Annex 4: Generic Design Samples

Complete school with six classrooms

School layout option

BOYS TOILET

FENCE to keep off the outsiders.

for future expansion

N

Teachers OFFICE

Location of latrine under CLEAR LINES of SIGHT to discourage vandalism, violence and bullying

CLASS ROOM

CLASS ROOM

Covered Veranda

pathway

Courtyard

pathway

FENCE

Pedestrian path

Bicycle parking

Road

Good Circulation

CLEAR LINES of SIGHT for Passive Surveillance

School Garden

FENCE

Multi-purpose sport field

CLASS ROOM

CLASS ROOM

Centrally located Principle'S OFFICE Easy to find by visitors

CAR DROP OFF AREA

ENTRANCE

Safe and sufficient water

Symbol of Community or Local identity, Culture and Heritage

Gender separated latrine with hand washing facility

STAFF TOILET

GIRLS TOILET

Pathway

Covered Veranda

CLASS ROOM

CLASS ROOM

For future expansion

PRIORITY PARKING

LIBRARY/ Community RESOURCE room

Plant tree to protect the building from strong wind
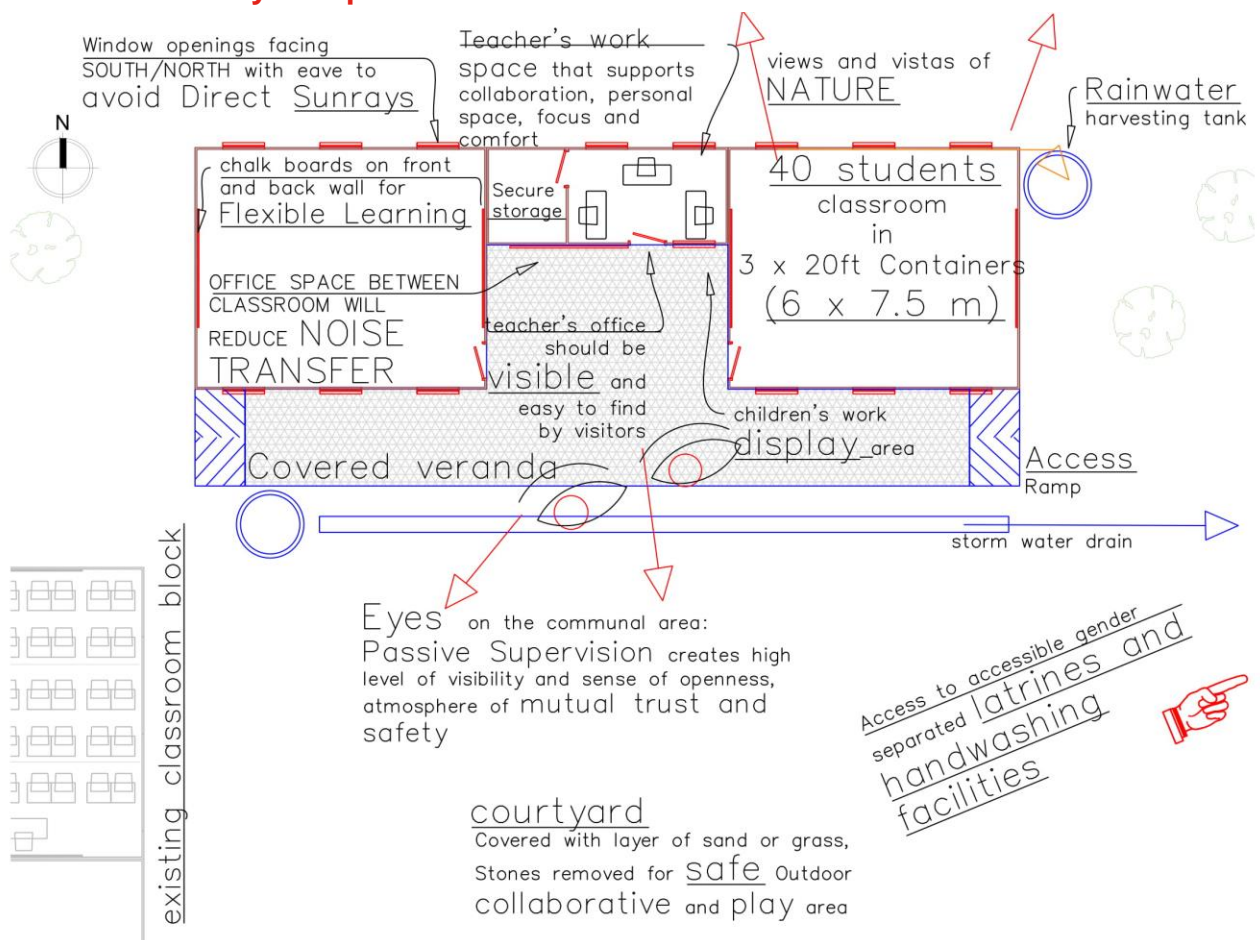
NOTES for school site development

