

Early Learning and Care Setting: Site Location, Approach and Design

An Early Learning and Care setting should place children at the heart of the community. The location and site design should provide an optimum environment for children, while promoting positive relationships between children, families, practitioners and the wider community.

01





Snapshots

A selection of images taken by the children from across the case study settings.





Site Location, Approach and Design: Overall Design Issues

The location, approach and design of an Early Learning and Care (ELC) site are critical. An ELC setting should be well integrated with the local community and set within a high-quality public realm where the adjacent footpaths, streets and roads are accessible, understandable and easy to use for all families and ELC practitioners. The approach to the site should create a positive relationship between the setting and the community. The site design should provide a safe, comfortable and stimulating environment with high-quality pedestrian, cycling, parking, and pick-up and drop-off facilities.

When considering the site location, approach, and design of an ELC setting, think about how these aspects will support the Key Design Issues as framed by the selected **Síolta Standards** (See **Introduction page 16**).

	Rights of the Child	Centrally located and well-connected settings that allow children experience and participate in the community as active citizens.
	Parents and Families	Centrally located and linked to public transport, where available, to provide easy access for families and to facilitate and encourage greater parental engagement.
	Interactions	Located and designed to provide positive interactions with the community while also creating onsite conditions that enhance interactions between children, families, and practitioners.
	Play	A public realm and site layout that provide children with accessible, safe, and comfortable environments to play, explore and learn.
	Professional Practice	Settings that are accessible and provide a supportive physical environment for practitioners to develop their skills and professional practice.
	Community Involvement	Located and designed to maximise community involvement and ensure that the ELC setting enhances the local community.

1.1 Site Location



01 Collage of images showing various ELC locations.

Design features

- Demonstrates variety of rural, suburban, urban settings.
- Illustrates the various site contexts for ELC settings including settings that are: attached to private dwellings; small, medium, and large standalone settings; settings that are integrated into larger urban blocks; or those that are part of a community centre or similar.



Strong Relationship with the Community

Design considerations and awareness



➤ 02 Giraffe Childcare, National College of Ireland, Mayor Square, Docklands, Dublin.

Design features

- Centrally located ELC setting in close proximity to public transport, residential apartments, offices, shops and other local services.
- Small public space in front of the setting provides a social area for people entering and leaving the setting.

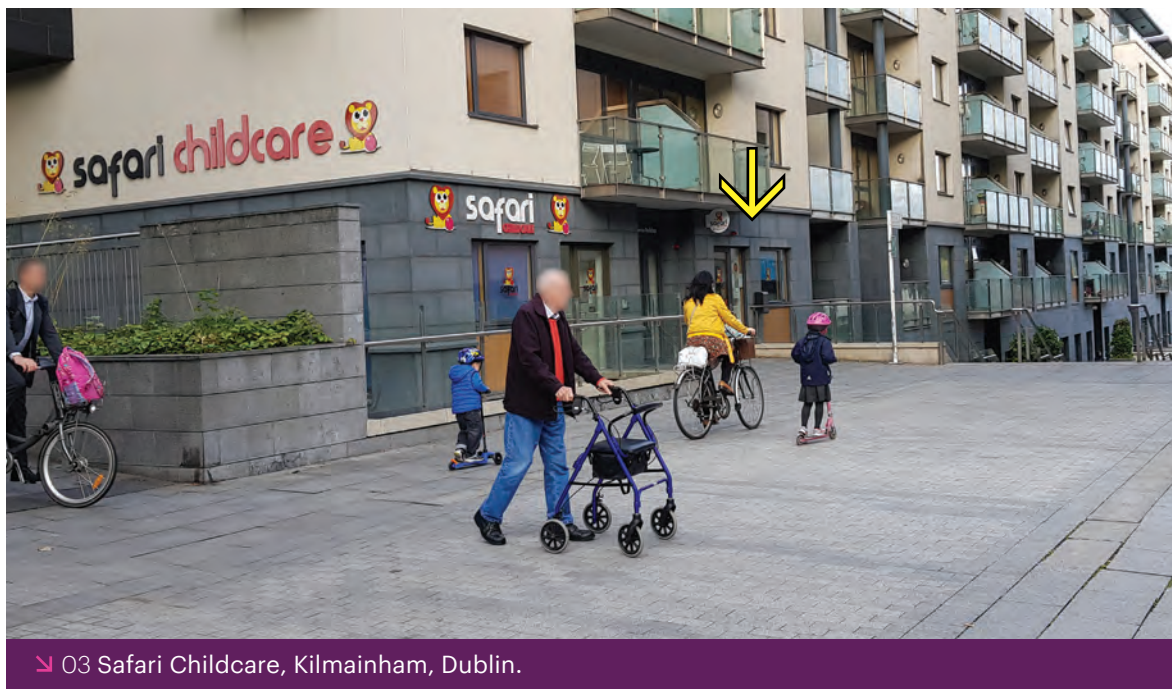
Design tip

- Covered entrance would make the setting more visible on approach (see arrow).
- A ramp to the entrance would provide access for buggies and mobility equipment.
- The public space would be improved with bicycle locking facilities and seating.

An ELC setting should be easily accessed by families, practitioners, and visitors, and where possible, be well connected to transport networks, local shops and services such as doctors, pharmacies, or primary schools. The **First 5 Strategy** envisages additional supports for children such as speech and language or occupational therapy delivered through ELC settings. Ease of access is important for the effective delivery of these supports if ELC is to be optimised in this way.

An ELC setting should place children at the heart of a community and create a positive relationship between the setting and its location. The setting should be visible in the community and designed to maximise family and community involvement. The setting should enhance the local community and clearly express its role as an important element of community infrastructure.

⬅ **Note:** For more information about ELC location see the **Childcare Facilities Guidelines for Planning Authorities 2001** and all subsequent updates.



03 Safari Childcare, Kilmainham, Dublin.

Design features

- Generous pedestrian areas create a safe, comfortable and calm approach.
- Being overlooked by apartments and high levels of pedestrian and vehicle activity improves passive security.

Design tip

- The entrance to the setting is not clearly visible on approach and this could be improved by highlighting the entrance with colour, planting or an obvious entrance canopy (see arrow).
- This area could be developed with seating and dedicated bicycle locking facilities.

The public realm refers to the public footpaths, streets, roads, squares, parks, and other public open spaces in villages, towns and cities. Effective ELC provision will be set within a supportive public realm that provides accessible, safe, and comfortable public spaces for travel, play and social interaction.

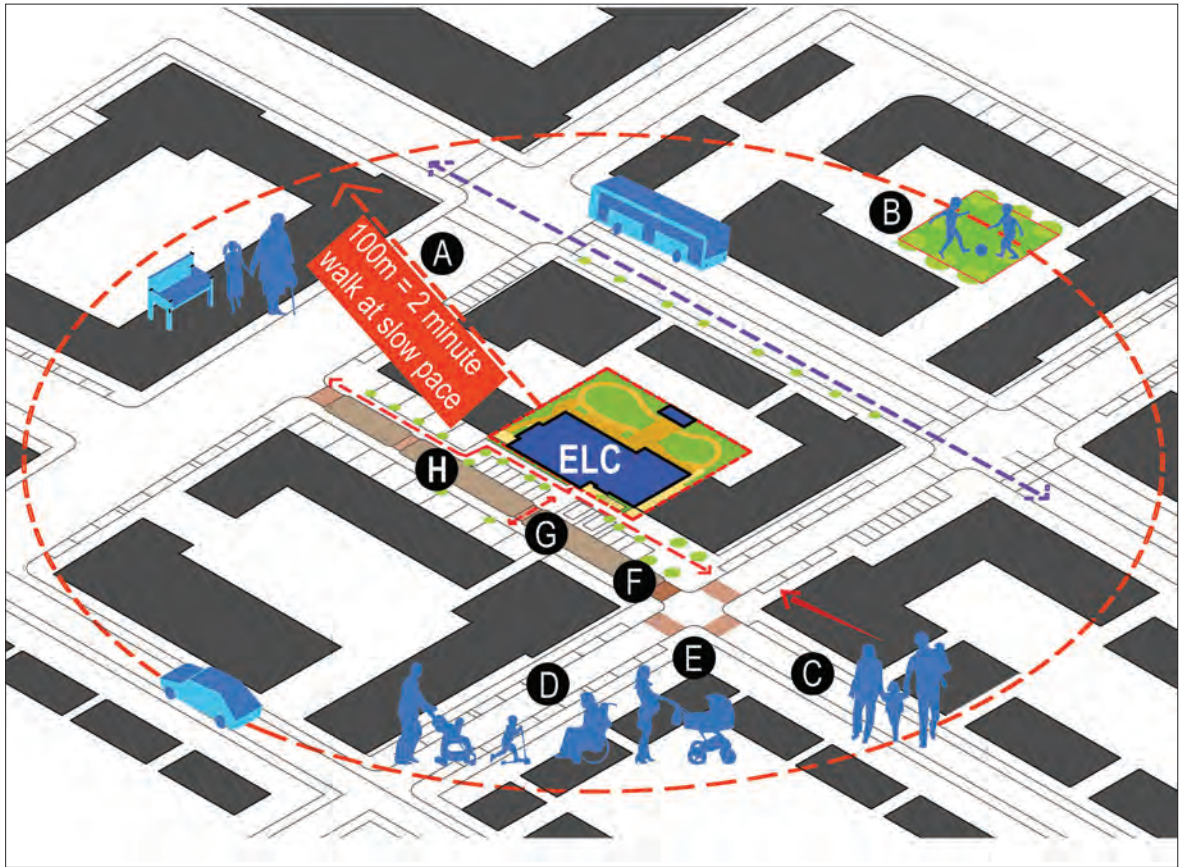
In addition to medium or large parks and playgrounds, a supportive public realm will provide smaller incidental public spaces such as extended pedestrian footpaths, small plazas, or 'pocket parks'. These should be connected by generous pedestrian footpaths with plentiful seating, good street lighting, and attractive planting. Reduced traffic speeds will create safer and more comfortable conditions for all users, particularly where children are playing or cycling bikes, or where adult cyclists are carrying children.



