
**TENDER FOR 7 DEFU LANE 4
FOR DIESEL REFUELLING STATION**

APPENDIX 3 : TECHNICAL CONDITIONS OF TENDER

1. **AUTHORISED USE**

- 1.1 The Authorised Use for 7 Defu Lane 4 ("said Land") is Diesel Refuelling Station only. Only above-ground diesel tank with capacity $\leq 28,400$ litres with supporting bund walls, if necessary, subject to necessary approvals from relevant authorities such as URA, SCDF, FSSD, Major Hazards Department (MHD). In addition, Successful Tenderer is to cater for infrastructure such as roads for all types of buses and prime movers within the said Land. Successful Tenderer is also to take necessary measures in building layout to keep vehicles using the pumps within the said Land.

2. **PROHIBITED USE**

- 2.1 The following usage will not be permitted on the said Land
- (a) Workers quarters/ dormitories
 - (b) Repair and servicing of motor vehicles/machinery/construction equipment
 - (c) Concrete batching
 - (d) Concrete precasting
 - (e) All trades involving food waste
 - (f) All trades involving construction and demolition waste, wood or horticultural waste, and other recycling activities which generate dust and odour, storage of scrap metal, waste paper and other waste materials.
 - (g) No other retail use (examples: canteen and minimart)

The above list of prohibited usage serves only as a guide and is by no means exhaustive or final.

3 **PROPOSED WORKS ON THE SAID LAND**

- 3.1 The maximum Gross Plot Ratio for the Authorised Use of Diesel Refuelling Station Use is 0.3, beyond which the Land Betterment Charge (LBC) may be payable to the State. Please note that this is just for reference as SLA, as the final authority for determining LBC, will need to evaluate the proposal submitted by the Successful Tenderer to determine if LBC is payable. Ancillary quantum (including office/ store room to serve the diesel refuelling station only) shall not exceed 10% of the total proposed Gross Floor Area.
- 3.2 In the event that LBC is payable, the Successful Tenderer shall assume liability to pay the LBC to the State and submit the Notice of Assumption of Liability Form to JTC via Corenet when seeking landowner's consent from JTC, before submitting Development Application to URA. SLA will follow up with Successful Tenderer on the payment of LBC following the grant of Provisional Permission by URA for the development proposal. Following the payment of the LBC by the Successful Tenderer to SLA, URA will then issue the Planning Permission to the Successful Tenderer to proceed with the Successful Tenderer's development proposal.

4.0 CONDITIONS AND REQUIRMENTS OF RELEVANT AUTHORITIES /PUBLIC UTILITY LICENSEES

- 4.1 The Successful Tenderer is required to consult and comply with all technical conditions imposed by the relevant authorities such as the Urban Redevelopment Authority, Land Transport Authority, National Environment Agency, Public Utilities Board, SP Power Grid and the Singapore Civil Defence Force, etc.
- 4.2 The Successful Tender for the said Land is required under the said Conditions of Tender to ascertain the exact and detailed conditions and requirements of all relevant Competent Authorities and Public Utility Licensees in respect of any Development Works to be carried out on the said Property thereon and shall at his own cost and expense observe and comply with the same.
- 4.3 Without affecting the generality of paragraph 4.1 above and without prejudice to the obligations of the Successful Tenderer as set out therein, the contents herein are provided for the information of the tenderers only. Whilst every care and attention has been taken in the compilation and preparation hereof, JTC does not warrant that the contents herein represent all the conditions and requirements of the relevant Competent Authorities/ Public Utility Licensees in respect of the proposed development on the Land Parcel or that they are free from errors or omissions whatsoever. The contents herein are subject to changes by the relevant Competent Authorities/ Public Utility Licensees concerned and the onus lies on the Successful Tenderer to verify these conditions and requirements directly with the JTC, the relevant Competent Authorities and Public Utility Licensees and comply with their current conditions and requirements.
- 4.4 A summary of the initial services requirements of the relevant Competent Authorities/ Public Utility Licensees is set out herein. It serves only as an indication of the possible work involved with regards to services, and is by no means exhaustive or final.
- 4.5 The Successful Tenderer shall ensure that the following requirements are complied with:
- 4.5.1 To consult and liaise directly with the relevant Competent Authorities/Public Utility Licensees regarding the actual locations of all service mains within the said Land and on the requirements and conditions for services diversion and provision prior to the commencement of site work. All necessary precautions shall be taken by the Successful Tenderer to safeguard the service mains before they are diverted.
- 4.5.2 To engage his own licensed Cable Detection Worker (CDW) and licensed Telecommunication Cable Detection Worker (TCDW) to carry out cable detection and if necessary to carry out trial trenches to locate any manholes

and cable routes prior to the commencement of site work. The Successful Tenderer shall bear the cost of any diversion work.

