



Housing LIN

Connecting people, ideas and resources

Factsheet 35

Landscape Design Principles for Dementia Care (2nd edition)

June 2023

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PRP



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1. Who is this factsheet for?

This updated factsheet is an essential resource for anyone involved in the design and development of housing for older people with cognitive and sensory impairment. It is particularly relevant for commissioners, planners, designers, and developers who are interested in creating effective and engaging landscapes that support the physical and emotional wellbeing of residents.

The factsheet highlights the critical role that well-designed landscaped gardens can play in improving residents' quality of life, promoting physical and mental health, and reducing the effects of cognitive decline. It argues that landscape design should be informed by the latest research on sensory and cognitive impairment, and should focus on creating environments that are safe, attractive, and engaging while still being accessible and easy to use for older and disabled people.

The information in the factsheet draws on the experience and expertise of PRP's landscape team, who has extensive experience in creating external spaces for older people and vulnerable adults. It includes examples of industry-accepted good practice in landscape design and aims to support those involved in the design and development of specialist housing in creating the most effective and engaging environments possible.

Background

In 2013, PRP collaborated with Housing LIN (Learning and Improvement Network) to produce Factsheet no. 35, offering guidance on landscape design for dementia care. Ten years on, this resource has proven to be a valuable tool and is widely accessed from the Housing LIN's online design hub.

As a multidisciplinary practice specialising in this area, PRP understands the significance of a collaborative and proactive approach to ensure that the needs and expectations of clients, operators, residents, and care staff are met. Our team has previously incorporated design guidance such as [Inclusive Design for Getting Outdoor by I'DGO](#), which emphasizes creating dementia-friendly environments in public parks, streets, and open spaces.

Focusing on landscape design for housing in the care sector, this factsheet outlines the fundamental principles to consider when designing for individuals with dementia, their families, and care providers. It also draws attention to landscape design for people with dementia within the NHS.

'Beautiful landscaped gardens at the award-winning Pilgrim Gardens, Leicester, provide a wonderful amenity for residents with seating, interesting features, sun, shade, calming water feature and walking routes.'



2. Overall Landscape Design Considerations

The role of attractive external amenity is critical for the health and wellbeing of residents. Buildings should create and define recognisable, usable spaces, ideally sheltered and sunny, with the best possible outlook. Key considerations include:



Visibility

The garden should be an extension of internal communal spaces, ideally glimpsed from the main entrance and communal facilities with biophilic design principles.



Security

It is important that residents perceive the garden areas as secure and safe from trespass. Areas at the front of a building may be open to the street but the areas intended for residents to walk, sit or garden should be clearly secured by appropriate fences, railings or planting.



Accessible

All paving must be laid level with even drainage falls, and be accessed from the building via level thresholds. Paths should be relatively level (no steeper than 1 in 20) and at least 1.5m wide. The ground and adjacent path must be level to avoid a trip hazard and all edgings laid flush. The surface should be even and slip resistant. Loose or bonded gravel is not appropriate but resin bound can be used instead.



Interesting Features

Gardens should surprise and delight through sound, movement, smell and touch as well as the visual senses. Moving water, for example, can create a refreshing, soothing sound on a hot day. A piece of sculpture or a feature such as a bespoke bench may provide a tactile experience that makes a particular spot in the garden memorable and familiar. Some schemes may also have an outdoor gym/ playground or a few steps to encourage exercise.



Walking Opportunities

However small the garden, it is desirable to establish opportunities for residents to take a stroll. A route should be provided to take full advantage of features, views and points of interest in the garden with adequate seats for resting. The resident's journey should be varied, stimulating and circulatory. Dead-ends should be avoided unless they terminate in a feature or 'event'. Paths must be level and slip-resistant.



Participation

If space allows, consider the inclusion of a small 'kitchen garden' area with vegetable beds, herb garden, compost bin/heap, greenhouse and/or potting shed for residents' use. Consider incorporating raised planters as a means of bringing plants closer to residents and enabling them to participate in gardening from a wheelchair or a standing position.



Sunlight

All schemes, however small, should include at least one sunny terrace area adjacent to the building to allow residents to sit outdoors on warm days for events such as BBQs.



