

CHECKLIST FOR VETTING COMMITTEE ON AESTHETIC DESIGN OF DRAINAGE SERVICES BUILDINGS (VCAB) SUBMISSION ^{Note 1}

Contract No.	
Project Title	
Project Proponent/Consultant	
Date of Previous VCAB Meeting ^{Note 2}	

For Stage 1 / 2 Submission ^{Note 2} (Cross out as appropriate)

1. Objectives and Principles of Aesthetic and Landscape Design					
No.	Item	Complied	N/C	N/A	Remarks
1.1	Avoid monotonous development.				
1.2	Avoid visually and physically blocking infrastructure, consider to locate sewage pumping station (SPS) underground, particular if the SPS has low design capacity.				
1.3	Adopt high quality architectural and landscape design.				
1.4	Provide focal points and landmark features, if applicable.				
1.5	Minimize building footprint/height and maximize open space and greening.				
1.6	Reserve more ground level spaces for greening. Priority shall be given to tree planting.				
1.7	In harmony with the surroundings throughout the life of the development.				
1.8	Optimum balance between aesthetic considerations, capital construction costs, long-term maintenance, running costs, as well as social and ecological benefits.				
2. Aesthetic Elements					
No.	Item	Complied	N/C	N/A	Remarks
2.1	Site context				
2.1.1	The facilities are carefully located to minimize conflicts or contrasts with surrounding landscapes and buildings.				
2.2	Structural form				
2.2.1	Consideration is given to vary the structural forms to mitigate the dull and mediocre image of DSD facilities.				
2.3	External wall/façade/structure				
2.3.1	The design of external elevations is in harmony with the environment and gives an aesthetically pleasing look.				
2.3.2	The design creates interesting geometrical/vivid effect and avoids large/massive walls.				
2.3.3	The external walls are free of utility facilities (i.e. pipelines, ducts, conduits and cat-ladders, etc.) and aesthetically unpleasing structures such as bulky support for staircase and protruded arm for lifting, etc. as far as practicable.				
2.3.4	The design should provide with easy access to facilitate future maintenance.				
2.4	Choice of materials				
2.4.1	The chosen materials are commonly available in market, long				

	lasting new appearance and low maintenance.				
2.4.2	Consideration is given to sustainability and biodiversity in the choice of materials.				
2.5	Colour scheme				
2.5.1	The colour scheme is in harmony with the environment and shows respect for local culture.				
2.6	Culture				
2.6.1	The design shows respect for local culture and tradition. Rural committees/local representatives are consulted in the design stage.				
2.7	Scale and proportion				
2.7.1	All exterior elements are designed on a scale proportional to each other.				
3. E&M Elements, Utility Services and Plumbing					
No.	Item	Complied	N/C	N/A	Remarks
3.1	General				
3.1.1	The design and selection of E&M elements are balanced among capital cost, land intake, operation reliability, as well as aesthetic appearance of the facilities.				
3.1.2	Space requirement to accommodate essential E&M installation, operation and maintenance are optimized (i.e. height, footprint requirements and aesthetic appearance are considered) while floor space and headroom requirements are minimized.				
3.1.3	Space-saving equipment & appliances are selected in order to contain the overall height of plant rooms and preserve the overall aesthetics of the project.				
3.1.4	Building/utility services (e.g. drains/irrigation pipes, electrical ducting/cables/fittings), plumbing and vents are concealed within the building to minimize visual intrusion and noise nuisance.				
3.1.5	Proposed external services, such as lighting poles, floodlights and CCTVs, exhaust fans/skylights on green roof etc., are included in the photomontage of the submission.				
3.1.6	Intrusive effects of unavoidably exposed building services are toned down by shape and colour alterations.				
3.1.7	Lightning pole erected on roof top and exposed copper tape on external wall surface shall be avoided as far as practical especially in those visually sensitive locations. For cases requiring special consideration, the project proponent should elaborate in details and provide justification.				
3.2	Pumps				
3.2.1	Options to optimize the numbers and types of pumps are explored to save headroom and space allowance.				
3.3	Trash screening and removal				
3.3.1	Options to optimize the headroom and space requirements are explored.				
3.3.2	Screening and removal facilities are located indoor, under cover, shielded or screened by appropriate architectural/landscaping				

