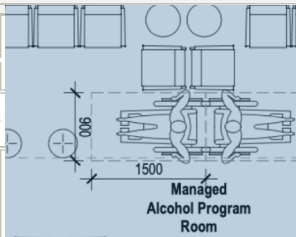


Shelter Design and Technical Guidelines



Prepared by Hilditch Architect Inc. for
Shelter, Support and Housing Administration

2021-01-Y1

Preface

This document has been commissioned and issued by the City of Toronto, Shelter, Support and Housing Administration (SSHA). It is a living document—it will be regularly reviewed and updated over the course of its life to reflect the evolving state of best practice in the design of shelters for people experiencing homelessness within the City of Toronto.

This report was essentially complete in March 2020 just prior to the major impact in Toronto of the COVID-19 pandemic. Since that time, the pandemic has had a significant impact on this city and people depending on the shelter system. For this reason, during 2021, this document will be reviewed and updated every six months to ensure evolving best practices are kept current. Please feel free to submit your thoughts on how these Shelter Design Guidelines might be improved by contacting SSHA at the following email address:

ShelterDesignGuidelines@toronto.ca

SSHA has responded to the COVID-19 pandemic by issuing Directive 2020-01, which updates the Toronto Shelter Standards and the 24-Hour Respite Site Standards to ensure, among other things, that shelter providers maintain physical distancing between beds (or alternative sleeping arrangements), in accordance with public health guidance. These directives may continue to change in response to new information and changing public health guidance about the most effective measures to reduce the spread of COVID-19.

These Shelter Design Guidelines also outline interim recommendations and best practice considerations shown in **purple**, which are based on the currently available public health guidance for reducing the risk of COVID-19 transmission in congregate settings. This additional guidance is located here in the preface and at key locations within the document.

Some of these interim measures may include:

- admission screening spatial requirements, (such as physical distancing), and including additional medical support (such as temperature checks)
- the need to create opportunities for physical separation between individuals, including shelter-users, staff and visitors, within the shelter, through the use of distancing and screening in the following locations
 - distancing of staff & clients in spaces for engagement
 - daily living spaces, including separations within dining areas
 - outdoor amenity spaces
 - specialized program space
 - sleeping areas, including physically-distanced sleeping arrangements, and possible use of impermeable, wipeable barriers of acceptable size, material and robust installation to mitigate exposure to COVID-19, and allow cleaning, while allowing light transmission and view, and potentially greater shelter-user privacy and security
 - washrooms
 - kitchenettes
 - office spaces including screening (and within City-run shelters to deal with City's office modernization program)

- staff break rooms, lunch rooms
- circulation routes
- staff washrooms
- meeting rooms
- central food services
- central laundry services
- the need for enhanced housekeeping practices and Infection Prevention and Control (IPAC) measures, and whether they require additional physical support for specific housekeeping materials
 - additional hand wash stations
 - consideration of touch-down workstations stations & contamination issues
 - consideration of cleaning practices and material needs for high-touch areas such as washrooms
 - possible use of germicidal UV-C, UV-B and anti-bacterial UV-A light for disinfection, with the spatial and electrical implications this will have
- consideration of physical distancing needs associated with the possibility of smaller, perhaps timed, groupings of shelter-users, such as the need for multiple shifts within areas such as dining, which may not support full use due to physical distancing provisions
 - potential needs within multi-use spaces for impact on use

The Ontario Ministry of Health provides guidance that may assist in shelter design and operating considerations in their document “[COVID-19 Guidance: Congregate Living for Vulnerable Populations](#)”, which is subject to periodic update.

Contributors and Acknowledgements

Principal Author:

Hilditch Architect Inc.

Engagement Lead and Editor

SHS Consulting

Contributing Authors:

Jay Pitter

Inclusive Design Consultant

DesignAble Environments Inc.

Accessibility Consultant

SustainGlobe Inc.

Mechanical and Electrical Consultant

Smith + Anderson

Security Consultant

Additional Contributors:

Dr. Karen Ward DVM

Chief Veterinary Officer, Toronto Humane Society

Dr. Aleisha Swartz University of Wisconsin Shelter Medicine

Project Steering Committee:

City of Toronto Shelter, Support and Housing Administration:

Mary-Anne Bedard

Ann Sherret-Peixoto

Irene Gryniewski

Nicole Williams

Morag Perkins

Lorin Carp

Sarah Carino

Justin Lewis

Loretta Ramadhin

Laural Raine

Alexandra Vamos

Anabella Wainberg

Note: all photos by Hilditch Architect Inc. unless noted. The cover design is by the City of Toronto.

We would like to thank the many people who shared their time and expertise in contributing to this document. Contributors include:

Agencies Hosting Shelter Tours:

City of Toronto Family Residence

City of Toronto Robertson House

City of Toronto Women's

Residence

COSTI

Covenant House

Fred Victor

Good Shepherd Centre

Homes First Society

Margaret's

Native Men's Residence Men's Shelter

Native Men's Residence Sagatay

Red Door Family Shelter

Salvation Army Evangeline Residence

Salvation Army Maxwell Meighen

Sojourn House

St. Simon's

YMCA Sprott House

YWCA Toronto First Stop

Woodlawn

Agencies Contributing to Focus Groups:

A large number of agencies and other stakeholders have contributed to the development of this document. We wish to thank them all for their shared insights.

Executive Summary

This document has been commissioned and issued by the City of Toronto, Shelter, Support and Housing Administration as a living document to be regularly reviewed and updated over the course of its life to reflect the evolving state of best practice in the design of shelters for people experiencing homelessness within Toronto.

Today, the number of people in Toronto who are under-housed or homeless continues to grow, amid a housing crisis driven by complex historical, social, economic, and political forces, and made more complex by the current COVID-19 pandemic. The escalation in numbers of people who are experiencing, or at risk of homelessness has reached critical levels.

These Shelter Design Guidelines are intended to enhance, through outlining evolving best practices for the planning and design of shelters in Toronto, positive outcomes and experiences for the community, all shelter-users, staff, and visitors in new and renovated shelters. They are also meant to facilitate designs that promote dignity, comfort, and choice to support shelter users in moving to permanent housing.

The methodology used to develop these Shelter Design Guidelines was based on a collaborative, human-centred engagement process with a diverse group of stakeholders including especially vulnerable groups of people who are over-represented in the shelter system. These Shelter Design Guidelines also try to acknowledge and convey the complex array of structural, cultural and perceptual obstacles faced by Indigenous people, Black people, people of colour, LGBTQ2S+ people and youth who experience homelessness, and to assist the designer in responding to these needs.

The Shelter Design Guidelines outline and present recommendations for the design of shelters in Toronto and provide recommendations from minimum to best practice in shelter design. These recommendations include performance-based criteria and prescriptive criteria, spanning a broad range of areas, from design approaches and principles, through the application of those principles, to specific consideration for sites, functional components of the building, building services, environmental design, materials and finishes. They are of greatest value in the development of new shelters but may also influence design decisions in the renovation of existing shelters. The Shelter Design Guidelines are not intended to retroactively apply to existing shelters.

Table of Contents

Preface	i
Contributors and Acknowledgements	iii
Executive Summary	iv
1 Introduction & Guide	1
1.1. Introduction	2
1.2. Purpose of these Guidelines	2
1.3. Methodology	3
1.3.1. Understanding Current Shelter Design and Use	3
1.3.2. Focus Groups with Stakeholders	3
1.3.3. Incorporating Feedback from Stakeholders	4
1.4. How to Use these Guidelines	5
1.4.1. Guideline Structure	6
1.5. Glossary	8
2 Design Approach & Principles	13
2.1. Inclusive Design Approach	14
2.1.1. The Urgency of an Inclusive Approach for Shelter Design	14
2.2. Design Principles	16
3 Facility Planning	20
3.1. Application of Inclusive Design	21
3.1.1. Inclusive Design Toolkit	21
3.1.2. Self-Reflection for Designers	22
3.2. Application of Design Principles	24
3.3. <i>User-centred Design</i>	24
3.3.1. Trauma-Informed Design	24
3.3.2. <i>Accessible Design</i>	27
3.3.3. Support for Cultural and Spiritual Practices	31
3.3.4. Harm Reduction	32
3.3.5. Support for Pet Ownership	33
3.3.6. Perception and Navigation of Space	36
3.4. Respect and Dignity	39
3.4.1. Create Positive Experiences	39
3.4.2. Enhance Positive Interactions Between <i>Shelter-users</i>	39

3.4.3.	Provide Privacy	40
3.4.4.	Offer Choice	40
3.4.5.	Recognize and Support Individual Identity	40
3.5.	Safety and Security	41
3.5.1.	Create Environments in Which Occupants Feel Safe	41
3.5.2.	Employ CPTED Methodology as Appropriate to Shelters	41
3.5.3.	Coordinate with City of Toronto Corporate and SSHA Divisional Security Policies	43
3.6.	Health and Wellness	44
3.6.1.	Support for Health Services	45
3.6.2.	Wellness and Healthy Buildings	45
3.6.3.	Infection Prevention and Control (IPAC)	49
3.6.4.	Pest Control	57
3.7.	Sustainability	58
3.7.1.	Toronto Green Standard (TGS) Compliance	58
3.7.2.	Greenhouse Gas Emission Reductions	60
3.7.3.	Renewable Energy	61
3.8.	Durability	62
3.8.1.	City Requirements	62
3.8.2.	Durability Plan	63
3.8.3.	Other Durability Considerations	63
3.9.	Resilience	66
3.9.1.	Resilience Measures	66
3.10.	Integration with Local Communities	68
3.10.1.	Integration of shelters with communities	68
3.11.	Flexibility	69
4	Site Design	71
4.1.	Response to Neighbouring Context	73
4.1.1.	Territorial Reinforcement and Placemaking	73
4.1.2.	Sight Lines	75
4.1.3.	Lighting	76
4.1.4.	Architectural Expression	76
4.1.5.	Outdoor Spaces Away from the Street	76
4.2.	Building Entrances	77
4.2.1.	Building Entrances for <i>Shelter-users</i>	77
4.2.2.	Building Entrances for Staff and the Community Space	78
4.2.3.	Service Entrance	78
4.3.	Site Access	79
4.3.1.	Types of Access	79
4.3.2.	Entrance Points and Circulation Routes	80
4.3.3.	Waste Pick-Up	81

4.3.4.	Other Services and Deliveries	82
4.3.5.	Wayfinding	84
4.4.	Outdoor Amenity Spaces	85
4.5.	Landscape	87
4.6.	Parking—Vehicles and Bicycles	88
4.6.1.	Vehicular	88
4.6.2.	Bicycles	88
5	Functional Components	89
5.1.	Welcome Centre	90
5.1.1.	Main Entrance	92
5.1.2.	Waiting Area	93
5.1.3.	<i>Universal Washroom</i>	95
5.1.4.	Reception	95
5.1.5.	Shelter Entrance	97
5.1.6.	Hygiene Suite	98
5.1.7.	Intake Room(s)	102
5.1.8.	Intake Lounge	102
5.1.9.	Intake Laundry	103
5.1.10.	Pet Cleaning Area	104
5.1.11.	Optional Areas	104
5.2.	Shared-Use Areas	106
5.2.1.	Daily Living Spaces	110
5.2.2.	Family Shelter Daily Living Spaces	130
5.2.3.	Case Management	141
5.2.4.	Outdoor Amenity Spaces	145
5.2.5.	Specialized Program Space	152
5.3.	Neighbourhoods	158
5.3.1.	<i>Sleeping Areas</i>	160
5.3.2.	Washrooms	177
5.3.3.	<i>In-Unit Kitchenettes and Kitchens</i>	183
5.4.	Staff Spaces	186
5.4.1.	Staff Roles	186
5.4.2.	Staff Office Space Needs	189
5.4.3.	Office Spaces	192
5.4.4.	Staff Meeting Spaces	196
5.4.5.	Staff Support Spaces	198
5.5.	Community Spaces	203
5.5.1.	On-site Community Services	203
5.6.	Facilities Support Spaces	205
5.6.1.	Central Food Services	206
5.6.2.	Central Laundry Services	219
5.6.3.	Solid Waste Services	224

5.6.4.	Housekeeping Services	228
5.6.5.	Building Service Rooms and Spaces	230
5.6.6.	Facility Storage	232

6 Building Services and Environmental Design 234

6.1. Mechanical Systems 235

6.1.1.	Function and Intent	235
6.1.2.	HVAC System	236
6.1.3.	Ventilation	238
6.1.4.	Plumbing System	241
6.1.5.	Automatic Sprinkler System	244

6.2. Electrical Systems 246

6.2.1.	Lighting System	246
6.2.2.	Receptacle Provisions	247

6.3. Fire Prevention and Awareness 248

6.3.1.	Fire Alarm System	248
6.3.2.	Compartmentalization	248
6.3.3.	Material Selection	248

6.4. IT/Communications 249

6.4.1.	Internet and Data System	249
6.4.2.	Telephone System	250

6.5. Electronic Safety and Security Systems 251

6.5.1.	Methodology	251
6.5.2.	Threat Risk Assessment (TRA)	251
6.5.3.	Codes and Standards	253
6.5.4.	Card Access Control System	253
6.5.5.	Intrusion Detection System	255
6.5.6.	CCTV System	256
6.5.7.	Intercom System	257
6.5.8.	Duress Alarm System	257
6.5.9.	Security Systems Infrastructure	257

7 Materials & Finishes 259

7.1. Floor Finishes 262

7.2. Wall Finishes 265

7.3. Ceiling Finishes 268

7.4. Doors and Frames 270

7.5. Other Systems 272

7.6. Other Issues 274

Bibliography & References 275

1

Introduction & Guide

- 1.1 Introduction
- 1.2 Purpose of these Guidelines
- 1.3 Methodology
- 1.4 How to Use these Guidelines
- 1.5 Glossary

1.1. Introduction

In 2019, the number of people in Toronto who are under-housed or homeless continues to grow, amid a housing crisis driven by complex historical, social, economic, and political forces. The escalation in numbers of people who are experiencing, or at risk of homelessness has reached critical levels.

As part of the City's effort to address this need, Infrastructure, Planning, and Development (IPD) launched in March 2015 by the Shelter, Support and Housing Administration (SSHA), and the subsequent annual Shelter Infrastructure Plans provide the groundwork for a New Shelter Service Model that aims to provide greater capacity to the shelter system while also working to increase options for people who may be ready to transition out of the shelter system into supportive and permanent housing.

1.2. Purpose of these Guidelines

The spatial and technical design of shelters play a key role in supporting the effective operation of the shelter system and its associated services. Informed by an in-depth consultation process, these Shelter Design Guidelines are a living document intended to outline design principles and evolving best practices for the planning and design of new shelters in the City of Toronto, with the following objectives:

- to guide and align the design of new shelters and renovations to existing shelters, to meet the goals of the New Shelter Service Model;
- to enhance positive outcomes and experiences for all *shelter-users*, staff, and visitors in new shelters, well-integrated with and positively contributing to existing communities;
- the inclusion of design criteria in support of equity seeking groups; and
- to facilitate designs that promote dignity, comfort, and choice to support shelter users in moving to permanent housing.

SSHA Categories and Sectors

■ These guidelines are aligned with the City's recognized shelter categories and sectors and specifically address *Emergency Shelters*.

There are multiple categories of accommodation, the first four of which are shelters, for people experiencing homelessness:

- *24-Hour Drop In Centres*
- *24-Hour Respite*
- *Emergency Shelters*
- *Transitional Shelters*
- *Housing*

Shelter categories are further sub-divided by sector. The three sectors defined by the City of Toronto are:

- Adults (over the age of 24)
- Youth (up to the age of 24)
- Family (in family shelters up to 75% of the population may be children)

1.3. Methodology

The methodology used to develop these Shelter Design Guidelines was based on a collaborative, human-centred engagement process.

These Shelter Design Guidelines were developed by an interdisciplinary team including architects, housing development consultants, an inclusive design consultant, an accessibility consultant, mechanical and electrical engineers, a security consultant, and a veterinary consultant.

To create these guidelines, the team combined insights taken from the engagement process with their knowledge of forward-looking, best practice design, as well as research into relevant topics including, shelter and housing models and strategies, literature on equity-seeking groups, trauma-informed design, accessible, inclusive, active design, and infection prevention and control.

1.3.1. Understanding Current Shelter Design and Use

The team reviewed plans and space analysis reports provided by SSHA on 65 existing shelters spanning all shelter categories and sectors within the SSHA portfolio.

Of these, site visits were conducted of 20 existing shelters that represented the spectrum of shelter categories and sectors. The shelters visited covered a diverse range of *shelter-user* groups, services and operation models, building types, and geographic areas, all of which can affect the design and programming of space.

Based on this information, the team gained a detailed understanding of the range of space allocations and design solutions in recent facilities compared to older ones. The team was able to assess how the current portfolio of shelters address the needs of stakeholders and observe what is working well and what improvements should be implemented.

1.3.2. Focus Groups with Stakeholders

The team engaged stakeholders in thirteen focus groups, each relating to a subject area pertinent to the development of the Shelter Design Guidelines. A diverse group of stakeholders, representing the range of roles and functions in the existing shelter system, participated in sessions most relevant to their area(s) of expertise. Specific engagement sessions focussed on the intersecting needs of especially vulnerable groups of people who are over-represented in the shelter system. Focus groups were used to attempt to understand the complex array of structural, cultural and perceptual obstacles faced by Indigenous people, Black people, LGBTQ2S+ people

and youth who experience homelessness. Participants included individuals with lived experience of homelessness (including individuals currently residing in shelters), shelter frontline staff and providers, Shelter, Support and Housing Administration staff, representative of partner organizations, and other individuals with relevant shelter knowledge or expertise.

The focus groups sought expertise and perspectives on current challenges faced in shelters, needs that should be addressed in new shelter design, and best practices that could be applied in future shelters. Findings from the focus groups, on the following key topics, directly informed the recommendations made in the Shelter Design Guidelines. Focus groups were held on the following topics:

- The perspective of Individuals with Lived Experience of shelter use
- The perspective of Indigenous Communities
- The perspective of Black Communities
- The perspective of LGBTQ2S+ communities
- The needs and methods for accessibility for persons with disabilities in shelter design
- Frontline experience in the Adult, Family, and *Youth* sectors
- Infection Prevention and Control (IPAC), Health and Wellness
- Risk, Security and IT including Cameras and Access Control
- Shelter Operations including Food Services, Laundry, Housekeeping, Waste, Shipping/Receiving/Storage, Maintenance, and Building Services
- Energy Conservation, Resiliency, Mechanical & Electrical Design

1.3.3. Incorporating Feedback from Stakeholders

A preliminary draft of these guidelines was circulated, and previously engaged stakeholders and new stakeholders were invited to provide feedback on the content at all levels of detail, from the overarching design principles to functional components and technical matters. This process provided the team an opportunity to ensure that the perspectives heard from all stakeholders during the engagement process were captured in the Guidelines, and that the content of the Shelter Design Guidelines received continuous feedback through its development.

1.4. How to Use these Guidelines

These Shelter Design Guidelines discuss and present recommendations for best practice in the design of shelters in Toronto. They are aligned with SSHA's new Shelter Service Model and informed by the feedback of stakeholders.

Recommendations include performance-based criteria and prescriptive criteria. Guided by feedback from stakeholders, designers are encouraged to seek out opportunities to exceed minimums and strive for best practice wherever possible. Prescriptive recommendations are not intended to limit creativity of innovation but to orient and align designers with important requirements.

Insight into Shelters

The Shelter Design Guidelines are organized into sections that cover an array of information pertinent to shelter design from approach and design objectives, to overarching considerations, through site, areas and rooms, building systems and finally materials and finishes. These Shelter Design Guidelines do not attempt to replace a designer's experience of building or systems design but rather augment it with specific insights related to shelters. They provide specific insights into the people who use shelters and present principles for design that are responsive to their needs.

Throughout this document every attempt is made to provide an understanding of the goals, context and constraints of shelters so that designers are equipped to make decisions which support the best outcomes for *shelter-users*.

Specific Sites and Programs

These Shelter Design Guidelines provide recommendations for shelters without the constraints of specific sites or programs. The recommendations provided must be reviewed and confirmed with the stakeholders for each specific shelter project. Consulting the viewpoints of the shelter's providers, staff, and shelter-users at the outset of, and during the design process will assist in tailoring the recommendations in these Shelter Design Guidelines to the shelter's specific needs and site-specific opportunities.

Authorities Having Jurisdiction

■ The guidance provided in this document does not remove the responsibility of shelter designers and operators for ensuring compliance with all legislation by Authorities Having Jurisdiction, including the Toronto Shelter Standards in its entirety.

Note that references to legislation contained in this document are not exhaustive. All current documents legislating design codes and standards should be consulted, along with these guidelines, and adhered to as required.

Shelter Standards are the requirement for all services and superseded anything recommended in this document.

Sidebar Callouts

These guidelines make use of sidebar callouts that contain information to support the main content of the Shelter Design Guidelines. These sidebars offer contextual information such as operational context, background information, insights gained from the engagement process, etc. that is intended to assist designers in understanding the bases for recommendations.

Other Documentation

Throughout these Shelter Design Guidelines are references to other documents that must be reviewed in conjunction with this content. City of Toronto shelters must adhere to City of Toronto standards. Some examples include:

- Toronto Shelter Standards
- Toronto Accessibility Design Guidelines
- Toronto Green Standard
- TransformTO
- HousingTO 2020-2030
- Infection Prevention and Control for Homeless Service Settings, [current public health COVID-19 guidance on congregate settings](#), etc.

Also, throughout these Shelter Design Guidelines are references to supplementary material that can be reviewed for a deeper understanding of the intent or context of the Shelter Design Guidelines recommendations.

1.4.1. Guideline Structure

The following is a brief summary of the Sections in these Shelter Design Guidelines and their purpose in this document:

Section 1 (current section): Introduction and Guide

This section introduces the purpose of these Shelter Design Guidelines, the methodology used to develop them, and outlines how they should be used.

Section 2: Design Approach and Objectives

This section introduces the design approach and principles that provide a foundation for the design process for shelters and are overarching concepts that inform the remainder of the document.

Section 3: Facility Planning

This section describes common and recurring facility-wide design considerations for the development of shelters.

Section 4: Site Design

Section 4 provides guidelines for site design and the shelter's relationship to the surrounding neighbourhood. It establishes outdoor space and natural features as a priority and establishes relationships between site components and building components.

Section 5: Functional Components

This section outlines the function, intent, location, and design attributes for each functional component (room or area). The components are grouped into functional groupings that establish relationships between different programs in shelter.

Section 6: Building Services and Environmental Design

This section provides guidelines for the environmental design and engineering systems that will be present in shelters.

Section 7: Materials and Finishes

This section provides recommendations for materials and finishes that are suggested for use in shelters.

1.5. Glossary

[Terms defined in the Glossary are italicized throughout the document.]

Accessible - [Term defined in The City of Toronto Accessibility Guidelines (TADG)] Refers to products, devices, information, services, facilities or public spaces that provide for independent, equitable and dignified access for people with disabilities, including but not limited to those with visual, auditory, cognitive and mobility related disabilities. The concept of *accessible design* ensures both “direct access” (i.e. unassisted) and “indirect access” meaning compatibility with a person’s assistive technology. The City of Toronto Accessibility Design Guidelines (TADG) should be referenced for detailed technical requirements for achieving *accessible design*.

Accessible Design - [Term defined by these Guidelines based on the intent of The City of Toronto Accessibility Guidelines (TADG)] Design with the objective of achieving full integration and participation for individuals of all abilities to access their environment indifferent of mobility, sight, hearing or cognitive disabilities. Aligned with the objectives of the Toronto Accessibility Design Guidelines.

Alternative Space Program - [Term defined by the Housing and Homelessness Service Glossary 2019] Provides temporary overnight spaces that are activated only when there are no suitable shelter or other overnight spaces available. Located within existing homeless shelter facilities, often in common spaces or meeting rooms.

Authorities Having Jurisdiction – [Term defined by these Guidelines] Authorities Having Jurisdiction (AHJ) are those persons or agencies charged with regulatory approval over the matters over which they have jurisdiction. These may include all levels of government as well as other parties such as standards bodies. Examples relevant to this document may include municipal level building and planning approvals, fire departments, health departments, provincial fire marshals, and ministries having jurisdiction on such matters as health and safety, building codes, etc. as well as federally on national standards such as environment, energy and greenhouse gas reduction.

Dedicated Sleeping Area - [Term defined by these Guidelines] A space which is a Sleeping Area as its permanent, primary function, this excludes areas that are used for *Alternative Space Programs*.

Dedicated Workstation - [Term defined by these Guidelines] A workstation used by one position all of the time. Where there are staff shifts that change the workstation is used by both shifts.

Design Service Life - [Term defined by CSA S478] The service life specified by the designer in accordance with the expectations (or requirements) of the owners of the building. For given materials and constructions exposed to identical loads, the design service lives for

similar buildings are adjusted depending on the amount and nature of maintenance that the owners commit to carry out during the lives of the completed buildings.

Emergency shelter - [Term defined by the Toronto Shelter Standards] A shelter that is accessible by an individual or *family* experiencing homelessness with or without a referral, with the intention of providing short-term accommodation and the support services required to move clients into housing.

Ensuite Washroom - [Term defined by these Guidelines] A washroom that is entered from a sleeping room or within a *private unit*.

Family - [Term defined by these Guidelines] Two or more people living together as a *family unit*.

Hand Wash Sink - [Term defined by these Guidelines] A sink used for the sole purpose of hand washing with exceptions as noted in Section 3.6.7 Infection Prevention and Control (IPAC), sub section 3.6.7.6 Hand Hygiene. Refer to this section for use, locations and configuration.

Harm Reduction Approach - [Term defined by these Guidelines] Toronto Shelter Standards mandates that shelter providers will have a harm reduction policy and procedures. A harm reduction approach seeks to reduce substance-related harm without requiring abstinence, with a goal of improving health. It is a pragmatic approach, based on humane values, where the dignity of people who use substances is respected, with a primary focus on avoiding potential harm. Refer to [SSHA's Harm Reduction Framework](#) for further information.

High-use area accessible path of travel - [Term defined by these Guidelines, based on the Toronto Accessibility Design Guidelines (TADG)] Refers to a paths of travel that are utilized by a frequent flow of people throughout the course of a day and designed to allow at least 2 persons using mobility devices to pass each other.

Inclusive Approach/ Inclusive Design Approach - [Term defined by these Guidelines] This term is defined in this document to mean a design approach that considers the individuality of those using the shelter system, the challenges they face, the connections between inequity and homelessness, and which seeks to create affirming, supportive spaces to assist in achieving social equity and enhancing access to the essential services that the shelter provides.

Inclusive Design Toolkit - [Term defined by these Guidelines] A term defined in this document which refers to a set of experiences for consideration to offer guidance to designers on how to approach the design of shelters using an Inclusive Design Approach.

In-Unit Kitchenette - [Term defined by these Guidelines] A kitchenette contained within a *private unit* as described in section 5.3.3 *In-Unit Kitchenettes* and Kitchens.

In-Unit Kitchen - [Term defined by these Guidelines] A kitchen contained within a *private unit*

as described in section 5.3.3 *In-Unit Kitchenettes and Kitchens*.

Lived Experience - [Term defined by these Guidelines] A term defined in this document to mean acknowledgement that the representation of the experiences and choices of a given person, and the knowledge that they gain from these experiences and choices, has value and should be considered together with the knowledge gained from more formal training and education.

Multi-Stall Washroom - [Term defined by these Guidelines] A washroom intended for the use of multiple shelter users at the same time, containing more than one plumbing fixture of the same type, with toilets and showers located in stalls.

Neighbourhoods - [Term defined by these Guidelines] *Neighbourhoods* are areas within shelters with a defined perimeter containing groupings of *sleeping areas*, washrooms and other facilities. In large shelters these groupings divide *sleeping areas* into smaller scaled units of living space.

Open Office - [Term defined by these Guidelines] An office space containing workstations separated by access aisles that is open to adjacent work areas, corridors, etc. (Refer to description in 5.4.3).

Personal Space - [Term used in the Toronto Shelter Standards defined specifically in these Guidelines] The floor space dedicated to each bed as recommended by Toronto Public Health to separate clients and decrease the transmission of communicable diseases and required by the Toronto Shelter Standards.

Private Washroom - [Term defined by these Guidelines] A washroom accessed from a corridor intended for the use of shelter users one-at-a-time.

Private Unit - [Term defined by these Guidelines] A *private unit* is a grouping of one or more *sleeping areas*, a washroom and a kitchenette (or kitchen) within a securable perimeter intended for the exclusive use of an individual or *family*.

Respite - [Term defined by the Housing and Homelessness Service Glossary 2019 for 24-Hour Respite Site] Provides essential services to individuals experiencing homelessness in an environment that prioritizes ease of access to safe indoor space. Services provided include resting spaces, meals and service referrals. An allied shelter service that operates on a 24/7 basis.

Shared Office - [Term defined by these Guidelines] An enclosed room which contains the office space of more than one staff persons for use at the same time. This office space can be separated acoustically from all other spaces but workstations within this office have no acoustic separation from each other.

Shelter-user - [Term defined by these Guidelines] A person using the services of a shelter. [Similar to the definition of Client in the Toronto Shelter Standards]

Shower Room - [Term defined by these Guidelines] A washroom containing a shower as its only plumbing fixture]

Sleeping Area - [Term used in the Toronto Shelter Standards, defined more specifically in these Guidelines] A part of a shelter where *shelter-users* sleep, store clothing and personal belongings and conduct related activities which may include resting, reading, being alone, dressing, grooming, accessing, using belongings etc.

Sleeping Room - [The use of the term *Sleeping Room* in these Guidelines is the same as in the Ontario Building Code.] A room meant for sleeping.

Sleeping Room Mix - [Term defined by these Guidelines] The quantity of rooms of each bed count that is provided in the shelter.

Touchdown workstation - [Term defined by these Guidelines] A workstation that is used, as needed, by more than one staff member at a time.

Transitional shelter - [Term defined by the Toronto Shelter Standards] A shelter that is *accessible*, by referral only, to eligible individuals and *families* experiencing homelessness, with the intention of providing longer-term accommodation and specialized supports required to move clients into housing. *Transitional shelter* providers are designated as such in their Operating Agreement.

Unit Mix - [Term defined by these Guidelines] The quantity of units of each bed/crib number that is provided in the shelter.

Universal Washroom - As defined by the Ontario Building Code (OBC) and Toronto Accessibility Design Guidelines (TADG).

Universal Washroom and Shower - As defined by the Ontario Building Code (OBC) and Toronto Accessibility Design Guidelines (TADG).

User-Centred - [Term defined by these Guidelines] Focused on the perceptions, perspectives, and needs of all users including but not limited to *shelter-users*, staff and visitors.

User-Centred Design - [Term defined by these Guidelines] For the purposes of this document, this term is taken to mean a design where users of the building are not forced to change their behaviour and will be a design that accommodates and considers the primacy of their needs.

Youth - [Term used in the Toronto Shelter Standards and in these Guidelines] For the purpose of determining shelter service eligibility, a person who is between 16 and 24 years of age, inclusive.

2-piece washroom - A washroom containing a toilet and a hand wash sink, and a shower or bathtub.

3-piece washroom - A washroom containing a toilet, a hand wash sink, and a shower or bathtub.

2

Design Approach & Principles

- 2.1 Inclusive Design Approach
- 2.2 Design Principles

2.1. Inclusive Design Approach

Design is not neutral¹. Design processes are usually led by small groups of professionals who design spaces based on traditional models of service which uncritically reinforce particular cultural values, power dynamics, and perceptions. A new framework for design which is inclusive demands a more thoughtful approach.

An Inclusive Approach must embrace real complexities of actual people. It is a needs-based design approach that considers the full range of human diversity and is fully coordinated with service delivery. An inclusive approach will create opportunities for collaboration and innovation; it will transcend the built-environment and play a crucial role in achieving social equity.

2.1.1. The Urgency of an Inclusive Approach for Shelter Design

Toronto's 2018 Street Needs Assessment, a point in time count and survey of people experiencing homelessness in Toronto, found that Indigenous peoples,² and other racialized groups,³ continue to be overrepresented in the overall homelessness population, that one in four *youth* experiencing homelessness identify as LGBTQ2S+,⁴ and that 40% of respondents staying in City-administered shelters are refugee/asylum claimants⁵.

A report from the Canadian Observatory on Homelessness published in 2016 found that shelter use has risen among older adults over the last ten years in numbers which cannot be entirely ascribed to an aging population. While men represent the majority of the shelter population, the report also found that more young families, women, and *youth* are encountering homelessness than in the past⁶.

These, and many other statistics, reveal how the intersecting parts of an individual's identity inform their level of housing vulnerability and points to the connections between inequity and homelessness. To serve people experiencing homelessness, shelter design must recognize their individuality, the challenges they face and the pasts they bring with them. Shelter design must actively rethink generic solutions

¹ "Design is not neutral" was a key theme from stakeholder engagements led by inclusive design consultant, Jay Pitter

² City of Toronto, *Street Needs Assessment* (Toronto, 2018): 14, <https://www.toronto.ca/wp-content/uploads/2018/11/99be-2018-SNA-Results-Report.pdf>.

³ Ibid, 19

⁴ Ibid, 23

⁵ Ibid, 18

⁶ Stephen Gaetz, et al., *The State of Homelessness in Canada 2016* (Canada: Canadian Observatory on Homelessness Press, 2016): 32, https://homelesshub.ca/sites/default/files/SOHC16_final_20Oct2016.pdf.

that are alienating, unfriendly, and render people invisible; they should make affirming, supportive spaces which recognize people as individuals. As shelters are an access point for engaging essential services, an inclusive approach is intrinsic to fulfilling their mandate⁷.

⁷ The framework for Inclusive Design in these Guidelines is based on the engagement and discussion led by Jay Pitter

2.2. Design Principles

Informed by an in-depth consultation process with *shelter-users*, shelter staff, and operators, and aligned with key objectives of related City Divisions, the following design principles are a guide for the development of new shelters so that they provide the best outcomes for the people that shelters will serve and other stakeholders.

For each new shelter, its category, sector, objectives, and location will present distinct design challenges and opportunities. *Shelter-users*, staff teams, operators, SSHA, and other City Divisions will have a diverse range of needs and aspirations through which these principles should be evaluated. The goal of providing flexibility in shelter design to allow an evolution to permanent and supportive housing should also be borne in mind.

Further detail for achieving the specifics of each principle is provided in Section 3 of these Shelter Design Guidelines.

I. User-centred Design

Shelter design should be centred on serving the needs of *shelter-users* and staff in an environment which maximizes their agency and wellbeing. Community use space should also be accommodated. Shelter environments should be welcoming, provide full access, and empower participation of diverse users including those of different cultural backgrounds, ages, shapes and sizes, physical, sensory and cognitive abilities, gender identities, needs, and aspirations.

Specifically, they should:

- be welcoming (home-like and not institutional)
- be equitable and serve specialized needs
- support the needs of persons who have experienced trauma;
- be *accessible*;
- provide support for cultural and spiritual practices; and
- build confidence, independence and agency through the perception and navigation of space.

II. Respect and Dignity

Shelter-users should have access to supports and services in a manner that respects users' individuality and protects and enhances their dignity.

Specifically, they should:

- create positive environments for *shelter-users*, staff and visitors;
- enhance positive interactions between *shelter-users*;
- provide privacy;
- offer choice; and
- recognize and support individual identity and need.

III. Safety and Security

One of the common experiences of being homeless is a sense of precariousness, and a lack of personal safety. Safety is also about feeling welcomed into a community, which highlights the importance of community engagement in the early shelter design process. Shelters should create space for positive, safe relationships between *shelter-users* and staff and the community too. A safe environment will create opportunities for building and supporting trusting relationships between *shelter-users* and with shelter staff and the neighbouring community.

Specifically, the shelters should:

- be environments in which the community, *shelter-users*, visitors and staff feel safe;
- employ Crime Prevention Through Environmental Design (CPTED) methodology as appropriate for shelters; and
- be coordinated with the City's security policies as applicable.

IV. Health and Wellness

Health and wellness are an important focus within shelters. Many *shelter-users* may experience poor health due to their lack of regular access to healthcare, their past histories, and their current life circumstances.

Specifically, the shelters:

- support the provision of health services;
- be environments of wellness for all building occupants;
- be healthy buildings;
- support measures for infection prevention and control; and
- support harm reduction approaches to service delivery.

V. Sustainability, Durability and Resiliency

Shelters should be sustainable, durable and resilient in design, so that they:

- are effective in minimizing energy use, and thereby operating costs, in a capital cost-effective manner;
- reduce greenhouse gas emissions;
- reduce and conserve use of resources, such as water;
- are durable, to minimize the costs of operations, and to ensure the facility continues to provide for the needs of its occupants on an ongoing basis;
- are resilient, to reduce impacts on shelter operation by unforeseen events and circumstances;
- are in compliance with codes and standards such as: the Ontario Building Code, the Toronto Shelter Standards, Environmental Control Best Practices, Toronto Green Standard, and all applicable laws; and
- are constructed with components that can be easily repaired or replaced to allow for ongoing maintenance.

VI. Integration with Communities

Shelters should be integrated into their surrounding communities—not at odds with them. Integration is important for minimizing the stigmatization of *shelter-users* within the community and enhancing neighbourhood relations. New shelters will be developed to create linkages with their communities with the goal of enrichment for both *shelter-users* and neighbours.

Integration with communities is a multi-faceted strategy which will:

- engage and involve neighbours during the design process;

- allocate space within the shelter to support and engage community use and involvement;
- be sensitive to the context during the site planning process;
- be sensitive to the impact of changes to the urban form through the architectural design process; and
- provide linkages and inclusivity to non-geographic communities, such as:
 - Indigenous peoples
 - Black communities
 - LGBTQ2S+
 - and other equity-seeking groups who identify barriers to equal access, opportunities and resources due to disadvantage and discrimination and actively seek social justice and reparation.

VII. Flexibility

After several decades of the evolution of shelters within Toronto, it is clear that the demographics of people served by the shelter system and the issues that led them to enter the system continue to change. New evidence and thinking in shelter design also evolve over time and building systems, technology, and equipment continue to advance. It is important that the design of future shelters acknowledges this process of evolution and shelters be designed with inherent flexibility to accommodate changing needs.

Shelter design should consider flexibility in two essential ways:

- flexibility in use; and
- flexibility for future reconfiguration, including support of other forms of housing.

3

Facility Planning

- 3.1 Application of Inclusive Design
- 3.2 Application of Design Principles
- 3.3 User-Centred Design
- 3.4 Respect and Dignity
- 3.5 Safety and Security
- 3.6 Health and Wellness
- 3.7 Sustainability
- 3.8 Durability
- 3.9 Resilience
- 3.10 Integration with Communities
- 3.11 Flexibility

3.1. Application of Inclusive Design

The Inclusive Design Approach described in Section 2 provides guidance on how to approach the design of shelters. This section provides the following additional tools:

- Inclusive Design Toolkit
- Self-reflection for designers

3.1.1. Inclusive Design Toolkit

An Inclusive Design Approach to facility planning should address a full range of user experiences. Below are lists of experiences for consideration. Note that these lists are not exhaustive.

- **Considerations for inclusive design for identity experiences:**
 - Support differences in culture, gender, race, disability, sexual identity, life experiences, and other identities.
 - Provide privacy in areas where people would normally choose to have privacy in life outside a shelter.
 - Incorporate non-gendered washroom and bathing facilities to accommodate persons of all gender identities.
- **Considerations for inclusive design for perception experiences:**

Shelter-users may have:

 - stress or exhaustion;
 - attention deficit or hyperactivity;
 - dementia;
 - addictions
 - brain injury or stroke;
 - intellectual difficulties;
 - language and learning difficulties;
 - dyslexia;
 - autism spectrum;
 - seizures caused by flashing lights (photo epileptic); and/or
 - nausea or dizziness triggered by inner ear (vestibular) disorders⁸.

⁸ Adapted from “Inclusive Design Cards”, Inclusive Design Toolkit, Province of Ontario, last modified October 17, 2019, <https://www.ontario.ca/page/inclusive-design-cards>.

- **Experiences of all shelter users especially neurodiverse users may be enhanced by:**
 - limiting the use of flashing lights;
 - clear and plain language on signage and wayfinding;
 - uncluttered design and artwork;
 - use of consistent and calming colours, etc.;
 - incorporating quiet spaces.

- **Considerations for inclusive design for audio experiences:**

Audio experiences of all users especially those with impaired hearing will be enhanced by:

 - separating large spaces into small rooms (open concept, large rooms make hearing difficult);
 - providing sound absorption;
 - ensuring no external noise sources nearby;
 - providing audio alerting systems (such as alarms, public announcement systems, etc.) with accompanying visual notifications; and
 - incorporating quiet spaces/areas for stress reduction.

- **Considerations for inclusive design for physical experiences:**
 - People come in all shapes and sizes, including persons of large and small stature.
 - Wheelchairs and other mobility devices are as unique as the people who use them, and some require more space than is usually specified in codes and standards.
 - Shelters should increase accessibility for persons who are sighted, partially sighted, and blind through consistency and predictability of planning and the creative use of colour and luminance contrast.
 - Shelters should accommodate persons with hidden disabilities, such as strength and stamina limitations, or environmental sensitivities, such as by designing mechanical elements such as door openers that do not require physical stamina and using products that are not known to contain irritants.
 - Shelters should incorporate equivalent levels of life safety for every *shelter-user*, including evacuation strategies for persons who cannot use stairs.

3.1.2. Self-Reflection for Designers

An Inclusive Design Approach calls upon designers to not only undertake the work of creating spaces that promote equity, belonging, and dignity but also to be self-reflexive about their role in the process. The design process must incorporate the insight of shelter operators and *shelter-users* for a successful outcome, as each shelter may vary according to the needs of those being supported by the design.

Inclusivity Consultant, Jay Pitter notes the points below for reflection:

Points for Designer Self-Reflection

1. Design with empathy.

Design sensitivity should encompass those not traditionally included. Not all types of difference are visible (e.g. depression, autism spectrum, and colour blindness) and people may have more than one disability (e.g. both low mobility and partial sight or blindness).

2. Acknowledge implicit design biases and social location.

Designers must also reflect on their personal biases, which can lead to lack of awareness and exclusions in the design process, such as overlooking barriers faced by groups from historically marginalized communities. This shortcoming has been cited in design related to physical accessibility. While designing with empathy demands a deeper understanding of social barriers it also increases the potential number of unintended oversights.

3. Think in terms of intersections, not singular stakeholder groups.

Inclusive design requires nuanced thinking rather than the embrace of a singular, prescriptive solution. This requires a more rigorous application of design expertise, which is challenging. A good way of addressing this challenge is to consider “intersectionality”. Intersectionality recognizes how aspects of an individual’s identity such class, gender, race, disability, age, and sexual orientation, inform both physical and social barriers that individuals face when navigating the world.

For example, some *shelter-users* and staff are comfortable with safety-related design interventions like cameras and surveillance mirrors. For other groups of *shelter-users* and staff, who may come from historically marginalized communities and face disproportionate rates of public profiling and incarceration, these design interventions trigger or reinforce a sense of discomfort and criminalization. Designers must also be mindful that while *shelter-users* share experiences of housing vulnerability, for each individual it is layered with unique challenges based on gender, race, disability, sexual identity and other social identities.

3.2. Application of Design Principles

Section 2 provides design principles for shelters. Shelters should support and promote each of these design principles:

- *User-centred* design
- Respect and dignity
- Safety and security
- Health and wellness
- Sustainability, durability and resilience
- Integration with communities
- Flexibility

More detailed information and recommendations for each objective are provided in this section.

3.3. User-centred Design

Section 2.2.1 establishes *user-centred* as a design principle for shelters. In this section specific considerations for the following components of *User-centred* Design are given.

- Trauma-informed design
- *Accessible design*
- Support for cultural and spiritual practices
- Harm reduction
- Support for pet ownership
- Perception and navigation systems

3.3.1. Trauma-Informed Design

Many *shelter-users* have experienced trauma in their lives. Trauma results from circumstances or events that are deemed physically or emotionally harmful or threatening by a person, and which have lasting negative effects on that person's

mental, physical, social, emotional, or spiritual well-being⁹. Life experiences of *shelter-users* which may have led to trauma include:

- experience in the corrections system (24% of the population surveyed in the 2018 Street Needs Assessment had interacted with police, while 13% had been to prison, jail, or a detention centre);
- experience in foster care (15% of the population surveyed in the 2018 Street Needs Assessment) can be a trigger for some *shelter-users*;
- substance use (27% of the population surveyed in the 2018 Street Needs Assessment) may impact *shelter-users* and may have led to trauma;
- experience of displacement and family separation including refugee/asylum claimants (40% of respondents staying in City-administered shelters); and
- experience of violence.

For people who may have experienced trauma in their lives, it is important to design spaces that avoid triggers that reawaken those experiences, and which may accommodate their needs for support animals. The design of shelters should recognize the prevalence of trauma among *shelter-users* and should support the tenets of trauma-informed care¹⁰. Trauma-informed design seeks to actively resist re-traumatization by adhering to the following principles:

- Reduce or remove known adverse stimuli.
 - Create a calm, welcoming, homelike, safe environment that promotes the ability to de-escalate conflict.
 - Avoid crowding.
 - Remove or reduce sources of stress, including acoustic and visual elements.
- Reduce or remove environmental stressors.
 - Provide opportunities for individuals to have privacy.
 - Create spaces where *shelter-users* may feel safe in their *personal space* while part of larger spaces through use of protective dividers or walls against which seating may be placed.
- Engage individuals actively in a dynamic, multi-sensory environment.
 - Create spaces with attributes of quality and beauty to offer *shelter-users*

⁹ Adapted from Substance Abuse and Mental Health Services Administration, *SAMHSA's Concept of Trauma and Guidance for a Trauma-Informed Approach* (Rockville, MD: Substance Abuse and Mental Health Services Administration, 2014), <https://store.samhsa.gov/system/files/sma14-4884.pdf>.

¹⁰ Committee on Temporary Shelter, "Trauma Informed Design: How the Physical Environment Supports Recovery from Homelessness", April 2018, https://cotsonline.org/wp-content/uploads/2018/04/Trauma-Informed-Design.BOD_.pdf

- access they are not normally afforded.
 - Create spaces that do not oppress.
 - Employ strategic use of art and colour¹¹.
- Provide ways for individuals to exhibit their self-reliance (i.e. the ability to do things independently).
 - Provide clear sight lines and understandable navigation in an uncluttered setting.
 - Use furniture that may be rearranged to provide agency to individuals rather than furniture that is fixed that is controlled by others. *Note that physical distancing requirements during the COVID-19 pandemic may override this option.*
- Provide and promote connectedness to the natural world.
 - Make visual and acoustic connections to the natural environment.
 - Provide space within natural settings for quiet meditation and contemplation.
- Allow individuals to separate themselves from others who may be in distress.
 - Provide opportunities for people to remove themselves from situations where stress or conflict may occur.
 - Allow for avoidance of those with whom a *shelter-user* may wish not to associate through creation of alternate spaces or routes through spaces.
- Reinforce individuals' sense of personal identity.
 - Recognize that cultural, historical, and gender issues often inform the initial trauma, and view physical and emotional safety through these lenses.
 - Provide opportunities for peer support and collaboration.
 - Create settings which support empowerment, provide choice, and affirm personal identity.
 - Provide options as to where and with whom *shelter-users* can spend time.
- Promote opportunity for choice while balancing program needs and the safety and comfort of the majority.
 - Create non-confrontational and non-authoritative hierarchies in relationships between *shelter-users* and staff, such as seating in a corner that may invite conversation and interaction versus an exchange with staff at a transaction counter.

¹¹ Ibid.

3.3.2. Accessible Design

Accessible design in these guidelines is aligned with the definition in the *City of Toronto Accessibility Design Guidelines (TADG)*. It refers to facility design with the objective of achieving full integration and participation for individuals of all abilities to access their environment indifferent of mobility, sight, hearing or cognitive disabilities. TADG must be adhered to in all City of Toronto-owned facilities and must be referenced in all City-funded facilities.

The design of shelters should ensure that the shelter is *accessible* to and usable by everyone, including *shelter-users*, staff, and visitors. *Accessible design* considerations specific to particular functional components are provided in Section 5. *Accessible design* considerations that are applicable to the entire facility are provided below.

Divisional Goal for Accessible Beds

- Beds should be designed to be as accessible as possible. The 2015 staff report to Toronto City Council stated that the Infrastructure and Service Improvement Plan for the *Emergency shelter* System set a goal of increasing the number of *accessible* spaces to 20% of all available shelter beds.

Shelter Specific Targets for Accessibility of Identical Elements

- *Shelter-users* of all abilities must be able to access and use all of the facilities' amenities and services. Where there are several identical elements such as beds, toilets, seats, lockers, etc. of which there will be a mix of *accessible* and non-*accessible* ones, variety, choice and if possible, flexibility should be provided in the location and grouping of those that are *accessible*. For example, in a dining room a person in a wheelchair should have a choice of where to sit: near a window, near the door, near the service counter, at a table of 2, at a table of 4, etc.
- These Shelter Design Guidelines recognize that space requirements for mobility devices vary by device and that types and quantities of mobility devices will vary between shelters. Where a mix of *accessible* and non-*accessible*, but otherwise identical elements are provided the appropriate quantity and distribution of *accessible* elements should be agreed upon jointly be SSHA and the shelter operator.

Corporate Design Guidelines

- The City of Toronto Accessibility Design Guidelines (TADG) should be referenced for detailed technical requirements for achieving *accessible* design within City funded shelters. TADG must be adhered to in all City of Toronto-owned facilities and must be referenced in all City-funded facilities.

Circulation

- All routes into and throughout the functional components of the shelter should be *accessible* to everyone, including *shelter-users*, staff and visitors. This should also include consideration for people with children in strollers.
- Rooms, spaces, and amenities for *shelter-users* and visitors should be *accessible*.
- *High-use area accessible paths of travel* should be wide enough to allow two-wheeled mobility devices to pass.
- Low-use area *accessible* paths of travel should allow a person walking to pass a person using a mobility device.
- Circulation routes within rooms and other spaces should be wide enough to accommodate a person using a wheeled mobility device.
- Rooms and other spaces should incorporate clear floor space to allow a person using a mobility device to turn around within the space. This can be achieved through a turn-circle, a T-shaped space for a 3-point turn, or through providing a circuit within the space.
- Minimize the length of pathways, hallways, and other circulation routes.
- Minimize slopes along pathways, hallways, and other circulation routes. Where it is not possible to avoid them, make them as shallow as possible.
- Provide rest areas with seating at intervals along lengthy pathways, hallways, and other circulation routes.
- Provide passing/turning spaces, large enough to accommodate wheeled mobility devices, at the start and end of, at intervals along length of, and at decision-making points in pathways, hallways, and other circulation routes.
- Provide even illumination along pathways, hallways, and other circulation routes.
- Strive to have pathways, hallways, and other circulation routes that are clear of projecting or overhanging objects. Where such objects are unavoidable, ensure they are cane-detectable.

Toolkit for Design of Space for Maneuvering of Mobility Devices

Wheelchairs have a tighter turning radius than mobility scooters, while power wheelchairs have the tightest radius, and can turn in as little as a 1 m space. A research project completed by the Center for Inclusive Design and Environmental Access (IDEA) at the University at Buffalo, New York, through their “Findings from the Anthropometry of Wheeled Mobility Study” 2010 found:

- For a 180° turn:
 - a turning space width of at least 1500 mm (59”) was required for 75% of the manual and power wheelchair users;
 - a turning space width of at least 1700 mm (67”) was required for about 95% of persons using manual and power wheelchairs and for 75% of scooter users; and
 - a turning space width of 2100 mm (83”) was required in order for 95% of scooter users.
- For a 360° turn:
 - 1600 mm (63”) was required for 50% of the manual wheelchair users;
 - 2100 mm (83”) was required for 95% of manual wheelchair and power chair users, and about 50% of persons using mobility scooters;
 - 2500 mm (98”) was required for 95% of scooter users; and
 - a clear floor space of 860 mm x 1480 mm (34” x 58”) will accommodate about 95% of all mobility devices.

Doors

- All doors into and within functional components should be at least 950 mm wide to allow a person using a mobility device to pass through and, if not equipped with a power door operator, have appropriate clear space at the latch side of the doors.
- Provide a vision panel, half-lite door glazing or half-height glazed sidelight of safety glass in all doors where privacy is not of concern. Ensure the vision panel/door glazing/sidelight is configured to function for standing and seated users.
- Accessible entrance doors and doors connecting hallways should be equipped with a power door operator.

Vertical Conveyance

- Stair systems should incorporate safety features including detectable warning surfaces, colour/luminance contrasted nosings, closed riser, and continuous handrails both sides, including landings.
- Elevators should be sized to accommodate the dimensions and weights of large wheelchairs and scooters, with a minimum capacity of 636 kg (1,400 lbs.), and have a clear inside space of not less than 1067 mm w x 1524 mm d (42" w x 60" d) with a clear car to canopy height of 2134 mm (7'0") and with an entrance opening of 914 mm w x 2032 mm h (3'0" x 6'8" h).
- As some shelters have paramedics on site on a daily basis, consideration should be given to provision of elevators large enough to allow for access to a standard size stretcher as per Ontario Building Code 3.5.4.1 "Elevator Car Dimensions" 2010 mm (6'-7") long and 610 mm (2'-0") wide in the prone position.
- Elevators should incorporate features to enhance usability for persons with hearing or sight loss, including both visual and audible feedback to announce the floor number, tactile characteristics, and braille.
- Ramps should be sized to accommodate large wheelchairs and scooters and incorporate safety features including colour/luminance contrast at slope transitions and continuous handrails both sides, including landings.
- Slope of ramps should be as shallow as possible.

Controls

- Switches and controls that are intended to be operated by *shelter-users*, staff, and visitors, should be reachable from a standing or seated position, and should have clear floor space in front to accommodate a person using a wheeled mobility device.

Materials and Finishes

- Use colour/luminance contrast strategically to differentiate elements and emphasize primary paths of travel, including potential hazards and obstacles.
- Use sound-absorbent finishes to minimize background noise and reverberation, particularly in spaces where oral communication is common (such as reception areas, dining rooms, lounges, interview rooms, etc.).
- Refer to Section 7 Materials and Finishes for additional considerations.

Signage

- Ensure all signage systems are clear and visible and *accessible* to all *shelter-users*, staff and visitors, including persons with sight loss.
- Incorporate pictograms wherever possible, to enhance readability for persons who do not read or understand words, or the English language.

3.3.3. Support for Cultural and Spiritual Practices

3.3.3.1. Culturally Appropriate Support

Many groups may benefit from acknowledgement of their culture in order to help reduce their sense of marginalization within the institutional reality that a shelter may present.

- Appropriate colour, symbols, art, and artifacts can all help people who are marginalized feel recognized and more welcome in a shelter, when backed by supportive management and operations.
- Support for traditional foods can enhance the sharing of cultural diversity across the range of *shelter-users*.
- Support for religious practices that may require or prohibit specific food.
- Support for traditional practices within the Indigenous community may include such aspects as smudging, sweat lodges, drumming circles, and other mechanisms to help restore personal grounding following a sense of lost culture.
- It is important to identify the cultures and religions of the proposed users of the shelter and to provide support for cultural and spiritual practices through the delivery of physical spaces suitable for those practices.

3.3.3.2. Spiritual Support

A wide range of religions and faiths are represented across the spectrum of *shelter-users*. Appropriate facilities accommodating the practices of these groups needs to be provided. These may include support for traditional religious practices as well as the inclusion of spaces connected to the natural environment to provide settings for quiet meditation and contemplation.

- Indoor and outdoor natural spaces can be used for individuals with a wide variety of beliefs, religions and traditions, including prayer and meditation.

- A religiously neutral quiet spaces may be shared across different groups through the provision of adjacent storage which may be needed to accommodate different practices.
- Provision of suitable ventilation and over-rides for smoke detectors may facilitate Indigenous practices which may involve smudging.

