

Continuing Care Strategy



Living well in a place you can call home.

Long Term Care Facility Requirements (Space and Design)

RFP 60131638

Appendix B

Nova Scotia Department of Health

Final

July 25, 2007

TABLE OF CONTENTS

| | Page |
|---|-------------|
| Introduction | 1 |
| 1.0 Vision of Continuing Care in Nova Scotia | 3 |
| 2.0 Long Term Care Facility and Environment Principles | 3 |
| 3.0 Fundamentals | 4 |
| 4.0 Definitions: Outcomes, Spatial Requirements and Lessons Learned | 6 |
| 5.0 Definitions: Nursing Homes and Residential Care Facilities | 6 |
| 6.0 Nursing Home | |
| 6.1 Site Location | 7 |
| 6.2 Site Development | 8 |
| 6.3 Building Configuration | 9 |
| 6.4 Building Systems and Components | |
| 6.4.1 General | 10 |
| 6.4.2 Mechanical Systems | 14 |
| 6.4.3 Electrical Systems | 17 |
| 6.5 Resident House | |
| 6.5.1 Resident Bedroom | 22 |
| 6.5.2 Resident Washroom | 24 |
| 6.5.3 Resident Assisted Bathing Suite | 25 |
| 6.5.4 Resident Living Room | 26 |
| 6.5.5 Resident Dining Room | 27 |
| 6.5.6 Resident Kitchen | 28 |
| 6.5.7 Resident Laundry | 29 |
| 6.5.8 Staff Support Space | 29 |
| 6.5.9 Resident Care Support Space | 30 |
| 6.6 Resident Ancillary Space | |
| 6.6.1 Multi-Purpose Room | 31 |
| 6.6.2 Tuck Shop | 31 |
| 6.6.3 Beauty Parlour | 32 |
| 6.6.4 Smoking Room | 32 |
| 6.6.5 Clean Utility Rooms | 33 |
| 6.6.6 Soiled Utility Room | 33 |

Long Term Care Facility Space and Design Requirements

July 25, 2007

| | | |
|-------|---------------------------------|----|
| 6.6.7 | Entrance Foyer | 34 |
| 6.6.8 | Family Room | 34 |
| 6.7 | Rehabilitation | 35 |
| 6.8 | Support Spaces | |
| 6.8.1 | Central Kitchen / Food Storage | 35 |
| 6.8.2 | Central Laundry | 36 |
| 6.8.3 | Housekeeping Rooms | 37 |
| 6.8.4 | Plant / Maintenance | 38 |
| 6.8.5 | Service / Equipment Rooms | 39 |
| 6.8.6 | Materials Management | 39 |
| 6.8.7 | Administration | 40 |
| 6.8.8 | Staff Facilities | 41 |
| 7.0 | Residential Care Facility (RCF) | 42 |
| 8.0 | Community Space | |
| 8.1 | Activity Room | 44 |
| 8.2 | Assisted Bathing Suite | 45 |

Introduction

In May 2006, the Nova Scotia government approved the ***Continuing Care Strategy for Nova Scotia – Shaping the Future of Continuing Care***. In the Strategy, the Government has committed to built new long term care homes to support the vision of *living well in a place you can call home*. The *Long Term Care Program Requirements and Space and the Design Requirements* documents complement one another and were created to provide direction for the development of these new long term care facilities from the perspectives of care and service, as well as physical environment.

Fundamental to the Continuing Care Strategy are the concepts of choice, empowerment, community, flexibility and independence. These concepts are well described in recent international and national research on continuing care trends and best practices. In addition, much has been written on the importance of autonomy, privacy and the trend of moving away from the institutional model of care.

We are moving towards the creation of vibrant, nurturing environments for the elderly that support the elimination of loneliness, helplessness, and boredom. The emphasis is on small living areas with residential features such as private bedroom and bath, a living room with a central fireplace, an adjacent open kitchen and dining area, and short halls to the living and dining areas. The emphasis is on organizing care and activities around the resident and not the institutional schedule (Thomas, *The Eden Alternative*¹).

A key feature to the success of these and other innovative approaches to long term care is the reduction in the number of residents living in one 'home area' or 'neighbourhood'. Smaller numbers of individuals encourage relationship building between and among residents, families and staff. The more familiar staff are with the residents, the better they can understand the person and the individual's unique needs.

Anecdotal experience in nursing homes built in Nova Scotia in recent years demonstrates that smaller unit size and private bedrooms promote a more restful sleep for residents. Challenging behaviours and the associated issues have also been noted to dramatically decrease with this new approach to design. There have been reports of fewer outbreaks of infection, as well as the ability to quickly

1 <http://www.edenalt.com/welcome.htm> Accessed March 12, 2007

limit its spread by containing the outbreak to the smaller unit. Resident compatibility issues have been significantly reduced in these new homes and has freed up the time spent by staff on managing this challenge.

The requirements specified in the *Long Term Care Program Requirements* and the *Space and Design Requirements* documents are intended to support the Continuing Care Strategy in achieving its vision for new long term care facilities to create an environment where *residents can live well in a place they can call home*.

The Continuing Care Strategy is a 10-year plan to enhance and expand Nova Scotia's continuing care system. By building on community support, increasing local solutions and ensuring care options are available when and where they are needed, the strategy aims to create a system that supports Nova Scotians in their desire to live well in a place they can call home.

1.0 Vision of Continuing Care in Nova Scotia

Living well in a place you can call home.

2.0 Long Term Care Facility and Environment Principles

Resident and family focus

The physical environment must:

- Help residents maintain choice and self-determination even as their need for support increases.
- Encourage residents and families to be partners in care.
- Support a holistic approach to resident centered care – addressing physical, social, mental and spiritual well being.
- Enable flexible scheduling of activities of daily living.
- Provide opportunities for meaningful relationships, interactions and companionship with residents, family, staff and the community.
- Maximize resident's abilities through improved design
- Provide a clean, accessible, comfortable, homelike and secure environment for residents and family.

Staff focus

The physical environment must:

- Support the occupational and organizational health, well being and safety of staff.
- Support innovative and alternative models of care delivery for the provision of resident focused care.
- Provide a workplace for staff that is pleasant, safe and efficient.

3.0 Fundamentals

The Service Provider is being engaged to provide care services to the residents. This document sets out minimum Facility Requirements. It is not intended to be a complete inventory. It is the Service Provider's responsibility to ensure that the necessary space, equipment and furnishings are available to provide the contracted service.

- 3.1 Proposed facilities must meet or exceed municipal, provincial and federal legislation and regulations.
- 3.2 The facility must provide one wheelchair accessible washroom for staff and all staff offices will be wheelchair accessible.
- 3.3 All washrooms and hand wash facilities must include a paper towel dispenser and liquid soap dispenser.
- 3.4 The facility design must be carried out by designers (e.g. architect / engineering team) who are experienced in long term care facility design and fully conversant in current trends.
- 3.5 Food services, Laundry and Infection Control must be compliant with the requirements of the Food Protection and Enforcement Division of the Nova Scotia Department of Agriculture and the Nova Scotia Food Safety Regulations and Guidelines. Overall and detailed floor plans must be submitted to and approved by that Department in accordance with the Facility Development Approval Process.
- 3.6 The facility design must respond to current trends in the field of Human Factors Engineering, resident and staff safety and infection control.
- 3.7 The following non-inclusive list of applicable standards and guidelines (including any future amendments) must be met or exceeded:
 1. The Nova Scotia Building Code Act and National Building Code of Canada.
 2. The Nova Scotia Homes for Special Care Act and Regulations.
 3. Long Term Care Program Requirements
 4. The Nova Scotia Nursing Home Building Maintenance Standard, dated November 1, 2004.
 5. CAN/CSA B651-04 Accessible Design for the Built Environment.
 6. CAN/CSA Z317.13-03 Infection control during Construction or Renovation of Health Care Facilities.
 7. The Model National Energy Code for Buildings.
 8. All equipment including mattresses to have CSA approval and label.
 9. CAN/CSA Z317.11.02 Area Measurement for Health Care Facilities modified for the exterior wall to a point within the wall and 6" (150 mm)

from the inside face.

