OWNER'S PROJECT REQUIREMENTS

Yagheli Shesh Qenq’a ANPCC I, II, III Renovations

ISSUED FOR RFP

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Contents

Introduction

What is an Owner's Project Requirement Document

Owner's Project Requirements are sometimes referred to as "design intent" or "project intent." The OPR documents all decisions and direction regarding design, construction, acceptance, and operational topics. It includes information to help the Project Team properly plan, design, and construct, and the Owner to operate, and maintain systems and assemblies.

The OPR document evolves through each project phase. As decisions are made during the Design Phase, Construction Phase, and Occupancy and Operations Phase, this document is updated to reflect the current project requirements of the Owner. It is the primary tool for benchmarking success and quality at all phases of the project delivery and throughout the life of the facility.

The OPR aligns interpretations of the building requirements and individual responsibilities for the Owner, designer, contractors, and O&M personnel. This helps avoid misunderstandings of the constructed project's needs.

General organization follows this outline:

- **Project Overview**: High-level description of purpose and processes
- **Project Goals**: Concisely worded list of goals defining success
- **Performance Criteria**: Specific, measurable, verifiable benchmarks that demonstrate achievement of Project Goals

Sources for information and goals specific to the ANPCC Roof Replacement are indicated where applicable in [Brackets] as follows:

[C] Sustainability Charrette
[U] User Group (e.g. at design review meetings)
[F] SCF Facility Planning and Construction Department
[CxA] Commissioning Authority recommendation
[A/E] Architect and Engineer Team
[R] Request for Proposal [previous] RFP SCF-25-1150 or [current] RFP SCF-26-1197

Primary Purpose of the Project

Yagheli Shesh Qenq'a Anchorage Native Primary Care Center provides high-quality health care to Customer Owners throughout the region. The ANPCC consists of three interconnected buildings: PCC I built in 1997, PCC II in 1999, PCC III in 2009. Additions were constructed in 2019 and 2022. The current facility is fully utilized and is experiencing deficiencies documented in a facility condition assessment dated July 23, 2025, specifically related to the building air system and roof assembly. Pressurization, leaks, and aging equipment are among the primary deficiencies to be addressed under the roof replacement portion of this project.

In addition to the primary construction affecting the roof, roof equipment, and boiler plant(s), SCF has identified an opportunity to re-commission the remainder of the facility to address the operational instabilities and deficiencies related to the ventilation system, including hydronic elements within the various systems. Included in the scope of this project is the consolidation of an existing rooftop boiler room on PCC-I to an existing interior boiler room. Intent is to improve

heating system performance and maintenance access while fitting within spatial constraints. Re-commissioning of existing-to-remain HVAC systems will help maximize the efficiency and effectiveness of the ventilation system by focusing on controls and sequences of operation to maintain code required pressurization relationships throughout the interconnected multi-building facility. In turn, other facility deficiencies related to sound levels, energy efficiency, and equipment maintainability shall be considered and addressed throughout the re-commissioning process.

[Added scope June 2026:]

PCC II Level 2 Renovation

The second floor of PCC-II houses Primary Care Family Clinic, Pediatrics Specialty Care Clinic, and an Integrated Care Team (ICT) open office workspace. The Clinics are planned to be renovated to address needs including expanded services such as Procedure Rooms, changes in exam room occupant count, sound privacy concerns, and worn or outdated finishes. The ICT is not included in the renovation scope.

Concept plans anticipate continued occupancy and functionality of the Clinics, necessitating a phased construction approach. Commissioning will coordinate with the phased schedule and advise SCF and the design team on design features that will facilitate commissioning for phased occupancy.

Acoustical Design for sound privacy must include detailed predictive modeling during design, and specification of physical mockups during construction to demonstrate successful achievement of design goals. Phasing of the project must include the mockups in representative spaces within the project boundary.

Completion of the various portions of the project are expected as follows:

- Roof replacement October 2027
- Mechanical Upgrades December 2027
- PCC-II TI February 2028

Commissioning Process

SCF has adopted the building commissioning process as detailed in the ASHE Health Facility Commissioning Guidelines and recommendations from the 2025 IHS A/E Design Guide as their quality-oriented process for determining, achieving, verifying, and documenting that the performance of the facility, systems, and assemblies meets their defined objectives and criteria as defined in this document.

The focus of the commissioning process is on key systems and assemblies, including:

- Life Safety
- Building Automation System with Control Strategies
- Air Handling Units
- Major Mechanical Systems
- Major Electrical Systems
- Backflow Preventer
- Building Envelope Commissioning (Parapets and Roofs)

Not Included are:

- Telecommunication and Television Cable
- Building Security
- Medical Waste Disposal
- Medical Gas and Medical Vacuum Systems

Refer to "Commissioning Program" section of this document for more details.