Note: For more information about public realm design and ELC see the 'First 5 Strategy' and the 'Childcare Facilities Guidelines for Planning Authorities 2001' and all subsequent updates.



Technical sketch 1: Indicative Urban Layout showing Key Location Factors and Public Realm Issues



- A** ELC setting within 100m of local services and public transport stops. At a very slow walking pace a person can travel 100m in approximately 2 minutes. For many older people or those with mobility difficulties a walking distances up to 500m is considered reasonable. Seating every 100m to 125m provides resting points.
- B** Proximity to parks or playgrounds will enable ELC practitioners or parents to take children to these amenities.
- C** The ELC setting is very visible within the community and places the children at the heart of the community.
- D** The surrounding public realm provides an accessible, safe and comfortable environment for all people. Placemaking and pedestrians are prioritized.
- E** Tight corner radii down to 1-3m forces vehicles to slow down as they turn the corner.
- F** Narrowing of the carriageway and the introduction of raised tables creates a gateway to the street, restricts traffic movement, and causes vehicles to slow down.
- G** Frequent raised crossing points particularly at strategic locations such as in front of the ELC setting.
- H** Wide footpaths up to 2.4m and wider in certain places such directly outside the setting.

Universal Design Guidance

- Where possible, choose a central location close to local services such as shops or doctors' surgeries and amenity spaces such as playgrounds or parks.
- Proximity to public transport networks will facilitate more sustainable travel patterns and provide easy access to families, staff and visiting health and social care professionals.
- Choose a site that places the setting at the heart of the community and maximises the potential for interaction and engagement with people and the local context.
- An ideal site will balance connectivity with the community with a calm and safe environment for young children.
- Ensure the location can facilitate safe drop-off and collection of children.
- Consider how the street where the ELC setting is located can be made safer and more comfortable using traffic-calming measures such as traffic raised tables or platforms, narrowing of road carriageways, or tighter corner radii to slow down vehicles as they turn into the street.
- Reduced speed limits such as 30km/hour zones will create safer and more pleasant conditions for people as they arrive and depart. This is important where children are playing, riding bikes and scooters, or where children are being carried as passengers on a parent's bike.
- Provide pavements with a minimum width of 2400mm without any reduction or interruption to the passageway.
- Minimise street bollards and instead use seating, planting, or other essential street furniture to delineate and protect footpaths where required.
- Provide comfortable seating with back and arm rests every 100m to 125m. Arm rests help a person get in and out of a seat while back rests provide additional support and resting places to lean on as a person walks along a street.
- Ensure that artificial lighting provides even illumination along pavements. Pedestrian areas should have an average maintained illuminance of 30 lux, while entrances, steps and ramps should have an illuminance of 100 lux.
- Ensure that lighting does not produce a glare or result in excessive reflection or shadows as this may cause discomfort or disorientation for some people.
- Minimise street signage and concentrate on key essential information especially at junctions. Use a legible and familiar signage format that will be recognisable to most people.



1.2 Site Approach



➤ 04 Happy Days Community Creche, Ballyporeen, County Tipperary (Two views of the setting).

Design features

- Strong relationship between the setting, the public road, the public playground, and local housing.
- Soft and permeable boundary between the car park and the public realm helps connect the setting with the community.

Design tip

- The main site entrance does not stand out on approach (see arrow). This could be rectified with signage.

Boundaries and Interface with the Community

Design considerations and awareness

The intersection of home/family, community, and ELC is an important part of a child's development. Continuity between the home and an ELC setting will be supported if the setting feels like an integrated part of the community and does not represent an abrupt change for the child. A building interface that generates a sense of place and reflects the local context and identity, will reinforce this continuity while creating a better relationship and connection with the community. This continuity will also be helped by welcoming and more visually permeable boundaries that enhance the setting and link it to the community.

This approach supports many of the **Síolta Standards** outlined in the introduction. Standards such as **Rights of the Child** and **Community Involvement** call for a well-connected and inclusive environment that brings together the setting, the family, and the community to support the holistic development of children.



05 Ballyroan Library, Dublin.

Design features

- While this is not an ELC building, it demonstrates how a well-designed boundary and public interface can create a strong relationship and integration between the building and the public realm. This relationship is strengthened by the bay windows that align with and correspond to the external seating.

Design tip

- The seating provided may not be comfortable for all users. Seating with arm and back rests would be more supportive.



➤ 06 Giraffe Childcare, Adamstown, Dublin.

Design features

- The setting is well integrated into the community and is near public transport and the local urban centre.
- The main entrance (see arrow) is set back from the main street and is located within a pedestrianised public space that provides safe and comfortable access.
- Dished kerbs (see arrow) provide level access between the road and the pavement.

Design tip

- Seating within the entrance space would provide a resting point for users as they enter and leave the setting.
- Wayfinding, signage to the entrance would help users find the setting.
- Bicycle racks would provide secure parking for all users.

A balance must be struck between community integration and the safety and security of children in the setting. This can be handled through a graduation of ELC spaces from more visible and semi-public spaces such as reception or communal areas, to more private and fully secure spaces. The main outdoor spaces will require secure boundaries, but this does not prevent a positive visual connection with the community.

Tobacco Free Ireland, the national tobacco control policy approved by Government in 2013, calls for the provision of tobacco free public places to protect children. The creation of a tobacco exclusion zone around an ELC supports the denormalising of tobacco use. Consideration in the design of external boundaries and interface with the local community should not include the provision of ashtrays, shelters or smoking points.



07 View of boundary fence of Asilo Nido La Chiocciola, San Miniato, Italy.

Design features

- The setting boundary supports a relationship between the setting, the community and the people in it.

Design tip

- Planting could be used to soften the appearance of the boundary fence.



08 Giraffe Childcare, Adamstown, Dublin.

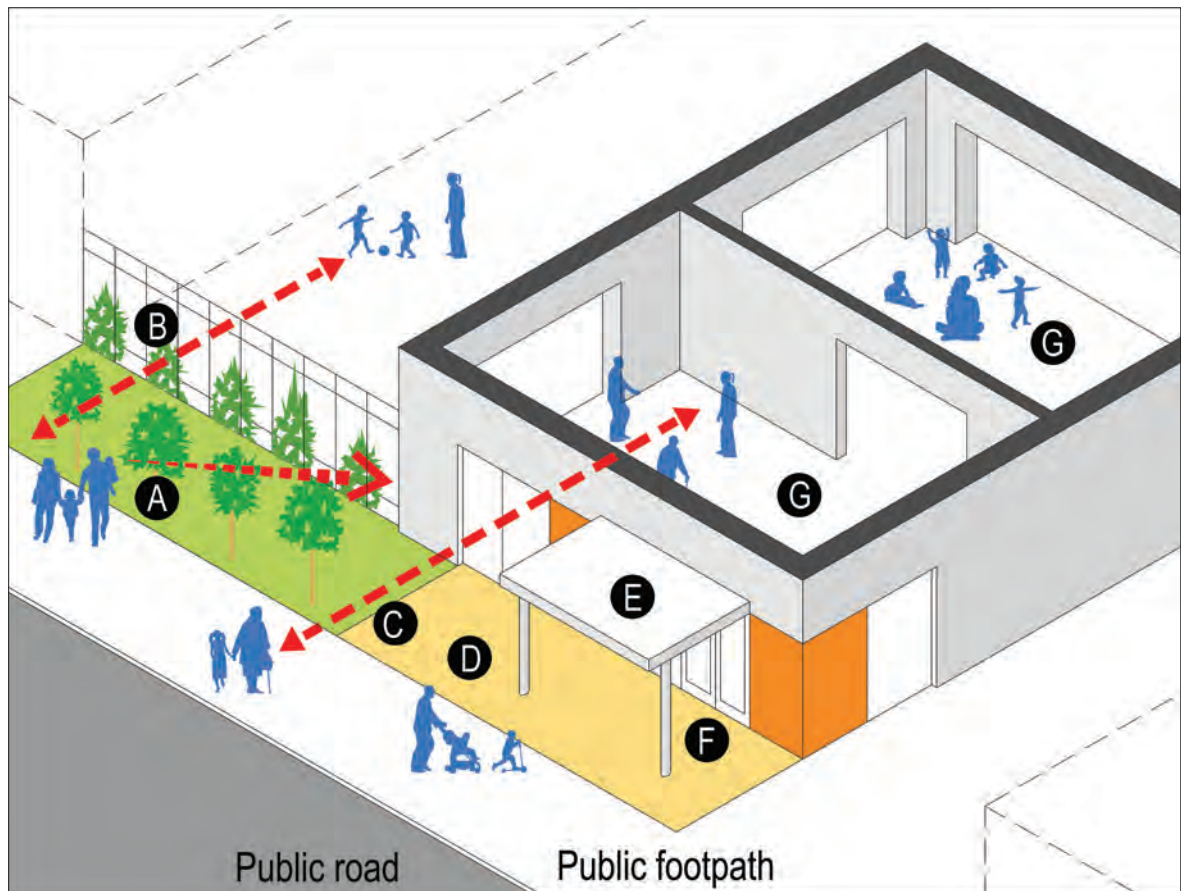
Design features

- The setting boundary clearly addresses the public realm and reinforces the relationship between the setting and community.
- The pedestrian area adjacent to the building provides quiet and calm boundary conditions while creating a safe and comfortable approach space for users.