10. CAN/CSA Z317.2-01 Special Requirements for Heating, Ventilation, and Air Conditioning Systems in Health Care Facilities.
11. CAN/CSA Z317.1-99 (R2002) Special Requirements for Plumbing Installations in Health Care Facilities.
12. ASHRAE HVAC Application Handbook 2003, Chapter 7 Health Care Facilities
13. ASHRAE Standards 62-2004 Ventilation for Acceptable Indoor Air Quality
14. CSA B51-03 Boiler, Pressure Vessel and Pressure Piping Code
15. CAN/CSA B149.1-00, Natural Gas and Propane Installation Code
16. CAN/CSA B139-04, Installation Code for Oil Burning Equipment
17. Nova Scotia Department of Environment – Petroleum Storage Regulation.
18. CAN/CSA Z32-04 Electrical Safety and Essential Electrical Systems in Health Care Facilities.
19. Electrical Code of Canada 2006.
20. Nova Scotia Government Communications Cabling Guidelines.
21. CAN/CSA Z317.5-98 Illumination Systems in Health Care Facilities.
22. BICSI/TDMM – Telecommunications Distribution Methods Manual.
23. IESNA Standards including IES RP28 Lighting and the Visual Environment for Senior Living.
24. CAN/ULC – S524-01, Standard for Installation of Fire Alarm Systems.
25. J-STD-607A Commercial Building Grounding and Bonding Requirements for Telecommunications.
26. NFPA 13-1999 Standard for the Installation of Sprinkler Systems
27. NFPA 20-2003 Standard for the Installation of Stationary Fire Pumps for Fire Protection
28. NFPA 96-2001 Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations
29. CAN/CSA Z318.0-5 Commissioning of Health care Facilities Health Care Technology.

4.0 Definitions: Outcomes, Spatial Requirements, Equipment Requirements and Lessons Learned

Outcome

Outcome describes the purpose or objective that **will** be achieved by facility design and program.

Spatial Requirements

Spatial requirements describe the elements that **must** be incorporated into the design and program of each facility.

Equipment Requirements

Equipment requirements describe the equipment that **must** be incorporated into the design and program of each facility. All equipment and furnishings, except resident owned items, must be new unless otherwise approved by the Department.

Lessons Learned

Lessons learned are items that have been found to promote quality of facility design and quality care outcomes. These features have been included to provide helpful guidance where they might not otherwise have been considered.

5.0 Definitions: Nursing Homes and Residential Care Facilities as Defined Pursuant to the Homes for Special Care Act

Nursing Home HFSCA 2 (1) (j) “Means a building or place or part of a building in place in which accommodation is provided or is available to persons requiring or receiving skilled nursing care”

Nursing Care HFSCA 2 (1) (i) “means the use of methods, procedures and techniques employed in providing nursing care by persons with technical nursing training beyond the care that an untrained person can adequately administer”

Residential Care Facility HFSCA 2 (1) (m) “means a building or place, or part of a building or place, where supervisory or personal care is provided to four or more persons....”

Personal Care HFSCA 2 (1) (k) “means the provision of room, board and supervision of, and assistance with, activities of daily living of a person who is ambulatory or semi-ambulatory”

Supervisory Care HFSCA 2 (1) (o) “means the provision of room, board and guidance or supervision in the activities of daily living or observation or surveillance of the physical well being of a person who is ambulatory or semi-ambulatory”

6.0 Nursing Home

The following requirements apply to new nursing home beds. New RCF beds which are built in combination with a DOH licensed nursing home and new RCF beds which are added to an existing DOH licensed nursing home are to be built to allow future conversion to nursing home beds. Refer to Section 7.

6.1 Site Location

Outcome

The site will provide an opportunity for building design, building configuration and site development to support the principles of and the requirements for Long Term Care facilities within a neighbourhood appropriate to this use.

Requirements

1. Lands adjacent the facility must not be industrial occupancy.
2. The site must support a building configuration of one or two storeys with at-grade access from the Resident Houses for each storey

Lessons Learned

1. The site should be large enough and of such profile to support the entire facility as a one or two storey structure with at grade access to each level. This approach improves access to the outdoors and provides more possibilities for enjoying natural stimuli, provides a greater sense of security in terms of evacuation, and promotes less reliance on elevators in maneuvering to events in public areas of the facility.
2. The site should be accessible to public transportation, where available, for use by families, staff and residents. For this purpose accessible is defined as “within a 5 minute walk along a barrier free route and a distance not greater than 500 meters”.
3. The site should be centrally located in the community with reasonable access (within 5 kilometers) to medical services, shopping and recreation services.
4. The site should be as far as possible from a similar long term care facility in order to provide good geographic distribution within the community.

6.2 Site Development

Spatial Requirements

1. Outdoor spaces for use by residents must be provided and be landscaped complete with walkways and seating areas that are wheelchair accessible and available for organized outdoor activities.
2. There must be paved routes for all exits to outdoor spaces used by residents.
3. The site design must include unobstructed access for emergency vehicles.
4. The site design must provide adequate space for visitor and staff parking and shipping and receiving functions.
5. The landscaping of outdoor spaces must include residential features such as fencing, outdoor furniture and raised flower beds. Each outdoor space should have an area that provides shade for residents and is protected from wind and harsh weather elements.
6. The site design must provide a maximum gradient of 5% to parking areas and walkways.
7. The site design must provide to the greatest extent possible, a 2% gradient at building entrances and on pathways and recreation areas.
8. The site design must provide a closed loop patterned pathway system.
9. The site design must use consistent pavement colour and non glare surfaces.
10. The site design must provide handrails for all stairs and ramps.
11. The site design must provide lighting for pathways and outdoor spaces and ensure that glare from fixtures has no impact on resident rooms and other indoor spaces.
12. The landscaping design must include planting to create a quality outdoor environment.
13. Service areas including fuel tanks, garbage and receiving must be screened from adjacent neighbours and from resident rooms to minimize visual and acoustic impact.
14. Design considerations must include:
 - Preserving and enhancing existing planting wherever possible.
 - Providing deciduous trees where required to shade building and outdoor spaces.
 - Providing coniferous trees to create wind breaks.
 - Provide planting for sensory experience (e.g. sound, touch, smell).

- Not using poisonous plants.

Lessons Learned

1. Consider providing wheelchair accessible gardening beds for resident use.

6.3 Building Configuration

Outcome

The layout of the facility will enhance the residents' ability to easily access and enjoy living spaces, amenity spaces and the outdoors.

Spatial Requirements

1. The facilities must be developed to create small group living environments for residents. Each Resident House must not have less than 12 residents except where otherwise specified.
2. The facility must not exceed 940 building gross square feet (87.3 square meters) per resident for facilities with 52 or more beds and 950 bgsf (88.3 square meters) for facilities with less than 52 beds. (Excludes Section 8 – Community Activity Space)
3. Residents must have at grade access from each Resident House to outdoor gardens and walking paths. Provide access with power assisted wheelchair accessible entrance.
4. Public access to the facility must have a power assisted wheelchair accessible entrance.
5. The travel distance between resident bedroom entry doors and the entry to the dining room must be 50 feet (15.3 meters) for 50% of the residents and less than 75 feet (23.0 meters) for the remainder.
6. Residents, staff and families must not travel through one Resident House to access another Resident House.
7. With the exception of Administration service areas as defined in Section 6.8 must be partitioned from the resident areas.
8. The facility design must support leading practices in infection control management as described in the LTC Program Requirements.
9. Views to the outdoors must be provided in all common areas used by residents.
10. There must be no dead-end corridors in resident areas.
11. The architecture must reflect residential scale and detail, appearing as

homelike as possible.