3.3.4. Harm Reduction

The development of a Harm Reduction Framework is one of the key actions of the 2013, Housing Stability Service Plan (HSSP). SSHA's *Harm Reduction Framework: Fostering Dignity for People Who Use Substances Across Housing and Homelessness Services, 2017*¹² provides the basis for an iterative and evolving framework for services to support the removal of barriers to housing for people using substances. The SSHA defines harm reduction as:

“an approach, set of strategies, policy or any program designed to reduce substance-related harm without requiring abstinence.”

Implementation of the Harm Reduction Framework is focused first, on the implementation of Harm Reduction Principles in the directly operated and funded shelters. After that consultation with SSHA funded agencies will be undertaken to develop an action plan that integrates Harm Reduction principles across all supports and services for homeless and vulnerably housed people in Toronto.

New shelters will support the Principles of Harm Reduction. This may include spaces and design initiatives that mitigate risks associated with substance use. Specific programs may include, managed alcohol program (MAP), education, distribution and disposal of supplies, etc.

3.3.4.1. Safe Use Practices

Some *shelter-users* may use needles for injection of prescribed medications, such as insulin, or for other substances. In order to support the safe use of needles, the following practices are suggested.

¹² Refer to Harm Reduction Framework: Fostering Dignity for People Who Use Substances Across Housing and Homelessness Services, April 2017, for full description of SSHA's Harm Reduction Framework and Harm Reduction Principles.

- Locate sharps containers where they may be used by *shelter-users*, such as *private washrooms* and stalls within multi-stall washrooms.
- A *shelter-user* may be seated on a toilet when injecting with a needle; the sharps container should be reachable from the toilet.
- Ensure that sharps containers are *accessible*, tamper-proof, and secured to a wall which is hygienic and easily cleanable.

3.3.5. Support for Pet Ownership

For people experiencing homelessness who are pet owners, accommodation of pets within shelters, both indoors and outdoors, is essential. Someone experiencing homelessness may choose not to enter a shelter if they cannot bring their pet with them, as their pet may be their main source of emotional support^{13 14}.

Benefits of Pet Ownership

Studies have shown that there are significant similarities between the emotional closeness shared between people and their pets and that shared by people and their closest family members.

- In one study 95% of those surveyed felt closer to their dogs than to other family members¹⁰.
- Other studies show that pets support the physical and mental health of individuals, particularly during stressful times¹¹.

¹³ “Gauging Family Intimacy: Dogs Edge Cats (Dads Trail Both)”, Social and Demographic Trends, Pew Research Center, March 7, 2006, <https://www.pewsocialtrends.org/2006/03/07/gauging-family-intimacy/>.

¹⁴ Allie Phillips, *Sheltering Animals and Families Together: Start-Up Manual* (SAF-T: 2010), 10, <http://alliephillips.com/wp-content/uploads/2010/11/SAF-T-Start-Up-Manual-2012.pdf>

Framework for the Management of Pets in Shelters

At the time of writing these Shelter Design Guidelines, pet-friendly shelters are recognized as an important need and shelters are evolving rapidly to fill it. The following is a framework for the management of pets in shelters.

Compatibility of Pets with Other People

Issues of compatibility of pets with other people, including both staff and *shelter-users* should be addressed. Housing pets together with people can pose serious health risks for some people, particularly immunocompromised people and people with asthma or allergies triggered by pet dander, feathers or fur. Other people may fear certain animals. In all cases the presence of pets in shelters should consider the best outcomes for both pet owners and non-pet owners.

- Negotiation

Decision making about how best to accommodate a pet takes sensitivity to and negotiation with occupants. It should be conducted on a pet by pet basis.

- Designation

Designating certain rooms and spaces as “pet friendly” or “pet free” may help with allergies and other concerns.

- Supervision

For the well-being of the pet as well as for the safety of all occupants it is important for pets to not free-roam or interact unsupervised with others.

Managing Aggressive Pets

Some shelters manage aggressive pet behavior by reserving the right to refuse admittance to animals that appear that way. However, even normal docile animals can exhibit aggressive behavior when under extreme stress and discomfort. Shelter operators may want to consider implementing procedures to reduce the risk of bites and other injuries. Procedures to reduce these risks might include the following.

- Aggressive animals should be handled only by their respective owners or trained staff members
- All animals on shelter property should be leashed or confined at all times; and

- Pets should not be handled or touched by other *shelter-users* without the permission of the owner.

Pet Wellness

Upon admittance to a shelter pets should be reviewed for infectious diseases. Approximately 10% of the pet population may be experiencing some form of illness at any one time which may affect other pets in the shelter. Pets with certain illnesses may need to be isolated while they recover. A veterinarian can assist in ensuring the wellness of a *shelter-user's* pet and by extension, the *shelter-user*.

Predators and prey, including cats and dogs should not be housed within visual, auditory or olfactory contact with one another. Protecting cats from exposure to the sight and sounds of dogs can help reduce stress levels in cats.

While in the shelter the pet owner will take care of the well-being of their pet, including feeding, cleanup, exercise, and providing stimulation to their pet

3.3.5.1. General Principles for the Design of Pet Friendly Shelters

Based on the framework above the following are general principles for the design of pet friendly shelters. It is assumed that most of the pets encountered in shelters will be dogs or cats. Further detail is provided in Sections 5.1 Welcome Centre, 5.2 Shared Use Areas, and 5.3 Neighbourhoods.

- Best practice for improved *shelter-user* outcome is to allow the pet to occupy the same sleeping room as its owner. The ability for a *shelter-user* to have their pet with them within their own space helps normalize their lives and takes away from the institutional perception that can be produced when separate pet kennels are provided.
- In addition to designated sleeping rooms for pets, some capacity in pet kennels should be provided to allow flexibility in how pets are managed.
- Kennels for dogs and cats should be separated from each other.
- Shelters should be designed to provide facilities that can be designated as pet friendly and those that can be designated as pet free. This should be considered through all stages of design.
- Petcare stations should be provided for care of pets by their owners and examination by a veterinarian.

3.3.6. Perception and Navigation of Space

While a shelter is meant to serve as temporary accommodation, introducing and instilling concepts of “home” is a key part of maintaining an individual’s self-esteem. The way we perceive our place in our environment, both to others and ourselves, is greatly influenced by the spaces we occupy. Subconscious spatial cues that exist, in all our spaces, have the power to influence these perceptions positively or negatively. In shelters, these cues should be actively implemented with the objectives of inclusivity, dignity, respect, and enhancing agency for *shelter-users*.

3.3.6.1. Considerations for the Perception of Space

The shelter’s design greatly impacts a *shelter-user*’s sense of agency within a space. The following design considerations discuss ideas for positive spatial cues, many of which overlap with points made elsewhere, but are gathered here for clarity.

- Establish territories and zones instead of boundaries, for example, using colours or finishes to identify territories as opposed to lines on the floor to delineate boundaries.
- Design spaces with an identity that is meaningful to *shelter-users* with landmarks, symbols, artwork, etc. so *shelter-users* relate to the space as one they can belong to.
- Provide access to natural light and views beyond the immediate space to benefit psychological wellbeing.
- Use colours and materials that resonate positively in a non-institutional way with *shelter-users*.

3.3.6.2. Wayfinding and Signage

A building that is designed for intuitive wayfinding supports and strengthens *shelter-users*’ comfort and familiarity when navigating through new spaces and environments. It can also further reduce barriers in accessing shelter services by easing any stresses or frustrations that may be experienced when not being able to find a destination. Wayfinding is aided by spatial cues that subconsciously ease movement through spaces. These cues, that should be intuitive and inclusive, facilitate navigation by influencing an individual’s instincts as they move through space. A journey of navigation from one point to the next can be broken down into three parts:

First, the *shelter-user* needs to be able to situate themselves within the shelter by being aware of their location and orientation. Measures for creating awareness of location should include:

- establishing unique perceptual identities for spaces or zones (while maintaining a consistent style that is an extension of the overall design) to aid identification of location and orientation;
- identification signage for *shelter-user* private spaces, staff-only spaces, common spaces and public/community spaces;
- graphic signage to support text signage; and
- incorporating braille, universal graphic symbols, and relevant languages to signage elements.

Second, the *shelter-user* needs to be aware of/be able to identify a direct path that takes them to their destination. Measures for identification of paths should include;

- directional signage to support decision-making at intersections or changes in route;
- no points of discontinuity or indecision while navigating the building;
- concise communication that does not have too little or too much information;
- sight lines to inform the navigator which provide clear visibility to the destination or the next wayfinding element leading to the destination;
- clear identification of routes for the flow of people and goods, *accessible* paths of travel and emergency paths of travel;
- easy wayfinding for occupants of various visible and invisible sensory, cognitive, and physical abilities; and
- clear location of all *accessible* routes and entry points.

Third, the *shelter-user* should be able to accumulate experiences of wayfinding that will form a mental map and make future navigation more instinctive. Measures that support the formation of mental maps should include:

- landmarks such as artworks or feature walls can help create familiarity while moving through the shelter;
- colours to develop patterns of identification for various zones and pathways;
- identification signage to outline the different uses and times of use for a space to aid memory of when a space can be used; and
- clear signage to identify *accessible* spaces and routes.

3.3.6.3. Signage Attributes

- For City-operated shelters, for standards for application of the City's corporate identity, refer to the City of Toronto Corporate Identity Program Design Manual.
- Smoking areas in outdoor spaces should be clearly labelled and separated from non-smoking areas in compliance with the Smoke Free Ontario Act and city regulations.
- Security measures such as panic buttons, intercom systems, and security phones should be easily locatable and have clear instructions for use, including visual and tactile information.
- Areas should be provided where informal information and regulatory signage can be temporarily put into place to accommodate changes in shelter programs and uses of space.
- All key signage should appear in text, graphic form, and braille.
- All signage should be clearly readable, day and night.
- Text should be aligned parallel to the sign format; diagonal text should be avoided.
- All text should be in mixed or title case. Text proportions, spaces between letters, and stroke thicknesses should be easy to read.
- Text size should be decided based on viewing distance. Allow 1" (2.5 cm) height for every 25 ft. (7.6 m) of viewing distance, and 1/2" (1.3 cm) height minimum at any distance. Refer to municipal standard requirements for signage text.
- A minimum of 80% contrasting colour background to text and graphic symbols should be provided. Signs should be positioned to avoid shadow areas and glare.
- Signage should be free of rough edges, irregular surfaces, non-uniform finishes, and similar imperfections.
- Materials used for signage should meet industry standards for chemical and fire resistance, should be non-porous, non-off-gassing, durable, and vandal-resistant.
- Materials used for signage should be easy to clean.

3.4. Respect and Dignity

SSHA's vision is to create and operate shelters that enhance respect and dignity for all *shelter-users*, staff, and visitors. The following objectives should guide shelter design.

“Privacy is dignity.”

- *Shelter-user* during engagement

3.4.1. Create Positive Experiences

Shelters should:

- Reduce feelings of marginalization, frustration, and anger.
- Create a positive sense of community.
- Create an environment where shouting isn't necessary for communication.
- Reduce the need for queuing in order to access services.
- Minimize the application of unequal power, such as through avoiding situations where staff physically “look down” on *shelter-users*.
- Avoid the creation of institutional relationships, such as through avoiding speaking ports in screens.
- Support conversations at eye-level between staff and *shelter-users*.
- Provide quality of space that demonstrates *shelter-users* are valued and not discounted.

3.4.2. Enhance Positive Interactions Between *Shelter-users*

Shelters should:

- Provide opportunities for peer support.
- Ensure trauma-informed design is considered where *shelter-users* interact.
- Provide generosity of space to respect that each person may have different social abilities which may be compromised by crowded space.

3.4.3. Provide Privacy

Shelters should:

- Provide privacy to individuals within a shelter in locations that someone would expect to encounter privacy outside a shelter.

3.4.4. Offer Choice

Shelters should:

- Allow people to be treated as adults, capable of making decisions in their own best interests.
- Create spaces that offer a range of options for people's use through creating less hierarchical, highly predetermined places which are more flexible to interpretation.
- Provide support for diverse individual interpretation of spaces.

3.4.5. Recognize and Support Individual Identity

Shelters should:

- Acknowledge that each person is unique and will be demeaned if treated without recognition of their differences.
- Acknowledge that people in shelters may share experiences that may differ from those of the designer, and that the designer should consult with them to better understand their needs.

3.5. Safety and Security

Section 2.2.3 establishes safety and security as a design principle for shelters. In this section, specific considerations for the following objectives for Safety and Security in shelters are given. Shelters should:

- be environments in which all occupants feel safe;
- employ CPTED (Crime Prevention Through Environmental Design) methodology as appropriate for shelters; and
- coordinate with City of Toronto Corporate Security and SSHA Divisional Security Policies.

3.5.1. Create Environments in Which Occupants Feel Safe

Shelters that are successful in realizing the design objectives of being inclusive, *user-centred*, respectful and dignified will be environments that bolster safety. Recommendations for enhancing safety are as follows:

- clear sight lines and visibility between and within staff- and *shelter-user*-occupied spaces except in areas intended to be private;
- spaces that minimize or de-escalate conflict where interactions between staff and *shelter-users* may most commonly occur;
- alternate routes for egress for occasions when conflict arises, such as a second exit from spaces; and
- systems that enable quick assistance when conflict resolution needs additional support.

3.5.2. Employ CPTED Methodology¹⁵ as Appropriate to Shelters

Crime Prevention Through Environmental Design (CPTED), as currently used, is based on the theory that proper design and effective use of the built environment

¹⁵ One of the concepts of using design to improve safety within communities and within built form was articulated in the 1960s by Jane Jacobs. This was later built upon in the 1970s through the work of criminologist C. Ray Jeffery, who coined the term CPTED, the acronym for Crime Prevention Through Environmental Design, which was the title of his 1971 book, and by Oscar Newman, in his 1972 book "Defensible Space: – Crime Prevention through Urban Design". Both authors revised and updated their thinking in later publications based on observations of the application of their theories. By the early years of this century, the CPTED approach had gained wide international acceptance, in part due to embracement of the principles by law enforcement, including the City of Toronto Police.

can reduce crime, reduce the fear of crime, and improve quality of life. The CPTED approach, while empowering certain people, disempowers others. It can have the effect of marginalizing and even criminalizing some based purely on appearance. This can have negative outcomes when applied to shelter design.

In essence, the principles of CPTED passively promote security, and discourage unwanted behaviour. These are most commonly used in spaces to the exterior of buildings but can also have application within buildings. CPTED principles include:

Natural surveillance

- Natural surveillance involves the placement of design features, activities and people in a way that maximizes visibility of the space and its users, fosters positive social interaction between users of private and public space, and discourages unwanted behaviour.
- In shelters, the principle of natural surveillance should be tempered by the need to give privacy to *shelter-users* and protecting them from inquisitive, unnecessary attention from people in neighbouring buildings and on the street.

Natural access control

- Natural access control involves clearly differentiating between public space and private space to limit access or control flow of people in a manner perceived naturally by those using the space.
- The entrances to shelters are thresholds for significant decision-making for *shelter-users*. The decision to enter may be complicated by a number of practical and psychological factors such as:
 - having a large volume of belongings;
 - having a pet;
 - missing ID;
 - being under the influence of substances;
 - being traumatized by institutional environments; and/or
 - feeling judged for life choices.
- Streamlining shelter entrances in keeping with objectives for natural access control may not support the needs of *shelter-users*. Natural access control must be considered within the context of many functions that intersect at shelter entrances.

Natural territorial reinforcement

- Natural territorial reinforcement is a sense of ownership increased by delineation of space. This vested interest of people who have a sense of ownership of a space leads to improved outcomes, and discourages behaviour which can sometimes more readily occur in anonymous, unclaimed space.
- Natural territorial enforcement should be deployed to improve safety of *shelter-users* and the neighbourhood.
- This enforcement may be used to deter the presence of people who target *shelter-users* while not impinging on the basic right to occupy public space.
- The use of natural territorial reinforcement should not criminalize *shelter-users* for being in public space.
- The use of natural territorial reinforcement should be mindful of simply relocating a problem to a different location.

Other CPTED elements

- Other non-design-related elements such as maintenance and activity support can also be seen as important to CPTED practices, but are not as relevant to these design guidelines, although the selection of materials that are easy to maintain, and which do not quickly convey the sense of diminished quality in the face of hard use or abuse, can help maintain the sense of pride of place.
- Allocation of spaces within buildings in a way that contributes to a lively streetscape can enhance safety within the public realm.

3.5.3. Coordinate with City of Toronto Corporate and SSHA Divisional Security Policies

When designing City-owned buildings, other references to be considered include the City of Toronto's City-Wide Corporate Security Policy¹⁶, which establishes policies and procedures for security within City managed buildings, as well the SSHA Divisional Security Policy. Toronto Police Services may also provide input with respect to site design. It is important to co-ordinate with the shelter operator's security team requirements.

¹⁶ City of Toronto, *City-Wide Corporate Security Policy*, 2009, <https://www.toronto.ca/legdocs/mmis/2009/gm/bgrd/backgroundfile-20217.pdf>

3.6. Health and Wellness

Section 2.2.4 establishes health and wellness as a design principle for shelters. The promotion of wellbeing is an important focus in Shelters. In this section, specific considerations for the following components of Health and Wellness are given:

- Support for health services
- Wellness, including mental wellness
- Healthy buildings
- Infection Prevention and Control (IPAC)
- Harm reduction
- Pest control

Health issues continue to be prominent within Toronto's shelters¹⁷, impacted by:

- a significant increase of refugees and refugee families in shelters and their need for health screening and primary care;
- an aging shelter population, associated with a growing need for long term and palliative care; and
- continually high numbers of *shelter-users* with trauma, mental health and substance use issues and needs.

In addition to many cases of poor physical health, spiritual and mental health may also be compromised. Approximately one third of people experiencing homelessness surveyed in the 2018 Street Needs Assessment self-identified as having mental health issues. People with mental health conditions experience a mortality rate 2.2 times higher than the general population and a median of 10 years of potential life lost¹⁸.

A coordinated approach to the delivery of health services in shelters is part of the Shelter Health Services Design Project collaboratively undertaken by SSHA and the

Healthy Building Standards, Guidelines, and Rating Systems

■ There are a number of international and governmental standards, guidelines, and building rating systems that incorporate health and well-being concepts.

- Fitwel,
- WELL Building Standard,
- Green Building Initiative (GBI)
- Green Globes, and
- Leadership in Energy and Environmental Design (LEED).

Portions of these guidelines support the physical, psychological, and social health and well-being of people in buildings and the built environment.

¹⁷ Toronto Shelter Network, "Shelter Provider Health Survey: Summary Report", July 14, 2017.

¹⁸ ER Walker, Robin E McGee, Benjamin G Druss, "Mortality in Mental Disorders and Global Disease Burden Implications: A Systematic Review and Meta-Analysis," *JAMA Psychiatry* 72(4) (2015): 334 – 41, <https://jamanetwork.com/journals/jamapsychiatry/fullarticle/2110027>.

Toronto Central LHIN. Going forward, other Provincial Health Partners may play a role in this delivery.

There are many different ways that we can enhance wellness through shelter design. The following provides an overview.

3.6.1. Support for Health Services

It is important for shelters to offer on-site health supports for effective outreach to *shelter-users*. Providing health supports within the shelter, versus within the community, may make the difference between *shelter-users* receiving or not receiving health care. Typically, shelters provide health supports through partnerships with other agencies. Services offered at shelter sites may range from non-clinical referral services, to on-site counselling, examinations or treatment by health practitioners in flexible space within the shelter.

3.6.2. Wellness and Healthy Buildings

Buildings can be key promoters of health and wellbeing since most people spend a majority of their time indoors. Measures that contribute to improved wellness include the following:

3.6.2.1. Support for Optimal Sleep

A lack of sleep compromises wellness. Not all factors that contribute to getting a good night's sleep can be controlled by building design, but designers should be cognisant of the role of the built environment in creating restful spaces that promote optimal sleep. Support for attainment of optimal sleep depend on a range of factors, which include:

- a sense of personal security (discussed further in section 3.5.1)
- privacy (discussed further in section 3.4.3)
- the acoustic environment (discussed further in section 3.6.2.4)



Figure 1: Restorative Space in Building Courtyard

3.6.2.2. Restorative Spaces

Calming, restorative spaces can have a marked impact on physical and mental wellbeing, including relief from negative symptoms associated with anxiety, depression, pain and stress, as well as enhancements in overall perceived health¹⁹.

Shelter designers should seek opportunities to create restorative spaces in shelters. The following are recommended.

- Biophilic design that provides direct contact with nature can improve wellbeing. Access to water, natural light, and plants, either within a space or in adjacent outdoor space, and secondarily, views to nature, can also improve health and well-being²⁰.
- Use of natural materials can also benefit psychological wellbeing through the indirect experience of nature²¹

3.6.2.3. Daylight

Access to natural daylight improves overall psychological health.

- Natural light seems to have therapeutic antidepressant effects with exposure at appropriate times during the circadian rhythm, regulating the sleep-wake cycle. Artificial light can be designed to imitate the spectral and changing qualities of natural light.
- Exposure to light has also been directly linked with health and can affect how we recover and heal—important considerations for *shelter-users*.



Figure 2: A skylight and green wall bring living plants and natural light into interior space

¹⁹ “Mind”, WELL, <https://v2.wellcertified.com/v2.1/en/mind#>.

²⁰ Stephen R. Kellert and Elizabeth F. Calabrese, “The practice of Biophilic Design”, 2015, www.biophilic-design.com.

²¹ Ibid

Levels of Daylighting

Determining the appropriate level of daylight within different parts of a shelter can draw upon those aspects of standards, such as those for healthy buildings, to target improved outcomes for shelter staff and users.

As an example, WELL's requirement to support circadian and psychological health through indoor daylight exposure and outdoor views requires window area to be no less than 10% of the floor area (within residential units, which relates to some portions of a shelter) and within regularly occupied non-residential spaces, with visible light transmittance (VLT) of transparent glazing greater than 40%. For non-residential spaces, (which includes many other spaces within a shelter), 70% of all workstations are to be located within 7.5 m of transparent envelope glazing or atria.

3.6.2.4. Acoustics

When noise from internal activity or external sources increases the noise level in a space, occupants become susceptible to distraction and increased stress levels. Increased stress levels within shelters can increase risk of negative interactions between staff and *shelter-users*. To reduce these issues the following are recommended.

- Separate spaces that generate different levels of noise. Social or recreational spaces should be separated from spaces requiring focussed thought, or from sleeping spaces.
- Quiet spaces should be provided in support of mental wellness (reading, meditating, etc.)
- Ambient noise can impact the ability of people to hear each other clearly during conversation and should be managed architecturally.
- HVAC systems should be designed to meet specific Noise Criteria (NC) and sound pressure level (dBA) thresholds to decrease background noise.
- Spaces with noise-generating equipment, such as mechanical and electrical rooms, should be designed for separation rated at STC 60.
- Spaces which are sensitive to noise impact, such as counselling rooms and private offices where confidential speech is required, should be designed to minimize sound transfer to adjacent spaces with a target of STC 50.
- Spaces, such as sleeping rooms, will benefit from reduced numbers of people sharing a space. When the number of occupants cannot be reduced, provision of sound masking systems should be considered.

- Separation of sleeping rooms should target STC 50.
- General meeting and office spaces and other occupied spaces should target STC 45 separations.
- Hard surface interior finish materials and systems can create reverberation and reflected sound which have the potential to create uncomfortable environments. Absorptive finishes can help control this issue. Refer to Section 7 Materials and Finishes for specific commentary.

3.6.2.5. Indoor Air Quality

Exposure to a variety of indoor air pollutants which can lead to poor health and diminished well-being for staff, *shelter-users* and visitors within a shelter²². During the COVID-19 pandemic, access to fresh, well-ventilated air that limits exposure to COVID-19 is an important consideration in building design. Building materials, furnishings, and fabrics specified by designers, (as well as elements introduced by occupants, such as cleaning products, personal care products and air fresheners) can all emit volatile organic compounds (VOCs) or semi-volatile organic compounds (SVOCs) into the indoor environment. Outdoor air quality may contribute to indoor air quality issues depending upon where the outdoor air may be drawn from. A range of indicators may be considered including²³:

- particulate matter;
 - organic gases;
 - inorganic gases; and
 - radon.
- Low-emitting materials should be selected for use in building components, furnishings, and fabrics. Refer to established standards for the selection of appropriate materials and systems to reduce emissions.
 - Flushing interior air from the building prior to occupancy may also provide improved air quality and should be a commissioning requirement.
 - Location of outdoor smoking areas, if provided, should be considered to minimize exposure to poor air quality.
 - Carefully consider locations for venting indoor air and sourcing outdoor air for the building.
 - Provision of operable windows can also provide occupants with the ability to control their personal environment, although window location within shelters

²² "Air", WELL, <https://dev-wellv2.wellcertified.com/v/en/air>.

²³ Ibid.

requires careful consideration with respect to building security. Where security may be an issue, provision of operable awning style windows which use cranks may provide flexibility to limit operability when necessary.

- Provide sufficient ventilation to ensure improved air quality. Refer to Section 6.1 Mechanical Systems for further detail.
- Air filtration and the use of UVGI treatments can also enhance air quality. Refer to Section 6.1 Mechanical Systems for further detail.

3.6.2.6. Colour

Studies have shown that exposure to colour affects people both physically and psychologically²⁴. The response of individuals to colour is highly personal affected by previous experiences, aesthetic trends, cultural traditions etc. Selection of colours should be determined in discussion with stakeholders and should consider the following.

- Rooms with lighter colours may be perceived as more open and less crowded, which may reduce stress for some *shelter-users*.
- Strong, warm colours used on surfaces within buildings may arouse negative emotions, while cool colours may have a calming effect.

3.6.3. Infection Prevention and Control (IPAC)

Shelters should be designed to prevent and control the spread of infection by:

- providing suitable built environments and building systems that limit the potential for infection (see Section 6 Building Services and Environmental Design); and
- providing safe and convenient facilities for *shelter-users*, staff and visitors to carry out routine practices²⁵.
- During the COVID-19 pandemic, enhanced housekeeping practices and IPAC measures, and whether they require additional physical support for specific housekeeping materials, is an important consideration. Some of these practices as ongoing measures implemented may include:
 - additional hand wash stations

²⁴ Stephen R. Vazquez, "Color: Its Therapeutic Power for Rapid Healing. Subtle Energies & Energy Medicine", *ISSSEEM Magazine* 17, no. 2 (2007): 191

²⁵ For an explanation of routine practices, refer to Toronto Public Health, *Infection Prevention and Control Guide for Homelessness Service Settings*, Revised September, 2009, <https://www.toronto.ca/wp-content/uploads/2019/09/98bf-tph-infection-prevention-and-control-homeless-service-settings-2019-.pdf>.

- consideration of touch-down workstation & contamination issues
- consideration of cleaning practices and material needs for high-touch areas such as washrooms
- possible use of germicidal UV-C, UV-B and anti-bacterial UV-A light for disinfection, with the spatial and electrical implications this will have.

3.6.3.1. Primary Reference Documents

For shelters in Toronto, the primary reference documents are as follows:

- Infection Prevention and Control Guide for Homelessness Service Settings, TPH, June 2018 (or latest edition);
- Guidelines to Reduce TB Transmission in Homeless Shelters and Drop-In Centres, 2007, TPH;
- Infection Prevention and Control (IPAC) Manual for City-Operated Shelter Services, SSHA, March 2019;
- Housekeeping Manual for Municipally Operated Shelters, SSHA, March 2013; and
- The current provincial COVID-19 guidance for congregate living settings.

If shelters contain food handling facilities (such as commercial kitchens, reheat kitchens or *shelter-user* kitchens) these spaces should be designed in accordance with Ontario Food Premises Regulations, and reviewed by Toronto Public Health.

If shelters contain health care facilities (such as exam and treatment rooms) these spaces should be designed in accordance with the recommendations of the Provincial Infectious Diseases Advisory Committee (PIDAC).

3.6.3.2. IPAC Policies and Procedures

Every shelter should have its own specific IPAC policies and procedures that, in response to Toronto Public Health requirements, outline standards and protocols for operation and quality control. Operators should be consulted to ensure that shelter design is coordinated with their IPAC policies and procedures.

3.6.3.3. Spatial Design

Soiled materials should be circulated, stored and handled separately from clean materials to avoid cross-contamination. For example, soiled laundry storage is separate from clean laundry storage (for room specific requirements refer to Section 5).

The circulation route of all soiled materials through the facility should be considered during design to ensure adequate separation can be provided either through spatial design or operations. If food delivery and garbage disposal share the same corridor, separation could be provided by a combination of timing of use, bagging/enclosing items, and physical separation.

Soiled materials such as soiled laundry, recycling, organics, and garbage, and clean materials such as food and clean linens should be stored in locked rooms or spaces that are only *accessible* by staff.

3.6.3.4. Room-Specific Requirements

- Food handling premises
 - All food must be prepared, handled, stored, and transported in a hygienic manner that follows food preparations requirements of Ontario Food Premises Regulations and enforced by Toronto Public Health²⁶.
 - Refer to 5.6.1.2 Commercial Kitchen and 5.2.1.4 *Shelter-user* Kitchens for further considerations.
- Bed spacing
 - For requirements for floor area and separation of beds refer to 5.3.1 *Sleeping areas*. *Note that additional physical distancing requirements have been implemented as a result of COVID-19.*
- Laundry
 - For considerations for laundry handling refer to 5.6.2 Central Laundries, 5.2.1.5 *Shelter-user* Laundries and 5.1.9 Intake Laundry.
- Cleaning spaces
 - For considerations for cleaning spaces refer to 5.6.4 Janitorial Rooms and 5.1.6 Hygiene Suite.

3.6.3.5. HVAC

- HVAC should be designed in accordance with Guidelines to Reduce TB Transmission in Homeless Shelters and Drop-In Centres to minimize the risk of TB infections. As an overview, strategies outlined in the Guidelines to Reduce TB Transmission in Homeless Shelters and Drop-In Centres include mechanical ventilation rates and strategies (refer to Section 6 for further information).

²⁶ Ibid.

- Poorly ventilated spaces are of particular concern during the COVID-19 pandemic. Most current direction from Toronto Public Health and other authorities should be sought and provided for.

3.6.3.6. Hand Hygiene

Hand hygiene is considered to be the most important routine practice to prevent the spread of germs²⁷. Hand hygiene or hand-cleaning can be performed in two ways²⁸

- When hands are visibly soiled, they should be washed with running water and soap, and dried.
- When hands are not visibly soiled, hand sanitizer can be used. Consult with shelter operator for current practices. (For City of Toronto shelters, Alcohol Based Hand Rub with an Alcohol content of between 70%-90%, as per SSHA IPAC Manual for City Operated Shelters, section 3.4 is current practice).
- Practising good hand hygiene is of particular importance during the COVID-19 pandemic, and should be accommodated.

Hand hygiene should be performed²⁹:

- before preparing, handling, serving or eating food;
- after personal body function such as using the toilet or blowing one's nose;
- when they come into contact with another person's blood, body fluid, mucous membranes of the eyes, nose or mouth, or non-intact skin;
- before putting on and taking off PPE;
- before and after client contact or contact with their environment;
- whenever there is a chance that hands may have been contaminated.

Locations for *hand wash sinks*:

In coordination with the practice of hand washing recommended by Toronto Public Health, the following locations are recommended for *hand wash sinks*:

- at every food prep, cooking, food service and dish washing area;
- on the *shelter-users* side of food service counters;
- in every laundry room close to where clothes are handled before washing;
- in every room with a toilet;
- in every janitorial room or closet;

²⁷ Ibid.

²⁸ Ibid.

²⁹ Ibid.

- in every wheelchair cleaning room;
- in every garbage room;
- in pet care rooms;
- close to the Main Entrance; and
- in any other location where soiled hands are anticipated.

In addition, operators may want to include *hand wash sinks*:

- in intake rooms;
- in meeting rooms; and
- in counselling rooms.

For health care settings refer to PIDAC standards³⁰ and for food handling locations refer to Ontario Food Premises Regulations³¹.

Dedicated Use

Hand washing sinks should be used for the sole purpose of hand washing. In rooms where other washing activities take place a separate sink should be provided for the sole purpose of hand washing. The only exceptions to this are:

- in washrooms and change rooms sinks will be used for hygiene and grooming functions other than hand washing; and
- where single sinks are provided in kitchenettes (not kitchens), they will also accommodate both hand washing and food preparation.

Hand Wash Sink Configuration

Hand wash sinks should be *accessible* except when achieving accessibility is determined to be technically infeasible in a location not required to be *accessible*.

There is no other special configuration required for *hand wash sinks* however for best practice the following is recommended:

- *Hand wash sinks* should be free standing, not built-in to counters and they should be mounted at least one metre away for any fixed work surface or separated by a splash guard.

³⁰ Public Health Ontario, *Infection Prevention and Control for Clinical Office Practice*, Revised April 2015, <https://www.publichealthontario.ca/-/media/documents/B/2013/bp-clinical-office-practice.pdf>.

³¹ Province of Ontario, Food Premises, Ontario Regulation 493/17, July 1, 2018, <https://www.ontario.ca/laws/regulation/170493>.

- Faucets, soap dispensing, and hand drying controls should be hands free operated by electronic sensors. Faucets can be operated by elbows or knees if not required to be *accessible*.

Hand Sanitizer

The preferred method for hand hygiene, when hands are not visibly soiled is to clean them using hand rub. (Refer to Infection Prevention and Control (IPAC) Manual for City-Operated Shelter Services 3.4 How to Use Alcohol-based Hand Rub (ABHR)). Shelter operators should be consulted on the formulation of hand sanitizer (refer to Toronto Shelter Standards 11.1 (d)).

Locations for Hand Sanitizer Dispensers

Hand sanitizer should be available in areas without *hand wash sinks*. They should be wall-mounted, or if there is a risk of product ingestion within specific groups of shelter users, Toronto Public Health recommends that staff carry portable/personal dispensers.

The following locations are recommended for wall-mounted hand sanitizers:

- near to all entrance doors to the facility;
- at elevators;
- in waiting areas;
- on the staff side of reception desks;
- in meeting rooms;
- in lounges;
- in counselling rooms;
- in intake rooms;
- in *shelter-user* corridors;
- in every room where staff and *shelter-users* interact;
- at every threshold between *shelter-user* space and a staff-only space - wherever food is prepared or consumed;
- wherever cash is handled;
- wherever clean supplies are given out;
- wherever Personal Protective Equipment (PPE) is put on or removed;
- in any other location where hands will need to be cleaned;
- in all locations away from soap dispensers to avoid confusion; and
- in all locations not directly above electrical outlets and switches.

Wall-Mounted Hand Sanitizer Dispenser Configuration

Wall-mounted hand sanitizer dispensers should be *accessible* except when achieving accessibility is determined to be technically infeasible in a location not required to be *accessible*. They should be complete with drip trays and coordinated with elements such as electrical devices. All dispensers should have an anti-microbial coating.

3.6.3.7. Use of Personal Protective Equipment

For personal protective equipment (PPE) to be used effectively for IPAC it must be convenient for staff to access it, put it on, use it, remove it and dispose of it in the correct way.

PPE may include:

- gloves;
- gowns;
- masks and respirators; and
- goggles and face shields.

Operators should be consulted during the design process to determine what PPE is needed and where it should be located. PPE may need to be stored in wall-mounted cabinets in specific locations to ensure that staff can dispense it easily.

3.6.3.8. Provision of Sharps Bins

Approved sharps bins should be located in shelters for use by *shelter-users*, staff and visitors for the safe disposal of items such as needles, razor blades scissors, knives and broken glass. When 75% full, sharps bins are removed from use, packaged and removed from the site.

Locations for Sharp Bins

Operators should be consulted to coordinate where sharps bins should be located. Some suggested locations are as follows:

- within arm's reach of every toilet;
- in housekeeping rooms and closets; and/or
- in garbage rooms
- in *shelter-user* health support rooms/areas

For health care settings refer to PIDAC standards.

Configuration of Sharps Bins

Sharps bins should be *accessible* except when achieving accessibility is determined to be technically infeasible in a location not required to be *accessible*. Those that are located within *shelter-user* accessed areas should be permanently fixed in their locations and tamper proof.

3.6.3.9. Environmental Cleaning

Environmental cleaning and disinfection rely on the ability to effectively clean surfaces.

- Materials and finishes should be appropriate to their location and use, moisture impervious and compatible with products used for cleaning and disinfecting. Consideration should be given to high-touch surfaces (doorknobs, elevator buttons and light switches) and low-touch surfaces (floors, walls and window sills).
- Reducing seams within or between materials will enhance clean-ability. For best practice monolithic (seamless) flooring and wall finishes are recommended.
- Clear access and adequate space are required to reach surfaces that require cleaning.
- A body of evidence based on both laboratory tests and test within clinical (healthcare) environments support the use of copper alloys in reducing the presence of micro-organisms. Copper alloys could have beneficial effects for IPAC in shelters. It is recommended that shelter designers consult the relevant literature to specify appropriate materials.
- Storage of cleaning and disinfection chemicals must be secure and under staff control.
- Eyewash stations should be provided in accordance with Occupational Health and Safety regulations and ANSI Standard Z358.1-2014. Eyewash stations should be included in any location chemicals are to be stored or any location with chemical dispensers with at least one per floor. The ANSI standard states that all flushing equipment must be located in areas that are accessible within 10 seconds (roughly 55 feet). This is commonly referred to in the industry as the 10-second rule. Best practices are to use a stop watch from your hazardous areas and determine if you have the proper flushing fluid located within 10 seconds. Keep in mind that an injured worker may need additional time to reach the flushing stations, as the severity of the injury could vary. In the presence of highly corrosive chemicals, consideration should be given to installing the flushing equipment much closer to the hazard. Be cautious of electrical supply panels that may be within "splashing distance" such as charging stations for Forklifts and other battery operated machinery.

3.6.4. Pest Control

The presence of pests, both insects, such as bed bugs, and other pests such as small rodents, can impact health within a shelter. In addition to the following physical requirements, a treatment plan for ongoing effective pest control is important (refer to Toronto Shelter Standards).

3.6.4.1. Rodent Control

Areas such as food cooking and storage, and garbage storage, can be the primary locations for infestation.

- Consider pest-resistant enclosures (rooms, and containers) for food and waste.
- Avoid elevated temperatures in such areas and provide adequate ventilation.
- Provide surfaces in areas for handling food and waste that are designed for easy maintenance. In the case of waste handling areas, provide drains, waterproof materials and detailing and a water source to allow for thorough cleaning.

3.6.4.2. Bug Control

- Bug control can be an issue in some shelters, with bed bugs being one of the more difficult to eliminate. Certain measures can assist in containing bed bug infestations, such as:
 - selection of materials that have tight joints, and avoid materials where joints or substrates may harbour bed bugs;
 - sealing of all joints between dissimilar materials; and
 - provide measures such as a heat room and high temperature clothes dryers located near shelter entries, that may reduce frequency of bed bugs being introduced to shelters (see Section 5.1 Welcome Centre 5.1.6 Hygiene Suite).

3.7. Sustainability

Section 2.2.5 establishes Sustainability as a design principle for shelters. This section establishes priorities for sustainable design in shelters addressing the following topics:

- Toronto Green Standard (TGS) compliance
- Greenhouse gas emission reductions (also reference TransformTO)
- Renewable energy

3.7.1. Toronto Green Standard (TGS) Compliance

The City of Toronto supports the development of energy efficient designs, where practical and reasonable. The City's goal is to demonstrate leadership in environmental stewardship for City-owned buildings and to reduce future operating costs. As the funder of shelters the City also seeks to improve the environmental performance of City-funded but not owned facilities.

On March 28, 2017, Toronto City Council directed that the City's Agencies, Corporations, and Divisions to, commencing in 2018 with the ten year Capital Budget and Plan within all procurement processes, apply the Toronto Green Standard (TGS) Tier 2 Core performance measures to all new buildings and additions greater than 100m² GFA, and furthermore to aim to achieve a net-zero energy/emissions target where technically practical and financially feasible for the same buildings and additions. As these requirements are periodically updated, they should be reviewed by the designer for current requirements.

Adherence to the requirements shown in the TGS are most commonly triggered and administered through the Site Plan Application process. These standards have been established for new construction and are not as readily-applied for renovations. For renovations, the City's Planning and Environment and Energy Divisions have agreed that only building elements which are being affected by the scope of renovation work should be considered for adherence with the TGS and should be carried out in the most energy efficient manner possible. This may help limit impact on shelter functional design, capital cost, maintenance, and operations. Scopes of work solely intended for compliance with the TGS should not be added.

As shelters are not a common form of building, the TGS also does not address the specific performance of this building type.

In consultation with the City of Toronto Planning and Environment and Energy Department, the established target for shelter development is compliance with current requirements. At the time of writing, this is with Tier 2 for Mid to High Rise

Residential Buildings, per Version 3 of the TGS³². This can either be demonstrated by meeting or exceeding the criteria for Multi-Unit Residential Buildings, based on the building height, or improvement on SB-10.

A modified table, entitled Table 1, showing applicable TGS requirements is shown below.

Table 1: Building Energy Performance Requirements Tier 2

Building Type	Total Energy User Intensity (KWh/m ²)	Thermal Energy Demand Intensity (KWh/m ²)	Greenhouse Gas Intensity (kg/m ²)
	Tier 2	Tier 2	Tier 2
Multi-unit Residential Buildings (>4 Storeys)	135	50	15
Multi-unit Residential Buildings (<6 Storeys)	130	40	15
Commercial Office Buildings	130	30	15
Commercial Retail Buildings	120	40	10
Mixed Use Buildings (90% residential, 5% retail, 5% commercial)	134	49	15
All Other Building Types	Tier 2: >25 per cent improvement above SB-10, 2017		

These targets are not completely in sync with the nature of a shelter, which operates 24/7, as compared to the more limited daily energy cycle of a typical residential building, and may be a challenge, particularly around the requirements for six air changes/hour for control of airborne diseases. The operation of commercial kitchens and commercial laundries on site may also present challenges.

³² The TGS has a series of escalating targets that vary over time. Please refer to the City's TGS website for further information. "Toronto Green Standard", City of Toronto, <https://www.toronto.ca/city-government/planning-development/official-plan-guidelines/toronto-green-standard/>.

The City is presently rolling out a series of new shelters, primarily within renovated buildings. Under this initiative, the City intends to target compliance with Tier 2 for Mid to High Rise Residential Buildings³³ and has identified building envelope upgrades as the most effective and reasonable means of reducing energy demand and therefore use. Identified examples of possible scopes of work which could be commonly included in a renovation project that could be upgraded to meet this intent include:

- increasing the exterior wall insulation thickness from interior side partition wall demo/replacement;
- replacing the windows;
- replacing the roof;
- replacing mechanical equipment; and
- replacing lighting systems.

For renovations, if Tier 2 of the TGS cannot be met, the design team will need to recommend a course of action which is reasonable to implement and provides the best value in terms of increasing the energy efficiency of the building, while minimizing the impacts noted above. At minimum, all new/existing mechanical and electrical (M&E) equipment should be connected to or be retrofitted to connect to a building automation system (BAS) which can be remotely-operated by the City.

To determine compliance with the City's energy and carbon goals, refer to the TGS energy modelling guidelines.³⁴

With respect to other components of the TGS such as air quality, water, ecology, solid waste, etc. discussions are ongoing with the City on how to best apply these requirements to the development of new shelters.

3.7.2. Greenhouse Gas Emission Reductions

As part of the City's goals to reduce greenhouse gas emissions, the TGS also includes Greenhouse Gas Intensity Targets. Refer to the City's TGS website for more information.

³³ "Energy/GHG & Resilience for Mid to High-Rise Residential & all Non-Residential Development", Toronto Green Standard Version 3, City of Toronto.

³⁴ Environment and Energy Division and City Planning Division, *Energy Efficiency Report Submission and Modelling Guidelines: For the Toronto Green Standard (TGS) Version 3*, City of Toronto, February 1, 2019, https://www.toronto.ca/wp-content/uploads/2019/02/93d5-CityPlanning_V3-Energy-Modelling-Guidelines-Feb-2019.pdf.

On October 2, 2020, City of Toronto Council voted unanimously to declare a climate emergency and accelerate efforts to mitigate and adapt to climate change. TransformTO is Toronto's ambitious climate action strategy. TransformTO lays out a set of long-term, low-carbon goals and strategies to reduce local greenhouse gas emissions and improve our health, grow our economy, and improve social equity.

Toronto's greenhouse gas (GHG) emissions reduction targets, based on 1990 levels:

- 30 per cent by 2020
- 65 per cent by 2030
- Net zero by 2050, or sooner

3.7.3. Renewable Energy

According to the Toronto Green Standard (TGS), City-owned mid-to-high-rise residential buildings which require site plan approval and which contain a gross floor area of 100 m² or greater should be equipped with on-site renewable energy devices to supply at least 5% of the building's total energy load, or 20% with a geo-exchange system for a City building. The renewable energy systems are most commonly solar photovoltaic (PV), solar thermal panel, or wind energy sources. The use of a geo-energy system is also considered an acceptable option under the TGS. Refer to Toronto Green Standard for details.

3.8. Durability

Section 2.2.5 establishes durability as a design principle for shelters. In this section parameters for durability in shelters are set out in the following sections:

- City requirements
- Durability plan
- Other durability considerations

From CSA S478, “Guideline on Durability in Buildings”:

“Buildings and their components shall be conceived, designed, constructed, and operated and maintained in such a way that, under foreseeable environmental conditions, they maintain their required performance during their design service lives. The predicted service life of buildings and building components and assemblies should meet or exceed their design service life.”

Under OBC 5.1.4.2. Resistance to Deterioration, clause (3) states:

“Design and construction of assemblies separating dissimilar environments and assemblies exposed to the exterior shall be in accordance with good practice, such as described in CSA S478, “Guideline on Durability in Buildings.”

The current version of this standard is CSA S478:19 “Durability in Buildings”, which is no longer a guideline, is intended to be but is not yet referenced in the National Building Code of Canada (NBC).

3.8.1. City Requirements

The City of Toronto has not mandated specific compliance requirements for durability in their capital projects for new shelter development, however shelters, by their nature of frequent turnover of *shelter-users*, have increased needs for durability not typically encountered in residential use. Shelters must be designed with high levels of durability to withstand intense use. *Design service life* is a consideration in determining an appropriate durability response, and shelters may span a range of service life durations from:

- temporary—up to 10 years;
- medium life—25 to 49 years; to
- long life—50 to 99 years;

This would therefore suggest different responses in development of a durability plan

to correspond to the expected *design service life*.

3.8.2. Durability Plan

Should the City determine that a shelter should have a durability plan developed, CSA S478 provides a framework for that process, which may require a durability specialist, as well as input from the City with respect to maintenance requirements and expectations, and considerations regarding extended commissioning.

3.8.3. Other Durability Considerations

Durability is not a material property; it is a function of:

- a material and its environment;
- installation;
- future maintenance; and
- replacement.

Consider impact of disassembly and replacement as part of initial design. Durability is an attribute for consideration with respect to a range of building systems. These are discussed in the following sections.

3.8.3.1. Interior Finishes

- Wall finishes
 - Walls should be resistant to hard use and impact, or enhanced at failure points, such as through installation of corner guards. Where appropriate, vandal resistant finishes should be considered.
 - High traffic area finishes should be stain-resistant.
 - Wall finishes should be easy to clean and maintain.
 - Finishes that require regular cleaning should be easy to reach, without the need of specialized equipment.
 - Finishes that are visible from above (e.g. ledges) should not require cleaning.
 - Porous materials should not be used where they can become damp or wet.
 - Finishes subject to humidity and moisture should be moisture-resistant.
 - Areas subject to flooding due to plumbing fixture blockage should have finishes not susceptible to deterioration from water or from cleaning.
 - Lower sections of walls need to resist physical wear from cart, trolley and mobility device collisions and impacts and scuffing from maintenance equipment.
 - Walls and their junctions with other surfaces and materials must resist bed

bug infiltration.

- Floor finishes

- Floor finishes should be appropriate for the intended use, with an appropriate coefficient of friction in areas subject to water.
- Floor finishes should be stain-resistant.
- Finishes subject to humidity and moisture should be moisture-resistant.
- Finishes in wet areas should be provided with waterproof installation.
- Floors and their junctions with other surfaces and materials must resist bed bug infiltration.

- Ceiling systems

- Ceiling systems should be able to withstand wear and tear if within reach, including from standing on furniture.
- Ceiling systems should be able to withstand cleaning in areas where subject to staining.
- Ceiling systems should be tamperproof when within reach (e.g. ceilings with access panels or removable tiles should be resistant to removal).

3.8.3.2. Exterior Elements

- Window systems

- Durable vapour and air barriers should be used that permit window replacement without deterioration.
- Interior window sills should be moisture-resistant.
- Window selection should consider that windows will need to be replaced frequently due to breakage. A standardized size for windows in locations susceptible to breakage will enhance ease of future replacement.

- Roof systems

- Roof finishes near or below *shelter-user*-occupied spaces should not be susceptible to deterioration from thrown objects or cigarette butts.

3.8.3.3. Mechanical & Electrical Systems

- Devices within zones occupied by *shelter-users* should be:

- of grade able to tolerate very high levels of use;
- not prone to breakage; and
- not susceptible to *shelter-user* intervention (e.g. any electronic components such as faucet automatic controls should be secured behind locked access panels. Light switches in common areas should be under staff control).
- tamper resistant.

- All devices should be:
 - easily maintained; and
 - readily available for replacement.
- Central systems should be:
 - easily maintained; and
 - easily replaced at the end of service life.

3.9. Resilience

Section 2.2.5 establishes resiliency as a design principle for shelters. In this section specific means for achieving resilient design are given in the following subsection:

- Resilience measures

On a macro level, Toronto has now established its first Toronto Resilience Strategy³⁵. One of the goals for new shelters is that they be resilient, to reduce impacts on shelter operation by unforeseen events and circumstances. Within certain sectors, building occupants may have greater ability to cope with adverse conditions such as power outages or failures to key building systems through relocating temporarily until the issue is resolved. Within the shelter sector, few such options exist for people served by the shelter system, hence the desire to provide greater resilience for shelters than for common commercial or residential buildings.

3.9.1. Resilience Measures

As a means of achieving this resilience, the following should be considered, both as a means of preventing building system failures, and recovering from them:

- Proven equipment suppliers with local service agents should be the first considered in the design of building systems. This ensures that equipment with proven track records is used and that, should there be an issue, local representation is available to remedy the situation.
- Backup systems and redundant equipment should be considered to achieve resiliency and reliability so that, should any piece of equipment fail, the respective services are not lost.
- All major equipment should be mounted on housekeeping pads.
- Mechanical equipment should not be located in locations where flooding may occur, due to natural events or equipment failures. There should be a means of water detection and removal in all mechanical rooms.
- No critical systems should be mounted in flood prone locations, including some at-grade mechanical or electrical equipment.
- No water piping should be routed through IT rooms or electrical rooms.
- No IT or electrical rooms should be located below grade.
- Major drain lines should not be located with changes in direction above critical spaces.

³⁵ <https://www.toronto.ca/services-payments/water-environment/environmentally-friendly-city-initiatives/resilientto/>

- A standby connection should be provided to hook up a portable leased water tanker to the domestic cold-water system at the main header. The connection should be located at or near the exterior wall of the building so that portable leased water tanker does not jeopardize fire safety or ongoing facility operations.
- On-site emergency power should be provided. If on-site emergency power cannot be provided, a standby connection should be provided to hook up a portable generator to the building in a manner that allows the building to continue to function during an extended power outage.
- Given the delays in switchover from the base building electrical service to an emergency generator, sufficient uninterruptible power should be provided to ensure that critical systems such as security, access control, IT, and telephony can continue operations until back-up generation capacity has been activated and is on-line.
- The heating plant should be designed with a minimum redundancy of 66% of the building load.
- In the event of a local air borne contamination emergency, the air handling and air distribution systems should be capable of the following modes of operation:
 - Complete shutdown of outdoor air and exhaust air for full recirculation with the exception of fume hood exhaust or other critical exhausts where shut down may cause harm to the occupants.
 - Complete shutdown of air handling units with the exception of exhaust, fume hood exhaust or other critical exhausts where shut down may cause harm to the occupants.
- All service access panels and drain clean outs should be located to allow ongoing functioning of key facility spaces and operations on occasions when servicing and maintenance are needed.

3.10. Integration with Local Communities

Section 2.2.6 establishes integration with communities as a design principle for shelters. In this section the integration of shelters with communities outside those within the shelter is further described. Integration will be established through different phases of design through:

- Engagement;
- Programming;
- Site planning; and
- Architectural design.

3.10.1. Integration of shelters with communities

Integration of shelters with communities will take place in the following ways once a site is identified:

- Through community engagement
 - Shelter planning and development will take place beginning with early engagement in the community and in adherence with Divisional engagement requirements.
- Through programming
 - Shelters will contain Community Program Space whenever possible, which is space allocated for use by the surrounding community (refer to 5.5 Community Spaces).
- Through site planning
 - Site planning should respond to the context and be sensitive to the needs of *shelter-users* and the community (refer to Section 4 Site Design).
 - The application of the relevant principles of Crime Prevention through Environmental Design (CPTED) is an important measure in ensuring the development a safe and non-threatening intervention by a shelter into the community (refer to 3.5 Safety and Security for Shelters).
- Through architectural design
 - The architectural expression of shelters should be in-keeping with the surrounding urban form (refer to Section 4 Site Design).
 - The design may incorporate community input into building exterior when possible—e.g. murals, feedback on landscaping
 - The planning of shelters should balance the activity and schedule of shelters-users with those of their neighbours for an optimal coexistence.

3.11. Flexibility

Section 2.2.7 establishes Flexibility as a design principle for shelters. In this section specific considerations for the following types of flexibility in shelters are given.

- Flexible in use
- Flexible for future configuration

Shelters should be designed to provide flexibility in use and flexibility for future reconfiguration as permanent supportive housing, minimizing the costs associated with such potential changes in use.

To be flexible in use the following should be implemented where possible:

- Loose fit of building envelope

The building envelope need not shrink-wrap the program. Where the budget and site allow, left over pockets of space can be located in places where programs are expected to grow. Pockets of space can be fit out immediately or enclosed for future fit out.

- Multifunctional rooms

Room design should try to anticipate changes of use. Locating a water bottle filler in a lounge not only provides greater amenity in the short term but in the long term allows that room to be reconfigured for a purpose that might require a water source and a drain. Single-purpose spaces should be evaluated for longevity and consideration given for future-proofing where opportunities are available. Adaptability to future changes in shelter population demographics can be assisted through linkages of adjacent spaces that permit rooms to be combined or shared with minimal cost, such as through the use of interconnecting doors.

To be flexible for future reconfiguration the following should be considered:

- Site selection for residential building types
 - Residential building types driven by their need for windows and natural light in sleeping and living areas have more efficient layouts when floor plate depths are less than about 17m (56 ft.) and windows can be located around the entire perimeter.
 - Sites that permit these conditions will yield layouts that are more flexible for future reconfiguration.
- Site planning for expansion
 - Site planning should not preclude later stages of building expansion either up or out.

- An exterior green space if appropriately proportioned could be developed as an addition in the future.
- Structural systems
 - Structural systems should provide flexibility.
 - A regular column grid may provide better flexibility than shear walls for a change in location of interior partitions.
- Building services
 - Building services should be expandable and *accessible*.
 - Locating electrical services below concrete slabs instead of within concrete slabs allows for future reconfiguration.
 - Central mechanical spaces allow for changes in energy source without extensive downstream disruption.

Facilities operated by the City of Toronto will need to address City of Toronto requirements. There are references to many different requirements throughout this document and in all cases, consultation with City Staff would be ideal in understanding City requirements.

