

APPLICATION FOR PERMISSION
UNDER SECTION 16 OF THE TOWN PLANNING ORDINANCE

APPLICATION NO. A/K14/769

- Applicant** : Water Supplies Department (WSD)
- Site** : Government land in Anderson Road Quarry Development (ARQD), Kowloon
- Site Area** : About 3,510m²
- Lease** : Government Land
- Plan** : Approved Kwun Tong (North) Outline Zoning Plan (OZP) No. S/K14N/15
- Zoning** : “Open Space” (“O”)
- Application** : Proposed Public Utility Installation (Grey Water Treatment Plant)

1. The Proposal

- 1.1 The applicant seeks planning permission for a proposed grey water treatment plant (GWTP)^[1] at the application site (the Site) (**Plan A-1**). The Site falls within an area zoned “O” on the approved Kwun Tong (North) OZP No. S/K14N/15. According to the Notes of the OZP, the proposed GWTP, which is a type of ‘Public Utility Installation’ use, is a Column 2 use within the “O” zone which requires planning permission from the Town Planning Board (the Board).
- 1.2 The ARQD is planned for residential developments^[2] supported by commercial and other government, institution and community (G/IC) facilities. The Site, zoned “O”, is at the southern portion of the regional open space^[3] at ARQD (the ROS) of about 2.35ha. Being located at the edge of ARQD and abutting a

^[1] Grey water refers to the waste water separately collected from baths, showers, wash basins, kitchen sinks and laundry machines, etc. which could be collected, treated and reused for non-potable purposes such as toilet flush. The proposed GWTP will house the pre-treatment, biological treatment and filtration, disinfection and other ancillary facilities for the grey water treatment, with a treatment capacity of about 3,300m³ per day.

^[2] The housing developments at ARQD are planned for completion, tentatively from 2023/24 to 2025/26.

^[3] A total 15.5ha open space has been designated in the ARQD, including regional open spaces which is divided into the northern and southern portions, as well as district open spaces. The construction works for open space would be completed tentatively by end 2023.

proposed road with increasing gradient, the proposed GWTP would be developed with its roof at the same level of the adjoining ROS (of above 182 meters above Principal Datum (mPD)) (the ROS level). Other ancillary facilities (with total area of 830m²) including voids for fire safety and natural lighting/ventilation purposes, a photovoltaic (PV) panel platform for generating renewable energy for use by the GWTP and a staircase hood (3m in height) with greening cover for emergency need would also be placed at the ROS level (**Drawings A-2 and A-8**). The construction of the GWTP is not visible for users of the ROS. Apart from the areas of the above ancillary facilities, majority of the Site at the ROS level (of about 2,680m²) would be handed over to Leisure and Cultural Services Department (LCSD) and will form part of the ROS for public enjoyment.

- 1.3 Location plans, section plans and drawings on the perspective views of the proposed GWTP as submitted by the applicant are at **Drawings A-1 to A-8**. The major development parameters of the proposed GWTP are summarised below:

Site Area	about 3,510m ² (^)
Gross Floor Area	About 2,825m ² <ul style="list-style-type: none"> • Main Building: 2,530m² • Ancillary Building: 295m²
Plot Ratio	0.805
Building Height	165 to 182mPD <ul style="list-style-type: none"> • Main Building: 2 storeys • Ancillary Building: 1 storey
Target Completion	2022

Note:

(^) Apart from the main and ancillary buildings, the Site also covers an emergency vehicular access (below the ROS level) and slope/retaining wall (**Drawing A-2**).

- 1.4 According to the applicant, the Civil Engineering and Development Department (CEDD) has prepared a master landscape plan with different themes for the various parcels of open spaces at ARQD and it recommends that the ROS would be developed mainly as a great lawn. Having consulted CEDD and LCSD, the landscaping of the ROS level of the Site would be designed along this theme with planting of shrubs and grass by the applicant for integrating with the remaining portion of the ROS.
- 1.5 Regarding the pedestrian accessibility, barrier-free accesses to the remaining ROS would be provided. A planned elevated pedestrian linkage under the ARQD zoned “OU” annotated “Landscaped Elevated Walkway” (**Plan A-2**) would link up the Site to the northern portion of the regional open space across the proposed Road F. A staircase would also be provided at the southwestern portion of the Site for accessing Road F at a lower platform level of about 175mPD (**Drawings A-2 and A-7**).
- 1.6 In support of the application, the applicant has submitted the following documents:

