



Accessible Housing Report

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Ryan Spencer

Planning and Development Department

City of Mount Pearl

3 Centennial Street

Mount Pearl, NL

A1N 1G4

(709) 748-1022

## Table of Contents

Introduction .....	3
Universal Design and Accessible Housing .....	3
Principles of Universal Design .....	6
Methodology .....	7
Accessible Survey Results .....	9
Conclusion .....	11
Appendix A: Accessibility Features Guide .....	12
Appendix B: Sample Room Images .....	15
Appendix C: Accessible Housing Survey .....	17
Appendix D: Accessible Housing Inventory .....	21
Appendix E: Sample Accessible Housing Plans .....	22

## **Introduction**

In April of 2009, the City of Mount Pearl released a report on “Housing and Homelessness” which contained some recommendations to address the housing issues within the City. It was determined through this study on housing and homelessness that there was a strong need for accessible housing. Individuals who require accessible housing are often overlooked in the housing market, evidenced by the low number of units not only in Mount Pearl, but in most areas of Newfoundland and Labrador. As a result, the report made a recommendation to address this issue of accessible housing by creating an inventory of all accessible units within the City of Mount Pearl.

## **Recommendation**

“The City Council establish an inventory of physically accessible units to facilitate persons with disabilities locate housing to suit their requirements. The level of services associated with this inventory would have to be determined by the City Council and could range from a basic repository to classification and inspections.”\*

\*Recommendation from the report on “Housing and Homelessness in Mount Pearl 2009”

This inventory was created with the hopes of furthering the Council’s knowledge on the current level of accessible housing. While this inventory does provide valuable information on the current status of accessible housing within Mount Pearl, it will become increasingly beneficial as the City Council looks to address further issues in the near future. Throughout this report the terms accessible and universally designed housing are extensively used. While both terms describe slightly different dwelling types (as described below), for the purpose of this report they can be used interchangeably to describe a dwelling that is usable by everyone.

## **What is Universal Design and Accessible Housing?**

The population of Newfoundland and Labrador is aging and Mount Pearl is no exception. As a result of this increase in age, demand for accessible housing is increasing yearly. But what exactly is universal design and accessible housing?

The following is an excerpt from “Universal Design: Housing for the Lifespan of all People” by Ron Mace (U.S. Department of Housing and Urban Development 1998).

*Universal design is the design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design.*

*The intent of the universal concept is simply life for everyone by making more housing usable by more people at little or no extra cost. Universal design is an approach to design that incorporates products as well as building features and elements which, to the greatest extent possible, can be used by everyone. While accessible or adaptable design requirements are specified by codes or standards for only some buildings and are aimed at benefiting some people (those with mobility limitations), the universal design concept targets all people of all ages, sizes, and abilities and is applied to all buildings.*

*What is a universal design feature? A universal design feature is any component of a house that can be used by everyone regardless of their level of ability or disability. Universal features are generally standard building products or features that have been placed differently, selected carefully, or omitted. For example, standard electrical receptacles can be placed higher than usual above floor, standard but wider doors can be selected, and steps at entrances can be eliminated to make housing more universally usable.*

It is noteworthy to address the differences between a universally designed home and an accessible home. For this report, both terms are linked to mean the same thing. However it is important to know that differences do exist between the two. As stated above, a universally designed home is a dwelling that is created with the purpose of being able to be used by as many people as possible. A universally designed home is constructed with this idea in mind. Therefore, while initially the home may not be accessible, it can be adapted for this purpose fairly easily with little or no cost. The majority of housing units in Mount Pearl are standard designed homes that for the most part, were renovated for the purpose of accessibility for the particular user at the time, and may not be accessible by everyone. Hence this type of housing unit would be accessible but not necessarily universally designed (accessible by everyone). It would be expected that most homes in the St. John's Metro Region (Mount Pearl, Paradise, and Conception Bay South), are not universally designed. The

majority of houses in the region were built in previous decades when universally designed and accessible homes were of no interest.

A universally designed home is an interesting concept. The public imagine of a universally designed dwelling or an accessible home is often skewed. What seems to be the impression is that an accessible home is often unattractive and hard to sell. However, it can be quite the opposite. Universally designed homes for example often look very similar to a standard housing unit with slightly different (often non-noticeable) features. For example, a universally designed house will have electrical outlets raised a little higher than your standard home. A universally designed home will also have a more spacious bathroom and kitchen. In fact, while an accessible housing unit is usually one that has undergone renovations to improve the accessibility; a universally designed unit can, and often is, one that has not undergone any renovations. So what makes a universally designed house accessible? The major difference between a universally designed house and a standard design is the ability to adapt the dwelling to its user. A universally designed home is one that can be altered with low cost because the ability to change was considered in the initial construction phase. A standard home during construction does not take into account the ability to change and adapt if necessary. As a result, to alter the interior of a standard home for accessibility, it can often cost thousands of dollars.

### **Photos of Accessible Housing**





### **The Principles of Universal Design**

Understanding what universal design entails requires understanding the founding principles of the concept. There are 7 basic principles that make up universal design and they are defined below.

1. **Equitable Use:** The design does not disadvantage or stigmatize any group of users.