- 4.5.3 To ensure that all service mains that do not need to be diverted are identified and provided with protection, if necessary, during the construction stage of the proposed development. The cost of repairs to any damaged service main as a result of work carried out by the Successful Tenderer shall be borne by the Successful Tenderer.
- 4.5.4 To ensure that the relevant Competent Authorities/Public Utility Licensees are allowed free and unconditional access at all times to services that are required to remain within the said Land for the purpose of installation, maintenance, repair and improvement works and all other work and activities incidental thereto.
- 4.5.5 To make his own arrangements with the relevant Competent Authorities/ Public Utility Licensees and pay for the costs of any diversion and/ or "Capping off" of existing services, provision of service mains and service connection, if any, in connection with the proposed development.
- 4.5.6 To provide for all the internal distribution for water, electricity, drainage and sanitary discharge for the proposed development.
- 4.5.7 To liaise with all the relevant Competent Authorities/ Public Utility Licensees on upgrading the road reserves abutting the Land Parcel to ensure that the necessary roadside drains, sidetable, kerb, etc are carried out in accordance with the latest Road Reserve requirements.
- 4.6 The Successful Tenderer shall be responsible to carry out at his own cost and expense his own site investigation to verify whether there is any sub-structure or other obstructions e.g. footings, piles, tree roots, etc. and other obstructions left in the ground of the said Land, and ascertain their effect on the proposed development.
- 4.7 There may be some other existing services affected by the proposed development. The Successful Tenderer shall inform the relevant Competent Authorities / Public Utility Licensees immediately and bear the necessary cost of diversion and/or "capping off" of these existing services, if any.
- 4.8 In general, no structure shall be sited close to or over existing/ proposed services. The Successful Tenderer shall comply with all the necessary requirements as stipulated by the relevant Competent Authorities/ Public Utility Licensees.
- 4.9 The Successful Tenderer shall seek all relevant agencies' approval on the layout plan for the proposed diesel pump site.

5 LAND TRANSPORT AUTHORITY (LTA)

- 5.1 The Successful Tenderer shall ensure that there is sufficient holding space within the proposed site to contain the vehicular queue without spilling over to the public roads and impeding other motorists. The space within the site is to be large enough to hold the surge of vehicles during operational peak to minimize spill overs from the site.
- 5.2 The Successful Tenderer shall ensure that maneuverability is accounted for larger diesel-powered vehicles. Turning radius should meet the minimum requirement.
- 5.3 The Successful Tenderer shall consider making good the footpath fronting the site. Footpaths should be 1.8m width where possible, or minimally 1.5m where there are constraints.

6 HOUSING DEVELOPMENT BOARD (HDB)

- 6.1 The Successful Tenderer shall provide mitigation measures/ facilities as required and seek the necessary approvals by URA and other technical agencies.
- 6.2 The Successful Tenderer shall only utilize the site for approved uses.
- 6.3 The Successful Tenderer shall be responsible for the safety, stability and maintenance of the above works/site.
- 6.4 The Successful Tenderer shall attend to all public enquiries / complaints arising from the proposed diesel refuelling station. Adequate signboards with details for the person(s)-in-charge and contact numbers must be put in place to inform the public.
- 6.5 The Successful tender shall ensure that all existing services/facilities/ pedestrian access are not tampered with/ affected. If there are, they shall be reconstructed/ reinstated.

7 URBAN REDEVELOPMENT AUTHORITY (URA)

- 7.1 The successful Tenderer shall note that there is strictly no extension of the usage period beyond 3+3 years, as the said Land would be needed for development then. Hence, the Successful Tenderer is to put in place all necessary measures to address this, e.g. phase out or relocate the uses, etc, before the expiry of the said usage period.

8 **GAS**

- 8.1 The Successful Tenderer shall liaise with a gas retailer on the requirements for gas supply to the said Land. For reference, the information on gas pipeline network in Singapore and the list of gas retailers in the market can be found at https://www.ema.gov.sg/Licensees_Gas_Retailer.aspx.
- 8.2 The Successful Tenderer shall at his own cost and expense, carry out trial trench / holes to determine the exact alignment and levels of any existing gas main within the Land Parcel and in the vicinity of the said Land during the design stage and ascertain whether they will be affected by the development works. If affected, the Successful Tenderer shall liaise with the Gas Transporter to request for diversion.
- 8.3 The Successful Tenderer shall provide a suitable diversion corridor and the proposed corridor for the gas mains diversion works must be made available without any obstructions. The Successful Tenderer shall contact gasenquiry@spgroup.com.sg for diversion consultation if the gas mains are affected and bear the necessary diversion cost.

9 **INFOCOMM MEDIA DEVELOPMENT AUTHORITY (IMDA)**

- 9.1 The Successful Tenderer shall ensure that before carrying out any earthworks:
- a) The Successful Tenderer shall consult with and obtain the relevant plant maps or information from the Facilities-Based Telecommunication Licensees who may be affected. Please refer to the link: <https://www.imda.gov.sg/regulations-and-licensing-listing/interconnection-and-access/imdas-requirements-to-be-included-in-land-use-proposal-submissions-to-ura>
 - b) Contractors carrying out the earthworks have to engage licensed telecommunication cable detection workers to locate existing telecommunication plant in the vicinity of the earthworks; and
 - c) Notification of the earthworks must be provided to the appropriate telecommunication licensees at least 7 days in advance.
- 9.2 In addition to Condition 9.1, the developers or owners may be required to compensate the affected telecommunication licensees for the removal or relocation cost, if they require the telecommunication licensees to remove or relocate their existing installation or plant.