- (a) Application form attached to a letter from the applicant **(Appendix I)** received on 1.3.2019
- (b) Planning statement received on 1.3.2019 **(Appendix Ia)**
- (c) Further information (FI) vide letter received on 1.4.2019 **(Appendix Ib)** providing responses to departmental and public comments and revised plans with minor amendments

2. Justifications from the Applicant

The justifications put forth by the applicant in support of the application are set out in the Planning Statement at **Appendix Ia**, and summarized as follows:

In line with Government's Policy to Enhance Sustainability of Water Supply

- (a) The Total Water Management strategy promulgated by WSD in 2008 emphasized the need to exploit new water sources including, inter alia, recycled grey water for enhancing the water resilience in Hong Kong. The proposed grey water recycling system at ARQD is identified as one of the examples of the climate actions as stated in Hong Kong's Climate Action Plan 2030+ promulgated by the Environment Bureau.

An Environmental Means for Providing Flushing Water for ARQD

- (b) The ARQD is at high altitude with mean site formation level in range of about 175mPD to 202mPD (**Drawing A-1**). As compared with the conventional approach of providing flushing water by pumping sea water, the proposed grey water recycling system, which is proved to be technically feasible^[4], is more desirable from the economic and environmental perspectives in supporting flushing water demand of ARQD.
- (c) The GWTP would be erected at about 165mPD which is the lowest topographical level within ARQD; thus it is a suitable location for collecting the grey water generated from various development sites within ARQD by gravity in a cost-effective way. The Site abuts the proposed Road F which would be essential for daily operation and maintenance of the GWTP (**Drawing A-3**).

Minimal Impacts on Public Enjoyment of the ROS

- (d) The proposed GWTP is designed with minimised building bulk for reducing land requirement^[5]. The Site (of about 3,510m²) is about 15% of the ROS and majority of the ROS level is planned for public open space, as such the integrity and accessibility of the planned ROS would not be hampered. Other facilities including the voids and PV panels are ancillary and environmentally friendly

^[4] The grey water recycling system has been operating in LOHAS PARK and the City University of Hong Kong since 2009.

^[5] According to the applicant, other conventional sewerage treatment plants with similar treatment capacity as the proposed GWTP, such as Mui Wo Sewerage Treatment Works and Yung Shue Wan Sewerage Treatment Works occupy the land areas of about 0.48ha and 0.4ha respectively.

features and their sizes are kept to a minimal to minimise the impacts on public enjoyment of the ROS. The applicant will consult CEDD and LCSD on the detailed design of the ROS level of the Site at later stage.

- (e) The Site at 182mPD is located at open platform at top of the slope adjacent to On Tai Estate and is subject to strong wind. Tree plantings at the ROS level may not be suitable for avoidance of possible tree collapse during typhoon that may impose hazards to the residents of On Tat Estate. Also, the Site is at the edge of the ARQD and planting of shrubs instead of trees would enhance the panoramic view of future park visitors.
- (f) In line with the thematic design of the ROS for developing a great lawn, landscaping with shrub and grass with soil depth of 600mm is proposed at the ROS level. This proposal is agreeable to the relevant government departments. Room for allowing deeper soil for other plantings, if requested by the relevant departments, could be accommodated in the detailed design of the proposed GWTP.
- (g) The architectural design for the proposed GWTP will provide a well-balanced architectural facade treatment that blends well with its surrounding environment. No adverse visual impact is anticipated.

Community Support

- (h) The applicant consulted the Housing and Environmental Hygiene Committee (HEC) of Sai Kung District Council (SKDC) and the Environmental and Hygiene Committee (EHC) of Kwun Tong DC (KTDC) in September 2018 on the proposed GWTP, and the DC members in general supported the proposal.

No Adverse Environmental, Traffic and Infrastructural Impacts

- (i) According to the Environmental Review (ER) conducted for the ARQD, the environmental impacts due to the proposed GWTP are insignificant. Odour and Noise Impact Assessment conducted by the applicant demonstrate that no adverse noise nor odour impacts are anticipated.
- (j) The Drainage Impact Assessment conducted by the applicant concludes that there will be no adverse drainage impact to the downstream drainage system arising from the proposed GWTP.
- (k) On traffic aspects, with limited traffic generation (mainly maintenance vehicles with one to two trips a day) associated with the GWTP, it is anticipated that the traffic impact during both the construction and operation stages would be minimal.