Shade

The provision of shade must be considered where gardens are south facing. Consider retractable blinds, a well-located existing or new tree, pergola or trellis planted with deciduous climbers.



Sensory Planting

Year-round colour and interest in the garden are key for residents who may be sedentary, to enjoy outlook throughout each day. Spring bulbs, autumn leaf colour and winter blossoms, for example, should be carefully considered to establish variety and delight throughout the year. Specify easily recognisable and colourful flowering plants. Planting that incorporates colour and movement will stimulate the senses, and can be particularly significant for people with visual impairment. Do not specify plants with any poisonous components or any thorny or spiky plants, the risks for potentially confused or physically unsteady residents is higher than usual.



Wildlife

Almost all residents will welcome the presence of birds and butterflies in the garden, and particular areas may be identified for feeders or nest boxes. Similarly, planting and habitat that encourages butterflies and other insects will enhance biodiversity and create interest for residents, many of whom may spend considerable time sitting and 'watching the world go by'.



Infection Control

Access to meaningful external space is even more important for maintaining wellbeing and exercise during an outbreak of illness in the building. The garden should be sufficiently sized to accommodate several residents at once while social distancing. Walking routes should circulate so as to enable a procession in one direction which avoids cross overs. Several seats should be provided to enable residents to sit down at once to talk whilst being 2m away from each other. Sheltered or covered spaces should be included to encourage residents to go into the garden for some fresh air, even during inclement weather.



Roof Gardens

Where sunny outdoor space at ground level is at a premium or there are opportunities for high level views, consider providing roof terraces. They should be accessible by lift and ideally associated with other communal facilities (e.g. an activity room, secondary lounge or conservatory). Non-climbable guarding to at least 1.8m height, preferably glass, will be required. Risk management in the event of residents with dementia attempting to climb over balustrading is considered more difficult in a shared or communal roof garden situation than in the case of private balconies (which can be shut off when necessary). Paths must be level and slip-resistant.



Lighting

Lighting is an essential aspect of any external area, not only for safety and utility but also for aesthetic purposes. If you have a garden area that is visible from multiple dwellings or communal spaces, it is worth considering how you can enhance the space's ambience during the hours of darkness. Besides traditional bollard lighting, additional lighting effects can accentuate the garden's beauty, making it a more enjoyable place to spend time in the evening.



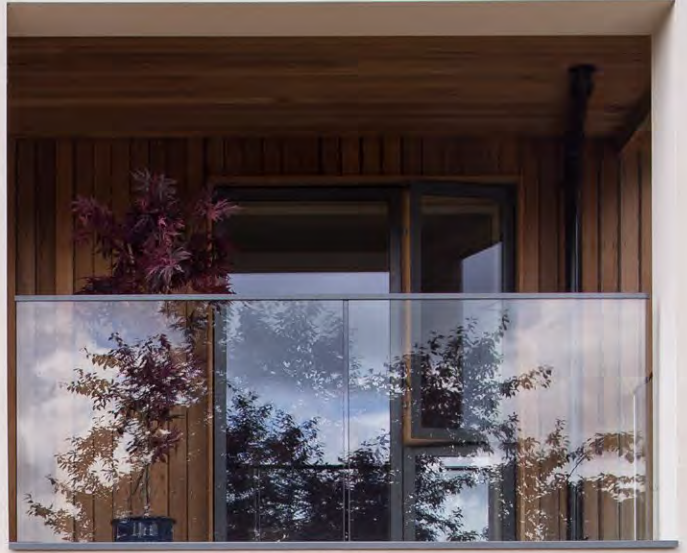
Maintenance

Provide external taps for garden watering purposes along with water butts and the specification of drought-resistant plant material to reduce the need for watering by hose or sprinkler.



Pets

If the operator has a pets policy, consider providing a pet walking area and bins.



'Sensory gardens at St Bede's, Bedford with a variety of textural, flowering and fragrant planting for sensory simulation.'

3. Dementia-friendly Design Principles

This section highlights a number of landscape specific dementia-friendly, emotional and physical wellbeing design principles that should underpin all external amenity design in the later living and care sector.