- Design the school layout so that destinations and travel routes are apparent.

- Arrival and entrance area should be inviting, open, inclusive and welcoming places.

- Provide tree planting and landscaping along the entry road that enhances the approach to the facility.

- Locate the spaces that have community functions near to the entry where possible.

- Provide disability access consistent with relevant legislative requirements such as ramps, walkways and other accessibility measures incorporated into the design of the whole school in consultation with people with disabilities.

- Design landscaping to support learning opportunities, respect local flora and fauna, work with the site location and topography, provide the shade by careful use of vegetation.

- Design well-proportioned spaces between buildings and consider the way large groups will flow through these spaces.

- Design outdoor spaces that are climatically pleasant and are protected from the prevailing winds and provide appropriate shade.

- Passive surveillance principles need to be considered and embedded through the site and within each building to create a safe haven for students and staff alike.

- Configure the position of toilets so that they can be easily supervised and are in easy reach of learning areas.

- Courtyards for physical education use and marked courts for general purpose (suitable for netball, or volleyball) are provided to suit the oldest student year groupings.

- Reduce, control, and treat surface runoff through effective stormwater practices that address both the quantity and quality of runoff created through the development process.
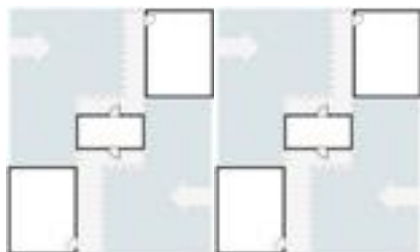
Twin-classroom block

Twin-classroom layout option

Window openings facing SOUTH/NORTH with eave to avoid Direct Sunrays

N

Teacher's work space that supports collaboration, personal space, focus and comfort

views and vistas of NATURE

Rainwater harvesting tank

chalk boards on front and back wall for Flexible Learning

Secure storage

40 students classroom in 3 x 20ft Containers (6 x 7.5 m)

OFFICE SPACE BETWEEN CLASSROOM WILL REDUCE NOISE TRANSFER

teacher's office should be visible and easy to find by visitors

children's work display area

Covered veranda

Access Ramp

storm water drain

existing classroom block

Eyes on the communal area: Passive Supervision creates high level of visibility and sense of openness, atmosphere of mutual trust and safety

Access to accessible gender separated latrines and handwashing facilities

courtyard
Covered with layer of sand or grass, Stones removed for safe Outdoor collaborative and play area

Layout options

1. Separate the outdoor space by classrooms

The building can be connected to isolate the divided spaces or leave a gap between buildings to provide access and sightline to and from each area. If the classroom has two doors, children will have easy access to both spaces.
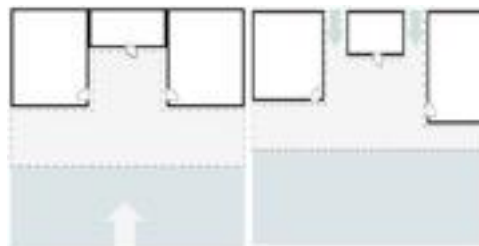
Option 1a.   Option 1b.