3. Compliance with the “Owner’s Consent/Notification” Requirements

As the Site involves government land only, the “owner’s consent/notification” requirements as set out in the Town Planning Board Guidelines on Satisfying the “Owner’s Consent/Notification” Requirements under Sections 12A and 16 of the Town Planning Ordinance (TPB PG-No. 31A) is not applicable to the application.

4. Previous Application

There is no previous application in respect of the Site.

5. Similar Applications

There is no similar application for the same use within “O” zone on the Kwun Tong (North) OZP.

6. The Site and Its Surrounding Areas (Plans A-1 and A-2 and site photos on Plan A-3)

6.1 The Site is:

- (a) located at the southwestern edge of the ARQD and forms part of a larger “O” zone for development of an regional open space serving the territorial population and tourists as well as the residents at ARQD and its vicinity; and
- (b) currently under site formation and infrastructural works by CEDD.

6.2 The surrounding:

- (a) area further northeast of the ROS is planned for public housing development;
- (b) areas to its north across the proposed Road F have been reserved for commercial and GIC (including community hall, sports centre and social welfare facilities) uses and the ROS would be connected with the northern portion of regional open space via a planned elevated landscape walkway; and
- (c) area to the further south is an existing high-rise residential public housing development, namely On Tat Estate with building heights of about 260mPD.

7. Planning Intention

The planning intention of “O” zone is primarily for the provision of outdoor open-air public space for active and/or passive recreational uses serving the needs of local resident as well as the general public.

8. Comments from Relevant Government Departments

8.1 The following Government departments have been consulted and their views on the application are summarized as follows:

Land Administration

8.1.1 Comments of the District Lands Officer/Sai Kung, LandsD (DLO/SK, LandsD):

- (a) The Site is currently held under a Temporary Land Allocation No GLA-SK 3479(T) allocated to CEDD for the purpose of site formation and infrastructural works for the development of ARQ sites until 31.12.2022.
- (b) The proposed GWTP is located at a piece of Government land reserved for a planned open space, which will be handed over to LCS D for public enjoyment. If the application is approved by the Board, both WSD and LCS D will need to obtain Government land allocation of the Site for implementation of the proposal.

Fire Safety

8.1.2 Comments of the Director of Fire Services (D of FS):

He has no in-principle objection to the application subject to fire service installations and water supplies for firefighting being provided to the satisfaction of his department. Detailed fire services requirement will be formulated upon receipt of formal submission of general building plans.

Environment

8.1.3 Comments of the Director of Environmental Protection (DEP):

- (a) He has no objection to the application on the consideration of the followings,
- (b) CEDD conducted an ER on the approved Schedule 3 Environmental Impact Assessment Report for ARQD based on the preliminary design of GWTP provided by WSD. The review broadly covers aspects of air quality, noise, water quality, sewerage and sewage treatment, and waste management. The ER has concluded that the environmental impacts due to the proposed GWTP are insignificant and the findings of the approved Schedule 3 EIA Report remain valid.
- (c) WSD has further conducted odour and noise impact assessments arising from the GWTP at the Site. The potential operation noise and odour impact from the proposed GWTP have been quantitatively assessed. The predicted fixed plant noise levels at the representative noise representative receivers comply with the day-time/evening (60dB(A)) and night-time (50dB(A)) noise criteria. The predicted odour level would comply with the odour criterion at all identified air representative receivers. No adverse noise and odour impact is anticipated.

Architectural Aspect

8.1.4 Comments of the Chief Architect/Central Management Division 2, Architectural Services Department (CA/CMD2, ArchSD):

The proposed GWTP with green open space at the ROS level is

considered satisfactorily blend in with the adjacent open space. As such, he has no comment from architectural and visual impact point of view.

Urban Design and Landscape

8.1.5 Comments of Director of Leisure and Cultural Services (DLCS):

As the ROS level of the Site is generally designed according to the master landscape plan for ARQD and the applicant will consult his department on the detailed design of the ROS level, he has no objection to the application, but advises that should the application be approved by the Board, approval condition requiring the submission and implementation of landscaping proposals should be imposed.