**10 MINISTRY OF DEFENCE (MINDEF)/DEFENCE SCIENCE/
TECHNOLOGY AGENCY (DSTA)**

- 10.1 The Successful Tenderer shall ensure that all developments, structures and fixtures on the said Land shall not exceed the maximum height of 64 m Singapore Height Datum (SHD). Such developments, structures and fixtures include those on the roof tops, whether permanent, temporary, transient or stationary (including but not limited to the building superstructure, TV antennae, water tanks, lift motor rooms, cranes, maintenance equipment, lightning conductors, solar panels, moving objects, vegetation etc.) and all construction equipment and temporary structures (including but not limited to cranes, piling rigs, etc.) which shall all be subject to the same height limit.
- 10.2 Republic of Singapore Air Force's (RSAF) clearance shall be sought for the use of construction equipment and temporary structures above 48 m SHD (Email: Height_Control@defence.gov.sg) If the Successful Tenderer wish to pre consult RSAF on the maximum allowable height for the use of construction equipment and temporary structures, the Successful Tenderer can consult RSAF. For civil aviation height and requirements, please consult the Civil Aviation Authority of Singapore ("CAAS"). The more stringent height restriction(s) from the respective agencies shall apply.
- 10.3 The development should not tap on or affect any MINDEF substations at all times.
- 10.4 There is a need for visual controls at the said Land to shield the facilities at Paya Lebar Air Base from external view. This can only be determined when design details such as number of storeys of the proposed development, location of openings (e.g. windows) etc. are made known to MINDEF. The Successful Tenderer shall comply with the details of the visual controls as follows:
- a) The views from windows, corridors, staircases, or any openings, or any surveillance cameras, devices or equipment (e.g. CCTVs) on the said Land exceeding the height of 20m SHD (indicative) must be directed away from MINDEF's premises.
 - b) If (a) becomes impracticable to implement, the developer/ owner/agent can propose visual screening measures in the form of permanent fixtures which are impossible or difficult to remove. They can include but are not limited to the following:
 - i) Window openings are to be recessed or have fixed frosted glass panels;
 - ii) Corridors, staircases, fixtures and other openings are to be provided with louvres; and

- iii) Parapet wall on the rooftop should have a height of 2m for personnel and 3m for vehicles.

The Successful Tenderer is advised to liaise with MINDEF early on the requirements for these visual controls and submit the proposal to MINDEF through DSTA for MINDEF's comments and clearance (at least 1 month in advance) at the detailed design stage and arrange for inspection(s) of the mock up screening measures on site before implementation. Such inspection may include the use of alternative means such as virtual meetings or multi-media to facilitate MINDEF's assessment. If the screening measures implemented on site are found by MINDEF at its sole discretion to be inadequate or ineffective, the developer/owner/agent shall undertake to carry out any and all necessary rectification works at its own cost and expenses, to comply with the visual control requirements stated above and to the satisfaction of MINDEF.

- 10.5 As the said Land is located in proximity to Paya Lebar Air Base, aircraft noise and vibrations should be expected. As such, these effects should be taken into account in the proposed development, and in particular, in the design of the facilities and operating equipment. If necessary, the Successful Tenderer should assess if a noise study should be carried out. The proposal must not impose any constraint on MINDEF or curtail its existing and future developments, operations and activities in any way.
- 10.6 All capital and operating costs or expenses incurred by the developer/owner/agent to meet all the above conditions and requirements will be borne by the Successful Tenderer.
- 10.7 The Successful Tenderer shall consult MINDEF through URA - Development Control Group or JTC if under the Plan Lodgement Scheme when the detailed development plans are available.
- 10.8 The Successful Tenderer shall seek MINDEF's clearance through DSTA early (at least 4 weeks in advance) if any part of the above requirements or any mention of MINDEF/SAF/DSTA is in the developer/owner/agent's information to be made public.

11 NATIONAL ENVIRONMENT AGENCY (NEA)

- 11.1 The said Land is located within a water catchment where rainwater and surface runoff are collected at downstream reservoir for treatment to produce drinking water. The proposed uses shall not pose any contamination risk to our water resources.
- 11.2 The activities at the said Land shall not cause any pollution to the environment or nuisance problem to the people working or residing in the vicinity. Pollution control measures (e.g. provision of containment facility

such as bund wall, etc.) will have to be duly implemented.

- 11.3 Sewage and used water generated from workers/staff and other people at the subject site shall be discharged into the public sewer in accordance with the conditions and requirements imposed by PUB.
- 11.4 Refuse and other solid wastes generated from the proposed development shall be collected by a licensed waste collector for disposal at an approved waste disposal facility. Please ensure that the proposed refuse storage and collection system (e.g. bin centre) is in compliance with the public health requirements stated in the Code of Practice on Environmental Health.
- 11.5 All the applicable requirements and provisions of the Singapore Standard on Code of Practice for Pollution Control (i.e. SS593:2013), the Code of Practice on Environmental Health, the Environmental Protection and Management Act 1999, the Environmental Public Health Act 1987, the Radiation Protection Act 2007, the Energy Conservation Act 2012 and their Regulations, shall be complied with.