Lessons Learned

1. Resident Houses with small groups of residents (e.g. sharing support spaces with other Resident Houses) have the following benefits:
 - Short travel distances between bedrooms, living room and dining room.
 - Flexibility to group residents with similar needs (e.g. dementia, young adults living with disabilities).
 - Ability to tailor each Resident House activities to the needs and preferences of the residents
 - Enables implementation of a staffing model whereby housekeeping, food service and resident care can be provided by the same staff enhancing continuity of care and contact with the residents and families.

2. Examples from other facilities indicates that the small groups of residents have a positive impact on resident care and family involvement:
 - Taigh Na Mara, Glace Bay, NS;
 - Sherbrooke Village, Saskatoon, SK;
 - Hebrew Home for the Aged, Riverdale, NY;
 - Livingston County Center for Nursing and Rehabilitation, Mt. Morris, NY;
 - Perham Memorial Hospital and Nursing Home, Perham, MN;
 - Riverview Manor, Wisconsin Rapids, WI;
 - The Cottages St. John’s, Lutheran Home, Billings, MT;
 - The Pines at Machias Healthcare and Rehabilitation Center, Cattaraugus County, NY.

6.4 Building Systems and Components

6.4.1 General

Outcome

The building, equipment and furnishings will be of robust construction using good quality materials, be residential in appearance and have easily maintained and durable finishes and systems.

Spatial Requirements

1. Wall areas below handrails and wall corners in corridors and common areas that are frequented by residents and portable equipment must have treatment or coverings that protect the wall surface (e.g. corner guards and bumper rails).
2. Equipment (e.g. carts, lifts etc.) must be kept in designated storage areas when not in use.
3. The facility must have a non-intrusive Resident/Staff Response System with stations located in resident bedrooms, resident washrooms, resident bathing areas and other resident activity rooms. An overhead paging system must be available and is to be used for emergencies only. For further details refer to the electrical section of these requirements.
4. Structured wiring system is to be provided for phone, cable television and high speed internet service in each resident bedroom and living room in the Resident House. For further details refer to the electrical section of these requirements.
5. Handrails must be securely mounted on both sides of corridor walls in resident areas, and located a minimum of 31 inches (860 mm) above the floor.
6. Resident rooms must have individual temperature control that can be managed from a central location. For further details refer to the mechanical section of these requirements.
7. The facility must have a building security system enabling controlled access and egress. For further details refer to electrical section of these requirements.
8. Each Resident House must have the ability to be secured to prevent resident elopement. Refer also to electrical section of these requirements.
9. All edges on counters, cabinets and corners in resident areas must be smooth / rounded.
10. The building must promote energy efficiency and incorporate sustainable design principles exceeding the Model National Energy Code of Canada by 25%.
11. To assist residents with visual impairments and cognitive difficulties visual and/or textural “cueing” must be included on signs to assist residents in identifying different rooms and finding their way in the facility. Examples are landmarks and curio “identity” boxes at entrances to resident rooms. Use upper and lower case lettering for

signage .

12. The facility must have a residential appearance with regard to wall, ceiling and floor finishes and fixtures.
13. Surfaces in clean and soiled utility spaces must be smooth, easy to clean and impermeable to moisture.
14. Exposed masonry and gypsum board surfaces must be painted.
15. Exposed concrete masonry shall not be used in resident houses.
16. Handrails are to provide a comfortable grip and are to be returned to the wall with soft corners at terminations. Handrail brackets must be located away from where the resident would grip a handrail so that the resident’s hands can move freely along the surface of the handrail. The bracket must be mounted at least 2.75 inches (70 mm) below the top of the handrails. A tactile signal must be provided at the end of each rail for visually and perceptually impaired residents to let them know when each rail ends.
17. The following table describes acceptable floor finishes:

| NAME | FLOOR | BASE |
|--|--|---|
| Resident Bedroom /Resident Washroom/ Resident Living Room / Resident Dining Room / Multi-Purpose Room / Resident Activity Room / Client Activity Room / Tuck Shop / Beauty Parlour / Smoking Room / Resident Care Support Space / Overnight Family Room | resilient sheet or resilient tile carpet is also an alternative for resident bedrooms and resident living rooms | resilient cove |
| Resident Bathroom / Resident Assisted Bathing Suite / Resident Assisted Bathing Suite / Soiled Utility / Staff Support Space / Resident Laundry / Central Kitchen / Central Laundry / Housekeeping | slip resistant resilient sheet | resilient welded or flash cove |
| Resident Kitchen | slip resistant resilient sheet or slip resistant resilient tile | resilient welded or flash cove |
| Clean Utility | resilient sheet | resilient welded or flash cove |
| Entrance Lobby | resilient sheet or resilient tile, ceramic at weather vestibule | resilient cove, ceramic cove at weather vestibule |

| | | |
|--|--|--|
| Rehabilitation | slip resistant resilient sheet | resilient cove |
| Services, Equipment & Material Handling | slip resistant floor paint on concrete or concrete hardener | resilient cove as required by wall construction |
| Administration / Corridors | resilient sheet, resilient tile or carpet | resilient cove or carpet base |
| Staff Facilities | resilient sheet or resilient tile (non slip sheet or ceramic at showers) | resilient cove (welded or flash cove at showers) |

NOTE:

1. The acceptable floor finishes above are to be read in conjunction with the space requirements for each space or area.
2. The noted finishes are intended to set a minimum standard. Other materials and finishes may be acceptable provided that they meet or exceed the appearance and performance standards of the products noted. The floor finishes must be low maintenance grade.
3. Carpet (roll goods or tile) in resident area corridors, resident bedrooms and resident living rooms noted above is to be specifically designed for long term care use.
4. Floor finish colors must be carefully considered to prevent confusion by residents with perceptual and visual impairments.
5. Provide finishes with the following minimum Light Reflective Values: Ceilings 80-90 LRV, Walls 60-80 LRV, Floors 30-50 LRV.
6. Use floor colours that contrast with the wall colours.

Lessons Learned

1. Consider wheelchair and walker maneuverability, as well as resident gait when selecting floor finishes, to ensure that residents can move about the facility safely (e.g. carpets can present difficulties for residents with gait/walking problems, and can create undue resistance for resident confined to wheelchairs).
2. Textural cueing should include painting service areas a different colour from areas used by residents so that residents can easily distinguish between resident areas and non-resident areas.
3. Residential finishes and fixtures could include indirect lighting and wall sconces. Interior finishes should be chosen for their ability to be easily

cleaned and maintained and that are capable of enduring heavy use with minimal deterioration.

6.4.2 Mechanical Systems

Outcome

The building mechanical systems will be maintainable, accessible and of robust construction using good quality materials and meet the requirements of the building systems to deliver resident accommodation, comfort and care.

Spatial Requirements

1. Testing

Field testing of the mechanical systems must be carried out to ensure that the equipment is operational and within industry and manufacturer's tolerances and installed in accordance with design specifications.

2. Insulation

All domestic piping, hot water heating piping and ductwork must be insulated as per The Model National Energy Code of Canada for Buildings.

3. Plumbing

1. If the building will be serviced from an on-site well system, provide reservoir sized for minimum 24 hour backup water supply.
2. Domestic hot water must be generated and maintained at 70deg C (158deg.F) as per CAN/CSA-Z317.1-99 (2002) Special Requirements for Plumbing Installations in Health Care Facilities.
3. Domestic hot water piping distribution at 60° C (140° F) as per CAN/CSA-Z317.1-99 (2002) Special Requirements for Plumbing Installations in Health Care Facilities
4. For resident, public and general use outlets, temper domestic hot water at mixing valves to 43° C (109° F) as per CAN/CSA-Z317.1-99 (2002) Special Requirements for Plumbing Installations in Health Care Facilities.

5. Generated and maintained the domestic hot water for the laundry at 77° C (170° F) as per CAN/CSA-Z317.1-99 (2002) Special Requirements for Plumbing Installations in Health Care Facilities.
6. Design the domestic hot water system to prevent generation of Legionella Pneumophila bacteria.
7. Provide grease interceptor for drains from the pot wash sink prior to connection to the building sanitary system.
8. Provide Institutional grade CSA approved plumbing fixtures and brass. Except where combined with a DOH licensed nursing home commercial residential grade is acceptable for Residential Care Facilities (RCF).
9. Provide electronic trap primers for floor drains.