Regardless of ability, the **sensation of joy** has a remarkable ability to:

- Instil an uplifting sense of happiness and contentment.
- Foster a host of positive emotions.
 - Promote overall wellbeing.
 - Inspire positivity.



Unlike happiness, which is measured over time, joy is a feeling of 'just now'.

Gardens and landscapes, in particular, have the power to provide moments of joy that can enrich the lives and wellbeing of residents.

1. Access, Movement and Orientation

- Provide level access to garden areas from communal rooms or private patios.
- Routes through external areas should be laid out in a legible manner, level and barrier free to promote confidence and independence.
- Provide clear navigational markers around the garden and along the building margin such as strongly scented plants or garden features.
- Consider including sculptures or memorable features throughout to aid wayfinding. Garden features visible from communal areas aid internal wayfinding within the building.
- Introduce 'circular' walking routes which return the resident to their starting point. Routes must never terminate at dead ends and exit gates should be concealed.



Farrow Court, Ashford



Pilgrim Gardens, Leicester



Pilgrim Gardens, Leicester



Signature at Reigate Grange

2. Memory and Mental Mapping

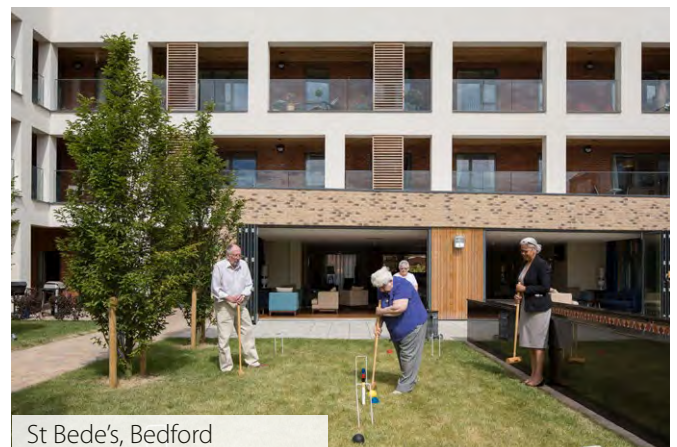
- Access to external space can trigger positive memories and provide a sense of achievement.
- The attributes of a garden including particular images and smells can stimulate memories - giving a strong sense of normality, security and refuge.
- Involvement in gardening experiences offers the opportunity to reminisce and engage in familiar activities such as hanging the laundry, picking flowers and growing herbs and vegetables for the kitchen.



Farrow Court, Ashford



Oval Quarter, London



St Bede's, Bedford



Oval Quarter, London

3. Sensory Simulation

- The surrounding environment must offer a peaceful setting that allows for tranquil introspection, reducing the impact of stress, sensory limitations, anxiety, and aggression, all possible indications of dementia.
- Introduction of stimuli for the visually impaired in planting through colour or textural 'contrast'
- Ensuring that the right material is used that avoid glare or shiny paving which may be mistaken for slippery surfaces.
- Provide strongly scented plants as 'markers' in the garden environment - at corners, seating areas or access points and encourage people to touch plants.
- Provide raised beds which will help make the plants more accessible to wheelchair users and those who have difficulty bending.
- Illuminate pathways, trees and features within the garden to enhance security and enable the gardens to be enjoyed at night (this is particularly important for people experiencing acute sensitivity to sunlight).