12 **NATIONAL PARKS BOARD (NPARKS)**

- 12.1 If the Successful Tenderer intends to carry out any regulated activities under the Parks and Trees Act and its Regulations that arise out of or pursuant to the use of the site, it must seek the Commissioner of Parks and Recreation's ("Commissioner") approval before doing so.
 - a) Before seeking the Commissioner's approval, the Successful Tenderer is required to consult the Commissioner, through the Greenery and Development Planning Branch at NPARKS_GDP@nparks.gov.sg at the planning and design stage of the development works concerning the Site.
 - b) The Successful Tenderer is required to present the following at the consultation:
 - i) A survey plan (dated not more than 2 years from February 2024) of the site and its peripheral roads, at a scale of at least 1:500. The plan must also clearly indicate the location, species, height and girth of trees at the site; and
 - ii) All other relevant additional information such as plans on construction hoardings.
- 12.2 The Successful Tenderer shall note and adhere to the following requirements in respect of the green verge(s) / road table(s) / green buffer(s) surrounding the site. Further details of these requirements can be found in NParks' "Guidelines on Greenery Provision and Tree Conservation for Developments". It is available for downloading at

<https://www.nparks.gov.sg/partner-us/development-plan-submission/guidelines-on-greenery-provision-and-tree-conservation-for-developments>

- a) The proposed development on the Site shall not encroach on the green verge(s) surrounding the said Land , nor shall it affect any roadside table surrounding the Site.
- b) The Successful Tenderer shall ensure that the green verge(s) abutting the site are not to be affected by the development and use of the site, including without limitation:
 - i) Ensuring that the construction or provision of any vehicular ingress/egress, acceleration/deceleration/storage/ vehicular lanes, services access, bus stops, and any structure required under statute to be erected to divert or reconstruct services or road features/elements, shall not affect the trees and plants located in the green verge(s);
 - ii) Ensuring that the green verge is kept clear and shall be free from obstructions and encumbrances at all times, including without limitation bicycles parked on the green verge or items left on the green verge;
 - iii) Ensuring that vehicular and service access points, pick-up/drop-off points, taxi lay-bys, loading/unloading bays and fire engine hard-standing areas are to be located within the said Land and not within the green verge(s); and
 - iv) Ensuring that there is no change of soil level to the green verge(s) without prior approval from the Commissioner.
- c) The Successful Tenderer must also ensure that the development on the site complies with the requirements for green buffers, including without limitation the following:
 - i) The green buffers must be free from any encroachment above ground, and/or any structures or services are to be recessed to at least 2-metre below ground level and are not to slope with gradients steeper than 1:2.5; and
 - ii) The width of the green verge shall be in accordance to LTA's standard road code for that category of road or aligned with the existing green verge along the road, whichever is wider.

If there is any indication that the works at the said Land will affect the green verge(s) / road table(s) / green buffer(s) in any way whatsoever, the Successful Tenderer must seek the Commissioner's approval as set out in Condition 12.1, as well as the approval of the other applicable authorities under the relevant legislation, for the conduct of the works

that will affect the green verge(s) / roadside table(s).

- 12.3 Development works are to be confined within the site and working boundaries. There must not be any illegal dumping or storing of construction materials beyond the approved boundaries. The proposed Development shall not encroach on the road reserve line and affect any roadside table.

13 CATCHMENT AND WATERWAYS (C&W) DEPARTMENT, PUBLIC UTILITIES BOARD (PUB)

- 13.1 The said Land is not affected by Drainage Reserve.
- 13.2 The minimum platform level (MPL) for the said Land shall not be lower than 4.5m above Singapore Height Datum, or 300mm above the adjacent road/ground level for general developments, or any other level as determined by PUB as in stated in the latest edition of the 'Code of Practice on Surface Water Drainage', whichever is the highest. In complying with the MPL requirement, thorough investigations of the site shall be conducted to determine suitable platform profiles to ensure that the runoff within, upstream of and adjacent to the subject site can be effectively drained away without causing flooding within the site and in the vicinity of the site. Any proposal to level/backfill the subject site shall be submitted to PUB(C&W) for comments and approval.
- 13.3 The Successful Tenderer shall locate and identify all existing drains within and in the vicinity of the development site. The existing drainage system within and in the vicinity of the proposed site shall not be interfered with, in any manner, without written approval from PUB(C&W). All works shall not cause damage or affect the structural integrity of the roadside/outlet drains.
- 13.4 The Successful Tenderer shall ensure that the design and construction of the proposed development within the site will not cause damage and affect the structural integrity of the existing drains. The Successful Tenderer shall ensure that the runoff within, upstream of and adjacent to the site shall be effectively drained away without causing flooding within the site and in the vicinity of the site. The Successful Tenderer shall take due care and precautionary measures to ensure that no damage, settlement or any adverse impacts occurs to any existing drain/drainage facilities in the course of the works. Free flow of water in the drains shall be maintained at all times. Any damages caused to the drainage structures shall be reinstated at the service provider/contractor's own cost to the satisfaction of PUB(C&W).
- 13.5 The planning, design, construction activities and procedures for plan submission shall comply fully with the requirements as stipulated in the latest edition of the Code of Practice on Surface Water Drainage and The Sewerage and Drainage (Surface Water Drainage) Regulations