4. Heating, Ventilation and Air Conditioning

Use the following design criteria:

1. Inside temperature and humidity design conditions as per Chapter 7, 2007 ASHRAE HVAC Application Handbook and CAN/CSA-Z317.2-01 Special Requirements for Heating, Ventilation, and Air Conditioning (HVAC) Systems in Health Care Facilities. 1. Winter Room Design: Generally, 22° C DB with greater than 30% RH.
2. Provide air filtration in accordance with ASHRAE HVAC Application Handbook 2007, Table 5, Filter Efficiencies for Central Ventilation and Air Conditioning Systems in Nursing Facilities.
3. Provide ventilation in accordance with the more stringent of ASHRAE HVAC Application Handbook 2007, Table 6, Pressure Relationship and Ventilation of Certain Areas of Nursing Facilities, ASHRAE Standards 62-2004 Ventilation for Acceptable Indoor Air Quality and CAN/CSA-Z317.2-01, Special Requirements for Heating, Ventilation and Air-Conditioning (HVAC) Systems in Health Care Facilities.
4. Except where combined with a DOH licensed nursing home, ventilation for Residential Care Facilities (RCF) to be in accordance with the more stringent of ASHRAE Standards 62.1-2004 and the

National Building Code of Canada. Where combined with a DOH licensed nursing home ventilation standards described in clause 3 above are to apply.

5. General HVAC

1. Locate air distribution systems in accessible (without the use of ladders) fan rooms sized for adequate service. The air distribution systems shall supply tempered and humidified air.
2. If air flow requirements for the Kitchen and/or Laundry exceeds 800 liters/second, provide separate systems.
3. Provide access doors for easy cleaning and maintenance for intake plenums, before and after coils, and other serviceable devices.
4. Intake plenums to have sloped floors complete with drains.
5. Heat recovery of general exhaust is recommended.
6. Design air distribution systems to prevent generation of Legionella Pneumophila bacteria – drain pans throughout and where acoustic liners are required walls are to be double wall construction with solid liners to facilitate cleaning.

6. Space Heating

1. Provide standby heating capacity as per CAN/CSA-Z317.2-01 Special Requirements for Heating, Ventilation, and Air Conditioning (HVAC) Systems in Health Care Facilities.
2. Fuel storage systems must have capacity for one week supply at winter design conditions.
3. The heating coils in the air distribution systems to be glycol.

7. Humidification

Humidification must be provided in all air distribution systems to maintain a minimum of 30% RH in winter.

8. Building Automation System (BAS) Controls

Room control as per CAN/CSA-Z317.2-01 Special Requirements for Heating, Ventilation and Air Conditioning (HVAC) Systems in Health Care Facilities.

Lessons Learned

Not Used

6.4.3 Electrical Systems**Outcome**

The building electrical systems will be maintainable, accessible and of robust construction using good quality materials and meet the requirements of the building systems to deliver resident accommodation comfort and care programs.

Spatial Requirements**1. Testing**

1. Field testing of the electrical systems must be carried out to ensure that the equipment is operational, within industry and manufacturer's tolerances and is installed in accordance with design specifications.
2. A fault level analysis, equipment interrupting evaluation, and a protective device coordination study for the electrical distribution system must be provided.

2. Normal Electrical Power Distribution System

1. The electrical power distribution system must be designed to meet anticipated needs with sufficient spare capacity to allow reasonable load growth over the life of the building.
2. The main electrical service entrance must be grounded to the requirements of the Canadian Electrical Code. All panel feeders will contain a bonding conductor sized to the requirements of the Canadian Electrical Code, Table 16.
3. Electrical junction and pull boxes must be color coded to indicate voltage and system type. All electrical equipment enclosures, circuits and panels must be identified with lamicaid plates. Conductors must be color coded to indicate phase, neutral, bond and ground.
4. Receptacles and switches must be heavy duty specification grade. All cover plates must be nylon in resident areas.

3. Emergency Electrical Power Distribution System

1. An emergency electrical power distribution system must be provided and be designed to supply on-site generated emergency power to carry loads considered essential for the life safety and care of the residents, the building lighting system and power distribution system in all resident areas, the entire building heating system, food preparation and other selected loads during a loss of normal utility power. The system must be in conformance with CSA-Z32-99 Electrical Safety and Essential Electrical Systems in Health Care Facilities. Generally, the system will consist of the following:
 1. Diesel engine driven, radiator cooled generator, located within a dedicated generator room within or adjacent to the facility.
 2. A dedicated fuel oil storage tank with capacity to operate the genset at full load for at least 24 hours.
 3. An automatic transfer switch complete with the following:
 1. Solenoid operating mechanism.
 2. Double throw, interlocked transfer mechanism.
 3. Overlapping neutral conductor.
 4. Programmable microprocessor controller.
 5. Bypass and isolation feature.
 6. In-phase monitor.
 7. Normal source surge protection.
 8. Auxiliary contact sets.
 9. CSA Type 1 enclosure, with drip shield.
 3. An automatic temperature control system must be installed to ensure generator room temperatures are maintained within acceptable parameters. A ventilation system must be installed to provide air for combustion and for cooling.
 4. Receptacles fed from the emergency power distribution system must be coloured "red".
 5. Residential Care Facilities (RCF's) must have emergency power to carry the noted loads but does not need to meet the requirements of CSA-Z32-99.

4. Structured Wiring System (Voice and Data)

1. Each resident bedroom and each living room in the Resident House and Resident Care Support space must be wired for voice and data.
2. The system must include Category 6 UTP cabling, communication outlets and terminals.
3. The structured wiring system must be capable of handling resident information systems, etc. in support of a future province wide resident records system.

5. Fire Alarm System

1. The system must include a two stage, addressable, analog fire alarm system to meet the requirements of the NBC and local fire protection requirements.
2. System wiring must consist of armored cable and conduit installed to the requirements to the Canadian Electrical Code, Section 32.
3. Fire alarm system will include manual pull stations, audible-signaling devices, smoke and heat detectors. Strobe signaling units must be provided in mechanical rooms and other areas with high ambient noise levels. Do not provide strobe signaling in resident areas.
4. Each resident bedroom must be equipped with a smoke detector, separately annunciated at a central location.

6. Resident/Staff Response System

1. The building must be equipped with a complete resident/staff response system.
2. Resident stations must be provided at each bed, emergency station in each resident washroom, resident bathing areas and other resident activity areas.
3. Corridor dome lights must be provided over resident room doors to annunciate normal, bed alarm, or emergency call.
4. An overhead paging system must be available and is to be used for emergencies only.

7. Lighting System

1. The building must be equipped with a lighting system that meets the illumination requirements of the Illuminating Engineering Society of North America (IESNA). Lighting system is to provide high illumination levels which are well distributed and uniform.
2. The lighting system must be operated at 120 volts throughout, with local switching at each room.
3. Each resident bedroom must be equipped with appropriately located and aesthetically appealing light fixtures which have a non-institutional appearance. Provide a three way switching for general room lighting.
4. Corridor lighting must be switched to provide lower levels of illumination for after hours periods.
5. Light fixtures must be mainly fluorescent, containing electronic ballasts. Lamps must have a colour temperature of 3000K and a CRI of 85.
6. Exterior lighting must meet the requirements of the IESNA recommended standards and will include the illumination of vehicular drives, sidewalks, and landscaping features to orient users and to enhance the safety and security of the facility perimeter.
7. Emergency lighting must be provided throughout the building as required by the National Building Code and powered by the emergency power distribution system. Emergency lighting must consist of a central inverter system and branch circuit wiring to selected fixtures to provide ride through until the generator set is transferred to power the emergency distribution system. Battery packs complete with heads must be provided for emergency lighting in all electrical rooms.
- .8 Do not use motion sensor switching in resident areas.

8. Exit Lighting System

1. The exit lighting system must meet the requirements of the National Building Code and CSA C860 certified.
2. Exit fixtures must be lit using LEDs to conserve energy.