Pros:

- Efficient for managing activities of different types, age groups for safety and to control movement and noise.
- Create unique and exciting sight and micro-climate within a school site depending on the orientation and wind direction.

Cons:

- Limit the interaction of children within a school. Inconvenient access to shared facilities from classroom block such as WASH, library, main school entrance, main assembly point.
- Requires more teachers to monitor and supervise activities and enough space to include a sports field.

2. Create a courtyard in front of the classroom.

The building can be connected or leave a gap between the buildings to provide access which can be used as a school entrance.

Option 2a   Option 2b

Pros:

- Easy access to shared spaces from all classrooms.
- Encourage interaction of diverse groups
- Easy to monitor and supervise the activities.
- Simple to organize the emergency evacuation.
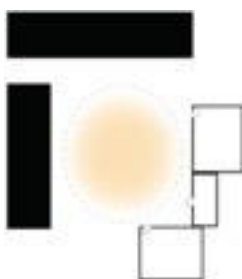- Efficient use of outdoor space when limited.

Cons:

- Space is limited for different types of activities and may increase competitions and accidents
- Difficult to control users' movement and noise when multiple conflicting activities take place in common outdoor space which may affect safety, comfort and effectiveness.

Same layout for existing schools

Option A: Arrange the new buildings to create useful and attractive communal gathering spaces (central courtyard) surrounded by new and existing buildings.

Pros: Easy to monitor and supervise the activities in the courtyard, which create a sense of safety with more visual connectivity.
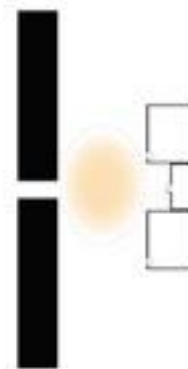
Cons: It is not repeatable and may limit the flexibility of space use in future development.

Option B: Arrange the new buildings parallel to the lines of the existing building to create the central courtyard or 'corridor' of the school.

Pros: Easy to monitor and supervise activities in the courtyard, which create a sense of safety. Easy to replicate for future development with the flexibility to create a closed courtyard.

Cons: It may be expensive if the site is sloped.