4

Site Design

- 4.1 Response to Neighbouring Context
- 4.2 Building Entrances
- 4.3 Site Access
- 4.4 Outdoor Amenity Spaces
- 4.5 Landscape
- 4.6 Parking – Vehicles and Bicycles

Introduction



Figure 3: A community garden at the rear of the YMCA Vanauley Shelter

Shelter sites will each have unique design challenges based on the demands of their contexts and the requirements of Authorities Having Jurisdiction. This section outlines strategies for site design that serve the needs of shelters, support shelter programs, and resonate with the Guideline's overarching design principles.

Potential Toronto shelter sites rest on the traditional territories of Indigenous peoples in Canada. The territory now occupied by the Greater Toronto Area has been, and continues to be home to three Indigenous nations before the arrival of settlers; the Huron-Wendat who stewarded these lands till the late 1600s, the Haudenosaunee who established two village sites in present day Toronto in the 1660s, and the Mississaugas of the Credit who moved into the area in the early 1700s. Furthermore, Toronto is home to many more First Nations, Metis, and Inuit peoples.³⁶

In accordance with the City's "Meeting in the Middle Engagement Strategy & Action Plan, it is best practice to respect and acknowledge these ties through a Land Acknowledgement of traditional territory. Beyond this verbal acknowledgement, Indigenous leaders, community members, and elders in the community should be consulted during phases of site selection,

³⁶ Courses for the Toronto Public Service, *Indigenous Cultural Competency Training: from Truth to ReconciliAction*, Toronto: People, Equity and Human Rights, 2019.

development and programming for all shelters. This practice of inclusion and mutual respect can strengthen community relationships and result in a design that will deepen the shelter's ties to the land it is on.

4.1. Response to Neighbouring Context

Introducing a shelter to a neighbourhood has the potential to be a controversial process and can face varied reactions from the community. In responding to its neighbourhood context, the site design should balance the need for community acceptance with the need to provide a respectful and dignified experience for *shelter-users*, staff, and visitors. A shelter's positive integration with the neighbouring context affects both the surrounding community and a *shelter-user's* sense of place and belonging.

Crime Prevention Through Environmental Design (CPTED) principles should be adapted to formulate design responses that will enhance *shelter-users'* feelings of empowerment, safety, and dignity, while being sensitive to the safety concerns of both residents and *shelter-users*.

■ It is important to consider the neighbouring context beyond the property line during site design for a shelter. Surrounding public spaces, such as adjacent parks, should inform site design elements including site access, building entrances and zones of privacy on the site.

4.1.1. Territorial Reinforcement and Placemaking

A typical approach to natural territorial reinforcement in site design would be to make use of passive territory defining elements such as, fences, the street wall and paving lines to make clear distinctions between public and private space.

When using this strategy at the perimeter of shelters, care should be taken to ensure that *shelter-users* are not alienated. Along with defining territory, placemaking elements such as pavement patterns and exterior artwork can be used to increase a sense of belonging by enhancing the identity and presence for the shelter within the neighbourhood.

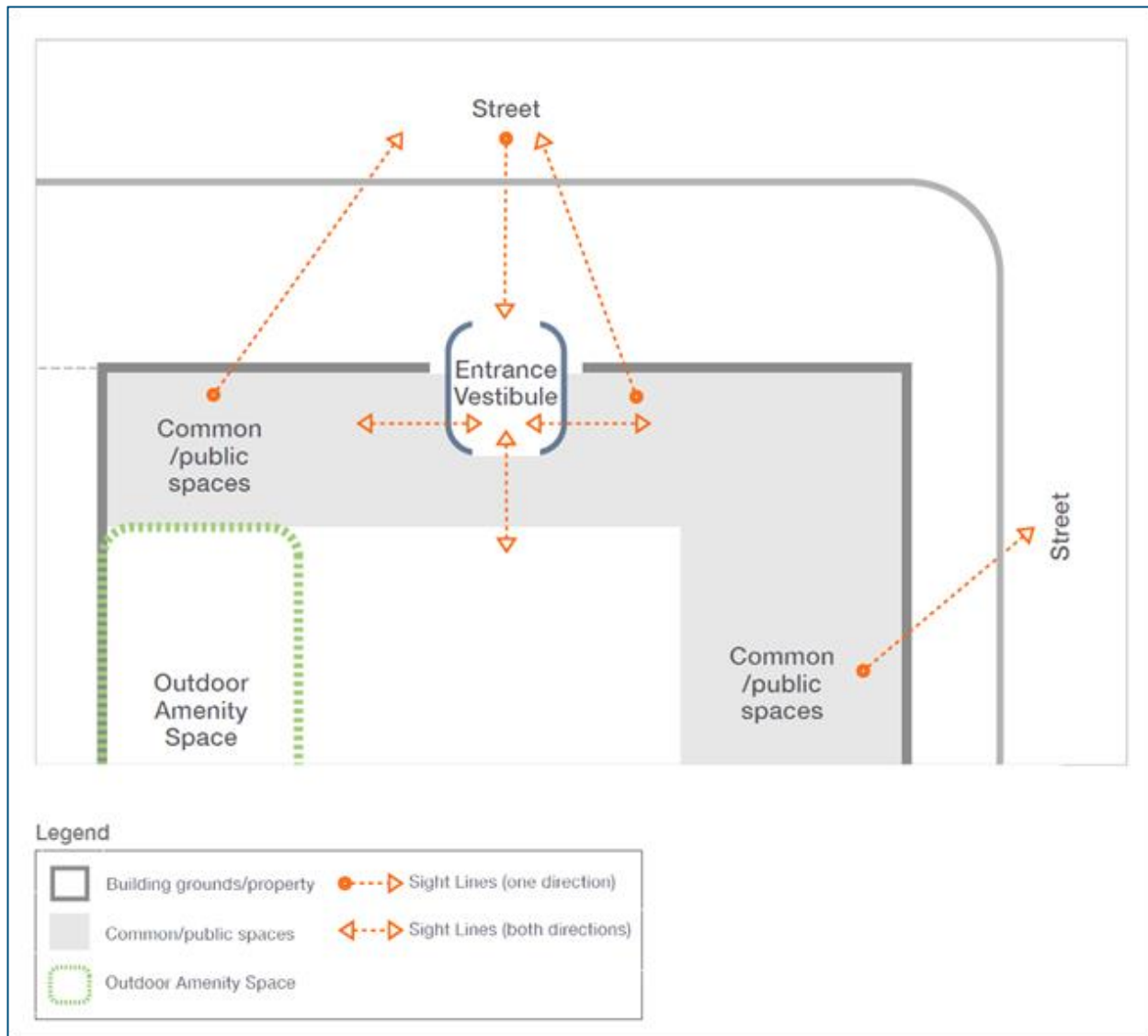


Figure 4: Diagram illustrating placement of common public spaces along building faces to facilitate the need for privacy while maintaining sight lines and views to the outside

4.1.2. Sight Lines



Figure 5: In the YMCA Vanauley emergency shelter, the shelter entrance is strategically located at the top of the steps and ramp away from the main street frontage to provide a secluded and dignified point of entry, yet still visible from the street.

Sight lines greatly impact *shelter-users'* privacy and dignity and should inform site design. *Shelter-users* may be subjected to unwanted scrutiny and attention from neighbours, who may complain of having views into shelter users' private spaces.

Similarly, sight lines into neighbours' properties, such as from shelter roof decks, should be screened.

Interior common spaces such as *shelter-user* gathering spaces and community spaces could be situated along building faces to enliven the street edge and create a threshold between the public exterior and the private interior (refer to 5.2 Shared Use Spaces for examples of common spaces). This builds on the CPTED principle of activity support by placing occupant activity where it contributes to natural surveillance by having "eyes on the street". However, sight lines from the street to interior private spaces of the shelter may be undesirable if they infringe upon *shelter-users'* privacy. The context and adjacencies of each site should be reviewed in determining where and how public spaces inside the building should be located.

Spaces that are typically considered public, such as waiting areas and lounges, should not be visible from the outside when they are used for *alternative space programs* and require privacy for *shelter-users*.

Elements that block the view of neighbours into shelters by depriving *shelter-users* views to the outside, such as frosted glass should not be used.

Main building entrances should be easy to find and visible from the street, however certain shelters may want to offer privacy or discretion in accessing shelter services. The shelter operator should be consulted to determine the need for discrete site and building entrances as well as desirable sight lines in these circumstances.

4.1.3. Lighting

Good exterior lighting with high colour rendition that compliments the surrounding street lighting on routes to the building, at entrances and within common exterior spaces will increase the feeling of safety for *shelter-users*, staff, visitors, and community members.

4.1.4. Architectural Expression

The architectural expression of the shelter should be compatible with the neighbourhood's urban fabric. For example, if the existing buildings surrounding a shelter site are three-storey brick houses with sloped roofs and front porches, the placement of a large, boxy, flat-roofed stucco building on the site will make the shelter stand out rather than blend into its context.

Solid, blank, utilitarian facades look closed off from their context and should be avoided on the front of the building. A shelter is foremost a residence and it should appear like home and not an institution.

4.1.5. Outdoor Spaces Away from the Street

Providing outdoor private shelter spaces within the shelter grounds/property, away from the street, will encourage *shelter-users* to use exterior space within the shelter property for activities such as lounging, pet walking and smoking. This may discourage use elsewhere that may have negative impacts from neighbours.

4.2. Building Entrances

This section applies to all sites, both where the building entrance and site entrance are distinct components and where the building entrance also serves as the site entrance.

The building entrance is a critical threshold for a *shelter-user* entering the shelter and should be inclusive, welcoming and inviting. It should avoid hidden exterior alcoves and blind spots, and support staff oversight of the front of the building when possible so that they are not disconnected from what is happening outside the building.



Figure 6: Main Entrance to Fatima House. Photo by Fred Victor

4.2.1. Building Entrances for *Shelter-users*

- Unless multiple shelter categories or services are present, there should be one main building entrance for *shelter-users*.
- If multiple shelter services or categories exist, such as combinations of drop-in programs, emergency and *transitional shelters*, it may be desirable to provide them with separate building entrances.

4.2.2. Building Entrances for Staff and the Community Space

- Separate building entrances should be provided for staff and for the Community Space.

4.2.3. Service Entrance

- A separate service entrance should be provided for loading and deliveries. Refer to 4.3.4.

4.3. Site Access

The extent of outdoor space surrounding the building will vary from site to site, affecting site design decisions such as outdoor amenity space, parking, loading, and building entrances. This section applies to sites where the building footprint does not occupy the entire lot area and site entrances and building entrances are separated by outdoor space. For sites where the building occupies the entire lot area, the building entrance also serves as the site entrance - refer to 4.2 Building Entrances.



Figure 7: Fatima House in context. Photo by Fred Victor

4.3.1. Types of Access

The following types of access are anticipated for shelter sites:

- Pedestrians;
- Bicycles; and
- Vehicles (which may or may not enter the site), including:
 - service vehicles;
 - delivery vehicles;
 - emergency vehicles;
 - wheel trans vehicles;
 - taxis; and
 - private cars.

4.3.2. Entrance Points and Circulation Routes

Pedestrian access will be the predominant mode of transportation for most emergency and *transitional shelter-users*. At *family* shelters, vehicular drop-off and pick-up also occur regularly. Shelter sites should make these modalities their prime focus.

Pedestrian Access

- Site entrances for pedestrians should be welcoming, human scaled, and should resist institutional overtones.
- Pedestrian entrance points should be visible from the street and clearly distinguishable for vehicle entry points if present.
- Pedestrian pathways should lead to public building entrances. There should be a single pathway leading to the Main Entrance unless the shelter houses multiple programs that require separation.
- All pedestrian pathways should be:
 - *accessible* as required by the Toronto Accessibility Design Guidelines; and
 - easily identifiable as pedestrian routes.

Bicycle Access

- Bicycle access can be paired with either vehicular or pedestrian access, with a designated pathway.
- Access routes should direct bicycles to bicycle parking either on or off site or, for staff, to bicycle storage.

Passenger Drop-off and Pick-up

- Drop-off and pick-up of people, including by Wheel-Trans vehicles, will take place at the Main Entrance to shelters. Where site conditions allow, this should be accommodated on site, if not, curb-side drop-off and pick-ups should be expected.
- A passenger drop-off and pick-up zone should be located beside the Main Entrance. Where space allows the following should be provided:
 - a covered waiting area and/or seating outside the Main Entrance, adjacent to the drop-off and pick up zone is desirable for pedestrians waiting to be picked up; and

- vehicle circulation through the drop-off and pick-up zone should not impede with other pedestrian and bicycle site circulation.
- The drop-off and pick up zone should be designed for:
 - cars and taxis;
 - Wheel-Trans vehicles.
 - Emergency vehicles

Access for Service and Delivery Vehicles

Access for service and delivery vehicles may be handled on site or by curbside access. Where space allows, the provision of on-site loading will reduce the time and cost of operating the facility.

4.3.3. Waste Pick-Up

Waste pick-up in all three streams (garbage, recycling, and organics) is typically provided by Municipal Solid Waste Management Services (some cases may be private pick-up), who will determine site-specific requirements on a case-by-case basis. Waste pick-up can occur either through front-end collection or curbside

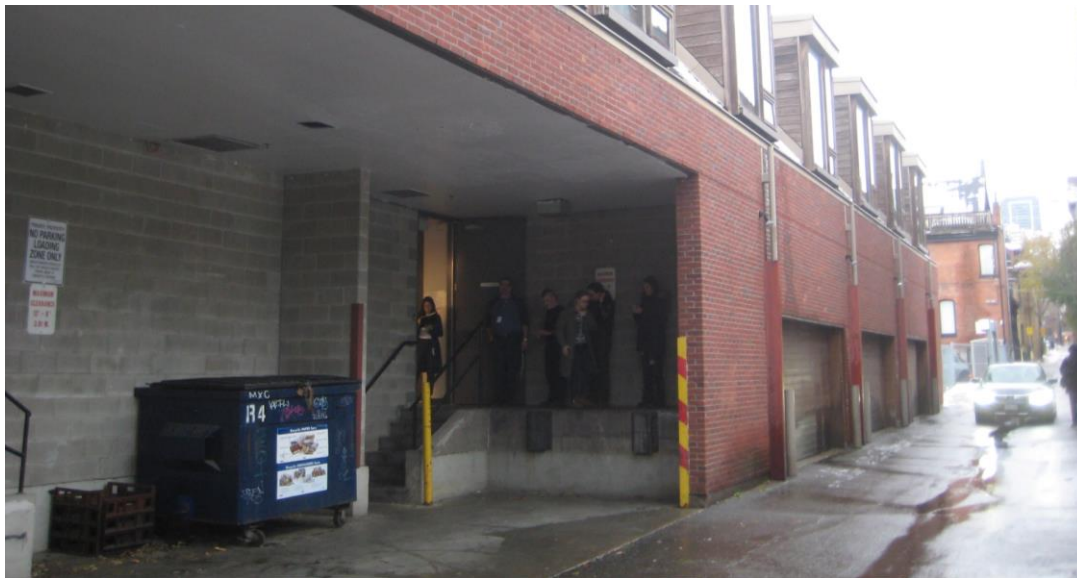


Figure 8: A back of house loading area and service entrance at Robertson House with access for vehicles.

collection, each with unique design implications. Front-end collection allows for waste to be collected in larger bins (3 to 6 cubic yards), while curb side pick-up relies on waste being brought to the curb in 95-gallon totes. In either case an indoor garbage room is required for garbage holding before pick-up. Refer to 5.6.3.1 Waste Collection for requirements.

Front End Collection

The requirements for front end collection require the provision of an onsite Type G loading space and sufficient room for maneuvering of the garbage collection vehicle. It is expected that few shelters will be able to accommodate this. Refer to City of Toronto Requirements for Garbage, Recycling and Organics Collection Services for New Developments and Redevelopments³⁷, for more information.

Curbside Collection

To facilitate curbside collection, waste totes will be wheeled and staged at the curb and should not block pedestrian routes. The access route from the indoor garbage room to the curb should be paved with a hard surface and be a short, direct, exterior route.

While these values could change based on the frequency of pick-ups, the following quantity of waste bins as a benchmark for a weekly pick-up for a 55-bed men's *transitional shelter* with a commercial kitchen in 2019:³⁸

- Garbage: 10 XL tote
- Recycling: 5 L tote
- Organic: 4 S tote

Refer to City of Toronto Requirements for Garbage, Recycling and Organics Collection Services for New Developments and Redevelopments, for more information.

4.3.4. Other Services and Deliveries

The following are examples of service and delivery vehicles that should be considered during site design. Shelter operators should advise on anticipated delivery frequency and delivery vehicles for each specific shelter.

- Shelters with third-party laundry services will typically ship out soiled and receive clean linens by truck once per day.

³⁷ City of Toronto, *Requirements for Garbage, Recycling and Organics Collection Services for New Developments and Redevelopments*, Revised May 2012, <https://www.toronto.ca/wp-content/uploads/2017/11/9914-Requirements-for-developments-and-redevelopments.pdf>.

³⁸ Information provided by SSHA via email on February 7, 2019, based on quantities at Birchmount Residence.

- Shelters with a commercial kitchen will typically receive food delivered by truck several times per week, and shelters without a commercial kitchen will typically receive food delivered by truck multiple times a day.
- Shelters without either a commercial kitchen or third-party laundry service will typically receive deliveries of cleaning supplies and chemicals, medical supplies, administrative supplies a few times per month.
- Typical city delivery trucks are between 24' and 28' straight trucks. Occasionally shelters may receive goods by semi-truck (for garbage pick-up refer to 5.6.3.1 Waste Collection).

The following loading space size is recommended as a minimum. Where the site can accommodate two loading spaces both a Type C and Type B loading space should be provided.

Shelter	Recommended Size for Loading Space
Every Shelter (min)	1 Type "C" - 6.0m (L) x 3.5m (W) x 3.0m (H) suitable for cargo vans and pick-up trucks
Shelter (approx. 100 beds) with Commercial Kitchen and/or 3rd Party Laundry	<p>1 Type "B" - 11.0m (L) x 3.5m (W) X 4.0m (H) suitable for straight truck (24'-28' long)**</p> <p><i>**No provision for semi-trucks, these deliveries expected to be managed by shelter staff through off-street loading</i></p>

- Loading spaces should have direct access to the service entrance. The access route from truck to building should be in a straight line, at the same grade as the service entrance or have ramps to connect grade changes. The following minimum unobstructed widths for corridors and doorways are recommended from loading spaces to delivery points within the shelter:
 - For the movement of carts and dollies, 1200mm (48") wide corridors with 915mm (36") wide door openings
 - For the movement of bulky items or palletized goods (1016mm x 1220mm/40"x48"), 1830mm (72") wide corridors with 1530mm (60") wide door openings.

4.3.5. Wayfinding

An intuitive and consistent wayfinding strategy should be exercised throughout the site to guide an occupant to and from key points on the site. Refer to 3.3.6.2 for facility wide wayfinding and signage principles.

- A consistent wayfinding strategy should be in place to and from the following locations:
 - all site and building entries and exits;
 - community/outreach spaces;
 - parking and bicycle storage;
 - passenger drop-off and pick-up points; and
 - loading, garbage, and delivery points.
- The use of pavement treatment, landscaped pathways, fencing, and natural growth can be used to guide an individual through the site.
- Placement and maintenance of physical features should facilitate sight lines and circulation routes. This includes locations of soft and hard landscaping, fencing, garbage containers, sheds, etc.
- Site wayfinding and signage should be consistent in design with interior wayfinding and signage.
- The use of exterior lighting should complement site and building entry points, site features, pathways, and parking.
- Exterior signage should be developed strategically when the shelter operator calls for privacy in identifying the shelter or its users.
- Ensure all wayfinding and signage is unobstructed by other site elements and coherent from its intended viewing distance.
- Ensure all site wayfinding and signage is clearly visible after dark.

4.4. Outdoor Amenity Spaces

Outdoor amenity spaces, whether at grade or on an elevated roof deck, are an opportunity to introduce restorative spaces that provide all shelter occupants the benefits of biophilic design and direct access to nature, which have a positive impact on their overall health and well-being (refer to 3.6.2.2. Restorative Spaces). Outdoor amenity spaces are also an important space for programmed and informal gathering for *shelter-users*, offering social, physical, and therapeutic benefits through programs such as community gardens, outdoor recreation, spaces for contemplation, spaces for children's outdoor play in *family* shelters, and spaces for pets. Outdoor amenity spaces have an important role in program support within shelters serving Indigenous people. Places for smoking are an important element to incorporate in all shelters, as well as spaces for staff.



Figure 9: Private outdoor amenity space at YWCA 1st Stop Woodlawn

- All outdoor amenity spaces should be *accessible* for all ages and abilities.
- Access to and from these spaces should only be from the building - access from the street is not desirable.

- Where possible, there should be no direct sight lines to these spaces from street or surrounding public areas of high population.
- Outdoor amenity spaces should not be situated in close proximity to garbage, loading, or receiving areas.
 - If situated close to parking and main drive aisles, visual, sound, and scent separation should be provided.
- Provide dedicated areas for smoking—refer to section 5.2.4. outdoor spaces should include soft landscaping.
- Where outdoor amenity spaces receive direct sunlight, they should be designed to provide options for being in the shade.
- For further design guidelines of outdoor amenity spaces, refer to 5.2.4. Outdoor Amenity Spaces.

4.5. Landscape

Landscape design can be a powerful tool in welcoming all occupants to the shelter and guiding an individual through the site. It should work hand-in-hand with the site's wayfinding system to form a clear transition between the street and all site components.

- All landscaping that is intended for paths of travel should be designed to be *accessible*.
- Landscape design should take into account the following physical, social, and environmental factors:
 - climate and weather;
 - topography;
 - soil type and quality;
 - site services, both above and below ground;
 - existing protected trees;
 - heritage designation (if any) of existing building;
 - *shelter-user* demographics (for accessibility, programming and privacy needs); and
 - spaces & support for pets.
- Exterior stairs, ramps, and level changes should contain adequate guards, railings, and clearly identifiable boundaries.
- Include natural features and soft landscaping throughout the site:
 - Consider planting native species that are non-toxic to humans and animals.
 - Plantings should be low maintenance and fast growing.
 - Soft landscaping can be used to provide privacy and protection from sun and wind but should not obstruct necessary sight lines.
- All landscaping materials should be easy to maintain, and provide good slip resistance, and stain and damage resistance, and should be suitable to its location (such as at grade or on an elevated deck).
- Snow cleaning and piling locations should be considered when designing hard landscaping to avoid snow accumulating in areas of circulation. When designing snow piling locations, designs must ensure that sufficient drainage is available. In outdoor spaces without sufficient room to allow for snow piling, snow melt systems should be included in the design. This is especially important for roof-top outdoor spaces.
- Landscape design can be used to provide privacy, and cover and protection from weather.

4.6. Parking—Vehicles and Bicycles

4.6.1. Vehicular

- All *accessible* parking design should be in accordance with applicable City standards.
- If the site permits it, parking may be desirable beyond the minimum zoning requirements. Shelter operators should be consulted to determine parking considerations for the following:
 - *shelter-users* (in some cases, particularly in *family* shelters, this may be a need);
 - staff (while the City of Toronto does not mandate provision of staff parking, City zoning standards may dictate a need, in which case, provision for shift changes bears consideration);
 - visiting or on call service providers (physicians, nurses, etc.);
 - visitors;
 - service buses (dental or health buses); and
 - community and outreach programs.
- Parking areas should be clearly distinguished with continuous curbs and landscaping.
- Curb depressions and pavement treatment should work hand-in-hand with wayfinding and landscaping to provide easy access from parking to building.
- *Accessible* parking spots should have as short as possible routes to a building entry point

4.6.2. Bicycles

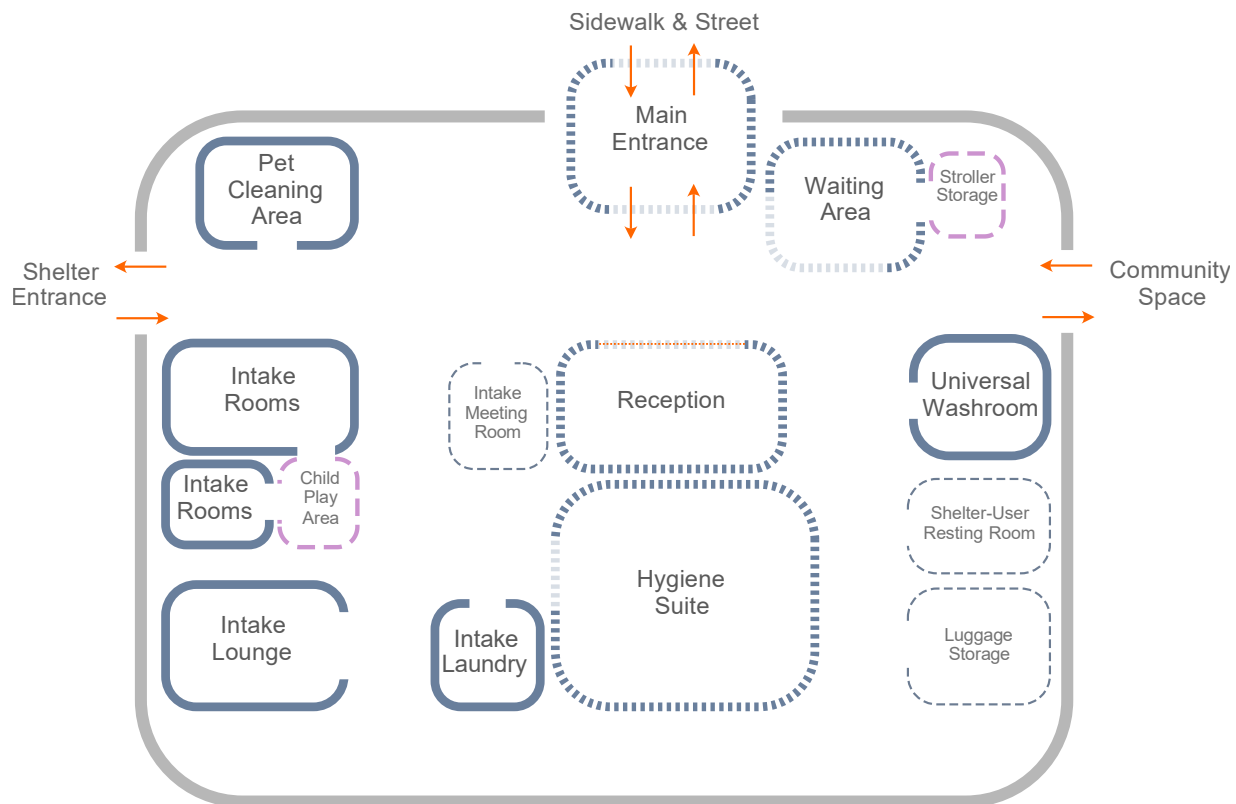
- There should be designated, secure, and covered bicycle storage for staff, and depending on discussions with the provider, bicycle storage for *shelter-users* can be provided.
- There should be additional bicycle parking *accessible* from the street and near the point of building entry.
- Shelter operators should be consulted on quantity of staff and general bicycle storage which may be greater than zoning requirements.

5

Functional Components

- 5.1 Welcome Centre
- 5.2 Shared Use Spaces
- 5.3 Neighbourhoods
- 5.4 Staff Spaces
- 5.5 Community Spaces
- 5.6 Facilities Support Space

5.1. Welcome Centre



Legend

	Functional Component - Room		Family Shelter Requirement
	Functional Component - Zone		Optional Space

Figure 10: A functional grouping diagram of the Welcome Centre

The Welcome Centre generally contains the following elements:

- | | |
|----------------------|---------------------|
| ■ Main Entrance | ■ Intake Laundry |
| ■ Waiting Area | ■ Pet Cleaning Area |
| ■ Universal washroom | |
| ■ Reception | |
| ■ Shelter Entrance | |
| ■ Hygiene Suite | |

Optional Spaces

- Stroller Parking
- Child Play Space

- Intake Room(s)
- Intake Lounge
- *Shelter-user* Resting Room
- Intake Meeting Room
- Luggage Storage

Function

The Welcome Centre is a contained suite of rooms that is separate from the rest of the shelter and is the first space people encounter when entering. In most shelters, it will be staffed 24/7. Within this space, *shelter-users* will form their first impressions of being welcomed, being accepted and feeling safe. Within the Welcome Centre, *shelter-users*:

- undergo the formal process of registering/intake in privacy, in a space free of clutter
- may access refreshments, washrooms and other supports
- leave and re-enter the shelter as the only access point for *shelter-users* and guests
- have casual interactions between staff and other *shelter-users*

Operational Context

■ The frequency of first-time arrivals varies across shelter categories, with *emergency shelters* at a higher rate and *transitional shelters* at a lower rate.

Intent

The Welcome Centre should provide all people with an environment that is:

- non-institutional in character
- welcoming and accepting of equity-seeking groups and people who have been marginalized, stigmatized or alienated in other environments
- sensitive to the needs of *shelter-users* who are dealing with or recovering from trauma
- dignified
- affirming
- generous in space
- *accessible* to all people
- calm
- safe

Location

The Welcome Centre serves as the main entrance to the building, located on street frontage with good pedestrian access to a public sidewalk and transit. It may also serve as the main or alternate entrance to the Community Space.

5.1.1. Main Entrance

The Main Entrance is part of a primary access route into the building for *shelter-users*, staff and visitors. It should be designed to accommodate the full range of *shelter-users*, staff and visitors, which may include people of all ages and all levels of physical ability. It should provide a generous, *accessible* route, clear and unencumbered by obstructions, to allow people leaving and arriving to pass.

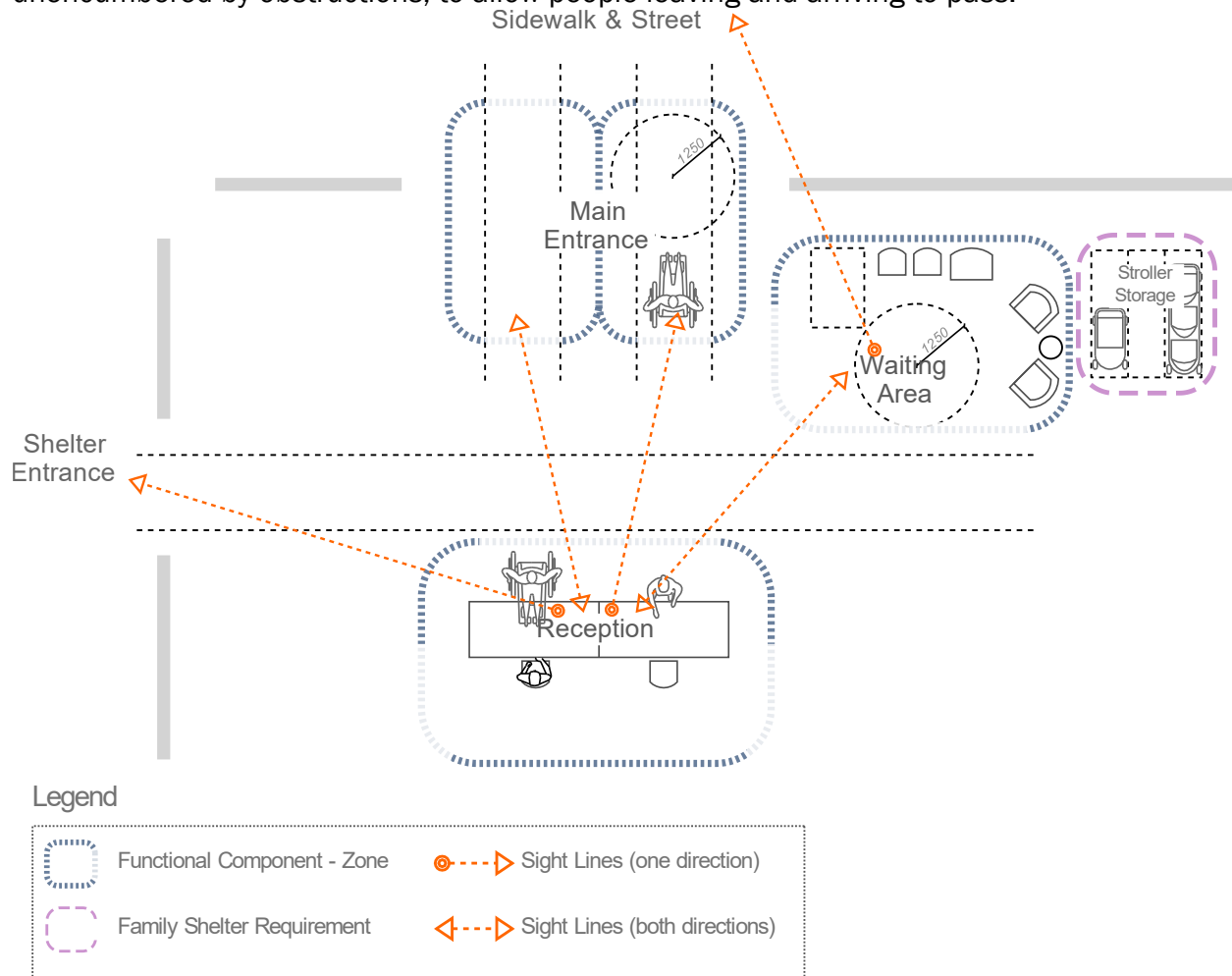


Figure 11: Diagram of circulation and sight lines at the Main Entrance, Reception and Waiting Area and their relationship to the Shelter Entrance

During the COVID-19 pandemic, additional measures may be required that include admission screening spatial requirements, if any, including additional medical support (such as temperature checks), and the ability to socially distance during the process of arrival and departure.

Attributes

Attributes of this space should include:

- clear sight lines to the Reception
 - discuss with providers and provide appropriate remote release buttons and video intercoms
 - controls to entrance doors may benefit from more advanced electronic systems
- a generous vestibule with 2.5 m (8.2 ft.) turning circle for large mobility devices
 - in *family* shelters: sufficient space to accommodate a parent with multiple children and a stroller in any entry vestibule
- adjacent, but separate path for the exit route where possible
- highly durable materials
 - this is often in conflict with the desire to create a welcoming and non-institutional space
- adequate lighting to support the intended function, without being over-lit, to avoid an institutional presence

Operational Context

■ The frequency of first-time arrivals varies across shelter categories, with *emergency shelters* at a higher rate and *transitional shelters* at a lower rate.

5.1.2. Waiting Area

The Waiting Area is a zone within the Welcome Centre that accommodates arrivals and departures of *shelter-users* and visitors.

The Waiting Area in a shelter is an important programmatic element. It is a space in which potential *shelter-users* may be deciding about entering the shelter system and may or may not choose to engage with staff. The Waiting Area should give newly arrived *shelter-users* the time and space they need to proceed at their own pace.

It is a place where staff and *shelter-users* can meet on equal, informal terms.

Attributes

Attributes of this space should include:

- located adjacent to the Main Entrance, out of the main traffic flow
- clear sight lines
 - to the Reception
 - to the street for *shelter-users* awaiting transit such as Wheel-Trans
- a counter or table for food and drink and other supports as needed, including a

hand hygiene sink, soap and paper towel dispensers

- a water bottle filler
- colour, symbols, art, etc. that help marginalized individuals feel recognized, included, and welcome
- generous size to allow independent use by unrelated *shelter-users*
- at least four chairs, potentially fixed in place, including at least one bariatric seat
 - the use of non-porous wipe-able sealed soft seating in this area is best practice, as long as a durable, damage-resistant product selection is provided
- integrated space for persons who use mobility devices, including a scooter, within the seating arrangement; persons waiting in mobility devices should not encroach on circulation routes
 - in *family* shelters: additional space for large amounts of luggage, strollers and larger extended families with multiple generations

Sufficient space to physically distance will be important during the COVID-19 pandemic.

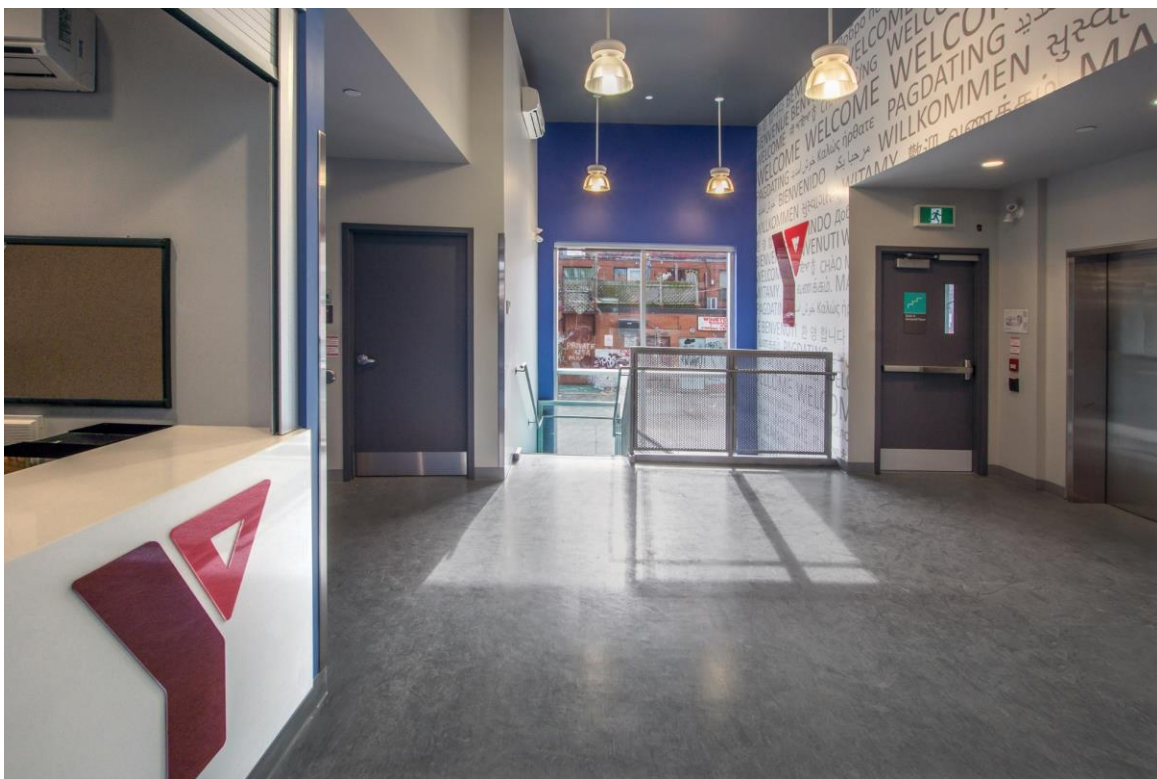


Figure 12: Reception area at YMCA Vanauley Shelter

5.1.3. Universal Washroom

A *universal washroom* near the Waiting Area, such as at Intake, is best practice. See Section 5.2.

5.1.4. Reception

The Reception is an important part of the initial contact between *shelter-users* and shelter staff. Staff provide overview of and control access to the entrance doors, as well as direct new *shelter-users* to the registration and intake process.

The Reception is a visual indicator of the culture of the shelter. Its design should convey openness and approachability. Human interaction is the core function of the Reception and its design should encourage interaction. The Reception design should support flexibility for staff in engaging with *shelter-users* in a safe, positive and dignified way, with options to enhance security.

The best configuration for reception should be determined on a case-by-case basis, taking into consideration the best outcomes for *shelter-users* and staff.

During the COVID-19 pandemic, various supports may be recommended to ensure adequate physical distancing among staff and clients in shelter spaces.

Attributes

Attributes of this space should include:

- direct visual and audio access to or voice/video intercom overview of the Main Entrance
- a primary access route between the Main Entrance and Reception designed as a *high-use area accessible path of travel*
 - clear and unencumbered by obstructions
 - generous in size, allowing people leaving and arriving to pass without interaction
 - with clear sight lines from the Reception
 - *accessible*, with a front approach
- access from the Reception to a nearby normally occupied staff position for purposes of backup support and egress

Operational Context

■ Traditionally, a service counter has been the model for reception, although a greeter or concierge may be less intimidating to *shelter-users*.

Well trained staff can be effective at de-escalating undesired behaviors with agitated clients. Reception desks which are enclosed with security can make *shelter-users* frustrated and may make tense situations worse

- an open and welcoming staff location across a low, open *accessible* reception counter that allows for eye-level contact between *shelter-users* and staff
 - a fixed counter separating staff from *shelter-users* may undermine human interaction if characterized by fixed transaction windows or high counters
 - a graduated response to enhanced security is available through optional closures, such as sliding screens
 - reception areas need to be easily lockable as staff may need to leave quickly to respond to critical events, and elements behind the counter need to be secured during this time.



Figure 13: Rendering of reception area at Red Door Shelter, by The Architect Builders Collaborative Inc.

- support for staff to leave the Reception and interact directly with *shelter-users*
 - opportunity for staff to work from an open table in front of the counter with a chair for *shelter-users* should be considered as best practice

- welcome/service counters that accommodate the communication needs of everyone, including features such as:
 - voice amplification
 - induction of loop assistive listening
 - a screen capable of displaying text from a translation program such as Google Translate
- small items storage maintained, in part, by staff for *shelter-users* for later retrieval, including:
 - a small refrigerator for medication
 - lockable storage for valuables (including transit tokens)
 - items not otherwise permitted in the shelter
- access control for the Main Entrance door and Shelter Entrance door
- staff access to video camera monitor

Operational Context

■ While the point of entry is generally staffed, the intake process may be reduced in some shelters during hours of reduced staffing, such as overnight. On those occasions, communication from the locked entry to a staff member elsewhere in the shelter may be required.

5.1.5. Shelter Entrance

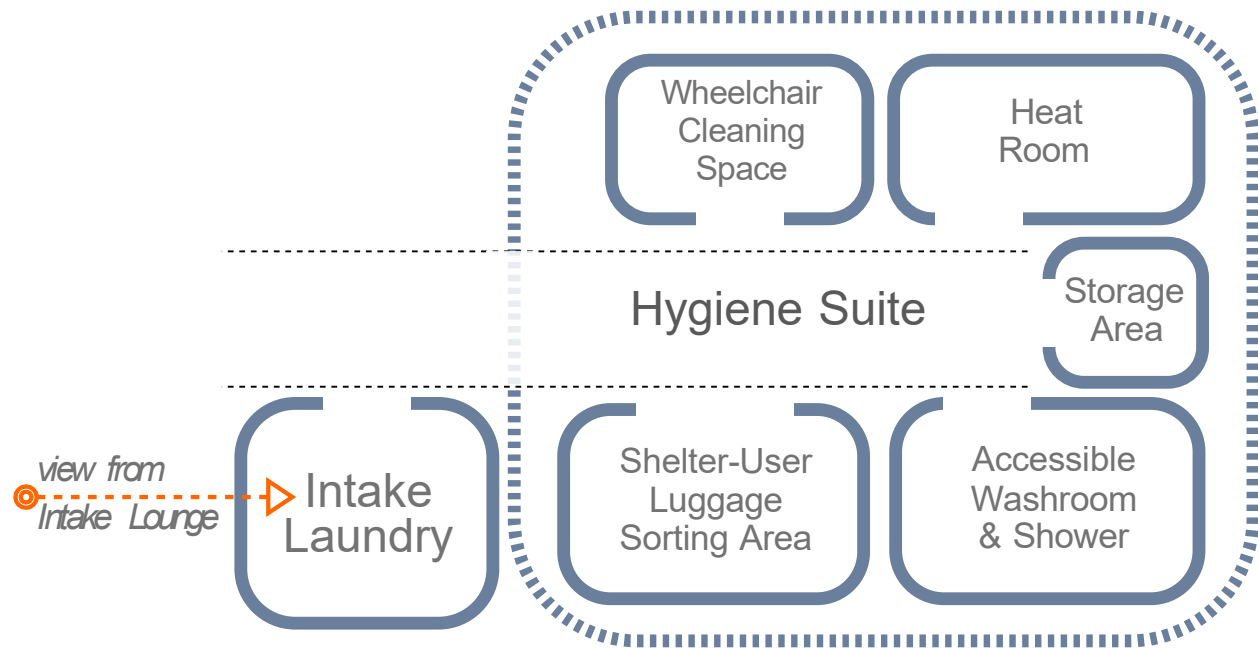
The Shelter Entrance is the secure door controlled from Reception that leads directly into the shelter.

Attributes

Attributes of this space should include:

- close proximity to and visibility from Reception
- on a primary access route designed as a *high-use area accessible path of travel* (1100 mm (3.7 ft.) minimum door width)
 - a separate exit route is best practice in larger shelters
- secure entry controlled by remote release by staff and fob/wristband/card

5.1.6. Hygiene Suite



Legend

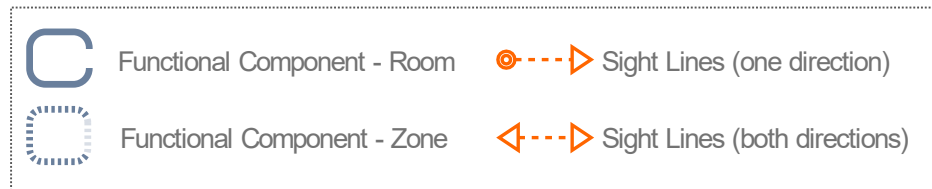


Figure 14: Diagram of Hygiene Suite

The Hygiene Suite is a space in which *shelter-users* can voluntarily, with the assistance of staff, attend to hygiene needs before entering the rest of the shelter. The Hygiene Suite may serve different needs and vary in use across the different shelter sectors and categories. Specific needs should be discussed with the shelter operator.

Shelter-user dignity and comfort is of the utmost importance; the Hygiene Suite should not create a sense of the impersonal “processing” of people that may occur in other facilities such as prisons. Hygiene Suites should accommodate all *shelter-users*, including persons who use any mobility device/appliance.

The Hygiene Suite and all its components should be located adjacent to the Reception for convenient access upon arrival. Capacity of the Hygiene Suite should be discussed with the shelter operator based on frequency and duration of intake. The Hygiene Suite may include the following subcomponents:

- *Shelter-user* Luggage Sorting Area
- Accessible Washroom and Shower with changing space
- Wheelchair Cleaning Area
- Staff-Controlled Storage Area
- Heat Treatment Room or Space

5.1.6.1. *Shelter-user* Luggage Sorting Area

When a new *shelter-user* arrives, they may have excess belongings beyond the capacity permitted within a shelter. This private space serves as a place to sort through, potentially with staff guidance, and select belongings to accompany them into a shelter, as well as for determining if certain belongings need heat treatment.

Attributes

Attributes of this space should include:

- a size of approximately 3.0 m²
- accessibility
- an *accessible* counter for sorting

5.1.6.2. Accessible Washroom and Shower

This component, with a changing space, is for the benefit of *shelter-users* should they need to use a washroom or choose to have a shower before accessing clean clothing.

Refer to *3-Piece Washroom* in section 5.3 for further details.

5.1.6.3. Wheelchair Cleaning Space

This is a staff-only accessed room for staff to clean *shelter-users'* mobility devices. The room should support cleaning and disinfecting activities including:

- donning and removing PPE (gloves)
- hand washing
- handling of cleaning and disinfecting chemicals
- use of a portable steamer

Attributes

Attributes of this space should include:

- a size of approximately 6.0 m² with enough space to allow a staff member full access around the object being cleaned
- a floor drain
- weatherproof GFI outlets and weatherproof light fixture(s)
- a wall-mounted PPE dispenser (i.e. glove box holder)
- a *hand hygiene sink* with paper towel, soap dispensers and hands-free garbage receptacle
- an eye wash station (per OHS regulations)
- a wall mounted hand rub dispensers
- shelving for storage of cleaning supplies and equipment
- finishes that are durable and water resistant and provide a coved base for easy cleaning

5.1.6.4. Staff-Controlled Storage Area

This space is where a supply of clean clothing could be provided to incoming *shelter-users* who may be in need of clothing, including while their own clothes are being washed.

Attributes

Attributes of this space should include:

- a size of approximately 4.0 m²
- a lockable room with clothes rods and shelves

5.1.6.5. Heat Treatment Room or Space

A heat room or chamber is used for exterminating bed bugs in items that cannot be put into a dryer. For each shelter, the optimal solution for heat treatment should be determined based on the size and quantity of items needing treatment and the frequency and duration of treatment. In many cases, storage and deployment space for a heat treatment chamber may be sufficient.

Operational Context

■ Maintaining temperatures of above 48°C for more than 20 minutes has been seen to effectively kill all life stages of bed bugs. However, treatment times of a minimum of 2 hours and up to 6 to 8 hours are often used to account for the insulating effect of belongings and the need to reach such temperatures throughout all material being treated.

A heat treatment chamber is a free standing, self-contained, commercially available tent-like device, which may vary in size from a suitcase to a walk-in closet. It should be provided with:

- adequate space for set-up and three-sided access for loading and unloading
- sufficient electrical power for connection of heaters (note: some chambers may require multiple 120V 15A circuits)
- a room with an exhaust and a *hand hygiene sink*



Small heat chamber

Attributes

A built-in heat treatment room is also an option. If selected, a built-in heat treatment room should be/have:

- a well-insulated room on all walls, floor and ceiling, with limited thermal conductivity to surrounding surfaces that is easy to clean
- a durable interior finish with no gaps or joints that would permit the hiding or escape of pests such as bed bugs
- a local source of heat that can easily be cleaned, with a suitable source of power
- structured storage to permit heat circulation around the items being treated and allow items to be placed higher within the room to capture the warmer air near the ceiling
- storage racks that are easy to clean
- space for items belonging to several people or for other larger elements to be treated; a size of 7.0 m² and a height of 2.2m may be optimal for a shelter
- an exhaust fan with a removable sealable cover, or placement of the exhaust location in an adjacent vestibule, for use following treatment³⁹

Operational Context

■ Emergency shelters and transitional shelters have traditionally required an in-depth intake process involving a 1:1 interview with intake staff that can last up to thirty minutes; however, this is an operational measure and may vary from shelter to shelter.

³⁹ For more detailed suggestions, refer to: "Section 13 20 00 - Heat Treatment Room," Section 4 Construction Standards, BC HOUSING Design Guidelines and Construction Standards (British Columbia: 2018), <https://www.bchousing.org/publications/BCH-Design-Guidelines-Construction-Standards.pdf>.

5.1.7. Intake Room(s)

The Intake room(s) provide a private space for one staff member and one or two *shelter-users* to meet across a table to discuss personal information as part of the intake process. In a *family* shelter, an adjacent, visually-connected place for children to play during intake is best practice. At least one room is needed in all shelters; however, the number of rooms should be determined with the operator. During the COVID-19 pandemic support for distancing of staff & clients in spaces for engagement is an important consideration.

Attributes

Attributes of this space should include:

- accessibility
- a space of approximately 11.0 m²
- an entry for *shelter-users* in close proximity to the waiting area
- a staff egress door, placed away from the *shelter-user* entry
- entry door with a half-lite

5.1.8. Intake Lounge

The Intake Lounge is used for waiting between activities during the intake process. It is intended to be distinct from the waiting area at the Main Entrance and provides a comfortable, calm, dignified place, offering refreshments prior to entering the shelter.

The presence of this space is dependent on the number of *shelter-users* and type of shelter. It is primarily needed in larger *emergency shelters* and not likely needed in transitional or smaller shelters.

This space should be located close to the Intake Rooms and Intake Laundry. The Lounge can also be a place where saved meals are held and eaten by *shelter-users* returning to the shelter after the kitchens have closed.

Legend

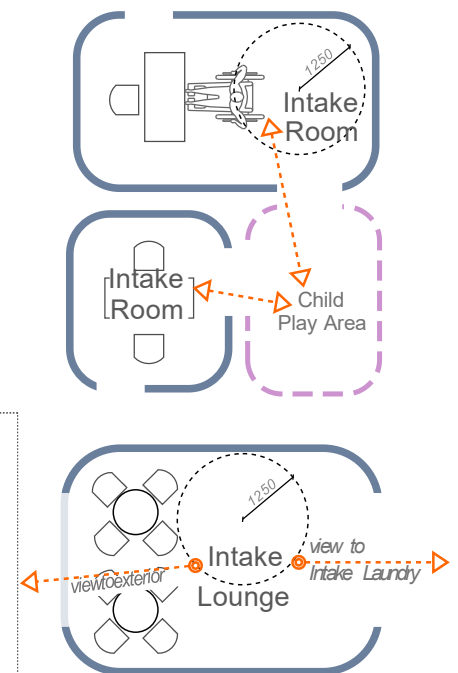
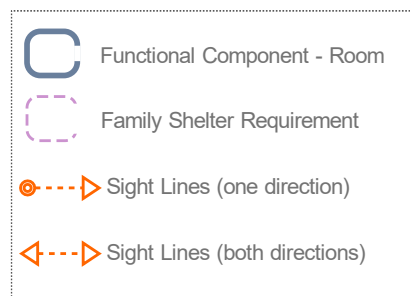


Figure 15: Diagram of the Intake Lounge

Attributes

The space, which may not be separated from adjacent space, should be/have:

- welcoming in appearance
- a size of approximately 13.0 m²
- a counter, sink, refrigerator, kettle and microwave
- a *hand hygiene sink* and paper towel dispenser
- a window to the exterior in compliance with OBC requirements for a dining or living space
- café-style tables and chairs and durable, non-porous, wipeable soft seating
- a connection and location for a television
- Wi-Fi connectivity
- charging station or wall plugs for cell phone charging

5.1.9. Intake Laundry

This space will allow *shelter-users* to launder clothes, independently or with staff assistance, as part of the intake process. This can be part of the treatment of clothing for pests. It should be located near the Intake Lounge.

Attributes

Attributes of this space should include:

- a size of approximately 11.0 m²
- capacity to accommodate two people, one of whom may be on a scooter
- *accessible* features, including a washing machine and dryer with *accessible* controls
- an *accessible* surface suitable for folding
- visibility from an adjacent sitting area to allow *shelter-users* to view progress
- a floor drain, water supply and drain connections suitable for washing machines, and power and exhaust suitable for dryers
- in-duct lint removal
- a *hand hygiene sink* with soap and paper towel dispensers
- mechanical and electrical support for an *accessible* washer and dryer

5.1.10. Pet Cleaning Area

As part of the routine for pet owners who are staying in the shelter, accommodation should be provided for pet cleaning near the point of shelter entry or elsewhere in the shelter. Refer to Section 5.2.1.7. Pet Care Station for further details.

5.1.11. Optional Areas

5.1.11.1 Shelter-user Resting Room

This room accommodates the overnight stay of a *shelter-user* within the Welcome Centre, close to staff. It can be used by a *shelter-user* whose entry into a *sleeping area* late at night could be disruptive to other *shelter-users*. This room can also be useful should a *shelter-user* need additional attention.

The room should be located to support staff overview and allow ready access to the necessary support, which may include a call to Paramedic Services. This may be particularly helpful for a vulnerable *shelter-user* waiting for a suitable bed to be made available.

The need for a *Shelter-user Resting Room* should be reviewed for each particular shelter.

Attributes

Attributes of this space should include:

- a door with a half-lite and blinds
- a window with blinds to the exterior, in compliance with OBC requirements for a sleeping space
- accessibility to a *shelter-user* on a scooter
- furniture, fixtures, and equipment that is determined in discussion with the operator

5.1.11.2. Intake Meeting Room

The Intake Meeting Room is used for private meetings between *shelter-users* and visitors, outside service providers and other agencies, as well as shelter case management. Number of rooms should be discussed with shelter operator.

Attributes

Attributes of this space should include:

- a space of approximately 13.0 m²
- accessibility to a *shelter-user* on a scooter
- space for a four- to six-seat meeting table
- two doors with half-lites
- suitable power and data provisions for staff
- charging stations and Wi-Fi connectivity for shelter-users, visitors, support agencies

5.1.11.3. Luggage Storage

This space is used to sort and store *shelter-user* luggage until discharge (or longer in some cases) if it exceeds the shelter's allowance for personal belongings that can be kept with the *shelter-user* within *sleeping areas*. The space is lockable and controlled by staff.