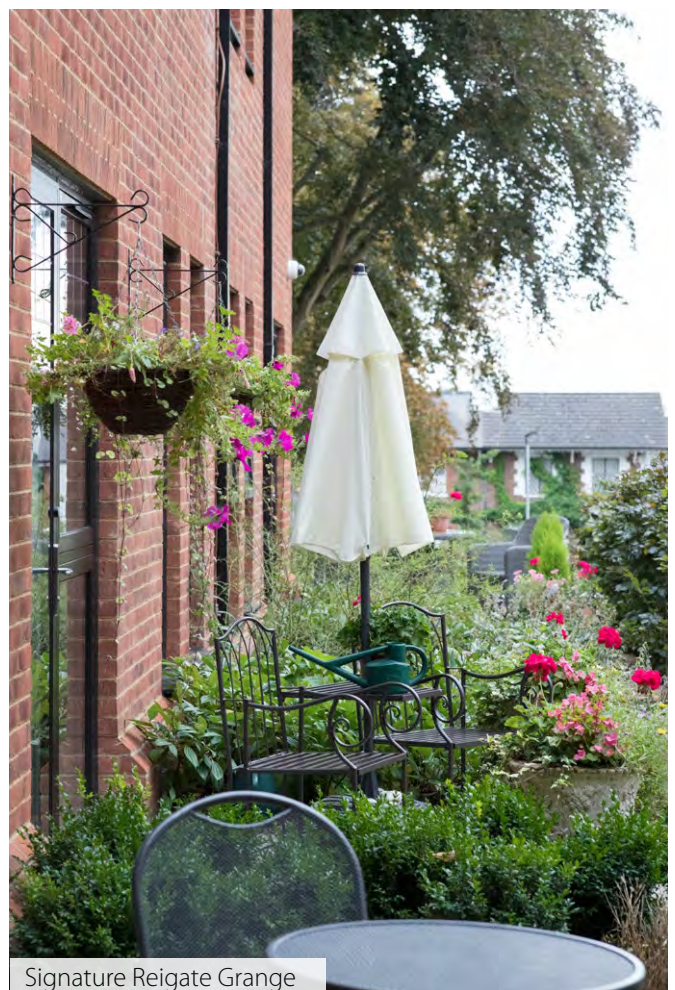
St Bede's, Bedford



Canada Gardens, Wembley



Ansell Court, Barnet



Signature Reigate Grange

4. Shelter and Shade

- Consider the provision of a heated summer house or winter gardens containing indoor plants to enable access to a garden environment at all times of year.
- Use pergola, climbing plants and trees to create light shade.
- Creating a sheltered garden will encourage greater use in warm summer months.
- Create a planting palette which reflects 'seasonal change' to facilitate a resident's association with natural time lines and chronology.



Beachcroft House, Westminster



Charlie Ratchford Court, Camden



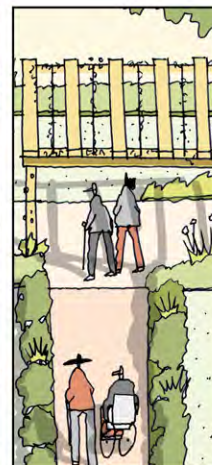
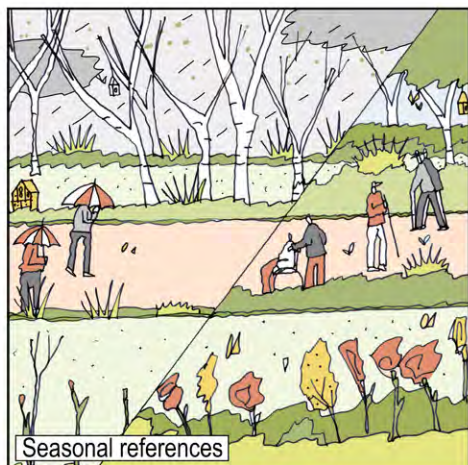
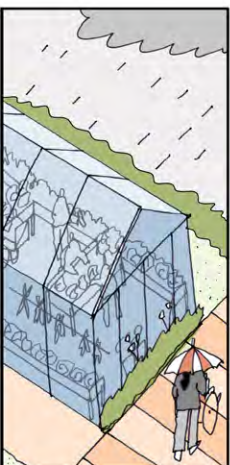
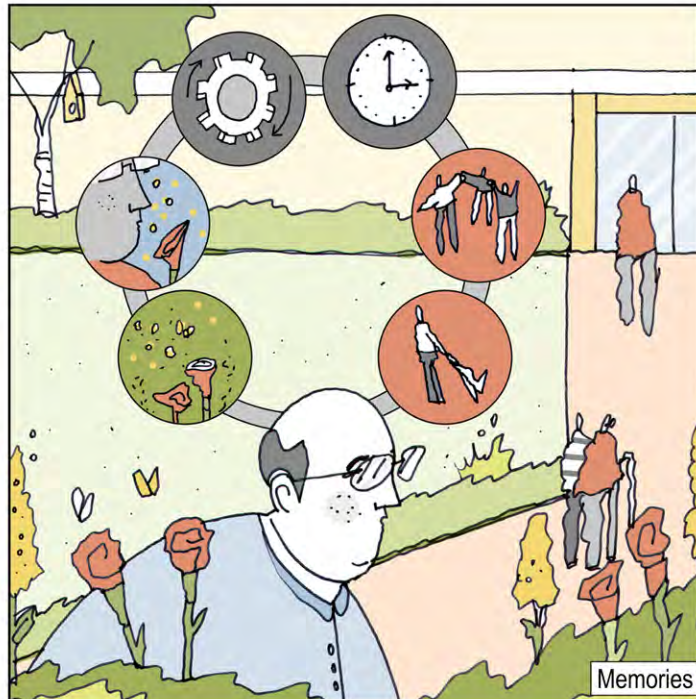
Canada Gardens, Wembley