	features or plants.				
3.4	Lifting appliances				
3.4.1	Suitable lifting appliances are selected to facilitate maintenance of equipment requiring minimum vertical clearance.				
3.4.2	Alternative lifting appliances such as mobile elevated platform are considered to improve the aesthetics and optimize the height of plant rooms.				
3.4.3	Foldable davits are used to reduce visual impact.				
3.5	Internal and external lighting				
3.5.1	Internal lighting, such as wall-mounted floodlights and fluorescent light tubes, is the first choice during the design stage to avoid excessive headroom for pumping stations.				
3.5.2	Provision of external lights shall be minimized to avoid light pollution.				
3.5.3	The use of daylighting (e.g. skylight, glass block wall) is encouraged to enhance energy saving.				
3.5.4	Appropriate no. of power supply points with outdoor rating are provided for emergency operation at night. Floodlight of high visual impact is avoided.				
3.5.5	Location and orientation of light fittings shall avoid inducing glare affecting the neighborhood, nearby road users and wildlife. Uplight is avoided.				
3.5.6	Electric cables of external light are concealed in conduit within the building/light fitting as far as practicable.				
3.6	Power supply				
3.6.1	The design is balanced among capital cost for provision of additional power supply, reliability, land intake and impact on aesthetics of facilities.				
3.7	Ventilation and air conditioning				
3.7.1	Ventilation fans and air conditioners are provided with aesthetic features to minimize their visual impact.				
3.7.2	Air ductworks are located inside the building.				
3.7.3	Ventilation openings and outlets are installed on building faces/walls away from the public and sensitive receivers. Silencers, louvers and/or ornamental features are provided as appropriate.				
3.8	Deodourising facilities				
3.8.1	The design should be minimized in height, footprint and visual impact.				
3.8.2	Deodourizers are located indoor, under cover, shielded or screened by appropriate architectural/landscaping features or plants.				
3.8.3	Provision of planting buffer is considered to screen the facilities.				
3.8.4	Special mitigation measures for deodourization units and the associated air ductworks on huge outdoor structures e.g. Sedimentation Tanks or Aeration Tanks in STWs should be considered.				

3.9	Energy efficient features and renewable energy equipment				
3.9.1	Selection of renewable energy equipment is based on space availability, cost effectiveness and architectural treatment for minimizing visual impact.				
3.9.2	Renewable energy equipment mounted on the roof of facilities is screened/shielded.				
3.9.3	The location of energy efficient features and renewable energy equipment shall coordinate with greening if to be installed in green roof/planting area.				
3.9.4	When providing shield/screen for the installation of renewable energy equipment, sufficient access and maintenance space should be allowed.				
4. Civil and Structural Elements					
No.	Item	Complied	N/C	N/A	Remarks
4.1	Boundary fence/wall and gate				
4.1.1	Boundary fence and wall are carefully located to minimize impact on existing urban/rural landscape elements.				
4.1.2	Setback of the boundary fence/wall for screen planting / integrating fence wall with planting is considered where applicable.				
4.1.3	Visually permeable fence is used. Solid boundary wall may only be considered when operational activities inside the facility cause environmental or visual nuisance.				
4.1.4	The materials, details and textures shall make the boundary wall, fence and gate visually recessive and compatible with the project building and its surrounding.				
4.1.5	Low chromatic colour is used for metallic fence to minimize contrasts with the structures and background.				
4.2	Openings				
4.2.1	The sizes of louvers, windows and other exterior openings are proportional to the building.				
4.2.2	Window guards instead of exterior security bars are used for windows at ground level for security reasons.				
4.3	Deposition of facilities and architectural treatment				
4.3.1	Facilities possibly giving negative visual impact are located indoors, away from sensitive receivers, under cover, shielded or screened by architectural/landscaping features or plants. Sufficient access and maintenance space should be allowed.				
4.3.2	Outdoor equipment including roof-mounted equipment is under cover, shielded or screened off and with sufficient access and maintenance space.				
4.3.3	Details shall be considered to prevent rainwater dripping along the external walls and staining problem.				
4.3.4	Architectural features are provided for the pillar box/water cabinet at boundary to maintain coherence with the building.				
4.3.5	If plant rooms are required to house the building services at roof,				