9. Security System

1. Exterior doors must be alarmed and separately annunciated at a central location. This must include exterior doors accessible to residents. Local control must be provided through the use of keypads and magnetic locks.
2. Each facility and Resident House must have the ability to be secured to prevent resident elopement.
3. A connection to the fire alarm system must provide an over ride where required by code

Lessons Learned

1. Residential light fixtures could include indirect lighting and wall sconces.

6.5 Resident House

Each Resident House will be a self contained unit that will accommodate small groups of residents. Each Resident House must include:

- Single resident bedrooms with private washrooms.
- Resident bath and shower rooms;
- Living room, kitchen and dining room; and
- Staff work space and support services areas.
- Resident Houses could share service areas such as soiled and clean utility rooms, conference rooms, housekeeping closets, clean supplies, etc.

6.5.1 Resident Bedroom

Outcome

A private space where resident personal activities of daily living will occur (e.g. reading, watching TV, sleeping, grooming and dressing).

Spatial Requirements

1. Each resident bedroom must be a minimum of 190 Net Square Feet (17.7 Net Square Meters) including space for a resident clothes closet and dresser, resident bed, side tables and resident chair. There must be a minimum of 5 feet (1500 mm) clear on either side of the bed and 4 feet (1200 mm) clear at the end of the bed.
2. The bedroom must meet each resident's need for comfort and safety, promote resident independence and dignity, and provide for resident privacy.
3. Each bedroom must be designed to maximize a sense of familiarity for residents and supports staff in the safe delivery of quality resident care.
4. One oversized bedroom resident must be provided on a ratio of 1/36 residents and must be a minimum of 250 NSF (23.3 NSM).
5. Each bedroom must include a ceiling mounted track for a resident lift to facilitate resident transfers from their bed to a chair or wheelchair.
6. Storage space with doors for resident's clothes including space for seasonal resident clothing storage must be provided and must be a minimum of 5 feet (1500 mm) wide, full height and 1.5 feet (470 mm) deep using closet organizers. A portion of this must be able to be secured.
7. Acoustically, clause 7.2.10 of the NBC will apply regarding minimum

sound transmission class rating (STC) of 50 between resident bedrooms.

8. Each bedroom must have a large exterior window to ensure that sufficient natural lighting is available for the bedroom. A portion of the window must be operable (e.g. with appropriate opening restrictions to limit openings to be no more than 8 inches) and have a maximum sill height of 25 inches (630 mm). Windows that open to the outdoors must have screens.
9. The bedroom design must include space for items such as shelving and bookcases to allow residents to display and store personal items. Residents must be given maximum opportunity to personalize their bedrooms.
10. In each Resident House, two adjacent resident bedrooms must have an adjoining door, which can be secured when the two rooms are not being shared.
11. The bedroom doorway must provide a minimum clear width of 44" (1050 mm).
12. A night-light outlet must be provided in the bedroom near the doorway to the washroom in a location where the light is visible from the bed.

Equipment Requirements

1. Provide all equipment and furnishings as required to support space and program functions.
2. The resident bed must be a high/low (to within 12" of floor surface) electric bed complete with split rails.
3. Ceiling lifts must be provided with a minimum ratio of 1 per 6 residents.
4. Provide one mechanical lift per facility.

Lessons Learned

1. A residential style window in the wall between the resident bedroom and the corridor promotes resident choice to see into common areas when in bed or in a chair.
2. Built in shelving maximizes floor space.
3. The facility should permit flexibility to enable residents and family to personalize their private spaces with family pictures, paintings etc.
4. "Identity" cases at the entrance to each room can assist in way finding and personalization of the space.
5. Bedroom configuration and planning should permit personalization through multiple bed locations.

6.5.2 Resident Washroom

Outcome

A private space where resident personal washroom activities will occur in an environment that supports their privacy, safety, dignity and independence.

Spatial Requirements

1. The resident washroom must be a minimum of 50 NSF (4.5 NSM).
2. Washrooms must be private, not shared between two bedrooms.
3. The washroom door opening must be visible to the resident when the resident is in bed.
4. Each resident washroom must have an entrance width of at least 3 feet clear opening (914 mm).
5. Securely mounted, wall hinged, fold-up bars are to be installed on either side of the toilet to accommodate lifts and transfers.
6. There must be no direct view of the toilet from the corridor when the washroom and bedroom doors are open.
7. Each toilet must be barrier free height to meet the needs of the residents without using raised toilet seats.
8. Taps must be easy to use by residents with visual impairments and by residents with physical disabilities that affect hand movement.
9. A night-light outlet must be provided in the washroom above the toilet.
10. Each washroom must have a mirror which is located over the sink designed to accommodate residents of differing heights.
11. Each washroom must provide storage space for resident's personal toiletry items and secure storage for staff supplies.

Equipment Requirements

1. Provide all equipment and furnishings as required to support space and program functions.

Lessons Learned

1. Improved accessibility could include a) lever handled taps that clearly distinguish between hot and cold water, b) single lever taps, and c) illuminated light-switch for the washroom located in the bedroom on the wall by the washroom entrance.
2. The washroom door could be a sliding door (e.g. surface mounted) that can be easily moved by residents. Alternatively, the door could be a swinging door as long as it does not interfere with access to the resident bed.

3. Consider using wall hung toilets to provide easy access for floor cleaning under and around the fixture. Wall hung toilets may be mounted at the higher than standard height to meet resident need and eliminate the requirement for raised toilet seats.

6.5.3 Resident Assisted Bathing Suite

Outcome

A space where residents will be bathed in a safe, dignified, private and comfortable environment. This suite will include a tubroom, shower room and a washroom shared between the two.

Spatial Requirements

1. A separate room with a therapeutic bathtub must be provided in each Resident House.
2. The bathtub must be positioned with 4 feet (1.2 m) access on three sides of the bathtub.
3. A separate but adjacent room with a wheelchair accessible shower must be provided in each Resident House. The showering area of the room must have sufficient space to accommodate a shower chair so that a resident can be showered in a seated position. There must be a securely fastened grab bar for use by the resident on at least one wall in the shower area.
4. A separate wheelchair accessible washroom with toilet and a sink must be provided in each Resident House that is accessible only from the tub room and shower room. The toilet must be positioned so that independent and/or assisted transfer from both sides of the toilet can occur. There must be securely fastened drop down grab bars on either side of the toilet.
5. Acoustically, clause 7.2.10 of the NBC will apply regarding minimum sound transmission class rating (STC) of 45 for the assisted bathing suite.
6. There must be visual privacy when the resident is in the bathtub or the shower from the corridor when the door is open.
7. Resident Bath and Shower Rooms must have sufficient secure storage space for cleaning supplies, soaps and shampoo.
8. Resident Bath and Shower Rooms must have individual quick response room temperature control capable of maintaining 30°C (85°F).
9. Provide a hand sink in each of the bath and shower rooms.
10. Provide a shampoo sink in each tub room.

Equipment Requirements

1. Provide all equipment and furnishings as required to support space and program functions.
2. A therapeutic bathtub with hydraulic / electric / mechanical lift must be provided. Do not use water generated whirlpool type bathtub.

Lessons Learned

1. In bathing suites, there are few opportunities to improve the acoustics or apply noise-reducing materials. Textural variety may reduce some problems with background noise transmission or the commonly experienced “echo” problem. Tub selection criteria could include low noise levels. Other opportunities to reduce noise include window coverings, shower curtains, cubicle curtains and flooring.
2. Consider using wall hung toilets to provide easy access for floor cleaning under and around the fixture. Wall hung toilets may be mounted at the higher than standard height to meet resident need and eliminate the requirement for raised toilet seats.
3. The décor, including paint colors, should be soothing and relaxing to contribute to a pleasant bathing experience.
4. Use care in location of air supply diffusers to avoid uncomfortable drafts for the residents.
5. Ensure that there are adequate lighting levels using non-institutional (in appearance) fixtures.