Attributes

Attributes of this space should include:

- a location near the Welcome Centre which is easily *accessible* by staff responding to *shelter-user* requests for the retrieval of personal belongings
- a metal shelving system capable of holding sealable containers for *shelter-user* belongings
- an *accessible* space for *shelter-users* to pack or repack belongings
- a size appropriate for the shelter category and sector, determined with the operator
- a suitable space for additional storage of mobility aids, for *shelter-users* who may need short-term use in the event their own device is being cleaned, may be combined with this space or placed in facilities storage

5.2. Shared-Use Areas

This section deals with spaces that are intended for shared use by all occupants of a shelter. These spaces are not to be confused with the Community Spaces which are required under the New Shelter Service Model program guidelines which includes amenities that are available to local communities (please see Section 5.5 Community Spaces for descriptions of these spaces).

Programs and support services described in this section are offered by a shelter operator or other service providers to help *shelter-users* meet their needs and goals will require some form of spatial consideration.

Shared-Use Areas include the following spaces:

Daily Living Spaces

- Gathering Space
- Recreational and Fitness Space
- Dining Room
- Shared *Shelter-user* Kitchens
- *Shelter-user* Laundry
- Private Lounges
- Pet Care Station
- Pet Kennels
- Washrooms

Family Shelter Daily Living Spaces

- Preschool-age Space
- School-age Space
- Child Program Support Space
- *Youth* Multi-Purpose Space

Case Management Spaces

- Small Counselling Room
- Small Case Management Room
- Group Case Management Room
- Computer and Resource Space

Outdoor Amenity Spaces

- Outdoor Amenity Space
- Outdoor Smoking Space
- Child Outdoor Play Space
- Outdoor Pet Space

Specialized Program Spaces

- MAP Room
- Community Health Room
- Life Skills Teaching Kitchen
- Arts & Craft Room
- Music Room
- Barbering space

Operational Context

■ At times, Shared-Use Areas can be converted into *Sleeping areas* when there is a high demand for beds. Dedicated spaces for programming and support services have been seen to decidedly improve the experience of *shelter-users* during their stay in the shelter.

The nature of the programming and support services offered will vary across the categories of shelters and sectors being served. The resulting space requirements should be determined in consultation with the operator. Programming of multi-use spaces may need to be examined as a result of COVID-19 physical distancing requirements.



Figure 16: Common area in Junction Place Shelter. Photo by SSHA



Figure 17: Common Area in Junction Place Shelter. Photo by SSHA

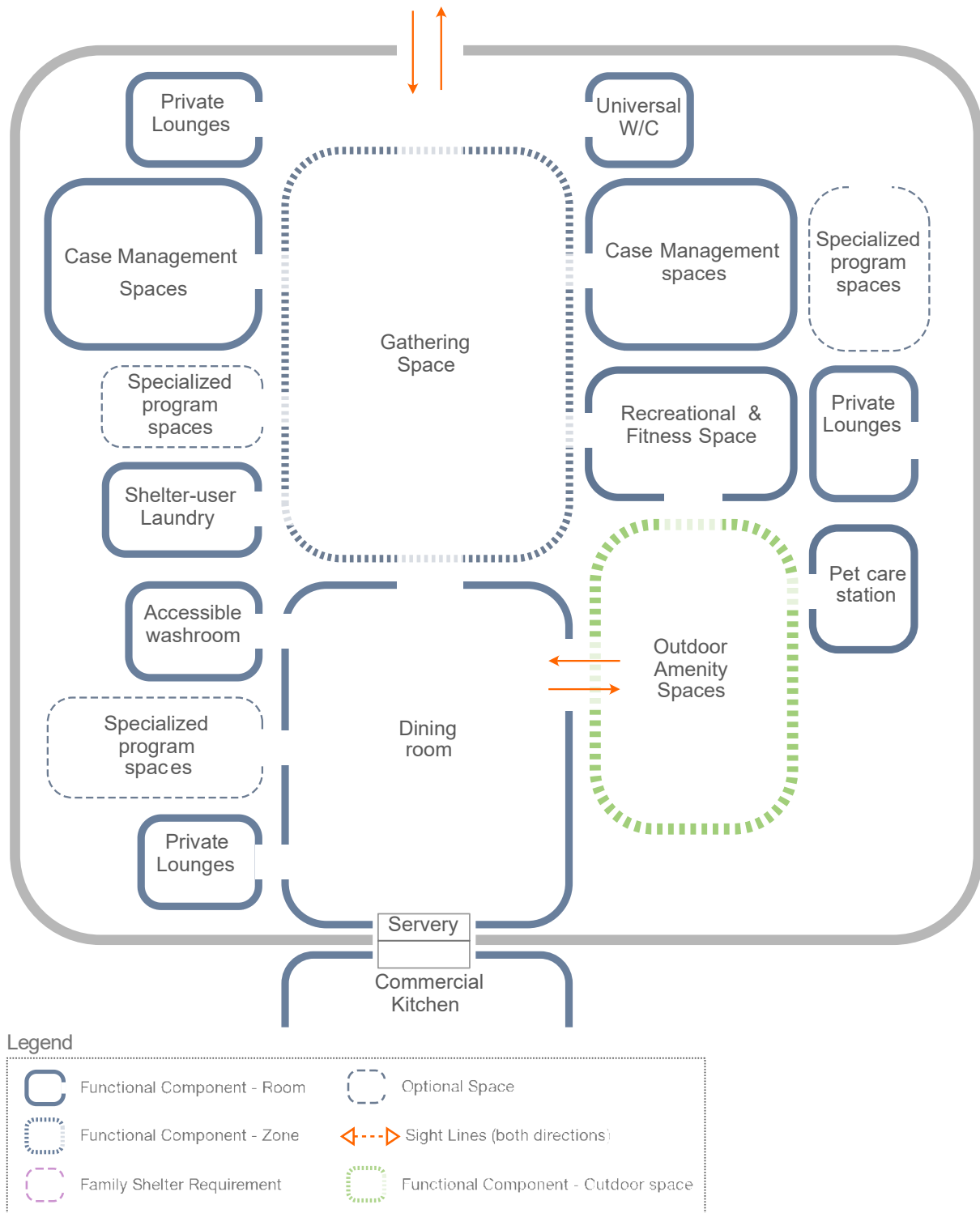


Figure 18: A functional grouping diagram of Shared Use Spaces

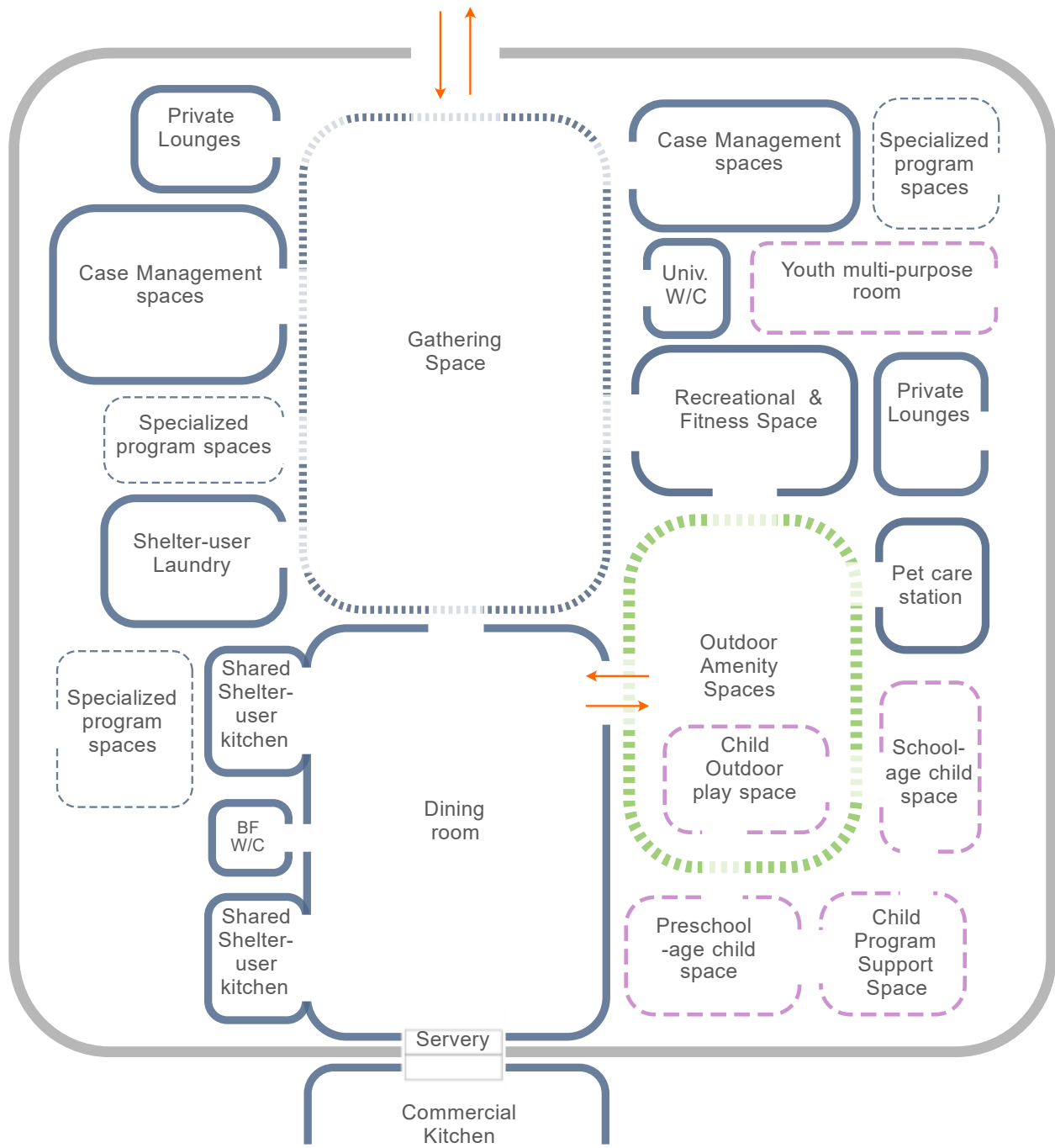


Figure 19: A functional grouping diagram of Shared Use Spaces in a Family Shelter

5.2.1. Daily Living Spaces

5.2.1.1. Gathering Space

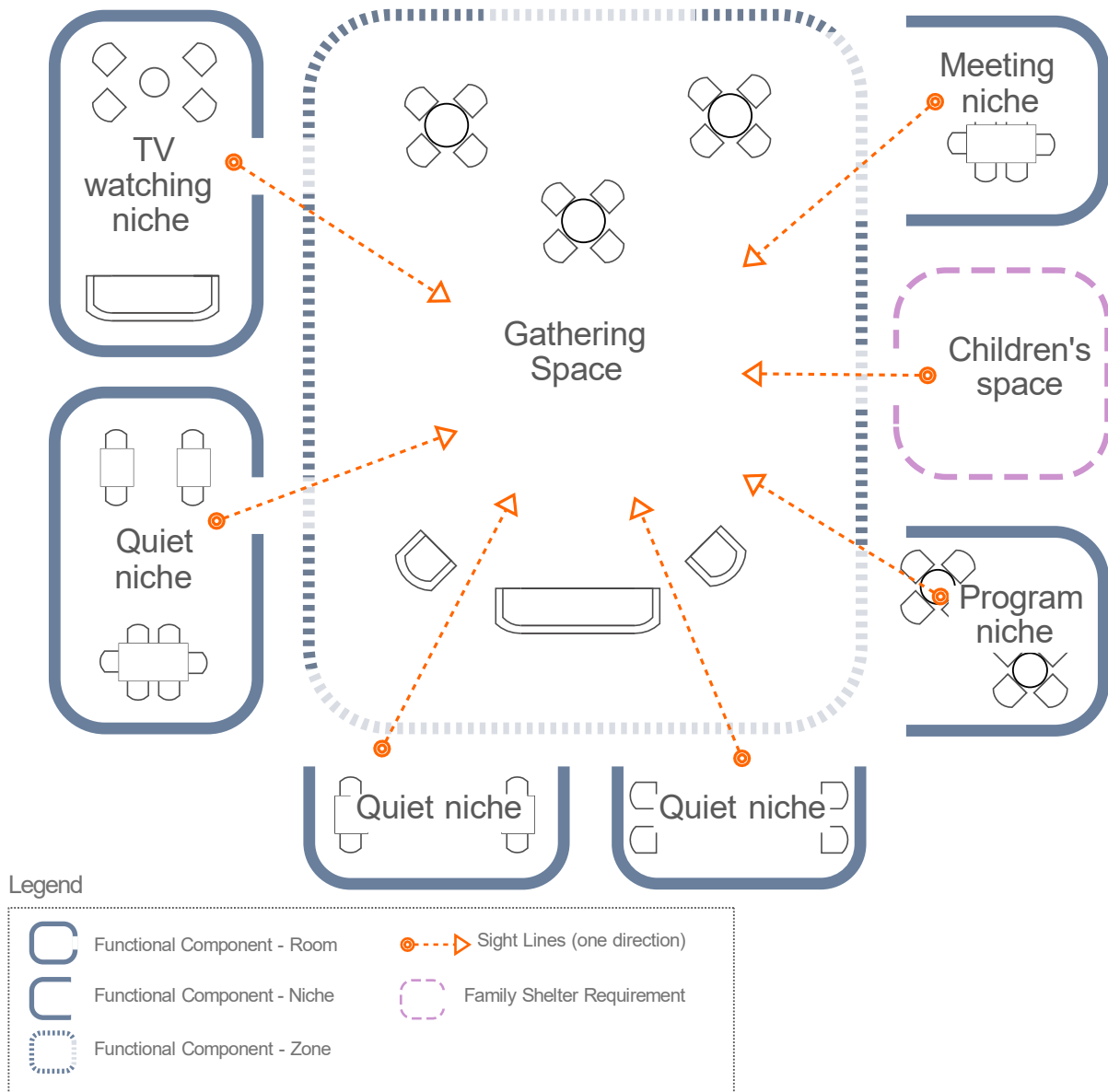


Figure 20: Diagram of the Gathering Space showing various niches for smaller groupings and different activities

Function

The Gathering Space is a space where *shelter-users* can relax and socialize that is separate from *sleeping areas*. This space can be used by individuals, or for larger scheduled gatherings such as Town Halls, movie nights or other group activities.

Intent

This space provides opportunities for peer support in a neutral space. It also provides an opportunity for staff to casually engage *shelter-users* to enhance opportunities for support. It is important to ensure that *shelter-users* are made to feel safe, engaged and connected with the staff and with each other, in a manner that does not restrict their choice or agency.



Figure 21: The gathering space at Sagatay Transitional shelter

Location

This space should be centrally located in the shelter and provide connections to other common and private spaces such as the Dining Room, Recreational and Fitness Space, Outdoor Amenity Space, Private Lounge, *Shelter-user* Laundry, Case Management spaces, Specialized Program Spaces, etc.

Attributes

Attributes of this space should include:

- A range of smaller flexible niches within the larger gathering space to provide *shelter-users* with choice in activities and size of groups they wish to engage with, including:
 - multiple spaces suitable for viewing different television programs to support *shelter-users* who may have different interests (e.g. news, movies, sports);
 - separate spaces which are not dedicated to TV use for quieter activities; and
 - a children's niche within *family* shelters with furniture appropriate for children and sight lines to this space from the main space.

- Clear sight lines with the ability for staff to oversee between the niches and the main space;
- Abundant access to daylight throughout main space and niches, while ensuring views from public areas into the shelter are appropriate;
- Generous paths of travel to accommodate *shelter-users* on a range of accessibility devices, including scooters;
- Power ports for device charging;
- Large enough to accommodate large *shelter-user* gatherings; and
- Comfortable furnishings appropriate to the use of the space;
 - easily cleanable, durable and bed-bug resistant;
 - stackable (for flexibility) loose tables, chairs, and soft seating that can be rearranged by *shelter-users* instead of fixed tables and seating;
 - suitable for *shelter-users* in need of bariatric furniture;
 - the weight of furniture should be considered if there is a concern for furniture being weaponized; and
 - within *family* shelters, provide cubbies for children to leave their belongings.

5.2.1.2. Recreational and Fitness Space



Figure 22: A gym in Covenant House Youth Shelter

Function and Intent

Recreational and fitness spaces, both indoor and outdoor, are often part of a wellness approach that provides opportunities for independent or group activities that develop and maintain health and well-being. This space can be used for recreational activities (such as billiards, card games, etc.) or fitness activities (such as weightlifting, yoga, exercise machines, etc.). In *family* shelters, consider the safety of children during certain activities such as billiards or weightlifting.

Location

In general, the location of this space should also be within a central location to satisfy the needs of *shelter-users* with connections to the gathering space and the outdoor space for outdoor recreational activities. Outdoor recreational space should be accommodated in the building's outdoor spaces. Refer to 5.2.4 Outdoor Amenity Spaces.

Attributes

Support for programs should be discussed with the shelter operator as attributes of this space will vary according to program and whether the space is used for recreational activities, fitness activities, or both.

Recreational Space

Attributes for this space should include:

- a multifunctional space for greater flexibility and space efficiency;
- space and acoustic requirements for recreational activities such as billiards, pool, or ping pong;
- comfortable lounge furniture that can be rearranged to suit various needs;
- adjacent, dedicated program storage to support activities in the room;
- in *family* shelters, consider the safety of children during activities such as billiards; and
- considerations for indoor/outdoor use.

Fitness Space

Attributes for this space, which could be combined with recreational space or a separate space, should include:

- space and acoustic requirements for fitness equipment;
- specific ventilation, electrical, acoustic or spatial requirements; and
- adjacent, dedicated program storage to support activities in the room.

5.2.1.3. Dining Room

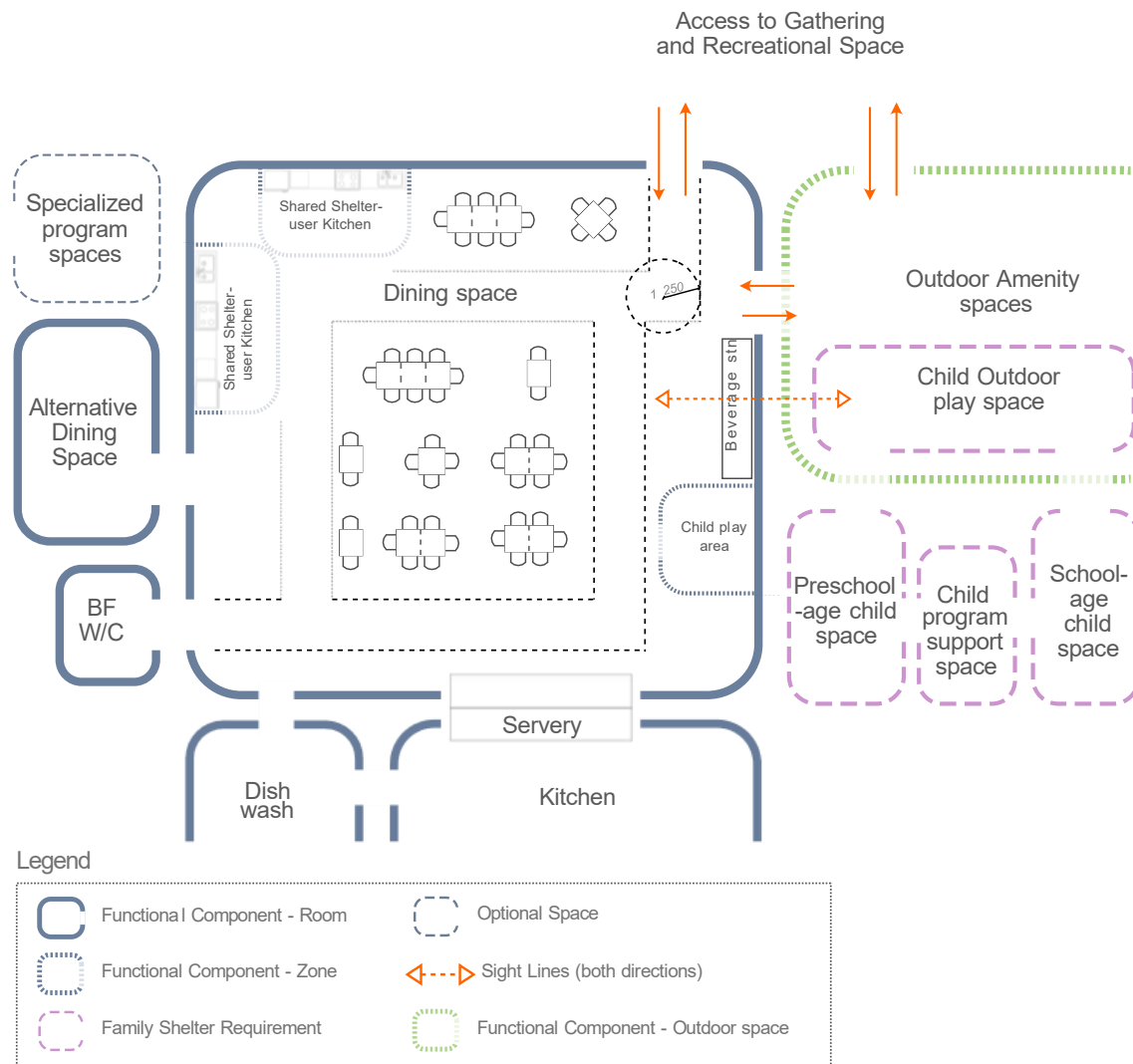


Figure 23: Diagram of Dining Room with adjacent Shared Use Spaces in a shelter with a meal program

Function

Whether food is prepared on- or off-site, a place for *shelter-users* to eat together is frequently a required component of a shelter. The Dining Room is a large space that can also serve other functions such as larger meetings, programs, or recreational activities.

Intent

One of the primary goals of any shelter is to provide nutritional support for its *shelter-users*. The Dining Room should be designed to enhance *shelter-user* dignity and comfort. An institutional space should be avoided, and this space should be used as an opportunity to

create a safe and welcoming environment for connection and interaction. Scale, acoustics, and materiality can all contribute to a sense of calmness in a space that may otherwise be noisy and intimidating to some *shelter-users*.

Location

The Dining Room should back onto a servery, which is immediately adjacent to a kitchen where food is cooked or reheated. Refer to 5.2.1.4 for kitchen location.

The location of this space should be:

- in proximity to the gathering space to reduce the need for queuing by allowing *shelter-users* to wait in common areas until line-ups reduce;
 - this proximity also supports the use of the dining room as part of *shelter-user* common space outside of dining hours
- adjacent to shared *shelter-user* kitchens with the dining room being the central point of communal eating;
- adjacent to the outdoor amenity space which can accommodate outdoor dining during favourable weather; and/or
- in proximity to common space washrooms.

■ Certain Shared-Use Spaces are identified as multi-use and can be designed for use by more than one program or support service in order to adapt to the changing needs of the shelter as well as ensure multiple programs and support services can be accommodated in shelters with limited space.

Attributes

Dining Room Configuration

The attributes of this space should include:

- The presence of daylight in excess of minimum code requirements;
- Smaller alternate dining spaces for dining adjacent to the main Dining Room may suit some *shelter-users* who find participating in a large dining hall setting uncomfortable—these spaces can be adjacent rooms or niches opening into the main dining space;
- The ability to close off the dining room, to allow the space to be more effectively cleaned and to allow the dining room to be used for programs without interruption from adjacent spaces;

- Layout that allows sufficient width of passage for free, unconstrained circulation so that *shelter-users* can come and go without being pressed into each other in tight passageways, which could otherwise result in unwanted *shelter-user* interactions;
- Acoustically-appropriate environment that enables *shelter-users* with hearing loss to participate in conversations, and which creates a sense of calmness in an otherwise noisy space—this may be improved by acoustically separating food preparation areas from dining rooms;
- A cafeteria-style servery for food service with an accessible tray slide rail unless a different configuration is requested by the operator;
 - Servery counter heights should include both standing and seated access to accommodate mobility devices
- A beverage and condiment station (if needed), that does not interfere with the passage of *shelter-users* picking up food;
- A hand-wash sink along the route to access of food, immediately prior to the food service station can help support hand hygiene before meals, and near the tray return;
- For *family* shelters, include a children’s play area within the dining room for the convenience of parents and a warming receptacle for bottle warming;
- Tables and chairs that are movable to provide *shelter-users* with the ability to configure the dining room to best suit their needs;
- Access to furnishings appropriate to the use of the space, with the following considerations:
 - Comfortable, durable easy to maintain furnishings that can be rearranged by *shelter-users* to suit their needs, such as loose tables and chairs rather than fixed tables and seating are less institutional and can give a greater sense of control to *shelter-users*; and
 - consideration of the appropriate weight for the intended furniture.



Figure 24: Rendering of dining room with various seating options at Red Door Shelter by The Architect Builders Collaborative Inc.

Dining Room Capacity and Size

Dining areas will require consideration as a result of the physical distancing requirements for the COVID-19 pandemic, with smaller, perhaps timed, groupings of shelter-users dining in multiple shifts to support reduced capacity due to distancing provisions. Temporary partitioning between seats at dining tables may also assist in this process.

The attributes of this space should include:

- Accommodation based on 75% of the shelter's occupancy in one sitting, although it is preferable to provide a flexible dining time that can accommodate *shelter-users'* preferred schedules and reduce queuing up for access to the dining room;
- Dining room seating that has 20% accessibility, which will include consideration of space provisions for table seating and/or accessible counter with no or fewer chairs than can be accommodate mobility devices, aisle widths and circulation routes between tables, and circulation routes around the room:
 - the shelter operator should be consulted for type and proportion of mobility devices being used by *shelter-users* (e.g. scooters and wheelchairs) as this will affect the *accessible* spacing requirements.
- Consider sector-specific criteria to size the dining room suitably per shelter:
 - number of children, their ages and the required support of highchairs in *family* shelters.
 - age and mobility of the *shelter-users* using the dining room, with the understanding that older *shelter-users* or those with accessibility needs may have particular limitations in accessing food through a servery. In some *transitional shelters* with high proportions of these demographics, table service or support on an individual basis may be necessary for *shelter-users* unable to serve themselves.
 - demographics with respect to size of *family* versus shelters serving single people may impact the best size of table, and whether tables may be joined together to accommodate larger groupings, or whether separate kitchenettes are provided to promote the opportunity to feed and dine with their children according to family and cultural customs, supporting agency and independence of shelter-users.
- Table size and shape:
 - rectangular tables that may be joined together to create larger shared tables maybe useful to accommodate varying *family* sizes.
 - a variety of table sizes may allow people who wish to eat alone being able to separate themselves from larger groups.
 - with the use of trays in a servery style facility it is important to size dining tables to accommodate the tray being used.

5.2.1.4. Shared *Shelter-user* Kitchens

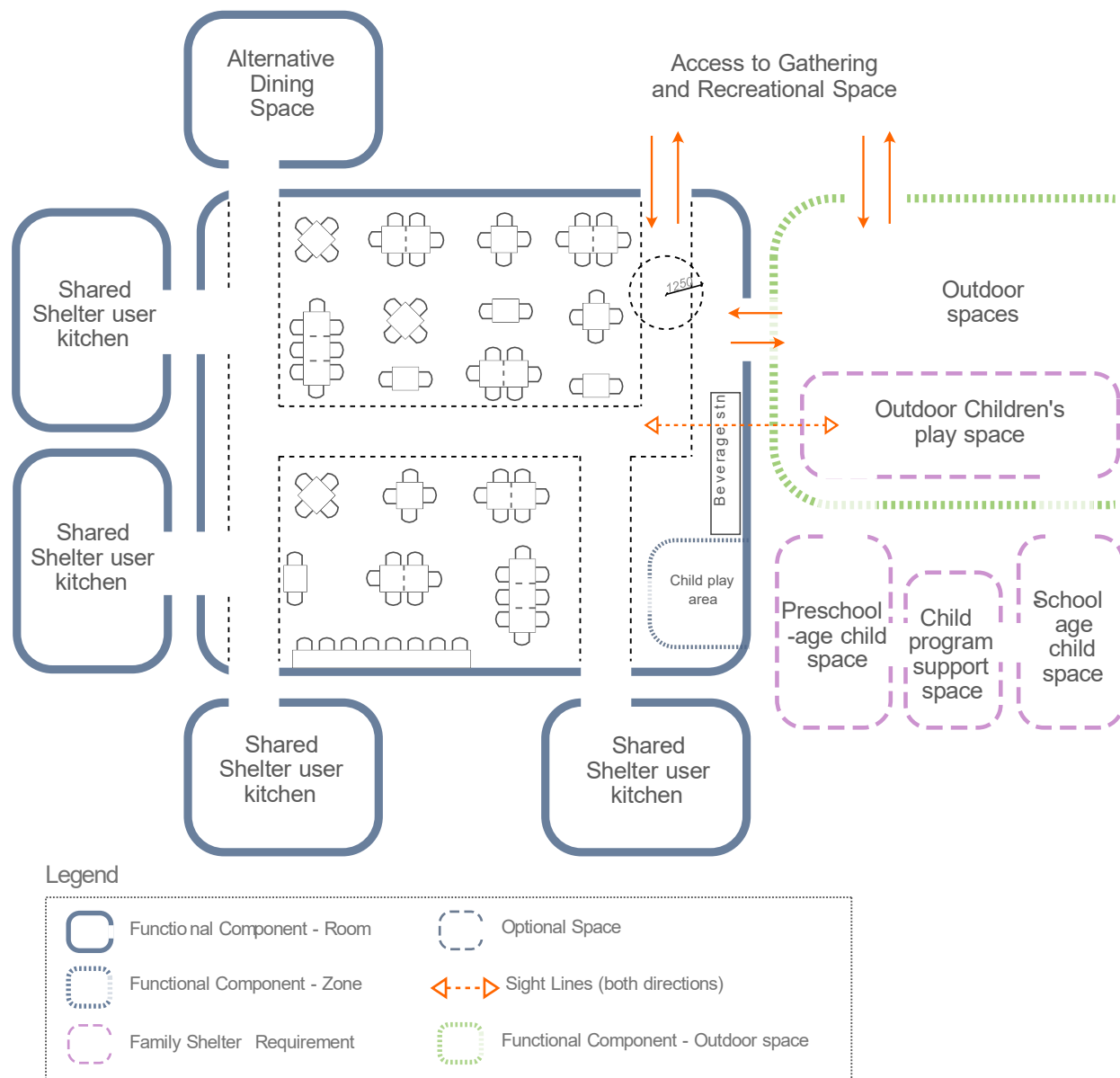


Figure 25: Diagram of Dining Room with adjacent Shelter-user Kitchens and Shared Use Spaces in a shelter without a meal program

Function

In all shelters regardless of sector, category, size, or location, it is recommended that kitchens are provided for *shelter-users* to be able to store food, reheat cooked foods, or prepare their own foods from raw ingredients. Shared *Shelter-user* Kitchens are intended for use by one person or *family* at a time, or co-operatively among multiple *shelter-users*.

Intent

When located in shelters with meal programs, Shared *Shelter-user* Kitchens are provided to give *shelter-users* flexibility and control of their diets. When located in shelters without meal programs, these kitchens are the sole means for clients to store and prepare meals.



Figure 26: A shared shelter-user kitchen

Location

Shared *Shelter-user* Kitchens should be located in or adjoined to the Dining Room. When there is a Commercial Kitchen within the shelter, locating Shared *Shelter-user* Kitchens close to the Commercial Kitchen provides opportunities for informal oversight and support from food services staff. They should be located away from areas that would be adversely affected by the noise and smell of cooking.

Quantity

The quantity of Shared *Shelter-user* Kitchens in each shelter should be determined through discussion with the operator and SSHA. The following should be taken into consideration:

- All *shelter-users* should have access to a kitchen.
- The presence of a meal program will be key in determining how many kitchens should be provided.

Feedback from Front-Line Staff

■ In existing shelters the need for facilities for *shelter-users* to prepare their own foods has been identified as a missing service. Providing *shelter-users* with the flexibility to bring in foods that are culturally specific, to satisfy dietary preferences, and to augment the shelter's meal program could greatly improve their experiences.

- The relevant shelter sector (*adult*, *youth* or *family*) will affect patterns of use and peak demand times. For example:
 - families typically have a designated person(s) who cooks for the whole *family*, this is unlike adults or *youth* who are more likely to be cooking for themselves.
 - *youth* may choose to cook at times of the day that are well outside of typical meal times.

Attributes

- Oversight and adjacency
 - proximity to regularly-staffed areas to allow for staff oversight.
 - proximity to food services staff and commercial kitchen is an asset.
 - adjacency of shared *shelter-user* kitchens to the dining room will give *shelter-users* the opportunity to partake in a communal dining experience regardless of if meals are self-catered or provided by the shelter.
- Accessibility
 - The greater of 20% or one shared *shelter-user* kitchen shall conform to the City of Toronto Accessibility Guidelines requirements for kitchens including access aisles and workspaces, millwork, sink, appliances and controls.
- Overnight safety controls for cooking appliances
 - Shared *shelter-user* kitchens should be designed so that cooking appliances can be taken out of use overnight. This could be through disabling their controls, switching off power or by physically enclosing them.
- Fixtures and fittings

Each kitchen should contain:

 - a double bowl sink with mixing valve
 - a microwave oven
 - a refrigerator for shared use, or individual refrigerators in each *shelter-user's* room
 - a freezer for shared use
 - a cooktop or range with a range hood
 - an oven
 - 4' continuous clear counter space
 - counter space providing landing space beside each appliance or fixture
 - 2 duplex convenience outlets at or above counter height
 - space for waste bins for collection of 3 stream waste
 - eyewash station
 - child safety devices for below counter storage and appliances (*family* shelters only)

- Building Systems
 - lighting designed for 500lux at horizontal work surfaces
 - the need for grease traps for sanitary drains should be confirmed through review with AHJs
 - a floor drain
 - the need for NFPA-approved fire suppression hoods at cooktops should be confirmed through review with AHJs
- Materials and Finishes
 - Refer to Section 7 Materials and Finishes

5.2.1.5. Shelter-user Laundry

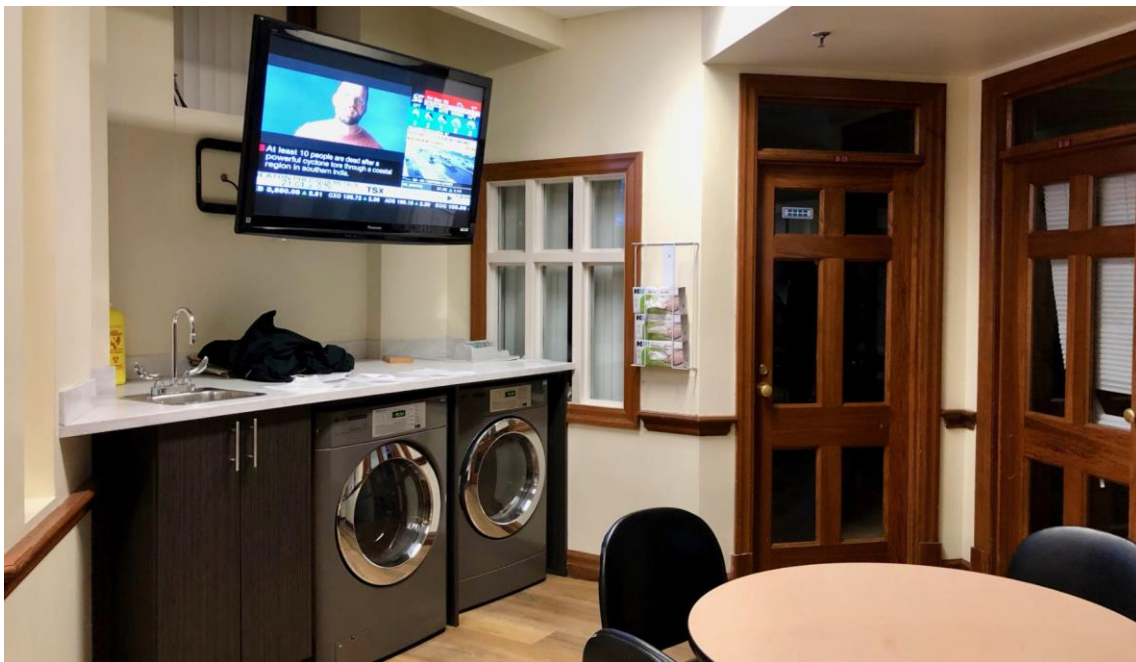


Figure 27: A shared shelter-user laundry space with one pair of washers and dryers

Function

Laundry facilities should be provided for *shelter-users* to clean their own clothing. Some emergency shelters may also expect their shelter-users to clean their own linens. In *transitional shelters*, *shelter-users* may also be responsible for cleaning sheets and towels supplied by the shelter. Central Laundries operated by staff are described in section 5.6 Facilities Support Space.

Intent

Laundry facilities are intended for independent use by *shelter-users* as a routine activity. In special cases staff assistance may be needed.

Location

- Laundry facilities should have convenient access to *Sleeping areas* with no more than 80.0 m (90 yards) travel distance between them. They are located:
 - either on the same floor as *sleeping areas*; or
 - near to elevators and stairs.
- Laundry facilities may be located in a central laundry room or dispersed into a few smaller laundry rooms grouped with *sleeping areas*.
- Laundry facilities should not be located in secluded area of the building and should be in a main traffic area.
- Laundry rooms should be located adjacent to and with oversight from a lounge to promote a sense of community.
- In *family shelters*, locate laundry rooms so that they have oversight to a children's play area.
- Laundry facilities' availability should consider *shelter-users*' schedules to ensure access.

Attributes

- Sight Lines
 - Laundry rooms should be visible from the corridor through glazed screens.
- Accessibility
 - The greater of 20% of washers and 20% of dryers or one of each should be *accessible* with front loading doors and accessible controls.
 - Access aisles and maneuvering space for mobility devices with turning circles of 2500 mm (8.2 ft.) should be provided in all laundry rooms with *accessible* washers and dryers.
 - Laundry room doors with closers should be equipped with auto door operators.
- Equipment

The following equipment is recommended:

 - Washers: 6-7Kg (14-16 Lb) heavy duty commercial washers; typical size 660-740

mm W x (26"-29" W) x 720 mm D (28-1/4" D)⁴⁰

- Dryers: energy efficient, single-load dryers; typical size 690-890 mm W (27"-35" W) x 720 mm D (28-1/4" D)¹
- Operation (by coin, card or other) will be determined by the operator
- Washers and dryers should be provided in the following quantities:

Shelter Sector	Laundry Equipment Supply
Adult /Youth	1 pair W/D per 25-40 <i>shelter-users</i> ¹
Family	1 pair W/D per 8-12 <i>families</i> ¹

■ Fixtures and Furniture

Each laundry room should include:

- a free draining hand hygiene sink with an auto operated faucet;
- an *accessible* table or counter for folding clothes, 24" (610 mm) x 48" (1219 mm) /5 dryers or a minimum of 1;
- space for a garbage container;
- counter for folding of clothing;
- seating at a ratio of 1 seat/dryer; and
- wash tub sinks can be provided but may increase the risk of floods.

■ Building Systems

- dryer exhaust ducts must be equipped with lint traps/clean-outs; and
- a floor drain should be located in the room so that overflowing water will drain to it.

Materials and Finishes

Refer to Section 7 Materials and Finishes

⁴⁰ Adapted from Multi-Housing Laundry Association, Laundry Room Guide 2015

5.2.1.6. Private Lounges

Function

Private Lounges are flexible/multifunctional spaces capable of being used for small private gatherings or individually as a quiet space. Private Lounges can serve the following functions:

- **Family Visitation Space:** while *family* and loved ones may have access all *shelter-user* common spaces, a separate space will facilitate private interactions.
- **Quiet Space:** a quiet, multi-faith worship space to retreat for prayer and meditation.
- **Study/Reading Space:** a space for reading or learning away from *shelter-user* common areas; in *family* and *youth* shelters, this space can be used as a quiet study or homework space for *youth*.
- **Alternative Meeting Space:** a space for small meetings or gatherings by *shelter-users* when other spaces are not available.
- **Neighbourhood Lounge:** a space located within a neighbourhood to be used as a lounge by *shelter-users* whose *sleeping areas* are in that neighbourhood - refer to 5.3 *Neighbourhoods*.

Feedback from Stakeholders

■ In existing shelters, the need for private and quiet spaces (especially when sleeping rooms are shared) was repeatedly stated as a missing space for *shelter-users* to be able to spend time on their own or within smaller groups.

During COVID-19, physical distancing requirements will impact the use of these spaces.

Intent

Providing *shelter-users* access smaller quiet spaces for individual or group activities other than *sleeping areas* gives *shelter-users* the choice to access privacy and engage in and plan different activities.

Connections with *family* and loved ones are, for many, an important aspect of emotional well-being. For people experiencing homelessness, maintaining or re-establishing relationships with *family* members or other loved ones may be an important part of working through trauma, regaining housing stability or a normal part of their lives.



Figure 28: Multi-functional worship space

Access to a multi-faith quiet space for prayer or meditation enhances inclusivity and wellness in a shelter and provides support for cultural and spiritual practices. This space may be shared across a wide range of religions, faiths, and practices. The design of this space should consider the needs of the population of *shelter-users* and be informed by discussions with the shelter operator.

In *youth* shelters, there is a need for a quiet and private space for studying and homework as many *youth* are involved in a schooling curriculum. A dedicated space in the shelter for this purpose provides *youth* with an opportunity to focus on completing schooling requirements as well as engaging in independent learning.

Location

These spaces should be located in proximity to interior common areas but secluded from busy circulation and spaces of high population. They are best situated along an exterior wall to provide views to the outdoors, natural light, and acoustic privacy from adjacent programs. Depending on the use, they should be situated close to related program spaces.

Attributes

Attributes of this space should include:

- access to natural light and views to the outdoors;
- partitions and doors leading into this space should have limited glazing for privacy;
- design considerations for acoustic privacy from adjacent interior spaces;
- accessibility features for a range of mobility devices and strollers;
- a recommended area of 20.0 m²;
- a mixture of café-style table and chairs, comfortable lounge furniture that can be rearranged to suit different needs, and independent study desks; and
- access to refreshments and snacks either within the room or through proximity to the dining space.

5.2.1.7. Pet Care Station

Function and Intent

This room will be a conditioned room for bathing, grooming and other pet care for use by *shelter-users* with or without staff assistance.

In order to provide a level of care for pets that *shelter-users* may not regularly have access to, the provision of a pet care station within the shelter is important for daily care of pets.

Location

The room is best situated within the building near the Outdoor Pet Space, to allow the pet to be washed and/or towelled dry should it come in from outside needing to be cleaned or wet from rain, and away from the main entrance to separate pets from shelter-users who may be uncomfortable with animals.

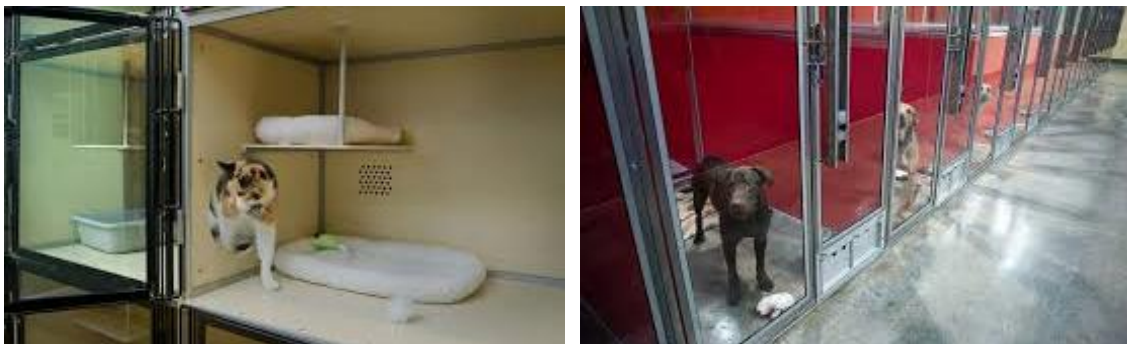


Figure 29: Pet Kennels for cats and dogs.

Attributes⁴¹

Attributes of this space should include:

- accessibility for someone using mobility devices;
- finishes in durable waterproof materials that allow the space to be thoroughly cleaned and disinfected;
- a centrally-located floor drain, with a minimum slope to drain;
- a space of about 13.5 m² in size, with a 2.75 m ceiling height;
- a space maintained at roughly between 20 and 24 °C, and between 30 and 60% relative humidity;
- a large pet wash sink set (with suitable plumbing and drains) in a solid surface grooming table at *accessible* counter height, with a set of stairs from the floor to the counter to assist larger pets in climbing up to the counter;
- a hand hygiene sink with paper towel and soap dispensers; and
- an intercom for assistance if needed.

5.2.1.8. Pets Within Kennels

Function and Intent

Kennels can help with housing pets while an owner is away for a short period of time, if a pet is exhibiting aggressive behaviour, or if a pet has an illness. Keeping pets within kennels regularly, on a daily basis, is not best practice as pets should occupy the same spaces as their owners. Refer to 5.3 *Neighbourhoods for Pets Within Sleeping areas*. Instead, kennels should serve as a pet minding space to keep pets for short durations when they cannot be with their owners. Indoor kennels provide an all-season solution, although access to outdoor space is also desirable.

Attributes

Attributes of this space should include:

- provide visual stimulation and access to natural light through window views, ideally to the outdoors, but not to locations where pets are exposed to constant activity within the shelter, which may be stressful
- dog kennels should be located in a quiet environment and designed to minimize noise, for example by using solid enclosures between dogs or smaller groups of dogs.

⁴¹ Referenced from: Sandra Newbury et al., *Guidelines for Standards of Care in Animal Shelters*, The Association of Shelter Veterinarians, 2010, <https://www.sheltervet.org/assets/docs/shelter-standards-oct2011-wforward.pdf>.

Enclosed housing units must be individually ventilated. It is assumed the pet owners will provide enrichment and out-of-kennel time for their pets.

- surfaces that are easy to clean and disinfect
- provide high levels of ventilation for animal comfort and to reduce the occurrence of secondary respiratory infections. Air changes of 10-12 per hour are often recommended for animal housing areas, but the number of necessary air exchanges depends greatly on animal density and level of contaminants (e.g. litter dust, cleaning chemicals, etc.), and may exceed 10–12 air changes/hr. Airborne disease is not a major issue for cats, but can be a significant means of disease transmission for dogs. Air exhaust in pet rooms should be isolated from main exhaust system to prevent clients with animal allergies from being exposed to allergens. This is especially important if HVAC systems use recycled air.
- provide as much choice within the housing unit for the pet (soft and hard surfaces, cool and warm surfaces, floor and elevated height spaces, hiding/retreat space, indoor and outdoor space, views, etc.) Provide double compartments of adequate space for the pet being housed to allow a place for retreat within the housing unit⁴²
- a typical dog kennel size will be:
 - 1.2 m wide by 3.0 m to 3.6 m long divided by an overhead door pass-through door, which will fit most dogs, although kennels for large breed dogs or co-housed dogs, mom and pups, etc. may be required, at which point a space 1.8 m wide x 3.0 m to 3.6 m long divided by an overhead door pass-through door will be required
 - If *shelter-users* will spend time with their dogs within the kennels, increase the kennel width to a minimum of 1.5 m wide or greater⁴³
 - An individual cat room in a kennel will be a minimum of 1.8 m² in size. A group cat room will have a minimum of 1.8 m² per cat, with a maximum of 4 to 6 cats.⁴⁴
- procedures to provide fresh clean food and water for the pets, and for cleaning of the pet space on a daily basis, as well as treatment upon entry, must be developed and supported by the design. Pet owners should be expected to undertake the ongoing support of their pet, but staff oversight should be provided should the pet owner not be able to ensure this is accomplished.

⁴² Adapted from: University of Wisconsin–Madison School of Veterinary Medicine, Shelter Medicine, *Facility Design and Animal Housing*, June 2015, <https://www.uwsheltermedicine.com/library/resources/facility-design-and-animal-housing>.

⁴³ Adapted from: University of Wisconsin–Madison School of Veterinary Medicine, Shelter Medicine, *Facility Design, Shelter Animal Housing and Shelter Population Management*, March 2019, <https://www.uwsheltermedicine.com/library/resources/facility-design-shelter-animal-housing-and-shelter-population-management>.

⁴⁴ Ibid.

5.2.1.9. Washrooms in Shared Use Areas

Intent

In addition to those provided in *sleeping areas*, washrooms should also be provided in Shelter Common Areas for the following reasons:

- Washrooms in Shared-Use Areas can be located close to dining areas, lounges, program rooms, and other shared spaces to provide convenient access for *shelter-users*.
- They provide facilities for visitors or drop-in shelter users who do not have access to washrooms in *sleeping areas*.
- They provide facilities for a current or future *alternative space programs*.

Quantity of Washrooms in Common Areas

The following washrooms should be provided in common areas:

- one *accessible 2-piece private washroom* on each floor that contains a common area; one being be a *universal washroom*;
- an *accessible 2-piece washroom* should be located close to the dining room;
- if a medical examination room is included in the shelter's common area a *private 2-piece washroom* should be provided immediately adjacent to the exam room and the doors to both of these rooms should not be located on a main corridor; and
- in *family* shelters, a child washroom should be located with the child play and support spaces (refer to 5.2.2.3).

For guidelines on washroom design, refer to 5.3.2.4.

5.2.2. Family Shelter Daily Living Spaces

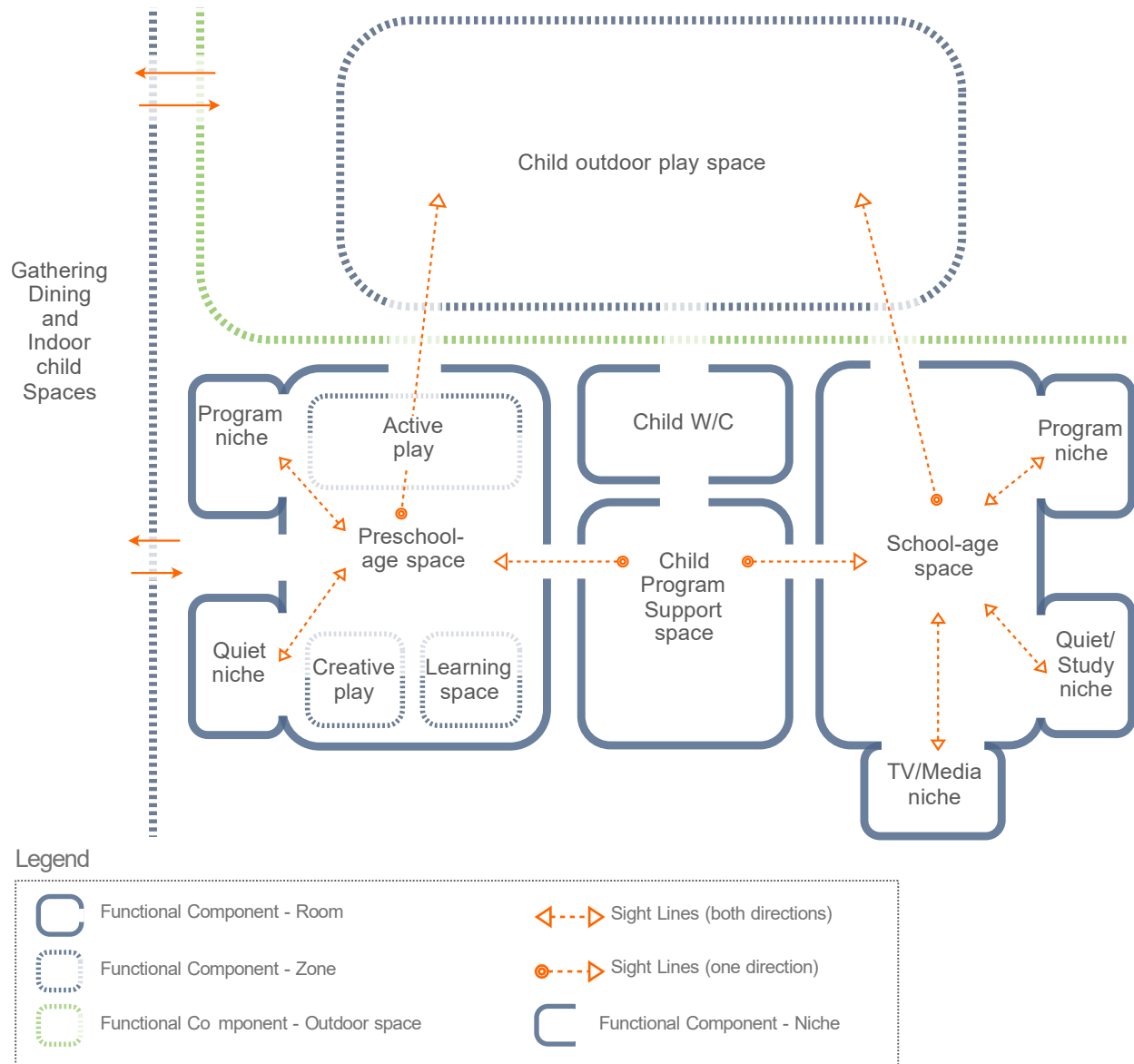


Figure 30: Diagram showing daily living shared use spaces in a family shelter

Function

These spaces primarily provide children and *youth* with an engaging, comfortable, and safe environment to play, grow, and learn. These spaces aid parents/guardians with supervision and develop a strong sense of community and companionship for children within the shelter. These spaces are not intended to support child care provided by persons other than parents/guardians.

Intent

Children may experience portions of their life in shelters, and these experiences greatly impact their formative years. The needs for children (below 16 years of age) vary by age, shelter, and demographic, but all children need spaces dedicated to them for independent growth and self-regulation. The support provided in these spaces is crucial in the development and growth of children spending their early years in a shelter.

In these spaces, distinction is made between support for preschool-age children (under 5 years), and school-age children (5-15 years).

Location

The Child Program Spaces should be located in proximity to the Dining Room, *Shelter-user* Shared Kitchens, Gathering Space, and other program spaces with high populations of parents and staff. All the *Family* Shelter Daily Living Spaces described below should maintain adjacency, direct access, and clear sight lines with one another. Refer to 5.2.4.1 for the Child Outdoor Play Space.

5.2.2.1. Preschool-age Space

Function and Intent

This is an indoor space that provides a safe and engaging space that invites children to explore, and supports activities such as playing, learning, and resting. This space promotes a child's early independence, socialization, and cognition.

Location

The preschool-age space should be located:

- with direct access and clear sight lines to the Child Outdoor Play Space and Child Minding;
- adjacent to School-age Space and Children's Washroom;
- in proximity and with sight lines to dining room or gathering space for further supervision and for easy access to food for children;
- in a space where cubbies or similar storage millwork for children can be located beside the transition between the indoor and outdoor play space, with some lockable *family* storage; and

■ For family shelters, these spaces are intended to be included in addition to other Shared Use Spaces outlined in this section. Activities that will occur in these spaces, and accessibility needs for children who use wheeled mobility devices should be determined through consultation with shelter operators and staff.

■ In existing shelters, the need for private and quiet spaces (especially when sleeping rooms are shared) was repeatedly stated as a missing space for *shelter-users* to be able to spend time on their own or within smaller groups.

- in a space where stroller storage can be provided.



Figure 31: The indoor child spaces in Robertson House open to a child outdoor play space.

Attributes

Attributes of this space should:

- be designed with a variety of zones of open spaces, as well as smaller intimate spaces to support children in distinct activities, such as:
 - material and active play;
 - creative play;
 - resting or napping;
 - eating;
 - activities with parents; and
 - activities in smaller or larger groups.