	the following are considered: i) The area of plant room is minimized and surrounded by greening/vertical green wall; ii) Integrate all plant room activities into an additional floor and cover the plant room with green roof.				
4.3.6	To minimize the visual impact arising from exhaust fans, sky windows, water tanks etc. on roof. Consideration is given to sink the services/raise the planter/set aside from the parapet wall.				
4.4	Aesthetic manhole covers on pedestrian walkway ^{Note 9}				
4.4.1	Aesthetic manhole covers shall have their characteristics compatible with the surrounding environment, local and historical context.				
4.4.2	The location of the aesthetic manhole covers shall be prominent to public.				
4.4.3	Pattern design shall be feasible for casting.				
4.4.4	Pattern design shall avoid leading to water trapping.				
4.4.5	Design considerations shall be given for passing relevant laboratory tests, eg. load bearing capacity, skid resistance and permanent set.				
5. Landscaping Design (incorporated the six focus areas of ILDF) ^{Note 3}					
No.	Item	Complied	N/C	N/A	Remarks
Complete the following if greening are included in the project					
5.1	Functional needs				
5.1.1	Site analysis for the following functional need(s) is completed.				
	i) Shade provision				
	ii) “Directional Effect” and “Creation of Space”				
	iii) Visual screening				
	iv) Environmental benefits				
	v) Ecological requirements				
5.1.2	Landscape design to address the above need(s) is provided.				
5.2	Aesthetics				
5.2.1	Landscape design is suitable for the site context and integrates with adjacent green space.				
5.2.2	Site investigation is conducted at early design stage to examine the existing site characteristics including landscape setting, existing and future land use, etc.				
5.2.3	Consideration is given to preserve existing mature trees/tree groups on site for the sense of place and instant greening effect.				
5.2.4	Consideration is given to maintain visual link/physical access to and along the river front/promenade. No permanent building/massive structures of new developments are abutting against the nullah/promenade.				
5.2.5	Design tools such as thematic planting ^{Note 4} ; use of hard and soft landscape forms/features are considered holistically to achieve compatibility of specific designs with the landscape setting.				
5.3	Life cycle costing				