6.5.4 Resident Living Room**Outcome**

A space where residents will interact with other residents, family members, visitors and staff in a comfortable, homelike and relaxed atmosphere that enhances resident quality of life through activities such as reading, conversing, celebrating, family visiting and watching television.

Spatial Requirements

1. Each Resident House must have a living room that is not less than 36 NSF (3.34 NSM) per resident.
2. Each living room must have storage / shelving.
3. Space for storage of wheelchairs and walkers (during resident use of the Living Room) must be located nearby.
4. Each living room must have view to the exterior.

5. Effort must be made to minimize noise in these areas through the provision of finishes that reduce reflected noise and increase sound absorption.
6. An electric fireplace must be provided.

Equipment Requirements

1. Provide all equipment and furnishings as required to support space and program functions.

Lessons Learned

1. Consider selecting wall decorations, window treatments (e.g. blinds and curtains) and room finishes (e.g. wallpaper, trim, wainscoting) that create a “homelike” environment.
2. Consider provision of at least one table in each resident living room to encourage activity.

6.5.5 Resident Dining Room**Outcome**

A space where residents will enjoy a positive dining experience in a comfortable, homelike and relaxed atmosphere and can be used for small activities.

Spatial Requirements

1. Each Resident House must have a dining area with a minimum of 36 NSF (3.34 NSM) per resident.
2. The dining area must have a hand wash sink in or immediately adjacent to the dining area for use by staff and residents.
3. The resident dining room must adjoin the resident kitchen.
4. A housekeeping closet must be provided near the dining area.
5. Each dining room must have a view to the exterior.
6. Space for storage of wheelchairs and walkers (during resident use of the Dining Room) must be located nearby.
7. Effort must be made to minimize noise in these areas through the provision of finishes that reduce reflected noise and increase sound absorption.

Equipment Requirements

1. Dining area chairs with armrests must be provided.
2. Provide all equipment and furnishings as required to support space and program functions.

Lessons Learned

1. Consider selecting wall decorations, window treatments (e.g. blinds and curtains) and room finishes (e.g. wallpaper, trim, wainscoting) in the dining room that create a “home-like” environment.
2. Small square dining tables provide flexibility in configuration and arrangement and encourage socialization and interaction between residents at meal times.
3. Consider providing a portion of the tables with adjustable height feature.
4. Non-pedestal type tables provide greater stability.
5. Non-glare table top finishes assist with vision challenges of residents.

6.5.6 Resident Kitchen

Outcome

A space in each Resident House where food will be partially or fully prepared by staff for the residents. The resident kitchen will enable residents and family to participate as appropriate.

Spatial Requirements

1. Each kitchen must have storage cabinets above and below (e.g. including space for pans/pots, dishes, glasses and utensils etc.) and counter space with double sink.
2. A deactivation switch must be provided for the range/oven and be inaccessible to the residents.
3. A surface in each resident kitchen must be accessible for use by residents in wheelchairs.
4. The kitchen must be adjoining to the dining room.

Equipment Requirements

1. Provide all equipment and furnishings as required to support space and program functions.
2. Each kitchen must have a dishwasher, range/oven, refrigerator with freezer space and ice maker/dispenser.

Lessons Learned

1. There has been demonstrated success with cooking being completed in each Resident House kitchen. One example would be Sherbrooke Village in Saskatoon. Website: www.sherbrookecommunitycentre.ca. This approach enables staff to set flexible times for eating that considers resident preferences.

2. Food could be prepared in a central kitchen or by contracted services with the balance of food prepared in each resident kitchen.
3. Preparing food in each resident kitchen creates aromas and an atmosphere similar to the residents' own homes increasing their appetites.

6.5.7 Resident Laundry

Outcome

A space for washing resident's personal clothing using best infection control practices.

Spatial Requirements

1. Hand wash facilities must be conveniently located in the laundry area for staff use.
2. All laundry room surfaces must be easily cleaned and impermeable to moisture.
3. There must be a minimum of one resident laundry area for personal clothing for every two Resident Houses.

Equipment Requirements

1. Provide all equipment and furnishings as required to support space and program functions.
2. Each resident laundry must have residential size, commercial quality washer and dryer. Washer must be capable of meeting the temperature requirements outlined in the mechanical section.

Lessons Learned

1. If residents will use the equipment do not use top loading machines.
2. Consider providing space to iron resident's clothing.

6.5.8 Staff Support Space

Outcome

Staff support space provided in each Resident House.

Spatial Requirements

1. One wheelchair accessible washroom must be provided for staff in each Resident House.
2. One staff meeting room must be provided for staff for each two Resident Houses.

Equipment Requirements

1. Provide all equipment and furnishings as required to support space and program functions.

Lessons Learned

Not Used.

6.5.9 Resident Care Support Space

Outcome

Spaces where care staff manage resident records, meet with staff/families, prepare and store medications and treatments.

Spatial Requirements

1. Secure space must be designated for medication preparation and treatment storage. Each medication space can serve a maximum of two Resident Houses.
2. Each Resident House must have secure storage and management of the resident records.
3. Meeting space must be provided for staff and family conferences.
4. The resident care support spaces must not intrude on the residential nature of the Resident House.

Equipment Requirements

1. Provide all equipment and furnishings as required to support space and program functions.

Lessons Learned

1. The records and medications could be kept in a locked cabinet in the Resident House.
2. Documentation of resident records could occur at a small work area in the Resident House.
2. Mobile chart racks could be considered.

6.6 Resident Ancillary Space

6.6.1 Multi-Purpose Room

Outcome

A space where group recreation activities will take place in the facility to support meaningful residential activities and social interactions including leisure pursuits, sensory stimuli, and music related programs.

Spatial Requirements

1. Assembly space must accommodate 100% of the facility residents at a minimum of 20 NSF (1.8 NSM) per resident.
2. An area of 150 NSF attached or within the multipurpose room must be provided for spiritual reflection. This space must have the ability to be separated from the larger room when used for small gatherings.

Equipment Requirements

1. Provide all equipment and furnishings as required to support space and program functions.

Lessons Learned

1. Providing adequate storage for chairs and table reduces the staff effort needed to rearrange heavy furniture or stack unused chairs.
2. Consider designing and decorating spiritual practice space in a flexible and non-denominational manner.
3. The multi-purpose space can also be utilized by the community which may promote a stronger relationship.

6.6.2 Tuck Shop

Outcome

A space where items are purchased.

Spatial Requirements

A Tuck Shop may be provided.

Equipment Requirements

1. Provide all equipment and furnishings as required to support space and program functions.

Lessons Learned

1. Consider providing adequate space in the tuck shop for display of the items, a cash register area, mobile cart and extra storage space.
2. Vending machines in a dedicated area could be considered as an option.

6.6.3 Beauty Parlour

Outcome

A space where hair dressing services are provided.

Spatial Requirements

1. A beauty parlour for hair care must be provided for residents with a minimum of one hair dressing station.
2. There must be sufficient space including work and storage counters, secure storage space for chemicals and a hair drying area.
3. There must be a shampoo sink.

Equipment Requirements

1. Provide all equipment and furnishings as required to support space and program functions.
2. One hairdressing and one shampoo chair must be provided.

Lessons Learned

1. Consider including a chair equipped with a hooded hair dryer.

6.6.4 Smoking Room**Outcome**

A space where residents can smoke.

Spatial Requirements

1. A smoking room must be provided that meets applicable regulations.
2. There must be a window to the corridor so staff can observe residents.

Equipment Requirements

1. Provide all equipment and furnishings as required to support space and program functions.
2. All furnishings must be non-combustible.

Lessons Learned

Not Used.

6.6.5 Clean Utility Rooms**Outcome**

Spaces where clean supplies (e.g. incontinent products, nursing supplies and linens) will be stored in a secure manner.

Spatial Requirements

1. Clean utility rooms must be provided to support the requirements for storage of clean supplies.
2. Each clean utility room must serve no more than two Resident Houses.
3. Clean utility spaces must have a secure space for the storage of clean supplies, linens and equipment, as well as counter space.