2. **Flexibility in Use:** The design accommodates a wide range of individual preferences and abilities.
3. **Simple, Intuitive Use:** Use of the design is easy to understand, regardless of the user's experience, knowledge, language skills, or current concentration level.
4. **Perceptible Information:** The design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities.
5. **Tolerance for Error:** The design minimizes hazards and the adverse consequences of accidental or unintended actions.
6. **Low Physical Effort:** The design can be used efficiently and comfortably with minimum fatigue.
7. **Size and Space for Approach and Use:** Appropriate size and space is provided for approach, reach, manipulation and use, regardless of the user's body size, posture, or mobility.

## **Methodology**

Accessible housing is a very broad topic that can cover numerous forms of disabilities as well as aging issues. As a result of this, determining what is accessible can often be difficult for various reasons. The biggest issue is identifying dwellings that have the possibility of being accessible. Most accessible features are located inside the dwelling making it difficult to physically identify them without contacting the home owner. In some cases, property owners may not be willing to discuss their homes, even if they are accessible. Likewise, while wheelchair ramps are usually a catalyst for accessible homes, they are not necessarily required. Many disabilities do not include impediments to movement and therefore do not require wheelchair access. These individuals may indeed have some form of accessible dwelling but because most features are interior based, it is almost impossible to identify them.

In order to determine the amount of accessibility within the City of Mount Pearl, a few different methods were used to gather information. It was determined that this study includes public living facilities such as senior homes, as well as private dwellings. As expected, collecting information on public housing facilities was fairly easy. Most care facilities and senior complexes offer some degree of

accessible units within their buildings. As the buildings are mostly open to the general public, it was easy to collect information by contacting the facilities directly by telephone.

Private housing, on the other hand, was fairly difficult to address. With over 9,000 households in Mount Pearl, contact by telephone was deemed to be ineffective. To address private housing, an ad was placed in “The Telegram” newspaper for two consecutive Saturdays asking residents to partake in the accessible housing survey. This method also proved to be ineffective as there was very little response. From there, a physical search of the city was conducted to try and determine where the private accessible housing was located. A visual survey of the city was conducted by looking for housing units with ramps. This search proved to be effective with 50 households being identified as possibly being accessible. A letter was drafted along with the accessible housing survey and sent to the owners of the identified properties. Property owners were asked to participate by completing the survey.

The key method of collecting information was the accessible survey its self. This survey was created with help from universal design experts Shelley Dinur and Mary Manojlovich of Eastern Health, as well as Susan Ralph and Amanda Lush of the Independent Resource Center. The survey was created using Principles of Universal Design to try and understand the extent of accessibility within a given housing unit. One of the issues with accessible housing is that it is difficult to determine what exactly is fully accessible, as opposed to partially accessible. By asking very specific questions regarding various accessibility features, we were able to gauge the level of accessibility within a given unit. Since there is no universally accepted definition of fully or partially accessible housing, it was determined that:

“A fully accessible housing unit is one that enables a person with disabilities to live independently. This includes being able to approach, enter, pass to and from, and make use of all living areas and its facilities, or either of them, without needing assistance.”

Based on the responses from the accessible housing survey, we were able to determine the amount and level of accessibility within the City of Mount Pearl.

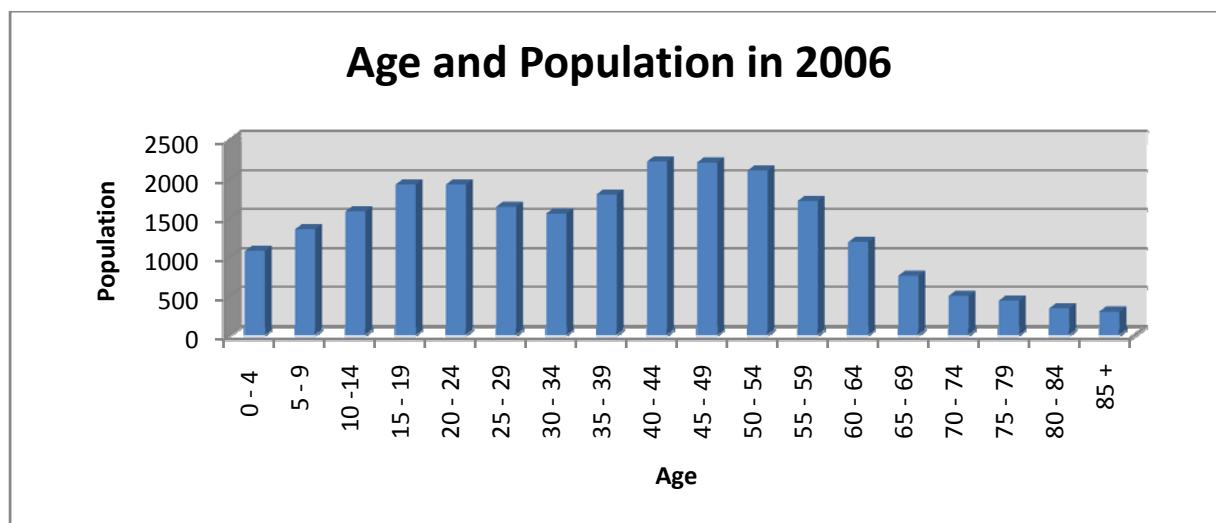
### **Who needs Accessible Housing?**

Traditionally, we think of accessible housing as belonging to individuals who are disabled and require extra support. However, a universally designed home can be beneficial to every one of all abilities. It is no secret that the average age in Newfoundland and Labrador is increasing, and thus the



strain on our health care system is increasing. As the residents of this province age, their physical ability and health will change. Residents will be forced to find living arrangements better suited for their health. This is where a universally designed home can become increasingly valuable. If a home is constructed using principles of universal design, home owners can adapt their dwellings with little cost to their needs. This will reduce the number of individuals seeking living arrangements in long care homes, reduce injuries and allow seniors to continue living independently.