Do's

- Locate the office space with easy access from the common area and learning space to allow passive-supervision to monitor children and visitors' engagement in school activities and play.
- To enhance eye health and comfort, orient school building to maximize the visual access to nature from within the learning spaces.
- Locate the buildings in a way to have more visual interconnectivity to increase the sense of safety with more adult eyes connecting with children around the school.
- Opening a line of sight into adjacent spaces to make learning communal, encourages collaboration, and creates a public forum for celebrating and observing children's activities.
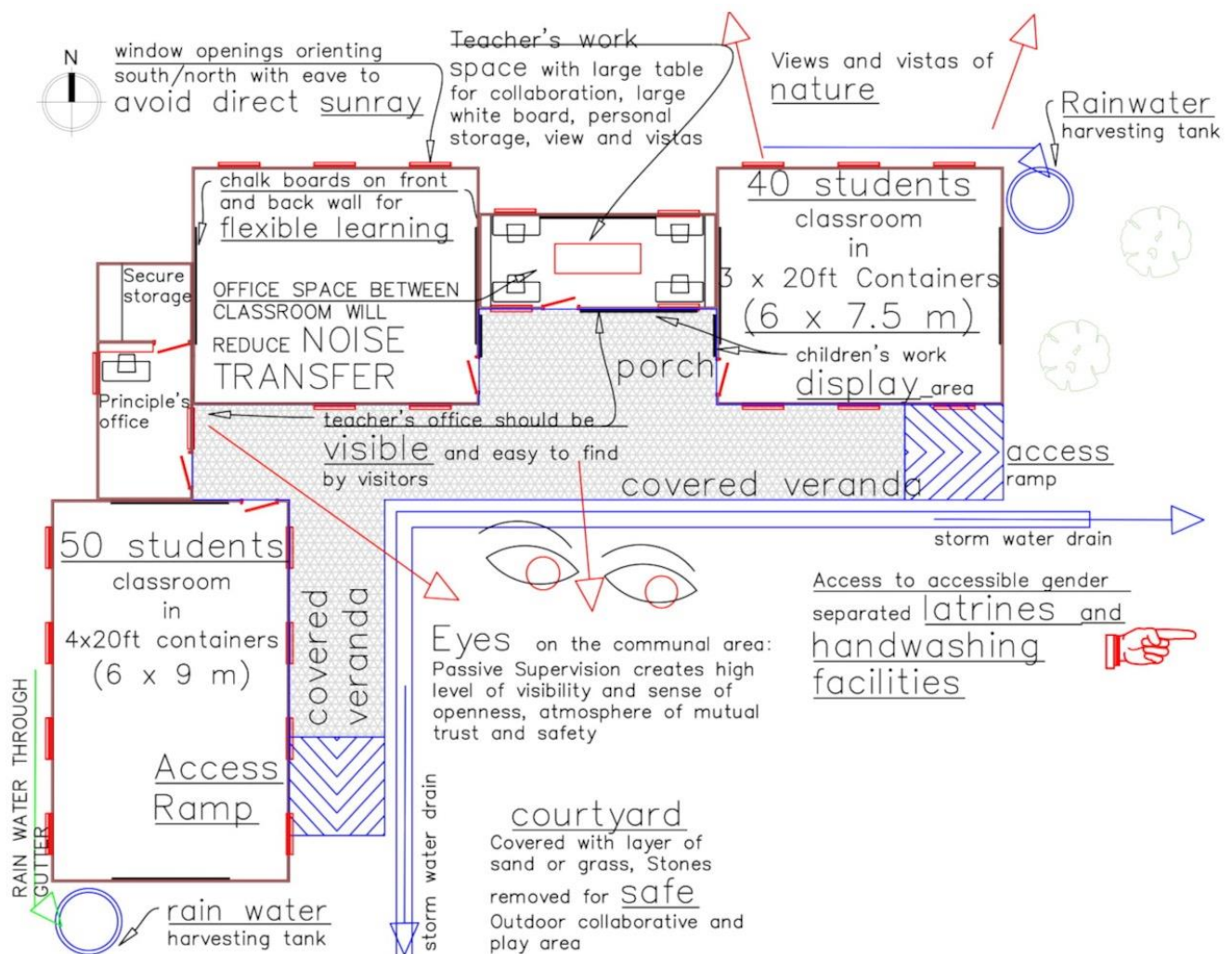
Don't´s

- Avoid creating potential concealment and *entrapment* areas (where people can hide) within the school
- Avoid creating paths that are confusing and counter-intuitive that makes children feel insecure.
- Avoid high contrast of light in the room created by very bright sunlight from a window, or insufficient illumination for reading, writing and following their teacher's instruction
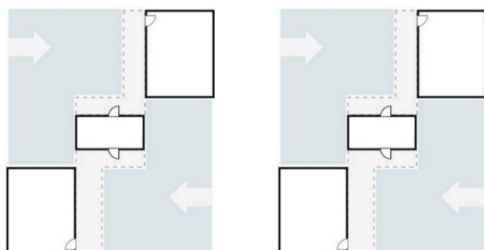
Triple-classroom block

Triple-classroom layout option

N

window openings orienting south/north with eave to avoid direct sunray

Teacher's work space with large table for collaboration, large white board, personal storage, view and vistas

Views and vistas of nature

Rainwater harvesting tank

chalk boards on front and back wall for flexible learning

40 students classroom in 3 x 20ft Containers (6 x 7.5 m)

