

**CONDITIONS OF SALE
REFERRED TO IN THE FOREGOING TENDER NOTICE**

PARTICULARS AND CONDITIONS FOR THE GRANT by the Government of the Hong Kong Special Administrative Region (hereinafter referred to as “the Government”) of the lot of land described in the Particulars of the Lot hereunder for a term of 50 years commencing from the date of the Memorandum of Agreement annexed hereto at the rent specified in the Particulars of the Lot hereunder and subject to the General and Special Conditions of Sale hereunder.

PARTICULARS OF THE LOT

Registry No.	Location	Site	Area in square metres	Rent
Hung Shui Kiu Town Lot No. 21	Area 34E (North), Hung Shui Kiu / Ha Tsuen New Development Area, Yuen Long, New Territories	As delineated and shown coloured pink on the plan marked “PLAN I” annexed hereto	7,757 (about)	An annual rent of an amount equal to 3% of the rateable value from time to time of the lot, subject to General Condition No. 4 hereof

GENERAL CONDITIONS

Completion of tender documents

1. Within 14 calendar days of the date of the letter referred to in paragraph 12 of the Tender Notice annexed hereto, the successful tenderer shall sign, or in the case of a limited company duly execute under its common seal and in accordance with the laws of its place of incorporation or otherwise in accordance with the applicable law to the satisfaction of the Director of Lands (hereinafter referred to as “the Director”), the Memorandum of Agreement annexed hereto (hereinafter referred to as “the said Memorandum”), the sale plans marked “PLAN I” and “PLAN II” respectively annexed hereto as the purchaser of the lot, for completing the purchase of the lot according to these Conditions. Where the successful tender has been made on behalf of a principal or principals, the principal or the principal who has been designated as the purchaser of the lot in the Form of Tender (Premium Submission) annexed hereto shall himself sign or itself execute the said Memorandum and the sale plans marked “PLAN I” and “PLAN II” respectively annexed hereto as the purchaser of the lot. The purchaser of the lot is hereinafter referred to as “Purchaser”.

Completion of sale

2. (a) Subject to sub-clause (b) of this General Condition, the Purchaser shall within 28 calendar days of the date of the letter referred to in paragraph 12 of the Tender Notice annexed hereto pay to the Government in one lump sum the balance of the premium tendered by him.

Payment of balance
of premium in stages

(b) If the Purchaser has elected to pay the balance of the premium in stages in his tender and his election has been accepted by the Government as notified in the letter referred to in paragraph 12 of the Tender Notice annexed hereto, he shall pay to the Government the balance of the premium tendered by him in the following manner free of interest that is to say–

- (i) within 28 calendar days of the date of the letter referred to in paragraph 12 of the Tender Notice annexed hereto, in one lump sum a sum equivalent to 25% of the premium tendered by him less the sum paid in accordance with paragraphs 9 and 13(a) (if required) of the Tender Notice annexed hereto and rounded up to the nearest hundred thousand which shall be applied in part payment of the balance of the premium tendered by him; and
- (ii) within 36 calendar months of the date of the letter referred to in paragraph 12 of the Tender Notice annexed hereto, the remaining balance of the premium tendered by him.

(c) It is hereby acknowledged that the premium tendered by him is for the purchase of the tendered lots referred to in paragraph 1 of the Form of Tender (Premium Submission) annexed hereto. The tendered lots referred to in paragraph 1 of the Form of Tender (Premium Submission) annexed hereto (excluding the lot) are hereinafter collectively referred to as “Other Lots”. In the event that the Purchaser is not the purchaser of all of the Other Lots as designated in the Form of Tender (Premium Submission) annexed hereto, the Purchaser’s obligation and liability to pay the premium or any part thereof for the purchase of the tendered lots referred to therein is joint and several with the purchasers of such Other Lots of which the Purchaser is not the purchaser.