Design tip

- Seating along the pedestrian route would provide resting points for all users.

Technical sketch 2: showing relationship between the setting and the adjacent community.



- A** The setting is well integrated into the community and is visible, easily identified and accessed from the public realm.
- B** Permeable boundaries help embed the setting and create connections and a relationship between the setting and the community. The main outdoor spaces will require secure boundaries but these can be provided with railings or screens that provide views out for the children and views in for people passing by. Plant trees, shrubs and climbing plants such as clematis, star jasmine or wisteria. These will also bring nature to the setting and provide multisensory experiences for the children.
- C** Visual connections between selected internal spaces, such as a lobby, and the public realm will help foster engagement with the community.
- D** Providing a small forecourt will create a transition area between the setting and the public realm and provide a waiting space or gathering area.
- E** A covered entrance will provide a visual cue while also offering shelter and shade.
- F** A strong accent colour or tonal contrast will help identify main entrance.
- G** Locate public-facing spaces to the front with more private spaces located to the rear.



Universal Design Guidance

- Locate and site the ELC setting to maximise interaction and engagement with the local community.
- While safety and privacy for certain areas or activities within the setting are important, consider how site and building boundaries can create visual connections and engagement between the setting and the local context in a safe and secure manner.
- Consider how certain parts of the setting such as the entrance, internal social areas or selected outdoor spaces can be visually connected to the community through visually permeable boundaries or shared spaces in a safe and secure manner.
- Use the building mass, landmarks, focal points such as thresholds, planting, building materials, seating and lighting to create a legible and recognisable setting with a strong sense of place.





1.3 Site Entry

Design considerations and awareness

An ELC setting can take many forms ranging from a building that directly adjoins the street to being located on a larger site where the main building is set back from the boundary. In all cases the main entrance site entry points should be easily identified, located, and accessed on approach.

On a larger site consider the need for more than one site entrance to ensure easy access for people arriving from different parts of the community. Where such sites are adjacent to public transport routes, locate site entrances as close to public transport stops as possible to reduce travel distances. The natural path to the site entrance should not be broken by pedestrian railings or barriers.



09 Site access to Family Tree Creche, Limerick.

Design features

- Setting is clear, visible and well-integrated.
- The low, open fence enables children to see the setting and the outdoor play area as they enter.

Design tip

- If the gate (see arrow) was picked out in contrasting colour it would be easier to see.



➤ 10 View to front of Asilo Nido La Chiocciola, San Miniato, Italy.

Design features

- The location of the pedestrian gate makes it easy to find and access the site.
- The design of the boundary including the low wall and fence makes the setting visible and integrated within the community.

Site access points should be clearly identified using simple, legible signage. For urban or suburban settings the building and main entrance will often be near the site entrance and so the site entrance will be easy to locate. In rural or parkland settings the site entrance, particularly pedestrian entrances, may be harder to identify and will require clear signage and visual cues.



➤ 11 Site entrance to Park Academy Nature Kindergarten, Kilruddery, Bray, County Wicklow.

Design features

- Outdoor ELC setting set in natural woodland as part of a large historic estate with house, farm and extended grounds. The area in the foreground is the parking area and the setting is entered through a wooden gate embedded in the trees. The setting has been designed to be as naturalistic as possible in line with an outdoor ethos and the overall ethos of the historic estate.
- Large format signage used to identify site access.
- Timber gateway (see arrow) to the rear helps to identify the entrance point.

Design tip

- Large log along entrance path may present a trip hazard for some users.
- Increasing the colour contrast on the signage would make it easier to see.



Universal Design Guidance

- Create a visually distinct entrance that clearly identifies the main access to the ELC site.
- On larger sites where there are options regarding site access location, select a point that minimises walking distances from key points such as public transport stops. For many older people (for example, grandparents dropping or collecting children) the walking distance to key destinations or public transport stops should ideally be within 500m.
- If possible locate site access points to minimise travel distances from the site boundary to the ELC building entrance.
- Choose a site entrance that will allow a level path through the site, or at least a route that minimises any gradient. Where the gradient is between 1:60 and 1:25 provide regular resting points. Provide resting points at maximum intervals of 19m where the gradient is 1:25 and maximum 25m intervals when the gradient is 1:33.
- Design access routes steeper than 1:25 as a ramp.
- Use clearly legible wayfinding signage to direct a person to the site entrance.
- Use landmarks, focal points, planting, or other features to reinforce the site access and create clearly visible legible entrance points.
- Well-designed artificial lighting should be used to illuminate the site entrance and wayfinding signage during low light conditions.
- The pedestrian threshold to the site or footpath leading onto the site should be flat, even and sufficiently wide to allow the safe and comfortable passage of pedestrians pushing buggies or using wheelchairs.
- All surfaces should be non-slip (at least R10 slip resistance), non-glare, and avoid strong patterns or sharp tonal or colour contrast.
- Place seating close to the access to provide a resting and orientation point for people entering and leaving the site.

1.4 Site Design



12 Ballindereen Community Childcare and Education Centre, Ballindereen, County Galway.

Design features

- Main entrance is visible on approach.
- Car parking spaces provided near the entrance.
- Natural landscaping, planting and trees creates a calm, therapeutic entrance zone.

Design tip

- The lack of a dedicated pedestrian path leading to the entrance may cause difficulties for some users, particularly during peak traffic time.
- Clear signage would help people locate the entrance door (see arrow).



Site Layout

Design considerations and awareness

An ELC setting can take many forms ranging from a private dwelling to a standalone setting within the community. It might be co-located with a primary or post-primary school. Consequently, the site layout of the setting will vary greatly depending on its location and site circumstances.

On larger sites, or for a setting that is co-located with other services, the site layout should be clearly legible and supported by good wayfinding to orientate the setting user and help them navigate to the main entrance. The main entrance and associated entrance spaces should act as a focal point within the site. The building entrance should be conveniently located, easily identified and accessible for those arriving to the setting on foot, bicycle, or vehicle.



➤ 13 Primary School in The Silvermines, Nenagh, County Tipperary.

Design features

- Attractive soft and hard landscaping creates an interesting access route that prioritises pedestrians over vehicles.
- Bright colours make the building easily identified and visible on approach.
- Covered outdoor space to the front of the building creates a sheltered area for children during the day, and for parents dropping and picking up children.

Design tip

- Avoid strong patterns on the surface finish as these may cause visual confusion or spatial disorientation for some people, especially for those with cognitive or vision difficulties who may see the dark to light squares as change in levels.

The site layout should help the setting integrate and connect with the community while also creating a strong sense of place for the setting. The external site spaces should be treated as part of a continuum that continues into the building and combines with the internal spaces to create a coherent and unified whole.

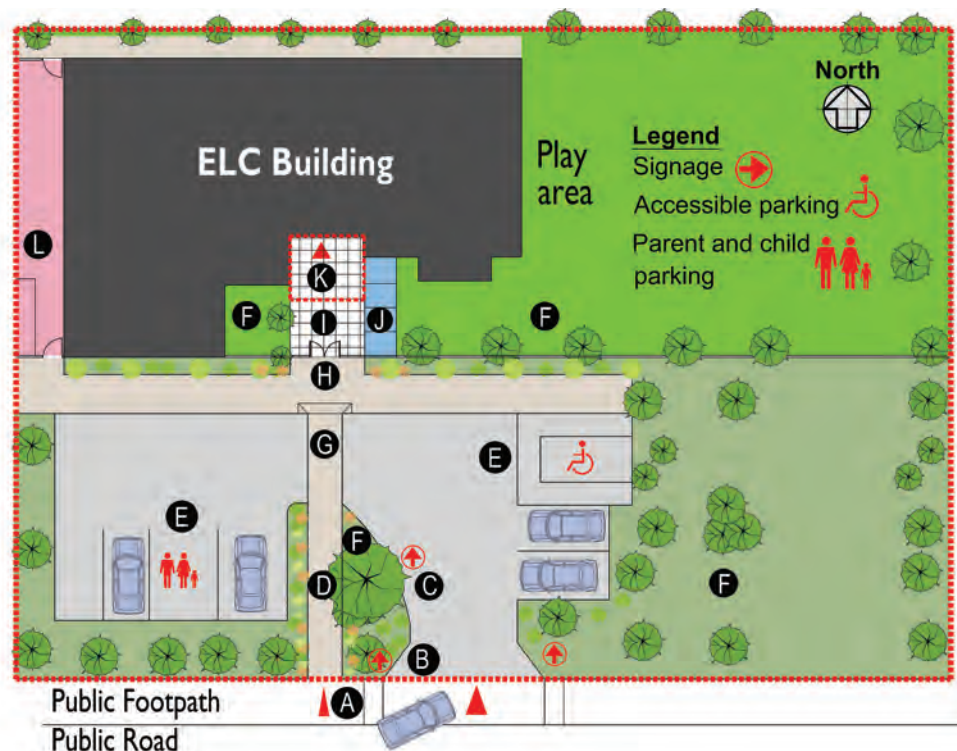
The site layout, particularly the main pedestrian access route, is an important part of the setting and should support play, adventure and multi-sensory experiences for children as they enter, exit and move about the site.