Equipment Requirements

1. Provide all equipment and furnishings as required to support space and program functions.

Lessons Learned

1. Personal clothing racks and linen exchange carts could be housed in this space.

6.6.6 Soiled Utility Room

Outcome

Spaces where soiled equipment and materials are processed in keeping with best infection control practices.

Spatial Requirements

1. Soiled utility room must be provided to support the requirements for disposal of waste items and storage of cleaning equipment and supplies.
2. Soiled utility room must have a hopper sink and a hand basin.
3. Soiled utility room must have a bedpan sanitizer serving a minimum of two Resident Houses.
4. Each soiled utility room must not serve more than two Resident Houses. Provide direct access from each Resident House.
5. Space must be provided for the temporary storage of soiled linen carts.

Equipment Requirements

1. Provide all equipment and furnishings as required to support space and program functions.
2. Soiled linen carts must be covered.

Lessons Learned

1. Not Used.

6.6.7 Entrance Foyer

Outcome

Main access space that provides a welcoming entry to the facility.

Spatial Requirements

1. A covered vehicle drop-off/pick-up area for residents must be located adjacent to the main entrance. Ensure adequate clearance for ambulances and service vehicles. The outside entrance doors must be designed to prevent drafts.
2. A foyer must be provided.

Equipment Requirements

1. Provide all equipment and furnishings as required to support space and program functions.
2. Provide living room style upholstered furniture for the entrance foyer.

Lessons Learned

1. Two storey or very high ceilings in the foyer are not as suitable as one storey entry spaces that create a more residential quality and scale.
2. The entrance foyer could be adjacent to the multi-purpose space.
3. The entrance foyer may be used by residents to gather and observe people coming and going from the facility.

6.6.8 Family Room

Outcome

Space where family will be able to spend the night and could also be used as a family quiet room.

Spatial Requirements

1. A minimum of one family room must be provided per facility.
2. The family room must have sleeping accommodations.
3. A three piece bathroom must be provided adjoining this room.
4. A small kitchenette must be provided.

Equipment Requirements

1. Each kitchenette must have a sink, microwave and ½ height

refrigerator.

Lessons Learned

1. Folding sofa bed could be considered.

6.7 Rehabilitation

Outcome

Space where residents will receive rehabilitation services (e.g. physical and occupational therapy) in a safe, dignified and comfortable environment.

Spatial Requirements

1. A minimum of 350 NSF (32.5 NSM) must be provided for physical and occupational therapy service.
2. An adjoining wheelchair accessible washroom must be provided. Ensure adequate space on each side of the toilet to accommodate lifting and transfers.
3. A ceiling mounted track and lift must be provided in the therapy room.
4. An adjoining storage room of minimum 50 NSF (4.65 NSM) must be provided.

Equipment Requirements

1. Provide all equipment and furnishings as required to support space and program functions.
2. The following equipment must be provided: treatment table, plinth, stair unit and walking bars.

Lessons Learned

Not Used.

6.8 Support Spaces

6.8.1 Central Kitchen / Food Storage

Outcome

Space, if provided, where bulk food may be prepared and storage of food supplies is managed.

Spatial Requirements

1. Storage of dry goods, supplies, refrigerated and frozen food, storage of wet and dry garbage and recycling must be done in compliance with Provincial standards.

2. If a central production kitchen is provided, the size of the kitchen must meet the Home for Special Care Act requirement, section 34.2, providing a minimum of 10 NSF (0.93 NSM) per resident.
3. If a central production kitchen is not used then adequate storage space must be provided for bulk food supplies serving the Resident House kitchens.

Equipment Requirements

1. Provide all equipment and furnishings as required to support space and program functions.

Lessons Learned

1. There has been demonstrated success with cooking being done in each Resident House kitchen. One example would be Sherbrooke Village.
2. Alternatively - Food could be prepared in a central kitchen or by contracted services.
3. A refrigerated refuse storage area could be considered to facilitate garbage processing.

6.8.2 Central Laundry

Outcome

Space, if provided, where resident linen (e.g. bed linens, towels, etc.) will be laundered and some personal clothing may be laundered.

Spatial Requirements

1. The central laundry must have an adequate allocation of space to accommodate the provided equipment and supplies.
2. The central laundry clearly delineate the clean and soiled areas.
3. If an off-site laundry service is used, there must be separate space in the facility for soiled laundry storage, and for receiving / distributing clean laundry.
4. The central laundry area must have hand wash facilities conveniently located for staff use.
5. There must be floor drainage in the washing central laundry space. If a drainage trough is provided for the washer this must have a cover.
6. All surfaces must be easily cleaned and impermeable to moisture.
7. Adequate access to the laundry equipment must be provided to ensure ease of cleaning and repair work.
8. Washing chemicals must be safety stored in the central laundry room.

9. The central laundry staff must have access to a separate area for the cleaning and sanitizing of laundry equipment such as baskets, carts and bags.

Equipment Requirements

1. Provide all equipment and furnishings as required to support space and program functions.

Lessons Learned

Consider providing space for a seamstress, labeling and ironing.

6.8.3 Housekeeping Rooms

Outcome

Space where housekeeping equipment and supplies are stored to ensure a clean and safe environment for residents, staff, family, and visitors utilizing best infection control practices.

Spatial Requirements

1. In addition to the housekeeping closets in each Resident House, there must be 1 housekeeping room for every two Resident Houses and 1 housekeeping room for every additional 15,000 NSF (beyond the Resident Houses).
2. Each housekeeping room must have sufficient space for the secure storage of chemicals and other cleaning supplies, chemical dispensing units, storing carts and other housekeeping equipment, such as mops and pails.
3. Each housekeeping room must be equipped with a hot and cold running water supply, a curbed service sink, a hand wash sink and floor drain. Provide sufficient space for the collection, sorting and pick-up of garbage. The area around the floor sink is to have full waterproof wall protection.
4. All surfaces (e.g. floors, walls, ceilings and shelves) in each housekeeping closet must be smooth, easily cleanable and impermeable to moisture.
5. There must be space to support a recycling program.

Equipment Requirements

1. Provide equipment and furnishings as required to support the housekeeping service program.

Lessons Learned

1. Housekeeping rooms are best located close to areas of highest use (e.g. close to the resident assisted bathing suites and public washrooms).
2. Consider providing a space with floor drain for the cleaning and sanitizing of equipment such as garbage containers and carts.

6.8.4 Plant / Maintenance

Outcome

Space provided for staff to support ongoing maintenance activities including equipment and building components.

Spatial Requirements

1. There must be a dedicated maintenance space provided to support the ongoing maintenance activities including: repairs on equipment, furnishings and other building contents; storage space for maintenance equipment, facility floor plans and operating manuals, portable machinery and tools.
2. Landscaping equipment such as snow blowers and lawn mowers must be securely stored in a separate building.
3. Fixed dust generating woodworking equipment must be connected to a dust control system.
4. There must be physical separation and good acoustical control between the plant / maintenance areas of the facility and the resident areas.

Equipment Requirements

1. Provide all equipment as required to support the plant maintenance service program.

Lessons Learned

Not Used.

6.8.5 Service / Equipment Rooms

Outcome

Space provided for mechanical and electrical equipment to provide the

residents, family and staff with heating, cooling, water and electrical service in order to have a comfortable and safe living environment

Spatial Requirements

1. Major mechanical and electrical equipment requiring service must be located in separate secured all-weather space accessible without the use of ladders.
2. Sufficient clearance around and access to serviceable equipment is required to enable and encourage maintenance.

Equipment Requirements

No specific requirements.

Lessons Learned

Not Used.

6.8.6 Materials Management

Outcome

Space provided to effectively and safely handle, store and distribute food supplies, dry goods, chemicals, paper products and resident supplies and equipment.

Spatial Requirements

1. Materials Management space must provide year round access for delivery, storage and distribution of supplies and equipment.
2. There must be a dedicated receiving entrance separate from the main entrance of the facility.
3. Materials Management space must be separated from resident and public areas to prevent exposure to noise, noxious fumes and safety hazards.
4. Storage space for the temporary accumulation of received goods must be provided.