As indicated by the graph below, Mount Pearl, like the rest of Newfoundland, is experiencing an increase in average age for its citizens. In the 2006 community profile report on Mount Pearl (2006 Census of Population, Statistics Canada), the average age was approximately 38 years old with over 7,360 individuals over the age of 50. This represents approximately 30% of the entire population of Mount Pearl. In approximately one decade, there will be over 11,800 individuals over the age of 50. This is clearly an indication of an aging population and reinforces the notion that universally designed or accessible homes will become increasingly popular. Along with seniors, universally designed or accessible homes can be beneficial to everyone. This type of dwelling offers a safe and healthy environment regardless of their current health.

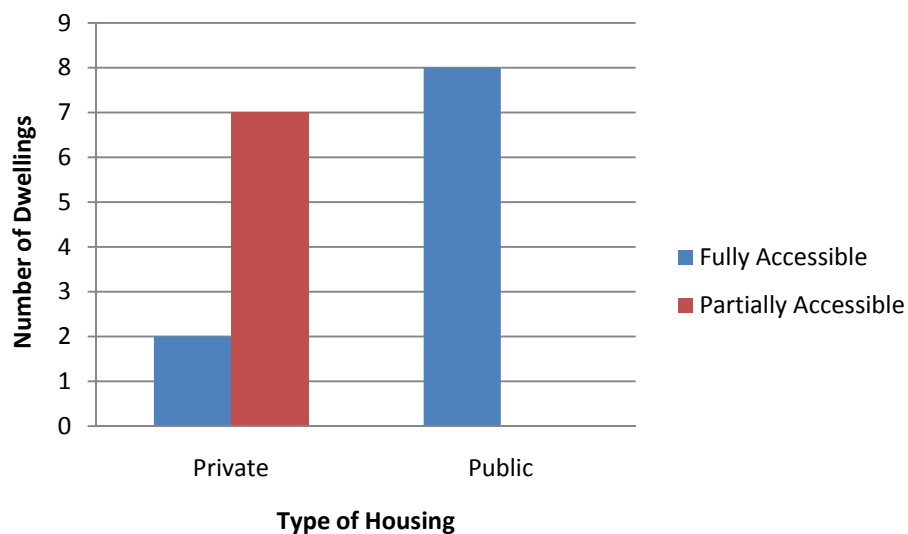


**\*Statistics Canada Community Profile 2006**

### **Accessible Survey Results**

The results of the accessible housing survey (see Appendix D for list of identified properties) vary greatly among the limited number of respondents. While 54 properties were contacted, as of August

26<sup>th</sup> 2009 only 18 responded. As expected, the majority of the respondents were private households which accounted for 55% of the results. Based on the results of the survey, it appears the majority of fully accessible housing in the City is publicly owned/funded properties. Ten of the respondents reported having a fully accessible unit. Out of ten fully accessible units, eight were owned by groups such as Newfoundland and Labrador Housing Corporation and Single Parents Association of Newfoundland and Labrador. Currently there is only two private household that reported being fully accessible. Partially accessible dwellings appear to exist exclusively among private dwellings in Mount Pearl. While seven respondents reported their dwellings as being partially accessible, the level of accessibility varied considerably. The range of partially accessible homes features ranged from very basic features (wheelchair ramp only) to almost fully accessible (major renovations to accommodate movement within the interior plus access to some features and rooms). Three respondents reported being very basic in terms of accessibility (one respondent asked to have their property excluded from the inventory); two respondents stated their homes were moderately accessible; while two other respondents stated their homes were almost fully accessible. One respondent declined the survey with no mention of the accessibility of their property.



Also included in the survey was a section for additional comments that allowed home owners to provide feedback. While not every respondent used this space to provide feedback, there were some individuals who provided insightful comments. Among the responses was a comment based on the costs of renovating for the purpose of improving accessibility. The respondent stated that they would most

certainly improve their accessibility if it was financially feasible. They noted that renovation costs were expensive for most typical home owners and hence the amount of partially accessible housing. Finally, another respondent stated that they would re-design their home for better accessibility if they had their time back.

## **Conclusion**

This inventory is largely incomplete due to the number of unidentified units that are possibly accessible within the City of Mount Pearl. Further methods will need to be explored in order to determine the full extent of accessibility within the City. As stated previously, the ability to identify accessible housing is critical to understanding the extent of accessibility within the City. A method to determine which homes fall under the category of accessible (outside of identification by wheelchair ramp) will need to be addressed. An ongoing inventory aided by information supplied from new building and development permits may be a solution.

While the majority of property owners have yet to respond, there seems to be a trend developing among those who have. It appears that as stated in the “Housing and Homelessness” study, the need for accessible housing is increasing. While individuals are making do with partially accessible housing, they would prefer a fully accessible unit if the cost to renovate was reasonable. This subsequently shows a demand for not only accessible housing, but for those units to be fully accessible as well. While public housing facilities offer some fully accessible units, they are often hard to acquire as many have lengthy waiting lists. To further compound this issue, most home owners would rather live in their own dwellings or another private dwelling if their health concerns were suitable for such an environment.

