must include a section dedicated to describing the basic characteristics and current condition of the site and building elements and systems. This section of the CNA report must be based on and/or include the following:

- a) Scope of Review: The CNA must be comprehensive in scope including, but not necessarily limited to, the assessment of the site, site amenities, building envelope, structural system, foundation, electrical/plumbing/HVAC systems, interior finishes and elements, elevators, egress components, fire protection systems, other elements and systems as applicable and appropriate to the unique physical characteristics of each project.
- b) Extent of Access and Inspection: Except for dwelling unit interiors as noted in the exception below, 100% of the building(s) including all interior and exterior spaces to be acquired and/or rehabilitated and all areas of the site must be inspected and included in the CNA. If an area of the building(s) or site cannot be inspected at the time of the scheduled inspection, the CNA must include an explanation for why the areas were not investigated and a rationale given for any assumptions that may be made in the CNA Report regarding the condition of the uninspected areas. The department may, at its sole discretion, require that the uninspected areas be inspected prior to accepting the CNA as being complete. A brief summary that describes the areas that were not observed as part of the building and site inspection must be provided.

Exception (Dwelling Unit Interiors Only):

Inspection of dwelling unit interiors may be limited to **no less than 33%** of the total number of dwelling units within each building however no fewer than 3 units will be inspected in buildings containing four to nine units and 100% of the dwelling unit interiors will be inspected in buildings containing 3 or fewer dwelling units. The inspection of dwelling unit interiors should be divided evenly among all the dwelling unit types present. Care should be taken to ensure the dwelling unit sampling size as required by this section is sufficient to satisfy all stakeholder users of the CNA.

- c) Interviews: Individuals familiar with the site and buildings must be interviewed as part of the CNA. At least two (2) individuals must be interviewed who maintain one or more of the following roles or responsibilities related to the subject property:
 - Owner
 - Property Manager
 - Maintenance Lead
 - Other (In possession of significant and pertinent knowledge of the property)

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All interviews conducted must be documented in the CNA and must include the individual's name, their position/relationship to the property, and the general nature of the information discussed.

- d) Document Review: Documents fundamental to developing a sound understanding of the site and buildings must be requested and reviewed when available as part of the CNA. The ASTM Standard referenced in section 03.01-05 of this Ai Module lists the documents that should be reviewed. Documents recommended for review as listed in the ASTM E2018-15 standard that are not available for review must be disclosed in the document review section of the CNA report.
- e) Pre-Survey Questionnaire: The CNA Provider's Pre-Survey Questionnaire must be completed by the Property Owner or their designated representative, and the completed questionnaire must be included in the CNA Report.
- f) Total Expected Service Life: The CNA must include an estimate of the total expected service life of each of the building and site elements and systems identified.
- g) Remaining Useful Life: The CNA must include an estimate of the remaining useful life of each of the building and site elements and systems identified.
- h) Condition Rating System: The CNA may use any component grading system deemed appropriate by the CNA Provider to describe the condition of the elements and systems identified.

03.01-11 Specific Areas of Interest to OHCS

The specific areas of interest listed below must be addressed by the CNA.

Specialized sub-consultants to the project owner's prime CNA consultant may be necessary to provide the needed general assessment in the areas of focused interest listed below.

- a) Energy and Water Use Assessment: If the subject building(s) are 15 years or older in age (taken from the date of the architect's certificate of substantial completion) the CNA must include an Energy and Water Use Assessment as defined in this Section. The following minimum requirements apply:
 - 1. Energy and Water use assessments must be performed by an Energy Consultant possessing a minimum of three years of experience conducting multi-family housing energy assessment/audits and must have personally conducted energy assessments/audits on at least two (2) prior projects of equal or greater size and complexity as the subject property. A Resume per section 03.01-05, d) demonstrating that the consultant meets department experience requirements must be included in the CNA.

Capital Needs Assessment (CNA)

2. The assessment report must disclose any potential conflicts of interest of the assessment provider or their firm with the project or any member of the Owner's Project Team.
3. The assessment must include interviews with the owner, property manager(s), and maintenance staff about their knowledge or awareness of energy and water efficiency related deficiencies and any indoor air quality issues. A written synopsis of any pertinent information gathered must be included in the assessment report.
4. Extent of Access and Inspection: Refer to section 03.01-10, b) for requirements.
5. At a minimum, the assessment report must describe the general character and condition of the elements listed below relative to their impact on energy and water use efficiency. For each item listed include recommendations for corrective work or element/system upgrades or replacement as deemed appropriate. Where possible, provide a hierarchical rating of the proposed improvements in order of the magnitude of their positive impact on energy/water efficiency or quality of life of the occupants.
 - i. Combustion Appliances.
 - ii. Indoor Air Quality and Ventilation Systems. Include cfm ratings for all kitchen and bathroom exhaust systems in units assessed. Test and describe functionality of clothes dryer venting in all assessed units and in common laundry areas.
 - iii. Building Envelope including, but not limited to, doors, windows, condition of weather resistive barrier (WRB) when visible, insulation type, condition, and R-values for wall, attic, and below floor insulation.
 - iv. Domestic Hot water System.
 - v. Heating and Cooling Systems.
 - vi. Lighting in all assessed dwelling units, all common areas, and all outdoor lighting.
 - vii. Water Use Fixtures in all assessed units and all common areas.
 - viii. Provide a general visual based assessment of the outdoor water use e.g. high/low summer-time irrigation demand, pools, fountains, etc. Generally describe the apparent efficiency/functionality of the irrigation system, if present.
 - ix. Appliances.
 - x. Other Equipment as applicable to the subject property.