Secure storage

OFFICE SPACE BETWEEN CLASSROOM WILL REDUCE NOISE TRANSFER

children's work display area

Principle's office

porch

teacher's office should be visible and easy to find by visitors

covered veranda

access ramp

storm water drain

50 students classroom in 4x20ft containers (6 x 9 m)

covered veranda

Eyes on the communal area: Passive Supervision creates high level of visibility and sense of openness, atmosphere of mutual trust and safety

Access to accessible gender separated latrines and handwashing facilities

RAIN WATER THROUGH GUTTER

Access Ramp

storm water drain

courtyard Covered with layer of sand or grass, Stones removed for safe Outdoor collaborative and play area

rain water harvesting tank

Layout options

Option 1: Separate the outdoor space by classroom blocks

The building can be connected to isolate the divided spaces or leave a gap between buildings to provide access and sightline to and from each area. If the classroom has two doors, children will have easy access to both spaces.

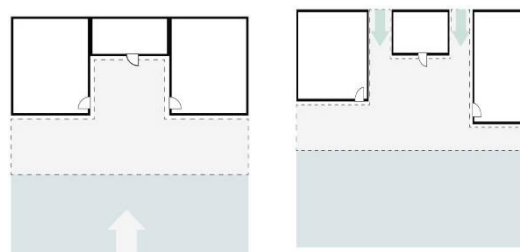**Option 2**: Create a courtyard in front of the classroom

The building can be connected or leave a gap between the buildings to provide access or use as a school entrance.

Option 1a.   **Option 1b.**

Option 2a.   **Option 2b**

Pros:

- Efficient for managing activities of different types, age and groups for safety and allow to control movement and noise.
- Create unique and exciting sight and micro-climate within a school site depending on the orientation and wind direction.

Cons:

- Limit the interaction of children within a school. Inconvenient access to shared facilities from classroom block such as WASH, library, main school entrance, main assembly point.
- Requires more teachers to monitor and supervise activities and enough space to include a sports field.

Pros:

- Easy to monitor and supervise the activities.
- Simple to organize the emergency evacuation.
- Efficient use of outdoor space when limited.
- Encourage interaction of diverse groups,
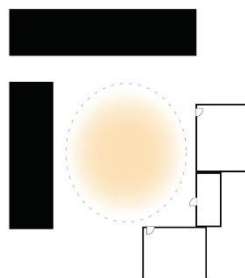- Easy access to shared areas and facilities from all classrooms.

Cons:

- Difficult to control users' movement and noise when multiple conflicting activities take place in common outdoor space which may affect safety, comfort and effectiveness.
- Increase competitions for space for different types of activities