Failure to pay
further deposit or
balance of the
premium

3. If the Purchaser shall have failed to pay the further deposit (if required) referred to in paragraph 13(a) of the Tender Notice annexed hereto in accordance with the said paragraph 13(a), or shall fail to pay the balance of the premium in accordance with General Condition No. 2(a) hereof, or if, the Government having accepted the Purchaser’s election (as notified in the letter referred to in paragraph 12 of the Tender Notice annexed hereto) to pay the balance of the premium in stages as provided in General Condition No. 2(b) hereof, the Purchaser shall fail to pay the sum in part payment of the balance of the premium in accordance with General Condition No. 2(b)(i) hereof, the Government may either enforce or cancel the sale. On cancellation, the sum forwarded by the defaulting Purchaser with his tender as an initial deposit and the sum paid as a further deposit in accordance with paragraph 13(a) of the Tender Notice annexed hereto and in part payment of the premium tendered by him shall be wholly forfeited to the Government, and the Government shall be at liberty to resell the lot (whether together with the Other Lots collectively or individually or otherwise at the Government’s sole and absolute discretion) at such time and place and in such manner as the Government shall deem fit, and all losses and expenses attending a resale or attempted resale, including–

- (a) interest equivalent to 2% per annum above the average Best Lending Rate announced by the current note-issuing banks in the Hong Kong Special Administrative Region (hereinafter referred to as “Hong Kong”), namely, The Hongkong and Shanghai Banking Corporation Limited, Standard Chartered Bank (Hong Kong) Limited and Bank of China (Hong Kong) Limited for the time being (hereinafter referred to as “the Agreed Rate”) on the further deposit (if required but not paid) and the balance of the premium or any part thereof for the periods from the respective latest dates upon which such further deposit and balance or any part thereof should have been paid in accordance with paragraph 13(a) of the Tender Notice annexed hereto and General Condition No. 2 hereof up to and including the date upon which the balance of the premium upon a resale is paid,
- (b) any deficiency which may result on a resale, and
- (c) interest at the Agreed Rate on any such deficiency for the period from the date upon which the balance of the premium upon a resale is paid up to and including the date of payment of the deficiency,

shall be made good and paid by the defaulting Purchaser and be recoverable by the Government as liquidated damages. Any increase of price on a resale shall belong to the Government.

Rent

4. Rent as specified in the Particulars of the Lot hereof shall commence and be payable from the date of this Agreement until the expiry of the term hereby agreed to be granted, and shall be governed by the provisions of the Government Rent (Assessment and Collection) Ordinance, any regulation made thereunder and any amending legislation and also subject to a minimum rent of HK\$1.00 per annum (if demanded).

Acknowledgement
by the Purchaser

5. (a) The Purchaser hereby expressly accepts and acknowledges–
- (i) that the Government shall be under no liability whatsoever to the Purchaser (which expression shall for the purpose of this General Condition only include his successors, assigns, mortgagees, tenants or other occupiers of the lot whether lawful or otherwise) for any loss or damage howsoever arising in connection with or as a consequence of his purchase of the lot and its subsequent development;
 - (ii) that he has purchased the lot based upon his own evaluation of land records and available geotechnical information whether obtained from Government sources or otherwise and has satisfied himself as to the state and condition of the lot in relation to the purposes for which the lot is to be developed or redeveloped;
 - (iii) that he takes the lot, whether on, above or below the surface of the ground, in the state and condition as it exists on the date on which possession of the lot is deemed to be given in

accordance with Special Condition No. (1) of these Conditions; and

- (iv) that he shall not be entitled to revoke, withdraw, cancel or resile in any way whatsoever from this Agreement nor be entitled in any way whatsoever to compensation or a reduction in the sale price or any other compromise whatsoever should he subsequently determine that the lot is not fit for the purposes for which he purchased the lot.

Exclusion of
warranty

- (b) (i) The Government gives no warranty, express or implied, as to the suitability or fitness of the lot or any part thereof for development whether in accordance with these Conditions or otherwise. The Purchaser for himself, his successors or assigns undertakes not to make any claim against the Government for any loss or damage whatsoever which he may suffer as a result of or arising from the state and condition of the lot making it either unfit for the purposes for which he purchased the lot or rendering it impossible to achieve the scale of development originally intended.
- (ii) The Government gives no warranty, express or implied, as to the accuracy or correctness in any way whatsoever of any information made available or obtained by the Purchaser, and in particular does not warrant that the lot is fit and suitable for any particular purpose.