The Owner is utilizing a third-party Commissioning Authority with a direct contract to the Owner. The scope of work to be accomplished by the Commissioning Authority includes the following key activities:

Design (Roof Replacement [and PCC-II L2 TI added June 2026])

- Facilitate development of the OPR (this document)
- Develop and maintain the Commissioning Plan
- Review Design: Basis of Design, Plans & Specifications (schematic, design development, construction documents), HVAC Control Sequences
- Integrate commissioning process into design documents, including specifications, prefunctional checklists, testing procedures, documentation, and impact of non-compliance
- Attend and Participate in Design Review Bluebeam Sessions and meetings
- Visit Existing Building Site

Construction (Roof Replacement [and PCC-II L2 TI added June 2026])

- Pre-construction Cx kickoff meeting
- Commissioning "milestone" meetings
- Project meetings
- Develop and maintain the Commissioning Plan
- Reviews:

    - Submittals, shop drawings, O&M manuals, Start-up Plan, HVAC Controls, Training Program, TAB report, Record Drawings
- Develop Pre Functional Checklist (PFC) and Functional Performance Test (FPT) forms
- Execute PFCs in phases: Construction site visits and meetings to verify on-going achievement of OPR by contractor
- Execute FPTs: Testing of HVACR & building systems to document Owner's Project Requirement achievement

Occupancy and Operations (Roof Replacement [and PCC-II L2 TI added June 2026])

- Seasonal testing of HVACR systems to document Owner's Project Requirement achievement
- 10-month warranty review
- Lessons-learned meeting

Key Owner's Requirements

Several key OPR have been identified on which the Cx Process will focus that are absolutely critical to the success of this project. These Key OPR descriptions are general in nature and encompass performance criteria and detailed OPR contained throughout this document.

- **Reduce sound and vibration levels propagating through the facility from roof-mounted mechanical equipment and interior ductwork**
- **Decrease air leakage rate through roof assembly**
- **Improve air filtration and air quality throughout the facility**
- **Provide consistent pressurization and code compliant pressure relationships throughout the facility**
- **Mitigate atrium roof snow shedding events**
- **Substantial completion of construction to occur before end of February 2028**
- **Building is to remain occupied throughout duration of construction. Cooperate with all stakeholders to minimize interruptions or day to day disruptions**
- **Relocate PCC-I Boiler room to improve maintenance access and remove spatial constraints of current boiler room**
- **Improve ease of roof access to increase maintenance accessibility**
- **Reduce water and air leakage around existing skylights through roof assembly repairs and improvements**
- **TI-specific goals for PCC-II Level 2 renovation scope: [added June 2026]**
    - **Address Space Programming changes identified in Concept Development**
    - **Address acoustic privacy issues in Exam Rooms**
    - **Address occupant comfort issues identified in questionnaire report**

General Project Description

The roof replacement project has been undertaken to improve the existing facility's performance up to the standards of the owner through project specific owner requirements. This project will enhance the existing facility to meet the needs of the Community and to provide the foundation with a facility that meets the needs of the stakeholders and end users. This project is not only a roof replacement on the existing facility, but is intended to maximize efficiency and performance, improve employee productivity and customer care, and be minimally disruptive to the facility operations.

Size & Scope

The existing facility consists of three (3) building sections, ANPCC I, II, and III. The existing facility has been the subject of recent facility condition assessments and studies, resulting in identifying specific issues that can be addressed through roof replacement, equipment replacement, and re-commissioning of the three facilities collectively. The renovation scope includes work on the roofs of all 3 building sections, as well as re-locating an existing heating plant and mechanical space that is undersized and beyond the end of its useful life. The building has documented issues with air leakage through the existing roof structure, as well as pressurization issues and control issues highlighted by the supporting controls contractor, Johnson Controls.

Careful consideration should be given to customer owners and end users of the facility during construction. The facility has undergone extensive construction projects over the prior 5+ years, and minimizing or eliminating disruptions to the building operations is critical. This effort will include noise disruption, interior access disruptions, parking and exterior building access interruptions, and ventilation/heating system operational interruptions.

SCF building maintenance and Johnson controls have highlighted areas of concern regarding control access and visibility to building equipment operational information. This ongoing issue has affected the performance of existing equipment and the energy efficiency of the facility. Due to the multi-phase construction of the three original structures, the operation of mechanical equipment serving separate areas has yet to be optimized to execute the design sequences of operation without detrimental interference between the separate facilities.