5.3.1	At-grade planting and tree planting opportunities are maximized.				
5.3.2	<p>Sufficient space and soil volume are provided for sustainable plant growth. Larger area/continuous planting strip (e.g. tree corridor) is more preferred than confined tree pits/fragmented areas/pockets. At-grade open bottom planters are provided instead of raise-up close bottom planters/trays/pots.</p> <p>Minimum soil depth for at-grade planting areas:</p> <ul style="list-style-type: none"> - 800mm to 1200mm for trees, 450mm to 600mm for shrubs/climbers/bamboos (depending on species) and 300mm for grass/ground covers with reasonable width. <p>Minimum soil depth for extensive green roof:</p> <ul style="list-style-type: none"> - 150mm for ground cover/turf planting for new roof; - 100mm for ground cover/turf planting for retrofit roof. <p>Recommended soil depth for raised up planters on structures/roofs:</p> <ul style="list-style-type: none"> - 300mm to 600mm for ground cover/shrubs/weeping plants depends on species; and - 800mm to 1200mm for tree planting depending on species. 				
5.3.4	If close bottom planters/trays/pots are used, though not recommended, the soil depth requirement in No. 5.3.2 is met and automatic irrigation is provided.				
5.3.5	Planting works are scheduled in growing season (between 1 st March and 31 st August) for better establishment.				
5.3.6	Avoid tree planting interfacing with grasscrete. If it is unavoidable (e.g. preserved existing tree), proper tree pit with minimum size 1.2mx1.2m shall be provided.				
5.3.7	Tree species with vigorous root systems (such as <i>Ficus spp.</i> and <i>Delonix regia</i> etc.) causing pavement uplift are avoided at narrow planting strips next to boundary/maintenance access/pavement areas, or tree pits on pavement.				
5.3.8	Proper specification of tree protective measures and tree transplanting works are included in the contract documents and properly implemented to minimize temporary impact on preserved trees, which will affect the long term health of trees.				
5.3.9	Horticultural maintenance requirement such as frequency of weeding, pruning and plant replacement, etc. are considered in the design stage. Low maintenance plants are selected. Appropriate recurrent consequences are allowed in the funding stage if high greening ratio is to be achieved.				
5.3.10	Materials selected shall minimize environmental burdens (in production, transportation, installation, maintenance/replacement and disposal, etc.). Plant species which require frequent replacement shall be avoided.				
5.4	Sustainability				
5.4.1	Right plant at the right place. Plant species are selected based on factors such as site characteristics, functional needs, availability of space and maintenance resources and expect maturity size etc. to				

	ensure sustainable growth.				
5.4.2	Native species and wildlife attracting plants shall account for more than 60% of plants quantity. Bio-diversity is encouraged and dominant of one single species is not preferred unless for thematic planting.				
5.4.3	<p>Slope planting design shall comply with GEO publication <u>No.1/2011– Technical Guidelines on Landscape Treatment for Slopes.</u></p> <ul style="list-style-type: none"> - For slope less than 35 ° , planting of whip trees/shrubs/ groundcovers/climbers can be considered and tree species with large mature size shall be avoided. - For soil fill slope less than 15°, light standard size trees can be considered. - Sufficient depth/volume of topsoil-mix shall be provided. 				
5.4.4	Standard to heavy standard size trees with larger mature size are considered for sites with large open space.				
5.4.5	Irrigation shall be provided for all planting areas. Automatic irrigation is adopted for those at unmanned sites. If provision of irrigation is not practical at remote site, sufficient soil volume shall be provided and plant species with low water requirement shall be used.				
5.4.6	Irrigation design shall minimize water wastage on non-planting areas/pedestrian/carriageway. Other requirements of irrigations shall be same as No. 6.7 of this checklist.				
5.4.7	Green infrastructure elements such as rainwater harvesting for irrigation, green roof, vertical greening, pervious pavement, bioswale / rain garden, etc. are considered in sewage treatment works and pumping stations ^{Note 5} .				
5.4.8	Free drains shall be ensured in all planting areas. Sub-surface drains and overflow drains are provided at planters on structure and for extensive at-grade planting areas. Prolonged saturation of the soil which causes plant failure and rotting shall be avoided. Drainage clean out/inspection chambers are provided in planters.				
5.5	Public health				
5.5.1	Plants posing possible health concerns to humans are avoided at places accessible by public.				
5.5.2	Dripline irrigation system shall be considered at planters near pedestrian areas to avoid nuisance (i.e. splashing water) to public.				
5.5.3	Stagnant water shall be avoided and free drain shall be ensured in planting areas.				
5.5.4	Water source for water features and irrigation shall be separated to avoid algae problem.				
5.6	Maintenance				
5.6.1	Maintenance responsibility of preserved trees/vegetation during the construction period shall be clearly defined in the contract among the contractors, maintenance contractors of DSD/other departments. Temporary access/water point shall be provided for				