Indemnity by the
Purchaser

(c) The Purchaser shall indemnify and keep indemnified the Government from and against all liabilities, claims, losses, damages, expenses, charges, costs, demands, actions and proceedings whatsoever and howsoever arising whether directly or indirectly out of, in connection with or incidental to any breach of these Conditions or any damage or soil and groundwater contamination caused to adjacent or adjoining land or to the lot where such damage or soil and groundwater contamination has, in the opinion of the Director (whose opinion shall be final and binding on the Purchaser), arisen out of any use of the lot, or any development or redevelopment of the lot or part thereof or out of any activities carried out on the lot or out of any other works carried out thereon by the Purchaser whether or not such use, development or redevelopment, activities or works are in compliance with these Conditions or in breach thereof.

Setting out

6. (a) The Director shall, at such time as he thinks fit or upon the application of the Purchaser, set out the lot on the ground, and the Purchaser or his authorized representative after such setting out when called upon by the Director shall attend at the lot to inspect the survey marks delineating the lot on the ground and shall be given a plan showing the positions and descriptions of each such mark. The Purchaser shall not commence any operations for building on the lot until it shall have been so set out by the Director. The Purchaser shall take or cause to be taken all proper care and precautions to safeguard the said survey marks from disturbance or removal. If, before commencing any operations for building on the lot, any of the said survey marks are disturbed or removed, the Purchaser shall apply in writing

to the Director for replacement by survey and shall pay on demand to the Government in advance the prescribed fee therefor.

Encroachment upon
Government land

(b) In the event that the Purchaser is found to have encroached upon and to be occupying Government land, the Director may at his absolute discretion either require the Purchaser to demolish any building or part of any building standing on such Government land, to reinstate such Government land to his satisfaction and deliver up vacant possession of the same to the Government or pay to the Government such sum as the Director at his absolute discretion shall determine as the premium in respect of such Government land. A certificate under the hand of the Director shall be conclusive as to the extent of any such encroachment and as to the amount of the premium payable in respect thereof. If the Purchaser fails to demolish any building as required by the Director as above, it shall be lawful for the Director to demolish such building and the Purchaser shall pay on demand to the Government the amount certified by the Director as the cost of such demolition. In the event that the Director exercises his discretion to require the payment of premium as aforesaid, upon the payment of such premium, the area of Government land encroached upon shall be deemed in all respects to be part of the lot and shall be included in the lease of the lot when issued.

Maintenance

7. (a) The Purchaser shall throughout the tenancy having built or rebuilt (which word refers to redevelopment as contemplated in sub-clause (b) of this General Condition) in accordance with these Conditions—

- (i) maintain all buildings in accordance with any approved building plans without variation or modification thereto; and
- (ii) maintain all buildings erected or which may hereafter be erected in accordance with these Conditions or any subsequent contractual variation of them, in good and substantial repair and condition and in such repair and condition deliver up the same at the expiry or sooner determination of the tenancy.

(b) In the event of the demolition at any time during the tenancy of any building then standing on the lot or any part thereof, the Purchaser shall replace the same either by sound and substantial building or buildings of the same type and of no less gross floor area or by building or buildings of such type and value as shall be approved by the Director. In the event of demolition as aforesaid, the Purchaser shall within 1 calendar month of such demolition apply to the Director for consent to carry out building works for the redevelopment of the lot and upon receiving such consent shall within 3 calendar months thereof commence the necessary redevelopment works and shall complete the same to the satisfaction of and within such time limit as is laid down by the Director.

Boundary stones

8. The Purchaser shall permit boundary stones properly cut and marked with the number of the lot to be fixed at each angle thereof and either in or on the land itself or in or on any building erected thereon as may be required by the Director and shall pay the fees prescribed by him therefor as

well as the prescribed fees for the refixing of such boundary stones which, through being lost, damaged or removed, need replacing.