[Added scope June 2026:

The Primary Care Family Clinic and Pediatrics Specialty Care Clinic occupy approximately 14,000 SF of the second floor of PCC-II. The spaces are the last within PCC-II to receive planned renovations to address infrastructure issues and refresh finishes. The Primary Care Clinic has requested a change to larger exam rooms to accommodate extended family participation in appointments. Both clinics also report unacceptable sound transmission between exam rooms. SCF also plans to undertake a comfort survey to identify thermal, odor, or other issues that could be addressed by the TI renovation project.**]**

Figure 1 – Facility Condition Assessment Deficiency Photo – PCC III

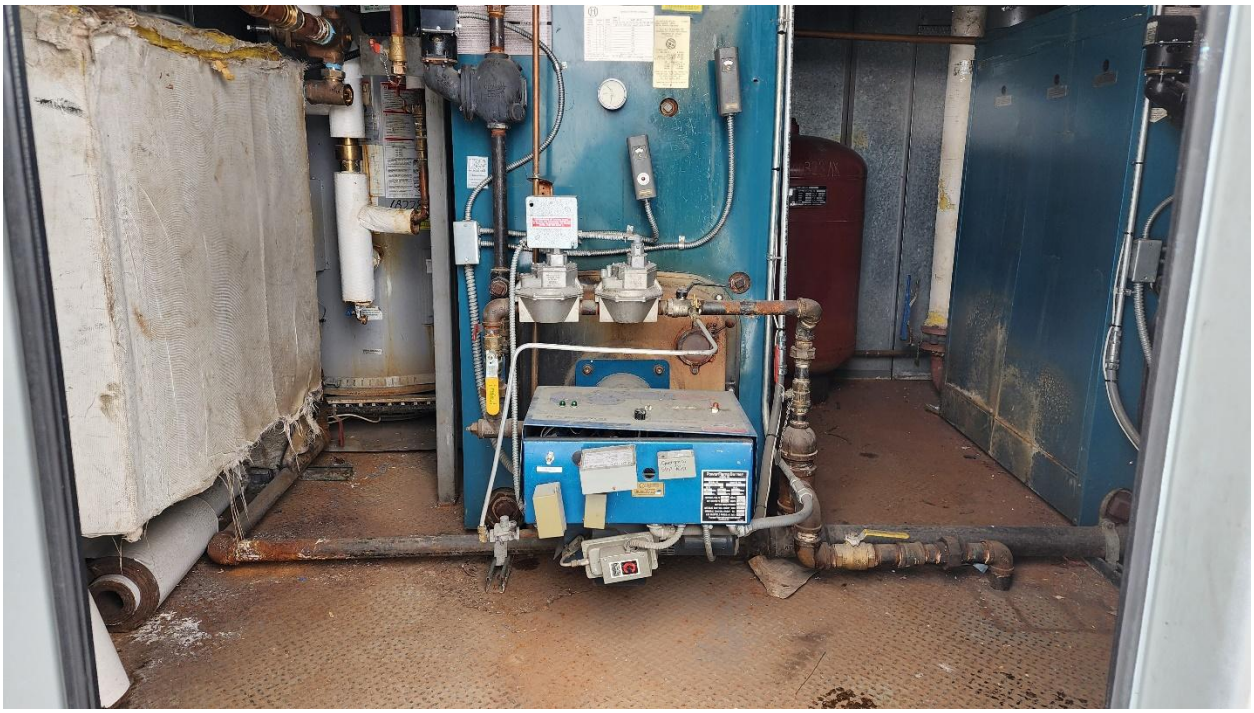

Figure 2 – Facility Condition Assessment Deficiency Photo – PCC I Boiler Room

Restrictions & Limitations

Interior Noise Generation

No specific code requirements have been identified. Quantifiable benchmarks for interior noise and vibration are described in the SCF Design and Construction Standards. SCF desires to avoid creating noise nuisances on the property both during and after construction by limiting work to outside business hours, during nights, and on weekends.

All issues identified in the acoustics report dated 2026-02-10 are to be addressed by this project unless already addressed by SCF.

[Added scope June 2026:

PCC-II L2 has a known noise issue with a transformer in an electric room within the Clinics. SCF is working to resolve this but may require solutions integrated into the TI project. **]**