Stanbridge Earls, Awbridge

A DAY IN A ...

Dementia Friendly Garden



'Beachcroft House, Westminster, is a good example of where these principles have been implemented. Short walking routes lead to sheltered spaces to sit and rest.'



4. Case Study: West Dereham Garden

Client: Queen Elizabeth Hospital,
King's Lynn NHS Foundation Trust

Introduction

PRP was commissioned by the NHS Trust to create a serene garden space for patients, carers, and staff of the West Dereham Ward located at the Queen Elizabeth Hospital in King's Lynn, Norfolk. This ward caters to the integrated care of older people and has recently undergone a comprehensive redesign to become the second dementia-friendly unit in the hospital. Partnered with the West Newton Ward, this facility hosts one of the largest specialty frailty units in the region.

Designed to avoid a clinical atmosphere, the West Dereham Ward incorporates a memory wall and local area photographs. To further enhance this tranquil setting, the garden serves as a natural expansion of the ward, offering direct access from the day room and staff room.

The Brief

The Trust aspired to create a garden that would serve as a secure and accessible environment, empowering patients to contribute to its upkeep and fostering social interactions and family visits. Additionally, the garden was envisioned as a source of enrichment for the daily lives of patients.

Constraints

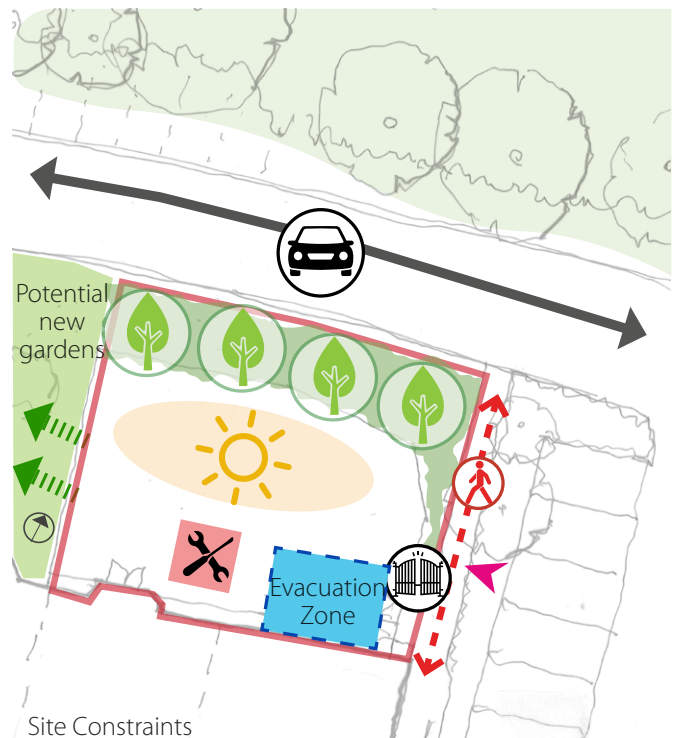
The garden is a compact space of approximately 210 m² and enclosed by a secure timber fence. Emergency access is required and the design must allow for the evacuation of beds. In addition, underground services run along the building edge.

Opportunities

The garden is secure, overlooked and level which provides a fantastic opportunity to create a safe outdoor space. The garden benefits from a mature woodland background giving the feeling of a wider landscape and a larger space.