Sample layout for existing schools

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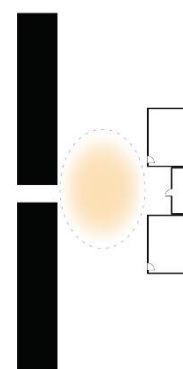
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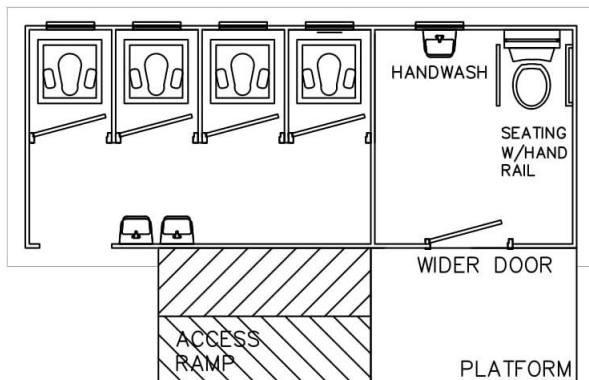
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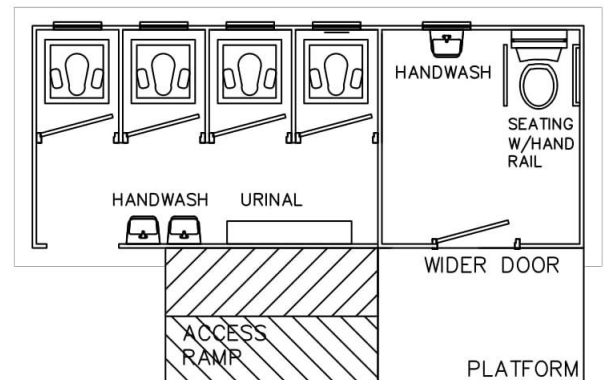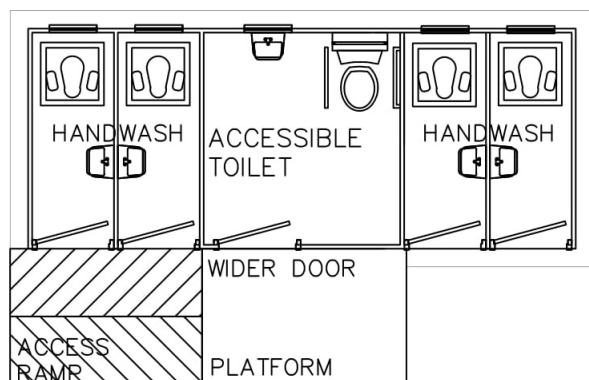
Latrine blocks

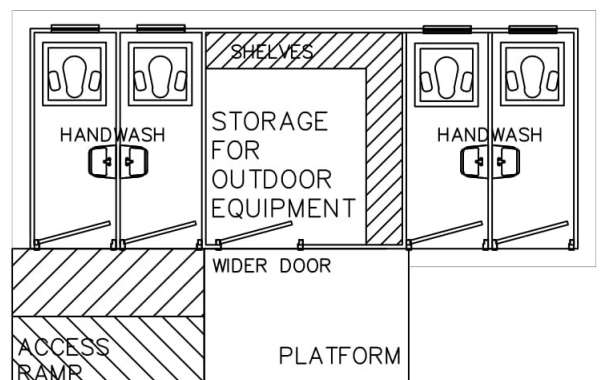# Latrine blocks layout option

Girls latrine layout

Boys latrine layout

Teachers latrine block with an accessible cubicle.