The site layout also determines the location of the building onsite and in turn establishes the relationship between the ELC building and the community.

➞ **Note:** Specific guidance regarding parking, pedestrian access and other related site design issues are covered in the next few sections.

⬅ For information regarding Research on Universal Design of Shared Educational Campuses in Ireland, see <http://universaldesign.ie/Built-Environment/Shared-Education-Campuses/>



Technical sketch 3: Indicative Site Layout.

- A** The main vehicle and pedestrian site entrances are easily identified, located, and accessed from the public realm.
- B** Simple and clear signage is provided at the site entrance to identify the setting.
- C** Where the main door is not visible from the site entrance, use wayfinding signage to direct people.
- D** There is a clear and easily identified pedestrian route from site entrance to the building entrance. All route surfaces are smooth and solid underfoot (i.e. not gravel or pebbles), are non-slip, non-glare, and avoid strong patterns.
- E** Spacious carparking with an adequate number of spaces is located close to the building entrance (the number of spaces depends on the size of the ELC). Accessible parking space and parent and child spaces are also provided.
- F** Attractive site landscaping with diverse planting creates a multi-sensory, restorative and healthful space for children.
- G** The entrance is clearly identifiable and easily reached from the parking and set-down areas via an accessible footpath.
- H** The clear opening width of the exterior gate is a minimum of 1000mm.
- I** An entrance patio, with a smooth, solid, non-slip surface is provided as a waiting area close to the entrance. This has some seating and has adequate artificial light.
- J** A covered external buggy storage area is provided near the entrance.
- K** A covered external waiting area is provided adjacent to the entrance provides shelter to the entrance and acts as a transition area between inside and outside.
- L** Refuse and recycling store placed out of reach of children but easily reached, accessed, and used by staff. Provide 1500mm turning circle in front of main storage areas. Ensure access paths are accessible as per D above.



Universal Design Guidance

- The site layout and design should create a playful setting with opportunities for adventure, challenge and learning within the site. Hard and soft landscaping should be used to create a natural environment that supports diverse native plants and wildlife, such as birds, insects and worms.
- Attractive site landscaping with diverse planting should be used to create a calm, gently stimulating multi-sensory, restorative and healthful space for children as they move through the site.
- At the same time, the site design should create a legible layout supported by clear wayfinding that will orientate users and help them navigate to the entrance or site exit when leaving.
- Where the main entrance is located at a distance from the site entrance, ensure there is a clear and easily identified pedestrian route from site entrance to the building entrance.
- On larger sites or where a setting is co-located with a school or another service, good site wayfinding will help people find their way around. This can be provided through clear, consistent, and easily read signage; supported by distinct paths or routes, and recognisable visual cues such as seating, building elements, artwork or planting. Provide simple and clear signage that communicates the relative positions of any other buildings on the site.
- Pedestrian routes should be flat, even and sufficiently wide to allow the safe and comfortable passage of groups of pedestrians. All surfaces should have sufficient drainage, be non-slip, non-glare, and avoid strong patterns or sharp tonal or colour contrast.



ELC practitioner, Ballinderreen Community Education and Childcare:

“As one walks into the grounds the trees and the outlay gives a welcoming feeling.”



Set-down Points and Parking

Design considerations and awareness

ELC settings will require an adequate number of generously sized parking spaces near the entrance to support parents, staff and those with deliveries. The number of spaces will depend on the size of the setting and local authority parking standards set out in local development plans.

Parking and set-down areas can be problematic for many settings at peak times when parents are dropping off or picking up children. All settings should make sure that there are bicycle and buggy storage facilities to ensure parents and staff can use alternative forms of transport. An appropriate number of parking spaces and set-down areas should be provided, particularly for users with mobility challenges.




➤ 14 Happy Days Community Creche, Ballyporeen, County Tipperary.

Design features

- Parking and set-down area in proximity to main entrance.
- Level access pathways providing a clear pedestrian route to the main entrance.
- Artificial lighting provided by post lighting.
- The covered entrance provides a sheltered transition space and acts as outdoor buggy storage.

While due consideration must be given to travel distances from the car parking area to the entrance of the setting, this must be balanced with the creation of a safe, calm and welcoming entrance space that supports the play and developmental needs of children. This space should also function as a waiting and social area for families as they arrive or depart the setting, particularly for users with mobility challenges.

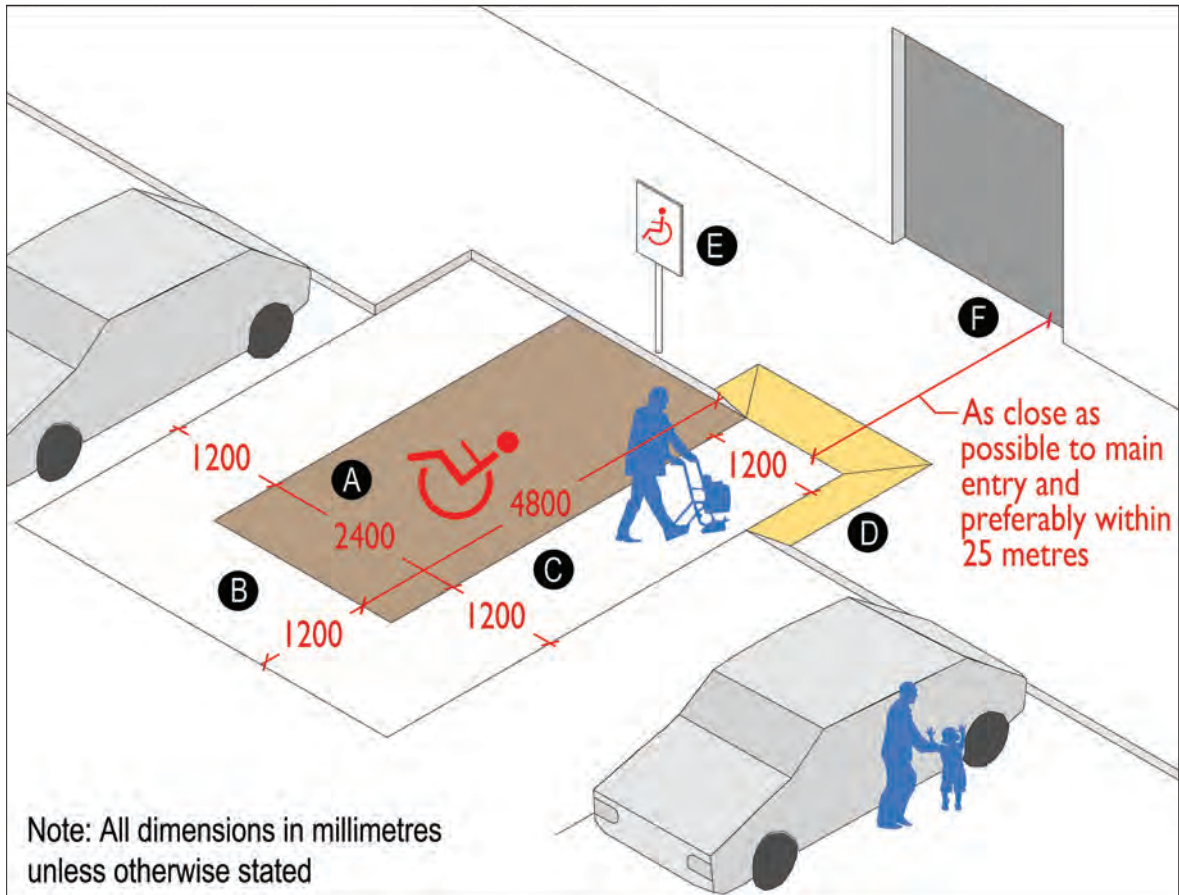
 **Note:** Specific guidance regarding pedestrian access, bicycle and buggy storage, and other related site design issues are covered in **Section 2**.

Universal Design Guidance

- Provide good bicycle locking/storage and buggy storage to encourage people to walk or cycle. This also encourages the use of public transport where it is available.
- Ensure that whatever parking or set-down areas are provided do not dominate the entrance area or diminish the quality of the space for children and families as they enter and leave the setting.
- Provide an adequate number of generously sized parking spaces to accommodate parents and children, baby bags and other items.
- For safety reasons, reverse parking should be encouraged through the use of signage in parking areas. Reverse parking means that when children are entering or leaving the back seat of a car they will be at a greater distance from the road.
- Provide adequate set-down space for people to drop-off and pick-up.
- Provide at least one accessible car parking space near the main entrance.
- The entrance should be clearly identifiable and easily reached from the parking and set-down areas via an accessible footpath.
- Provide good levels of artificial lighting to the parking and set down areas to ensure they are safe, comfortable and accessible in low light conditions (see lighting on page 71 for more guidance).



Technical sketch 4: Designated accessible car parking space located close to the setting entrance providing easy access to the setting for drivers or passengers with a Disabled Person's Parking Permit.



- A 2400mm x 4800mm space.
- B 1200mm rear access zone.
- C 1200mm side access zone.
- D Dished kerb at least 1200mm wide.
- E Accessible parking bay sign fixed to post with the lower edge of the sign set 1200mm above ground level.
- F Locate accessible parking as near to the main building entrance as possible and preferably within 25m.