	existing vegetation during the construction period.				
5.6.2	Tree preservation works are clearly stated in the contract documents in accordance with relevant DEVB's guidelines.				
5.6.3	The proposed landscape design is appropriate to the site context e.g. at rural setting and unmanned site, more ecological approach with lower maintenance requirement shall be proposed, whereas for location surrounded by high-rise residential areas, more thematic approach may be proposed.				
5.6.4	The landscape design takes into account the site characteristics such as existing drainage condition, pH value, sun/wind exposure, etc.				
5.6.5	Safe maintenance access is provided for maintenance of greening works.				
6. Green Roof / Planting on Structures					
No.	Item	Complied	N/C	N/A	Remarks
6.1	Installation of green roof is considered for new buildings and buildings require retrofitting.				
Complete the following if green roof /planting on structures is included in the project					
6.2	General				
6.2.1	Objective/type of green roof is identified and the design shall suit for the purpose. Examples of objectives to be considered and specified in the report submission: i) Demonstration and education purpose in large STW as part of visitor route; ii) Beautification and aesthetic purpose for sites surrounded by residential development; iii) Ecological purpose with brown roof for remote site and unmanned site; and iv) Low maintenance green roof for unmanned site e.g. proprietary system with sedum mix, special plant substrate with rainwater harvest function, etc.				
6.2.2	Site conditions have been considered including but not limited to the following: i) Regional/local microclimate including rainfall/drought period, average exposure to sunshine, shadowing effect of the surrounding buildings/tree group, exposure to wind; and ii) Coastal location / on mountain, etc.				
6.3	Soil depth/loading				
6.3.1	If the minimum soil depth (refer to No. 5.3.2) cannot be achieved due to loading concern, alternatively, low maintenance green roof proprietary system with sedum mix of different seasonal dormancy shall be considered.				
6.3.2	Movable shallow tray planters are avoided.				
6.4	Utilities and lighting				
6.4.1	If exhausted fan is located at planting area, set back and screen				

	shall be provided.				
6.4.2	The highest external IP rating of utilities are specified.				
6.5	Safety and access				
6.5.1	Fall arrest system/railing is provided for safety operation.				
6.5.2	Sturdy railing/parapet wall of suitable height is provided.				
6.5.3.	All metal structures and electric power supply are earthed.				
6.5.4	Proper access/staircase to roof garden is provided. Internal stairs is preferred. Cat ladder, though not preferred, is located inside the building.				
6.5.5	Proper drain shall be provided in maintenance access to avoid standing water and slip surface.				
6.6	Roof / structure gradient and drainage				
6.6.1	Drainage system specified for the green roofs/planters on structure has taken into consideration of local climate (intensive rain storm in rainy season) and gradient of the structure. It shall i) promote aerated conditions in the overlying growth media layer, and ii) manage rainfall runoff and convey it to the roof drains.				
6.6.2	Inclination of 2-5% is generally optimal for greening on structures. The design of flat roofs/structures (inclination < 3.5% / ~2°) shall ensure free drainage without complex layout (e.g. planters are not blocking the path to the water outlets) or materials of low water permeability (i.e. thick water retention layer) is avoided.				
6.6.3	Depending on steepness, measures relating to water retention and delivery as well as slippage prevention shall be in place for sloping roofs with a 5 to 58% (~3° to 30°) incline. Details refer to No. 6.11.				
6.6.4	In view of the structural and vegetation maintenance problems posed by roofs with gradient in excess of 30°, greening should not be considered.				
6.6.5	The inspection chamber is designed to admit water freely at the base. It should have a removable lid to prevent debris from entering. Regular checking and cleaning of inspection chambers during construction and the establishment period are required.				
6.6.6	Sufficient inspection chamber shall be provided.				
6.7	Irrigation				
6.7.1	Water requirement of plants shall be specified in the report and contract documents. Preferably drought tolerant plant species are used.				
6.7.2	Automatic irrigation with full coverage of all planting areas is provided. Location of sprinklers head shall fit the intended plant height and site conditions. Shifting/adding of sprinkler to avoid blocking of water by existing roof structure/vent.				
6.7.3	Selection of irrigation system i.e. sprinkler/drip line system shall take into consideration of site conditions e.g. wind exposure/planting design/proximity to footpath, etc.				
6.7.4	Different plant types (grass/ground cover/shrub) species have different water requirement. Plants under shade will require less				