8.1.6 Comments of the Chief Town Planner/Urban Design and Landscape, Planning Department (CTP/UD&L, PlanD):

Urban Design

- (a) As illustrated in the photomontages prepared for the ER (at **Appendix Ia**), with the building profile of the residential blocks generally descending from the mountain backdrop to the edge of ARQD where the GWTP is located, the proposed development might not be noticeable when viewed from the identified visual sensitive receivers. The greening atop the GWTP might also provide visual relief. As such, it is anticipated that the proposed development would not induce significant adverse visual impact on the surroundings.

Landscape

- (b) As illustrated on the perspective views submitted by the Applicant, the ROS level of the Site is proposed with soft landscaping treatment, mainly lawn, to mitigate the potential landscape impacts of the proposed development. Shallow soil depth (i.e. less than 600mm clear soil depth) is provided at the ROS level which may limit the possible choice of planting type and restrict the landscape design.
- (c) While there may be room for possible improvement on landscape quality of the proposed development, he has no-principle objection on the application from landscape planning point of view.
- (d) He advises the applicant that due consideration should be taken for the overall landscape quality and the relationship and interface with the ROS in order not to affect the overall quality and necessary functional requirements of the public open space.

Other Technical Aspects

8.1.7 Comments of the Head of Geotechnical Engineering Office, CEDD (H(GEO), CEDD)

He has no objection to the application but suggests that should the application be approved by the Board, approval condition requiring the

submission of a Geotechnical Planning Review Report should be imposed.

8.1.8 Director of Electrical and Mechanical Services:

He has no comment on the application and the FI from electricity supply safety aspect but reminds the applicant to observe the Electricity Supply Lines (Protection) Regulation and the “Code of Practice on Working near Electricity Supply Lines” established under the regulation when carrying out works in the vicinity of the electricity supply lines.

8.2 The following Government bureaux/departments have no comments on the application and the FI:

- (a) Secretary for Development;
- (b) Project Manager (East), CEDD;
- (c) Chief Engineer/Construction, Water Supplies Department (WSD);
- (d) Mainland South Division, Drainage Services Department (DSD);
- (e) Chief Highway Engineer/Kowloon, Highways Department (CHE/K, HyD);
- (f) District Officer (Kwun Tong), Home Affairs Department (HAD);
- (g) District Officer (Sai Kung), HAD;
- (h) Commissioner for Transport (C for T);
- (i) Commissioner of Police; and
- (j) Government Property Administrator.

9. **Public Comments Received During the Statutory Publication Period**

On 8.3.2019, the application was published for public inspection. During the first three weeks of the statutory public inspection period, which ended on 29.3.2019, one public comment was received from an individual (**Appendix II**) who comments that the applicant should provide details on the proposed soil depth to demonstrate that proposed development would not affect the landscaping works of the planned open space.

10. **Planning Considerations and Assessments**

10.1 The application is to seek planning permission for ‘Public Utility Installation (GWTP)’ use at the Site within the “O” zone at ARQD. The proposed GWTP forms an essential component of the grey water recycling system at ARQD which aims at conserving water resources; and owing to the high topographical level of ARQD, such recycling system would help minimise the energy and cost of pumping sea water for flushing purpose. As such, the proposed GWTP is considered in line with the Smart, Green and Resilient City Strategy as advocated under the PlanD’s 2030+ Study that focuses on, amongst other, minimizing demand for use of resources, promoting low-carbon smart economy and living, enhancing city efficiency, and enhancing climate resilience.

Planning Intention and Land Use Compatibility

- 10.2 The roof the proposed GWTP would be at the same level of the adjoining ROS, and majority of the Site at ROS level which would still be kept for open space use. Only ancillary and environmental features (about 832m²) such as voids, PV panels and staircase hood with greening cover would be visible by the future park goers. About 15.5ha open spaces have been reserved for ARQD, as such, the proposed development at the ROS, in general, would not affect the overall provision of open space at ARQD. The applicant will implement the landscaping works at ROS level (mainly with shrub and grass paving as agreeable to LCSD) and is in echo with the thematic design of the ROS as a great lawn, which would then be handed over to LCSD for management and maintenance and would be open for public enjoyment. With the landscaping/greening at the ROS level, the proposed GWTP and the ancillary facilities generally would not affect the integrity and function of the ROS. As such, the planning intention of “O” zone would not be undermined. DLCS has no objection to the proposed GWTP.