Applicable Codes and Standards

- State & Local Codes
  - Anchorage Municipal Code **[2024 as of May 2026]**
  - Alaska Administrative Code
- Facility Guidelines Institute (FGI)
  - 2022 Guidelines for Design and Construction of Outpatient Facilities
- ASHRAE Guidelines & Standards
  - Standard 55 - Thermal Environmental Conditions for Human Occupancy
  - Standard 62.1 - Ventilation for Acceptable Indoor Air Quality
  - Standard 90.1 - Energy Standard for Buildings Except Low-Rise Residential Buildings
  - Standard 170 - Ventilation of Health Care Facilities **[2021 edition with all published Addenda is incorporated into 2022 edition of FGI above]**
  - Standard 189.1 - Standard for the Design of High-Performance Green Buildings
  - Standard 189.3 - Design, Construction, and Operation of Sustainable High-Performance Health Care Facilities
  - Standard 202 - Commissioning Process for Buildings and Systems
- American Society of Healthcare Engineers (ASHE)
  - Health Facility Commissioning Guide
- Indian Health Services (IHS) (formal compliance documentation is not anticipated)
  - 2025 Architect Engineer Design Guide (for Commissioning Scope guidance)

Operation and Maintenance Requirements

The facility will be operated and maintained by dedicated maintenance staff along with Contracted assistance. The training and training materials must be sufficient to allow them an understanding of the various components of the system, the interaction between those components, and troubleshooting issues that may arise. Any specific knowledge that the maintenance staff will require must be included in the training materials, including hands-on demonstrations with the equipment. The maintenance team should also be familiarized with the controls and what standard operating ranges would be for the various systems, as well as key indicators of trouble within the system. This shall be specified to be completed by the Contractor during construction.

A system manual will be created for this facility per SCF Division 1 templates. This document will contain maintenance information and standard operating conditions of the system. The system manual will assist the maintenance personnel in properly operating the system within the design conditions and outline regular maintenance required by the system. The systems manual will also contain information on the warranties of the equipment that was installed. The content covered in the system manual does not excuse the trainers from covering content in the training.

The design must also support the transfer of asset management data into SCFs asset tracking software. SCF desires to pursue digital twin BIM for eventual asset management. This project should be developed to start SCF down this path. In the interim, the project's asset data must be delivered to SCF in a format consistent with their current software capabilities.

The design of the system must take the maintenance requirements of the equipment into account. Where possible easy to maintain and straightforward systems are desired to reduce the complexity and need for maintenance. Properly spacing and intelligently locating equipment is essential to promoting maintenance and proper operation of the systems. In addition, the designers must consider limited capabilities of 3rd party vendors when selecting systems and equipment.

Project Goals

The goals defining successful accomplishment of this project are detailed in this section.

Economics: First Cost, Change Orders, Life Cycle Cost

1. Design on budget [F]
2. Minimize Change Orders and delays [F]
3. Minimize Life Cycle Cost [F]

Schedule

4. Substantial completion:
    - Roof Replacement: by October 31, 2027 [F]
    - PCC-II L2 TI: by December 31, 2027 [F] **[added June 2026]**

Environmental: Energy Efficiency and Sustainability

5. Implement energy efficiency measures (EEMs) recommended within the Energy Audit by sizing boilers appropriately for the spaces served, maximizing efficient condensing

operational ranges through robust sequencing and low temperature operation, and targeting greater than 92% boiler efficiency based on manufacturer documentation [F]

Occupant Satisfaction

6. Demonstrate Respect for Community Members both during and after construction [F]
7. Provide a Comfortable and Healthy Working Environment [F]
8. Provide for occupants' Acoustic Privacy [F]
    - Develop detailed acoustic models during design to demonstrate that desired acoustic performance will be achieved using proposed solution(s). **[added August 2026]**
9. PCC-II L2 TI: Address issues identified by SCF resulting from occupant satisfaction survey [F] **[added June 2026]**
10. Reduce operational disruptions during construction, generated at site, and through life of building [F]

Operation & Maintenance

11. Target energy cost index highlighted within Energy Audit [F]
12. Mitigate damage from Atrium Roof snow shedding events [F]
13. Provide Building Systems that require minimal maintenance and are easy to maintain/ operate throughout the life of the building, provide ease of maintenance access for all equipment and appurtenances [F]
14. BAS: **[added/revised August 2026]**
    - Improve BAS communication and operation across building areas by maximizing Johnson Controls' (JCI) control and visibility of equipment on front end BAS software [F]
    - Demonstrate to the Owner, during design, a full understanding and audit of existing points to be re-used and new points to be implemented into the new sequences of operation. [F]
    - Solidify sequences of operation clarity and efficiency for building maintenance staff within the design documents. [F]
    - Adaptive learning algorithms are not allowed without prior Owner review and acceptance. [F]
    - Reduce inconsistent pressurization and ventilation deficiencies using existing and new controls capabilities, develop and implement cooperative sequences of operation with fully coordinated controls strategies [F]
15. BIM: **[added August 2026]**
    - BIM does not currently exist for the existing ANPCC I, II, and III. Create BIM to LOD 200 or greater: Structural, Architectural, and MEP.
    - For PCC-II L2 TI, develop BIM to LOD 350
    - Prepare BIM for eventual capability to interface with SCFs Asset Management software
16. Existing Systems to remain: **[added August 2026]**
    - Clean existing systems: ducts and piping
    - Develop building-wide schematic diagrams of heating, cooling, and ventilation systems to include:
        i) Demonstration of design intent
        ii) Interrelationship of new and existing equipment
        iii) Understanding of energy efficient operational strategies
17. Asset management: **[added August 2026]**
    - Provide asset data in spreadsheet format provided by Owner and filled out by contractor for submission