While this inventory has provided a quick glimpse of the accessible housing that exists within the City of Mount Pearl, many respondents as well as Universal Design experts have stated that this is the first step to addressing the issues that surround accessible housing. From the information provided within this report, the City Council can now begin to address the issues that surround accessible and affordable housing within the City of Mount Pearl.

## **Appendix A**

### **Accessibility Features Guide**

#### **Entrance:**

- It is best to make all home entrances without steps.
- More than one “step-free” entrance is preferred.
- At least one “step-free” entrance is essential; if only one, not through a garage or from a patio or raised deck.
- Avoid ramps if possible.
- Minimum 5' x 5' level clear space inside and outside entry door.
- Power door operators whenever possible.
- Well lit entrance.

#### **Interior Circulation:**

- An open plan design.
- At least one bedroom and accessible bathroom should be located on an accessible ground floor entry level.
- Clear door opening width (34" – 36")
- Flush thresholds at all doorways.
- Turning space in all rooms.

#### **Vertical Circulation:**

- All stairs should be appropriate with and have space at the bottom for later installation of a platform lift, if needed.
- At least one set of stacked closets, pantries, or storage spaces with knock-out floor (two-storey only).

#### **Bathrooms:**

- At least one bathroom must have one of the following accessible bathing fixtures
  - Minimum 5' x 3' curb-free shower
  - Tub with integral seat, waterproof floor, and a floor drain.
- Clear space (3') in front and to one side of toilet.
- Toilet centered 18" from any side wall, cabinet, or tub.
- Grab bars should not be stainless steel or chrome.
- Lavatory counter height 32" minimum with knee space underneath (29").
- Full-length mirrors when possible.
- Offset controls in tub/shower with clear floor space.
- Single-lever water controls at all plumbing fixtures and faucets.

- Pressure balanced anti-scald valves present.
- Hand-held shower heads where possible.

#### **Kitchens:**

- Clear knee spaces under sink, counters, and cook tops (minimum 29" high).
- Variable height working surfaces (28" – 42").
- Full-extensions pull-out drawers, shelves and racks in base cabinets.
- Front-mounted controls on all appliances.
- Side-by-side refrigerator with pull out shelving.
- Built-in oven with knee space beside set for on pull-out oven rack at the same height as adjacent countertop.
- Dishwasher raised on a platform or drawer unit, so top rack is level with adjacent countertop.

#### **Laundry Areas:**

- Front-loading washers and dryers with front facing controls.
- Laundry sink and countertop surface no more than 34" above finished floor.

#### **Storage:**

- 50% of all storage should be less than 54" high.
- Adjustable height closet rods.
- Power operated clothing carousels.

#### **Garages and Carports:**

- Power operated overhead doors.
- 8' minimum door height or alternate on-site parking for tall vehicles.

#### **Decks:**

- Build deck at same level as house floor.
- Keep deck clear of the house and use slatted decking for positive drainage.

#### **Hardware:**

- Level door handles
- Push plates
- Loop handle pulls on drawers and cabinet doors.
- Touch latches.

#### **Home Automation:**

- Motion detector light switches in garages, utility spaces, entrances and basements.

- Remote controls for selected lights.
- Remote controls for heating and cooling.
- Doorbell intercoms that connect to portable telephones.
- Audible and visual alarms for doorbell, baby monitor, smoke detectors, etc...

**Switches and Controls:**

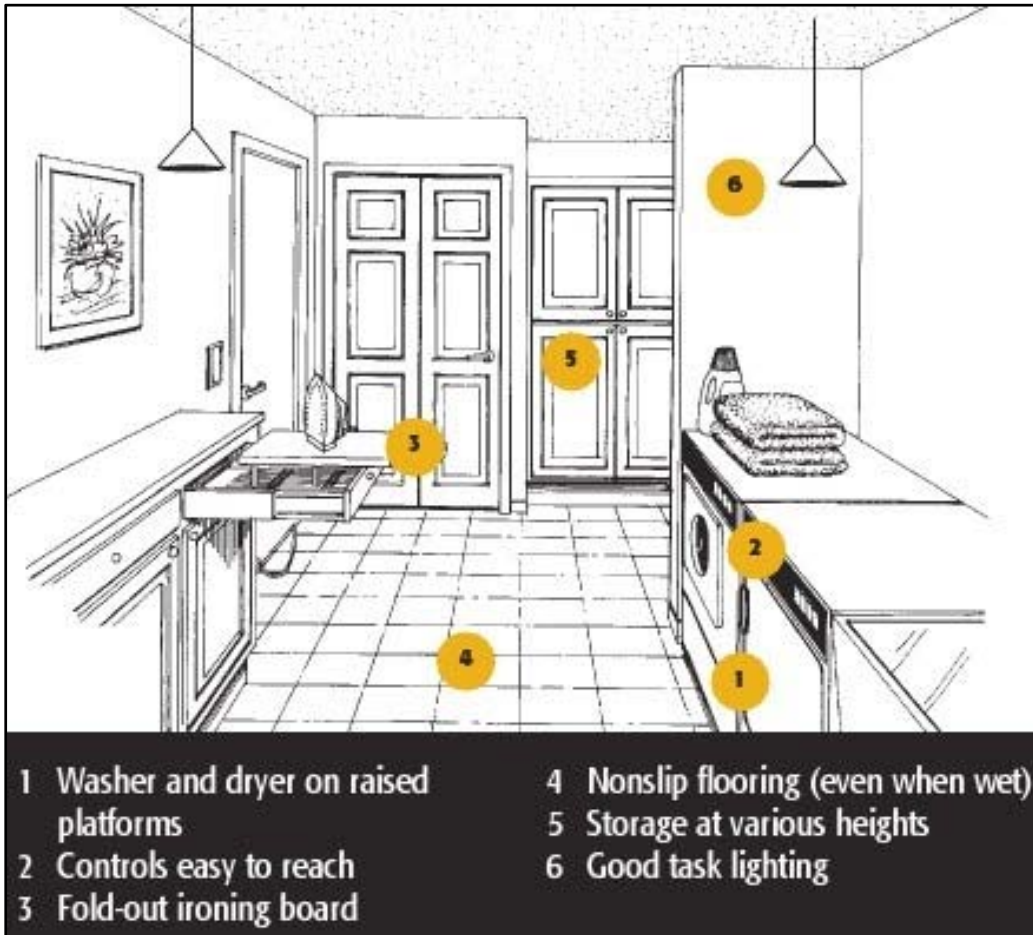
- Light switches and thermostats 44" – 48" high.
- Easy-touch rocker or hands free switches.
- Electrical outlets at beds and desks, four-plex boxes each side for computer and electronic equipment as well as personal use equipment.
- Electrical outlets 18' minimum height.