Urban Design and Landscape Aspects

- 10.3 On visual aspects, in support of the application, the applicant has submitted perspective drawings (**Drawings A-6 to A-8**) which illustrate that the overall visual impact induced by the proposed GWTP and its ancillary facilities is insignificant and would not be incompatible with the surroundings. In this regard, CA/CMD2, ArchSD and CTP/UD&L, PlanD have no objection/adverse comment on the application from visual impact point of view.
- 10.4 The Site is at high topographical level which enjoys panoramic view of Kowloon East but may be subject to strong wind, as such tree planting may not be suitable for avoiding potential hazard to the residents at the lower platform in case of tree collapse during typhoon. In view of the above, the landscape proposal with planting of shrub and grass in soil depth of 600mm is considered acceptable. The applicant mentions that deeper soil for tree plantings, if requested by the relevant government departments at detailed design stage, would be accommodated in the design of the proposed GWTP. CTP/UD&L, PlanD has no in-principle objection to the application from the landscape planning perspective. DLCS has no comments on the landscape proposal at ROS level as it is generally in line with the future design of the ROS, but suggests imposing an approval condition on the submission and implementation of landscape proposals.

Other Technical Aspects

- 10.5 Technical assessments submitted demonstrate that the proposed GWTP would not have adverse impacts in respect of environmental, noise, odour, drainage and traffic aspects on the surrounding areas. Relevant departments (such as FSD, DEP, C for T, CEDD, GEO of CEDD) have no adverse comments on the application.

Public Comments

- 10.6 The applicant has consulted the HEC of SKDC and EHC of KTDC in 2018 on the proposed GWTP, and in general, the DC members were supportive to the proposal.

- 10.7 In respect of the comment raised by and individual on landscape aspects, the assessments mentioned in paragraphs 10.2 to 10.4 above are relevant.

11. Planning Department's Views

- 11.1 Based on the assessments made in paragraph 10 above and having taken into account the public comments mentioned in paragraph 9, the Planning Department has no objection to the application.
- 11.2 Should the Committee decide to approve the application, it is suggested that the permission shall be valid until 12.4.2023, and after the said date, the permission shall cease to have effect unless before the said date, the development permitted is commenced or the permission is renewed. The following conditions of approval and advisory clauses are suggested for Members' reference:

Approval conditions

- (a) provision of fire services installations and water supplies for firefighting to the satisfaction of the Director of Fire Services or of the Town Planning Board;
- (b) the submission of a Geotechnical Planning Review Report and implementation of the necessary geotechnical remedial works identified therein, in respect of the slopes adjacent to the application site to the satisfaction of the Director of Civil Engineering and Development or of the Town Planning Board; and
- (c) the submission and implementation of landscaping proposals to the satisfaction of the Director of Leisure and Cultural Services or of the Town Planning Board.

Advisory clauses

The recommended advisory clauses are attached at **Appendix III**.

- 11.3 There is no strong reason to recommend rejection of the application.

12. Decision Sought

- 12.1 The Committee is invited to consider the application and decide whether to grant or refuse to grant permission.
- 12.2 Should the Committee decide to approve the application, Members are invited to consider the approval condition(s) and advisory clause(s), if any, to be attached to the permission, and the date when the validity of the permission should expire.
- 12.3 Alternatively, should the Committee decide to reject the application, Members are invited to advise what reason(s) for rejection should be given to the applicant.

13. Attachments

Appendix I	Application form attached to a letter from the applicant received on 1.3.2019
Appendix Ia	Planning statement received on 1.3.2019
Appendix Ib	Further information vide letter received on 1.4.2019
Appendix II	Public comment received during the statutory publication period
Appendix III	Recommended advisory clauses
Drawing A-1	Location Plan
Drawings A-2 to A-4	Site Plans
Drawing A-5	Section Plan
Drawings A-6 to A-8	Perspective plans
Plan A-1	Location Plan
Plan A-2	Site Plan
Plan A-3	Site Photos

**PLANNING DEPARTMENT
April 2019**