Exception:

A waiver of some or all of the energy and water use assessment requirement may be granted by the department when the project constitutes a Change of Use as this term is defined by the Oregon Structural Specialty Code, and where the finished project will meet or exceed current Oregon Energy Code requirements for new

Capital Needs Assessment (CNA)

construction as well as any OHCS Sustainable Design requirements. In such cases, the project owner must submit a Variance Request (OAS **Form VR** which can be obtained in the project Workcenter) justifying a waiver of the Energy and Water Use Assessment/Audit. If approved, the department approved **Form VR** must be included in the CNA.

Important Note Regarding Energy and Water Use Assessments:

Funding Programs such as the department's **Multi-Family Energy Program** (OR-MEP) may have specific Energy Audit requirements that are additional to or may be different from the CNA requirements given in this document. Project's receiving MEP funding must verify current Energy Audit requirements for the program to ensure program compliance is maintained. Should a conflict in the department Energy Audit requirement for a given project occur, the more restrictive of the conflicting requirements will control.

- b) **Accessibility:** The CNA must provide a summary analysis of the property's Accessibility that, at a minimum, addresses the following:
1. A review and assessment of the property for Accessibility compliance and the development of a list in the assessment of any deficiencies observed.
 2. Identification of areas and/or primary building components that have or appear to have received significant prior Accessibility updates and the approximate date that the updates occurred.
 3. Identification of any documented history (or the lack of any history) related to past or current Accessibility related complaints or concerns.
 4. Identification of any limitations of the assessment.
- c) **Environmental Hazards – General :** The CNA must include any observed conditions and/or any related pertinent information gleaned from readily available documentation/reports related to Environmental Hazards including but not necessarily limited to:
1. Evidence of the existence of lead pipes and/or lead-based coatings.
 2. Evidence of the existence of asbestos.
 3. Evidence of excessive levels of mold or evidence of mold conducive conditions.
 4. Evidence of rodent Infestation.
 5. Any other observed environmental hazard-related issue e.g. presence of fuel tanks, fuel leaks, septic system malfunction, etc.
 6. Provide a list of needed/recommended environmental hazard related upgrades in order of importance.
- d) **Environmental Hazards - Radon:** The CNA must include the following with respect to Radon:

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1. The CNA must summarize any observed conditions and/or any related pertinent information gleaned from readily available documentation/reports related to the potential presence of Radon at the site.
2. The CNA must include testing for radon when the site is in a zone showing moderate to high levels of radon presence. The department uses the Oregon Health Authority's (OHA) Online/Interactive Map of Radon Risk Levels in Oregon to determine moderate to high risk areas. At the time of this writing the map can be accessed at the following web link:

<http://www.oregon.gov/oha/PH/HEALTHYENVIRONMENTS/HEALTHYNEIGHBORHOODS/RADONGAS/Pages/zipcode.aspx>

The following standards related to radon testing must be met:

- i) When Testing is Required: Areas of the above-mentioned OHA map shaded in light yellow, yellow, pink, and red are considered to be moderate to high level areas; projects located in these areas must receive testing.

Exception:

Radon testing may be waived at the department's discretion in cases where a Radon Professional (per item iv below) concludes that neither testing nor mitigation is necessary based on a physical inspection of the property, the characteristics of the buildings, and other valid justifications. An example of a valid justification is having only a garage located at grade level that is open to the air or is fully ventilated.¹

Waiver requests should use OAS **Form VR** which can be obtained in the project owner's Workcenter. The waiver request must include a written signed statement/rational by the Radon Professional supporting the request. If approved, the department approved Form VR must be included in CNA.

- ii) Report: The radon test must include a report that summarizes the testing protocol undertaken, the results of the test, and the details of any mitigation deemed by the radon professional to be prudent or necessary.
- iii) Buildings to be Tested: All Buildings containing spaces used by residents and/or residential operations staff must be tested.
- vi) Test Protocol¹: Radon testing must follow the protocols set by the American Association of Radon Scientists and Technologists, Protocol for Conducting Radon and Radon Decay Product Measurements in Multifamily Buildings (ANSIAARST MAMF-2017 (or the most recent edition).
- v) Radon Professional²: All testing and mitigation must be performed under the supervision of a radon professional that is certified by either the American

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Association of Radon Scientists and Technologists (AARST) National Radon Proficiency Program (NRPP) or the National Radon Safety Board (NRSB).

- e) **Natural Hazards – General:** The CNA must include any observed Natural Hazards related conditions as follows:
1. Evidence of previous and/or risk of future impacts of flooding, landslide, high wind, wildfire or other Natural Hazard based on readily observable conditions and/or available documents/reports.
 2. Provide a list of needed/recommended Natural Hazard related upgrades in order of importance.
- f) **Natural Hazards – Seismic Risk:** The CNA must include a narrative risk assessment or mitigation strategy that, at a minimum, includes the following elements:
1. A list of identified seismic risks including structural deficiencies based on the structure's age and construction type.
 2. Any code required upgrades e.g. those that may be driven by a 'Change of Occupancy' or other drivers.
 3. A List of suggested upgrades in order of priority with an estimate of associated costs to remedy.
- g) **Recommendation for Additional Professional Assessment:** The CNA must identify where the CNA Provider feels more specialized professional assessment is needed or recommended particularly with respect to items c) through f) of this section.