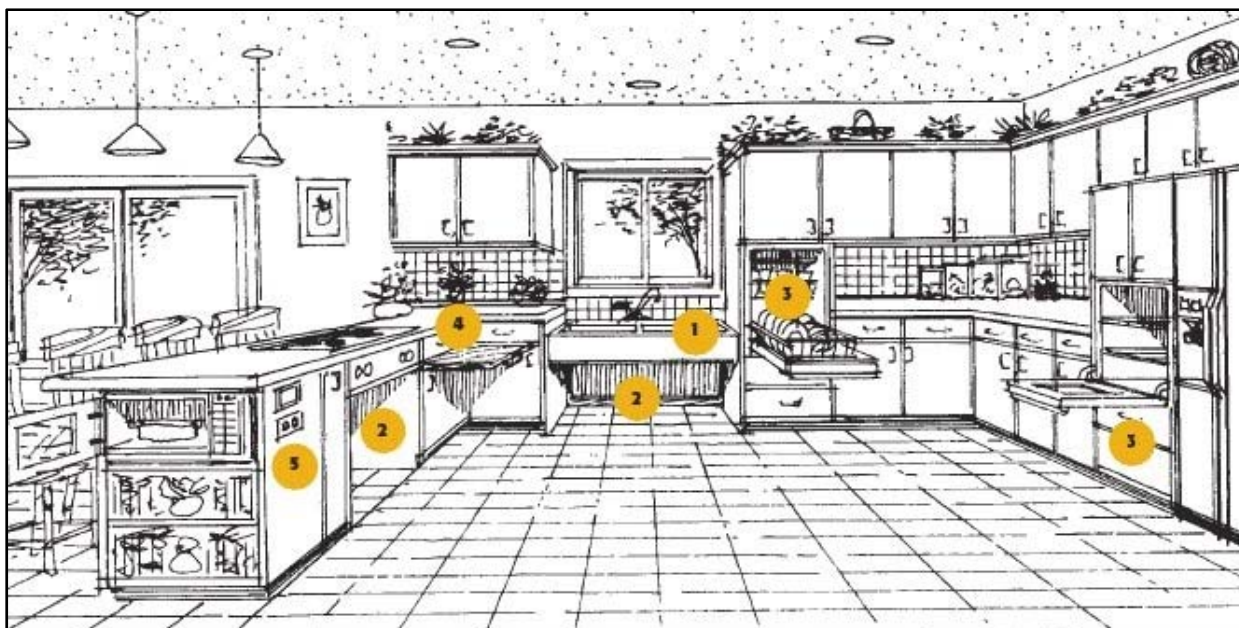
**Windows:**

- Windows for viewing, 36" maximum sill height.
- Use crank operated style and power operators whenever possible.