Steps, Ramps, Landings and Handrails

Design considerations and awareness

Where a change of level occurs, both steps and a ramp should be provided as a choice for users. Ramps and steps should be clearly visible upon approach and logically located, so they are easy to find. Level landings should be provided at the top and bottom of steps and ramps along with intermediate landings on longer flights to provide resting points.



15 Entrance ramps, steps and handrails, Tigers Childcare, Blanchardstown, Dublin.

Design features

- Steps are provided in logical location and lead directly to the main entrance.
- Integrated approach to ramp and steps provides good choice for people and makes both elements easy to see and use.

Design tip

- Handrails to both sides of the ramp would provide support for a person as they travel on the ramp.
- Steel handrails can prove uncomfortable to the touch for many people especially in cold conditions.
- Handrails should extend 300mm beyond the first and last step.
- 50-70mm deep contrast colour nosings across the width of the steps would make them easier to see.

Ramps should be wide enough to accommodate easy access at peak times and allow people to pass each other in comfort including people in wheelchairs or those with buggies and children. Ramps should have a maximum gradient of 1:20 as steeper gradients cause difficulties for people using wheelchairs or pushing buggies. If the rise of the ramp is 2000mm or greater, an alternative means of access such as a lift or platform lift will be required.



The dimensions of steps (rise and going) should be consistent throughout the flight and single steps should be avoided as they can be a trip hazard. Corduroy pattern tactile warning surface indicators (TWSI) should be used on the top and bottom of all flights so they are safe and easy to use for people with visual difficulties.

Handrails offer support and act as a wayfinding device by providing an additional visual cue. Providing a handrail that contrasts visually with the background will make the handrail more visible. Handrails should be fitted to both sides of a flight and the provision of additional handrails between 600 to 750mm above the pitch line will support children and people of short stature.



➤ 16 Steps and handrails, Mayfield Community Development Project, Mayfield, Cork.

Design features

- Black painted handrails provide good colour contrast to the background and make the handrails visible on approach.
- Colour contrast on steps makes the steps easier to see and use.
- Seating provides a resting and orientation point in setting forecourt.
- Entrance canopy provides shelter when entering and leaving the setting.

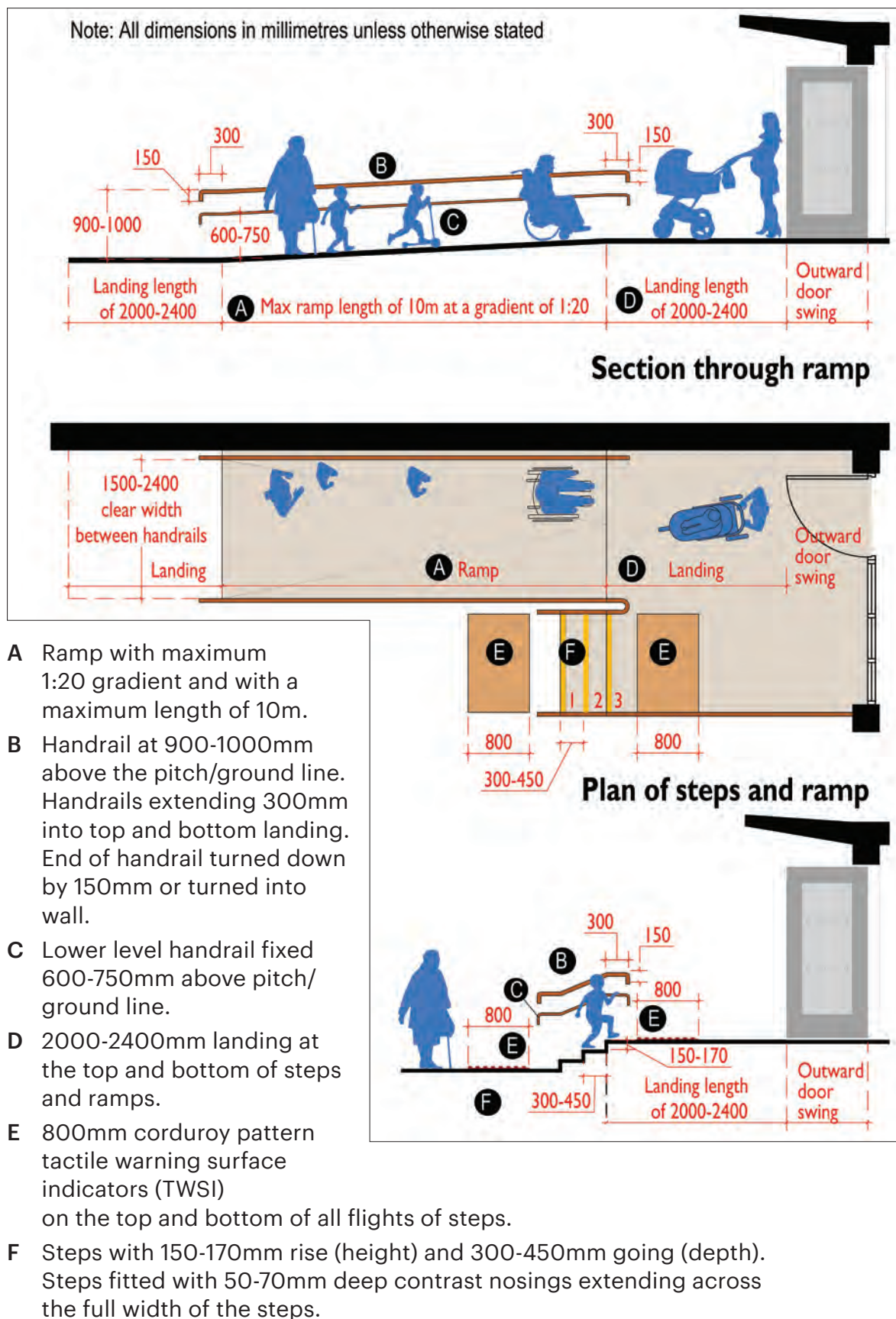
Design tip

- While this entrance is not the one used by children, an additional lower level handrail would provide support for children and people of short stature.
- Steel handrails can prove uncomfortable to the touch for many people especially in cold conditions.



Note: Refer to the **Universal Design Guidelines for Homes in Ireland - Section 1 (2015)** and **Building for Everyone – Booklet 1 (2014)** for more information regarding Steps, Ramps, Landings and Handrails.

Technical sketch 5: Steps and Ramp at Entrance Area.





Universal Design Guidance

Ramps and landings

- Ramps should be at least the same width as the path it serves. This width will depend on the size of the setting but the clear width between handrails should be between 1500-2400mm.
- Ramps should be constructed with the shallowest gradient possible, so they are comfortable to use. The following gradients and maximum ramp lengths apply:
 - Gradients of 1:25 allowed for a maximum distance of 15m
 - Gradients of 1:20 allowed for a maximum distance of 10m
 - Gradients of 1:15 allowed for a maximum distance of 5m
 - Gradients of 1:12 allowed for a maximum distance of 2m
- Ramps longer than those listed above will need intermediate level landings as resting points. Level landings are also required at the top and bottom of every ramp. These landings should be at least the width of the ramp flight and have a length between 2000-2400mm (clear of any outward opening door swing).
- Handrails should be fitted to both sides of the ramp. Handrails at two levels should be fitted to both sides of the ramp. The upper handrail should be between 900-1000mm above pitch/ground line and the lower handrail should be between 600-750mm above pitch/ground line.

Steps and landings

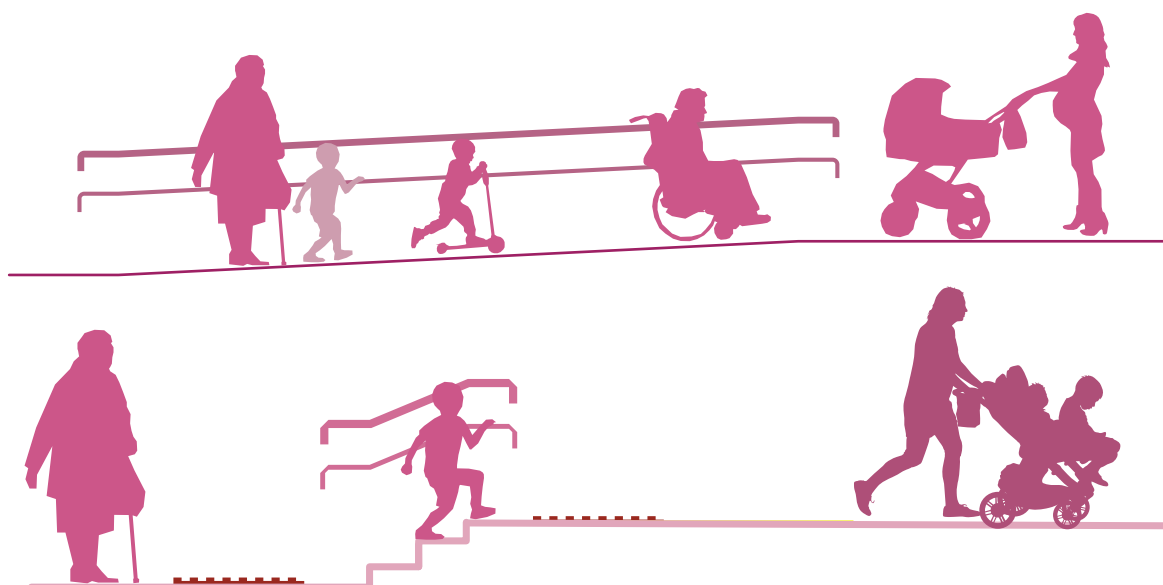
- A single step should never be provided as these can be a trip hazard.
- The rise (height) of steps should be 150-170mm and the going (depth) should be 300-450mm).
- Steps should be at least the same width as the path it serves. This width will depend on the size of the setting, but steps that are 1500-2400mm wide will make it easier to access a setting during peak time.
- The minimum clear width between enclosing walls, strings or upstands is 1200mm.
- For steps wider than 2000mm an additional central handrail will be required to divide the steps into channels.
- A landing must be provided for every 1500mm maximum rise. Landings are also required at the top and bottom of every flight. The length of any landing should be at least the same as the width of the steps (clear of any outward opening door swing).