Program and Services Needs (PCC-II L2 TI) [added June 2026]

Program goals listed below are a reflection of the 10% Concept Design report and were initially developed during Programming and 10% Concept Design Phase. Needs were vetted through multiple rounds of meetings and discussions between the Design Team, Program Directors, and SCF Facility Planning and Construction. [PC; FP]

18. A programming document was developed in the 10% design documents; refer to this document for specific information on requirements to be met. [R]

Construction Process

19. Develop & follow applicable environmental infection control procedures. [F]
20. Develop physical mock-ups within the renovated space that demonstrate to SCFs satisfaction that acoustic transmission design targets will be met.

Life Span, Cost, and Quality

Intent of this section is to clearly document the Owner's expectations for lifespan of materials, cost of construction, and the level of quality desired. By providing this information, unrealistic expectations are mitigated.

Equipment Reliability

SCF expects specified equipment to be high quality and reliable. Avoid cutting-edge technology in favor of time-proven systems, while still utilizing modern equipment. Provide simpler solutions when possible. Provide sufficient redundancy so that equipment is not a single point of failure. Provide equipment from proven manufacturers with support available in Alaska. [CxA]

Building Systems Automation and Flexibility

The Building Automation System shall be Johnson Controls. SCF expects the controls for all building sections to be integrated into a common interface and easily accessible, viewable, and controllable. The existing building uses Johnson Controls monitoring packaged controls integral to the units with little to no controllability, and in some cases indicated unit status not aligning with actual conditions. Use evaluations of the existing capabilities of the packaged controls systems to best integrate existing controls into the new sequences. Establish control sequences during design and specify equipment that is capable of achieving the sequences. [F]

Desired Technologies and Preferred Manufacturers

SCF standards have been developed and finished prior to the design of this project. Variance from these new standards in the existing design must be discussed with the owner before implementing these changes into the design. Specific known preferences are listed below.

a) Boilers: Basis of design shall be high efficiency condensing type with make and model approved by Owner [F]
b) Air handler controls: basis of design shall be Johnson Controls [F]

Budget Considerations and Limitations

Expected budgetary restrictions and considerations are contained in this section.

[see Economics: First Cost, Change Orders, Life Cycle Cost and Economics]

Performance Criteria

The performance criteria on which the project will be evaluated by the CxA Team are included in this section. Each performance criterion is intended to be measurable and verifiable.

Commissioning Program

Benchmarks for performance

1. Successfully demonstrate proper installation and functionality of these systems at minimum:

System & Equipment
Life Safety System
Fire and Smoke Dampers
Building Automation System with Control Strategies
Direct Digital Control (DDC) or Building Automation System (BAS)
Energy Management Control System (EMCS)
Electrical or Pneumatic Controls
Air Handling Unit System
Air Handling Unit including Supply and Return (or Relief) fans (including air pressure adjacency validation)
Exhaust Air Fans
Terminal Units (or VAV boxes)
Diffusers/Grilles (Supply, Return and Exhaust)
Ductwork (Supply, Return, Exhaust)
Chilled and Hot water pumping system
Major Mechanical Systems
Heating Hot Water System including Boiler, Fuel system and Pumps
Chilled Water System including Chiller, Cooling Tower and Pumps
Storm drainage system including roof drains, overflows, and rain leader piping
Major Electrical Systems
Advanced Metering System (TBD)
Renewable Energy System (TBD)
Building Lighting Control System
Backflow Preventer
Potable Water, Fire Sprinkler system, Chiller, Cooling Tower, and Boiler water supply as applicable
Building Envelope Commissioning (Parapets and Roofs)

Problems to avoid

2. Allow sufficient time in construction schedule for automation controls setup and troubleshooting prior to functional testing. [CxA]

Specific occupant requirements

3. Provide nighttime setbacks within sequences of operation that maintain reasonable space temperatures for maintenance and janitorial staff and coordinate proper schedules with Owner prior to functional performance testing. The setback shall allow for building space temperatures to reach specified minimum temperature 65° F or maximum temperature 75° F within 30 minutes.