- include an indoor active play zone, in a designated space adjacent to the Child Outdoor Play Space, that will accommodate all active play during bad outdoor weather;
 - circulation paths through the rest of the space should not impede with this space; and
 - ensure the space is free of tripping hazards and large enough for free active play
- include a resting or sleeping zone, adjacent but separate from the play zones, that allows for strong sight lines with the rest of the space;
 - cots of different sizes should be provided
 - ability to control natural and artificial light in this space
 - electrical fit-outs for soft music and dimmable lights should be considered
 - good acoustic separation between this space and other play spaces
- consider scale of space (such as ceiling heights and area) from the viewpoint of a child—providing nooks and zones within the larger space will enhance a child’s feeling of comfort and safety;
- provide views to the outdoors and daylight in excess of minimum code requirements;
- use glazing in interior and exterior walls and doors to facilitate sight lines for child supervision and safety;
 - glazing on walls or partitions should be at low heights to accommodate children’s views
 - if operable windows are present, their controls should be out of reach of children
 - glass should be tempered and laminated throughout common areas of a shelter
- incorporate mirrors which can be used to engage children and aid their learning and cognition as they watch themselves’ and others’ activities;
 - consider mirrors behind child *hand wash sinks* and above change tables (refer to Child Washrooms in 5.2.2.3 in Child Program Support Space)
 - consider full length mirrors in change and dressing areas
 - if mirrors are used in program spaces, place them at *accessible* heights for children with a grab bar for children to sit down and get up in front of the

■ Through active play, and physical exploration, children gain increasing levels of independence, learn to persevere and practice self-control, and develop a sense of physical, emotional, and intellectual mastery and competence." (How Does Learning Happen? Ontario’s Pedagogy for the Early Years, pg. 29-30)

mirror

- mirrors should be shatterproof



Figure 32: Child spaces should accommodate various activities within a larger space using furniture and half height partitions to create niches and zones

- incorporate methods of organization and storage designed so there are no barriers to supervision of children and children can freely play and move around;
 - storage is labelled for ease of putting things away and situated along walls so as to not impede circulation through the space
 - storage containing items not for children should not be in reach of children
 - storage space should account for fluctuating numbers of children that may be present in the shelter at a given time
- incorporate storage designed with children's safety in mind;
 - items that may pose as choking hazards for younger children should be out of reach
 - avoid storage around or above any areas where children will be resting or napping
 - if open storage bins are used and *accessible* by children, consider children's safety when determining their sizes and heights
 - an auto door operator at the entrance to this space will support adults holding children, but may allow children to run from the space during the open interval

- use materials and finishes to create territories and boundaries and establish the various zones and circulation paths;
- support different activities within each zone and reduce impact on adjacent spaces by carefully selecting acoustic qualities of the space;
- include lockable storage to support all activities and child belongings within the space, *accessible* to staff and parents only and designed with children's safety in mind;
- design zones and associated furniture with flexibility to allow staff opportunity to rearrange and modify the space;
- choose materials and finishes that can withstand impact of children's play and contribute to the sense of space for children by incorporating colour, shapes and patterns to aid learning and interaction; and
- provide a recommended area of 2.8 m² per child.



Figure 33: A quiet reading niche within the larger child space uses wall hangings for acoustic separation

5.2.2.2. School-age Space

Function and Intent

In a *family* shelter, separate space for children aged 5 to 15 should be provided as they have distinct needs from children under the age of 5. This space is less complex than space for younger children, and more flexible, but still requires overview by parents and staff.

Location

The location should:

- provide direct access with clear sight lines to the Child Outdoor Play Space and Child Minding;
- be adjacent to the Preschool-age Space and Children's Washroom; and
- be in proximity and with sight lines to dining room or gathering space for further supervision and for easy access to food for children.

Attributes

Attributes of this space should:

- provide access to natural light in excess of minimum requirements, and views to outdoors;
- be in close proximity to an *accessible* common area washroom;
- provide overview from a staff space suitable for a child and youth worker;
- include access to a sink, drinking water, and an under-counter fridge;
- consider acoustic design to support different activities occurring at the same time within the space, and consideration of acoustic impact on adjacent spaces;
- include niches within the space to support play, supervised programming, and individual activities including reading;
- include a space for school homework, which may be separate from active spaces, with support for computer use with power outlets and charging stations; and
- provide lockable storage for programming and activities.

Operational Context

■ Family shelters will have varying operational regulations around supervision of children. The shelter operator should be consulted on operational rules concerning times and locations of child supervision by parents and/or staff to best inform the design of Child Support Spaces.

5.2.2.3. Child Program Support Space

Function and Intent

This is an indoor space that supports staff and parents in the supervision and caretaking of children for activities such as preparing and storing food, changing, washing toys, and any further office or storage support for children, parents, and staff.

Location

This space should be:

- adjacent with sight lines to all indoor child spaces.
- adjacent to the dining room and shared *shelter-user* kitchens.
- in proximity to laundry provision areas.
- Further required adjacencies and sight lines to any other relevant programs should be determined with shelter staff and operators.

Attributes

Attributes of this space should:

- incorporate access to natural light and views to the outdoors, where possible—if operable windows are present, they should be out of reach of children;
- ensure there are no blind spots within this space;
- incorporate an auto door operator into and out of this space to support adults holding children;



Figure 34: Child program support space located beside the main play space

- include a toy cleaning area, for cleaning and sanitizing toys, play materials, and equipment to mitigate the spread of infection and/or communicable diseases, separate from the food preparation area; and
- provide ample storage space for the following purposes:
 - toy storage area;
 - secure storage to support staff and parents in food preparation and changing and cleaning areas;
 - first-aid kit and medical supplies;
 - separate, secure, and lockable storage for cleaning materials and equipment; and
 - temporary storage of soiled clothes and linens to be sent to laundry.

All storage should be lockable with hardware that cannot be accessed by children.

Child Washrooms

A child washroom and change area dedicated to children, away from public access, should be present within or adjacent to this space.

The following should be considered when designing child washrooms:

- Fixtures and furniture for children should be designed to suit the scale of a child and be appropriate for children's dexterity and motor functions:
 - child size toilets should include 1 or 2 toilet seats;
 - children should be able to wash their own hands under supervision; and
 - provide a mirror behind the sink at children's eye level.
- One change table should be provided for every 10 children, located within the Child Washrooms and/or close to washrooms within the main Child Program Support Space;
 - change tables should be in proximity to the sink and toilet;
 - a covered diaper pail should be provided; and
 - a mirror should be provided above the change table.
- Provide a hand wash station for adults.
- All finishes should be impervious, easy to maintain and non-slip, with a floor drain.
- Provide space for closed waste bins.



Figure 35: Child-sized fixtures in child support spaces

5.2.2.4. Youth Multi-Purpose Space

Function

A *youth*-specific, multi-purpose recreational space provides opportunity for social and individual growth. The programs supported in this space should be decided in consultation with the shelter operator and can include specialized programs such as art or music programs. Refer to 5.2.5 Specialized Program Space.

Intent

Youth (ages 16 to 24) have a strong need for independence paired with additional support to grow and learn how to make important decisions as they evolve into independent adults. The challenges *youth* face and their respective supports vary vastly. For this reason, spaces that provide programs and support directed specifically at supporting these needs are imperative in both *youth* shelters and *youth* in *family* shelters. While this space should be present in a *family* shelter, the attributes of this space can inform modifications to the gathering and recreational spaces when present in a *youth* shelter.



Figure 36: Youth multi-purpose space in Covenant House

Location

This space is best located adjacent to the gathering spaces and recreational and fitness spaces as well as in proximity to the outdoor amenity space. Unlike the children's spaces, *youth* occupying this room may not need as much direct oversight from parents or staff and rather will benefit from an autonomous space.

- This space should be considered an interior common area and as such can provide the required sight lines for other, more private spaces.
- This space should be located in close proximity to an *accessible* common area washroom.
- This space should be in proximity to support areas with staff such as counselling, case management, etc. unless accessing these services requires discretion.

■ Building entries and interior circulation to sensitive programs and shelter types may require more privacy for youth and should be determined through consultation with the operator

Attributes

This space should:

- be *accessible* with a generous path of travel to, from, and within the space to accommodate mobility devices;
- offer presence of daylight in excess of minimum code requirements;
- accommodate a small kitchenette with access to a sink, drinking water, and an under-counter fridge;
- provide acoustic design to support different activities that may occur in the space as well with the impact on adjacent spaces;
- include a range of smaller spaces or niches associated with the larger space to allow *youth* who may be uncomfortable with being part of a large group to engage with activities on the periphery;
- include a niche dedicated to TV use, which will benefit other activities;
- avoid hidden corners where people could be trapped or be subject to violence out of sight lines or surveillance;
- incorporate varied, comfortable, and moveable furniture, aiding flexibility of the space;
- consider lighting, electrical outlets, and the load on the building's electrical system designed to support multiple programs; and
- include adequate lockable storage space to support multiple activities.

5.2.3. Case Management

Function

These are spaces for service providers or staff to establish linkages with *shelter-users* to enhance *shelter-user* access to community services and perform essential tasks to support *shelter-users* such as informal counselling, assessment, planning, referrals, monitoring, advocacy, collaborating, and follow up. Additional support may be mandated for a specific population of *shelter-users* for which specific needs may be identified. Consult the shelter operator for specific requirements.

The primary needs of support staff in spaces for Case Management fall into two types of spaces that work hand in hand:

- spaces for staff to engage with *shelter-users* (covered in this section); and
- spaces for staff work accommodation, while not engaged with shelter-users, while on site (refer to 5.4 Staff Spaces).

There is no predetermined way in which staff or service providers will engage with *shelter-users*, instead these spaces should be capable of accommodating needs for privacy and provide flexibility for different kinds of meetings. Shelter operators should be consulted on which spaces and attributes accommodate their needs.

During the COVID-19 pandemic, the need for physical distancing of staff & clients in spaces for engagement will require consideration.

Intent

A large part of the support provided within shelters relates to counselling and support services for *shelter-users* around challenges that they may be dealing with. A range of counselling and case management services may be delivered by staff or service providers, including:

- housing services;
- employment services;
- life skills development services information;
- Partners for Access and Identification (PAID) ID clinic;
- tax clinic;
- banking services;
- services may also be *accessible* through partnerships with other agencies and organizations specific to the needs of the sector; and

- special cultural or personal needs for *shelter-users* who may be experiencing discrimination within a more generalized shelter.

Location

The location of these spaces should be in close proximity to *shelter-user*-occupied common areas such as the gathering space. The screening of counselling access areas from larger public areas will provide *shelter-users* with added dignity.

A *touchdown workstation* or *shared office* for the service provider or staff providing counselling will be located elsewhere in the shelter along with other staff spaces. While the counselling rooms may not have direct access to staff work areas, proximity and clear circulation from staff spaces is beneficial. Refer to 5.4 Staff Spaces.

5.2.3.1. Small Counselling Meeting Room

Function and Intent

Health support in shelters includes spaces for counselling from staff or service providers. This is a small, private meeting room for a staff or service provider to meet one on one with a *shelter-user* or meet with a couple or *family*. The required number of small meeting rooms for counselling should be discussed with the shelter operator.

Attributes

This space should:

- incorporate a secondary egress from the space for staff;
- include a minimum of one room that accommodates *shelter-users* with scooters;
- provide access to daylight, directly or indirectly;
- be sized appropriately, if support is to be provided to more than one individual at a time, such as couples or *families*;
- incorporate an adjacent space appropriate to accommodate children while a parent is engaged with staff, when located in *family* shelters;
- be acoustically private to permit *shelter-user* confidentiality;
- provide a sidelite or half-lite view into the support space (this should be discussed with the operator);
- include one or more chairs for the *shelter-user(s)*;

- be *accessible* for people using mobility devices smaller than scooters; a size of 14.0 m² is acceptable depending on configuration; and
- be *accessible* for visiting practitioners with additional space needs, or accessibility for people using scooters; 17.0 m² is acceptable for scooter access, although additional area will be required depending on the room layout.

5.2.3.2. Small Case Management Meeting Room

Function and Intent

This is a small, private meeting room for a staff or service provider to offer case management services to one or two *shelter-users* at a time. The required number of small meeting rooms for case management should be discussed with the shelter operator.

Attributes

This space should:

- incorporate all attributes listed in the Small Counselling Meeting Room;
- include secure staff accessed storage for confidential paperwork if required by the service being offered; and
- provide any additional storage, furniture, or specialized electrical needs, as determined through consultation with the shelter operator.



Figure 37: A welcoming and private meeting space

5.2.3.3. Group Meeting Room

Function and Intent

At times, visiting professionals may offer support to *shelter-users* through group counselling or case management. This is a large, private meeting room suitable to accommodate these support services for a group of *shelter-users*.

This space should:

- provide an *accessible* private consultation room of 17.0 m² with a second exit;
- allow for proximity or clear circulation to a *touchdown workstation* with associated electrical and internet connections for the visiting health professional which may be located elsewhere in the shelter;

- include several chairs around a low table for the *shelter-users* and health care professional;
- be flexible in nature, allowing other program use, as requirements for this space are not exclusive of other use; and
- incorporate security, including staff panic alarm button, for locations such as where the handling of money or other items of value may occur, depending on the shelter category and sector.

5.2.3.4. Resource Room

This space provides access to resources and computers that further support case management services and can be used by *shelter-users* for workshops such as resume workshops, or for furthering employment skills, or housing searches. In some cases, these spaces may require additional support such as access to audio/visual support and network access. The presence, extent and attributes of this function are to be discussed with the shelter operator, as the nature of this space varies widely across different types of shelters, from one or more computer access points to much larger rooms with more extensive resources.

5.2.4. Outdoor Amenity Spaces

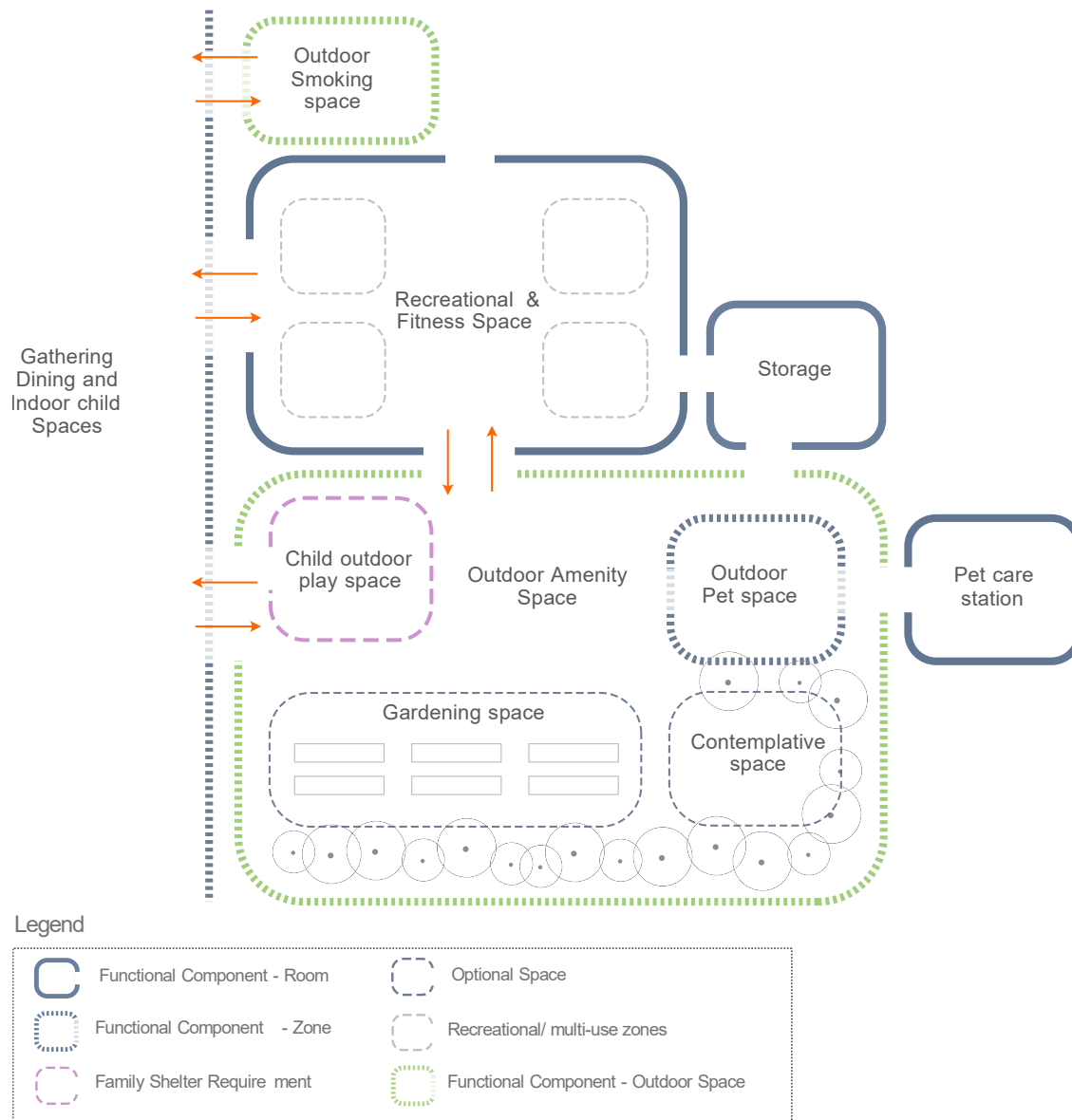


Figure 38: Diagram showing Outdoor Amenity Spaces and relevant adjacent indoor spaces

Function

Outdoor amenity spaces provide *shelter-users*, staff, and visitors with a dedicated outdoor space for recreation, gathering and other programs. This is a space that is *accessible* and designated as non-smoking for *shelter-users*, staff, and visitors and should be provided with sufficient space to support a majority of the shelter's occupants. The design of the outdoor amenity space should consider support for age specific activities and be aware of noise impacts on neighbours.



Figure 39: A raised children's play deck at a Toronto shelter, with cut-outs for children to view beyond the screen walls.

Intent

Outdoor amenity spaces are restorative spaces that are key to the design principles of these guidelines and improve quality of life through connection to nature and the outdoors. Outdoor Amenity Spaces should accommodate small and large gatherings and offer social, physical, and therapeutic benefits through programs such as community gardens, outdoor recreation, spaces for contemplation, spaces for children's outdoor play in *family* shelters, and spaces for pets. They may be at grade or on a roof or elevated deck.

Location

All outdoor spaces should:

- be adjacent or with clear sight lines to immediate interior common areas such as the dining room or gathering spaces;
- serve as an extension of interior program spaces such as recreation spaces;
- be for exclusive use by *shelter-users*, staff, and visitors, and as such should not be accessed by public from the street or site entrances;
- be located in proximity to child and *youth* spaces in *family* shelters;
- incorporate clear pathways or direct access to and from a building entry point; and

- be located in consideration with site orientation, climate, and weather conditions;
- avoid sight lines from surrounding streets or public areas of high use; and
- avoid lines of sight to adjacent neighbours' private yards.



Figure 40: Covered outdoor gathering space at Sagatay Men's Transitional shelter

Attributes

This space should:

- be *accessible* to a range of mobility devices;
- incorporate access to and from outdoor spaces that is wide enough for two-way paths of travel for mobility devices;
- provide sufficient seating and outdoor furniture to accommodate the various uses and programs being accommodated;
 - provide outdoor furniture that is moveable to accommodate various activities, change of seasons, and adapt to *shelter-user* needs;

- consider circulation routes and mobility devices when selecting and situating outdoor furniture;
- accommodate outdoor eating;
 - circulation to dining room and servery or shared kitchen should be considered (refer to 5.2.1.3 Dining Room);
 - provision for outdoor cooking such as barbecues should be discussed with the operator;
- include covering and shading devices for some or all of the outdoor space;
- provide garbage and recycling disposal receptacles;
- incorporate good artificial lighting with high colour rendition to allow access to and use of the space after dark, without negatively impacting neighbours;
- include a variety of soft landscaping and natural materials;
 - pathways and paving should be slip-resistant and made with durable and easy to maintain materials and finishes;
 - warm and natural materials such as wood and stone are recommended;
 - use materials manufactured and treated for outdoor use; and
- incorporate community gardens that can be maintained by *shelter-users*, upon discussion with the shelter operator.

Staff Outdoor Space

This space should:

- consider incorporating a separate, private outdoor space for staff, located adjacent and with direct access to interior staff spaces;
- provide entry into staff spaces from the outdoor space, which may serve as the separate staff entry into the building; and
- allow for clear circulation between the staff outdoor space and indoor staff space that is not impeded by other shared use spaces, if direct access or adjacency to staff spaces is not possible.

5.2.4.1. Child Outdoor Play Space

Function and Intent

Providing children access to the outdoors, and a chance to learn and grow from a natural environment is an important aspect of any child's life and can greatly offset some other aspects of shelter life. Often outdoor spaces provide opportunities for larger areas of space for this program when indoor space is restrictive. Outdoor spaces for children should be inclusive for various play and learning abilities of children and give children the opportunity for independent and group activities.

Location

- There should be no direct sight lines or access to this space from the street or site entrance.
- This space should directly access the child indoor play spaces as outdoor play can occur multiple times a day. If such a space is not in the program, it should directly access and have strong sight lines into an interior common area that is typically occupied by parents and staff.

Attributes

This space should:

- be enclosed by a minimum 6-foot-tall fence or alternate structure to create a defined territory for children;
- incorporate careful consideration to ensure there are no blind spots within the space;
- incorporate as much soft landscaping and natural material as possible;
- include sandboxes and water play structures;
- include benches and picnic tables for sit down activities;
- provide shade for a portion of the outdoor space and over seated areas; and



Figure 41: A view into the Child Outdoor Play Space at Robertson House

■ “Children thrive in indoor and outdoor spaces that invite them to investigate, imagine, think, create, solve problems, and make meaning from their experiences – especially when the spaces contain interesting and complex open-ended materials that children can use in many ways.” (How Does Learning Happen? Ontario’s Pedagogy for the Early Years, pg. 20)

- ensure an inclusive play space, provide flexibility in use, and encourage learning through activities.

For more information, refer to any applicable guidelines under 5.2.2.3 Child Indoor Play Space.

5.2.4.2. Outdoor Smoking Space

A secondary Outdoor Space that is *accessible* and permits smoking for *shelter-users*, staff, and visitors should be provided in a location that does not impact other activities. This space may be adjacent to the primary outdoor space but should be separated by dividers and clear signage. Where possible staff smoking areas should be distinct from client smoking areas.

- The secondary outdoor smoking area must comply with provincial legislation including the Smoke-Free Ontario Act⁴⁵ and City of Toronto bylaws⁴⁶ and regulations⁴⁷ regarding smoking, including signage.
- Cigarette disposal in outdoor spaces designated for smoking.
- Covering and shading devices for some or all of the outdoor smoking space should be provided for use during unfavourable weather conditions.
- This space should not be located near children's outdoor space in a *family* shelter.
- Presence of sharps containers should be discussed with the operator.

5.2.4.3. Outdoor Pet Space

Function and Intent

This space is primarily for the benefit of *shelter-users* with dogs who may want a space where they will be free from outside attention, and for *shelter-users* with service animals.

Location

Provision of an Outdoor Pet Space that is part of the private shelter outdoor space can help reduce neighbourhood issues by allowing *shelter-users* access to a space that can allow them to spend time with their pets without venturing into the

⁴⁵ Province of Ontario, Smoke-Free Ontario Act, S.O. 2017, Chapter 26, Schedule 3, June 6, 2019, <https://www.ontario.ca/laws/statute/17s26>.

⁴⁶ City of Toronto, Toronto Municipal Code Chapter 709 Smoking (December 17, 2013) https://www.toronto.ca/legdocs/municode/1184_709.pdf

⁴⁷ "Second-hand Smoke and the Law," Health & Wellness, City of Toronto, <https://www.toronto.ca/community-people/health-wellness-care/health-programs-advice/live-tobacco-free/second-hand-smoke-and-the-law/>.

neighbourhood.

Consideration should be given to an indoor pet relief area with suitable plumbing for use by people with mobility restrictions with service animals during winter use.

Attributes

This space should:

- be separated from other shelter outdoor spaces, and fenced with an *accessible* gate on an *accessible* path of travel; an auto gate operator should be considered;
- be designed to accommodate a person using a wheelchair handling a service animal on a 1.8 m leash; should space only be available for service animals, a minimum of 6 m² is required;
- have at least two surfaces, one which can accommodate a person in a wheelchair, and the other being designed for dog relief;
- be long enough to provide a leash-free dog run space, where available—this is particularly useful in *neighbourhoods* where access to such spaces within the public realm is not available;
- incorporate a synthetic turf surface with integral pet relief provisions that allows for the drainage of pet urine without damage to vegetation is desirable; product characteristics may include:
 - the ability to withstand full climatic exposure including ultra-violet rays and extreme heat in the location of the play yard/dog run;
 - resistance to insect infestation, rot, fungus, mold and mildew; and
 - allows the free flow of water vertically through the surface and into a drainage system below.
- include a sink with a faucet for hand hygiene (for use in warmer seasons);
- offer potable water as a drinking water supply for animals, (for use during warmer seasons), with a water bowl;
- offer a separate water supply for use in cleaning the surface;
- be constructed with adequate drainage to facilitate regular cleaning;
- offer weather protection from sun and precipitation;
- provide a three-dimensional device (e.g. rock or fake fire hydrant) to encourage urination by male dogs;
- offer animal waste bags;
- include a waste receptacle near the entrance at an *accessible* height for users in wheelchairs;

- offer a pooper scooper with a long handle is especially important for those with mobility limitations; pooper scoopers and bowls can be permanently attached to prevent theft;
- provide signage to locate the pet relief area, additional accessibility features should be incorporated:
 - supplemented with means, including auditory announcements, to guide people with vision impairments;
 - braille signing should be installed adjacent to the side of doors and gates opposite the hinges.
- within the space, signage should also be provided to indicate:
 - the need for dog owners to clean up after their animals;
 - the location of waste disposal bags, and waste receptacles, hand washing facilities, and any other facilities (e.g. automatic flushing controls); and
 - instructions for the operation of any facilities.

5.2.5. Specialized Program Space

Function and Intent

There will be additional specific program support requirements for different categories and shelter sectors. These specific needs and supporting specialized program spaces should be determined through discussion with the shelter operator.

Location

Specific locations may vary depending on the support and should be located beside other similar programs. Consult the shelter operator for the best location.

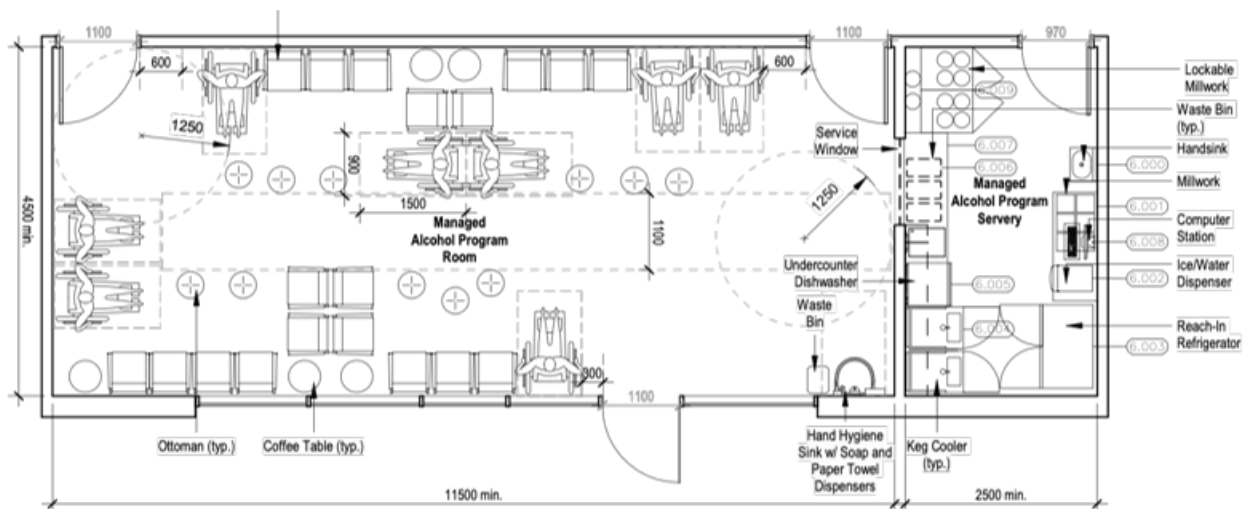


Figure 42: An example layout of a Managed Alcohol Program Room and Servery. This layout assumes 33% of program users with mobility devices)

5.2.5.1. Managed Alcohol Program

Function

The managed alcohol program (MAP) is one of the specific harm reduction programs which some shelters may provide to accommodate *shelter-users* using alcohol. In a MAP program, predetermined doses of alcohol are dispensed by staff to *shelter-users* at scheduled intervals during the day.

Intent

The program provides better outcomes for *shelter-users* for whom their use of alcohol would otherwise restrict their ability to use the shelter system. This space should also serve the purpose of outreach where *shelter-users* can interact with staff and receive information on various needs and services.

Location

This program is typically located within a shelter in proximity to the main *shelter*-user-occupied common spaces.

Attributes

This space should include two rooms, one common area for *shelter-users* and a staff-controlled space for dispensing and storage which should:

Operational Context

■ Size and quantity of server equipment, millwork, and storage should be discussed with the shelter operator to best suit the specific supplies and activities of the MAP program. *Shelter-users* may be permitted to take alcohol to their rooms, so the size of the MAP room should be discussed with the operator.

- be sized based on the population of *shelter-users* program capacity;
 - be *accessible* to a range of mobility devices including scooters (ratio to be determined with shelter operator);
 - accommodate a mixture of lounge chairs and side tables;
 - provide hand hygiene sinks, soap and paper towel dispensers and waste bins for *shelter-users* and staff;
 - incorporate a stainless-steel serving counter with dispensing taps and sink, and ice/water dispenser;
 - incorporate keg coolers and lockable storage for additional kegs;
 - provide a refrigerator and dishwasher/sanitizer;
 - include a computer workstation for record keeping and outreach; and
 - include a storage room to store supplies.
- Through providing controlled access to alcohol during their time in a shelter, *shelter-users* are able to manage their consumption at a pace and in a location that may cause less self-harm. This program can also be delivered in conjunction with support for sobriety and recovery.

5.2.5.2. Community Health Room

Function and Intent

A room within a shelter which may allow an outside service provider to provide health care services to *shelter-users*. In this space, service providers can also establish linkages to community services for *shelter-users*.

Location

The Community Health Room should be located in proximity to the main *shelter-user* common spaces. They may also be located within community spaces should more extensive health-related programs be provided to the wider community. Note that the *touchdown workstations* for visiting support providers may be located within staff spaces shared with shelter staff, depending on the program requirements.

Attributes

The attributes of this space should be determined through discussion with the care provider. As a benchmark, this space should:

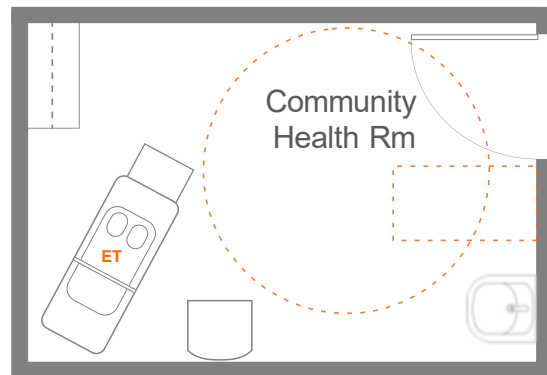


Figure 43: A community health room for visiting service providers to provide health care services.

- *accessible*, including a turning circle and access to accommodate a *shelter-user* on a mobility device, including a scooter;
- incorporate an examination table with an examination curtain for screening of the examination table;
- include a chair for use by an assistant, interpreter or *family* member;
- include a sink in a counter, with lockable base cabinets and upper cabinets for supplies;
- incorporate wall-mounted medical instruments;
- include a hand hygiene sink, soap and paper towel dispenser, and waste bin;
- include materials that are wipeable and easily disinfected
- incorporate a Class C ventilation system;
- provide voice/data/fax/outlets
- consider providing an adjacent *accessible* washroom; and
- recommend incorporating a second exit.

For further guidance, refer to provincial standards for health care spaces: PIDAC, Infection, Prevention and Control for Clinical Office Practice⁴⁸.

5.2.5.3. Life Skills Teaching Kitchen

In some shelters, life skills teaching is an essential program to assist people in moving on to permanent housing. This program may include skills development in nutrition management, shopping, cooking and cleaning.

This space should:

- incorporate a kitchen that can be set up to serve small scale instruction; the use of hot plates on a common teaching island may permit an instructor to best engage with *shelter-users*;
- provide child-friendly design with child height counters, sink, and furnishings, when located within a *family* shelter;
- consider that the life skills teaching kitchen within the shelter can sometimes be shared with the larger community when located in community space; and

⁴⁸ Public Health Ontario. *Infection Prevention and Control for Clinical Office Practice*. Revised April 2015. <https://www.publichealthontario.ca/-/media/documents/B/2013/bp-clinical-office-practice.pdf>.

- consider that when shared with the larger community, the kitchen can also host larger-scale classes, offering:
 - community programs (e.g. canning and preserving);
 - programs in conjunction with a community garden;
 - an angled overhead mirror and residential cooking appliances can assist in viewing the lessons;
 - a stove and commercial NFPA-listed exhaust hood with fire suppression system may be required, complete with measures to ensure safe shut down/enclosure of equipment when not in use; and
 - grease interceptors, dish washer/sanitizer may also be required.

5.2.5.4. Classroom

A classroom is a space for group learning programs with flexible seating that can be used by *shelter-users* and staff. This space may also be used as follow-up support for former *shelter-users*, which may include such uses as a food bank or donations disbursement spaces for third party shelter operators.

5.2.5.5. Music Program

A music program has been found to be effective in some shelters and has limited design requirements beyond acoustic separation, provision of suitable electrical, and lockable instrument storage.

In addition, consider:

- within shelters providing Indigenous support, a drumming program may be valuable; and
- within *family* shelters, include small percussion instruments that are easy to maintain.

5.2.5.6. Art Program



Figure 44: An arts and crafts space to support art programs

An art program can be provided for some *shelter-users*, including children in a *family* shelter setting. Specific support including plumbing should be discussed with the shelter operator, such as eye wash stations and sinks with clay traps.

5.2.5.7. Barbering and Hairdressing

If provided, barbering and hairdressing programs are often staffed on a part-time basis and require suitable plumbing and furniture. Within *family* shelters, provide furniture suitable for children.

5.3. Neighbourhoods

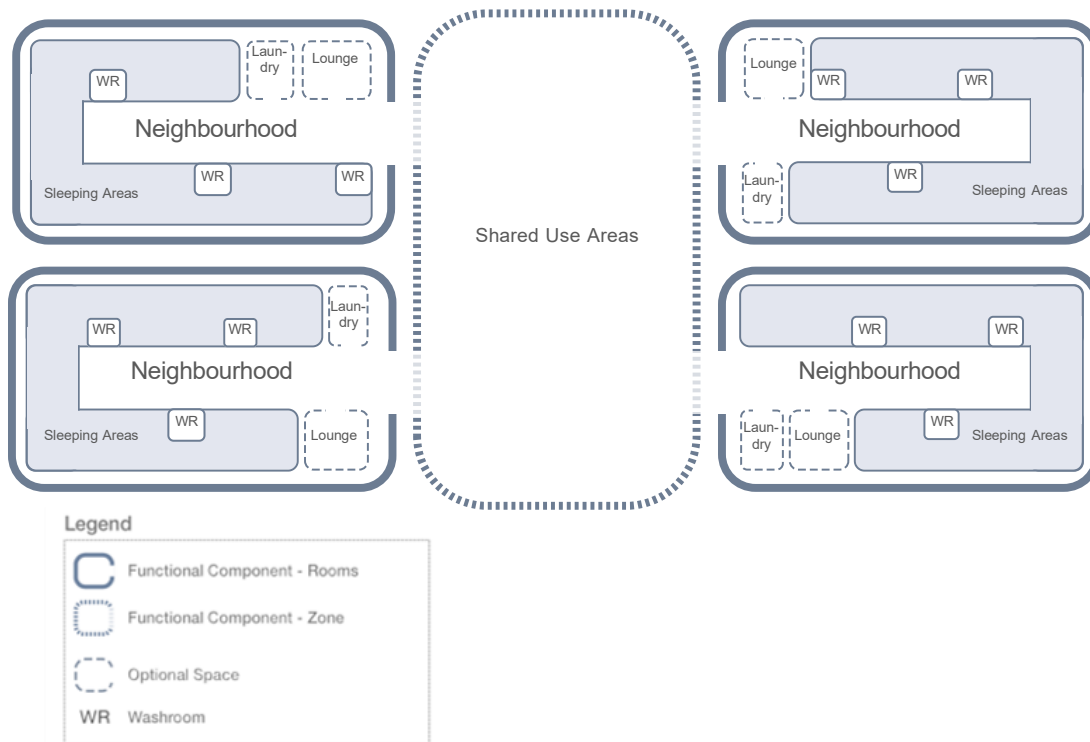


Figure 45: Diagram of concept of Neighbourhoods

Consideration of smaller grouping of shelter-users may have even more value during the COVID-19 pandemic to assist with reducing the risk of COVID-19 transmission.

Neighborhoods contains the following elements:

- *Sleeping areas*
- *Washrooms*
- *Kitchenettes (family shelters only)*

The following elements could be located either in *Neighbourhoods* or in *Shared Use Areas*:

- *Private Lounge* (Refer to 5.2.1.6 for description)
- *Shelter-user Laundry* (Refer to 5.2.1.5 for description)
- *Staff areas (offices)* in or adjacent to each of the neighbourhoods to facilitate engagement without it needing to occur in shelter-user rooms. Staff may keep some supplies at hand in the office for better response to client needs (linens, towels, toiletry and sanitary supplies etc.)

Function

Neighbourhoods are groupings of *sleeping areas* and washrooms within defined areas. They may also contain lounges and laundry facilities. They divide the *sleeping areas* of shelters into units of living space that are at an intermediate scale between individual sleeping rooms and central common areas. They may be no more than individual floors within the shelter.

Intent

In an 80- to 90-bed shelter, groupings of 20 to 25 beds in a *neighbourhood* provides a scale for accommodation which works toward recognizing people as individuals. In the area of the shelter where *shelter-users* need the most privacy, it reduces the number of different individuals who share facilities. Where staff are regularly assigned to the same *neighbourhoods*, there is opportunity for staff and *shelter-users* to get to know each other.

Location

Neighbourhoods should be located away from noisy common areas. Their location relative to support and programming space can help to build relationships within shelter programs. The location of neighborhoods can provide casual, spontaneous opportunities for *shelter-users* to encounter counselling, programming and health supports on their way to *sleeping areas* and washrooms.



Figure 46: Davenport Shelter sleeping area. Photo by SSHA

5.3.1. Sleeping Areas

Sleeping areas are the areas within shelters where *shelter-users* sleep, store clothing and personal belongings, and conduct related activities which may include resting, reading, being alone, dressing, grooming, accessing and using belongings, etc.

Sleeping Area Terms

The following terms are used in this Section (refer to Glossary for definitions):

- *sleeping area*
- *dedicated sleeping area*
- *sleeping room*
- *personal space*

Operational Context

■ Shelter operators report that even in shared sleeping rooms the provision of individual sleeping spaces that *shelter-users* can identify as their own enhance *shelter-users'* feeling of stability and agency and impacts the effectiveness with which they can cope with challenges.

Dedicated sleeping areas provide for *shelter-users'* needs in an environment which gives privacy, enhances feelings of safety, and is conducive to getting a good night's sleep.

Sleeping areas are of particular concern during the COVID-19 pandemic. Providing additional physical distancing between beds and provision of other measures in response to the latest information and changing public health guidance about the most effective measures to reduce the spread of COVID-19 is critical. In addition to physical separation, introduction of partial height partitions which do not reduce access to daylight or staff oversight, and which are secure, stable, meet fire safety requirements, and which are easy to maintain in a hygienic state, may also be worth consideration. In such cases, sprinkler coverage and flow of air will need to be assessed on a case-by-case basis. These partitions may provide the opportunity for creating increased privacy and greater dignity for the *shelter-users*.

5.3.1.1. Adult and Youth-Shelter Sleeping Areas

Enclosed Sleeping Rooms

Dedicated sleeping areas should be located within enclosed sleeping rooms. Open floor areas with large numbers of beds lack privacy and dignity and are not recommended.

Accessibility

The following is required:

- 20% of beds shall be *accessible* in conformance with the requirements for Residential Bedrooms in the City of Toronto Accessibility Design Guidelines (TADG).

In addition:

- Some, or at a minimum, one of the *accessible* beds identified above shall have adjacent maneuvering space for a mobility device with a turning circle of 2500mm (98") instead of 1500mm (59").
- Aisles to *accessible* furnishings should have a minimum clear width of 1100mm (43") in conformance with the requirements of the TADG.



Figure 47: An enclosed, private 1-bed sleeping room

Area and Personal Space

The following are minimum requirements:

- The area of *sleeping rooms* should accommodate the fixtures and furnishings listed in Adult and Youth Shelter *Sleeping Room* Attributes and/or others as required by operators with circulation space for occupants to conveniently access them.
- The area of *sleeping rooms* at a minimum shall be provided in conformance with the Ontario Building Code (OBC).
- *Personal space* shall be provided for each bed in conformance with the Toronto Shelter Standards (TSS) and any Directive related to COVID-19 physical distancing requirements.

The following is recommended for best practice:

- Clearance between non-accessible fixtures and furnishings should have a minimum clear width of 915 mm (36") in paths of travel shared by two or more *shelter-users*.

Privacy

The following is a recommended minimum:

- In rooms with more than six beds, privacy between groupings of four beds should be created with the use of screens, half walls, strategic arrangement of furniture, or the layout as described by the Toronto Shelter Standards. [Follow TPH guidance for screen partitions for COVID-19 purposes.](#)

The following is recommended for best practice:

- Wherever possible, privacy as described above should be provided to each bed.

Beds

In adult and *youth* shelters, single beds, *accessible* directly from the floor, are recommended. Bunk beds are not recommended but permitted in certain circumstances as determined by SSHA.

- **Number of Beds in sleeping rooms**

Rooms with small numbers of *shelter-users* are better than those with large numbers for:

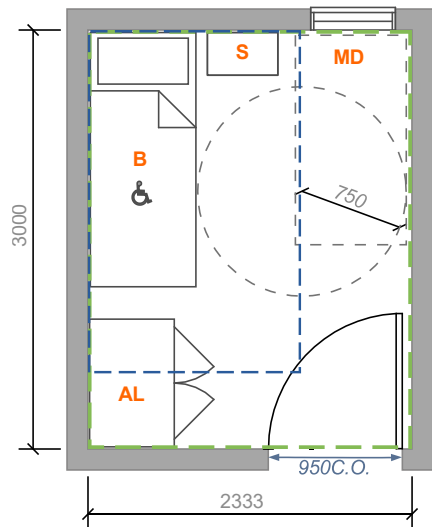
- Providing visual and acoustic privacy; and
- Enhancing occupants' sense of safety and control.

The following numbers of beds in rooms are recommended, sequenced below from most desirable to least desirable:

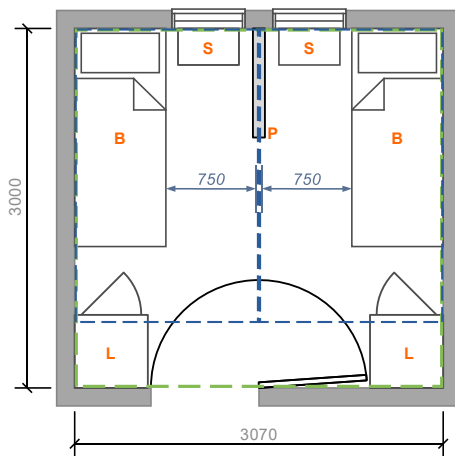
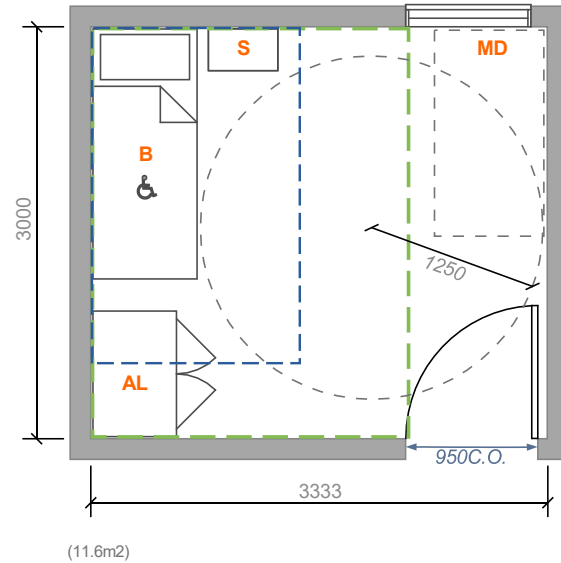
- **One- and Two-Bed sleeping rooms**

(These diagrams illustrate solutions which satisfy the minimum requirements. Solutions should be tailored for each shelter's specific fixtures, furnishings and site constraints.) [Note that the diagrams in this document do not necessarily reflect public health recommendations regarding physical distancing issued as a result of the COVID-19 pandemic.](#)

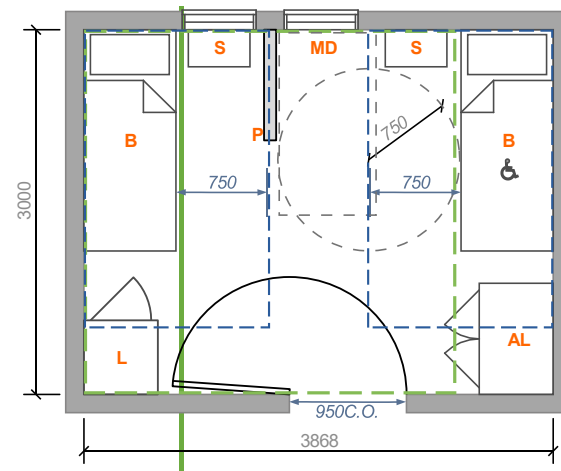
1-Bed Accessible Sleeping Room



1-Bed Accessible Sleeping Room for Larger Mobility Devices



2-Bed Sleeping Room



2-Bed Sleeping Room with 1 Accessible Bed

Legend

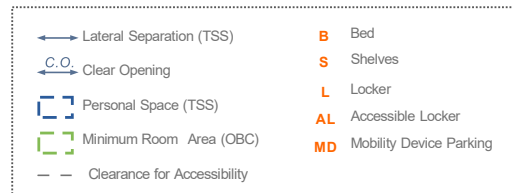


Figure 48: 1 and 2-bed sleeping room layouts showing options for accessibility

■ **Three-Bed *Sleeping Rooms* – Not suitable for use in every shelter**

Shelter designers should work closely with operators in determining if three-bed sleeping rooms are appropriate for each shelter.

■ **Four-Bed *Sleeping Rooms***

Operational Context

■ From operator feedback, an enclosed room with three occupants may contribute to the formation of unwanted social dynamics, where one of the occupants is alienated or victimized by the other two.



Figure 49: 4-bed sleeping room layouts showing options for accessibility

■ Five- to Eight-Bed *Sleeping Rooms*

More than eight beds in sleeping rooms is not recommended.

Pet Accommodation

When pets are accommodated within a *shelter-user* sleeping space, the following should be considered to help provide proper pet wellness and to minimize the stress of an animal (and consequently its owner) within an unfamiliar setting:

- a defined and dedicated space should be provided for the pet, such as a crate. Depending on shelter policy, the pet may or may not be able to choose to use the crate. Its provision will help provide a place of refuge in an unfamiliar setting.
- within the dedicated pet space, different pets will have different needs:
 - For cats, best practice is to provide two interconnected compartments, one which contains a litter box, the other which contains food, water, *sleeping areas* and a shelf or other elevated perching space. The area should be a minimum of 1.0 m² in size, with a minimum height of 0.75 m.
 - all pets should be provided with a place for concealment which comfortably allows them to avoid visual contact with people or other animals and is an important principle to reduce stress.
 - dogs will require a large enough crate to fully extend in all directions. Size will vary according to the size of the dog.
- it is assumed the shelter standard ventilation rate of 6 air changes per hour will be enough to accommodate the presence of a pet in a sleeping room.

Sleeping room mix in Adult and Youth Shelters

Sleeping room mix refers to the quantity of rooms of each bed count that is provided in the shelter. The program of each individual shelter will ultimately determine what mix of sleeping rooms is best. The shelters' category, sector, programmatic goals, and available staffing will all affect the optimal *sleeping room mix*.

Shelter designers should work closely with operators in determining these objectives. General recommendations are:

- **Shelter-users with Unique Circumstances**

It is recommended that all shelters provide at least 1 one-bed sleeping room so that private accommodation may be offered to *shelter-users* with unique circumstances, such as illness or end of life care.

- **Transgendered, Transsexual and Gender-Non-binary Shelter-users**

One-bed sleeping rooms are recommended for gender-nonbinary, transgendered and transsexual *shelter-users*.

- **Youth**

One- and two-bed sleeping rooms are best suited to *youth*. Higher number of beds have proven to net undesirable results for *youth* and staff.

- **Pets**

One- and two-bed sleeping rooms are best for designation as pet friendly sleeping rooms.



Figure 50: A multi-bed sleeping room with partial height partitions to provide privacy. Photo by DTAH

Additional Considerations for Best Practice

- **Contiguous Space for each Shelter-user in Shared Sleeping Rooms**

In shared sleeping rooms, all items intended for the exclusive use of a single *shelter-user* should be located within a contiguous floor area so that a *shelter-user* may access each of them without passing through another *shelter-user's* space.

Attributes

Attributes of this space should include:

- **Room Type**

- an enclosed room with eight or fewer beds

- **Location**

- separated from noisy areas
- located close to washrooms and showers

■ **Area**

- a minimum area of 7.0 m² for one-bed *sleeping rooms* in accordance with the Ontario Building Code (OBC)
- a minimum area of 4.6m² per person for two-to-eight-bed *sleeping rooms* in accordance with the Ontario Building Code (OBC)

■ **Door**

- a solid entry door with a 900 mm-wide (35" wide) clear opening or a 965 mm-wide (38" wide), clear opening in rooms containing *accessible* beds
- half-lite vision panels in doors, typically used to facilitate bed-checks or electronic hold-open devices can be considered as an alternative when doors require a fire resistance rating

■ **Window(s)**

- window(s) with an unobstructed glass area equal or greater than 5% of the floor area of the room per requirement of the Ontario Building Code (OBC); larger glass areas that maximize daylight should be used, where possible, except where susceptible to breakage
- except for public-facing windows close to grade, windows should be operable, where possible
- skylights can be used in unique circumstances

■ operable windows should be fitted with limiters to prevent windows from opening more than 100 mm (4")

■ crank open awning style windows are preferred, with removable access controls to allow staff to restrict operation when necessary

■ operable windows should be fitted with security screens to prevent objects from passing through the opening

■ windows in *sleeping rooms* that are operable by *shelter-users* should serve only a single *shelter-user* and be clearly in their control or controlled by staff

- there should be operable blinds or window coverings in all *sleeping room* windows

■ frosted glass or window films should not be used where they would obscure occupants' view to the outside, which would contradict the Human Rights Code

■ interior glazing between spaces, and exterior windows close to floor level, should be provided in a manner that is resistant to strong impact, and limited to small glazing sizes for easier replacement.

■ **Washbasin**

- in rooms with more than four beds, a washbasin and vanity with a floor area of 0.6m² (6.5 ft²) are recommended to be included in the *sleeping room*

Attributes Per Bed

- a single bed, minimum size 760mm (30") W × 1,820mm (72") L, *accessible* directly from the ground
 - the actual bed size should be confirmed with the operator
 - a gap should be provided around bed perimeter for changing of bedding
- individual locker or lockable closet 600mm (24") D × 600mm (24") W × 1,830mm (72") H
- open shelving at bedside
- lockable storage for mobile devices while charging, located near the head of each bed
- wall-mounted towel bar for hanging shower towel
- electrical receptacle near head of bed suitable for use of a wall mounted reading lamp
- duplex electrical receptacle and duplex USB charging port for use with personal devices, located near each bed

Attributes Per Accessible Bed

- all attributes per bed provided within an *accessible* reach range with storage units being equivalent in volume to non-accessible storage units
- *accessible* lockers should conform with the requirements of the TADG
- each *accessible* bed shall have an adjacent floor space and electrical receptacle for mobility device parking and charging (refer to the TADG requirements for Mobility Device Storage Space)

5.3.1.2. Family Shelter Sleeping areas

Private Units

- *Sleeping areas* Washrooms and Kitchenettes⁴⁹
 - In *family* shelters, *sleeping areas* washrooms and kitchenettes may be located within *private units*. Each *private unit* is intended for the exclusive use of one *family*/household, typically consisting of adults and children.
 - *Sleeping areas* in *private units* may include one sleeping room containing all beds and cribs or be subdivided into smaller *sleeping rooms*.
 - Each *private unit* should contain one *3-piece washroom*. (For further recommendations on *3-piece washrooms*, refer to 5.2 *Shelter-user Washrooms*.)
 - Each *private unit* should contain at a minimum, a kitchenette with facilities for refrigerating, warming and washing food, and food service items.
 - Where kitchenettes are provided in-unit, full-scale cooking and dining facilities will be provided in shared common areas.
 - In some *Family Shelters*, depending on the program, kitchens may be provided within the *private unit*. A discussion should be had with the operator to determine if this is an option. (For further recommendations on kitchenettes refer to 5.3.3 *In-Unit Kitchenettes and Kitchens*.)
 - Living areas are typically located outside of the *private units* in the gathering space.
- Accessibility

The following is required:

 - 20% of beds and the *private units* within which they are located shall be *accessible* in conformance with the requirements for Residential Facilities in the City of Toronto Accessibility Design Guidelines (TADG).

⁴⁹ In certain family shelters, program objectives may favour the inclusion of kitchens in *private units*, instead of kitchenettes.

In addition:

Some, or at a minimum, one, of the *accessible private units* shall have maneuvering space for a mobility device with a turning circle of 2500mm (98") instead of 1500mm (59").

- Aisles to *accessible* furnishings should have a minimum clear width of 1100mm (43") in conformance with the requirements of the TADG.

Area and Configuration of Private Units

The following is required:

■ Area of *Private Units*

The area of *private units* will include:

- the area of *sleeping rooms* including *in-unit kitchenettes*
- the area for an *in-unit kitchen* instead of an *in-unit kitchenette* if required by the operator
- the area of *3-piece ensuite washroom* area (refer to 5.2 *Shelter-user Washrooms*)
- circulation space

■ Area of Sleeping Rooms within *Private Units*

- The area of *sleeping rooms* should accommodate the fixtures and furnishings listed in *private unit* attributes, and/or others as required by operators, with circulation space for occupants to conveniently access them.
- The area of *sleeping rooms*, at a minimum, should be provided in conformance with the Ontario Building Code (OBC).
- Beds in *private units* assigned to a single *family*/household are exempt from the *personal space* and *lateral separation* requirements required by the Toronto Shelter Standards for adult and *youth* shelters.

The following is recommended for best practice:

- Clearance between non-accessible fixtures and furnishings should have a minimum clear width of 915mm (36") in paths of travel shared by two or more *shelter-users*.