2007. The Successful Tenderer may download the latest version of the COP from the PUB website:

<https://www.pub.gov.sg/drainage/COPsurfacewaterdrainage>

- 13.6 The Successful Tenderer shall ensure that the runoff within, upstream of and adjacent to the site can be effectively drained away without causing flooding within the site and in the vicinity of the site.
- 13.7 The topography of the site shall not be changed without the approval of PUB.
- 13.8 All raw materials such as sand, gravel and cement shall be stored under a shelter. The storage areas shall be kerbed and served by proper drainage, and all sullage water from the material stockpile areas shall not be discharged into drain/waterway. All sewage and sullage water shall be discharged into a public sewer.
- 13.9 Effective erosion and sediment control measures shall be provided by the developer/owner and the QP shall advise his developer/owner to provide such effective measures and facilities with inputs from Qualified Erosion Control Professional (including site management system and perimeter cut-off drain, silt traps, storage ponds, treatment plants, etc) to ensure clean discharge that complies with the statutory requirement. The proposed erosion and sediment control measures shall be submitted by a Qualified Erosion Control Professional (QECP) to Public Utilities Board before commencement of works. All affected watercourses shall be desilted and cleared until completion of work. For reference, the information can be found in the website <https://www.pub.gov.sg/drainage/earthcontrolmeasures>
- 13.10 The said Land is within Serangoon Water Catchment.
 - a) The proposal shall not result in any loss of yield from the catchment area.
 - b) Stringent pollution control measures shall be incorporated in the design and during the construction of the proposed development.
 - c) All sewage and sullage water shall be discharged into a public sewer.
 - d) Bulk storage of toxic and hazardous materials shall not be allowed.
 - e) If there is any earth filling work at the development site, use good earth free of any debris or construction waste materials. If sand is used for backfilling, do not use marine sand. Only washed sand with chloride content not exceeding 0.01% (by Weight) shall be allowed. Test reports on the chloride content of the washed sand shall be submitted to PUB(C&W) for records before commencement of work.
- 13.11 All pollutive items shall be stored under shelters which shall be kerbed-

up and properly contained. This is to ensure that no spills/leaks of wastes escape the proposed development and potentially enter controlled watercourses. All sullage water from the containment area shall be discharged into a public sewer.

- 13.12 The site shall be designed to minimize the contamination of stormwater runoff. This includes having sheltered and perimeter kerbed areas for pollutive materials and activities.
- 13.13 All contaminated stormwater runoff shall be collected and treated. Any discharges into watercourses shall comply with Allowable Limits for Trade Effluent Discharge to Controlled Watercourses under the EPMA (Trade Effluent) Regulations.
- 13.14 Proper housekeeping is required, and the premises shall be kept clean and tidy at all times. All open ground (i.e. unsheltered areas) and drains in the premises shall be free of grease/oil/raw materials.

Please contact SHEN HUI CHRISTIANA (email: CHRISTIANA_SHEN@PUB.GOV.SG), ZENG WENQIU (email: ZENG_WENQIU@PUB.GOV.SG), TAN LEH HO (email: TAN_Leh_Ho@pub.gov.sg), ONG JING YUAN (email: ONG_JING_YUAN@PUB.GOV.SG), from PUB(C&W), for any clarifications on Catchment and Waterways.

14 **WATER RECLAMATION NETWORK DEPARTMENT, PUBLIC UTILITIES BOARD (PUB)**

- 14.1 The planning of this project shall comply with the Code of Practice on Sewerage and Sanitary Works (2nd Edition Jan 2019 and Addendum No.1 – Mar 2021) [thereafter referred to as the “COPSSW (2nd Ed.)”].
- 14.2 There are existing 150mm diameter sewers within/ in the vicinity of the said Land. Enclosed is a plan that shows the approximate location of existing sewerage infrastructure within/in the vicinity of the proposed site. This plan is for the Successful Tenderer reference only Thorough site investigation shall be carried out to determine the exact positions and levels of the existing sewerage infrastructure.
- 14.3 The used water generated from the proposed site shall be discharged to the existing 150mm diameter sewer within the proposed site.
- 14.4 PUB’s approval shall be obtained for any proposed abandonment of sewers/manholes as well as the manner in which they will be abandoned. Successful Tenderer and QP shall note that the upstream (inlet) and downstream (outlet) ends of the abandoned sewer connections or sewers of all sizes shall be sealed watertight with 225mm thick brick plugs rendered with cement mortar. All abandoned manholes are to be demolished, filled up with well compacted

approved material, and the manhole frames and covers removed. Details of the requirements can be found in the COPSSW (2nd Ed.) and “Standard Requirements for Abandoning of Disused Sewerage System” for compliance [https://info.pub.gov.sg/Documents/STDREQ_SEALING_SEWERCONNECTION_ABANDONEDSEWERS_MANHOLES/PUMPINGMAINS0423.pdf]. The abandoned sewers/manholes, including the manner of abandonment (remove, seal, grout, partial demolition, etc.), shall be indicated on the as-built drawings submitted to PUB(WRN). The following details shall also be included:

- a) whether the abandoned sewers are removed, grouted or sealed;
 - b) For manholes that are only partially demolished with approval from PUB(WRN), the extent of demolition shall be shown;
 - c) the exact extent/length of the abandoned sewers that is removed, grouted or sealed;
 - d) the exact locations of the watertight seals; and
 - e) the type of watertight seals.
- 14.5 Sullage water from motor garage or lubrication bay and car washing bay of petrol station shall be discharged into the sewerage system via an oil interceptor (Standard Drawing No. PUB/WRN/STD/042A to be purchased from PUB for reference)
- 14.6 Trade effluent discharge from the proposed development into the public sewerage system shall comply with the requirements as stipulated in the Sewerage and Drainage (Trade Effluent) Regulations. Pre-treatment plant/facilities shall be installed to ensure the compliance of the trade effluent with the discharge requirements. The Successful Tenderer shall be responsible for the provision, operation and maintenance of the pre-treatment plant/ facilities. Please refer to COPSSW (2nd Ed.) Section 5 on requirements for trade effluent discharge into public sewer. Effluent that is prohibited to be discharged into public sewer shall be disposed of in accordance with its waste classification e.g. toxic industrial waste, general waste, etc. For toxic industrial waste (TIW), the operator shall engage only NEA licensed TIW collector. After obtaining Temporary Occupation Permit (TOP) for the development, the operator shall apply to PUB for a Written Approval (WA) before discharging trade effluent into public sewers. The application for WA for discharge of trade effluent into the sewer can be made online at <https://www.gobusiness.gov.sg/licences>. For further information on matters relating to trade effluent discharge, please email to PUB_WA@pub.gov.sg.
- 14.7 No building/ structure/piling/retaining structure, etc. (whether temporary or permanent), except lightweight and demountable elements (such as

awnings, surface drains, compound boundary wall & fencing, planting troughs and link-way shelters), shall be sited over or across any sewers/pumping mains without the approval of PUB. All proposed structures shall be kept as far away from the existing sewers/pumping mains as possible and no nearer than the following minimum lateral clearances (also known as sewer/ pumping main setback):

| Sewer/Pumping Main Nominal Diameter(mm) D | Sewer Depth (m) | Minimum Distance (m)* |
|--|-----------------|-----------------------|
| ≤ 600 | ≤3 | 1.0 |
| | >3 and ≤5 | 1.5 |
| | >5 | 2.0 |
| > 600 to 1500 | All | 0.5D + 2.5 |
| >1500 to 2500 | | 0.5D + 3 |
| >2500 | | 0.5D + 4 |
| Deep Tunnel Sewerage System (DTSS) | | 0.5D + 6 |
| * measured from the outer most edge of the structure, including footings and overhangs, to the centreline of the sewer pipe or DTSS. | | |

More details can be found in COPSSW (2nd Ed.) Sections 1.2.4 and 1.2.5.

- 14.8 No sewerage systems (including abandoned sewers, any sensors, meters, equipment, instruments, etc. within manholes) shall be altered/interfered with without the approval from PUB(WRN). Where diversion/removal of any sewer is required, it shall be carried out by the Successful Tenderer at his own cost & expense. Details of the diversion (pipe size, gradient, invert level, etc.) shall be submitted to PUB(WRN) for approval before the commencement of works. The Successful Tenderer shall be responsible for seeking approval from all relevant authorities/land owners for the proposed sewerage works to be carried out beyond the development site. Such approval or consent from the land owner/authorities shall not include any conditions that require PUB to provide a letter of undertaking to divert the sewerage infrastructure in future. The Successful tenderer is to ensure that all sewerage and sanitary designs comply with PUB's COPSSW (2nd Ed.). All sewers and manholes shall be readily accessible at all times to PUB for inspection and maintenance.
- 14.9 The Successful tenderer/QP shall take every measure to protect all existing sewers, particularly large (≥900mm diameter) sewers, affected by or in close proximity of the proposed works.
- 14.10 Where there are any Specified Activities (including excavation/tunnelling/jacking/boreholes/installation of ERSS for services diversions) within the public sewer corridor [i.e. 10m for sewer/main of diameter <900mm, 20m for sewer/main of diameter ≥ 900mm and 40m for DTSS tunnel] as stipulated in COPSSW (2nd Ed.) Section 2.1.2, a written approval from the Director, Water Reclamation Network of PUB should first be obtained before carrying out the specified activities at the site. QP shall submit the Application Form via the Protection of Water and Sewer Pipes (POWS) at

<https://bpu.pub.gov.sg/pows> prior to any commencement of the specified activities. The applicant shall refer to COPSSW (2nd Ed.) Section 2 for the technical requirements on sewer protection.