Teacher's latrine block with storage.
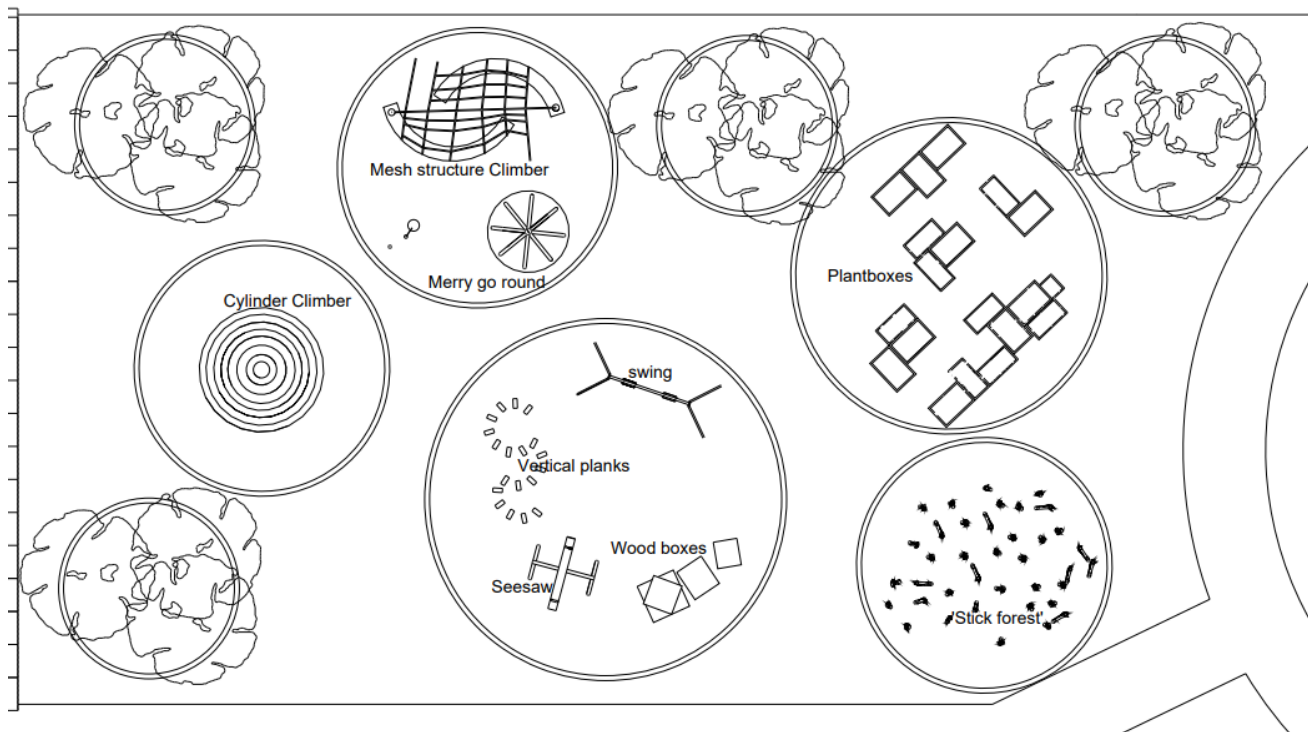
NOTES for School latrine development

- The accessible, gender-sensitive, safe and functional toilet, with hand-washing and drinking-water facilities, should be provided for all children.

- Toilets must have appropriate lighting as well as doors and roofs for safety and privacy.

- Water and soap for washing hands assist in learning safe hygiene management.

- Latrines are well-ventilated and.are located away from the classroom to avoid odour affecting the wellbeing of classroom activities.

- Toilets provide each gender with an appropriate level of privacy and safety.

- Children with reduced mobility, but who do not use wheelchairs, may benefit from having a squatting seat (if this is in keeping with local customs) with grab-bars.

- Some common barriers at drinking-water and hand-washing facilities include controls and taps that are too high and cannot be accessed by small children and wheelchair users.

- Drinking-water units are often located on elevated platforms, which make them inaccessible for small children and children using wheelchairs or other seated devices.

- Text and pictogram signage for toilets are necessary, located to be visible and touchable. The use of pictograms of male and female symbols, following local customs and standards, with raised outlines and bright colour contrast will be more evident to everyone, and particularly helpful for children with visual impairments.

Outdoor facilities

View of exterior activities.

Playground facility layout examples

NOTES for outdoor facility development

- Provide outdoor space that promotes to develop life-long healthy habits by providing incidental physical fitness opportunities as well as a range of competitive and non-competitive sports.

- Provide a playground that is safe, inclusive, and sufficient for age-appropriate recreational activities with a separate zone for junior and senior grade children.

- Where possible, provide as much transparency as possible between indoors and outdoors to encourage teachers to use the outdoor space more for teaching and learning.

- Create a path and walk trail around the school that can support the study on biology, ecology, botany and wild-life behaviour, which can also serve as running track, and becoming a vital part of a physical education program.

- Create outdoor space that allows children to experience learning that could not take place indoors, such as large projects, and messy activities, gardening, nature walks, play facilities and equipment that develop motor skills.

- Children and their families who use wheelchairs, crutches or walkers can use a paved pathway with a width of at least 1,800mm to access play facilities. Where there is a level difference, provide an accessible ramp to merge the change in levels and connect the pathway.

- Provide equipment and play materials that will be inclusive of a range of abilities. A variety of ground surface materials should be considered in play areas to provide a more diverse sensory experience.