	water than on exposed areas. Plants on top of slope may require more water than those at the bottom. Separate timer/control on irrigation duration shall be provided for different plant types/species/conditions.				
6.7.5	Filter/automatic self-cleaning is specified in the irrigation system to keep irrigation free of contaminants that degrade performance and efficiency.				
6.7.6	At least one water point shall be provided in green roof (i.e. water source shall be separated from automatic irrigation system) for emergency use i.e. failure/shutting down of automatic irrigation system and cleaning of green roof.				
6.7.7	Water conservation considerations such as use of rain sensor and drip line system, increase soil volume, selection of drought tolerant species, use of water retention/preservation layer etc., shall be considered to minimize the amount of water for irrigation in green roof.				
6.8	Wind concern				
6.8.1	Sturdy materials and fixing details shall be used for railing/parapet wall/planter curb at green roof.				
6.8.2	At exposed site next to tall building where wind is a concern, a vegetation-free zone (i.e. 500mm to 800mm depending on site condition) at roof edge and corner shall be provided.				
6.9	Planting				
6.9.1	Species requiring high water consumption or frequent application of pruning/weeding/fertilizer/pesticide, or being unable to recover after hard pruning are avoided.				
6.9.2	Species which cannot tolerate heat/sun/wind exposure are avoided.				
6.9.3	Native species are used to enhance biodiversity.				
6.9.4	If sedum is specified, mix of species which adopt to local climate and with different seasonal dormancy shall be used.				
6.9.5	Mulch shall be specified for ground cover/shrub planting to reduce weed problem and water consumption.				
6.10	Growing substrate				
6.10.1	Well-drained soil/growing substrate shall be used.				
6.10.2	For sedum planting, proprietary planting substrate specially designed for sedum shall be used and topsoil mix is not recommended.				
6.11	Pitch roof (>5% inclined roof)				
6.11.1	Root resistant waterproofing is used.				
6.11.2	Stable abutments are installed on the eaves edges to transfer shear forces from green roof system into the roof construction.				
6.11.3	Gradient of extensive green roof shall not be greater than 58% (\cong 30° degrees from level).				
6.11.4	Additional measures should be considered: <ul style="list-style-type: none"> • >3° to 10°: shear barriers at drainage level and extended to the upper vegetation layer e.g. provide dividers; • \geq10°: root resistant waterproofing and reinforced eaves; 				

	<ul style="list-style-type: none"> • 10° to 20°: use of erosion control mat shall be placed over the soil-mix and/or a small percentage of cement (1% to 5%) shall be added to the soil mix to increase its strength; • >20° to 30°: use of additional shear barriers/proprietary products specially designed for pitch/curve/incline green roof (e.g. recycle plastic anti-slip cleats/T sections/mesh, plastic grid/web/modular system) to prevent soil from sliding down slopes by transferring the soil to roof structure and allow substantial space for plant growth; use of pre-cultivated modular system/ vegetation mats; • Curved slope: special design which interlock the plant substrate/vegetation mats, coarse-mesh jute to provide additional protection for windy site; and • Adequate drainage provision is provided at top to prevent uncontrolled surface flow from upslope areas. 				
6.11.5	Drainage board system that actually holds water in its specially designed pockets together with 50mm thick water retention layer are adopted for pitch roof/structure>3° as natural drainage may be too rapid.				
6.11.6	Irrigation with low water splashing impact is adopted for pitch roof to minimize uncontrolled surface flow.				
6.11.7	Plants selection shall consider the variation of soil moisture, e.g. plants at top may lose water easily, while plants at bottom may receive too much water.				
7. Vertical Green (VG)					
No.	Item	Complied	N/C	N/A	Remarks
7.1	Installation of VG is considered for new buildings and buildings of require retrofitting.				
Complete the following if VG is included in the project					
7.2	Self-clinging climbers/climbers with supporting system are used instead of modular systems.				
7.3	Choice of wall finish shall suit the growth of self-clinging plants. Self-cling plants prefer climbing at natural materials such as bricks/stones/clay tiles/timbers or concrete. New paint finish and heat metal panel at south facing aspect will hamper their growth thus are not recommended.				
7.4	Consideration is given to put right plant at right place. Some climber species need supporting wire/mesh to climb whereas self-cling plants just need a wall/surface. Correct species shall be selected for different applications. Tough plant species are selected for exposed sites. Site conditions, functional, aesthetic, maintenance provisions and the growth speed and greening effects of plants shall be considered. (Refer to R&D study on DSD Homepage).				
7.5	Soil requirement refer to No. 5.3.2.				
7.6	VG is proposed at preferred aspects - 1 st : south; 2 nd East/West to maximize the greening effect.				