03.01-12 Specialized Focused Inspections

- a) **Building Envelope Inspection:**
Some projects are required to provide a specialized Building Envelope Inspection conducted in accordance with Architectural Index Module 03.03. This specialized inspection, when required, can be integrated into the CNA or it can be provided as a separate report.

When a specialized Building Envelope Inspection is required by the department, this requirement is conveyed to the Project Owner via their OHCS project specific Workcenter.

CNA Providers should confirm with their client if the specialized Building Envelope Inspection is required and if so whether the CNA will be tasked with addressing the requirement.

03.01-13 Opinion of Costs to Remedy Physical Deficiencies

The CNA must provide a list of needs with associated costs to remedy broken into the three needs categories given below. Costs given must include current market rate values for materials, labor, and construction contractor profit and overhead.

- a) **Immanent Health & Safety Needs**: The CNA must identify all observed conditions which can be considered an imminent threat to occupant health and safety.

Note:

If serious health and safety issues are identified in currently occupied buildings, the department may require that all such issues be temporarily or permanently addressed to the department's satisfaction prior to offering any conditional award of Program funding.

- b) **Critical Needs**: The CNA must identify all physical needs requiring attention within a 24-month period from the date of the CNA Report.
- c) **Non-Critical Needs**: The CNA must identify all physical needs requiring attention beyond the critical needs window identified in item b) above, and extended out to at least 20 years. Needs in this category must be provided in a schedule type format.

03.01-14 Projected Post Project Completion Analysis of Reserves for Replacement

(Also referred to in this document as a "Capital Plan")

As a later follow-up submission requirement connected with the CNA, the Project Owner will be required to obtain from their CNA provider and submit to the department a Projected Post Construction Reserves for Replacement Analysis (RFR). This analysis will be due to the department later in the funding application process after the project scope has been conclusively determined. The CNA provider will use the finalized scope of work for the project to develop the RFR. This follow-up requirement to the CNA must be factored into the project owner's scope of services agreement with their CNA provider when they procure CNA services for a given project.

The RFR must include an estimate of the initial and ongoing monthly deposit into the replacement reserve needed to support the capital needs of the project for a minimum period of 20 years.

The projected Post Project Completion RFR Analysis must not include items that fall into one of the three operations related areas listed below. Costs associated with the three operations-related areas listed below must be addressed using project operating funds taken from the completed projects operating budget - not from funds reserved for post project completion capital needs.

- 1) Maintenance

- 2) Repair
- 3) Unit Turnover

03.01-14 Photographic Record

The CNA must include color photographs of sufficient detail and extent to adequately record the character and condition of the property.

03.01-15 Other OHCS Requirements

- a) CNA Scope of Services and Fee Proposal to Project Owner
The CNA must include the Scope of Service proposal to the Project Owner including the Fee being charged to the Owner by the CNA Provider. Additionally, the fee must show line-item figures for any specialized sub-consultant contributor's i.e., Energy and Water Use Audit, etc. The department uses this data to stay apprised of industry cost expectations for these services.
- b) Acknowledgement of Compliance with CNA Requirements:
The CNA must include a statement by the Principal Provider **within the executive summary** that indicates that the completed CNA complies with these OHCS CNA Requirements. If an aspect of the department CNA requirements cannot be fully complied with, the required acknowledgement must identify what requirements have not been fully addressed and must include a detailed rationale for the omission or deviation. Omissions of or material deviations in meeting the requirements of these standards must be approved by the Department in writing for the CNA to be considered complete. Timing of such requests should be made well in advance of the projected submittal date to the department so that there is adequate time for the CNA to be revised by the applicant's CNA Provider if deemed necessary by the department.

03.01-16 Small Project CNA

Projects consisting of four (4) or fewer contiguous dwelling units (Small Projects) may elect to have a CNA performed under the requirements of this Section as follows:

- a) The CNA, the inspector, and the inspector's report must address all the same conditions stipulated for the standard CNA with the following modifications:
 - 1. Section 03.01-06, a) is modified to **include an individual in possession of a current Oregon Home Inspector's license.**
 - i) An individual in possession of a current Oregon Home Inspector's license.
 - 2. Section 03.01-06, e) is modified to **remove the Project Architect as an entity not eligible to perform the needed services.**
 - 3. **Exceptions**

The following sections do not apply to the Small Project CNAs:

Section 03.01-10; c), d), e)
Section 03.01-11; a)
Section 03.01-14

- b) It is suggested that the narrative section of the Inspector's report be developed such that it follows the same sequence as that given in these requirements. The inspector is expected to address each required item only to the extent it can be reasonably done with visual inspection of the property. In some cases, the ability to address one or more of the requirements of this section will be limited or may not be possible. Where a required item is deemed by the Inspector to be unachievable or outside the reasonable scope of the inspection, the Inspector may address the requirement by stating in their report the rationale for why the requirement could not be addressed. The overarching goal of the Small Project CNA is to acquire and convey as much critical Rehabilitation scope defining information as possible within a limited investigatory process. As long as the spirit of this goal is reflected in the inspector's work product, the department will allow the inspector wide latitude in how closely the inspection scope and report meets the requirements of this section. The department may require additional investigation based on the content of the submitted Small Project CNA. The department will reject work products it deems to have not meet the spirit and intent of this section.