Universal Design Guidance

- Where steps lead up to the main entrance, consideration should be given to a larger landing of between 1800-2400mm square (clear of any outward opening door swing).
- Fit 50-70mm deep contrast nosings that extend across the full width of the steps.
- Handrails should be fitted to both sides of the steps.

Handrails

- Handrails to be 900-1000mm above the pitch line and 1100mm above landings. The profile of this handrail should be 40-50mm in diameter if circular, or 50mm wide and 38mm deep if elliptical.
- Fit an additional lower handrail between 600 – 750mm above the pitch line. The profile of this handrail should be 25-32mm in diameter.
- Handrails to extend 300mm beyond the first and last step of each flight and to be continuous across intermediate landings.
- The end of a handrail should turn down by 150mm or return into the wall.
- Ensure handrails visually contrast with the background to make them more visible.
- Use handrail finishes such as timber or plastic which are comfortable to the touch. Avoid materials such as steel or metal which can be cold and uncomfortable to the touch.





External Lighting

Design considerations and awareness

Good levels of external lighting are important for full day care settings and for settings that provide extended services used by family or community members in the early mornings or evenings.

Ensure that artificial lighting provides even illumination with an average maintained illuminance of 30 lux for approach, while entrances, steps and ramps should have an illuminance of 100 lux. The use of LED lighting should be carefully considered as the blue light emitted from LEDs may cause issues for some people with visual challenges. There is some evidence to suggest that the use of LED lighting may negatively affect sleep patterns or circadian rhythms.

Low level lighting and lighting that is set into the ground directing light upwards should be avoided as the resulting glare can cause visual difficulties and discomfort for many people.



17 Artificial lighting on public playground, Fairview, Dublin.

Design features

- High quality lighting to playground ensures that the space can be used when it is dark.
- Lighting creates a safer and more secure environment for children and families.

Design tip

- Ensure lighting does not cause excessive glare which can result in visual difficulties and discomfort for some people.



18 Lighting to rear of Asilo Nido La Chiocciola, San Miniato, Italy.

Design features

- Effective use of downlighters to illuminate the rear of the building and to wash light down the walls to highlight the building form and materials.
- Subtle lighting that avoids upward directed light and glare.

Universal Design Guidance

- Ensure that artificial lighting provides even illumination with an average maintained illuminance of 30 lux for approach, while entrances, steps and ramps should have an illuminance of 100 lux.
- Avoid low level lighting that directs light upwards as the resulting glare can also cause difficulties for people with visual impairments.
- The use of LED lighting should be carefully considered as the bluish quality of the light may cause difficulties for many people.



Site Planting

Design considerations and awareness

Given the importance of all external site spaces and the need to think about these as part of a flow of spaces continuing into the building, the planting in a setting needs to be carefully considered as part of the overall UD approach.

Planting along access routes provides an ideal multi-sensory and educational experience for all users as they enter or leave the setting. Planting provides direct contact with nature and an opportunity for adventure and exploration within the ELC environment.

Planting can help with orientation and wayfinding by providing visual, olfactory (sense of smell), and tactile experiences that function as landmarks or focal points. This can make approach routes and entry points more identifiable and provide opportunities to create distinct and recognisable areas through native and familiar planting.



➤ 19 Ballindereen Community Childcare and Education Centre, Ballindereen, County Galway.

Design features

- Attractive site landscaping with diverse planting creates a calm, gently stimulating multi-sensory, restorative and healthful space for children as they move through the site.
- Smooth and flat paving provides an accessible route for all users.

Design tip

- Seating, lighting, and shelter somewhere along the access route would help provide a more supportive environment.

Planting can help mediate against air pollution and overheating by providing shade to external and internal spaces. It can also help control certain negative stimuli such as glare and noise.

Planting must be selected carefully to avoid trees, shrubs or flowers that are known to cause respiratory difficulties, allergic reactions or skin irritations. Certain plants are toxic if ingested: examples include Deadly Nightshade, Foxglove (Digitalis), Monkshood (Aconitum) and Giant Hogweed. Other plants such as the Dandelion, Geranium, Carnation and Marigold are considered to be low-toxic plants but can still cause irritation to the mouth or stomach upset if they are consumed. Refer to the **National Poisons Information Centre** website for more information about poisonous or toxic plants.

← www.poisons.ie



20 Carraig Briste, Enniscorthy, County Wexford.

Design features

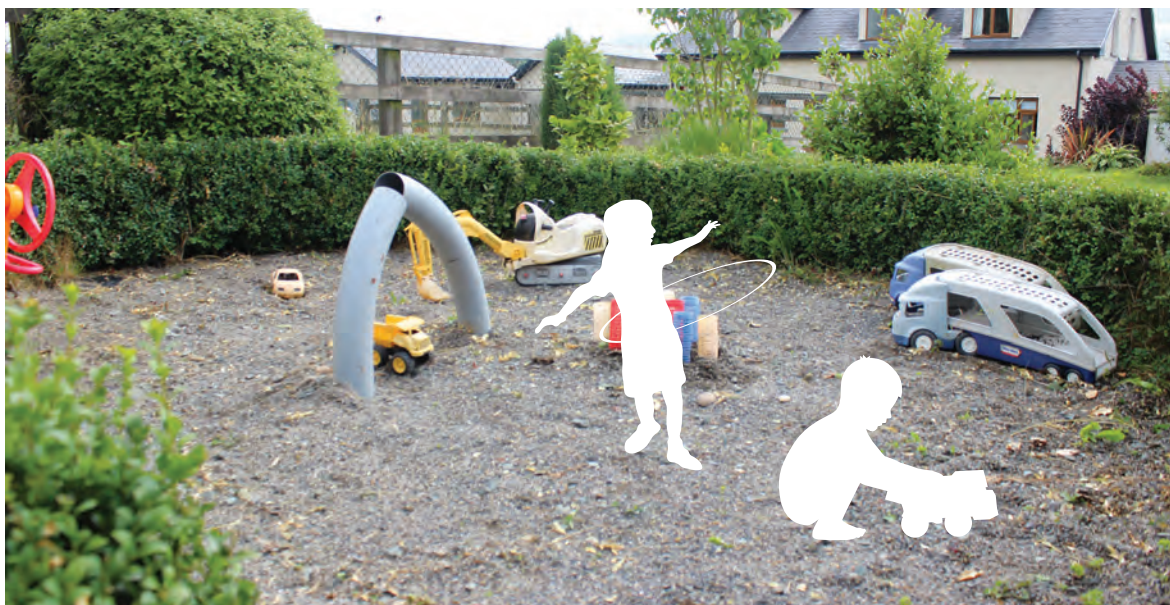
- Planting provides interactive and educational experiences for children.
- Fruit bearing plants such as a strawberry bush provide opportunities for children to see and taste fruit grown within the setting.



➤ 21 Naíonra Choill Mhic Thomasín, County Waterford.

Design features

- Trees and bushes planted along entrance routes or other shared spaces provide opportunities for play and adventure throughout the site beyond the dedicated play areas.
- In addition to low and medium level plants, shrubs and bushes, taller and more robust planting such as trees will encourage climbing and adventure.



➤ 22 Puddleducks Playschool, Ballylanders, County Limerick.

Design features

- Low level planting creates defined areas for play while being easy for adults to supervise.



23 Ballindereen Community Childcare and Education Centre, Ballinderreen, County Galway.

Design features

- Planting along the edge of the entrance route softens the appearance, provides sensory experiences and an opportunity to interact with nature.
- Planting with distinctive colours and scents reinforces wayfinding as it provides visual and olfactory cues in key locations.
- Planting can absorb sound and provide an acoustic barrier to reduce impact of external noises.



24 Ballindereen Community Childcare and Education Centre, Ballinderreen, County Galway.

Design features

- Playful objects among plants encourages interaction with nature.
- The use of gravel and stones provides multi-sensory stimulation for children.
- Planting to railings behind helps to visually soften the appearance of the fence.

Design tip

- A greater colour contrast between the edging and the path would make the kerb easier to see and reduce the risk of someone tripping on it.