- 14.11 The Successful Tenderer/QP must check for the presence of public sewerage pipelines by referring to the Sewerage Information Plan (SIP) and through site investigation. The SIP is available on SLA's INLIS at <https://app.sla.gov.sg/inlis/#/PUB/UP/Search>. Please note that the sewerage information in SIPs is indicative and for reference only. A thorough site investigation, including trial trenches, shall be carried out to determine the exact position and levels of the existing sewers. For development control clearance for the proposed development/building/infrastructure/utility works and clearance certificates for the proposed sewerage/sanitary works, the QP shall prepare plans and submit applications via BCA Corenet e-submission system to PUB's Building Plan Division (BPD). More details on these applications can be found at <https://info.pub.gov.sg/Documents/Used%20Water%20Submission%20Procedures.pdf>
- 14.12 The guideline on 'Prevention of Damage to Public Sewerage System' can be found in PUB website at https://www.pub.gov.sg/-/media/Images/Feature/Content-ages/Professionals/Compliance/Applications/Revised_PUB_WRN_AdvisoryNotes_Mar_2023.pdf. The QP/contractor is required to submit a notification to our Network Management Branch (NMB) at least 7 days before the commencement of any works or specified activities within the public sewer corridor.

Please contact LEE KANG WEI (email: LEE_Kang_Wei@pub.gov.sg), LOH WAN QING ANGELINE (email: ANGELINE_LOH@PUB.GOV.SG), LEONG FOONG LING, JOYCELYN (email: Joycelyn_LEONG@pub.gov.sg), YANG WEIXUAN (email: Elaine_YANG@pub.gov.sg), from PUB(WRN), for any clarifications.

15 WATER SUPPLY NETWORK DEPARTMENT, PUBLIC UTILITIES BOARD (PUB)

- 15.1 The Water Supply Plan (WSP) shows the approximate positions of our existing and proposed watermain of 100 mm diameter and above in the vicinity of the proposed site. Smaller submain to customers' premises / properties are not indicated. The latest WSP is available on SLA's INLIS portal at <https://app.sla.gov.sg/inlis>
- 15.2 Please determine by means of trial holes the exact alignment and levels of all existing watermains during the design stage and consult PUB(WSN) at the contact information provided below. If there are

affected water pipes affected by the proposed works, PUB(WSN) can advise whether diversion is required during the consultation. If diversion is required, consultation must be made at least 6 months ahead and the cost of diversion of any watermains shall be borne by the Successful Tenderer. If diversion is unavoidable, please be advised to engage a qualified pipe laying contractor with CR07 work head with at least 5 years of experience to carry out the diversion of the affected existing watermains.

- 15.3 Attached a copy of PUB WSN Advisory-Prevention of Damage (PUB WSN Advisory-Prevention of Damage to Watermains Jan 2022.pdf, PUB_24_0170_Site 01WSP_Landscape_A3.pdf) to Watermains which provides the details on the protection and submission requirements for applications to seek PUB's approval for proposed works carried out in the vicinity of our water mains. This submission shall be made via PUB online submission portal, Protection of Water and Sewer pipes (POWS) at <https://bpu.pub.gov.sg/pows>
- 15.4 Please note that any changes to the existing internal water reticulation system of the said Land premises shall be carried out in compliance with the following requirements:
- a) The design of the internal water reticulation system shall comply with the Public Utilities (Water Supply) Regulations, Singapore Standard 636 -Code of Practice for Water Services and all other relevant statutory requirements. The modes of water supply to be adopted are as attached, Mode of Water Supply.pdf.
 - b) Notwithstanding the above modes of supply, where water is essential for the operations at the above premises, storage tanks of capacity equivalent to 1 day's water requirements shall be provided for the purpose of maintaining a continuous supply of water in the event of supply interruptions.
 - c) Where pumping system or storage tanks are required for the water services, a Professional Engineer must submit the Notification of WSI Works together with a set of drawings to Centralised Services Department. If all the fittings in the water service installation are receiving direct water supply from PUB watermain, then a Licensed Plumber shall be engaged to submit the Notification of WSI Works together with a set of the drawings to Centralised Services Department prior to commencement of the WSI works.
 - d) PUB is presently supplying NEWater for direct non-potable purposes such as for cooling towers, industrial processes, general washing landscaping, and other non-potable purposes. All new non-domestic premises, such as commercial and industrial developments, etc, including those existing premises undergoing addition/alteration works where it is applicable to use NEWater, are therefore required to provide a dedicated NEWater pipe system now to facilitate the supply of

NEWater when it becomes available in future. Provision shall also be made for a NEWater storage tank to be installed within the premises with its inlet not higher than 15 m above mean sea level and a capacity equivalent to the 1 day's non- potable water requirement. There shall be no cross connection between the PUB water and NEWater supply pipelines. Developers / consultants may consult PUB during the pre-planning stage on the detailed requirements. Please refer to attachment Mode of Water Supply.pdf.