03.01-17 Partial Exemptions from CNA Requirements

The Department may grant a partial exemption from the CNA requirements for projects that meet the definition of a Substantial Rehabilitation where the hard cost to rehabilitate is 75% or greater than the hard cost to reconstruct completely.

A completed Form VR, located in the Project Owner's Workcenter, must be submitted to the department at the earliest possible date if a variance from the CNA requirements is deemed appropriate or necessary by the Project Owner. The following documentation must accompany the Variance Request:

- a) A brief written description of the project.
- b) A rehab vs complete-rebuild cost analysis deemed acceptable to the department supporting the contention that the project meets the definition of a Substantial Rehabilitation.
- c) A proposal following the numbered format of the CNA requirements that indicates which major elements of these requirements will be provided in the proposed reduced-scope CNA and which ones are proposed to be excluded. A brief rationale must be provided for each item that is proposed to be excluded.

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When reduced-scope CNAs are submitted to the department, they must include the Department approved Form VR and the documentation listed in items a) through c) above to be considered complete.

End Notes:

1. Copied or adapted from HUD's Office of Multifamily Development Radon Policy.
2. Copied or adapted from HUD's Office of Multifamily Development Radon Policy.

Module: **03.02**



Rehabilitation Scope of Work

03.02-01 Overview

When work is planned to an existing structure and when a Rehabilitation Scope of Work is required by the department, the scope of work must, at a minimum, comply with the provisions of this Architectural Index Module.

03.02-02 Scope of Work (SOW) Requirements

Prepare a written Scope of Work (SOW) that addresses all items listed in this section.

1) General Information

- a) Date of the SOW
- b) Project Name
- c) The primary individual who has developed the SOW, their position title, and the name of their organization.
- d) The primary individual who has developed the required Cost Estimate portion of the SOW, their position title, and the name of their organization.

Important Notes:

The SOW must be developed by an individual or entity that is not affiliated with the individuals and/or organization that has or will be providing CNA services on the same project.

It is recommended that the architect that will be preparing the construction documents for the project be engaged to develop the SOW and coordinate that work with the Cost Estimate Requirements prescribed in section 03.02-03.

2) Executive Summary

Provide a brief overview of the scope of the proposed project including a brief rationale for the proposed scope of work. This can be a duplicate statement from the ORCA Application however care should be taken to ensure this statement succinctly and accurately captures the project's general character, scope and intent.

3) SOW Elements List

- a) List and describe each of the major elements of the project by major system or body of work i.e. foundation, building envelope, roof, dwelling unit interiors, site, plumbing etc. This list should be detailed and comprehensive enough to clearly convey to a third party the full scope of the project. Major areas of work can be titled in a way that describes their general purpose like, "envelope replacement" but they must also go further than this by providing a reasonable level of related detail of the system elements affected. For example, the primary building components that will be repaired or replaced should be listed and the scope of work to each item briefly described. In the current "envelope replacement" example, sheathing, siding, windows, water resistive barrier, rainscreen, etc. should be itemized as applicable and the scope of the work related to each item briefly described.
- b) Separate the proposed scope of work list into three categories:

Rehabilitation Scope of Work

- **Category A: Immanent Health & Safety Needs** as identified in the project's CNA; All needs identified as "imminent health and safety" should be included in Category A of the SOW. Imminent health and safety issues are those that pose an immediate and serious threat to health and safety.

The department may require that Category A items be addressed to the satisfaction of the department before considering or approving a funding request.

- **Category B: Critical Needs** as identified in the project's CNA; Critical Needs, for the purpose of the Architectural Index, are those that fall within a two-year needs window and are not already included in Category A (the Immanent Health and Safety Needs category).

It is assumed that all needs identified as "critical" will be included in Category B of the SOW. If the funding applicant deems an item to be incorrectly categorized as such by the CNA provider, the item must still be listed in Category B but must be clearly identified in this list and conspicuously noted as "not deemed to be a Category B item by the project owner".

Items that are not identified in the CNA as being a Critical Need must not be included in the Category B part of the SOW.

- **Category C: Renewal Needs***
Defined as physical needs identified in the CNA that fall beyond the two-year needs window and the project owner has determined are a necessary part of the project scope. Include a Category C in the SOW Elements List even if there are no items that fall in this category. If no items fall in this category, state "none" or "no items".
- **Category D: Owner Identified Needs***
Defined as physical needs that are supplemental to what has been identified in the project's CNA – these are items that are not identified in the CNA.

*Applicable only when the project owner is proposing scope of work items not within the immediate to 2-year needs window per the project's CNA. Include a Category D in the SOW Elements List even if there are no items that fall in this category. If no items fall in this category, state "none" or "no items".

4) Rational for Renewal and Owner Identified Needs

- a) When project scope items are listed in Categories C and D under item 3), b), provide a written rational for why the proposed work should be considered for funding.

5) Rational for Significant CNA and SOW Cost Value Differences

- a) When project costs between the values given in the CNA and the SOW vary significantly, provide an explanation or rationale for the variation.