Universal Design Guidance

- Use planting to enhance the overall site and to increase wildlife and biodiversity generally.
- Create soft landscaping areas that provide play spaces, adventure and challenge for children throughout the site.
- Use planting for multi-sensory stimulation and orientation to time of year through seasonal plants that flower, bear fruit or change colour throughout the year.
- Avoid plants that are known to exacerbate allergies or respiratory difficulties, that irritate the skin or are toxic if ingested (see above).
- Carefully locate trees that shed excessive fruit or leaves so these do not cause slipping or tripping on paths. Maintain planting to keep pathways clear.
- Use colourful and distinctive planting in strategic locations and destinations to create visual landmarks to help with wayfinding.
- In line with the creation of visual landmarks, use fragrant planting to reinforce wayfinding by providing aromas in certain key locations such as entrances or junctions along approach paths.
- Use planting to help mitigate air pollution, overheating and glare by providing shade to external and internal spaces, and act as a noise buffer.



Note: Refer to **Section 3.4** of these guidelines for more details regarding outdoor spaces.



Parent, Bernie's Pre-school:

"In choosing a pre-school for my daughter, the location with outdoor space to play and explore was very important."

External Buggy and Bicycle Storage

Design considerations and awareness

Avoid the need to bring buggies into the building by having a buggy storage area adjacent to or near the main entrance. This has many advantages including:

- Reducing the access and circulation difficulties experienced at busy times.
- Providing more space and a calmer internal environment.
- Addressing hygiene concerns regarding buggy wheels carrying germs into the setting.
- Minimising the amount of water brought into the setting on wet days.
- Eliminating the need for parents and guardians to fold up the buggy, an exercise that causes difficulties for many people.



25 External buggy storage area, Happy Days Community Creche, Ballyporeen, County Tipperary.

Design features

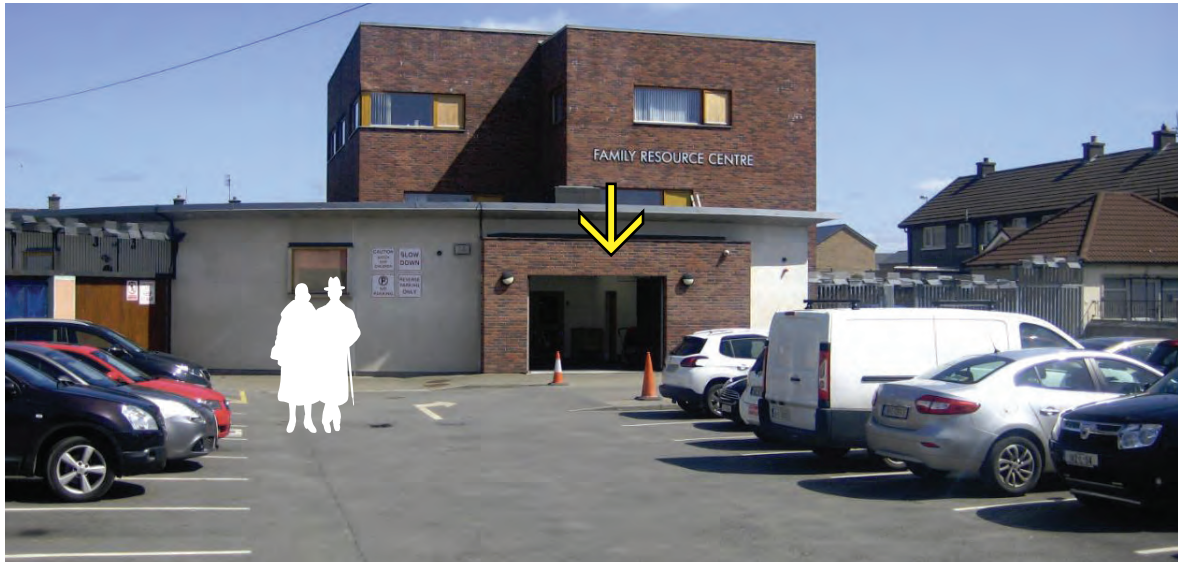
- External buggy parking area adjacent to main entrance provides a convenient and easily accessible storage option that reduces the need to bring buggies inside.

Design tip

- Painting the columns a different colour to the background would improve visibility for all users.



Consider security if an external buggy storage area is provided. If possible locate this area within a secure boundary. If the buggy storage is placed in an unsecured location, then options such as lockable gates or the facility to lock the buggy to the storage structure will have to be examined.



➤ 26 Northside Family Resource Centre, Ballynanty, Limerick City. (Two views of the setting).

Design features

- Convenient accessible buggy storage close to the entrance (see arrow), off the car park (see top image).

Design tip

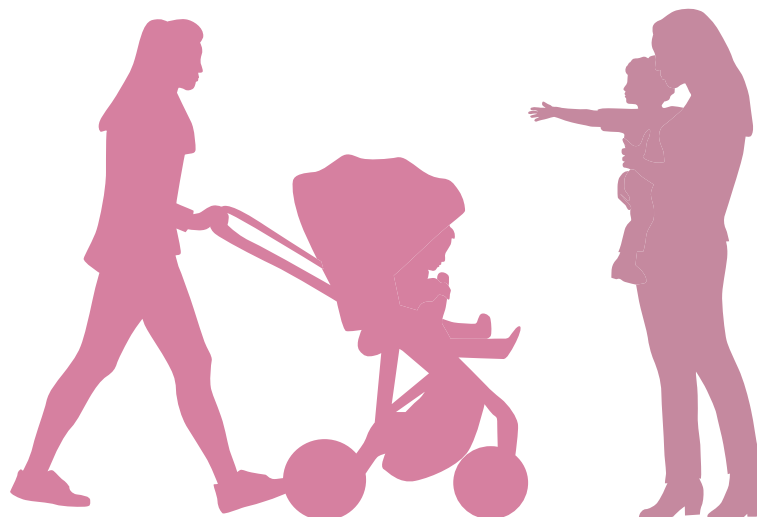
- As the storage is on the approach to the front door, security may be an issue.
- Wayfinding signage in the car park and at the entrance would benefit all users.

Secure facilities should be provided for locking and storing bicycles belonging to staff, parents and guardians, or visitors. People who take children to the ELC setting on a bike will require a safe place to dismount and take the child off the bike. Ideally a covered area would provide shelter and a space to remove or put on a child's wet-gear before entering or leaving the setting. This could be provided as part of a covered waiting area adjacent to the building entrance.

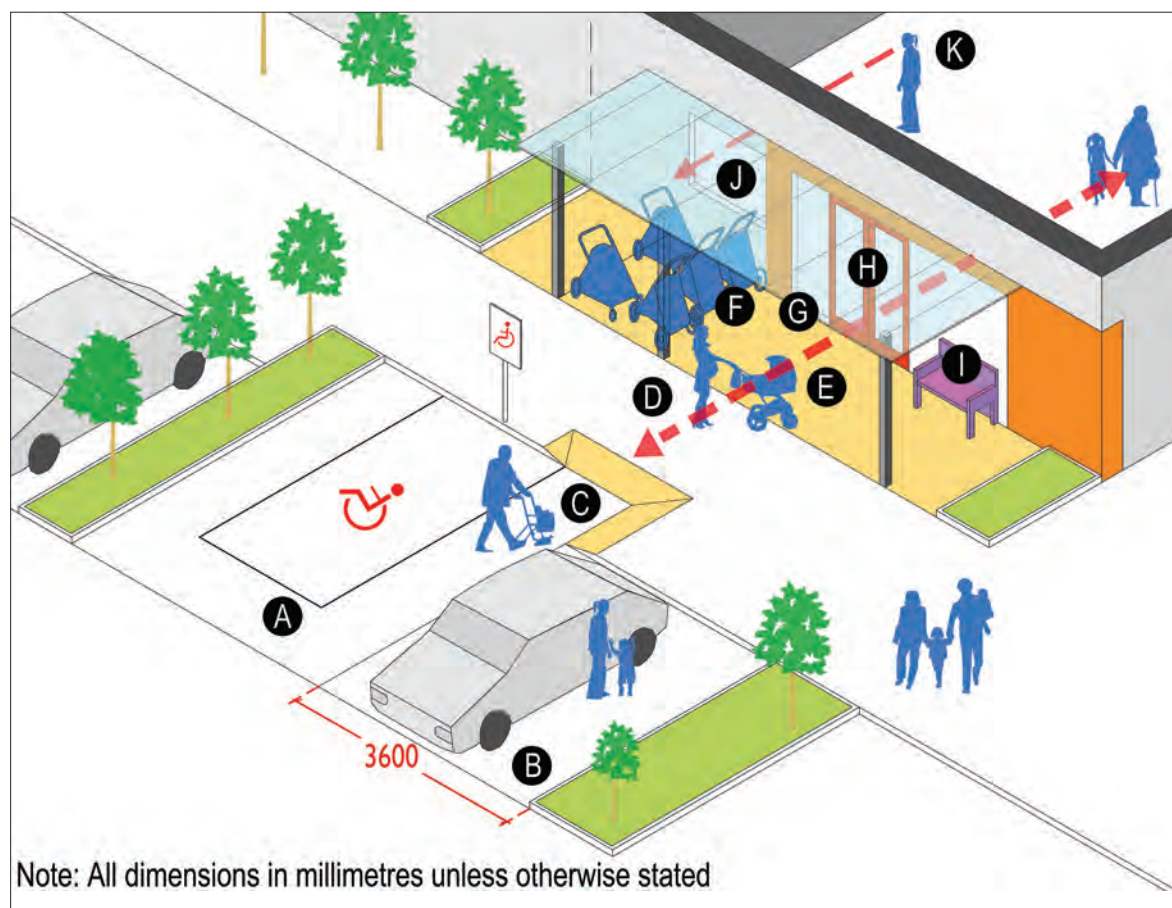
➞ See **Section 2.1** for more information on covered entrances.