Beds

In *family* shelters, the following bed sizes may be used:

- single beds
- double beds
- cribs

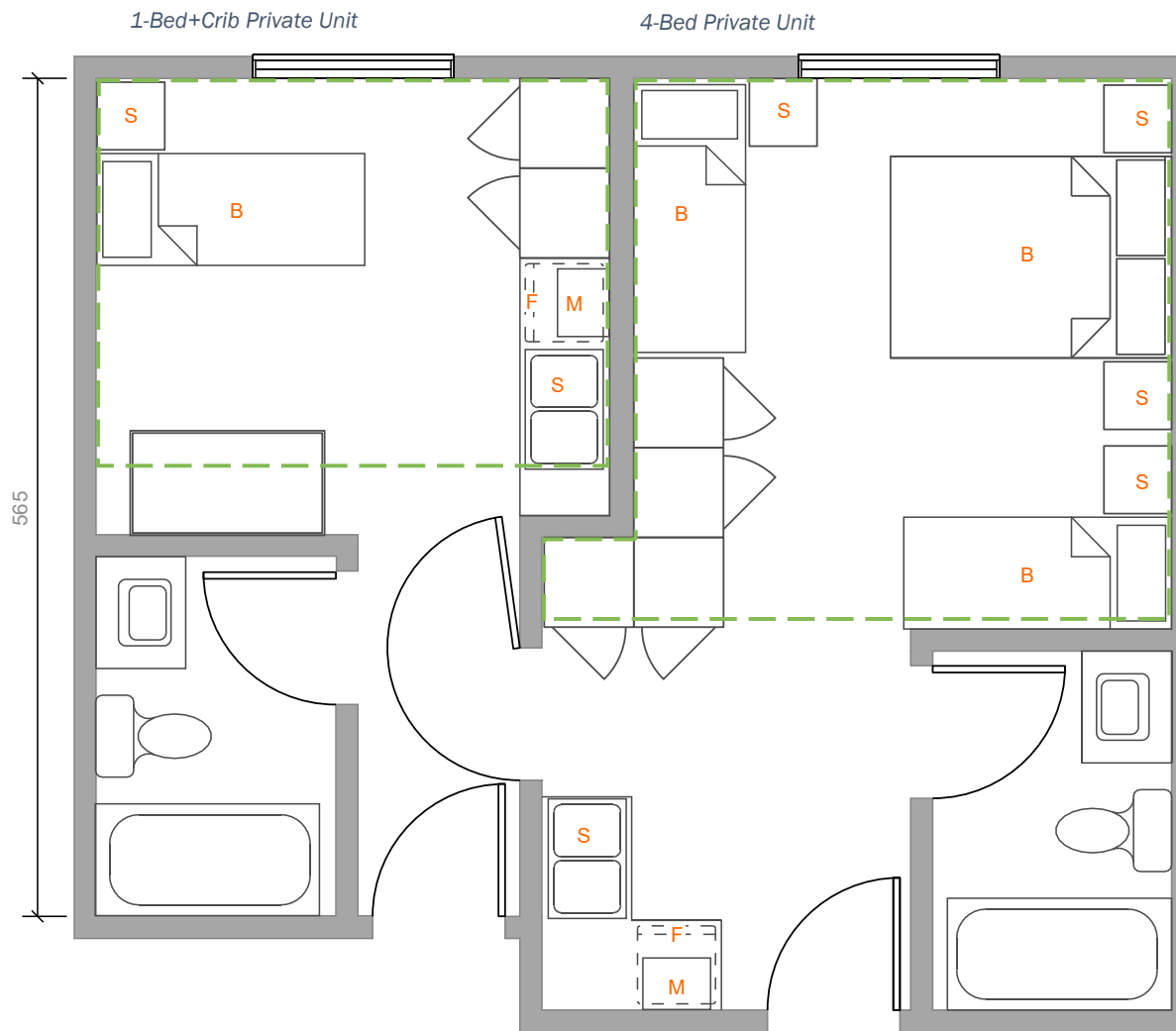
It is recommended that beds are *accessible* directly from the floor. Bunk beds if used, are for children age 6 or older only.

■ **Number of Beds/Cribs per *Private Unit* and *Unit Mix***

Family shelter *private units* should accommodate *families* ranging in size from 2 to 8 *family* members.

Flexibility in the number of beds/cribs within a *private unit* can be provided by connecting units via interconnecting doors.

Unit mix refers to the quantity of *private units* of each bed/crib number that is provided in the shelter. Shelter designers should work closely with operators in determining the number of beds/cribs in each unit and the *unit mix* to provide appropriate and flexible configurations suited to typical *family* sizes.



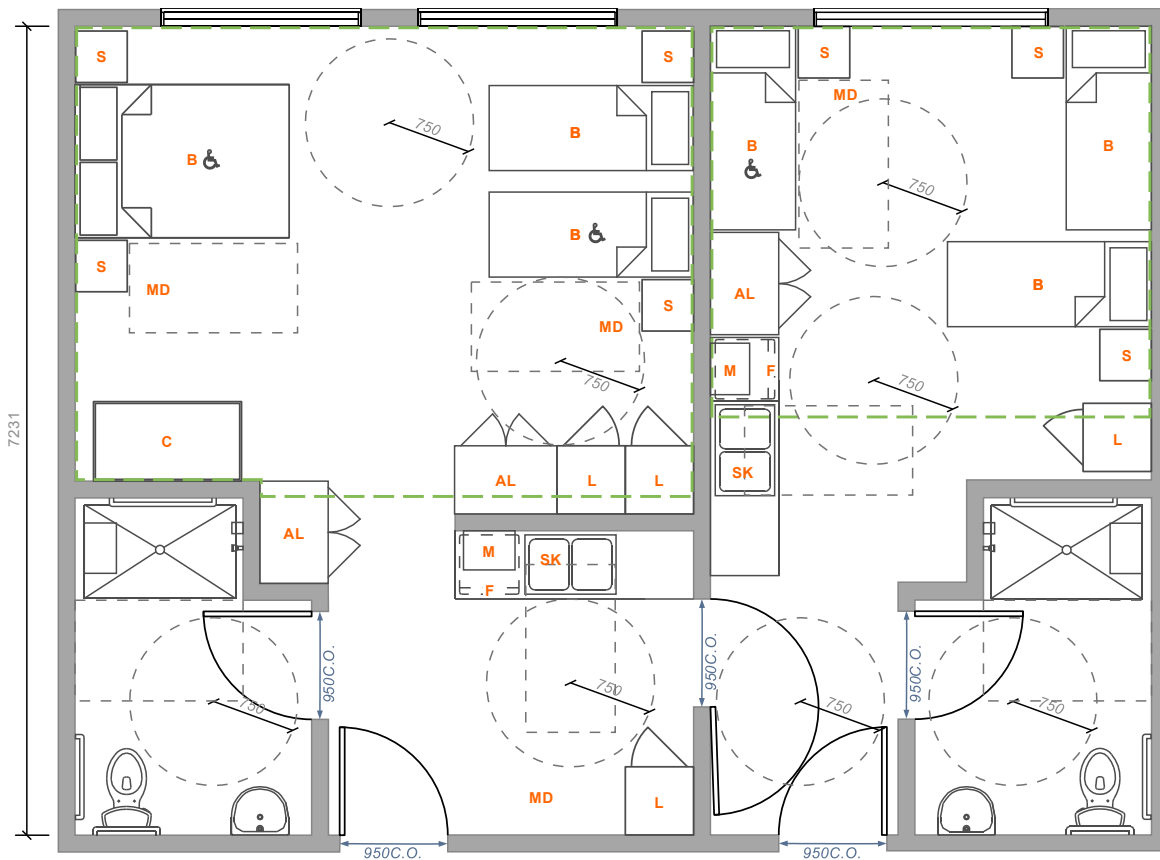
Legend

	Minimum Room Area (OBC)
B	Bed
C	Crib
L	Locker
S	Shelves
SK	Double bowl Sink
F	Under-counter Fridge
M	Microwave on Shelf

Figure 51: Family shelter sleeping room mix showing 2-person and 4-person sleeping room layouts



Figure 52: Family shelter sleeping room mix showing 5-person and 3-person sleeping room layouts.



Legend


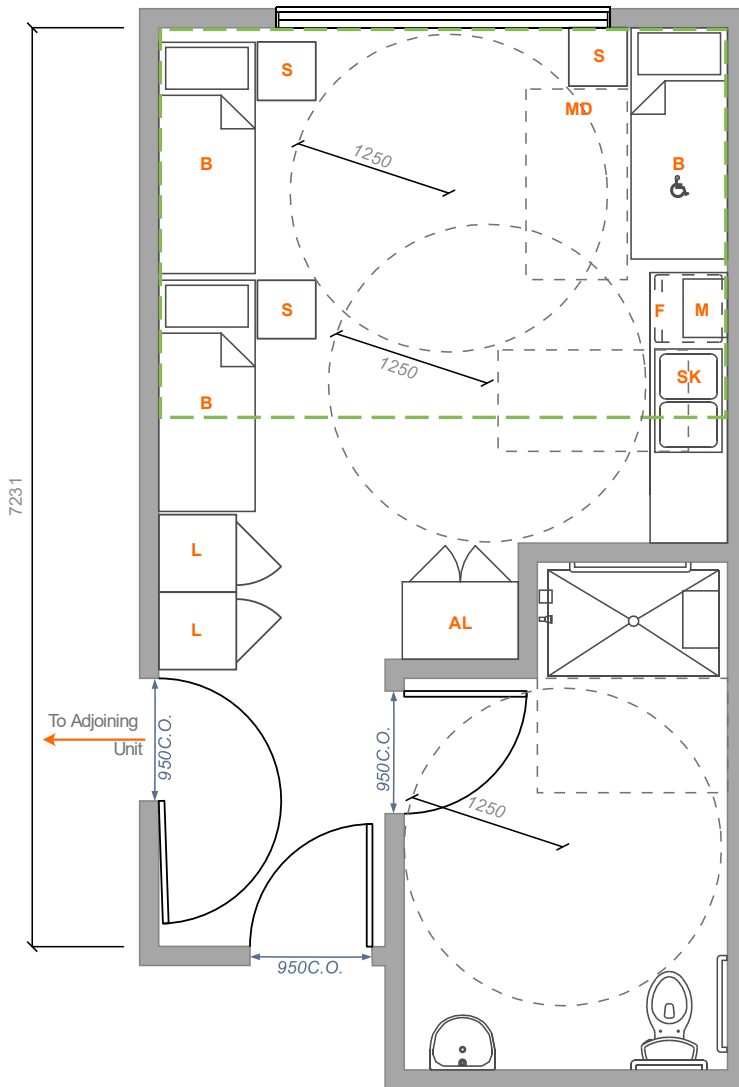
	Minimum Room Area (OBC)
B	Bed
C	Crib
L	Locker
S	Shelves
MD	Minimum Room Area (OBC)
AL	Access Locker
M	Microwave on Shelf
F	Under-counter Fridge
SK	Double bowl Sink

Figure 53: Family shelter sleeping room mix showing 5-person and 3-person accessible sleeping room layouts

3-Bed Accessible Private Unit for larger Mobility Devices



Legend

	Minimum Room Area (OBC)
--	Clearance for Accessibility
B	Bed
C	Crib
L	Locker
AL	Accessible Locker
S	Shelves
SK	Double bowl Sink
F	Under-counter Fridge
M	Microwave Shelf

Figure 54: Family shelter 3-bed accessible sleeping room layout for larger mobility devices

Pet Accommodation

Refer to Pet Accommodation in 5.3.1.1. Adult and *Youth-Shelter Sleeping areas*.

Attributes of Private Unit

Attributes of this space should include:

■ Type

- *private units* containing sleeping area(s), a *3-piece washroom* and a kitchenette
- refer to 5.2 *Shelter-user Washrooms* for washroom attributes
- refer to 5.6 *Shelter-user Self Catering* for kitchenette attributes

■ Location

- separated from noisy areas

■ Area

- two- to eight-bed *sleeping rooms* to have a *minimum* area of 4.6m² per person in conformance with the Ontario Building Code (OBC)

■ Door

- solid, lockable entry door with 900mm-wide, clear opening and 965mm-wide, clear opening in *accessible private units*
- interconnecting doors should be used in pairs or have acoustic seals

■ Window(s)

- window(s) with an unobstructed glass area equal or greater than 5% of the floor area of bedrooms/*sleeping area* per requirement of the Ontario Building Code (OBC); where possible larger glass areas that maximize daylight should be used
- in consideration of the safety of children, it is recommended that windows are not operable.
- child-safe, operable blinds or window coverings at all *sleeping room* windows; frosted glass or window films should not be used if they would obscure occupants' view to the outside

■ Fixtures and Furnishings

- beds should be *accessible* directly from the floor; actual bed sizes should be confirmed with the operator.
- closets 600mm (24") × 1,830mm (72") H, with 600mm (24") of width per bed/crib
- open shelving at each bedside
- electrical receptacle near head of each bed suitable for use of a reading lamp

- one duplex electrical receptacle and one duplex USB charging port per bed for the use with personal devices
- in units in which a child is expected to reside, electrical outlets must be tamper proof to ensure the safety of the child.

Attributes of Accessible Private Units

Attributes of this space should include:

- all *accessible* fixtures and furnishings within an *accessible* reach range and storage units being equivalent in volume to non-accessible storage units
- *accessible* storage in conformance with requirements of the City of Toronto Accessibility Design Guidelines (TADG)
- floor space and electrical receptacle for mobility device parking and charging within the *private unit* for each *accessible* bed

5.3.2. Washrooms

Washrooms in *neighbourhoods* are the main facilities for *shelter-users'* toileting, showering, grooming and other personal care activities. They should be located as close as possible to *sleeping areas*. They should be provided in adequate supply to reduce conflict, they should be convenient to use, they should be private and support *shelter-users'* confidence in their safety and privacy. Flooding is a common occurrence in shelter washrooms. In multi-level facilities, where possible, *shelter-user* washrooms should be stacked and a washroom should never be placed above sleeping areas, offices or other critical spaces. A waterproof membrane integrated into all washroom flooring systems.

Washroom Terms

The following washroom terms are used in this section (refer to Glossary for definitions):

- *ensuite*
- *private*
- *multi-stall*
- *3-piece*
- *2-piece*
- *shower room*
- *universal washroom*
- *universal washroom and shower*

5.3.2.1. Considerations for all Neighbourhood Washrooms

Accessibility

The following is required:

- the number of washrooms that are *accessible* should be proportional to the number of beds that are *accessible* for example if 20% of beds are *accessible* then 20% of washrooms should also be *accessible*;
- wherever *accessible* beds are located the washrooms closest to them should be *accessible*;
- where an *accessible* bed provides maneuvering space for a mobility device with a turning circle of 2500 mm this bed shall be served by a *universal washroom and shower*; and
- *accessible* washrooms should conform to the requirements of the TADG.

Configuration

The following washroom configurations can be used in shelters:

Locks in all washrooms should be the type that can be overridden by staff.

Consideration should be given to washroom doors and stall doors opening out instead of in.

- ***Ensuite washrooms***

An *ensuite washroom*, can be a 2-piece or a 3-piece washroom that is entered from a sleeping room. The room is lockable to provide privacy to the washroom occupant.

- ***Private washrooms***

A *private washroom* can be a 2-piece or 3-piece washroom or a shower room that is entered from a corridor. The room is lockable to provide privacy to the washroom occupant.

- ***Multi-stall washrooms***

A *multi-stall washroom* contains more than one plumbing fixture of the same type, located in stalls if they are toilets or showers, intended for the use of multiple *shelter-users* at the same time

The wait times for plumbing fixtures will be affected by washroom configuration and the supply of washrooms should take this into consideration. For example, the occupants of a four-bed sleeping room sharing a single *ensuite washroom* will have longer wait times for plumbing fixtures than if they shared a multi stall washroom with

the same number of fixtures. However, wait-time is not the only consideration for determining washroom configuration. Other factors are discussed below.

Quantity of Plumbing Fixtures

The Ontario Building Code (OBC) and the Toronto Shelter Standards (TSS) provide minimum requirements for the quantity of plumbing fixtures. In addition, the following study provides for reference a comparison of plumbing fixture counts compared in different configurations in existing shelters.

Plumbing Fixture Counts in Existing Toronto Shelters ⁵⁰						
	Water Closets		Sinks		Showers	
ENSUITE MODEL						
7 Vanauley Street Emergency shelter. Youth 43 beds	FIXTURE COUNT # in sleeping areas (# in facility)					
	20	(28)	20	(31)	19	(23)
	FIXTURES : BEDS					
	1 :	2.2	1 :	2.2	1 :	2.3
Sagatay Transitional shelter. Men 22 beds	FIXTURE COUNT_ # in sleeping areas (# in facility)					
	20	(22)	20	(22)	18	(18)
	FIXTURES : BEDS					
	1 :	1.1	1 :	1.1	1 :	1.2
PRIVATE MODEL						
Eva's Satellite Emergency shelter. Youth 33 beds	FIXTURE COUNT # in sleeping areas (# in facility)					
	12	(14)	8	(10)	8	(10)
	FIXTURES : BEDS					
	1 :	2.8	1 :	4.1	1 :	4.1
Youth Link Transitional shelter. Youth 47 beds	FIXTURE COUNT # in sleeping areas (# in facility)					
	12	(15)	10	(12)	6	(6)
	FIXTURES : BEDS					
	1 :	3.9	1 :	4.7	1 :	7.8

⁵⁰ Data sourced from Space Analysis Studies of Shelters provided by SSHA. Studies were conducted by Chu Architects, 2018

	Water Closets	Sinks	Showers
MULTI-STALL MODEL			
Na-Me-Res <i>Emergency shelter. Men</i> <i>63 beds</i>	FIXTURE COUNT # in sleeping areas (# in facility)		
	11 (12)	6 (7)	6 (7)
	FIXTURES : BEDS		
	1 : 5.7	1 : 10.5	1 : 10.5
Good Shepherd Centre <i>Emergency shelter. Men</i> <i>92 beds</i>	FIXTURE COUNT # in sleeping areas (# in facility)		
	36 (40)	20 (24)	11 (11)
	FIXTURES : BEDS		

5.3.2.2. Adult and Youth-Shelter Neighbourhood Washrooms

Consideration for Privacy and Convenience

For providing the most privacy and convenience to *shelter-users* in adult and *youth shelter neighbourhoods*, *ensuite washrooms* configurations are preferred, *private washrooms* configurations are second best, and multi-stall configurations are the least desirable.

Consideration for Shelter Users with Unique Circumstances

It is recommended that all shelters provide some 3-piece *ensuite washrooms* adjoining 1-bed sleeping rooms so that private accommodation may be offered to shelter users with communicable diseases or other unique circumstances.

Consideration for Transgendered Transexual and Gender Non-binary Shelter Users

Three-piece *ensuite washrooms* adjoining 1-bed sleeping rooms provide the best accommodation for transgendered or transsexual shelter users. Three-piece *private washrooms* are the second-best configuration. *Multi-stall washrooms* in *neighbourhoods* do not provide enough privacy, safety, or dignity for transgendered and transsexual *shelter-users* because of the private nature of activities that take place such as showering and shaving, although gender-neutral *multi-stall washrooms* may be suitable in other parts of the shelter where these activities do not take place.

The facility should provide a configuration that does *not* identify (“out”) transgendered or transsexual *shelter-users* through their choice of washrooms. For example in women’s shelters if all but one set of fixtures is provided in a multi-stall configuration and the remaining set of fixtures is provided in a *private washroom* identified as the “gender-neutral washroom”, the *shelter-user* who uses the gender-

neutral washroom is identifiable because the facility forces them to behave differently from everyone else. However, if all of the fixtures are provided in either ensuite or private configurations the facility will provide a safer and more dignified experience.

5.3.2.3. Family-Shelter Neighbourhood Washrooms Configuration

In *family* shelters, *private units* should at a minimum each contain one 3-piece *ensuite washroom*.

- Bathtubs are preferred over showers. Refer to the City of Toronto Accessibility Design Guidelines (TADG) for *accessible* bathtubs.

5.3.2.4. Washroom Design

Attributes

Within larger, multi-use washrooms, provide a hose hook up for easy cleaning and disinfection. All washrooms should have the following attributes:

- **Doors**
 - Washroom doors should have a minimum width of 965 mm.
 - Except for entry doors to *multi-stall washrooms*, all washroom doors and washroom stall doors should be lockable from the inside and unlockable from the outside by staff.
 - Washroom doors and washroom stall doors should be capable of swinging out as either the normal way in which the door operates or under special circumstances by a staff person.
 - Ensuite and *private washroom* entry doors and washroom stall doors should have occupancy indicators.
 - *Multi-stall washrooms* can be doorless, but should be provided with an entrance barrier for cleaning. Doors shall be provided to stalls.

- **Hand Wash Sinks**

Hand wash sinks should be accompanied by:

- an auto operated faucet with temperature mixing valve;
- a drain which runs freely at all times;
- a vanity of a minimum size of 750 mm (30") W x 500 mm (20") D supported from the floor (fixed to walls for lateral support); under-sink storage is not required; and
- a wall mounted mirror minimum size 450 mm (18") W x 600 mm (24") H.

Hand wash sinks in adult and *youth* shelters should be accompanied by:

- space for *shelter-users'* belongings when they use the washroom.

■ Water Closets

Water closets should be accompanied by:

- 900 mm (35") minimum clear space in front of the water closet and 460 mm (18") minimum clear space from the centre line of the water closet on both sides; and
- a tamper-resistant wall mounted sharps bin should be provided within arms-reach of every water closet.

■ Showers and Bathtubs

Showers should:

- have a minimum size of 900 mm (35") W x 1500 mm (59") D or the equivalent area;
- incorporate a bench within the room or stall for dressing in a seated position; and
- be equipped with shower curtains or partitions and doors in ensuite and *private washrooms*, and with a lockable door in *multi-stall washrooms* shower stalls.

Accessible showers and *accessible* bathtubs should:

- conform to the requirements for *accessible* showers of the TADG.

■ Robe Hooks

- Wherever *hand wash sinks* and showers are provided, wall-mounted robe hooks should be provided within arm's-reach.
- A minimum of 2 robe hooks should be provided at every hand wash sink, water closet, and 4 at every shower
- Anti-ligature fixtures should be used if there is any concern about shelter-user self-harm.

■ Floor Drains

- Wherever a sink, water closet, or shower is provided a minimum of one separate floor drain should be provided within the same room.

■ Finishes and Materials

- Refer to Section 7 Materials and Finishes

Storage of Towels

■ When using shared washrooms, *shelter-users* should be encouraged to remove towels from washrooms after use, turn them in as soiled or store them in *sleeping areas*. This is to prevent the spread of infections because of mix-ups between one shelter user's towel and another's.

5.3.3. In-Unit Kitchenettes and Kitchens

In *Family Shelters*, kitchenettes are included in *private units*. In certain *Family Shelters*, program objectives may favour the inclusion of kitchens instead of kitchenettes. A discussion should be had with the operator to determine if this is an option.

Accessibility

The following is required:

- Wherever a *private unit* contains an *accessible* bed the kitchenette or kitchen shall also be *accessible*.
- Where the maneuvering space at the *accessible* bed caters for a mobility device with a turning circle of 2500 mm (98") instead of 1500 mm (59") the maneuvering space in the kitchenette or kitchen shall do so also.

The City of Toronto Accessibility Guidelines requirements for kitchens and kitchenettes shall be applied except that:

- Kitchenettes and kitchens which cater to mobility devices with 1500 mm (59") turning circles can have clear aisle widths of 1500 mm (59").

Location

- Within *private unit* near to entry door

Attributes for In-Unit Kitchenettes

Every in-unit kitchenette should contain:

- a double bowl sink with mixing valve;
- a microwave oven;
- an under-counter refrigerator;
- 914 mm (3') continuous clear counter space;
- 914 mm (3') storage cabinets or shelving, a minimum of 305 mm (12") deep;
- 2 duplex convenience outlets at or above counter height;
- space for waste bins for collection of 3 stream waste; and
- child safety devices for below counter storage and appliances.

Attributes for In-Unit Kitchens

Every in-unit kitchen in addition to or instead of the items above should contain:

- a 610 mm (24") W full-height refrigerator and freezer instead of an under-counter fridge
- a cooktop or range with a range hood, with safety shut-off
- an oven, with safety shut-off
- 914 mm (3') storage cabinets or shelving min 508 mm (20") deep in addition to that in kitchenette
- counter space providing landing space beside each appliance or fixture
- space allocation for eating in the *private unit* to be reviewed and confirmed with operator

Safety Considerations for In-Unit Kitchens

When stovetops are located within private spaces it is challenging for staff to monitor their use and there is greater risk of the occurrence of kitchen fires. The facility operator should determine if the provision of private *shelter-user* kitchens is appropriate for each shelter.

In addition to the requirements of the Building Code the following safety measures are recommended:

- Design kitchens keeping safety in mind.
- Adhere strictly to manufacturers' recommendations for the installation of equipment.
- Install a manual fire extinguisher in every kitchen.

The use of the following can be considered (refer to Reducing Residential Stovetop Fires in Ontario, Office of the Fire Marshall, 2009):

- Install an automatic fire extinguishing system activated by a temperature sensor above the cooktop.
- Install a motion sensor at the front of the cooktop that either sounds an alarm when no one is present or includes a control component that can automatically turn the cook top off.
- Install a timer that is started automatically when the cook top is turned on and sounds when the cook top has been on for a pre-set duration. This can be easily reset by the user.

- Install a pan-contact temperature sensor in the cooktop which will adjust its input to limit maximum temperatures.
- Use induction cooktops.

Each of the measures above have advantages and disadvantages that should be reviewed with the operator.

5.4. Staff Spaces

Shelters operate 24 hours/day, 7 days/week, 365 days/year and have a continuous staff presence. The work of staff is the foundation for success in shelter programs and staff well-being is key to sustaining the quality of shelter services.

During the COVID-19 pandemic, considerations of physical distancing and touch-down should be addressed.

It is expected that each shelter operator will have their own organizational structures, staff job descriptions, and hiring practices. This section sets out a baseline program for staff space based on a formulation of generic staff roles. It should be reviewed and tailored to the requirements of each new shelter through discussion with the operator and SSHA.

Shelter staff work everywhere in the shelter, and staff needs are addressed throughout these Guidelines. This section deals with the following spaces:

- Staff Office Spaces
- Staff Meeting Spaces
- Staff Support Spaces

5.4.1. Staff Roles

The following is a generic description of staff roles in shelters based on discussions with SSHA. A shelter capacity of 100 *shelter-users* is assumed.

Senior Management

Senior management staff oversee all shelter staff and programs and are responsible for the facility and operations. They are the most senior staff and their specific needs for each shelter based on the requirements of the operator must be provided for. A shared office does not work well for the senior management positions. These positions are frequently having confidential calls and meetings with staff, clients, community members, outside agencies, and vendors. Having touchdown spaces for staff who have a primary office at another facility is acceptable.

Positions may include:

- Shelter Manager or Facility Manager
- Shift Leader, Site Leader, Program Supervisor or Operational Supervisor
- Program Coordinator
- Supervisor of Social Assistance or Housing Worker Supervisor
- Administration Supervisor

- Food Services Supervisor
- Property Services Supervisor

Administration

Administration staff are responsible for the administrative work that supports shelter operations and services including data entry, bookkeeping, ordering, booking, processing client files etc.

Positions may include:

- Administration Support Worker
- Administration Clerks

Case Management

Case management staff work directly with *shelter-users* providing counselling, system navigation, assistance with benefits, employment, health programs, and finding housing.

Positions may include:

- Counsellors
- Case Managers
- Housing Workers
- Social Workers

Shelter-user Service and Support Staff

Shelter-user service and support staff interact with *shelter-users* on an on-going, daily basis providing continuous support and assistance with services and programs within the shelter.

Positions may include:

- Client Service Workers
- Personal Service Workers
- Support Workers

Food Service Staff

Food service staff undertake the handling, storage, planning, preparation and/or serving of food or meals. Food Services Managers, Cooks and Kitchen Staff work predominantly in the kitchen. Dietitians/Nutritionists are expected to visit the shelter intermittently to meet with other food service staff.

Positions may include:

- Food Services Manager
- Cooks
- Kitchen Staff
- Dietitians/Nutritionists

Property Services

Property service, housekeeping and maintenance staff are responsible for the cleaning maintenance and servicing of a shelter facility.

Positions may include:

- Maintenance Workers
- Handy Persons
- Site Superintendents
- Cleaners
- Custodians

Visiting Service Providers

Visiting service providers are staff who are not employed by the shelter but work for partner organizations that provide services in the shelter.

Positions may include:

- Health Practitioners
- Social Service Providers
- Other

5.4.2. Staff Office Space Needs

This section describes office space needs of shelter staff described in the previous section. Certain staff positions require office space for their entire workday, while other staff positions, may only require office space for only a portion of their workday. Certain staff will work full-time at the shelter while other staff may only work there part-time or intermittently. SSHA's objectives for office environments in shelters are to create modern and collaborative environments, provide all staff with access to office space as needed, and use space efficiently by allowing workstations to be shared as schedules allow.

■ Touchdown workstations are shared between multiple staff and can be accessed through a hoteling system (where the workstation is reserved in advance) or a hot-desk system (where an available workstation is claimed on the spot).

It should be noted that the City of Toronto has guidelines for space and furniture provision for office space under their Office Modernization Program (OMP) that apply within shelters the City operates.

During the COVID-19 pandemic, consideration will be needed on physical distancing requirements between staff in an open office environment.

Office Terms

The following terms are used in this section (refer to Glossary for definitions):

- *Dedicated workstation*
- *Touchdown workstation*
- *Shared office*
- *Open office*

Staff Positions and Office Space Needs

Role and Workplace	Position	Office Space Needs
Senior Management (workplace split between office and meeting rooms)	<ul style="list-style-type: none"> Shelter Manager/Facility Manager 	<ul style="list-style-type: none"> <i>dedicated workstation</i> in a <i>shared office</i> frequent access to small meeting rooms
	<ul style="list-style-type: none"> Shift Leader/Site Lead/Program or Operational Supervisor 	<ul style="list-style-type: none"> <i>dedicated workstation</i> in a <i>shared office</i> site lines to reception or area of highest <i>shelter-user</i> activity frequent access to small meeting rooms
	<ul style="list-style-type: none"> Supervisor of Social Assistance/Housing Worker Supervisor 	<ul style="list-style-type: none"> <i>dedicated workstation</i> in a <i>shared office</i> frequent access to small meeting rooms
	<ul style="list-style-type: none"> Admin Supervisor/Property Services/Food Services Supervisor 	<ul style="list-style-type: none"> <i>dedicated workstation</i> in a <i>shared office</i> if based full-time at site or <i>touchdown workstation</i> in <i>open office</i> if based part-time at site or makes intermittent visits. frequent access to small meeting rooms
Administration (workplace primarily in office)	<ul style="list-style-type: none"> Admin Support Worker Admin Clerk 	<ul style="list-style-type: none"> <i>dedicated workstation</i> in <i>open office</i> access to small meeting room frequent access to Administrative Workroom
Case Management (workplace split between office and case management meeting rooms with <i>shelter-users</i>)	<ul style="list-style-type: none"> Counsellor Case Manager Housing Worker Social Worker 	<ul style="list-style-type: none"> <i>dedicated workstation</i> in <i>open office</i> Site lines and frequent access to case management meeting rooms and counselling meeting rooms

Role and Workplace	Position	Office Space Needs
Shelter-user Service & Support Staff (workplace primarily in other areas in the shelter small amount of time spent in office)	<ul style="list-style-type: none"> • Client Service Worker • Personal Service Worker • Support Worker 	<ul style="list-style-type: none"> • Client Service Worker • Personal Service Worker • Support Worker
Food Service Staff (workplace in dining and kitchen facilities; small amount of time spent in office)	<ul style="list-style-type: none"> • Food Services Manager 	<ul style="list-style-type: none"> - <i>dedicated workstation</i> in commercial kitchen
	<ul style="list-style-type: none"> • Kitchen staff • Cooks 	<ul style="list-style-type: none"> - <i>touchdown workstation</i> in open office or kitchen
(work time divided between more than one shelter. When on site, workplace predominantly in office and, meeting rooms)	<ul style="list-style-type: none"> • Dietician/Nutritionists 	<ul style="list-style-type: none"> - <i>touchdown workstation</i> in open office - access to small meeting room
Property Services and Maintenance Staff (work time spent primarily in other areas of the shelter; small amount of time spent in office)	<ul style="list-style-type: none"> • Maintenance Workers • Handy Persons • Site Superintendents 	<ul style="list-style-type: none"> - <i>touchdown workstation</i> in open office
Housekeeping Staff (work time spent primarily in other areas of the shelter; small amount of time spent in office)	<ul style="list-style-type: none"> • Cleaners • Custodians 	<ul style="list-style-type: none"> - <i>touchdown workstation</i> in open office
Visiting Service Providers (part-time or intermittent work time at the shelter spent primarily in case management meeting rooms; small amount of time spent in office)	<ul style="list-style-type: none"> • Health Practitioners • Social Service Providers • Other 	<ul style="list-style-type: none"> - <i>touchdown workstation</i> in open office

5.4.3. Office Spaces

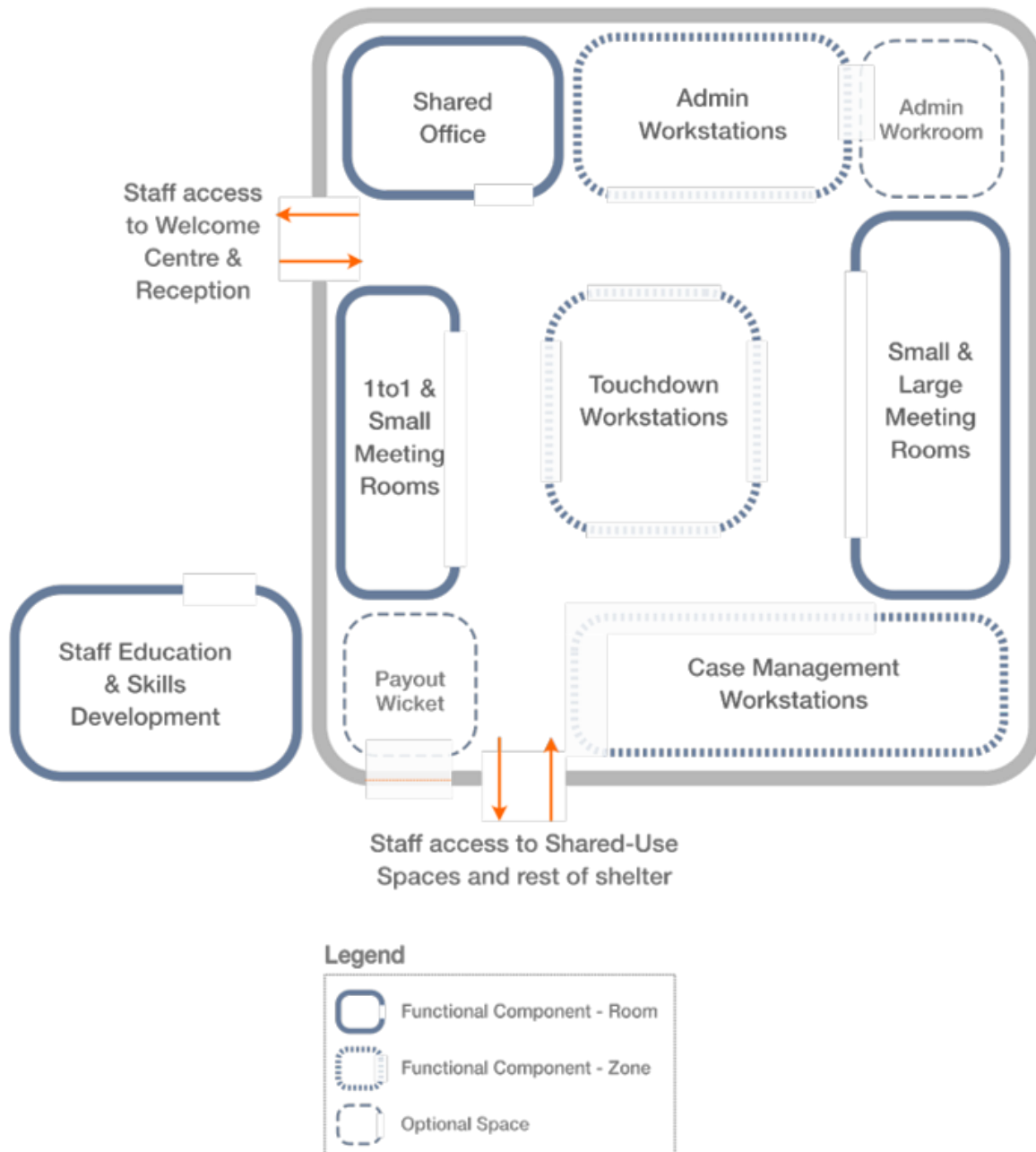


Figure 55: Diagram of Staff Office Spaces and Meeting Spaces in Main Office Suite

This section describes office spaces that accommodate the needs described in the previous section as well as specialty spaces that may be needed if required by the shelter program. The spaces required will vary based on the staff roles and the organizational structure of each particular shelter.

5.4.3.1. Main Office Suite

Unless driven by specific adjacency requirements, all office spaces should be located in a main office suite so that meeting rooms, staff and equipment (multifunction devices) can be shared. The Main Office Suite should have one end that is close to *shared use spaces* and another end that is away from *shelter-user spaces*.

5.4.3.2. Shared Office

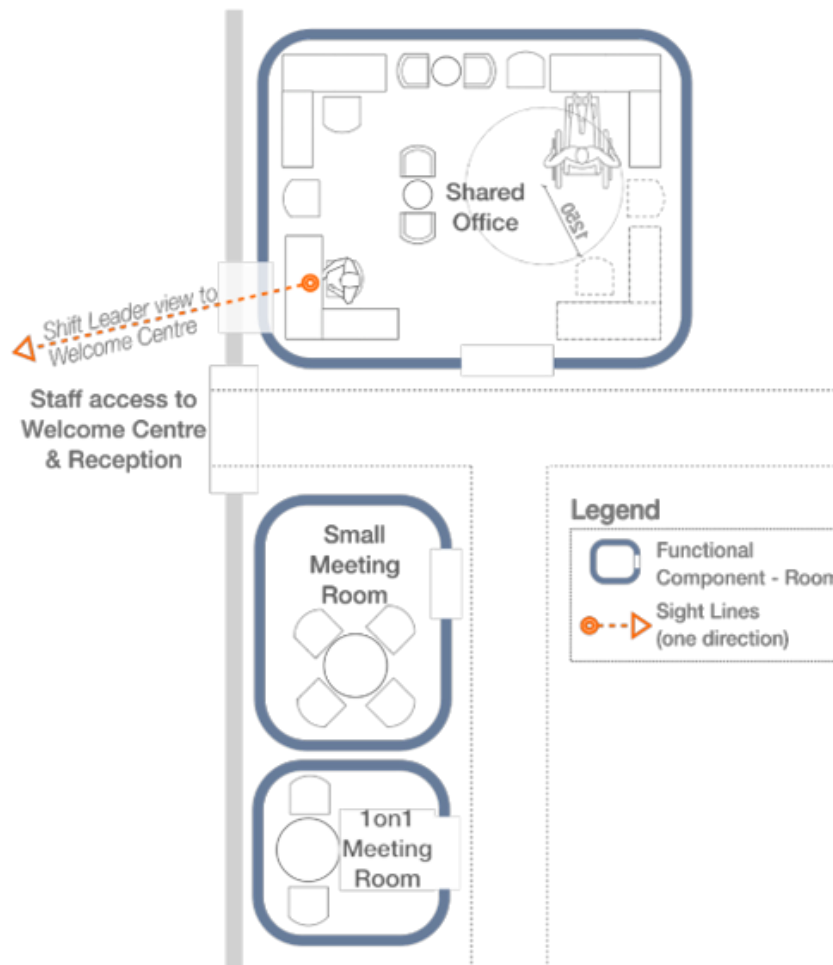


Figure 56: Diagram of adjacencies and sight lines for Shared Office

This space should:

- be located in the main office suite away from *shelter-user spaces*;
- accommodate *dedicated workstations* and filing cabinets, one per staff, as needed;
- include huddle space(s) with small round meeting tables and chairs or stools for shared use by all room occupants;

- be immediately adjacent to One to One or Small Meeting Room(s) for spontaneous break out meetings - refer to 5.4.4 Staff Meeting Space;
- be in proximity to the *open office* areas;
- be *accessible* to accommodate staff in mobility devices;
- provide a guest chair for each workstation;
- provide acoustic privacy for staff conversations;
- provide network access and electrical support for staff devices such as computers, tablets, and phones; and
- provide access to daylight or view to the exterior, either directly or indirectly.

5.4.3.3. Open Office

This space should:

- locate Case Management staff close to *shelter-user spaces*, with sight lines and direct access to *Case Management Meeting Rooms and Counselling Meeting Rooms*;
- locate Administration staff in the Main Office Suite away from *shelter-user spaces* with sight lines to the *shared office*;
- accommodate *dedicated workstations* and filing cabinets, one per staff, as needed;
- accommodate *touchdown workstations* as needed;
- be immediately adjacent to Administrative Workroom;
- be in proximity to Small Meeting Room(s) for spontaneous break out meetings (refer to 5.4.4 Staff Meeting Space);
- provide access for mobility devices;
- provide network access and electrical support for staff devices such as computers, tablets, and phones; and
- provide direct access to daylight or view to the exterior.

5.4.3.4. Administrative Work Room

This space is used for mail sorting, document assembling, and general administrative support. It operates in support of administration staff and provides work counters for workspace and equipment and should be situated adjacent to the administration work

spaces. Alternative to this space, a private work counter with copier and printer should be provided adjacent to the administration work spaces.

5.4.3.5. Specialty Work Spaces

Payout Wicket

This space provides a secure location for dispensing cash or other items of value to *shelter-users*. This space can be used for alternate functions when not in use for this function.

This space should:

- be an enclosed room with a barrier free service window;
- be in close proximity to administration work stations;
- have clear circulation from *shelter-user* Shared-Use Areas;
- be screened from direct view from the general shelter area for privacy while receiving payout;
- include a lockable safe or have an adjacent cash safe storage room (may need to meet City requirements for cash handling if operated by City staff);
- have the barrier free service window open into an adjacent waiting room *accessible* to *shelter-users*;
- have a waiting room that provides ample circulation space to and from the service window and an access route for *shelter-users* free from dead ends and blind corners; and
- have an adjacent space suitable for counselling (refer to 5.2.3.1 Small Counselling Room).

During the transition paperless operations, provide space allocated for securing client paper files (active and inactive) that is accessible by case management staff and front-line staff.

5.4.4. Staff Meeting Spaces

Meeting spaces provide staff with opportunities to gather, discuss, and coordinate their work in the shelter by accommodating meetings of various sizes. The shelter operator should be consulted on the required quantity of each type of meeting room described below.

Meeting spaces should be located adjacent to staff work spaces, beside or within the *Main Office Suite*. At times, meeting rooms may be located outside staff spaces if assisting *shelter-user* programs and spaces, or if meeting spaces are required on multiple floors.

5.4.4.1. One-to-One Meeting Room

This is a small, private space for staff to meet one-on-one or make confidential telephone calls away from the open and shared work spaces. This space will be frequently used by the Senior Management.

Attributes

This space should:

- provide a small table with two chairs, and a telephone;
- be in close proximity to the *Shared Office* within the Main Office Suite;
- be *accessible* to accommodate staff in mobility devices;
- provide acoustic privacy for staff conversations;
- provide a telephone; and
- provide network access and electrical support for staff devices such as computers, tablets, and phones.

5.4.4.2. Small Meeting Room

This is a small meeting room that accommodates 4-6 staff. It is a, private space for staff to meet in small groups, one-on-one or make confidential telephone calls away from shared work spaces. This space will be frequently used by the Senior Management.

Attributes

This space should:

- provide a meeting table with 4-6 seats;
- be in close proximity to the *Shared Office* within the Main Office Suite;
- be *accessible* to accommodate staff in mobility devices;

- provide acoustic privacy for staff conversations;
- provide a telephone or conference phone;
- provide network access and electrical support for staff devices such as computers, tablets, and phones; and
- provide large screen television with network and power connections.

5.4.4.3. Large Meeting Room

This is a large meeting room that accommodates 10 to 12 staff.

During the COVID-19 pandemic, physical distancing requirements will affect the capacity of meeting rooms.

Attributes

This space should:

- provide a meeting table with 10 to 12 seats;
- be in proximity to the open work areas within the *Main Office Suite*;
- be *accessible* to accommodate staff in mobility devices;
- provide acoustic privacy for staff conversations;
- provide a telephone or conference phone;
- provide network access and electrical support for staff devices such as computers, tablets, and phones;
- provide a large screen television with network and power connections;
- provide a *touchdown workstation* that can also be used as a staff or visiting service provider workspace; and
- be suitable for shared use to accommodate program needs.

For spaces where staff would meet with *shelter-users*, refer to 5.2.3 Case Management and 5.2.5 Specialized Program Spaces.

5.4.5. Staff Support Spaces

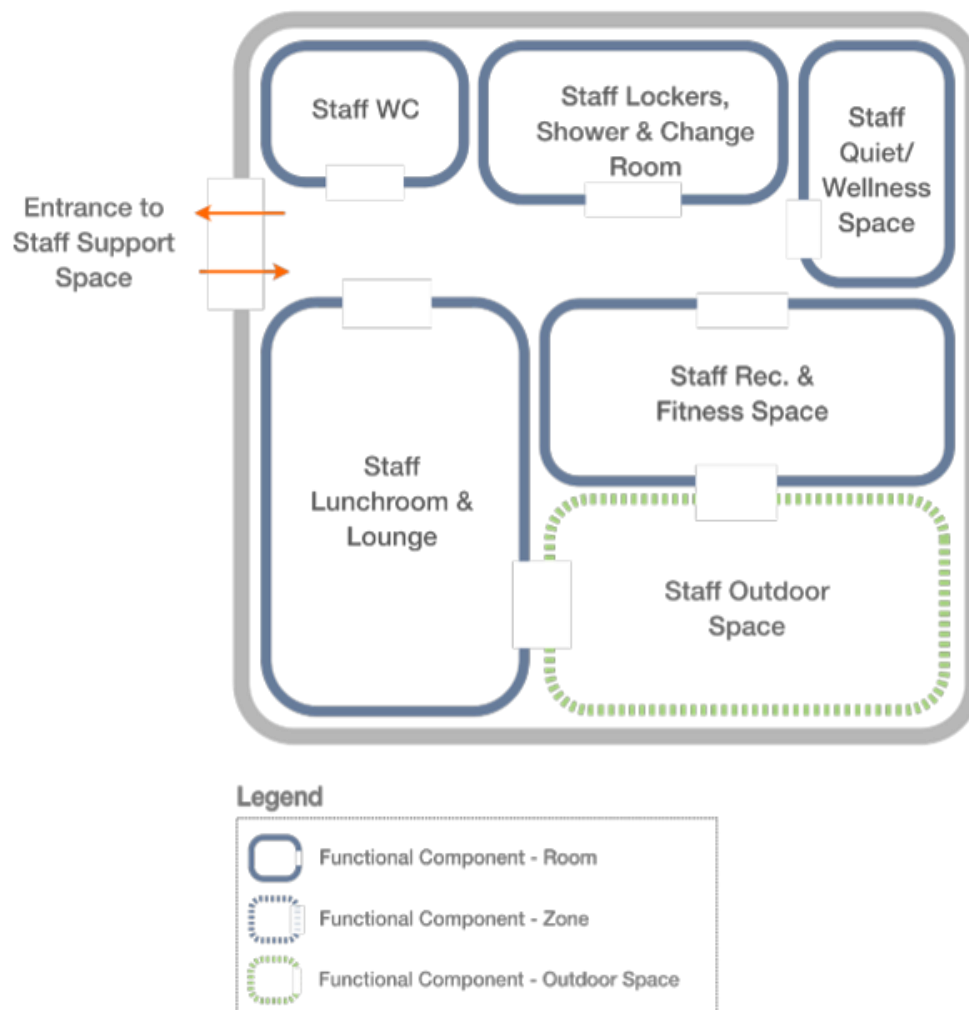


Figure 57: Diagram of Staff Support Spaces

These are spaces where staff can relax and disengage from the challenges of their work. Work in a shelter, especially front-line work, needs to be balanced with support spaces that provide staff an opportunity take a break and recharge. These spaces include typical daily use staff spaces as well as support spaces that are unique to shelter staff.

Staff are sometimes overlooked in the quest to deliver user-focused services; however, effective staff support is key to maintaining healthy, engaged staff who are energized and capable of maintaining their focus on achieving the best *shelter-user* outcomes on an ongoing basis. Staff support should address staff safety, health and wellness, staff learning and skill enhancement, and staff opportunities for relief from the stresses that front-line work can often bring.

These spaces should be located away from *shelter-user* spaces to provide staff with opportunity to take breaks. They will benefit from being close to staff work areas for easy access for all staff.

5.4.5.1. Staff Lunchroom and Lounge

Function and Intent

The staff lunchroom and lounge provide staff with a space to store and eat meals, to relax, and to socialize during breaks or in between shifts.

Location

In best practice this space should be adjacent to a private outdoor space for the exclusive use of staff and should be easily accessed from staff work spaces.

Attributes

This space should:

- have an area that accommodates 50% of weekday, daytime staff, or a staff count determined through consultation with the shelter operator;
 - allow sufficient space for amenities being provided. Approximately 4.0 m² per person for lunchroom (including kitchen and dining) and lounge.
 - provide full size refrigerators and microwaves based on one per 10 staff using the space concurrently
 - provide a double compartment sink
 - provide an under-counter dishwasher
 - provide a water bottle filler
 - provide a hand hygiene sink with soap and paper towel dispensers
- be visually and acoustically separated from *shelter-user* areas;
- provide the presence of daylight and exterior views in excess of minimum code requirements;
- provide comfortable furnishings that can be rearranged to suit staff needs, including dining tables and chairs, soft chairs, and couches;
- provide a television with suitable network and cable connections; and
- provide space for staff notice boards, information sharing, and schedule posting.

■ Depending on the size and nature of the shelter, some smaller *transitional shelters* have had success combining staff lunchrooms with shelter user kitchens, offering natural opportunities for staff and shelter user engagement and life skills training. It should be noted that if this model is used, a separate staff lounge should still be provided to allow staff to disengage from their duties.

5.4.5.2. Staff Quiet Room and Wellness Room

Function and Intent

This is an essential staff support space for stress relief and coping with crises that may arise during a shift. This space can also serve double duty as a staff wellness room to accommodate staff who may experience ill health during the course of a shift, and who may need a brief break to recover.

Location

This space should be situated away from spaces with high activity and noise, and away from main circulation spaces.

Attributes

This space should:

- accommodate a reclining chair, side table, and comfortable chair;
- accommodate space for a wheelchair and turning circle; and
- be visually and acoustically separated from shelter user areas.

5.4.5.3. Staff Skills Development and Education Space

Function and Intent

Shelter staff are continuously trained and educated so they are equipped with the required skills to work effectively in the changing environments of shelters. The staff skills development and education space accommodates staff skills upgrading and training in a flexible, classroom type setting. This room can be used as a meeting space when not in use for staff training.

Location

The location of this space should be removed from shelter user areas to allow staff to focus on their training without interruption by *shelter-users*.

Attributes

This space should:

- provide AV and IT support for presentations and lectures;
- have appropriate lighting controls to adapt the space for the intended uses;
- include seating and training tables oriented to view a presentation screen;

- allow adequate space to accommodate accessibility of people using mobility devices; and
- provide staff who may not have a fixed desk access to computers during their work day for on-line training or other purposes.

5.4.5.4. Staff Recreational and Fitness Space

This is a staff space for exercise or leisure activities and should be designed to suit activities that are determined through consultation with staff. These may include a fitness room, space for yoga, or other activities. This space should be adjacent to the staff locker room and change room and should be in proximity to other staff support spaces. Space for recreational activities can be combined with the Staff Lunchroom and Lounge if activities are compatible.

5.4.5.5. Staff Locker, Shower & Change Room

This is a space for staff to store personal belongings, shower, and change for their shift. This space is best located adjacent to the staff recreational and fitness space, and close to the staff building entry point for staff who want to change before their shift.

Attributes

This space should:

- provide lockers for all shelter staff;
 - full height staff lockers are typically provided for dietary and housekeeping staff
 - half-height lockers are typically provided for other shelter staff
- provide change areas with an *accessible* washroom and shower; and
 - allow space for change areas, showers and washrooms
- provide *accessible* gender-neutral facilities, either as primary or additional facilities depending on shelter operator dictates.

■ The need for more storage space was observed in many existing facilities. Facility storage was seen to take over staff storage space, as staff tend to prioritize *shelter-users* and the facility over themselves. Beyond lockers for personal items, staff storage for program support equipment and other items may be beneficial in various staff spaces, as determined through consultation with the shelter operator and staff.

5.4.5.6. Staff Washrooms

Dedicated washrooms facilities should be provided for shelter staff. This may be a health requirement for food services staff, and it is also best practice for front-line staff. Staff washrooms should be situated adjacent to staff work areas and key staff support spaces.

Provide one *accessible 2-piece private washroom* for every 10 staff. Where the shelter has fewer than 10 staff a minimum of one *accessible 2-piece gender neutral washroom* should be provided to ensure safe access to washrooms for transgendered/gender non-binary staff.

5.5. Community Spaces

As a way of breaking down barriers between the community and the shelter, providing community access to facilities within the same building as the shelter, potentially catering to both *shelter-users* and local residents in a way that provides for safety and confidentiality, can help integrate new shelters into existing communities.

The nature of this community space will vary based on the interest of the community and is best determined in a dialog with the neighbouring community. In order to help improve integration of shelters into the communities in which they are located, certain principles have been adopted by SSHA. New shelters may:

- be open 24/7, reducing impact on neighbours where the discharge of *shelter-users* during the day historically caused issues;
- provide *shelter-users* with access to community services;
- include services on new shelter sites which are open to both *shelter-users* and community members, with programs offered by range of providers, to help break down barriers between the community and the shelter;
- be co-located with other services; and
- be limited in size to 100 beds.

5.5.1. On-site Community Services

Function and Intent

Some possibilities for this shared space may include:

- **Health-related services:** studies have shown that homelessness is clearly associated with poor health, and many people who are homeless remain at risk for poor health even if they obtain stable housing due to other variables such as poverty, mental health or substance use.⁵¹
- **Childcare services:** the provision of childcare services can be especially useful if colocated with a *family* shelter.
- **Community resource centres:** specific resources such as employment-related or other community support services may be of value to *shelter-users* and community residents.

⁵¹ Toronto Shelter Network, “Shelter Provider Health Survey: Summary Report”, July 14, 2017.

- **Pet care services:** pets have been seen to provide significant emotional support to people who may be experiencing homelessness and are a point of commonality shared with many residents in communities across the city.
- **Community meeting space:** offering space for community groups to book for meetings.
- **Community program space:** sometimes a community may not have adequate facilities for programming such as arts, bridge night, or cooking programs which could also be shared with the shelter.
- **Education and skills training services:** these services may prove valuable when colocated with a *youth* shelter.

Location

These services will be located within the facility at a point that both public and *shelter-user* entries are facilitated. Direct access to the street is also of benefit.

Attributes

As a base case, if the specific uses intended for the community space are unknown at the time of initial planning, the following attributes should be provided:

- access to an *accessible* gender-neutral washroom, within or adjacent to the space;
- an *accessible* sink, with water supply and drain, to allow flexibility for future use;
- millwork approximately 2.5 m (98") in length for sink, with lockable base cabinets and combination of open shelving and lockable cabinets above; and
- electrical sub-panel within space with additional capacity to accommodate potential future changes in use with higher electrical requirements.

5.6. Facilities Support Spaces

Facility support spaces are used by staff to handle materials and process that are needed for provision of shelter programs and services. These spaces are typically not accessed directly by *shelter-users*.