03.02-03 Cost Estimate Requirements

Prepare a companion Cost Estimate based on the SOW developed per section 03.02-02. The Cost estimate must address all items listed below.

1) Intent

- a) The cost estimate must be developed so it is **directly and easily relatable to the SOW**. This means that costs must be broken down to **correspond directly** with the SOW Elements List developed per section 03.02-02, 3, b).

The manner that scope and cost information is conveyed is up to the preparer, but it must meet the intent of this section.

- b) Estimator Qualifications:

The estimator (individual principally responsible for the estimate) must have at least four (4) years of experience providing commercial and/or multi-family residential construction estimates and;

The estimator must have demonstrable familiarity with the current construction cost environment in the State of Oregon.

2) Documents and Information Relied On

The estimate must identify and briefly describe the design documents or other information that was used to formulate the estimate.

3) Cost Data References

The estimate must indicate what cost data references were used and how costs were derived.

4) Estimate Limitations

The estimate must identify any limitations to the estimate's accuracy including any undefined 'knowns' and any cost escalation risks that the estimator may be aware of based on the documentation provided to them and on their experience with similar projects.

5) Itemized Costs

- a) Separate from the costs that are itemized to correspond with the SOW list of needs, provide itemized cost figures for the following:
 - i. General Conditions
 - ii. Overhead
 - iii. Profit
 - iv. GC's Construction Period Contingency (If included. State "none" if not included).

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- b) If the party that prepared the cost figures has a Schedule of Values or cost estimate format that they normally provide to communicate costs, provide the document as an appended attachment to the SOW. If included with the SOW, this document is not a substitute for providing costs in the SOW in the format as outlined in this Architectural Index module.

6) Escalation

The cost estimate must show costs that include escalation tied to a presumed construction start date (or construction phase mid-point). Include the date used for calculating escalation and identify what point in the construction phase (construction start/mid-point) the date represents. Show a percent figure that was used to adjust current day costs to arrive at the escalated figure.

Module: **03.03**



Building Envelope Inspection

Building Envelope Inspection

03.03-01 Overview

When a Building Envelope Inspection is required by the department, the required inspection must, at a minimum, comply with the provisions of this Ai Module.

For the purposes of this Ai Module, Building Envelope Inspection is considered a more thorough and more focused Building Envelope evaluation than what is typically provided as part of a Capital Needs Assessment (CNA). Though there may be overlaps in the level of assessment covered by a typical CNA and what is expected in a Building Envelope Inspection complying with this Ai Module, the department considers these to be completely separate, non-complimentary assessments.

Inclusion of Building Envelope Inspection as Part of the CNA

When a Building Envelope Inspection is required by the department, it may be conducted either as a formal part of the project's CNA (in lieu of the more general envelope evaluation that is typically included in a standard CNA) or it can be provided as a separate 'stand-alone' assessment and report prepared by a service provider engaged under a separate contract. When the Building Envelope Inspection is included as part of the CNA, it must still meet all the requirements of this Ai Module. This includes the need for the CNA provider themselves or the sub-consultant to the CNA Provider meeting the qualification requirements under section 03.03-04, particularly item b).

03.03-02 Purpose of the Building Envelope Inspection

Specialized Building Envelope inspection provides the Project Owner and the department with an in-depth assessment of this technically complex and risk intense aspect of buildings.

03.03-03 Baseline Standard

(Reserved)

03.03-04 Inspection Provider Qualifications

The Envelope Inspection Provider must comply with the following Qualification Standards:

- a) Service Provider Certifications: The Service Provider must possess a State of Oregon Architect license, a State of Oregon Professional Engineer license, or State of Oregon Commercial Construction Contractor license.

Exception:

The Department may, at its sole discretion, accept a service provider who does not have one of the required credentials listed under this item provided their qualifications are otherwise deemed acceptable to the department and they have the experience required under item b) of this section. Department acceptance of a provider not meeting the criteria under item a) of this section must be in writing and must occur prior to the project owner's engagement of the proposed service provider.

Building Envelope Inspection

- b) Specialized Envelope Inspection Experience: The Service Provider must be in the business of routinely performing specialized envelope inspection work on commercial/multifamily housing facilities as a core service function of their business. The primary individual performing the Envelope Inspection must have a minimum of 3 years of previous experience in specialized building envelope focused inspection which includes work on at least two projects of similar or greater size, scope, and complexity as the subject project.
- c) Identity of Interest: Except for a possible connection with the CNA that has been developed for the subject project, the individuals providing Envelope Inspection services, and their firms, must not have an identity of interest with the Project Owner, the Owner's property, or any management entity for the property and further must not provide other services (services outside the scope of the Envelope Inspection, e.g. architectural design, construction, etc.) on the same project. If any pending litigation or claims exist against any of the involved firms or individuals related to their professional service (either as the primary consultant or as sub-consultant), these must be disclosed in writing to the Project Owner and to OHCS prior to engagement of services.