Existing Garden



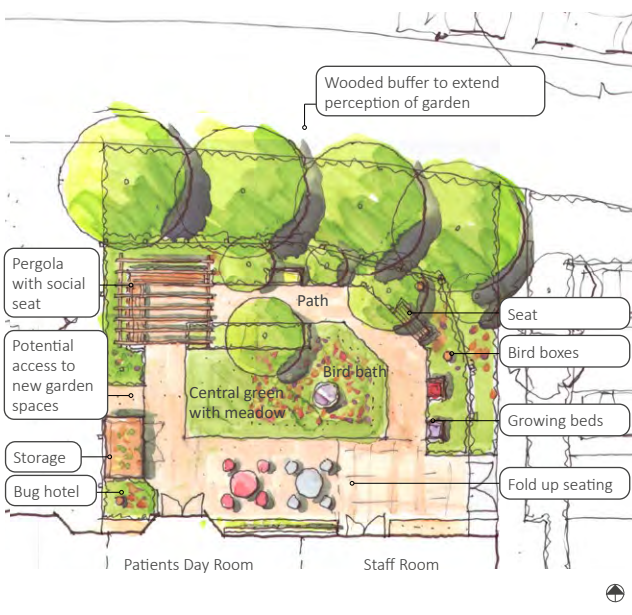
Site Constraints

Following the Trust’s brief, we crafted three sketch layouts that embrace dementia-friendly design principles. Through collaboration with the Trust, we generated multiple ideas for the space’s layout and the activities it could host. Despite the limited size of the area, we ensured that each layout option featured unique elements that utilise and enhance the garden’s existing features.

The Trust was keen in involving staff, carers, patients and families in the design process. The three options were displayed in the Dementia Cafe in the hospital. The designs were subject to a vote which included the Trust, Care of Elderly Doctors and the West Dereham Ward staff. A tick box illustrated list of garden elements was also used to gauge everyone’s interest and determine what was most desired in the garden.

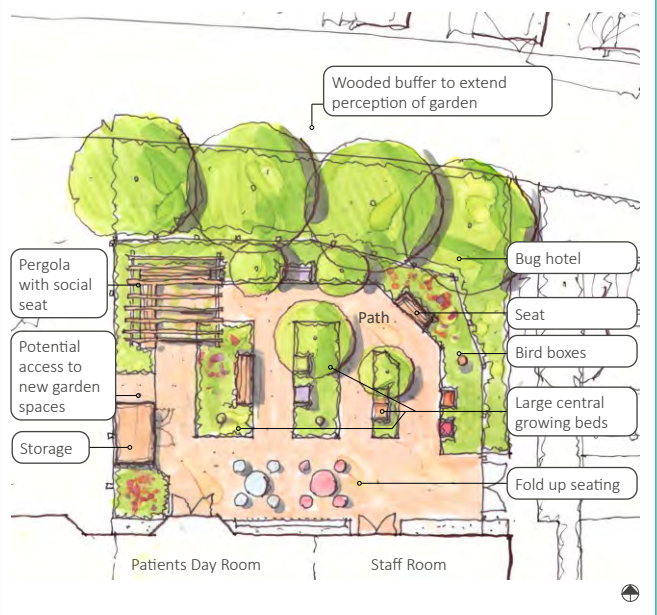
Design Option 1

A legible footpath around a central meadow, with a pergola for shade, raised planting beds and a flexible terrace.



Design Option 2

A garden centered around raised planting beds for the patients to plant and maintain.