Economics

Benchmarks for performance

4. Total Construction Budget Cap of $14.5M: program goals must be met.
    - Maintain 10% escalation & contingency in Cost Estimates
    - FF&E is included in Cap
5. Change Orders and delays are minimized
    - Target Maximum of 5% Change Orders
    - Avoid late changes to the design: floor plans fixed after 65%
    - Allow sufficient time in the design phase for review and verification of achievement of the Owner's Project Requirements
6. Minimize Life Cycle Cost
    - Building systems useful life is coordinated with the building life; systems needing replacement within 50 years have a clear path for the work to occur
    - Systems are Commissioned to operate correctly

Problems to avoid

No specific economic-related problems to avoid were identified by the Owner.

Specific occupant requirements

7. Plan for minimal operational disruptions:
    - Anticipate how construction of various areas in the building will affect customer owners and end users to reduce interruptions and noise nuisance

Schedule

The key project milestones are:

Milestone & Estimated Date of Completion	**2025**	**2026**	**2027**	**2028**	**2029**
Design	**2025**	**2026**	**2027**	**2028**	**2029**
Sustainability Charette	~~X~~				
Concept & Program Completed	~~X~~				
OPR Draft Completed	X	X			
Schematic design		X			
Design development		Aug			
95% Construction documents		Nov			
100% Design documents		Dec			
Construction	**2025**	**2026**	**2027**	**2028**	**2029**
Out for Bid			Feb		
All submittals approved			Apr		
Roof replacement complete			Jul		
Major HVACR equipment installed			Sep		
Startup			Sep		
Testing			Sep		
Tuning			Sep		
Substantial completion Roof/Mech			Oct		
Testing/Tuning PCC-II TI			Dec		
Substantial completion PCC-II TI			Feb		

Milestone & Estimated Date of Completion	2025	2026	2027	2028	2029
C.O. & Warranty start date				Jan	
10-month warranty review meeting				Dec	

Environment & Energy

Benchmarks for performance

8. ~~New building meets target Energy Use Index of 115 kBTU/sf~~. **[N/A for ANPCC 2026 project]**
   Building is well-insulated. Target exceedance of IECC (Energy Code) using ASHRAE 189.1 (and 189.3) including Table E-7:

   Table E-7 Example Building Envelope Compliance Values for Climate Zone 7* (I-P)
   (Supersedes Table 5.5-7 in ANSI/ASHRAE/IES Standard 90.1)

Opaque Elements	Nonresidential Assembly Maximum	Nonresidential Insulation Min. R-Value**
Roofs		
Insulation entirely above deck	U-0.027	R-40 c.i.
Metal building [a]	U-0.028	R-10 + R19 + R-13 c.i.
Attic and other roofs	U-0.016	R-71
Walls, above grade		
Mass	U-0.067	R-17.5 c.i.
Metal building	U-0.042	R-11 + R-19 c.i.
Steel framed	U-0.047	R-13 + R-15.6 c.i.
Wood framed and other	U-0.048	R-13 + R-12.5 c.i.
Wall, below grade		
Below-grade *wall*	C-0.060	R-17.5 c.i.
Floors		
Mass	U-0.040	R-23 c.i.
Steel joist	U-0.030	R-49
Wood framed and other	U-0.026	R-38+ R-7.5 c.i.
Slab-on-grade floors		
Unheated	F-0.485	R-20 for 48 in.
Heated	F-0.637	R-20 full slab
Opaque doors		
Swinging	U-0.352	
Nonswinging	U-0.295	

Fenestration	Assembly Max. U	Assembly Max. SHGC	Assembly Min. VT/SHGC
Vertical glazing, 0% to 40% of *wall*			
Fixed	U-0.28	E&W-0.38, S-0.40, N-0.50	1.10 (for all types)
Operable	U-0.34	E&W-0.34, S-0.36, N-0.46	
Entrance door	U-0.60	E&W-0.34, S-0.36, N-0.46	
Skylight, 0% to 3% of *roof*			
All types	U-0.42	NR	NR

10. Minimize infiltration through building envelope
    - Target compliance: ASHRAE 189.1 7.3.1.2 requires 0.20 CFM/SF of envelope (at 0.3 in. H2O = 75 Pa pressure diff) to improve on 90.1
        i) Test per 10.6: WHILE AIR BARRIER IS ACCESSIBLE per ASTM E779, ASTM E1827, ASTM E3158, CAN/CGSB-149.10, CAN/CGSB-149.15, or ISO 9972
    - Minimum compliance: ASHRAE 90.1 5.4.3.1.4 requires 0.35 for > 10,000 SF buildings
        i) Test per ASTM E3158 using 3rd party tester per 4.2.5.1
11. Minimize air leakage at regulated rooms e.g. patient isolation, pharmacy, etc. (USP non-sterile 795) Pressure test for regulated spaces shows minimal leakage. Target 0.35 CFM/SF of room surface area when tested per ASTM E3158
12. Maximize night setback capability; avoid ventilating, heating, and cooling spaces when unoccupied. Sequences of Operation clearly describes rules for applying setbacks.
13. Carbon Footprint: No Specific Target Greenhouse Gas Intensity.