Universal Design Guidance

- Provide external buggy storage near the main entrance in a location where it is visible, easy to locate, accessible and easily used. This may form part of a main covered entrance area. Security measures such as lockable gates or the facility to lock the buggy to the storage shelter may have to be considered.
- Ensure there is sufficient space to store and remove the buggy and to allow the safe and comfortable passage of multiple people with buggies or those using wheelchairs.
- Ground surfaces should be smooth, flat and even using materials that are non-slip, non-glare, and avoid strong patterns or sharp tonal or colour contrast.
- Provide good levels of evenly distributed artificial lighting to ensure the buggy storage is comfortable to use, and accessible in low light conditions.
- Provide a roof and side and back walls to protect the buggies from the elements.
- If the storage is a low-level unit (i.e. just high enough to fit the average buggy of approx. 1100-1200mm) ensure the roof is transparent to allow users to see in without having to bend down.



Technical sketch 6: Indicative 3-D sketch showing ELC setting, parking and entrance area.



- A Accessible car parking space close to entrance.
- B Where space exists provide Parent and Child parking spaces (4400x3600mm).
- C Dished kerb providing access to pavement.
- D Main entrance clearly visible on approach and good visual access provided to the entrance lobby or foyer.
- E Small forecourt provides waiting or gathering space.
- F Covered external buggy store adjacent to entrance. Security measures such as lockable gates or the facility to lock the buggy to the storage shelter may need to be considered.
- G Entrance canopy or covered external area providing shade and shelter, while also providing a visual cue at the entrance to make it more obvious on arrival.
- H Double doors providing easy access for large objects when required. The primary opening leaf provides a minimum clear opening width of 1000mm. Doors painted in distinct colour or using strong tonal contrast to make it easier to see on approach.
- I Seating near to entrance to provide a resting and orientation point when entering or leaving the setting.
- J Windows providing supervision to buggy storage area.
- K Provide direct supervision to buggy store from inside.



Refuse, Recycling and External Service Areas

Design considerations and awareness

External refuse and recycling storage should be accessible and usable for all staff, while being inaccessible to children. An accessible path should be provided from the refuse and recycling area to the public road to ensure easy transfer of bins for roadside collection. The storage of tools, maintenance equipment, or gardening materials should also be accessible and within easy reach for staff. Taking this approach to all external storage and service areas will enable staff to work safely, effectively and comfortably regardless of age, size or ability.

It is important to locate these areas away from children's spaces to eliminate contact with dangerous objects or hazardous materials. This will also reduce the impact of noise from bin movement or the use of tools, while minimising odours from refuse or materials such as paints or cleaning fluids. All doors or gates to these areas should be safely locked to prevent access by children.



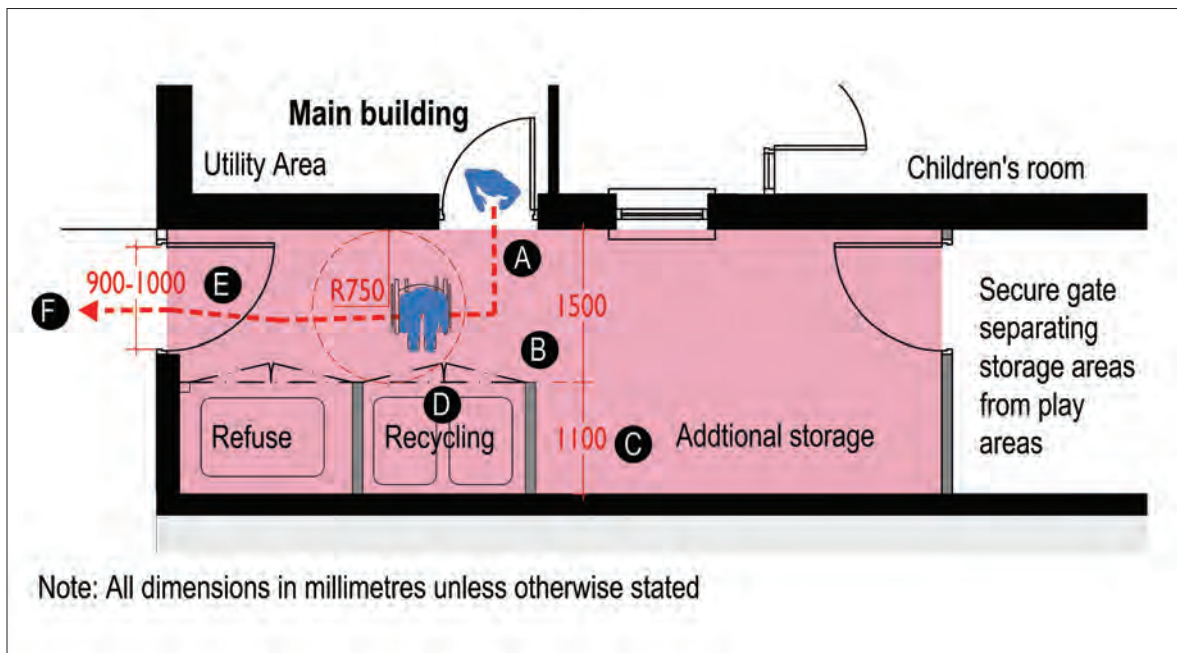
27 External refuse and recycling area, Waterford Childcare Centre, Waterford City.

Design features

- Refuse and recycling area enclosed with secure wire fence to prevent access by children.
- Wire fence balances security with visual access from outside.
- Generous amount of space provided within the storage area for manoeuvring bins and other large items.
- Lighting fixtures to side wall to provide artificial lighting when required.
- Planting along fence helps to soften its appearance.



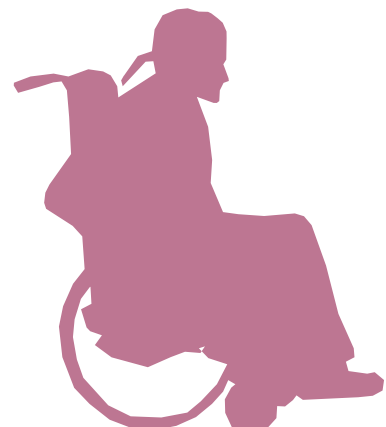
Technical sketch 7: Indicative plan showing external refuse, recycling and storage area.



- A Easy access from utility or kitchen area.
- B 1500mm clear space for wheelchair turning circle.
- C 1000mm deep storage space for wheelie bins.
- D Storage area can be fitted with roof and doors to provide greater visual screening and enclosure if required.
- E 900-1000mm clear opening to boundary gate or door to provide easy movement of wheelie bins and other large items or equipment.
- F A short and direct route to the roadside refuse and recycling collection point.



Note: Specific guidance for outdoor toys, play materials, or play equipment is provided in **Section 3** as this type of storage is directly associated with outdoor play areas.



Universal Design Guidance

- Provide external refuse/recycling areas and service or storage areas in a location where they are easy to locate, accessible and easily used by all staff.
- The location of these areas should be removed from children's space to minimise potential adverse impacts from dangerous objects, noise, or strong odours.
- Ensure there is sufficient space for storage while also allowing adequate manoeuvring space for all users.
- Provide doors that are easily opened, accessible, and fitted with usable locks and latches so they are accessible for all staff. At the same time doors should restrict access by children.
- Ground surfaces providing access to these areas should be smooth, flat and even, use materials that are non-slip, non-glare, and avoid strong patterns or sharp tonal or colour contrast.
- Provide high levels of evenly distributed artificial lighting on approach to the refuse or storage area (and internally if applicable) to ensure these areas are safe and comfortable to use, and accessible in low light conditions.







➤ Creative Kids and Co, Kilnamanagh Road, Walkinstown, Dublin.

Learning Stories

Valerie Gaynor, Creative Kids and Co:

Creative Kids and Co has been operating in the Assumption Primary School in Walkinstown since 2009. We provide a breakfast service, 5 preschool sessions per day (over 3 rooms) and school-age childcare. The setting is open from 7.30am to 6pm, 46 weeks per year.





The advantages are many:

Children: the transition from home to preschool to primary school is easier as they are comfortable in their surroundings and know what to expect. They are planting firm seeds in their community and they move on with their peers.

Families: it is convenient and a sense of community develops. Parents can access primary school supports such as English classes for parents who don't speak English, multicultural days, meeting local parents etc. Enrolment to the primary school is easy.

Providers: we have a guaranteed enrolment each year. We have access to large common spaces outdoors such as the yard and green area. We have an enclosed garden that is a natural outdoor classroom. We have access to a sensory garden. We have access to a playground with safety surface and to the school hall for graduations, parent meetings and for energetic play during very bad weather. Our rooms are square class rooms and feel spacious as there are high ceilings. There are opportunities for shared learning and sharing resources between the school and the pre-school.

There are some disadvantages:

Morning drop off times are difficult, due to traffic and parking. Operating times and holidays are not the same as the pre-school is open for 46 weeks per year. There can be assumptions made that the pre-school is part of the primary school and the management functions are the same. There is no parents room or any access to a space for parents to relax together. There is a good distance to walk from the street into the grounds. There is no space to store buggies, bikes or scooters. There is no reception area.

The size of the premises and numbers of children can be scary for small children. Toilets are not adjacent to the rooms, which is problematic for children and staff. The corridors can be cold.