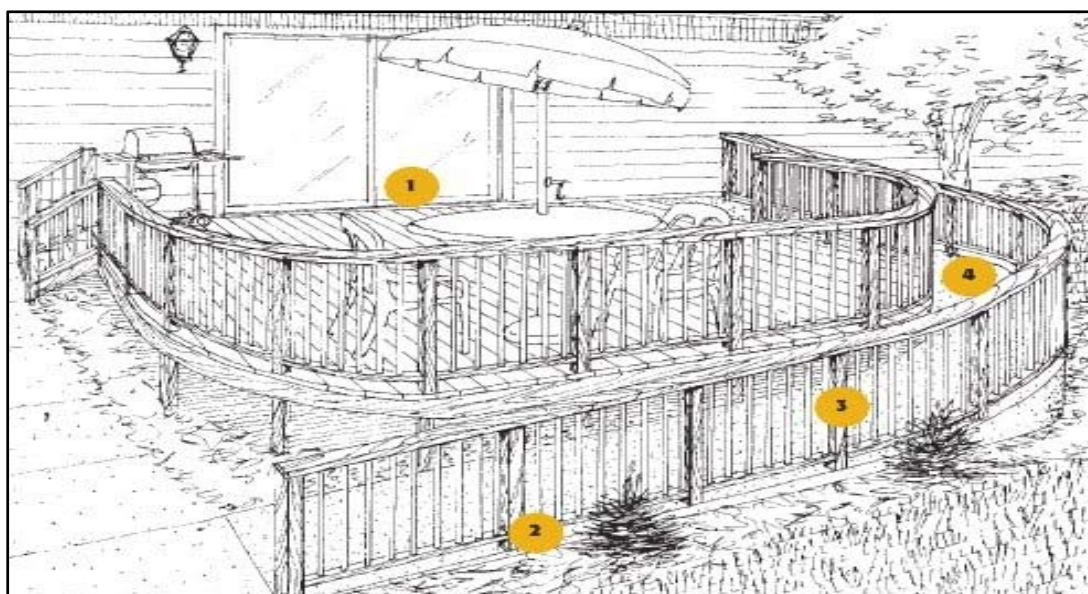
## Appendix B

### Sample Room Images





- |   |  |
|---|--|
| 1 "Power sink" that raises and lowers           | 4 Pullout workboard  |
| 2 Space under stove and sink for seated users   | 5 Some switches and outlets at the outside edge of counter |
| 3 Raised oven and dishwasher with storage below |  |



- 1 Wide, step-free entry with low, beveled threshold
- 2 Gap between rail and ramp floor, for easier sweeping and shoveling
- 3 Gently sloping ramp, at least 36 inches wide
- 4 For wheelchair accessibility, avoid a curved ramp. Instead, use straight ramp sections and provide a large, level landing area for turning the corner



## Appendix C

### Accessible Housing Survey

#### Accessible Housing Measurement Guide

The numbers below are a quick guide to understanding certain key features of accessible housing. While they are universally accepted as standards, they are usually considered to be the minimum measurement of a given feature.

- 36 inches: width of an accessible route, path, sidewalk or hallway
- 32 inches: width of the interior opening for all doors (clear passage)
- 30" x 48" : space needed for standard 18" x 16" manual wheelchair
- 60" x 60": manoeuvring room needed for standard manual wheelchair
- 28" to 34": finished tabletop or countertop heights for accessibility
- 27" to 29": knee clearance measured from finished floor to bottom of wheel-in sink, stovetop, or countertop
- 15" to 48": minimum and maximum height for controls, outlets, shelves
- 1:12 maximum slope of ramps (1 inch of rise per 12 inches in Length)

<b>Name</b>			
<b>Address</b>			
<b>E-mail</b>			
<b>Phone</b>			
<b>Fax</b>			
	<b>YES</b>	<b>NO</b>	<b>COMMENTS</b>
<b>General Information</b>			
Do you wish to have your housing unit submitted to an inventory of accessible units?			
May we contact you for further information?			
Was your dwelling created or renovated for the purpose of accessibility?			
Does your property contain more than one accessible unit? If so, how many?			
<b>Exterior</b>			
Is there a level or gently-sloped 36-inch path from sidewalk or parking to the main entrance, and is it safe and easy to use?			

Is the main entrance covered, step-free, with a level threshold, and contains rails when needed?			
Do alternative entrances exist that are step free with a level threshold?			
	<b>YES</b>	<b>NO</b>	<b>COMMENTS</b>
Is the main entrance at least 36 inches wide, with a lever handle?			
Is the main entrance door power-operated?			
Are the exterior surfaces slip resistant?			
Is the exterior route well lit?			
<b>Interior</b>			
Are all passageways and hallways at least 36 inches wide?			
Are all doors at least 34 inches wide (32 inches clear passage) with level thresholds?			
Do all doors contain lever handles?			
Is there a clear route with no steps to all living areas and to at least one bathroom and bedroom and kitchen?			
Are the floors slip resistant? If carpet is present, is it low density pile (< ½ inch thick)?			
Does the dwelling contain a telecommunication device for individuals with hearing disabilities?			
Are there visual indicators (e.g. flashing lights) for smoke, door, and telephone present?			
<b>Kitchen</b>			
Is there at least 5 feet by 5 feet turning space?			
Is there a sink with lever-style taps easy to reach from a seated position?			
Is there a sink no more than 34 inches high, with at least 27 inches knee clearance underneath?			
Are the storage cabinets easy to open and access from a seated position?			
Is there at least one countertop or pull-out work board no more than 34 inches high?			

Do all appliances have front controls that are easy to reach, see and operate from a seated position?			
Do appliances have safety shut-offs (beeper, flashing light)?			
Does the refrigerator door open 160 to 180 degrees?			
	<b>YES</b>	<b>NO</b>	<b>COMMENTS</b>
Is there a dishwasher present? Is it raised 8 to 10 inches above the floor?			
<b>Bathroom</b>			
Are the walls reinforced around the tub, shower, and toilet with grab bars present?			
Do sink and shower have lever-style hardware?			
Is there a sink no more than 34 inches high, with at least 27 inches knee clearance underneath?			
Are there anti-scald valves present?			
Is there a telecommunication device present?			
Is there at least 5 feet by 5 feet turning space in the room?			
Is there a roll in shower present?			
<b>Other</b>			
Are all electrical outlets and telephone jacks at least 18 inches above the floor?			
Are all light switches and environmental controls no higher than 44 inches from the floor?			
Is there at least one lightweight, crank opening or power-operated window in all major living areas?			
Are viewing window sills no higher than 32 inches from the floor			
Does the main interior route have access to front loading laundry facilities that are 9 to 10 inches above the floor?			
Are there any lifts or elevators present?			
If lift is present, does it contain brailled buttons or have audio signals to indicate which floor you are on?			