Reduce waste during construction, generated at site, and through life of building
- Design is for long-term, limiting need for future remodel & renovation
- Contractor implements specified waste management requirements including after occupancy
- Selected building materials consider source, reuse, waste, and have a plan for end-of-life

Problems to avoid

15. Inconsistent pressure relationships
16. Condensing boilers should be sized, selected, and sequenced to maximize time operating in condensing mode
17. Minimize new penetrations through roof assembly
18. Air leakage and building envelope performance issues

Occupant Satisfaction

Benchmarks for performance

19. Respect occupants' Acoustic Privacy
    - Design meets 2022 FGI noise criteria 1.2-6.1 Acoustic Design
    - ASHRAE recommendations are followed & met for non-FGI Public vs Private spaces
    - HVAC system acoustics minimize sound transfer
    - PCC-II L2 TI: STC ratings between Exam Rooms meet or exceed STC 40-50 performance targets in Deliverable Summary dated 2026-06-02 **[added June 2026]**

Table 1.2-4: Maximum Design Criteria for Noise in Interior Spaces Caused by Building Systems[1]

Room Type	NC [2, 3]	dBA
Patient Care and Diagnostic Areas		
Multiple-occupant patient care area	45	50
Exam/treatment room	40	45
Procedure room	40	45
Class 2 imaging room	40	45
Operating room[4]	50	55
Class 3 imaging room[4]	50	55
Telemedicine room	30	35
Support Areas		
Medication safety zone	40	45
Testing/research lab, minimal speech	55	60
Research lab, extensive speech	50	55
Group teaching lab	45	50
Public Areas		

Room Type	NC [2, 3]	dBA
Corridors and public areas	45	50
Conference room	35	40
Teleconferencing room	25	30
Auditorium, large lecture room	30	35
Administrative Areas		
Private office	40	45

[1]Additional spaces shall be added based on the building program.
[2]See *Sound & Vibration 2.0*: *Design for Health Care Facilities* for a discussion of room noise rating criteria.
[3]Spaces shall be designed to fall below the maximum values shown in this table with no rattles or tonal characteristics.

Table 1.2-6: Design Criteria for Speech Privacy for Enclosed Rooms and Open-Plan Spaces[1, 2]

Level	Metrics			
Speech Privacy—Closed Plan	**PI**	**AI**	**SII**	**SPC**
Confidential	≥95	≤0.05	≤0.10	60–69
Normal	80–94	0.06–0.20	0.11–0.25	52–59
Defining standard	ASTM E1130	ASTM E1130	ANSI S3.5	ASTM E2638
Speech Privacy—Open Plan	**PI**	**AI**	**SII**	**SPC[3]**
Confidential	Special consideration required[4]			
Normal	80–94	0.06–0.20	0.11–0.25	—
Marginal	60–79	0.21–0.40	0.26–0.45	—
Defining standard	ASTM E1130	ASTM E1130	ANSI S3.5	—

[1]The indicated AI and SII values shall be considered the maximum accepted values. The indicated PI and SPC values shall be considered the minimum accepted values.

[2]Equivalence among these metrics, as indicated, is correlative. Some of the metrics may not be suitable for a particular space. The referenced standards indicate that PI and AI are appropriate for use in open-plan spaces and that SPC is appropriate for closed-plan spaces. The referenced standard for SII indicates it may be used for either type of space.

[3]SPC does not apply to open-plan spaces.

[4]Achieving confidential speech privacy in open-plan spaces may be difficult due to the lack of barriers, low ambient sound levels, increased occupant density, reduced occupant separation, and typical speech levels.

20. Vibration does not exceed FGI 1.2-6.1.7 Design Criteria for Building Vibration.
21. Demonstrate Respect for Community Members
    - Transportation is Efficient across the campus throughout construction
22. Provide a comfortable and healthy working environment.

- Humidity levels maintained per ASHRAE 170 as appropriate per space
- Air Filtration meets applicable requirements of ASHRAE 62.1 (MERV-8 min) and ASHRAE 170 (MERV-8 or -14). Consider MERV-14 minimum for all occupied areas.
- Design includes capacity for MERV-11 outdoor air pre-filters to reduce impact of PM2.5 during events such as wildfire, pollen, and glacial silt. Refer to ASHRAE 62.1 6.1.4.2.
- HVAC system adjusts capacity to Accommodate varying occupancy load including expected future capacity.