7.7	If steel mesh system is to be specified, grade 316 stainless steel mesh shall be used at coastal / windy location or environment with corrosive substance.				
7.8	Mesh with grid size of 75 to 150mm wide is used for mature size of plant species.				
7.9	If raised-up planter (i.e. close bottom planter) is unavoidable, automatic irrigation and sufficient drainage should be provided to ensure sustainable plant growth.				
7.10	Use of native/flowering species should be considered to enhance bio-diversity.				
7.11	Maintenance requirements should be considered during the design stage. Prior agreement with the maintenance team and comments from DSD Landscape Unit should be sought. Proper maintenance access is provided.				

Notes

1. This checklist is to be read in conjunction with DSD TC No. 3/2015 and DSD Guidelines on Aesthetic Design of Drainage Services Buildings.
2. Stage 1 Submission refers to submission made upon completion of Detail Design. Stage 2 Submission refers to submission made upon completion of Working Drawings before construction works commence. Re-submission or Stage 2 submission should quote the date at which the previous submission was made.
3. Details of Integrated Landscape Design Frameworks (ILDF) should be referred to in the Cyber Manual for Greening
4. Project proponents are encouraged to make reference to CEDD's approved Greening Master Plans (GMPs) of relevant district when selecting the thematic plants where applicable. Adjustment should be made to suit project constraints and site conditions.
5. Due to limited application of new green infrastructure elements such as pitched green roofs, pervious pavement, bioswale, rain garden in DSD facilities and in Hong Kong, relevant compliance/maintenance requirements are to be reviewed periodically after more applications. Project proponents are recommended to seek advice from project officers of precedent projects and / or conduct appropriate site trial(s) to verify the design details prior to actual installation.
6. Illustrative examples mainly extracted from DSD projects are uploaded to DSD Website Homepage (<http://www.dsd.gov.hk>) under Greening/ VCAB Submission. These examples would be periodically updated for illustration, lessons learnt and experience sharing purpose. Good examples included in the illustrations would only serve as a reference, and they should not be used as standardized design for approval. Project proponents should base on project specific requirements, site constraints and opportunities to design the DSD facilities.
7. The use of this compliance checklist is to encourage efficient, aesthetically pleasing and sustainable design of DSD facilities. Project proponent should comply with the latest available good practice to prepare the design submission.
8. Soft copy of the Checklist and other supplementary information can be downloaded in DSD Website Homepage (<http://www.dsd.gov.hk>) under Greening/ VCAB Submission. Project proponent should review all the relevant parts of the Checklist and ensure their compliance. For non-compliance items, justifications and elaboration should be provided in the report.
9. Section 4.4 – “Aesthetic manhole covers on pedestrian walkway” was added in September 2019.

Abbreviations: N/C – Not comply

N/A – Not applicable

- END -