If stairs are present, is there at least 1 solid, easy-grip handrail present?			
Would you consider your dwelling to be fully accessible?			
Would you consider your dwelling to be partially accessible?			

OTHER COMMENTS:

**PLEASE RETURN COMPLETED SURVEY BY MAIL, FAX, OR EMAIL**

PLANNING AND DEVELOPMENT DEPARTMENT  
CITY OF MOUNT PEARL  
3 CENTENNIAL STREET  
MOUNT PEARL, NL  
A1N 1G4  
(709) 748-1115  
(709) 748-1150 (fax)  
rspencer@mountpearl.ca

## Appendix D

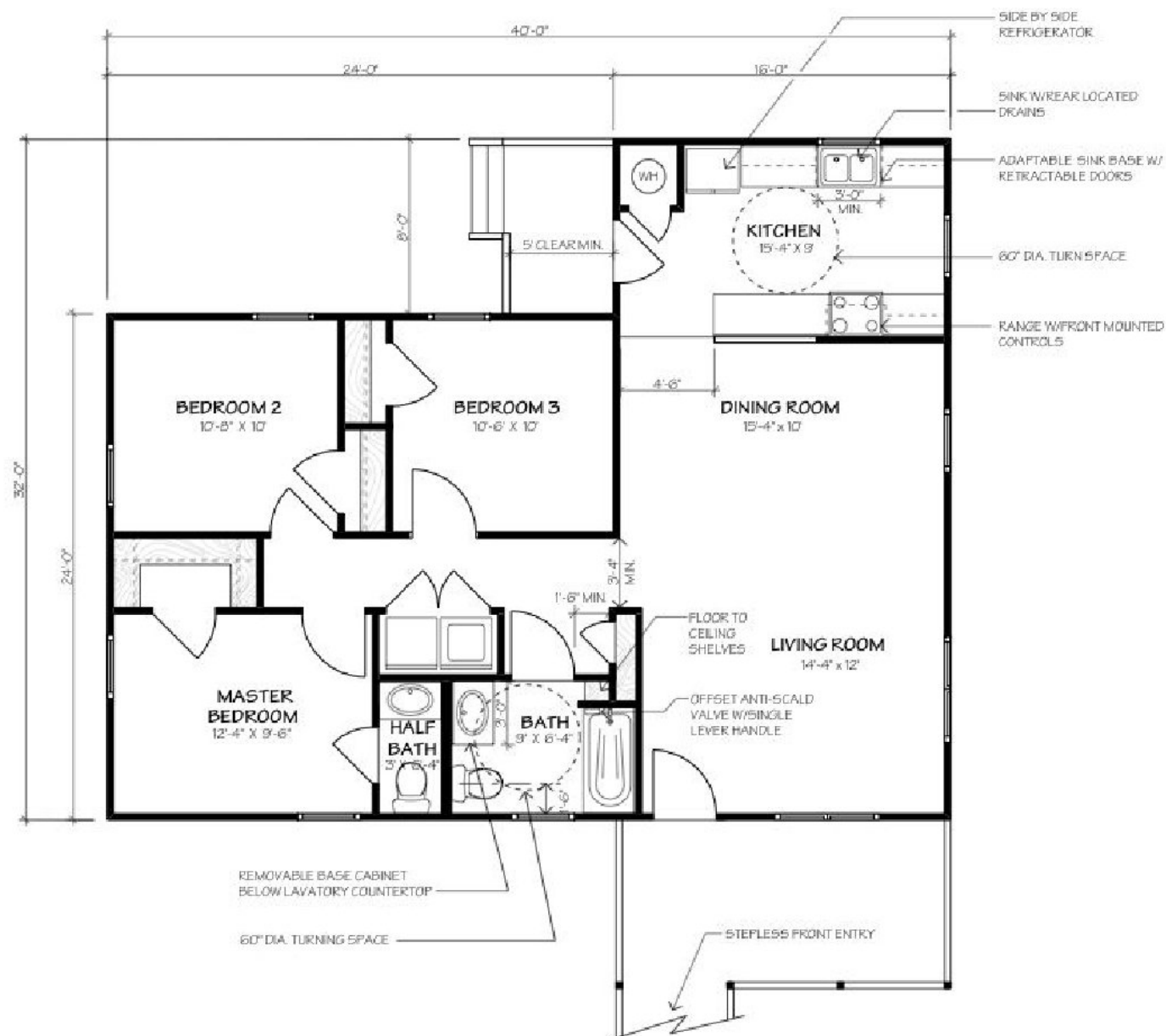
### Accessible Housing Inventory

Address	Type of Housing	Level of Accessibility
11 Manley Pl	Public	Fully Accessible
12 Manley Pl	Public	Fully Accessible
21 Manley Pl	Public	Fully Accessible
26 Wilson Cres	Public	Fully Accessible
17 Wilson Cres	Public	Fully Accessible
Building 15 Masonic Park	Public	Fully Accessible
25 Moores Dr	Public	Fully Accessible
65-67 Park Ave	Public	Fully Accessible
3 Sycamore Pl	Private	Fully Accessible
6 Crystal Pl	Private	Fully Accessible
13 Firgreen Ave	Private	Partially Accessible
1 Clover Brae Cres	Private	Partially Accessible
13 Sunrise Ave	Private	Partially Accessible
7 Blossom Ave	Private	Partially Accessible
53 O'Flaherty Cres	Private	Partially Accessible
11 Champlain Cres	Private	Partially Accessible