23. Reduce spread of disease within facility
    - Airflow rates follow ASHRAE 62.1 or 170 design requirements as applicable
        i) Additional Outside Air supplied (coordinated with energy use goals)
    - Air Cleaning: appropriate measures are provided to improve Indoor Air Quality beyond Industry minimums:
        i) Air filtration ratings exceeded (e.g MERV 14 vs 8)
        ii) UV cleaning provided e.g. at cooling coils
        iii) ~~Ionization provided at each supply air system~~ **[AHU-based ionization should be considered but is not required by SCF Design Standards or specifically for ANPCC] [Consider Ionization for odor control e.g. Soiled Linen rooms] [CxA 6-30-2026]**
    - Negative pressure (AII) room capability is provided for defined set of Exam Rooms
    - Pressure differentials designed into system where required (Procedures, Soiled Linens, etc.)
    - Infection Control Management for Clean Construction Developed & Followed:
        i) PCRA Preconstruction Risk Assessment
        ii) ICRA Infection Control Risk Assessment
        iii) ILSM Interim Life Safety Measures
        iv) IUSM Interim Utility System Measures
        v) WICRA Water Infection Control Risk Assessment

Problems to avoid

24. Disruption in building usage, occupancy, and access during construction process.

Specific occupant requirements

25. Adjust construction schedule to minimize impact on customer owners and end users.

Operation & Maintenance

Benchmarks for performance

26. Energy Utilization Index (EUI)
    - Existing building EUI 165.1 kBTU/SF/Yr.
    - Target EUI 115 kBTU/SF/Yr EUI. [F]
      It is recommended that SCF create a database to track O&M cost across their building portfolio, this can be used to track performance, identify high-cost properties, and establish target O&M costs for new and renovated buildings. [CxA]

Problems to avoid.

27. Pressurization-caused issues with operability of closure-required doors and facilities personnel making changes.
28. Pressurization issues between buildings and within roof assembly due to building pressurizations issues/flaws

Specific occupant requirements.

29. Roofing system and materials complies with SCF standards.
30. Building pressurization and pressure relationships are consistent and within design parameters.
31. Atrium Roof snow shed events do not damage adjacent buildings
32. Building systems have useful life coordinated with the building life.
    - Design includes pathway for eventual replacement of building systems & components.
    - Resilient & robust materials are selected.
33. Building systems require minimal maintenance and are easy to maintain / operate through the life of the building
34. BAS:
    - Graphics are robust and add to understanding of the HVAC system
    - HVAC Sequences of Operation are clear and accomplished the intended task.
    - Existing and new equipment work together smoothly to control building pressure
35. BIM is turned over to SCF Facilities with all required LOD.
36. Ducts and piping are cleaned.
37. Building-wide HVAC diagrams produced and delivered to SCF are robust and add to understanding of the HVAC system.
38. Asset management data is successfully imported into SCFs software.

Program and Services Needs (PCC-II L2 TI) [added June 2026]

39. Room counts, size, and adjacencies align with approved concept documents
40. Specialty Pediatrics: acoustic separation around exam rooms achieves an STC of 40-50 so that normal speech is barely audible.
41. Primary Care: exam rooms increase in size to between 115 and 120 sf and follow the SCF standard Exam room layout.
42. Procedure Room(s) are provided, including supporting infrastructure to meet code and standard requirements, such as:
    - Group E supply air outlets
    - Positive Pressure
    - Radiant heating

Construction Process

Benchmarks for performance

43. Environmental requirements
    - Infection Control Management for Clean Construction Developed & Followed:
      i) PCRA Preconstruction Risk Assessment
      ii) ICRA Infection Control Risk Assessment
      iii) ILSM Interim Life Safety Measures
      iv) IUSM Interim Utility System Measures
      v) WICRA Water Infection Control Risk Assessment

Problems to avoid

44. Acoustic and physical disruptions of the usage and occupancy of the building throughout the construction process.

Specific occupant requirements

45. Construction mockups prove viability of acoustical control design.

OPR Version History

Below is a summary of the changes made throughout the predesign, design, construction, and occupancy and operations activities. This information is critical to understand and document the trade-offs made over time and the resulting impact on the project.

Rev. No.	Date	Description of Revisions
0	12/23/25	Initial version published
1	4/22/26	Additional requirements and project goals specified with more concrete values and guidelines for design team.
2	6/12/26	Added scope for PCC-II L2 TI per OPR scoping meeting 6/10/26
3	6/19/26	Incorporated SCF review markups
4	6/24/26	Incorporated SCF review markups; ready for RFP
5	8/11/26	Incorporated additional SCF review markups; ready for RFP