03.03-05 Required Minimum Scope of Service

At a minimum, the Envelope Inspection must include the following:

- a) Must be a comprehensive inspection and evaluation of the building envelope-related systems including but not necessarily limited to:
- Roofing and waterproofed deck areas and related components
 - Exterior wall system including cladding and related components
 - Attachments to and openings/penetrations in the building envelope
 - Design and condition of joints, junctions, and penetrations
- b) Identification of areas or conditions where building geometry, changes in surface planes, or material transitions have been designed or constructed in a way that makes the condition especially or uniquely vulnerable to water intrusion. Such conditions should be identified even when there is no current evidence of an envelope performance issue.
- c) Identification of any conditions that do not (in the inspector's opinion) meet or exceed current industry-best-practice for materials or methods even when there is no current evidence of an envelope performance issue.
- d) Identification of suspected contributing factors to any vulnerabilities observed such as, but not limited to, poor or inadequate building HVAC design/management, site surface drainage, irrigation management, etc. Crawlspace and attic inspection/evaluation
- e) Identification of suspected contributing factors to any vulnerabilities observed such as, but not limited to, poor or inadequate building HVAC design/management, site surface drainage, irrigation management, etc.

- f) Crawlspace and attic inspection/evaluation
- g) Thermal imaging, as deemed prudent by the inspector
- h) Recommendation for deeper intrusive (targeted deconstructive evaluation/testing), as deemed prudent by the inspector.

03.03-06 Required Deliverable (Report)

The Envelope Inspection service must include development of a written report that details the observations made by the inspector.

The report should include visual and graphical support such as photos and 'red-lined' architectural drawings/diagrams that illustrate the conditions that the inspector is describing in the report.

03.03-07 Format of the Envelope Inspection Report

(Reserved)

03.03-08 Accepted Period of Validity of the Report

The Envelope Inspection must have been originally performed or "updated" no more than 12 months prior to the date the report is submitted to the department. Envelope Inspection reports that are not more than 12 months old from the original date of the report to the Department's deadline for receiving the report do not require updating.

03.03-09 Inspector Proposal for Follow-On Remedial Work Consultation

When deemed prudent by the inspector or as may be requested by the project owner, a follow-on scope of work outline and fee estimate will be developed by the inspector that covers the following general scope:

- a) Development of detailed technical guidance (construction ready details/specifications) sufficient for a construction contractor to develop a construction cost estimate for the recommended work.
- b) Periodic site visits to evaluate contractor performance and provide construction period support to the owner associated with the corrective scope of work.

Module: **04.01**



Construction Cost Estimating

04.01-01 Overview

When a Construction Cost Estimate is required by the department it must meet one of the three types of criteria detailed below. Which type of criteria to be used in preparing the estimate is defined in the department issued request for a cost estimate i.e. a required task issued to the funding program participant via their project specific Workcenter. Where the type of criteria to be used is not identified, the Type I Criteria must be used as a default unless the Type II Criteria or the Type III Criteria has been approved in writing by the Department.

04.01-02 Type I Estimate

(3rd Party Construction Cost Estimate)

Criteria for this type of construction cost estimate are as follows:

1. Cost Estimator Qualifications:

- a) Each key individual participating in the estimating services (estimator) must have at least four (4) years of experience providing commercial and/or multi-family residential construction estimates.
- b) The estimator must have demonstrable familiarity with the current construction cost environment in the State of Oregon.
- c) Identity of Interest: The individuals providing Cost Estimating services, and their firms, must not have an identity of interest with the Project Owner, the Owner's property, or any management entity for the property and further must not provide other services (services outside the scope of Cost Estimate service, e.g. architectural design, construction, etc.) on the same project. If any pending litigation or claims exist against any of the involved firms or individuals related to their professional service (either as the primary consultant or as sub-consultant), these must be disclosed in writing to the Project Owner and to OHCS prior to engagement of services.

2. Cost Estimate Format and Content Requirements:

- a) Estimate Age: The estimate must have been completed or updated by the cost estimator within 45 days of submission to the Department.
- b) Standard to be Followed: The estimate must follow standard industry practices for level of completeness, detail, and content. CSI **MasterFormat** or **UniFormat II** structure for the estimate may be used.
- c) Statement of Estimate Conformity with Department Requirements: The estimate must contain a statement in the estimate introduction that specifically states that the estimate conforms to the requirements of Architectural Index (Ai) Module 04.01.

Construction Cost Estimating

- d) Professional Profile: The estimate must include a Profile section that, at a minimum, includes the following information:
- i. Description of the estimator's firm including size, primary clientele, and services offered.
 - ii. A brief resume/professional bio that includes all professional licenses/certificates held by key personnel and each individual's number of years of construction cost estimating experience.
 - iii. References: Provide a list of at least three prior construction estimating jobs similar in size and complexity to the project that current services are being requested/provided for. Include the names of the individuals for whom the estimates were conducted, the name of their organization, and a contact phone number for each reference.
- e) Estimate Scope and Documents Relied Upon: The estimate must identify and briefly describe the design documents and any other project related documentation that was used to formulate the estimate. Description of the design documents used must include the estimator's assessment of the estimated level of completeness of the documents given in a percent complete figure and must include the date of the subject documents.
- f) Cost Data References: The estimate must indicate what cost data references were used and how costs were derived.
- g) Estimate Accuracy: The estimate must identify any limitations to the estimate's accuracy including any undefined 'knowns' and any cost escalation risks that the estimator may be aware of based on the documentation provided to them and on their experience with similar projects.
- h) Site Costs: Provide a section of the estimate dedicated to site costs with a site related sub-total.
- i) Other Itemized Costs: Provide itemized cost figures for the following:
- i. General Conditions
 - ii. General Overhead
 - iii. Profit
 - iv. Construction Contingency
- j) Escalation: The estimate must include an escalation figure showing projected cost at the projected construction start date. The projected construction cost date must be indicated in the estimate.
- k) Estimate Contingency: The estimate must include an Estimate Contingency section that, as a whole, describes how well the project has been defined at the time the estimate is made (this is not intended to be a Construction Contingency (set-aside for unforeseen costs once construction commences)). The estimate contingency section must, at a minimum, include the following general components:

- i. Generally list and/or describe any aspects of the project where there is high probability that a project cost exists but the source or driver of that cost has not yet been defined in the design documents.
- ii. Provide an Estimate Contingency in the form of a percent figure. This percentage is intended to capture project costs that will occur or are likely to occur based on item [i] above.
- iii. Provide an assessment of the Cost Estimate's Accuracy in terms of a percentage figure (this is different from the percentage figure provided under item [ii] above. This percentage figure represents how far the final construction cost may vary from the subject cost estimate.

04.01-03 Type II Estimate

(Project Team Construction Cost Estimate)

Criteria for this type of construction cost estimate are as follows:

1. Type II Criteria are identical to Type I Criteria with the following exceptions:
 - a) 04.01-02, 1), c) ; Identity of Interest
This exception means that the Type II Criteria estimate may be developed by any individual deemed by the Project Owner to have the expertise and experience necessary to provide cost estimating services sufficient to develop an accurate budget setting figure for the construction of the project. The selected cost estimator must, however, still meet the qualifications required by 04.01-02, 1), a) and b).
 - b) 04.01-02, 2), d) ; Professional Profile

04.01-04 Type III Estimate

(Combined Rehabilitation Scope of Work and Construction Cost Estimate)

Criteria for development of this document is as follows:

1. Type III criteria are identical to Type I criteria with the following exceptions and additions:

Exceptions:

- a-1) **04.01-02, 1), c) ; Identity of Interest**
See additional information on this exception under Section P.1.02b, a).

- a-2) **04.01-02, 2), b) ; Standard to be Followed**

- a-3) **04.01-02, 2), d) ; Professional Profile**

Additions:

b-1) Standard to be Followed for Type III Criteria (Combined SOW/Cost Estimate):

- i. The Combined SOW/Cost Estimate must be combined into a single document that directly relates scope items to their respective cost.
- ii. A method of presenting costs in 'elemental' or functional categories such as that characteristic of the CSI UniFormat II (not to be confused with "MasterFormat") method is required. This places descriptive emphasis on the functional or physical scope attributes of the project and less on the physical materials used.
- iii. The Combined SOW/Cost Estimate must describe and provide costs for all significant systems and assemblies that make up the full proposed scope of the project. Note: The Combined SOW/ Cost Estimate is separate from (a different document from) the 'Opinion of Costs' provided in the CNA.
- iv. The Combined SOW/Cost Estimate must separate the proposed scope into two clearly distinguishable categories as follows:
 - SOW items that are identified in the CNA as falling within the Immediate and/or 2-year needs category and,
 - SOW items that are not identified as immediate or two-year needs in the CNA but the Project Owner has identified as being a necessary or prudent part of the rehabilitation scope.
- v. The Combined SOW/Cost Estimate document must be developed by an individual or entity that is unaffiliated with the individuals and/or the organization that has or will be providing CNA services on the same project.
- vi. The primary individual who has prepared the document and the name of their organization must be clearly identified in the document.

Module: **05.01**



Construction Phase Engagement Requirements

Construction Phase Engagement Requirements

05.01-01 Overview

The Construction Phase Submission Requirements give the department a critical view into the project in two fundamental ways:

- 1) Documents and Communications:
By providing access to certain critical construction administration related documents and including the Department in high-level project management communications, and;
- 2) Construction Site Access:
By providing physical access to the construction site such that the department can periodically observe construction activity and progress.

The Construction Phase of the project begins when construction activity commences.

05.01-02 Project Status Updates

Project Status Updates refer, as a whole, to the Construction Administration (CA) related documents and communications that are required to be sent to the department over the course of the project's Construction Phase.

- 1) Required Documents & Communications
In general, the required documents are the same as those that are routinely transmitted to key members of the owner's project team and other key project stakeholders. The list of documents given below may be modified with written approval given by the department on a case-by-case basis. Adequate rationale for the modification must be provided in writing by the owner's project team. The department may, on a case-by-case basis, request submission of documents that are not listed below.
 - a) Contractor's Application for Payment: Forms AIA G702 (must be signed by the Project Architect) and AIA G703 (a non-AIA G703 equivalent with similar formatting is acceptable).
 - b) Construction Site Meeting Minutes.
 - c) Project Architect's Construction Observation Reports.
 - d) Observation Reports prepared by Sub-Consultants to the Project Architect.
 - e) Special Inspection Reports (as applicable).
 - f) Project Schedule Updates.
 - g) Change Order Request (COR) and Change Order (CO) Log.
 - h) All Change Order Requests (COR)s. (CORs must be issued to the Department for review prior to Project Owner Approval).

Note Regarding Change Orders:

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The department must be notified prior to Owner approval of the COR. Though department approval of CORs is not required, the department maintains the authority to disapprove the use of Program funding on COR line items when the department deems the request to be outside of its expectations for the project. Any department disapproval of CORs will be issued in writing to the Owner's Development Team.