- e) For queries on matters relating to water pipes, please contact PUB(WSN) officer at 63809804 or email to PUB_WSN_EASTBU@pub.gov.sg.

Please contact WANG QIONG (email: NG_QIONG@PUB.GOV.SG), ANG LIEW KWEE (email: ANG_LIEW_KWEE@PUB.GOV.SG), TAN KE HAN, REGINA (email: REGINA_TAN@PUB.GOV.SG), from PUB(WSN), for any clarifications.

16 SINGAPORE CIVIL DEFENCE FORCE (SCDF)

16.1 The Successful Tenderer is required to comply with the Fire Safety Act 1993 and its Regulations, the prevailing "Code of Practice for Fire Safety Precautions in Buildings" (Fire Code), the relevant Codes of Practices & Guidelines, and SCDF Circulars. These general fire safety requirements are also applicable to any proposed temporary usage or installation. In addition, the following conditions will apply where applicable:

- a) To consult SCDF on the specific design requirements if the premises is to store, handle, use, transport or import of hazardous materials, including diesel refuelling station, petrol station or CNG station which may have impact within the premises or on the surrounding existing or new developments. SCDF may impose the Quantitative Risk Assessment study (QRA) and/or additional Fire Safety requirements, or disapprove such proposal if there is possible impact within the premises or on the surrounding developments.
- b) To consult SCDF on any specific developments or structures having impact on SCDF operations e.g. deep basement works (which are more than 4 storey or more than 24 metres in depth), tunnel or any other special developments, etc. SCDF may impose additional Fire Safety requirements.
- c) The Successful Tenderer shall ensure that their proposal will not affect existing other surrounding developments (neighbouring) such as their exit provision, sidelane / backlane, window openings [the unprotected openings requirements, i.e. the Successful Tenderer and their Qualified Person (QP) shall strictly observe these existing conditions and provide more setback if necessary to prevent fire spread] and fire engine accessway etc. The Proposer and their QP shall consult SCDF

directly for those new proposed building structures to be sited near to common boundary line, as additional Fire Safety requirements may be imposed.

- d) The Successful Tenderer shall ensure that the boundary line of petroleum service stations, either be an existing or going-to-build petrol station, shall be at least 50m from any residential building, or 90m from any place of public assembly.
- e) For existing premises, the Successful Tenderer may wish to note that the SCDF's Plan Approval and Fire Safety Certificate (FSC) will have to be obtained if there is any change in use or involving any alteration / addition works. The Successful Tenderer shall ensure that the existing premises, including existing layouts and usages, have obtained the necessary approvals from SCDF.
- f) For lease extension, the Successful Tenderer is urged to engage their own QP in assisting them to obtain the SCDF's Plan Approval and Fire Safety Certificate (basing on the prevailing Fire Code) if it is not done so for the entire buildings/premises. The fire safety provisions and mitigation measures are essential for all buildings; it is particularly true for religious premises where congregation of general public is possible, and for premises with similar usage as Nursing Home & Childcare Centre where the occupants are vulnerable to emergency situations. (The premises/building owner, such as HDB, SLA and JTC etc shall engage the operator and see how to address the shared concerns before considering granting their lease extension application).
- g) For applications of non-exclusive and limited religious use, the Successful Tenderer shall liaise directly with the building owner/management to ensure their proposed usage and number of occupants for that particular room /floor does not exceed the limit as originally designed & approved for. The Successful Tenderer shall also provide the full details to the building owner/management so that the Emergency Response Plan (ERP) can be updated accordingly.
- h) For new road development (including road widening, realignment, road expunction & interim measures etc), it shall not affect or encroach upon any part of existing development compounds. For public fire hydrant, do liaise with PUB directly for any proposed relocation or erection of new fire hydrant.
- i) For drainage system development (including widening, realignment, extension & interim measures etc), it shall not affect or encroach upon any part of existing development compounds.

16.2 Before making any commitment (purchase/occupation or rental/lease etc) or commencement of any proposal, the Successful Tenderer shall engage a Qualified Person (QP) to carry out a feasibility study to ensure the entire

premises and new proposals are able to comply with all the Fire Safety requirements (the current Fire Code and other relevant standards/guidelines/circulars). The feasibility study shall also ensure those existing fire safety provisions of surrounding developments are not affected. The QP shall assist the Successful Tenderer to obtain the SCDF's Plan Approval and the Fire Safety Certificate (FSC). The Successful Tenderer and the QP shall visit the SCDF at SCDF Headquarters, 91 Ubi Ave 4, for a walk-in consultation should the Successful Tenderer have any doubts or queries regarding the fire safety requirements or plan approval procedures.

- 16.3 For projects involving petroleum and flammable materials (P&FM) such as Chemical Plants, Petroleum Refineries and Buildings/Structures used for handling & storage of bulk P&FM, the Successful Tenderer and their QP shall provide the overall layout details to SCDF at SCDF Headquarters at 91 Ubi Ave 4, for further comments, as additional fire safety provisions and mitigation measures will be imposed. The Successful Tenderer and their QP may wish to consult LTC Bryan Ng (Email: Bryan_NG@scdf.gov.sg) for a consultation session.