Equipment Requirements

1. Provide all equipment and furnishings as required to support the materials management service program.
- 2.

Lessons Learned

1. Consider providing an exterior intercom system in Materials Management to allow delivery persons to alert facility staff when goods have arrived.
2. The exterior of the receiving dock could have an overhang or dock seal to protect staff and goods from inclement weather.
3. The driveway to the Materials Management could directly link to the public road to facilitate pickup and delivery and reduce onsite truck traffic.

6.8.7 Administration

Outcome

Space where the administrative staff will provide overall management of the facility.

Spatial Requirements

1. Administration must have the necessary office space to provide overall direction and support to the residents, family and staff of the facility.
2. There must be space in the facility for meetings with staff and families and for staff education.
3. Secure storage space for files and records must be provided.
4. Administrative offices must be conveniently located for residents and their families.
5. There must be a dedicated photocopier and related supplies space complete with dedicated exhaust.

Equipment Requirements

1. Provide all equipment and furnishings as required to support space and program functions.

Lessons Learned

1. Consider the locations of confidential and electronic correspondence.

6.8.8 Staff Facilities

Outcome

Space for staff to store personal belongings and change clothes.

Spatial Requirements

1. An area with secure lockers must be provided for staff to store personal belongings.
2. An area, separate from resident care and common areas, must be provided for staff “break” periods complete with kitchenette and sink.
3. Separate change areas must be provided for both male and female staff.
4. Provide one staff washroom and shower for staff next to the staff locker rooms.

Equipment Requirements

1. Provide all equipment and furnishings as required to support space and program functions.
2. Kitchenette to have a microwave and a refrigerator with freezer and ice machine/dispenser.

Lessons Learned

1. Full height lockers can be problematic when used to store wet clothes. An alternative could be a secure room with open coat/boot rack with separate half-height lockers for small personal belongings.
2. Consideration could be given to providing separate male and female change rooms and a staff lunch room and vending machines.

7.0 Residential Care Facility (RCF)

New Residential Care Facilities must be designed to meet the requirements of CAN/CSA standards for Health Care Facilities referenced in Section 3 Fundamentals and the requirements of Section 6.0 as follows:

1. Sections 6.1 Site Location, 6.2 Site Development and 6.3 Building Configuration.
2. The requirements of Sections 6.4 except that clauses 6.4.2 Mechanical and 6.4.3 Electrical need not apply to spaces other than resident bedrooms, resident washrooms and bathing suites contained within an adjoining existing facility.
3. The requirements of NBC subsection 3.3.3 except that, for a standalone RCF facility, corridor widths may be reduced to 6'-0" (1.8 M) clear.
4. Building systems and components such as plumbing, heating, ventilation, power and ceiling structure for lifts are to be appropriately designed and sized for future conversion.
5. Section 6.5 Resident House with the following modifications:
 - 5.1. Resident bedroom ceiling structure is to be designed to accept the future addition of a ceiling mounted track and lift.
 - 5.2. Each resident bedroom is to have a private (not shared between two bedrooms) bathroom which must be a minimum of 75 NSF (7.0 NSM). Each bathroom must have a wheelchair accessible shower. Provide reinforcing for future wall hinged, fold-up bars on either side of the toilet to accommodate lifts and transfers.
 - 5.3. Resident Assisted Bathing Suite is not required to include the shower room clause 6.5.3.3 but must provide a room and roughed-in services for a future therapeutic tub. For the RCF function the bathing suite must provide a residential bathtub complete with grab bars, a hand held shower and provision for a seat.
6. Section 6.6 Resident Ancillary Space with the following modifications:
 - 6.1. Multi-Purpose Room clause 6.6.1 is not required for a standalone facility; however if the RCF is built in combination with a Nursing Home, the multi-purpose room shall be sized to accommodate the entire facility resident population.
 - 6.2. Beauty Parlour clause 6.6.3 is not required.
 - 6.3. Entrance Foyer clause 6.6.7 is not required.

- 6.4. Family Room clause 6.6.8 is not required.
7. Section 6.7 Rehabilitation is not required.
8. Section 6.8 Support Spaces with the following modifications:
 - 8.1. Central Laundry clause 6.8.2, Materials Management clause 6.8.6 and Administration clause 6.8.7 are not required for a standalone facility.

8.0 Community Space

The Community Space is not mandatory and is applicable only where prescribed by the Department.

The Community Space includes:

- Client activity room with kitchen, storage, client coat / locker storage and quiet room;
- Assisted bath and washroom; and
- Parking for staff and clients.

The requirements of Section 6.4 Building Systems and Components are to apply.

8.1 Activity Room

Outcome

A space where clients will interact with other clients and staff in a comfortable homelike and relaxed atmosphere that enhances client quality of life through planned social / recreational activities, meal service, personal care and minor health services (e.g. monitoring medications, diabetes monitoring).

Spatial Requirements

1. Each activity room must provide space not less than 36 NSF (3.34 NSM) per client.
2. Each activity room must have a television and storage / shelving.
3. Each activity room must have view to the exterior.
4. Each activity room must have a kitchen within the activity space for staff/clients to make meals and receive training to enable the clients to maximize their level of functioning when they return to their home or apartment. Each kitchen must have a dishwasher, double sink, storage cabinets above and below (e.g. including space for cooking pans/pots, dishes, glasses and utensils etc.), counter space, range/oven, refrigerator and freezer space, and locked cabinet for medications.
5. Effort must be made to minimize noise in these areas through the provision of finishes that reduce reflected noise and increase sound absorption.
6. The activity room must have space for client coats and personal belongings.
7. A quiet room must be provided next to the activity room where a client can rest undisturbed by the general activity.

Equipment Requirements

1. Provide all equipment and furnishings as required to support space and program functions.

Lessons Learned

1. Consider selecting wall decorations, window treatments (e.g. blinds and curtains) and room finishes (e.g. wallpaper, trim, wainscoting) in the activity room that create a “home-like” environment.
2. The Community Activity works best when there is a separate entrance or a designated drop off/pick up areas at the main entrance so clients have only a short travel distance to the program space.
3. Storing client coats in lockers provide improved security for clients clothing.

8.2 Assisted Bathing Suite**Outcome**

A space where clients will bathe in a safe, dignified, private and comfortable environment.

Spatial Requirements

1. A separate room with a therapeutic bathtub must be provided.
2. The bathtub must be positioned with 4 feet (1220 mm) access on three sides of the bathtub.
3. A separate wheelchair accessible washroom with toilet and a sink must be provided adjacent to the bathroom. The toilet must be positioned so that independent and/or assisted transfer from both sides of the toilet can occur. There must be securely fastened drop down grab bars on either side of the toilet.
4. The bathroom must have moisture-resistant light fixtures.
5. There must be visual privacy when the client is in the bathtub from the corridor when the door is open.
6. The bathroom must have sufficient secure storage space for cleaning supplies, soaps and shampoo.
7. The bathroom must have individual temperature control.

Equipment Requirements

1. Provide all equipment and furnishings as required to support space and program functions.
2. Provide a therapeutic bathtub with a hydraulic, electric or mechanical lift. Do not use water generated type whirlpool bathtub.

Lessons Learned

1. In bathing suites, there are few opportunities to improve the acoustics or apply noise-reducing materials. Textural variety may reduce some problems with background noise transmission or the commonly experienced “echo” problem. Tub selection criteria could include low noise levels. Other opportunities to reduce noise include window coverings, shower curtains, cubicle curtains and flooring.
2. Consider using wall hung toilets to provide easy access for floor cleaning under and around the fixture. Wall hung toilets may be mounted at the higher than standard height to meet resident need and eliminate the requirement for raised toilet seats.
3. The décor, including paint colors, should be soothing and relaxing to contribute to a pleasant bathing experience.
4. Use care in location of air supply diffusers to avoid uncomfortable drafts for the residents.
5. Ensure that there are adequate lighting levels using non-institutional (in appearance) fixtures.