- i) Owner and/or Development Team Knowledge of, or Communications Regarding, a Significant Unforeseen Project Development or Issue. Also see item 4) under this section.
 - j) Other Documents
As deemed necessary or prudent by the department and as requested.
- 2) Timing of Project Status Updates
Except for documents and communications that fall under item 1); i) and j) above, submit Required Documents and Communications listed under item 1) above to the department at the same time they are routinely provided to other key members of the owner's project team and other key project stakeholders. Typically, monthly submittals of project status updates are sufficient unless substantive changes or events such as those falling under item 1), i) under this section and under section 05.01-03 require more frequent communication as a means of keeping the department apprised of important project related developments.

Submit Project Status Update packages per instructions in the project's OHCS Workcenter.

- 3) Owner's Project Team Response to Department Comments/Questions
The department may issue questions or comments to the owner's project team regarding the information provided. The project team is expected to work diligently with the department to resolve any issues or concerns that may be expressed by the department stemming from its review of Project Status Updates.
- 4) Highlighting Important Construction Related Issues
When project Status Update Submissions consist of documents that contain information regarding important project developments/issues/concerns, the Owner's Project Team must also send an email sent directly to the OHCS Construction Manager specifically apprising the department of the development.
- 5) Department Response to Project Status Updates
Unless the status update includes information that has been specifically called out as an issue needing attention or conspicuously identifying or suggesting that a reply is expected, the department will typically not formally respond to routine, periodic updates from the Owner's development team.

05.01-03 Emergent Issue and Project Change Related Communications

The Department requires the Owners project team to promptly and directly notify the OHCS Construction Manager when either of the following occur:

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- 1) Change Order Requests (COR) where the proposed cost of a single item in the request is \$10,000 or more. The department must be notified prior to owner approval of the COR.
- 2) Significant Emergent Issues when the issue can reasonably be considered substantive to a primary project stakeholder such as OHCS. In such cases, the owner's project team will keep the department apprised in a timely manner of the issue's development and the process by which it is being resolved. Periodic and timely reporting on the status of the issue by the Owner's project team will continue until the issue is fully resolved to the satisfaction of the department.

05.01-04 Department Construction Phase Site Visits and Construction Observation

This Section defines the department's Construction Site Access related actions and expectations.

- 1) OHCS Construction Observation Site Visits
At its discretion, the department may conduct one or more Construction Observation visits to the project site during the construction period to determine if the project is being executed in accordance with funding program requirements and expectations. The frequency of site visits and the degree of related project team contact is based on a number project characteristics including, but not limited to, project complexity and applicable funding program requirements.
- 2) OHCS Construction Administration Consultant (CA-Consultant)
 - a) Role of the Department's CA-Consultant
At its discretion, the department may engage a CA-Consultant to assist with construction phase project site visits to observe the construction work. The CA-Consultant is engaged by the department to inform the department on matters of construction progress, quality of workmanship, and general conformance with the department's funding-related conditions. The role of the department's CA-Consultant does not include providing guidance of any kind to the owner's project team. Further, the department's CA-Consultant will not be engaging with the project team in a formal inspection or enforcement related capacity.
 - b) Communications between the CA-Consultant and the Project Team
Some direct communication between the CA-Consultant and the project team is necessary and expected, however care must be taken by both the CA-Consultant and the project team to keep communication within the expected guidelines of the department. The following general communication guidelines must be understood and followed by both parties:
 - i. General:
The OHCS CA-Consultant is under contract with the department to provide Construction Administration support to OHCS only. Any communication regarding the technical aspects of design or construction that may come directly from the CA-Consultant to the project team is strictly unofficial and does not represent the will or the position of the department. Any official communication from the department regarding the project will be issued in writing directly to the project team by department staff.

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ii. Construction Observation Reports:

Construction observation reports that have been generated by the CA-Consultant are for use by the department only. The department may, at its sole discretion, decide to share the CA-Consultant's observation reports with the project team so it has the opportunity to determine if information in the report can be used to benefit the project. When CA-Consultant Observation reports are shared with the project team the following condition applies:

Construction Observation reports written by the department's CA-Consultants may include suggestions or direction on how the design or the construction of the project could be improved. All such suggestions and direction are to be regarded as the personal opinion of the CA-Consultant and do not represent the opinion of the department.

Regardless of the manner in which such opinions are conveyed in the CA-Consultant's reports, the project team is in no way to construe such opinions as de facto improvements to the observed condition, nor as directives from the department, nor as presumptions on the part of the department that such opinions will be followed by the project team.

Any use of the information in the CA-Consultant's Construction Observation Reports by the project team is entirely voluntary and must first be independently deemed by the legally responsible entities who control the design and construction work being performed to be the most prudent approach to be taken.

3) Responding to Department Requests

Based on observations made during site visits by department personnel or a department engaged CA-Consultant, the department may suggest or require clarifications or revisions to the construction documents. The project owner and their project team are obligated by their acceptance of funding from one or more department administered programs to energetically engage with the department in reaching satisfactory resolution to any issues or concerns that may be expressed by the department. Failure to reach satisfactory resolution of department identified issues or concerns may lead to project schedule delays and may jeopardize project funding from the department.

05.01-05 Completion Phase Requirements

(Reserved)