Checklist for functions

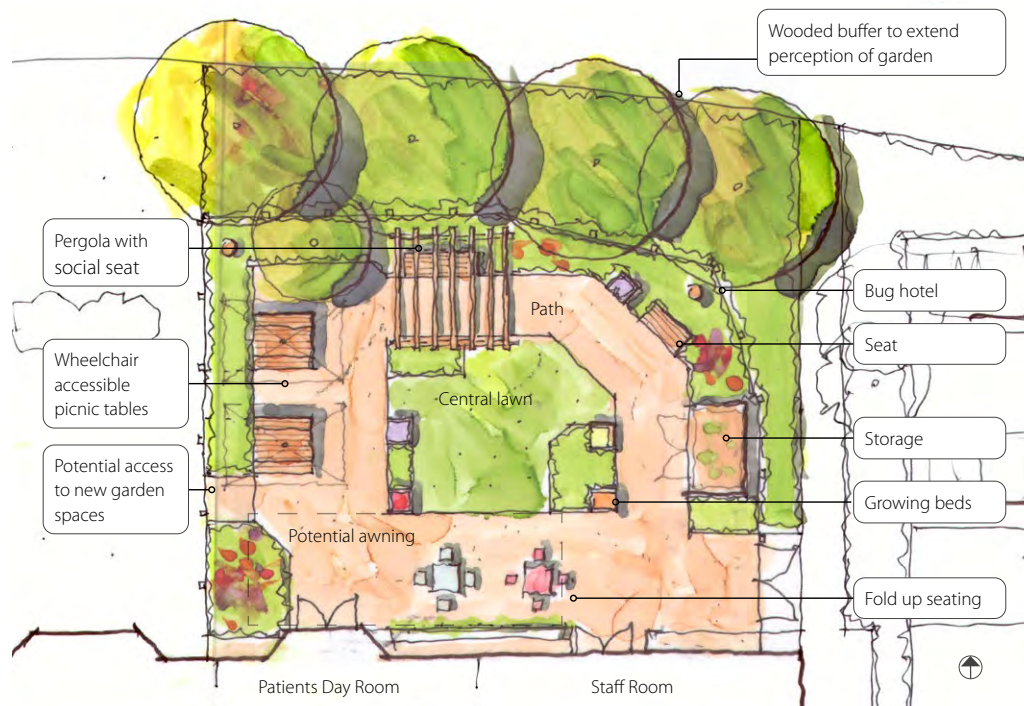
What would you like to have in the garden?

- The purpose of this board was to demonstrate the result of the collaborative processes involved to create the chosen design.
- The process allowed staff, patients and carers to provide input and contribute towards creating a design which provided benefits for all users involved.
- The layout of the board shows which design elements were popular with all involved in the process and which ultimately were included in the final design option.

Chosen design option

The chosen layout is similar to option 1, with a central green, with more emphasis on places to sit, engage and rest. It includes the following elements:

- Two picnic tables with wheelchair accessibility and scope for umbrella canopies to the west of the space.
- Growing area and storage focused to the east of the space, allows for informal surveillance from the staffroom.
- Leafy buffer to the north on graded bank outside of the fence.
- Sequence of landscape features providing prompts to engage and explore the space, including a pergola, colourful raised planters for food growing, seating and ecological features.
- Flexible use space provided in front of the dayroom and staff room.
- Canopy / covered area, over part of flexible use space.

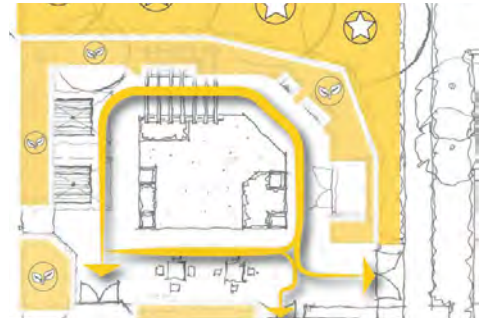


Dementia-friendly design principles

The set of dementia-friendly design principles govern this layout, with each principle addressing a difficulty encountered by the patients with dementia.

Access, movement & orientation

- Access will be level and all routes around the garden will be simply laid out, level and legible with plenty of rest points available.
- Clear navigational trees will be placed around the perimeter of the garden including edible trees such as apple trees.
- A continuous walking route determines the layout and will return the resident to their starting point and never terminate at dead ends.
- The garden is inclusive with the terrace dimensioned to allow for hospital beds to be taken outside and tables are wheelchair accessible.



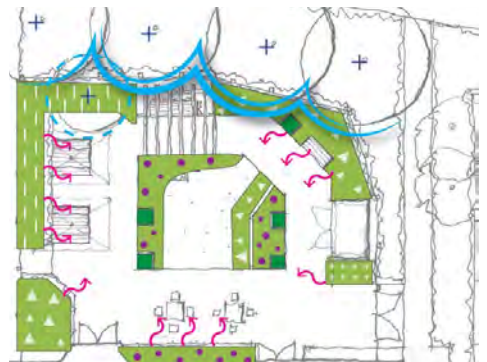
Memory and mental mapping

- Comfortable spaces to sit with protection from wind, rain or sun are provided to allow year-round access to outdoors for residents.
- The sensory elements of the garden design which include strongly scented and pigmented planting help stimulate memories and cognitive activity.
- Raised planting beds are proposed for the patients to engage in gardening and establish a sense of routine, familiarity and revive memories.