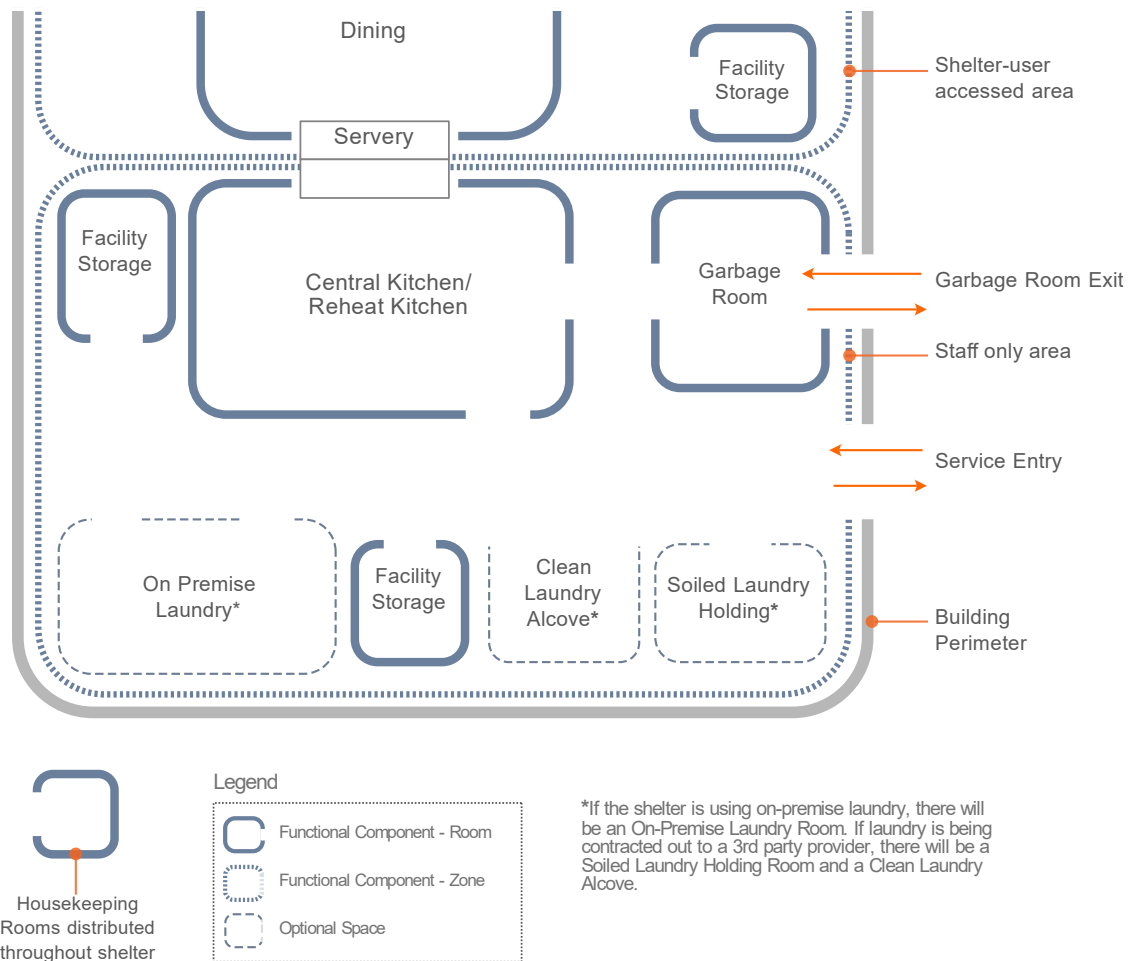


Figure 58: Diagram showing Facilities Support Spaces

These spaces support the following:

- Central Food Services
- Central Laundry Services
- Solid Waste Services
- Housekeeping Services
- Building Services Rooms and Spaces
- Facility Storage

5.6.1. Central Food Services

In this section, two types of food services facilities are discussed:

- **Commercial kitchens:** for central on-site food production by staff
- **Reheat kitchens:** for meals produced off-site and served by staff.

Meal programs can be delivered by either method. For a 100-bed emergency or *transitional shelter* a commercial kitchen is typically provided. Producing food on-site contributes to a sense of community and stability in the shelter and reduces operational cost.

Some shelters may not have meal programs in which case kitchens for self-catering should be provided. In all shelters, with and without meal programs, *shelter-users* should have access to a kitchen for personal use. Refer to 5.2.1.4 Shared *Shelter-user* Kitchens.

In *family* shelters with and without meal programs, at a minimum, kitchenettes—and in some cases full kitchens—should be provided within *private units*. Refer to 5.3.3 *In-Unit Kitchenettes* and Kitchens.

5.6.1.1. Food Premises Regulations

Commercial Kitchens and Reheat Kitchens should be designed in accordance with Ontario Food Premises Regulations.

5.6.1.2. Commercial Kitchen

Specialist Consultant

It is recommended that a food services consultant is retained for the planning and design of commercial kitchens and for selection of kitchen equipment. This will provide compliance with legislation, efficiency in layout and operating cost and access to the latest food services equipment.

General Planning Principles

- The kitchen and its connections to spaces beyond should be planned to reduce cross contamination by separation. Keeping clean and dirty process flows spatially separated should be integral to the planning process.

Cooks in Shelters

- The presence of cooks in shelters allows for direct interaction with *shelter-users* that can have a positive outcome. Food preparation can be immediately responsive to the requests of *shelter-users*, special events such as birthdays can be recognized with special foods (cake) and in some cases *shelter-users* may participate in food preparation.

- The kitchen should be planned to promote a forward workflow and limit unnecessary movement between spaces. The workflow from receiving and sorting, through preparation, cooking and serving should maximize process hygiene and ergonomic efficiency.
- Adequate space should be provided for the separate preparation of foods like raw meat on separate work surfaces.
- Adequate storage should be provided so that items can be kept separate, for example edible food stuffs and toxic cleaning materials.
- The cleaning and maintenance of equipment and surfaces should be considered when planning layouts.
- Dedicated free-standing hand washing sinks should be provided in each work area.
- Hose reels and floor drains should be provided in the following areas and floors should be properly graded to prevent ponding of water:
 - pot washing and crockery washing
 - preparation areas
 - cooking areas

General Space Standards

Recommended space standards are as follows:

- a 1200 mm (48") clear space between a wall and any item of cooking equipment, counter or work surface;
- an 1800 mm (72") clearance between facing items of cooking equipment, counters or work surfaces;
- a 2000 mm (78") clearance in front of cooking equipment considered to be hazardous – for example, deep fat fryer; and
- ceiling heights of 2.7-3.0 m (9'-10') AFF.

Functional Areas

Commercial kitchens should contain the following functional areas:

- | | |
|----------------------------------|-----------------------|
| ■ Receiving, Sorting and Storage | ■ Server |
| ■ Preparation | ■ Crockery Washing |
| ■ Cooking | ■ Housekeeping Closet |
| ■ Pot washing | ■ Administration |

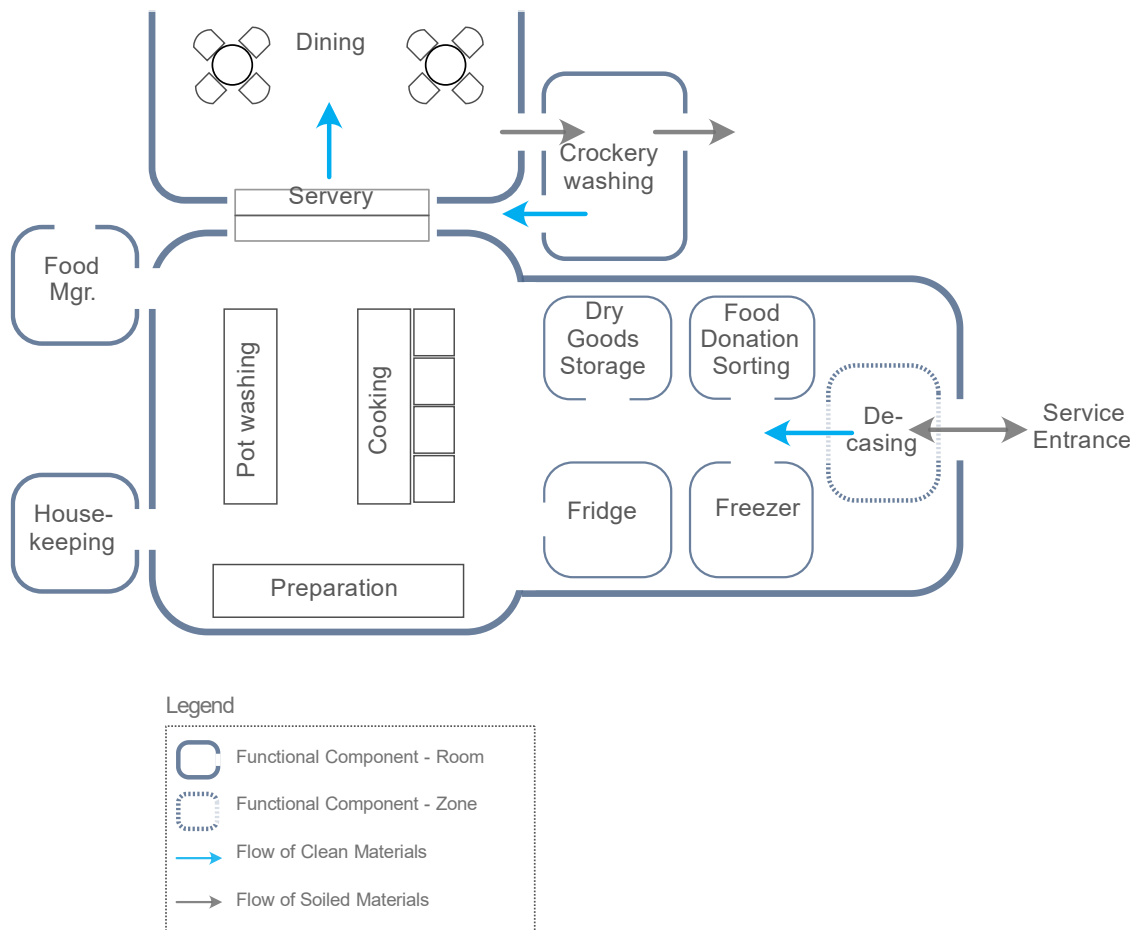


Figure 59: Diagram showing Commercial Kitchen spaces and flow of materials

Receiving, Sorting and Storage

Location

The receiving, sorting and storage areas should be adjacent to each other and located as close as possible to the shelter's service entrance.

Description

Incoming products can be audited for quality in the receiving area and then transferred to storage areas for dry, refrigerated or frozen goods as appropriate. An open area for de-casing and sorting incoming goods should be provided.

Equipment

Possible receiving and sorting equipment:

- Dollies
- Pallet jack
- Tables for sorting

Possible cold storage equipment:

- Commercial stand-alone reach-in refrigerators and freezers
- Insulated walk-in refrigerator and freezer rooms with cooling units
 - Must have built in thermometers
 - May need to be lockable
 - Cooling units must be *accessible* for service from the floor or from elevated walkways, not from ladders

Possible dry food storage equipment:

- Racks/shelving

Preparation

Location

The food preparation area should be located with convenient access to the storage areas and should be separate from the cooking area to allow raw and cooked food to remain separate. Mixing bowls, pans and utensils should be stored where they can be accessed conveniently.

Description

Activities that could take place in the preparation area include:

- Pastry preparation
- Raw meat (including poultry and fish) thawing and preparation
- Vegetable washing, peeling and slicing
- Preparation of pre-cooked foods

Donated Food

■ Unlike central kitchens in other facilities, which order raw food in bulk from commercial purveyors, shelters may receive a significant portion of their raw food through donations. This adds complexity to ordering and management of inventories. Sufficient space should be provided for inventorying and counting of household sized portions of raw food that arrive unsorted. (This may include packages of pasta, canned beans etc.)

Equipment

Possible preparation equipment:

- Hand wash sink
- Prep sinks
- Scales
- Meat slicer
- Countertop mixer
- Food processor/bowl slicer
- Blender
- Floor mixer
- Wheeled waste bins
- Stainless steel countertops
- Mobile stainless-steel tables

Cooking

Location

The location of the cooking area should promote a forward workflow from preparation to cooking to serving.

Cooking equipment can be grouped together to share fire suppression exhaust hoods. Island configurations provide good access to all equipment and can be fed by a spine of services including gas, water and electricity.

Description

In the cooking area food goes from being raw to being cooked by being heated. Sufficient work surfaces beside equipment should be provided. Appropriate clearance around each piece of equipment should be provided for safe use. Pots, pans and utensils should be stored where they can be accessed conveniently. Access for cleaning should be considered in the design.

Equipment

Possible cooking equipment:

- Hand wash sink
- Gas oven, (steam/convection)
- Gas cook and hold oven
- Range with oven
- Combi-Unit
- Deep fryer
- Convection steamer
- Electric skillet

- Electric and gas fired kettles
- NFPA-approved fire suppression hoods at all cooking equipment
- Fire extinguishing equipment of types and quantities that comply with NFPA requirements
- Stainless steel equipment stands
- Mobile stainless-steel tables

Pot Washing

Location

The location of the pot washing area should be close to the preparation, cooking and servery areas.

Description

Food waste is scraped into bins and all kitchen and servery equipment including pots, pans, food containers, utensils and parts from food preparation and serving equipment are washed and sanitized in this location. This does not include used crockery generated in the dining room.

In addition,

- The layout should promote a forward flow of wares from soiled to clean.
- Adequate ventilation for humidity and steam should be provided.

Equipment

Possible pot washing equipment:

- Hand wash sink
- Eyewash station
- Wheeled waste bins
- Soiled dish-table
- Electric utensil/pan washer
- Clean dish-table
- 3-basin sink
- Soak sink
- Pot rack

Servery

Location

Shelters have typically been set up for cafeteria-style food service. In this model the servery is immediately adjacent to the dining room with the two spaces separated by the food service counter and a rolling shutter.

Description

The food is held in the counter and *shelter-users* on the dining room side file past it, collecting trays, crockery, and cutlery before being served by dietary staff stationed on the server side. A self-serve beverage station is provided to be accessed by *shelter-users* from the dining room. Refer to 5.2.1.3 Dining Rooms.

In some shelters it may be advantageous to have *family*-style dining which case the server design may differ from what is described here.

Equipment

Possible server equipment:

- Hand wash sink
- Stainless steel food service counter with tray rail
- Drop in hot and cold pans
- Plate dispenser
- Sneeze guard
- Waste bins
- Reach-in refrigerator
- Beverage dispenser
- Coffee/tea machine

Crockery Washing

Location

The crockery washing area is adjacent to the dining room, either outside of the main kitchen or inside the kitchen, located so that soiled dishes do not flow through and are segregated from the rest of the kitchen. Dirty dishes from the dining room should not pass through the server. There is access to the crockery washing area from the dining room via a door or pass through window.

Description

In the crockery washing area, soiled dishes are scraped and loaded into a commercial dishwasher. Waste food should have a clear path to the garbage room where it will be stored for pick-up. Once clean, dishes are stacked and stored in this area until the next meal service. Clean plates should not be contaminated with dirty plates. Adequate ventilation for humidity and steam is required.

Equipment

Possible crockery washing equipment:

- Handwashing sink
- Eyewash station
- Wheeled waste bins
- Soiled dish-table

- Commercial dishwasher
- Clean dish-table
- Sink
- Shelving

Housekeeping Closet

A dedicated housekeeping closet should be located adjoining the kitchen. Refer to 5.6.4 Janitorial Rooms.

Administration

Location

The administration area is an office space for the kitchen manager. It should be adjoining the kitchen for convenient oversight and access. A second access point to this office from outside of the kitchen is beneficial for visiting contractors, suppliers and vendors who need not go through the kitchen.

Description

The manager of the kitchen will need a *dedicated workstation* for the following functions:

- Researching and planning menus
- Inventory management and ordering
- Managing food services staff
- Maintenance and quality control management
- Meeting with contractors, suppliers and vendors

Related Spaces Outside of the Kitchen

The following spaces outside of the kitchen are related to the function of the kitchen and should be conveniently accessed from the kitchen.

- Garbage room (storage of garbage, recycling and organics)
- Storage location for 3rd party provider's container for recyclable fats, oil and grease (if needed)

Building Systems

The following lighting levels are recommended:

- 500 lux in walk-in refrigerators and freezers, dry storage, preparation, cooking and washing areas
- 300 lux at servery
- 350 lux in administration area

Grease Traps

- In the kitchen, grease traps must be attached to wastewater lines to prevent fats, oils and grease (FOG) from contaminating sanitary sewers. A mechanical engineer or licensed plumber can determine the size for the grease trap based on usage and City requirements. Grease traps need to be cleaned on a regular schedule. The following should be considered:
 - The trap covers should be *accessible* for regular inspection and maintenance (once-a-month minimum) and should be located outside the kitchen to avoid contamination during cleanout.
 - Approved Ministry of Environment, Conservation and Parks (MECP) flusher truck may be needed to pump out and clean the grease trap. Vehicle and equipment access should be considered in locating the grease trap.

For more information, refer to the City of Toronto's website for mandatory grease traps⁵²

Ventilation

- Ventilation systems must provide appropriate exhausting of heat, grease, smoke and steam laden vapors that is balanced with supply air to contain kitchen odors.

Pest Control

- Kitchen design should consider measures to minimize the risk of pests entering food premises. Measures may include the following:
 - Installing rodent proof strips at entrance doors
 - Installing self-closing devices at entrance doors
 - Covering external vents with wire mesh
 - Providing insect screening on operable windows
 - Ensuring walls and floors are free of gaps

5.6.1.3. Reheat Kitchen

For new shelters that will provide a meal program without cooking on the premises, a reheat kitchen is proposed.

⁵² "Mandatory Grease Traps for Food Services Establishments", Water & Environment, City of Toronto, <https://www.toronto.ca/services-payments/water-environment/water-sewer-related-permits-and-bylaws/sewers-by-law/mandatory-grease-traps-for-food-service-establishments/>.

The objectives are as follows:

- To reduce capital cost
- To reduce waste

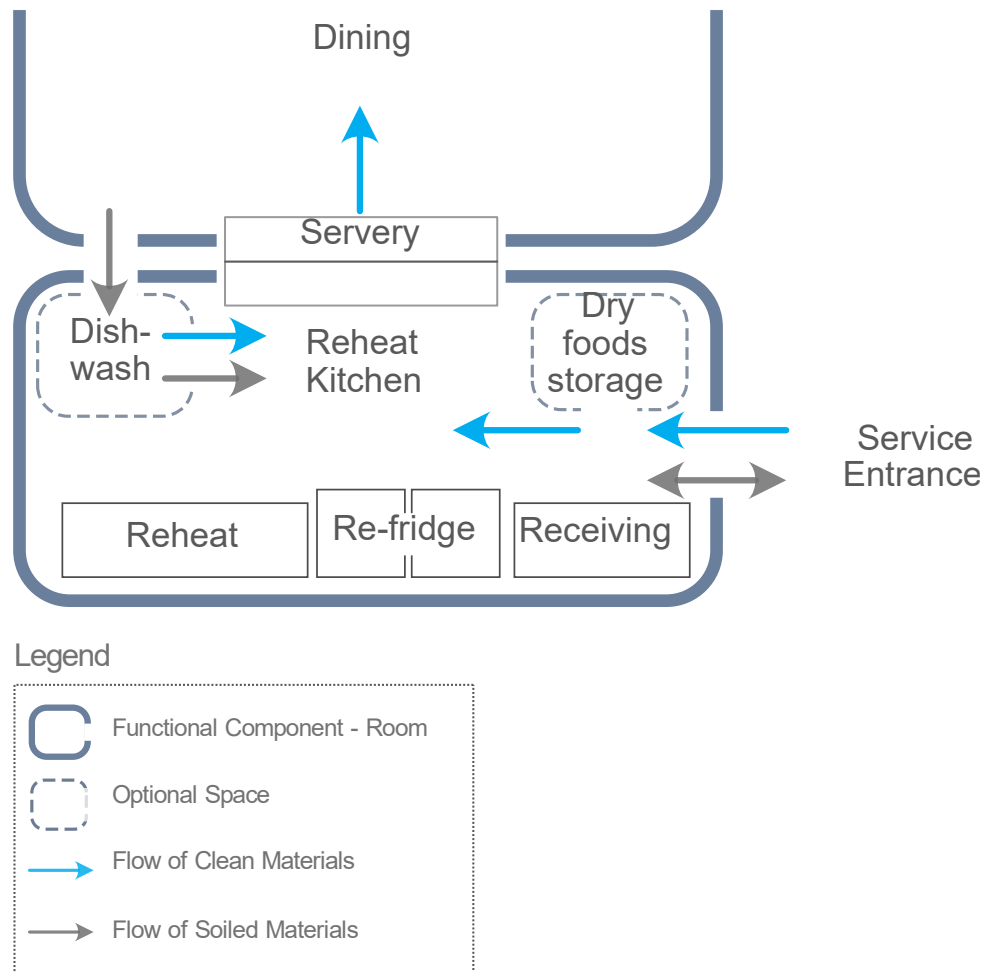


Figure 60: Diagram showing Reheat Kitchen spaces and flow of materials

General Space Standards

Recommended space standards are as follows:

- 1200 mm (48") clear space between a wall and any item of food equipment, counter or work surface
- 1800 mm (72") clearance between facing items of food equipment, counters or work surfaces
- Ceiling heights should be 2.7 -3.0 m (9'-10') AFF

Functional Areas

Reheat kitchens should contain the following functional areas:

- Receiving
- Reheat and panning
- Storage
- Server
- Utensil and crockery washing
- Housekeeping closet

Receiving

Description

The receiving area of the reheat kitchen should be easily accessed from the shelter's service entrance.

Work space should be provided for receiving and unwrapping catered and purchased foods and other food service items. Incoming food items can be audited for quality in the receiving area. Foods for immediate consumption are transferred to the reheat/panning area and foods that will be consumed later are transferred to storage areas for dry, refrigerated or frozen goods as appropriate.

Equipment

Possible receiving area equipment:

- Hand wash sink
- Stainless-steel counter approx. 1200 mm (48")
- Waste bins

Reheat and Panning

Description

In the reheat and panning area, catered foods can be reheated in commercial micro-convection ovens, placed in appropriate serving vessels and transferred to the server. Items like saved meals, packed lunches or continental breakfasts are assembled in this area.

Equipment

Possible receiving and sorting equipment:

- Hand wash sink
- Prep sink
- Stainless-steel counter approx. 1200 mm (48")

- Commercial micro-convection oven(s)
- Waste bins
- The need for NFPA-approved fire suppression hoods should be confirmed through review with AHJs

Storage

Description

Storage space and equipment should be provided for:

- Food items
- Pans and utensils

Equipment

Possible receiving and sorting equipment:

- Commercial reach-in refrigerator and freezer
- Racks/shelving

Servery

Refer to the server in 5.6.1.2. Commercial Kitchen

Utensil and Crockery Washing

Description

The utensil or crockery washing area is located so that soiled dishes do not flow through, and are segregated from, the rest of the kitchen. Dirty dishes from the dining room should not pass through the servery. There is access to the utensil and crockery washing area from the dining room via a door or pass through window.

Used dishes, glasses and cutlery from the dining room and used food service pans are scraped, washed (sanitized) and stored until needed for the next meal. Waste food should have a clear path to the garbage room where it will be stored for pick-up.

Clean utensils and crockery are stacked and stored in this area until the next meal service. Clean plates should not be contaminated with dirty plates. Adequate ventilation for damp and steam is required.

Equipment

Possible receiving and sorting equipment:

- Hand wash sink
- 3-basin sink
- Eye-wash station
- Wheeled waste bins
- Soiled dish-table
- Under counter/commercial dishwasher
- Clean dish-table
- Racks/shelving

Housekeeping Closet

A dedicated housekeeping closet should be located adjoining the kitchen. Refer to 5.6.4 Janitorial Rooms.

Building Systems

The following lighting levels are recommended:

- 500 lux in reheat, panning and washing areas; and
- 300 lux at servery.

Grease Traps

The need for grease traps for sanitary drains should be confirmed through review with AHJs.

Pest Control

Kitchen design should consider measures to minimize the risk of pests entering food premises. Measures may include the following:

- Installing rodent proof strips at entrance doors
- Installing self-closing devices at entrance doors
- Covering external vents with wire mesh
- Providing insect screening on operable windows
- Ensuring walls and floors are free of gaps

5.6.2. Central Laundry Services

In shelters there are two methods for centrally processing laundry, by use of:

- an on-premise laundry facility or;
- a 3rd party laundry provider.

Central laundry services are used to process:

- towels, sheets and blankets from bedded programs;
- linens and towels from central kitchens; and
- mops and rags from housekeeping.

For both City-operated shelters, and shelters operated by others, needs beyond the immediate facility should be considered when determining the capacity of On-Premise Laundry, as the facility may need to support other operations such as warming centres, respites, and additional shelters.

Shelter-users' clothing is laundered in *shelter-user* laundries. Refer to 5.2.1.5 *Shelter-user* Laundry.

5.6.2.1. On-Premise Laundry

The size and capacity of the On-Premise Laundry should be planned around the following criteria:

- quantity of soiled laundry produced per day by weight;
- degree of soil of laundry and equipment cycle time;
- staffing and hours of operation; and
- required back-up or expansion capacity.

It is recommended that a laundry planning consultant is engaged to assist in the estimation of laundry quantities, efficient equipment, and design of an optimal layout. Laundries are large consumers of power and water and this must be considered in planning and operation. These services can be provided by independent consultants or by equipment vendors.

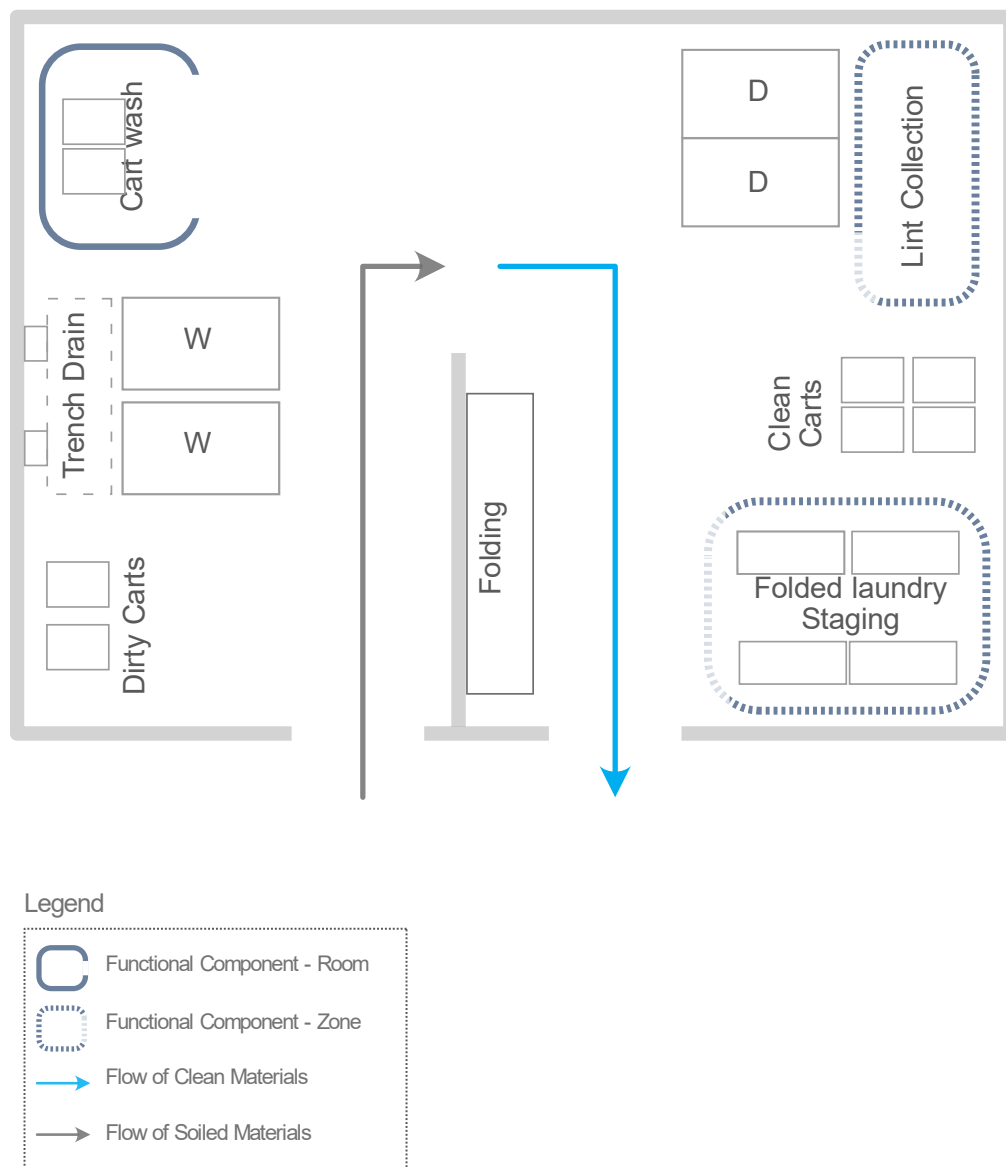


Figure 61: Diagram showing On-Premise Laundry spaces and flow of materials

General Planning Principles

- The laundry should be planned to reduce cross contamination by separation.
 - Keeping clean and soiled laundry spatially separated should be integral to the planning process.
 - Soiled and clean carts should be marshalled at opposite ends of the laundry.

- The laundry layout should provide optimal space for use of equipment and the flow and stacking of laundry carts to provide a safe and ergonomic work environment.
- A dedicated free-standing hand washing sink should be provided wherever soiled laundry is handled.
- In the area of washer/extractors, floor drains should be located so that accidental overflowing water will drain into it.
- A separate mechanical room may be needed for plumbing and HVAC requirements of the laundry.
- A separate room may be needed for the storage and automatic dispensing of laundry chemicals.
- An eye wash station should be provided wherever laundry room chemicals are handled.
- A cart washing area with a hose reel and floor drain may be needed for the cleaning of soiled laundry carts.
- All laundry machines should have a dedicated shut-off valve. This shut-off valve should be accessible to staff without the use of a ladder.

General Space Standards

- 1100 mm (43") clear space for safe circulation of people and carts that excludes the space required by door swings, carts and people when laundry equipment is in use.
- Ceiling heights a minimum of 3 m (10') AFF.

Functional Areas

The laundry will contain the following functional areas

- Soiled receiving/sorting
- Processing
- Finishing
- Marshalling
- Administration

Soiled Receiving/Sorting

Description

Soiled clothing is received by cart (or chute) and is sorted by fabric type and degree of soil on a unit by unit basis and batched for processing.

Processing

Description

Laundry is manually loaded into and then washed in commercial grade washer/extractors. Following the wash cycle, the wet laundry is transported by internal transport carts, manually loaded into and then dried in commercial grade dryers.

Finishing

Description

Following processing, laundry is folded at a folding table and stacked onto carts for transport or placed immediately into an adjacent clean laundry storage room.

Marshalling

Description

Sufficient space is needed in the laundry room for stacking of clean laundry carts until they can be taken to storage locations where they are stockpiled until needed.

If the same carts are used for clean and soiled laundry, then a cart cleaning area should be located within the laundry so that carts carrying soiled laundry can be cleaned and sanitized before being loaded with clean laundry.

Administration

Description

An admin area may be required for the laundry, and if present, should be located within the clean side of the laundry and be *accessible* by staff.

Related Spaces Outside of the On-Premise Laundry

It is recommended that clean laundry storage is located close to where clean laundry is needed so that on-duty staff can conveniently access it as needed.

A lockable clean linen room should be located within *neighbourhoods* close to *sleeping areas* or in an adjacent staff office.

Building Services in Laundry

Utilities for laundries should be coordinated with equipment selection. Laundry equipment requirements will affect building services (water, electricity, gas, sanitary drains and HVAC) in capacity and configuration.

Dryer exhaust ducts should be *accessible* for lint removal and be appropriately pressured for effective equipment operation.

5.6.2.2. Third-Party Laundry Provider

If shelter laundry is contracted out to third-party providers of laundry services, the facility design should take the process into consideration and allot the appropriate space.

Description

The third-party providers typically exchange carts of soiled laundry for carts of clean laundry on a regular schedule.

Soiled laundry is collected, bagged and brought by cart (or chute), by shelter staff to a soiled laundry holding area. From this holding area the third-party provider will collect the full carts. The third-party provider will deliver carts of clean laundry which may arrive on a separate truck and drop it off in a clean laundry holding area.

Shelter staff collect the laundry from the clean laundry holding area and unload it into the designated laundry storage areas in the shelter, such as clean linen rooms. The carts can be used for collecting soiled laundry. Soiled laundry should never be stored in clean linen rooms.

Soiled Laundry Holding Area

Attributes

Attributes of this space should include:

- location on the same level and as close as possible to the service entry;
- sized for the volume of soiled laundry that will be generated in the interval between pick-ups, (for example, 1 day, 2 days or 3 days) and extra carts;
- a dedicated room to prevent carts being stacked along corridors;
- a lockable door to control the movement of soiled materials; and
- a hand wash sink if soiled laundry is handled in the room.

Clean Laundry Staging Alcove

Attributes

Attributes of this space should include:

- location on the same level and as close as possible to the service entry;

- sized for the volume of clean laundry that will be needed in the interval between drop-offs, (for example, 1 day, 2 days or 3 days) and extra carts;
- appropriate space so that carts and laundry can be counted on receipt; and
- an open space in a staff only area is proposed.
 - It is expected that the carts are transferred to storage rooms immediately after receipt.
 - If this is not possible the area should be an enclosed room with a lockable door.

5.6.3. Solid Waste Services

Shelter facilities should be designed for municipal collection of 3 major waste streams:

- Garbage
- Organics
- Recycling

In addition, the facility may have privately contracted collection of the following minor/seasonal waste streams:

- Confidential paper
- Bio medical waste (sharps)
- Recyclable cooking oil
- Yard waste (if no municipal collection is available for shelter)

5.6.3.1. Collection Services for Major Waste Streams

In Toronto there are three ways in which waste collection services can be obtained and each has unique design implications. They are as follows:

- by the City of Toronto Solid Waste Collection with front end collection;
- by the City of Toronto Solid Waste Collection with curbside collection; or
- by private collection.

Front-end collection requires waste to be collected in larger bins (3 to 6 cubic yards) and the waste collection vehicle to enter and load on site. Curbside pick-up relies on waste being staged at the curb in 360-litre (95-gallon) totes by facility staff. Private contractors offer a range of solid waste services which can be tailored to the facility's needs.

City Objectives for Waste Collection

It is the objective of the City that municipal shelters participate in the waste diversion program offered by Municipal Solid Waste Collection Services; new shelters will be developed accordingly. Private collection for the major waste streams is not discussed in these Guidelines.

There are no specific published requirements for garbage collection for municipal shelters. These services will be reviewed by Solid Waste Management Services on a case-by-case basis.

Typical Requirements for City of Toronto Solid Waste Services

Although written for developments of individual and multiple households, some generic requirements for solid waste services can be extracted from City of Toronto Requirements for Garbage, Recycling and Organics Collection Services for New Developments and Redevelopments, Latest Version, Part III. These include:

For Curbside Collection

- garbage collection vehicle maneuvering criteria on the public street; private street, mews or public laneway;
- garbage containers - type, size and spacing;
- garbage storage room requirements; and
- facility operational requirements.

For Front-End Collection

- loading space and staging area - height, width & length;
- loading space and staging area - grade;
- over-head door size;
- garbage collection vehicle dimensions;
- garbage collection vehicle maneuvering criteria;
- garbage collection, compaction and storage room requirements;
- garbage containers - type and size;
- waste chute requirements; and
- facility operational requirements.

Solid Waste Facilities for Toronto Shelters

While site-specific requirements will be determined by Solid Waste Management Services the following should be considered for all shelters:

Garbage chutes

Garbage chutes are not recommended for shelters. If garbage chutes are used, they should

allow for diversion of 3 waste streams either by the use of separate chutes or by sorting equipment attached to chutes.

Garbage room

A garbage room, *accessible* only to staff, should be provided for storage of solid waste between collections.

Location

The location of the garbage room should take the following criteria into consideration:

- access from the commercial kitchen should be convenient and be via a service corridor, with close proximity to an exterior exit.
- If within a multi-storey building, close proximity to an elevator or to a service corridor connecting to an elevator will be important
- the location should allow for waste containers to be transferred to the point of collection via an external route. (Refer to 4.3.3 Waste Pick-Up)
- If front end collection is used the garbage room should be located adjacent to the required Type G loading space and staging area. (also see 4.3.3 Waste Pick-Up and coordinate with the requirements of Solid Waste Management Services)

Area

The size of the garbage room should take the following criteria into consideration:

- the current volume of waste in each stream, the interval between collection and room for program expansion
- the size and maneuvering of waste containers (totes, larger bins and equipment to move them)
- use of a garbage compactor
- use of a cardboard bailer
- storage of bulky items

Door

- Where totes are used, lockable, solid, double doors, with minimum. 1800 mm clear opening should be provided for moving bins into and out of the garbage room.
- Where larger bins are used overhead rolling doors between the garbage room and the garbage loading area may be needed.

Hose Bib and Trench Drain

A hose bib and trench drain should be provided to allow the room to be washed down.

Hand Wash Sink

A hand wash sink, soap dispenser, paper towel dispenser and garbage receptacle for used paper towels should be provided in the garbage room.

PPE Storage

Storage for PPE should be provided so that it can be conveniently accessed by staff.

Staging and Loading Areas

Refer to 4.3.3 Waste Collection.

5.6.3.2 Collection Services for Minor Waste Streams

The collection of minor waste streams by private contractors will not be major drivers for the allocation or configuration of space, however the following should be considered.

Confidential Paper

The mode of disposal (on-site or off-site shredding), quantity, and size of confidential paper bins should be considered. Bins should be located within the facility for ease of use and wheeled access to point of pick-up/disposal.

Bio Medical Waste (sharps)

A space should be provided that is secure and clearly marked for the collection and storage of biomedical waste before removal from the facility. Refer to: City of Toronto, Needle Disposal: Guidance for Policies and Procedures, Latest Version.

Process flow should be reviewed with facility operators to ensure that adequate hand hygiene facilities, PPE and furnishings are provided for the collection and storage of used sharps bins.

Recyclable Cooking Oil

Cooking oil removed from food services equipment should be placed in organics waste, garbage or recycled. When a cooking oil recycling service is used the following should be considered:

- an appropriate space should be provided for storage of the providers' waste oil container either inside or outside of the facility, *accessible* by dietary staff and for collection.

Yard Waste

Yard waste should be bagged and staged at the curb for pick-up according to municipal requirements. If private contractors are used for landscaping services, it is likely that yard waste removal is included in their services.

5.6.4. Housekeeping Services

Housekeeping services are central to creating safe and healthy environments for staff, *shelter-users*, and visitors. Housekeeping rooms support housekeeping activities that take place throughout the shelter. The design of housekeeping rooms should meet the requirements of the Occupational Health and Safety Act and be coordinated with City and Operators' policies and procedures.

During the COVID-19 pandemic, the need for enhanced housekeeping practices, and whether they require additional physical support for specific housekeeping materials should be discussed with the shelter operator.

The following rooms are recommended:

- Housekeeping Closet - General
- Housekeeping Closet - Dedicated
- Housekeeping Equipment Room

Housekeeping Closet – General

Location

- One per 1400 m² (15,000 ft²) of floor area with a minimum of 1 per floor; and
- Distributed to minimize travel distance from floor areas to housekeeping closets.

Attributes

General Housekeeping Closets should have the following:

- mop sink 600 mm x 600 mm (24" x 24") minimum, mounted at floor level;
- parking space for and circulation space around a housekeeping cart;
- door width to easily accommodate housekeeping cart, min. recommended width 965 mm (38") clear opening, based on 600 mm (24") wide cart;
- hand wash sink;
- shelving for cleaning supplies;
- wall-mounted broom/mop rack;
- PPE storage and dispensing (as required by facility);
- chemical dispenser/pump. All dispensing systems should have dilution control systems.;
- eye-wash station; and

- floor drain outside of the mop sink.

Housekeeping Closet – Dedicated

Location

Water used for mopping floors should be disposed of in mop sinks, not in food service, hand wash, health room sinks, or any sinks not intended for that purpose. Dedicated housekeeping closets should be located in the following areas if main housekeeping closets are not convenient for use from these locations:

- adjacent to kitchen and/or dining area;
- adjacent to washrooms; and
- adjacent to health area such as the Community Health Room.

Attributes

Dedicated housekeeping closets should have the same attributes as general housekeeping closets but sized for the storage of mop buckets instead of a housekeeping cart. Dedicated housekeeping closets should provide:

- mop sink 600 mm x 600 mm (24" x 24") minimum;
- storage space for buckets and wringers;
- door width to accommodate wheeled buckets, min recommended width 915 mm (36") clear opening;
- hand wash sink;
- shelving for cleaning supplies;
- wall-mounted broom/mop rack;
- PPE storage and dispensing (as required by facility);
- chemical dispenser/pump;
- eye-wash station;
- floor drain outside of the mop sink; and
- additional attributes as required by location. For example, in a commercial kitchen space a dedicated housekeeping closet for washing and hanging anti-fatigue floor mats may be required.

Housekeeping Equipment Room

Location

- One per facility with elevator access to every floor.

Attributes

Housekeeping equipment rooms are used for storing larger pieces of cleaning equipment such as scrubbers, sweepers and burnishers. The space and attributes for this room should be designed around the equipment that will be stored. Typical considerations include

- parking and maneuvering space for and circulation space around equipment;

- door width to easily accommodate width of equipment;
- mop sink with hose reel for emptying wastewater and cleaning equipment;
- chemical dispenser/pump located for hose access to equipment fill tanks;
- electrical receptacles for equipment charging;
- shelving for supplies and spare parts;
- floor drain outside of the mop sink;
- hand wash sink;
- PPE storage and dispensing (as required by facility);
- eye-wash station;

5.6.5. Building Service Rooms and Spaces

Building service rooms and spaces are the rooms and spaces that house building services and equipment. They may include:

- mechanical rooms;
- electrical rooms and closets;
- ITC closets;
- elevator equipment rooms; and/or
- HVAC and plumbing shafts.

Building service rooms and spaces are provided on an as-needed basis to suit the requirements of the building infrastructure. Refer to Section 6 for Building Services Design.

General Planning Principles

Building services rooms and spaces should:

- be designed to allow the operation of the equipment or infrastructure on an ongoing basis without adverse impact to the space or surrounding spaces, such as:
 - allow for operation or drain-down of systems without impact on adjacent finishes
 - allow for leakage or condensation drips to be accommodated without adverse impact
 - allow for sound isolation of any equipment that might adversely impact the acoustic environment of building users
 - be located to provide the most efficient operation of the infrastructure being provided, in order to reduce ongoing costs of operation
- be designed to provide sufficient access space and configuration of equipment to allow for effective maintenance and servicing of equipment
- be located to minimize impact of servicing on other critical or private spaces, such as:
 - pumping out of grease interceptors without impacting hygiene within commercial kitchens

- access panels for drain clean-outs occurring within common corridors or other public areas
- access panels for valves and shut offs serving more than one room being located outside that room
- be provided with a path of access that allows for replacement of equipment and components that does not require costly building modification to accommodate, including:
 - large door openings to rooms and along the path of travel to accommodate replacement of equipment through existing doors
 - located to allow future crane access for rooftop unit replacement
 - located to allow knock-out panels on exterior building faces, and paths of travel to that location, where larger equipment cannot be removed through an interior route
- be designed for the ability to efficiently clean the service room
- be located strategically to avoid cascading failures of other systems by the failure of the first system, such as:
 - plumbing stack failures affecting other systems, including commercial kitchens, electrical and IT infrastructure, laundry facilities, etc.
 - sprinkler head failures affecting important electrical or IT infrastructure
- be designed for the ability to handle failures of a component, including:
 - provision of floor drains, and water-resistant finishes, including coved bases with sealed seams, in any space with water distribution
 - provision of shut-off valves at all plumbing fixtures
 - provision of valving of other services to permit zoning to allow maintenance without widespread effect
 - locations of critical equipment which may be susceptible to failure in the presence of flooding to locations not susceptible to flooding (i.e. not in sub-grade locations, or in at-grade locations in flood prone areas)
- be provided with appropriate space conditioning to ensure efficient use of equipment within thermal tolerances of the equipment, such as:
 - elevator machine rooms
 - electrical, IT and security equipment rooms
- be designed so that equipment located within service rooms does not generate excess heat that may affect the comfort of users in adjacent spaces
- be designed to provide controlled access to those who have authorization

5.6.6. Facility Storage

Facility storage^{53 54} may be needed for the categories and types of items in the table below. It is recommended that the volume of items, location of use, and frequency of replenishment is reviewed with the operator to determine appropriate sizes and locations of storage rooms.

Storage Category	Types of Items
Donated Clothing	Donated clothing
Client Consumables	Mattresses, shower curtains, heaters, fans, microwave ovens, client toiletries and hygiene supplies (toothbrushes and toothpaste, soap, shampoo, razors, shaving cream, sanitary napkins, diapers)
Facility Consumables	Cleaning supplies, paper products (toilet paper, paper towels) garbage bags, PPE, office supplies, emergency supplies.
Indoor Equipment	Ladders, carts, dollies, tools.
Outdoor Equipment	Snow blowers, snow plough, lawn mowers, leaf blowers, BBQ, seasonal outdoor furniture,
Facility Maintenance	Lightbulbs, HVAC filters, replacement parts (ceiling tiles, glazed units/replacement windows), plumbing supplies, repair supplies (caulking, paint, adhesives)
Seasonal items	Christmas decorations etc.
Other	Determined by operator

⁵³ Facility storage does not include room-based storage which is described within the room/space description. For example, lockable storage that is needed at Reception, is described within the 5.1.4 *Reception*.

⁵⁴ Facility storage does not include program-based storage which is described within the functional component or grouping. For example, clean linen rooms, refrigerated food storage and garbage rooms are described within other program specific areas.

Donated Clothing Room

Description

Donated clothing can best be utilized if the room is set up like a retail space which clients access with staff, to select items which suit and fit them.

Other Facility Storage Rooms/Spaces

Description

For all other facility storage, separated rooms should be provided as needed to organize materials and make access to them both controlled and convenient. Shelving, cabinets and bins should be suited to the size, weight, flammability etc. of items being stored. Storage rooms should support tracking of quantities of stocked items so that they can be replenished before they run out.

6

Building Services and Environmental Design

- 6.1 Mechanical Systems
- 6.2 Electrical Systems
- 6.3 Fire Prevention and Awareness
- 6.4 IT/Communications
- 6.5 Electronic Safety and Security Systems

6.1. Mechanical Systems

6.1.1. Function and Intent

6.1.1.1. Health & Wellness

Health and wellness is an important focus within shelters due to the poor health many *shelter-users* may experience.

For this reason, provision of a mechanical system that ensures good indoor air quality is an important aspect of *user-centred* design and also supports the City's desire to meet its environmental goals through the creation of energy efficient shelters (refer to Section 3).

6.1.1.2. Operations & Maintenance

This document reflects the City's expressed desire to be able to maintain existing facilities into the future in good operational condition. Achievement of success in the face of this challenge needs to consider two key criteria:

- operation of building systems must be possible without the need for skilled on-site staff; and
 - the City wishes to be able to remotely monitor all systems through an extensive Building Automation System (BAS) which needs to be in communication with central City monitoring facilities using compatible protocols.
- All mechanical equipment should be fully *accessible* for maintenance.
 - Access to mechanical equipment (including isolation valves and dampers) located within the ceiling space should be limited to corridors and public areas with staff oversight and should not be permitted within *shelter-user*-occupied areas.
 - Selection of mechanical, electrical and plumbing equipment should be consistent across multiple sites. Consult SSHA for current product selections.

6.1.1.3. Flexibility

Flexibility is a goal in the design of new shelters in order to accommodate changes in use over the life of the facility. For this reason, mechanical systems should be flexible and adaptable to changes in space functionality. Systems should be designed to respond to day-to-day environmental and climatic changes. As a best practice, systems should be sized for at least 10% additional capacity.

6.1.1.4. Durability

All major systems and items of the mechanical plant and equipment should be designed for a useful life expectancy of 25 to 30 years.

6.1.2. HVAC System

The selection of an HVAC (Heating, Ventilation and Air Conditioning) system in a shelter for people experiencing homelessness may depend on the nature of the project; new construction or renovation may offer different options. New construction will allow for the installation of new HVAC, a totally renovated building may offer a similar opportunity, while a smaller renovation or retrofit project may be limited by the existing mechanical equipment, which may have a significant service life remaining.

During the COVID-19 pandemic, the HVAC system design will have enhanced importance in the delivery of fresh air to spaces at the rate and in the manner best capable of minimizing exposure to COVID-19. Lessons learned from the current pandemic should be considered for incorporation into future shelter design. The designer should consult the latest health-related advice from municipal, provincial and federal sources.

6.1.2.1. HVAC System Design

There are many factors to be considered in selecting a system. The following factors should be considered:

- effectiveness of providing adequate ventilation to the spaces;
- comfort level;
- capital cost;
- system efficiency and operation cost;
- ease of operation for those using the system; and
- ease of monitoring, maintenance and maintenance cost.

The indoor design temperature for the shelter should follow the Ontario Building Code requirement of 22°C (71.6°F) during the heating season. An adequate air conditioning system should be provided to maintain the occupied area at 24°C (75.2°F) during the summer season, in order to reduce the likelihood of conflict arising from the discomfort of *shelter-users* due to excess heat and humidity in Toronto's summers. If A/C is not provided, a cooling centre/room must be provided.

6.1.2.2. System Control

On City-owned sites, a Building Automation System (BAS) should be provided to allow for current or future City access for monitoring of on-site systems, including the HVAC system. The BAS should be able to provide plumbing and HVAC control. It should be able to turn all equipment on and off and the programming ability should include, but not be limited to, the

following features:

- set point adjustment;
 - optimum start stop (OSS);
 - night setback (NSB);
 - scheduling;
 - trending;
 - load-shedding;
 - demand control ventilation (DOV) based on CO² and other pollutants per floor and zones alarms; and
 - password levels.
-
- All BAS controlled and/or monitored mechanical devices should be IP-based. The control points required for the plant management system should include auxiliary points for different disciplines, including but not limited to:
 - electrical equipment (i.e. transformer failure alarm);
 - lighting control;
 - generator control; and
 - elevator control.
 - An open protocol non-proprietary system should be provided. The system should be a distributed-based system with a capability to link into an Ethernet system.
 - The system should be independent of the building fire alarm system and any other computerized control system but integrated into the ICT system.
 - The computerized control system should be one complete package from one control manufacturer and not an integrated system of differing manufacturers.
 - Remote dial-out to the building operators should be provided and be compatible with iPhone, Android, and other commonly used communication devices.
 - Internet to the system should be provided for individual users, in order for the users to monitor BAS system remotely.
 - The front-end of the system should be redundant and provided with emergency power.
 - The BAS must be compatible and able to interface with City remote monitoring requirements.

6.1.3. Ventilation

6.1.3.1. Tuberculosis Prevention

Tuberculosis disease control is a major concern in the design of HVAC systems within shelters for people experiencing homelessness. The City of Toronto has provided guidelines for environmental control to minimize the spread of tuberculosis disease in the shelter since 2007. The HVAC system design engineer should refer to the Environmental Best Practices Report⁵⁵ for details. During the COVID-19 pandemic, HVAC design should consider current public health guidance relating to COVID-19.

Sufficient ventilation should be provided into all rooms of the building by the HVAC equipment according to Ontario Building Code and American Society of Heating, Refrigeration and Air-Conditioning Engineers (ASHRAE) standard 61.1. Areas occupied by shelter-users and/or staff are classified as high-risk areas. Examples of high-risk areas includes sleeping areas, dining areas, meeting rooms, offices and gathering rooms.

Total Air Changes Per Hour (TACH) is the air flow rate provided by HVAC equipment into the space. TACH is equal to:

$$\frac{\text{volume of room (in cubic feet)} \times \text{air changes per hour}}{60 \text{ minutes}}$$

The TACH is reported in units of cubic feet per minute (CFM).

- Means of delivering ventilation air should be based on a mechanical ventilation system. Natural ventilation via windows cannot be included as part of ventilation requirement because of the limited allowable open area.
- Ventilation air delivered by the HVAC equipment can be either mixed air (fresh air and return air) or 100% fresh air.
- A minimum of 6 TACH should be provided to high risk areas in the building. For mixed air system, fresh air should be provided to the spaces according to the Ontario Building Code and ASHRAE standards. Fresh air with a minimum of 25 CFM per person should

⁵⁵ Toronto Public Health, *Environmental Control Best Practices: Guidelines to Reduce TB Transmission in Homeless Shelters and Drop-In Centres*, 2007, <https://www.toronto.ca/wp-content/uploads/2019/09/98bf-tph-infection-prevention-and-control-homeless-service-settings-2019-.pdf>.

be provided to the spaces in new construction and a minimum of 15 CFM per person should be provided to the spaces in older building.

- A constant flow air system should be provided to maintain the 6 TACH during occupied hours. The supply air diffusers and return air grilles should be located on opposite sides of a room if possible to achieve cross ventilation. Placement of room exhausts grilles in a location deep within a space occupied by *shelter-users*, with fresh air near the point of entry to the room, can increase the quality of air in spaces occupied by staff and visitors to the room, and reduce the risk of spread of airborne infection.
- If 6 TACH cannot be met due to high capital cost or restriction of an existing HVAC system, upper-room or in-room enclosed Ultraviolet Germicidal Irradiation (UVGI) units can be considered to help attain a level of health equivalent to 6 TACH. Exposed UVGI units should not be used within a sleeping room due to the potential for interference with sleep.
- Return air cannot recirculate between the sleeping rooms. A unitary HVAC unit serving more than one sleeping room should be a 100% fresh air unit to supply 100% fresh air and return all air without recirculation. In consideration of energy consumption, Energy Recovery Ventilator (ERV) should be employed to reclaim heat from exhaust air. Building exhaust includes sanitary exhaust in washrooms, *shower rooms* and janitor room and general exhaust in other areas.
 - Sanitary exhaust and general exhaust should be collected via two separate exhaust duct systems and combined at the inlet of the ERV.
 - Backdraft dampers should be installed at the ends of the two exhaust systems to prevent crossing of general exhaust air and sanitary exhaust air.
 - The efficiency of ERV should comply with O.B.C. requirements, however, due to the high air change requirements for a shelter, targeting high levels of ERV efficiency should be considered for optimizing operating costs.
 - Some ERVs have a defrosting function during very cold weather to thaw the ice built-up at the heat wheel. During the defrosting cycle, the heat wheel will be slowed down and the performance of the ERV will be reduced. Preheating the fresh air by means of electric heater or hydronic heating coil should be provided to minimize the defrosting cycle. The design engineer should consult with the manufacturer to determine the needs and size of preheating equipment.
- Within rooms in a shelter with more than 20 persons occupancy which are served by one mixed air HVAC unit, in addition to 6 TACH, an in-duct or in-unit UVGI should be installed in the HVAC unit.
 - UVGI devices can be incorporated inside rooftop units, air handling units or fan coil units depends on the availability from the manufacturer.
 - Ease of maintenance of the UVGI should be considered for the selection of UVGI. UVGI inside a rooftop unit that requires the replacement of lamps from the roof will delay the maintenance during bad weather. Instead of UVGI inside the unit, in-duct UVGI is recommended in this case.

- In-duct or in-unit UVGI unit should include a remote indicator light to show the operation of the UVGI.
 - A maintenance schedule to inspect the condition of the lamps and replace the lamps regularly according to the manufacturer's recommendations should be included in the routine maintenance schedule.
 - The in-duct or in-unit UVGI unit is not required in a 100% fresh air system.
- Upper-room UVGI units should be mounted high on walls or hung from the ceiling in high risk areas.
 - Disinfection of the UVGI is limited to the upper room region of the space and minimal UVGI level is present in the lower room where the occupants are located.
 - Room air movement should be designed to circulate to the upper room for disinfection. Room fans or ventilation systems are recommended to help mix the disinfected air in the upper room with the potentially contaminated air below. The fans or ventilation system should be operating continuously when the building is occupied.
- Wall mounted fixtures must have louvres to block downward radiation or be positioned such that lower room UV-C levels meet safety standards.
- Upper-room UVGI should not be installed under the following situations.
 - Ceilings less than 2750 mm (9 feet) high. The lamps must be installed sufficiently high so that people cannot look into the lamps or touch them. Therefore, UVGI lamps need to be installed so that there is at least 2150 mm (7 feet) of clearance above the floor or above beds.
 - Rooms with bunk beds unless it can be installed with sufficient clearance above the upper bunk, otherwise a *shelter-user* who is sitting/standing on the top bunk may be exposed to UV-C in the upper, radiated, part of the room.
 - In a room with bunk beds, UVGI lamps need to be installed with at least 2150 mm (7 feet) of clearance above bunk beds.
- If upper UVGI fixtures are not feasible, an in-room enclosed UVGI unit can be used. The fully-enclosed UVGI unit consists of a circulation fan to induce room air into the unit for disinfection. The in-room enclosed UVGI system should be used only if:
 - no central forced air system exists;
 - there is no in-room air movement;
 - existing central forced air system cannot deliver the required rate of disinfected air;
 - or
 - a tamper-proof design is desired.
 - In addition, UV light must be enclosed in the fixture.