## **Appendix E**

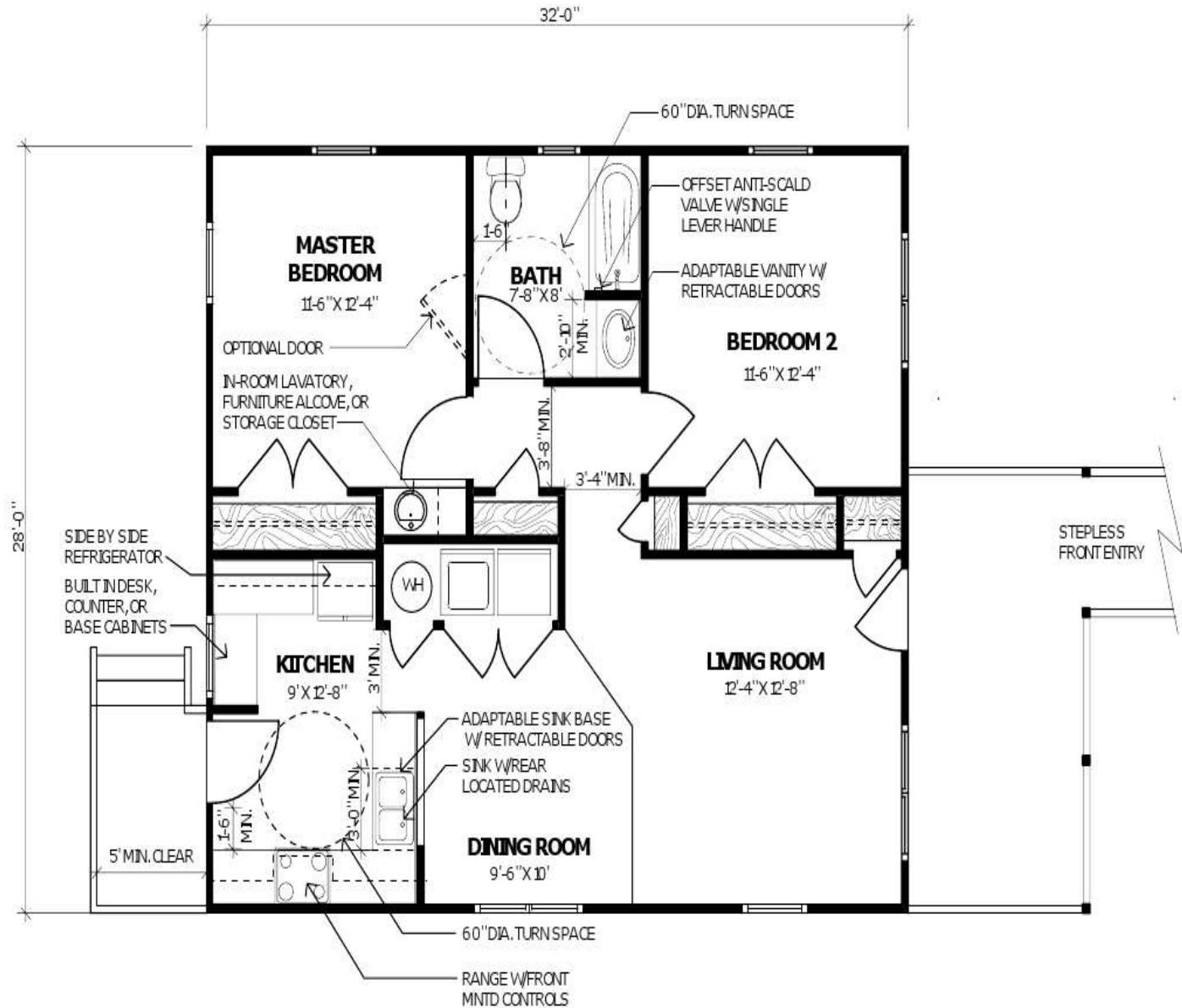
### **Sample Housing Plans**

NOTES:
ROOM SIZES ARE APPROXIMATE.
TOTAL AREA = 1080 SQ. FT.
TYP STUD WALL THICKNESS = 3-1/2"
ALL PASSAGE DOORS ARE 3'-0"
ALL OTHER DOORS 3'-0" WHEN POSSIBLE.
ENTRY CONFIGURATION DEPENDS ON UNIQUE SITE CONDITIONS



# NOTES:

ROOM SIZES ARE APPROXIMATE.  
TOTAL AREA = 896 SQ.FT.  
TYP STUD WALL THICKNESS = 3-1/2"  
ALL PASSAGE DOORS ARE 3'-0"  
ALL OTHER DOORS 3'-0" WHEN POSSIBLE.  
ENTRY CONFIGURATION DEPENDS ON UNIQUE SITE CONDITIONS





NOTES:
ROOM SIZES ARE APPROXIMATE.
TOTAL AREA - 1288 SQ. FT.
TYP STUD WALL THICKNESS - 3-1/2"
ALL PASSAGE DOORS ARE 3'-0"
ALL OTHER DOORS 3'-0" WHEN POSSIBLE.
ENTRY CONFIGURATION DEPENDS ON UNIQUE SITE CONDITIONS.