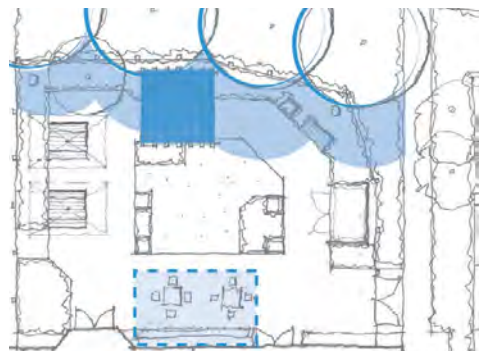
Sensory stimulation

- The external environment will provide seating spaces for quiet personal contemplation.
- Introduction of colourful and highly textured plants such as sunflowers, fan plants and Mexican orange sundance will provide stimuli for the visually impaired.
- Strongly scented plants such as lavender, spearmint, rosemary and wormwood will act as 'markers' in the garden.
- Provision of raised beds along walking routes will help to make the plants more accessible to wheelchair users.



Shelter & shade

- A large pergola will form a centrepiece of the design, creating a new shaded outdoor space to relax and provide respite for those passing through on a walk around the garden.
- Tree planting will further increase the amount of shade that can be used on sunny days.
- The use of awning will provide sheltered areas with seating allowing variable shade condition depending on the weather conditions.



Benefits to the residents, on-site staff and carers

The garden design aims to enhance the wellbeing of patients and carers alike by providing a diverse range of experiences while minimising the impact of dementia on the enjoyment of the garden. It will also provide a stimulating place to work as well as a range of facilities for visitors alike.

Adhering to the four core design principles will foster independence and freedom within the garden for those with dementia, motor difficulties, visual impairments and orientation and wayfinding issues.

The small site has been designed to maximise the connection to a variety of plantings and the natural landscape, encouraging stimulation of the mind and usage of a broader range of senses. Seating and lawn space foster movement, exercise, and socialising with other patients, while also allowing for moments of quiet reflection. These activities build a sense of normality and structure to the daily routine, ultimately contributing to a holistic treatment plan in conjunction with medical assistance.



Disclaimer

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About PRP

At PRP, our mission is to create exceptional homes where residents feel secure and proud to live. We take great care in designing and delivering housing and care environments for older people, with a dedicated team of over 40 architects and landscape architects leading the charge. We collaborate with charities, local authorities, housing associations and private developers every step of the way, from the earliest planning stages to project completion. Our portfolio boasts a diverse range of projects, from small specialist dementia care homes to expansive IRCs with varying tenures. We are driven by our passion for quality design, and our expertise in this sector has earned us numerous awards and recognition. Our innovative buildings and landscape designs are both efficient and impactful, making a positive impact on the lives of those who call them home.

The logo for PRP, consisting of the letters 'PRP' in a bold, red, sans-serif font.

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About the Housing LIN

The Housing LIN is a sophisticated network bringing together over 20,000+ housing, health and social care professionals in England, Wales and Scotland to exemplify innovative housing solutions for an ageing population. Recognised by government and industry as a leading 'ideas lab' on specialist/supported housing, our online and regional networked activities, and consultancy services:

- Connect people, ideas and resources to inform and improve the range of housing choices that enable older and disabled people to live independently
- Provide insight and intelligence on latest funding, research, policy and practice to support sector learning and improvement
- Showcase what's best in specialist/supported housing and feature innovative projects and services that demonstrate how lives of people have been transformed, and
- Support commissioners and providers to review their existing provision and develop, test out and deliver solutions so that they are best placed to respond to their customers' changing needs and aspirations.

To access a selection of related resources on designing extra care housing, visit our 'design hub' at: www.housinglin.org.uk/Design

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