6.1.3.2. Shower Room Ventilation

Shower facilities in a shelter are heavily and frequently used. Excessive moisture causes damage to the building. Higher exhaust rates of either 50 CFM per sanitary fixture or 10 air changes per hour should be provided in *shower rooms*. Shower exhaust fans should either be run all the time or controlled by a humidity sensor until moisture is removed.

6.1.3.3. Heat Room

A designated heat room in shelter is a space designed where the room itself may be used to exterminate bed bugs. A space used to accommodate a heat tent does not require these design criteria. The room temperature in the heat room will be raised to 48°C (118°F) or 50°C (122°F) by means of a plug-in heater. An exhaust fan is required in this room to remove the hot air directly to outside following the completion of the treatment. The exhaust fan can be controlled by manual switch when needed. The exhaust inlets should be sealed when not being used to prevent the migration of bed bugs. The exhaust fan system should be able to withstand the temperature of the hot air.

6.1.4. Plumbing System

6.1.4.1. Domestic Water Supply System

The domestic water main to a shelter should be adequately sized to serve the plumbing fixtures and washers in the building. If the size of the existing water main is not adequate to meet the required flow rate of the plumbing fixtures and upgrade of the water main is not feasible due to budget or availability of street service, the domestic water pipes in the building would provide for greater future flexibility if sized adequately for a future water main upgrade.

The following equipment should be equipped in the domestic water system:

- backflow prevention device at the domestic water main according to CSA B64.10 latest standard;
- back water valves at the underground sanitary drains in basement to avoid sewage backup; and
- thermostatic mixing valve to limit the supplied water temperature of domestic hot water to 48.8°C (120°F). Domestic water in water heaters should be maintained at 60°C (140°F).

6.1.4.2. Plumbing Fixtures Selection

Plumbing fixtures in shelters include but are not limited to showers, lavatories, toilets, urinals, eye wash stations, exterior hose bibs and bottle filling stations. Selection of plumbing fixtures in a shelter should be based on the following criteria:

- durability;
- vandal resistance, where appropriate to shelter demographics being served;
- water consumption;
- ease of maintenance; and
- capital cost.

6.1.4.3. Toilets

- Toilets in group washrooms should be floor-mounted type, with either manual operation or with flushometer for hands-free operation for new construction, dependant on the use profile of the *shelter-users* being accommodated.
 - The sensor should be concealed type to avoid vandalism.
 - The bowl of the toilet should be equipped with an antimicrobial surface to inhibit growth of stain and odour causing bacteria, mold, and mildew.
 - Construction of the toilet should be commercial grade for extended use.
- Toilets in bedroom *ensuite washrooms* can be floor-mounted, flush tank type.
 - Single-flush tanks with trip levers should be provided instead of dual flush tanks.
 - The flushing action of the toilet should be capable of scrubbing the bowl with every flush.
 - The tank should be lined, and the tank cover should be bolted.
- Water consumption of the toilet should follow the current Ontario Building Code requirements and the Toronto Green Standard.

6.1.4.4. Lavatory

Counter-mounted drop-in lavatories, or stainless-steel sinks seamlessly welded within stainless steel countertops, are preferred.

- It is extremely important to create highly durable installations that will take the weight of people sitting on counters or sinks.
- Lavatories in group washrooms should be equipped with automatic hand washing faucets with thermostatic mixing valves for hands-free operation.
- Low voltage controls fed by 120V power should be specified for the faucet.

- Access to the underside of the counter should be restricted by an apron that encloses equipment to limit tampering with devices and controls, but which does not impede accessibility.
- Lavatories within bedrooms, if provided, may be equipped with manual faucets.
 - Suggested features of manual faucets include two vandal-proof handles, rigid cast brass spout, compression operating cartridge and lead-free construction.
- Electronically-controlled faucets with backup power should be provided in all public washrooms and other public spaces.
- Where electronically-controlled faucets are provided, the electronic sensing eye's sensitivity should not allow flow to exceed the sink or lavatory bowl limits.
- Water consumption of the lavatory should follow the latest Ontario Building Code requirements and the Toronto Green Standard.

6.1.4.5. Urinal

Urinals should be wall-mounted type equipped with concealed manual flushometer for hands free operation, or floor-mounted as required for accessibility. Suggested features of urinal should include:

- vandal resistant bowl;
- floor-mounted urinal carrier with steel hanger plates;
- heavy duty one-piece construction steel pipe legs welded to block base feet support; and
- drain cleanouts to allow for ongoing preventative maintenance.

6.1.4.6. Shower

Built-in type showers are recommended in a shelter. The suggested features of the shower include:

- cast brass body temperature-pressure balancing mixing valve (consider timed push button control vs. non-timed levers dependant on *shelter-user* profile);
 - non-rising stem;
 - ceramic shutoffs for long term drip free reliability;
 - self-contained cartridge for easy maintenance; and
 - adjustable limit stop and conical shower head.
- Each shower stall should be equipped with a floor drain or, preferably a trench drain where possible.

6.1.4.7. Bathtub

Within some shelters, particularly those used by *families*, bathtubs may be desirable.

6.1.4.8. Bottle Refill Station

Strategically located bottle refill stations provide better infection control than drinking fountains. The suggested features of the bottle refill station include water filter, hands-free operation and lead-free construction.

6.1.4.9. Drains

- Every room with a plumbing fixture should be provided with a floor drain.
- Toilet drains should be oversized to avoid plugging from items not intended to be flushed down toilets.
- Drain lines should not be provided with changes in direction located above any critical service or space, such as above kitchens, in order that access to any plugged line does not compromise critical spaces. All drain lines should include cleanouts in order to clear blockages.

6.1.4.10. Grease Traps

The grease trap should be easily *accessible* from below and not be located above any *shelter-user-occupied* spaces. Maintenance of grease traps should not compromise the operation and hygiene of any kitchen or related space.

6.1.5. Automatic Sprinkler System

6.1.5.1. Consideration of Sprinkler Systems

A large portion of the population of *shelter-users* within some shelters, especially those providing accommodation for single people, may smoke cigarettes. While smoking regulations are in place throughout indoors spaces within shelters, and also govern outdoor smoking, regulations rely on shelter staff for enforcement. With limited shelter staff, effective enforcement may be difficult in some shelters, especially at nighttime.

- For additional safety, an automatic sprinkler system should be considered even though not all buildings may require a sprinkler system according to the Ontario Building Code.
- With a sprinkler system comes the risk of vandalism to sprinkler heads which may cause damage from flooding.

- Concealed type sprinkler head should be used in all bedrooms and anywhere subject to *shelter-user* access.
 - Service valves and devices for the sprinkler system should not be installed in sleeping rooms to limit disruption.
 - Sprinkler zone valves and test connections should be located in cabinets and not be above a ceiling.
 - Sprinkler piping mains should not be routed through sleeping rooms and similar type rooms.
- The automatic sprinkler system must be designed by a licensed professional engineer specialized in fire protection system design.

6.2. Electrical Systems

6.2.1. Lighting System

While provision of natural daylighting is an important consideration for the wellbeing of *shelter-users* and staff, provision of suitable artificial lighting is also required.

The following features should be considered when selecting interior lighting in a shelter:

- energy efficiency;
- durability;
- vandal resistance; and
- ease of maintenance.

The lighting power density in the building should follow the Ontario Building Code MMAH Supplementary Standard SB-10 “Energy Efficiency Requirements”. LED fixtures should be installed in the majority of the area to comply with the requirements.

6.2.1.1. Interior Lighting Fixture Selection

LED fixtures have longer running life which will reduce maintenance costs. However, an integral type LED fixture requires replacement of whole unit when it fails, which will increase replacement costs. Fixtures with replaceable LED lamps can be removed by *shelter-users*.

- Fixtures in bedrooms and *shelter-user* washrooms should be integral type LED lights.
- Fixtures with replaceable LED lamps may be used in other areas.
- Recessed or surface mounted ceiling lights in bedrooms and areas with headroom lower than 3 meters should be installed to avoid vandalism.
- Dimmable lights will allow for greater accommodation of *shelter-users*’ needs, which may vary during different times of day within the same space.
- Where lighting impacts spaces occupied by *shelter-users*, provide controls *accessible* to *shelter-users* for spaces solely under their control, such as at a recessed or secured wall fixture. Lighting should direct light so as not to interfere with a roommate who does not want to be disturbed by the adjacent light.
- In common areas, light switches should have access controls such that they are operable only by staff. This can be achieved with the use of keyed light switches.
- Coordinate locations of light switches to avoid conflict with mounting of hand sanitizer dispensers.

6.2.1.2. Exterior Lighting Fixture Selection

Exterior lighting design should follow the guideline “Best Practices for Effective Lighting”, “Bird-Friendly Development Guidelines”, and “Green Development Standard” by the City of Toronto.

- The location of exterior lights around the building for security purpose should be reviewed by a security consultant.
- Exterior lights should be controlled by timer and photocell.
- Selected exterior lights may be controlled by motion sensors where they will not cause impact to adjacent property owners.
- Lights should be shielded to prevent glare and/or light trespass onto any neighbouring properties.
- No up-lighting from exterior light fixtures should be provided unless otherwise permitted through a heritage designation, at which point the fixtures should be vandal-proof.

6.2.2. Receptacle Provisions

6.2.2.1. Shelter-Specific Requirements

In addition to the normal requirements for a building, specific shelter requirements should be addressed. These include:

- Receptacle outlets should be provided close to each bed located beside a wall.
- An extra receptacle should be provided at an upper bunk bed if bunk beds are provided.
- Receptacle outlets at *shelter-user* beds should be combination duplex outlet and USB charger type.
- Coordinate locations of receptacles to avoid conflict with mounting of hand sanitizer dispensers.

6.3. Fire Prevention and Awareness

6.3.1. Fire Alarm System

Provision of a fire alarm system monitored by a third party should be in accordance with Ontario Building Code regulations.

- Self-contained combination CO/smoke detectors should be provided in a shelter equipped with natural-gas equipment.
- CO/smoke detectors should be provided in the kitchen of suite with bedrooms or in each independent bedroom.
- Provision of smoke detectors within sleeping rooms will enhance building safety
- A two-stage fire alarm system, with visual alarm devices and proper staff training, is recommended to minimize the occurrence of false alarms.
- Provision of covers over pull stations is recommended.

6.3.2. Compartmentalization

Depending on the nature of the *shelter-user* population, some facilities may have *shelter-users* making more extensive use of mobility aids than other shelters. As a means of enhancing safety of staff and *shelter-users*, consideration should be given to provision of additional compartmentalization of a floor plate for floors above grade to provide safe refuge to allow people who may not be able to quickly evacuate the building on their own to have a safe place to await evacuation by others.

6.3.3. Material Selection

Due to the prevalence of smoking within some *shelter-user* populations, it is important to ensure that materials used are suitable for use in a shelter. Examples include:

- avoid combustible mulch in planting beds, where a discarded cigarette butt could start a fire;
- avoid combustible roof finishes on lower roofs when a higher rooftop smoking area is provided;
- when rooftop smoking areas are used, provide deck finishes that do not make removal of cigarette butts difficult;
- do not expose roof finishes to potential exposure to cigarette butts and fire; and
- use of other finishes that are resistant to damage from stubbing out cigarettes is important.

6.4.IT/Communications

6.4.1. Internet and Data System

The Information Technology system in a shelter should comply with City of Toronto requirements when the shelter will be operated by the City. Where the shelter operator is not the City, the system should comply with the shelter operator's standards. If the shelter is owned by City but not operated by the City, a demarcation point should be provided to City requirements, with the shelter operator's requirements used for the system design beyond the demarcation point.

A typical system may include a data network for in-house office use and a wireless internet connection within the building which may be open to *shelter-users*. Internet services provision via cable or telephone companies may be considered in the building depending upon direction by the operator. Fibre optic connection is preferred for new internet service. The basic provision for the information technology in the building should include the following:

- A dedicated branch breaker panel should be in the server room, if equipped.
- Either a dedicated exhaust fan or split air conditioner for the server room should be included. The air conditioner should be winterized to provide cooling during winter season.
- Where fibre is being used within building, new fibre cables should be OM4 multimode. All fibre cables terminate in patch panel with LC terminations.
- Unshielded twisted pair used between the workstations and the hub room should be 4 pair unshielded twisted pair enclosed in plenum rated jacket with a minimum of EIA/TIA Category 6A performance with RJ45 terminations.
- The UTP-based cabling system should have minimum a 160 MHz Channel Bandwidth over a maximum distance of 100m (328 ft.) and a positive channel Power Sum Attenuation-to-Crosstalk Ratio (PSACR) at 160 MHz.
- The UTP-based cabling system should use matched components from a single manufacturer, and the cabling system should be certified to deliver system performance over the lifetime of the applications for which the cabling system was originally designed to support.
- All components used in the UTP-based cabling system should be warranted for a period of 25 years from date of installation against defects in materials and/or workmanship.
- The UTP-based cabling system should comply with the following standards:
 - Minimum Enhanced Category 5 – ANSI/TIA/EIA-568-B.1;
 - Class D ISO/IEC 11801 2nd edition;
 - Class D - CENELEC EN50173; and

- Wireless access points should be mounted on the ceiling to provide internet access in the building. Wireless access point jacks should be installed so that they can be moved to adjust the wireless access point.

6.4.2. Telephone System

Subject to confirmation by the shelter operator, a VOIP (Voice Over Internet Protocol) phone system should be installed in the building, equipped with Cat 6A cables to each phone jack. Provision should be made for a fax machine, if required.

- One data jack consisting of two outlets should be provided to each workstation user in an office space.
- Each data jack should be equipped with one phone outlet and one data outlet.

6.5. Electronic Safety and Security Systems

Electronic safety and security systems are most efficient and effective when they are designed with specific intent, purpose, and are well harmonized with facility operations and staff.

Facilities operated by the City of Toronto will need to address City of Toronto requirements. The City's staff are available to assist in understanding City requirements. When the shelter is not operated by the City, the shelter operator will need to provide input on their organization's requirements. If the building is owned by the City but operated by a different operator, the building will still require support for the City's electronic safety and security infrastructure to a termination point in case operations shift to the City in the future.

6.5.1. Methodology

- For new construction and renovations, a security systems specialist should be engaged as part of the design team to provide consultation, develop design concepts and full systems design.
- The security systems design should correlate to the Crime Prevention Through Environmental Design (CPTED) principles in this document.

6.5.2. Threat Risk Assessment (TRA)

At the outset of the design, a threat and risk assessment (TRA) should be conducted to determine the risk level associated with the facility's assets and recommended security countermeasures. If the facility is owned and operated by the City, this process will be conducted by the City. The TRA should include:

- Identification of assets:
 - people (employee, visitors, *shelter-users*);
 - information (client records, business and employee information);
 - equipment (High-cost AV equipment, computers, servers, etc.);
 - building envelope (perimeter glazing and doors); and
 - reputation.
- Identification of threats:
 - break and enter;
 - vandalism;
 - violence;
 - theft;

- fall accidents;
 - assault;
 - robbery;
 - altercation; and
 - violent intruder.
- Analysis and identification of an asset's vulnerability to threats
 - Determination of risk levels of each asset
 - Recommended security countermeasures to reduce risk levels to levels that are acceptable by the Shelter operator. The countermeasures may include:
 - Security systems: CCTV, card access control, intrusion detection, duress alarm, etc.;
 - Procedural: de-escalation training, processes and policies; and
 - Risk transfer: insurance.
 - Below is an example of a worksheet that can be used to assess risk and determine recommended countermeasures

Asset	Threat	Existing Countermeasure	Risks	Impact Statement	Likelihood [1-5]	Impact [1-5]	Risk Level [1-25]	Recommend Countermeasure	Residual Likelihood [1-5]	Residual Impact [1-5]	Residual Risk Level [1-25]

- The security specialist should provide analysis and information as need by the shelter operator to determine the types and level of security systems required at the respective facility. The shelter operator should be apprised of current technology options and trends in order to make informed decisions.
- The security systems design should be done collaboratively with the shelter operator at each phase of the project to ensure the system will fulfil the shelter operators' needs and capabilities.
- The systems design should:
 - meet the shelter operator's current and future security management needs;
 - enhance the shelter operator's current and future operations in terms of quality-of-service, safety, staffing, maintenance and cost;
 - be modular, expandable and adaptable to changing security needs of the shelter operator;
 - employ best practices security design; and
 - meet budget constraints.

6.5.3. Codes and Standards

It is highly recommended that the systems used in designs, in addition to meeting City of Toronto specifications, comply with the following standards:

- shelter operator's related operational policies and standards
- Institute of Electrical and Electronic Engineers (IEEE) standards
- CAN/ULC standard S524. Standard for the Installation of Fire Alarm Systems.
- ULC-S317-96 Installation and Classification of Closed Circuit Video Equipment
- CAN/ULC-S319-05 Electronic Access Control Systems.
- ULC-S318-96 Power Supplies for Burglar Alarm Systems.
- ULC/ORD-C634-86 Connectors and Switches for Use with Burglar Alarm Systems.

6.5.4. Card Access Control System

The access control system in the facility can facilitate controlled access to rooms and or areas within the facility.

- The security specialist should appraise the Shelter operator of the relative Technology options to consider wireless access control locks with integrated card/fob readers as a cost-effective approach to providing access control at doors as well as being a cost-effective approach to installing locks at existing doors.
- Consider the following technology solution options when designing an access control system:
 - Power Over Ethernet (POE) Access Control Systems that utilize local edge controllers at doors. This technology utilizes common data networks for communications and power, requires a single cable from data switches to doors minimizing the cost of wiring;
 - Wireless Lock Access Control Systems that utilizes WI-FI or proprietary Radio Frequency (RF) infrastructures to communicate to battery operated wireless locks; and
 - Traditional/legacy Access Control Systems that utilizes hard-wired electrified locks and card readers at doors with centralized controllers.
- Consider the following access control system components when designing an access control system:

Component	Function
Card/Fob Reader	Installed on the unsecured side of a door to read the door access rights information on a card. This information tells the access control system if the holder of the card/fob has the rights to enter the respective door.
Door Contact/Door Position Switch	Installed on a swing or roll up door or gate to monitor the open / close position of a door..
Electrified Locks: -Electric Strike, -Electric Mortise Lock - Electric Latch Retraction / Electrified Panic	Types of electrified locks that open or close a door automatically when a signal is received from the access control system. The type of lock for any door type should be codetermined with a Door Hardware Consultant.
Magnetic Locks	An electrified lock that is typically used when securing a door in the direction of a designated egress path or frameless glass doors..
Door Alarm.	A device that gives a loud, high pitch sound when triggered by an alarm condition such as a door being forced open or held open beyond an acceptable timeframe.

- The system should include card/fob readers, electric locks, door alarms, and door position switches at doors that require controlled access. Doors that require only monitoring of open/close status should be equipped with door position switches and door alarms with a central visual display for staff monitoring. Doors that required controlled access and status monitoring only should be codetermined with the Shelter operator during design development.
- Push button door release functions should be included to enable the opening of secured doors and parking garage gates from designated control locations.
- The system should include all necessary controllers, power supplies and software to facilitate a complete turnkey system.

- The system should include access cards and or fobs type and quantity determined by the Shelter operator. City managed sites must comply with standards; cards and access are by Corporate Security.
- The system should include a means to perform systems administration and access card management. This can be provided from an onsite or offsite computer.

6.5.5. Intrusion Detection System

Shelters operate on a 24/7 basis, however, some areas may operate on a less than full time basis. If provided, intrusion detection systems can facilitate detection of intrusions at the perimeter as well as from within the facility and can have the capability to relay the detected intrusion to an onsite or remote alarm monitoring station, depending on shelter staffing.

- The intrusion detection system can include the following intrusion detectors:
 - facility perimeter and fence intrusion detectors that monitor the perimeter of the facility for climbing or breach of fences;
 - glass break detectors that monitor breakage of all glazing that is located at the perimeter of the facility and that is *accessible* from grade;
 - motion detectors that detect motion in specific areas of the facility; and
 - door contact or door solution switches to detect break-in at doors and or windows.
- LCD keypads can be located at main entrances, exits, and/or where required to facilitate arming and disarming of the intrusion detection system.
- All intrusion detection system peripheral devices should be integrated via controllers complete with the necessary input and output modules and power supplies. The controllers, input and output modules, and power supplies should be located in the security system hub or communications rooms within the facility.
- The access control system should be integrated with the intrusion detection system such that all “force door alarms” are relayed to the intrusion detection system as an individually addressable alarm.
- Where alarm monitoring is being done by a third party remote alarm monitoring company, the intrusion detection system should be equipped with a main internet and a cellular back-up dialler or communicator to facilitate the communications of all alarms to the remote alarm monitoring company.

6.5.6. CCTV System

Within a City-owned-and-operated facility, City requirements apply to the design and selection of system components, and the handling of any video feed. When operated by a shelter operator who is not the City, the operator's standards will apply. In all cases, the design and operation of the system must comply with applicable privacy legislation.

Some general considerations for a CCTV system are as follows:

- The CCTV system should be an IP (Internet Protocol) based CCTV system that facilitates live monitoring and recording of video streams from strategically placed IP based CCTV video cameras throughout the facility.
- CCTV Cameras will be strategically located to monitor and record activity at areas of interest determined by the shelter operator.
- CCTV Cameras should be Fixed IP and Pan Tilt Zoom (PTZ) (Internet Protocol) Cameras. Consider providing:
 - wide-angle high definition CCTV cameras to increase CCTV coverage efficiency;
 - cameras with built-in dynamic privacy masking that will enable administrators to mask areas within a camera view providing effective coverage while maintaining required privacy; and
 - cameras with built-in motion detection that can assist in detection of unauthorized motion in specific areas within specific timeframes.
- CCTV cameras should be of the appropriate resolution and should be located as required to facilitate recognition, identification, and general monitoring as determined by the shelter operator.
- Exterior CCTV cameras should be day/night rated with wide dynamic range to compensate for varying light conditions.
- All video streams should be recorded directly to Network Video Recorders and should be stored for a period determined by the Shelter operator for instant access and viewing.
- The CCTV System should include a computer to facilitate viewing of live and recorded video streams. The computer should be equipped with strong passwords to prevent unauthorized access and viewing of video streams.

6.5.7. Intercom System

The intercom system should facilitate bidirectional audio only or audio and video communications between intercom substations and master intercom stations.

- When calls are placed from a substation to a master intercom station, if the call is not answered at the master intercom stations within a pre-set number of seconds, the call should be automatically relayed to a predetermined telephone number (cell phone or landline) via the public switch telephone network (PSTN).
- Locations of intercom substations and master intercom stations should be codetermined with the shelter operator, as should locations of speakers for a public address system.

6.5.8. Duress Alarm System

Where duress alarm systems are provided, the system should provide a means for persons in duress to request assistance.

- Duress alarm systems should consist of duress alarm initiators such as wired duress buttons and/or wireless wearable buttons (note: wireless buttons are not in compliance with City security standards) attached to lanyards and/or hand-held devices.
- System should include a monitoring station that has the capability to instantly pinpoint and display the zone from which an alarm has originated to facilitate prompt response.
- Locations of duress alarm initiators, monitoring stations and response protocol should be codetermined with the shelter operator.

6.5.9. Security Systems Infrastructure

- A complete metal conduit system should be implemented to house and protect all security systems wiring.
- All wiring should be multi-conductor unshielded and shielded (as required) cables. All wiring should meet the applicable code requirements and should be a minimum FT4 rating. Current City standards require CAT6, CAT6A cabling.
- All security headend devices should be located in a secured room or closet within the facility. The room or closet should be:
 - sized to as required to house security headend devices and growth based on input from the shelter operator;
 - finished with antistatic flooring;

- secured with card access control or lock and key as determined by the shelter operator; and
- equipped with supplementary cooling as required for proper operation of equipment.
- All devices should be exterior-rated where exposed to weather elements.
- All security systems should derive power from an essential power source where available. Uninterrupted power supplies should be provided where an essential power source is not available. All CCTV cameras should derive power via POE (Power Over Ethernet).
- **Cyber Security:**
 - coordinate with the shelter operator's Information Technology representatives and include all applicable cyber security network configurations in the system's design;
 - enable authentication and encryption technology for all network attached equipment; and
 - employ network security best practices when programming and configuring network attached devices and workstations.
- Training should be provided to the shelter operator's staff on the proper operation, administration and maintenance of the security systems.

7

Materials & Finishes

- 7.1 Floor Finishes
- 7.2 Wall Finishes
- 7.3 Ceiling Finishes
- 7.4 Doors and Frames
- 7.5 Other Systems
- 7.6 Other Issues

Introduction

Materials and finishes selected for use in shelters require the application of the objectives defined in Section 2 and the details of Section 3 of this guide. Easy to maintain, wipeable hygienic surfaces, particularly in high-touch areas, should be provided, and anti-microbial materials should be considered. Permeable, cloth-like surfaces should be avoided. **This need is enhanced during the COVID-19 pandemic.**

Of particular note, the following should be considered for material and finish selection:

User-centred

- in support of Trauma-Informed Design:
 - create a calm, welcoming, homelike, safe environment that promotes the ability to de-escalate conflict
 - remove or reduce sources of stress, including acoustic and visual elements
 - engage the individual actively in a dynamic, multi-sensory environment with attributes of quality and beauty
- in support of Accessible Design:
 - use colour/luminance contrast strategically to differentiate elements and emphasize primary paths of travel, including potential hazards and obstacles
 - use sound-absorbent finishes to minimize background noise and reverberation, particularly in spaces where oral communication is common (reception areas, dining rooms, lounges, interview rooms, and similar spaces)
- in support of Cultural and Spiritual Practices:
 - use colour, symbols and art to help people who are marginalized feel recognized and more welcome
- in support of Perception and Navigation Systems:
 - establish territories and zones using colours or finishes
 - design spaces with an identity that is meaningful to *shelter-users* with landmarks, symbols, and artwork so *shelter-users* relate the space as one they can belong to

Respect and Dignity

- create positive experiences for *shelter-users*, staff and visitors

Safety and Security

- create environments in which occupants feel safe

Health and Wellness

- create healthy buildings
- support measures for infection prevention and control
- surfaces should be non-porous and wipe able. Where possible materials and finishes should be free of cracks and seams to prevent insect infestations.

Sustainability, Durability and Resiliency

- make durable selections to minimize the costs of operations.

Integrated with Communities

- select materials that are sensitive to the context, particularly for exterior materials and finishes

Flexibility

- use materials that are flexible in use
- use materials that are flexible for future reconfiguration

7.1. Floor Finishes

The following table captures a range of common shelter spaces and recommendations for floor materials and finishes. Note that all installations of sheet flooring should have welded seams.

Space	Flooring Material	Flooring Format	Wall Base
Sleeping Rooms	Recommended <ul style="list-style-type: none"> Linoleum (resilient flooring) Vinyl (resilient flooring) Rubber (resilient flooring) Not Recommended <ul style="list-style-type: none"> Engineered Wood Carpet 	<ul style="list-style-type: none"> Sheet Tile /plank 	<ul style="list-style-type: none"> Self-cove Resilient base (10 mm thickness)
Common Rooms Dining Rooms	Recommended <ul style="list-style-type: none"> Linoleum (resilient flooring) Vinyl (resilient flooring) Rubber (resilient flooring) Not Recommended <ul style="list-style-type: none"> Wood Carpet 	<ul style="list-style-type: none"> Sheet Tile /plank 	<ul style="list-style-type: none"> Self-cove Flash cove base Resilient base (10 mm thickness)
3-piece washrooms	<ul style="list-style-type: none"> Vinyl - safety 	<ul style="list-style-type: none"> Sheet 	<ul style="list-style-type: none"> Self cove
Shower room	<ul style="list-style-type: none"> Porcelain tile with slip resistance waterproofing membrane continuous to floor drains Epoxy safety floor (cleaning issues) 	<ul style="list-style-type: none"> Large format with epoxy grout N/A 	<ul style="list-style-type: none"> Tile Self cove
2-piece washroom	<ul style="list-style-type: none"> Vinyl Porcelain tile with slip resistance water proofing membrane continuous to floor drains 	<ul style="list-style-type: none"> Sheet Large format with epoxy grout 	<ul style="list-style-type: none"> Self cove Tile
Admin Offices Staff Lounges (without kitchenette)	Recommended <ul style="list-style-type: none"> Linoleum (resilient flooring) Vinyl (resilient flooring) Rubber (resilient flooring) Could be considered case-by-case <ul style="list-style-type: none"> Engineered wood Carpet is not recommended	<ul style="list-style-type: none"> Sheet Tile /plank Plank 	<ul style="list-style-type: none"> Resilient base (10 mm thickness)
Staff Stations Reception Desks (staff side) Counselling Rooms	Recommended <ul style="list-style-type: none"> Linoleum (resilient flooring) Vinyl (resilient flooring) Rubber (resilient flooring) 	<ul style="list-style-type: none"> Sheet Tile /plank 	<ul style="list-style-type: none"> Self cove Resilient base (10 mm thickness)
Shelter-user Kitchens and Kitchenettes	<ul style="list-style-type: none"> Vinyl Porcelain tile with slip resistance water proofing membrane continuous 	<ul style="list-style-type: none"> Sheet Large format with epoxy 	<ul style="list-style-type: none"> Self cove Tile

Space	Flooring Material	Flooring Format	Wall Base
Staff Kitchenettes	to floor drains	grout	
Shelter-user Laundry Rooms	<ul style="list-style-type: none"> Vinyl (resilient flooring) 	<ul style="list-style-type: none"> Sheet 	<ul style="list-style-type: none"> Self cove
	<ul style="list-style-type: none"> Porcelain tile with slip resistance water proofing membrane continuous to floor drains 	<ul style="list-style-type: none"> Large format with epoxy grout 	<ul style="list-style-type: none"> Tile
Commercial Kitchens	<ul style="list-style-type: none"> Safety Vinyl (resilient flooring) 	<ul style="list-style-type: none"> Sheet 	<ul style="list-style-type: none"> Self cove
	<ul style="list-style-type: none"> Porcelain tile with slip resistance with water proofing membrane continuous to floor drains 	<ul style="list-style-type: none"> Large format with epoxy grout 	<ul style="list-style-type: none"> Tile
	<ul style="list-style-type: none"> Epoxy safety 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Self cove
On-Premise Laundry	<ul style="list-style-type: none"> Safety Vinyl (resilient flooring) 	<ul style="list-style-type: none"> Sheet 	<ul style="list-style-type: none"> Self cove
	<ul style="list-style-type: none"> Porcelain tile with slip resistance water proofing membrane continuous to floor drains 	<ul style="list-style-type: none"> Large format with epoxy grout 	<ul style="list-style-type: none"> Tile
	<ul style="list-style-type: none"> Epoxy 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Self cove
Main Entrance Lobby	<ul style="list-style-type: none"> Stone tile Porcelain Tile 	<ul style="list-style-type: none"> Large format with epoxy grout 	<ul style="list-style-type: none"> To match floor
Elevator lobbies	<ul style="list-style-type: none"> Terrazzo 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Self cove
Shelter-user Corridors (within walk off distance of exterior door)	<ul style="list-style-type: none"> Polished concrete 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Resilient base (10 mm thickness)
Main Convenience Stairs (within walk off distance of exterior door)	<ul style="list-style-type: none"> As above with tactile warning strips and contrasting slip-resistant nosings 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> As above where applicable
Public spaces Shelter-user corridors (high traffic, non-abrasive)	<ul style="list-style-type: none"> Linoleum (resilient flooring) Vinyl (resilient flooring) Rubber (resilient flooring) 	<ul style="list-style-type: none"> Sheet 	<ul style="list-style-type: none"> Self cove
Convenience stairs	<ul style="list-style-type: none"> with tactile warning strips and contrasting slip-resistant nosings 	<ul style="list-style-type: none"> single piece tread riser nosing 	<ul style="list-style-type: none"> As above where applicable
Semi Public/private Spaces	<ul style="list-style-type: none"> Linoleum (resilient flooring) Vinyl (resilient flooring) Rubber (resilient flooring) 	<ul style="list-style-type: none"> Sheet 	<ul style="list-style-type: none"> Self cove
Exit stairs	<ul style="list-style-type: none"> Resilient flooring with coordinated nosings with tactile warning strips and contrasting slip-resistant nosings 	<ul style="list-style-type: none"> single piece tread riser nosing 	<ul style="list-style-type: none"> Self cove Resilient base (10 mm thickness)
	<ul style="list-style-type: none"> precast concrete with tactile warning strips and contrasting slip-resistant nosings 		<ul style="list-style-type: none"> Resilient base (10 mm thickness)

Space	Flooring Material	Flooring Format	Wall Base
Service Corridors	<ul style="list-style-type: none"> • Porcelain tile 		<ul style="list-style-type: none"> • Tile
	<ul style="list-style-type: none"> • Polished concrete 		<ul style="list-style-type: none"> • Resilient base (10 mm thickness)
Heat Rooms	<ul style="list-style-type: none"> • Vinyl (resilient flooring) 	<ul style="list-style-type: none"> • Sheet 	<ul style="list-style-type: none"> • Self cove
Child minding and child play areas	<ul style="list-style-type: none"> • Linoleum (resilient flooring) • Vinyl (resilient flooring) • Rubber (resilient flooring) 	<ul style="list-style-type: none"> • Sheet 	<ul style="list-style-type: none"> • Self cove
Outdoor Areas	<ul style="list-style-type: none"> • range of hard and soft surfaces including poured rubber for children's play areas 		
Outdoor smoking area	<ul style="list-style-type: none"> • non-combustible finish without openings that would permit passage of cigarette butts 		

7.2.Wall Finishes

The following table captures a range of common shelter spaces and recommendations for wall materials and finishes. Note that the use of corner guards is recommended throughout the shelter in higher traffic areas, particularly on outside corners, where the presence of mobility devices, strollers or service carts may lead to wall impact and damage. Corner guards should avoid creating hidden crevices and should be selected not to create an institutional character in areas occupied by *shelter-users*.

Space	Wall substrate	Wall Finish	Sheet wall protection
Sleeping Rooms	<ul style="list-style-type: none"> Abuse resistant GWB 	<ul style="list-style-type: none"> Paint 	<ul style="list-style-type: none"> consider wall protection at bed spaces if adjacent to a wall
Common Rooms Dining Rooms	<ul style="list-style-type: none"> Abuse resistant GWB 	<ul style="list-style-type: none"> Paint 	
3 piece washrooms within shower area <i>Shower room</i>	<ul style="list-style-type: none"> cementitious wall backer board or concrete block with water proofing membrane continuous to floor drains 	<ul style="list-style-type: none"> Large format porcelain wall tile with epoxy grout 	<ul style="list-style-type: none"> provide full height tile finish within <i>shelter-user</i> showers
2 piece washroom 3 piece washroom	<ul style="list-style-type: none"> cementitious wall backer board or concrete block at tile finish 	<ul style="list-style-type: none"> porcelain wall tile full-height in shelter user washroom and 1.2m AFF in all other washrooms 	
	<ul style="list-style-type: none"> Abuse resistant GWB where no tile finish 	<ul style="list-style-type: none"> Epoxy paint 	
Admin Offices Staff Lounges (without kitchenette)	<ul style="list-style-type: none"> GWB 	<ul style="list-style-type: none"> Paint 	
Staff Stations Reception Desks (staff side) Counselling Rooms	<ul style="list-style-type: none"> Abuse resistant GWB 	<ul style="list-style-type: none"> Paint 	
<i>Shelter-user</i> Kitchens & Kitchenettes	At sink back splash <ul style="list-style-type: none"> cementitious wall backer board or concrete block 	<ul style="list-style-type: none"> Porcelain wall tile Epoxy paint 	

Space	Wall substrate	Wall Finish	Sheet wall protection
Staff Kitchenettes	Everywhere else <ul style="list-style-type: none"> Abuse resistant GWB 	<ul style="list-style-type: none"> Scrubbable paint 	
<i>Shelter-user</i> Laundry Rooms	<ul style="list-style-type: none"> cementitious wall backer board or concrete block 	<ul style="list-style-type: none"> Porcelain wall tile Epoxy paint 	
Commercial Kitchens	<ul style="list-style-type: none"> Abuse resistant GWB 	<ul style="list-style-type: none"> Porcelain wall tile/ Altro white rock or similar system/ stainless steel/ Epoxy paint/ scrubbable paint 	
Commercial Kitchen – non-combustible	<ul style="list-style-type: none"> Cementitious wall board 	<ul style="list-style-type: none"> All of the above except Altro white rock or similar system 	
Commercial Kitchen – water-resistant area	<ul style="list-style-type: none"> Cementitious wall board 	<ul style="list-style-type: none"> All of the above except scrubbable paint 	
On-Premise Laundry	<ul style="list-style-type: none"> moisture resistant GWB 	<ul style="list-style-type: none"> Porcelain Tile Epoxy paint scrubbable paint 	<ul style="list-style-type: none"> FRL/FRP to 6' AFF
Main Entrance Lobby Elevator lobbies <i>Shelter-user</i> Corridors (high traffic) Convenience Stairs (high traffic)	<ul style="list-style-type: none"> Abuse resistant GWB 	<ul style="list-style-type: none"> scrubbable paint 	<ul style="list-style-type: none"> Acrovyn
Other Public spaces <i>Shelter-user</i> corridors	<ul style="list-style-type: none"> Abuse resistant GWB 	<ul style="list-style-type: none"> scrubbable paint 	<ul style="list-style-type: none"> Acrovyn

Space	Wall substrate	Wall Finish	Sheet wall protection
Convenience stairs			
Semi Public/private Spaces	<ul style="list-style-type: none"> Abuse resistant GWB 	<ul style="list-style-type: none"> scrubbable paint 	
Exit stairs	<ul style="list-style-type: none"> Abuse resistant GWB 	<ul style="list-style-type: none"> scrubbable paint 	
Service Corridors	<ul style="list-style-type: none"> Abuse resistant GWB 	<ul style="list-style-type: none"> scrubbable paint 	<ul style="list-style-type: none"> FRL/FRP to 6' AFF, SS bumpers
Heat Rooms	<ul style="list-style-type: none"> Abuse resistant GWB use of reflective foil surface may reduce energy use 	<ul style="list-style-type: none"> heat resistant scrubbable paint 	<ul style="list-style-type: none"> note that metal guards should be provided to light fixtures and sprinkler heads
Child minding and child play areas	<ul style="list-style-type: none"> Abuse resistant GWB 	<ul style="list-style-type: none"> scrubbable paint 	
Outdoor smoking area		<ul style="list-style-type: none"> resistant to cigarette burns 	

7.3. Ceiling Finishes

The following table captures a range of common shelter spaces and recommendations for ceiling materials and finishes.

Space	Ceiling	Ceiling Finish
Sleeping Rooms	<ul style="list-style-type: none"> GWB Concrete Not Recommended <ul style="list-style-type: none"> ACT 	<ul style="list-style-type: none"> Paint
Common Rooms	<ul style="list-style-type: none"> GWB Concrete 	<ul style="list-style-type: none"> Paint consider use of washable acoustic treatments where beyond reach of <i>shelter-users</i>
Dining Rooms	<ul style="list-style-type: none"> ACT could be considered case-by-case if ceiling exceeds 3.6 m (12') AFF 	
3 piece washrooms in shower enclosures <i>Shower room</i>	<ul style="list-style-type: none"> High-performance panels that resist moisture, mould and fire as well as dents and penetration with panel surfaces does not delaminate when wet (Aqua-Tough or equal) 	<ul style="list-style-type: none"> Epoxy paint altro white rock or similar system
2 piece washroom	<ul style="list-style-type: none"> High-performance panels that resist moisture, mould and fire as well as dents and penetration with panel surfaces does not delaminate when wet (Aqua-Tough or equal) 	<ul style="list-style-type: none"> Epoxy paint
Admin Offices	<ul style="list-style-type: none"> GWB Concrete 	<ul style="list-style-type: none"> Paint
Staff Lounges (without kitchenette)	<ul style="list-style-type: none"> ACT could be considered case-by-case 	<ul style="list-style-type: none"> N/A
Staff Stations	<ul style="list-style-type: none"> GWB Concrete 	<ul style="list-style-type: none"> Paint
Reception Desks (staff side)	<ul style="list-style-type: none"> ACT could be considered case-by-case 	<ul style="list-style-type: none"> N/A
Counselling Rooms		
<i>Shelter-user</i> Kitchens & Kitchenettes	<ul style="list-style-type: none"> GWB 	<ul style="list-style-type: none"> Paint
Staff Kitchenettes		
<i>Shelter-user</i> Laundry Rooms	<ul style="list-style-type: none"> Moisture resistant GWB 	<ul style="list-style-type: none"> Epoxy paint
Commercial Kitchens	<ul style="list-style-type: none"> GWB Washable ACT 	<ul style="list-style-type: none"> Paint N/A
On-Premise Laundry	<ul style="list-style-type: none"> Moisture resistant GWB 	<ul style="list-style-type: none"> Paint
Main Entrance Lobby <i>Shelter-user</i> Corridors (within walk off distance of exterior door)	<ul style="list-style-type: none"> GWB 	<ul style="list-style-type: none"> Paint

Space	Ceiling	Ceiling Finish
Convenience Stairs (within walk off distance of exterior door)		
Public spaces <i>Shelter-user</i> corridors (high traffic, non-abrasive) Convenience stairs	<ul style="list-style-type: none"> GWB 	<ul style="list-style-type: none"> Paint
Semi Public/private Spaces	<ul style="list-style-type: none"> GWB 	<ul style="list-style-type: none"> Paint
Exit stairs	<ul style="list-style-type: none"> GWB 	<ul style="list-style-type: none"> Paint
Service Corridors	<ul style="list-style-type: none"> ACT 	<ul style="list-style-type: none"> N/A
Heat Rooms	<ul style="list-style-type: none"> Abuse resistant GWB use of reflective foil surface may reduce energy use 	<ul style="list-style-type: none"> heat resistant scrubbable paint
Child minding and child play areas	<ul style="list-style-type: none"> GWB 	<ul style="list-style-type: none"> Paint

7.4. Doors and Frames

The following table captures a range of common shelter spaces and recommendations for door and frame materials and finishes. It should be noted that glass in doors and sidelights in some shelters may have durability issues when located in the lower half of doors and sidelights. Thickness of glass in doors and sidelights should be sized to anticipate use, with tempered laminated glass providing the most durable application.

Space	Doors	Door Frames
Sleeping Rooms	<ul style="list-style-type: none"> Hollow metal Solid core wood w/PLAM 	<ul style="list-style-type: none"> Metal Frames
Common Rooms	<ul style="list-style-type: none"> Hollow metal Solid wood w/PLAM 	<ul style="list-style-type: none"> Metal Frames
Dining Rooms		
3 piece washrooms	<ul style="list-style-type: none"> Hollow metal or Solid core wood w/PLAM 	<ul style="list-style-type: none"> Metal Frames
<i>Shower room</i>		
2 piece washroom	<ul style="list-style-type: none"> Hollow metal or Solid core wood w/PLAM 	<ul style="list-style-type: none"> Metal Frames
Admin Offices	<ul style="list-style-type: none"> Hollow metal or Solid core wood w/PLAM 	<ul style="list-style-type: none"> Metal Frames
Staff Lounges (without kitchenette)		
Staff Stations	<ul style="list-style-type: none"> Hollow metal or Solid core wood w/PLAM 	<ul style="list-style-type: none"> Metal Frames
Reception Desks (staff side)		
Counselling Rooms		
<i>Shelter-user</i> Kitchens & Kitchenettes	<ul style="list-style-type: none"> Hollow metal or Solid core wood w/PLAM 	<ul style="list-style-type: none"> Metal Frames
Staff Kitchenettes		
<i>Shelter-user</i> Laundry Rooms	<ul style="list-style-type: none"> Hollow metal or Solid core wood w/PLAM 	<ul style="list-style-type: none"> Metal Frames
Commercial Kitchens	<ul style="list-style-type: none"> Hollow metal or Solid core wood w/PLAM 	<ul style="list-style-type: none"> Metal Frames
On-Premise Laundry	<ul style="list-style-type: none"> Hollow metal 	<ul style="list-style-type: none"> Metal Frames
Main Entrance Lobby	<ul style="list-style-type: none"> Thermally broken hollow metal 	<ul style="list-style-type: none"> Thermally broken metal frames
<i>Shelter-user</i> Corridors	<ul style="list-style-type: none"> Hollow metal or Solid core wood w/PLAM 	<ul style="list-style-type: none"> Metal Frames
Convenience Stairs		
Public spaces	<ul style="list-style-type: none"> Hollow metal or Solid core wood w/PLAM 	<ul style="list-style-type: none"> Metal Frames
Semi Public/private Spaces	<ul style="list-style-type: none"> Hollow metal or Solid core wood w/PLAM 	<ul style="list-style-type: none"> Metal Frames
Exit stairs	<ul style="list-style-type: none"> Hollow metal 	<ul style="list-style-type: none"> Metal Frames
Service Corridors	<ul style="list-style-type: none"> Hollow metal 	<ul style="list-style-type: none"> Metal Frames

Space	Doors	Door Frames
Heat Rooms	<ul style="list-style-type: none"> Hollow metal 	<ul style="list-style-type: none"> Metal Frames
Child minding and child play areas	<ul style="list-style-type: none"> Hollow metal or Solid core wood w/PLAM 	<ul style="list-style-type: none"> Metal Frames
Outdoor Areas	<ul style="list-style-type: none"> Thermally broken hollow metal 	<ul style="list-style-type: none"> Thermally broken metal frames

7.5. Other Systems

The following table captures a range of other shelter systems and recommendations for their use.

System	Comments
Elevators	In addition to serving accessibility needs within shelters that may exceed the makeup of a cross section of the general population, shelter elevators should have cab finishes that are highly durable such as a finish like Rigid-Tex or similar, which conceals scratches, smudges, and fingerprints so that cleaning and maintenance are greatly reduced. The use of mirrors (such as polished stainless steel) within elevators has been shown to reduce incidences of mistreatment of finishes. Sufficient cooling should be provided for all elevator machine rooms.
Acoustic Treatment	Acoustics treatment may be important within various spaces within a shelter. Shelter-specific criteria to bear in mind include washability, resistance to bed bug infestation, locations clear of potential for damage due to heavy use or abuse
Door Hardware	<p>Due to the heavy use experienced within a shelter, all door hardware should be suitable for that environment, and, in some locations, where appropriate, be resistant to vandalism. Door hardware systems should be widely available for frequent repair/replacement.</p> <p>Door hardware should be considered high security and, if keyed, keys protected from copying (i.e. Medeco or similar system).</p>
Accessories	<p>Wall mounting of accessories and other architectural elements requires robust blocking within walls when fastened by screws. Fasteners and blocking should be appropriate to the location of use to avoid premature failure. If in a wet area, options to avoid breaching the plane of waterproofing should be considered, such as floor-mounted rather than wall-mounted shower seats</p> <p>Automated hand dryers within shelter-user washrooms reduce paper towel waste which may also end up in toilets creating plumbing blockages. The impact of aerosols generated by hand dryers should be evaluated on a case-by-case basis, as well as the benefit of paper towels for IPAC considerations.</p>
Sealants and caulking	It is extremely important for IPAC and control of pests that joints between similar and between dissimilar materials be sealed with durable sealants
Millwork & Cabinetry	<p>For durability, commercial grade millwork with heavy duty hardware and lockable doors and drawers and plywood cores to all cabinets and doors should be provided.</p> <p>Durable finishes should be provided to all exposed cabinets (including inside of doors). Use of 3mm vinyl edge banding on all exposed door edges can enhance durability.</p>

System	Comments
Millwork & Cabinetry	Scratch and heat resistant materials for countertops should be provided in shelter-user kitchens. Solid surfacing (Dupont Corian or equal) for countertops, with heat welded seams should be provided, except within commercial or reheat kitchens, where stainless steel is best practice.

7.6. Other Issues

The following table captures a series of issues that have been identified as significant within the City's shelter development process.

Element	Comments
Stair accessibility	Within new construction it may be apparent that tactile warning strips and contrasting slip-resistant nosings are required at stairs, however, this is also a need within renovations of existing buildings.
Project duration	In light of shelter system occupancy constraints, consider if project requires expediting during construction stage through use of overtime and extended workdays and weeks.
Work within an occupied shelter	When working within an occupied shelter, either as a renovation project or for dealing with deficiencies and warranty issues, issues of site & fire safety, noise & vibration impact, IPAC, dust/fume control, appropriate behaviour of construction staff and hours of operation all need consideration and agreement with the shelter operator. Access in or through occupied spaces should be avoided, and a secure interface between the construction zone and occupied zone should be maintained at all times.
Existing floors within a building to be renovated	If existing conditions do not permit the review of large portions of a floor area, and there is a risk that floor levels of adjacent areas which are intended to be combined may not match height, or require extensive grinding or levelling, consider demolition in advance of the main scope of work, or use extensive destructive investigation of existing conditions.

Bibliography & References

City of Toronto. *City-Wide Corporate Security Policy*. 2009.

<https://www.toronto.ca/legdocs/mmis/2009/gm/bgrd/backgroundfile-20217.pdf>

City of Toronto. “Energy/GHG & Resilience for Mid to High-Rise Residential & all Non-Residential Development”. Toronto Green Standard Version 3. <https://www.toronto.ca/city-government/planning-development/official-plan-guidelines/toronto-green-standard/toronto-green-standard-version-3/mid-to-high-rise-residential-all-non-residential-version-3/energy-ghg-resilience-for-mid-to-high-rise-residential-all-non-residential-development/>.

City of Toronto. “Mandatory Grease Traps for Food Services Establishments”. Water & Environment. <https://www.toronto.ca/services-payments/water-environment/water-sewer-related-permits-and-bylaws/sewers-by-law/mandatory-grease-traps-for-food-service-establishments/>.

City of Toronto. *Requirements for Garbage, Recycling and Organics Collection Services for New Developments and Redevelopments*. Revised May 2012. <https://www.toronto.ca/wp-content/uploads/2017/11/9914-Requirements-for-developments-and-redevelopments.pdf>.

City of Toronto. “Second-hand Smoke and the Law.” Health & Wellness. <https://www.toronto.ca/community-people/health-wellness-care/health-programs-advice/live-tobacco-free/second-hand-smoke-and-the-law/>.

City of Toronto. *Street Needs Assessment*. 2018. <https://www.toronto.ca/wp-content/uploads/2018/11/99be-2018-SNA-Results-Report.pdf>.

City of Toronto. “Toronto Green Standard”. <https://www.toronto.ca/city-government/planning-development/official-plan-guidelines/toronto-green-standard/>.

City of Toronto. Toronto Municipal Code Chapter 709 Smoking. December 17, 2013. https://www.toronto.ca/legdocs/municode/1184_709.pdf.

Committee on Temporary Shelter. “Trauma Informed Design: How the Physical Environment Supports Recovery from Homelessness”. April 2018. https://cotsonline.org/wp-content/uploads/2018/04/Trauma-Informed-Design.BOD_.pdf

Courses for the Toronto Public Service, *Indigenous Cultural Competency Training: from Truth to ReconciliAction*, Toronto: People, Equity and Human Rights, 2019.

Environment and Energy Division and City Planning Division. *Energy Efficiency Report Submission and Modelling Guidelines: For the Toronto Green Standard (TGS) Version 3*. City of Toronto. February 1, 2019. https://www.toronto.ca/wp-content/uploads/2019/02/93d5-CityPlanning_V3-Energy-Modelling-Guidelines-Feb-2019.pdf.

Gaetz, Stephen, Erin Dej, Tim Richter and Melanie Redman. *The State of Homelessness in Canada 2016*. Canada: Canadian Observatory on Homelessness Press, 2016.
https://homelesshub.ca/sites/default/files/SOHC16_final_20Oct2016.pdf.

Kellert, Stephen R. and Elizabeth F. Calabrese. "The practice of Biophilic Design". 2015.
www.biophilic-design.com.

Newbury, Sandra, et al. *Guidelines for Standards of Care in Animal Shelters*. The Association of Shelter Veterinarians, 2010. <https://www.sheltervet.org/assets/docs/shelter-standards-oct2011-wforward.pdf>.

Pew Research Center. "Gauging Family Intimacy: Dogs Edge Cats (Dads Trail Both)". Social and Demographic Trends. March 7, 2006.
<https://www.pewsocialtrends.org/2006/03/07/gauging-family-intimacy/>.

Phillips, Allie. *Sheltering Animals and Families Together: Start-Up Manual*. SAF-T: 2010.
<http://alliephillips.com/wp-content/uploads/2010/11/SAF-T-Start-Up-Manual-2012.pdf>

Province of Ontario. "Inclusive Design Cards". Inclusive Design Toolkit. Last modified October 17, 2019. <https://www.ontario.ca/page/inclusive-design-cards>.

Province of Ontario. Food Premises. Ontario Regulation 493/17. July 1, 2018.
<https://www.ontario.ca/laws/regulation/170493>.

Province of Ontario, Smoke-Free Ontario Act. S.O. 2017, Chapter 26, Schedule 3. June 6, 2019. <https://www.ontario.ca/laws/statute/17s26>.

Public Health Ontario. *Infection Prevention and Control for Clinical Office Practice*. Revised April 2015. <https://www.publichealthontario.ca/-/media/documents/B/2013/bp-clinical-office-practice.pdf>

"Section 13 20 00 - Heat Treatment Room." Section 4 Construction Standards, BC HOUSING Design Guidelines and Construction Standards. British Columbia, 2018.
<https://www.bchousing.org/publications/BCH-Design-Guidelines-Construction-Standards.pdf>.

Substance Abuse and Mental Health Services Administration. *SAMHSA's Concept of Trauma and Guidance for a Trauma-Informed Approach*. Rockville, MD: Substance Abuse and Mental Health Services Administration, 2014.
<https://store.samhsa.gov/system/files/sma14-4884.pdf>.

Toronto Public Health. *Environmental Control Best Practices: Guidelines to Reduce TB Transmission in Homeless Shelters and Drop-In Centres*. 2007. https://www.toronto.ca/wp-content/uploads/2017/10/9017-tph-tb-environmental-control_best-practices-2007.pdf

Toronto Public Health. *Infection Prevention and Control Guide for Homelessness Service Settings*. Revised September 2009. <https://www.toronto.ca/wp-content/uploads/2019/09/98bf-tph-infection-prevention-and-control-homeless-service-settings-2019-.pdf>

Toronto Shelter Network. “Shelter Provider Health Survey: Summary Report”. July 14, 2017.

University of Wisconsin–Madison School of Veterinary Medicine, Shelter Medicine. *Facility Design and Animal Housing*. June 2015. <https://www.uwsheltermedicine.com/library/resources/facility-design-and-animal-housing>.

University of Wisconsin–Madison School of Veterinary Medicine, Shelter Medicine. *Facility Design, Shelter Animal Housing and Shelter Population Management*. March 2019. <https://www.uwsheltermedicine.com/library/resources/facility-design-shelter-animal-housing-and-shelter-population-management>.

Vazquez, Stephen R. “Color: Its Therapeutic Power for Rapid Healing. Subtle Energies & Energy Medicine”. *ISSSEEM Magazine* 17, no. 2 (2007): 191-213

Walker, ER, Robin E McGee, Benjamin G Druss. Mortality in Mental Disorders and Global Disease Burden Implications: A Systematic Review and Meta-Analysis. *JAMA Psychiatry* 72(4) (2015): 334 - 41. <https://jamanetwork.com/journals/jamapsychiatry/fullarticle/2110027>.

WELL. “Air”. <https://dev-wellv2.wellcertified.com/v/en/air>.

WELL. “Mind”. <https://v2.wellcertified.com/v2.1/en/mind#>.