Private streets, roads
and lanes

9. Any private streets, roads and lanes which by these Conditions are required to be formed shall be sited to the satisfaction of the Director and included in or excluded from the area to be leased as may be determined by him and in either case shall be surrendered to the Government free of cost if so required. If the said private streets, roads and lanes are surrendered to the Government, the surfacing, kerbing, draining (both foul and storm water sewers), channelling and road lighting thereof shall be carried out by the Government at the expense of the Purchaser and thereafter they shall be maintained at public expense. If the said private streets, roads and lanes remain part of the area to be leased, they shall be lighted, surfaced, kerbed, drained, channelled and maintained by and at the expense of the Purchaser and in all respects to the satisfaction of the Director and the Director may carry out or cause to be carried out the installation and maintenance of road lighting for the sake of public interest as required. The Purchaser shall bear the capital cost of installation of road lighting and allow free ingress and egress to and from the area to be leased to workmen and vehicles for the purposes of installation and maintenance of the road lighting.

Right to inspect

10. (a) The Purchaser shall throughout the tenancy, at all reasonable times, permit the Director or his authorized representatives, with or without notice, to enter into or upon the lot or any part thereof or any building or part of any building erected on the lot for the purpose of inspecting the same so as to ascertain that there is no breach of or failure to observe any of these Conditions.

Right to inspect for
assessing
contamination

(b) The Purchaser shall throughout the tenancy, at all reasonable times, permit the Director and the Director of Environmental Protection or his or their authorized representatives, upon serving reasonable verbal or written notice on the Purchaser, to enter into or upon the lot or any part thereof or any building or part of any building erected on the lot for the purpose of carrying out site investigation works to assess the extent of contamination within the lot, which works shall include but not be limited to conducting site inspections, taking soil and water samples and any other works and operations relating or ancillary to such contamination assessment.

Breach of lease
conditions

(c) The fulfilment by the Purchaser of his obligations under these Conditions shall be a condition precedent to the grant or continuance of the tenancy, and in the event of any default by the Purchaser in complying therewith, such default shall be deemed to be a continuing breach and the subsequent acceptance by or on behalf of the Government of any rent or rates or other payment whatsoever shall not (except where the Government has notice of such breach and has expressly acquiesced therein) be deemed to constitute any waiver or relinquishment or otherwise prejudice the enforcement of the Government's right of re-entry for or on account of such default or any other rights, remedies or claims of the Government in respect thereof under these Conditions which shall continue in force and shall apply also in respect of default by the Purchaser in the fulfilment of his obligations under these Conditions within any extended or substituted period as if it had been the period originally provided.

Re-entry

11. (a) Upon any failure or neglect by the Purchaser to perform, observe or comply with any of these Conditions, including but not limited to any failure to pay the remaining balance of the premium in accordance with General Condition No. 2(b)(ii) hereof, the Government shall be entitled to re-enter upon and take back possession of the lot or any part thereof and all or any buildings, erections and works erected or to be erected on the lot or any such part thereof or any part of such buildings, erections or works and thereupon this Agreement and the rights of the Purchaser hereunder shall absolutely cease and determine (in respect of such part if the re-entry is upon a part only) but without prejudice nevertheless to the rights, remedies and claims of the Government in respect of any breach, non-performance, non-observance or non-compliance of the terms and conditions hereof.

(b) In the event that the Purchaser has elected to pay the balance of the premium in stages in his tender and his election has been accepted by the Government as notified in the letter referred to in paragraph 12 of the Tender Notice annexed hereto, the following conditions shall apply–

(i) If, prior to payment in full of the remaining balance of the premium in accordance with General Condition No. 2(b)(ii) hereof, there is any breach of or failure to perform, observe or comply with any of the terms and conditions of any of the Conditions of Sale of the Other Lots, the Government shall be entitled to re-enter upon and take back possession of the lot or any part thereof and all or any buildings, erections and works erected or to be erected on the lot or any such part thereof or any part of such buildings, erections or works (whether together with the Other Lots or any of them or any part of any of them or otherwise) and thereupon this Agreement and the rights of the Purchaser hereunder shall absolutely cease and determine (in respect of such part if the re-entry is upon a part only) but without prejudice nevertheless to the rights, remedies and claims of the Government in respect of any breach, non-performance, non-observance or non-compliance of the terms and conditions hereof.

(ii) The Purchaser hereby acknowledges and agrees that prior to payment in full of the remaining balance of the premium in accordance with General Condition No. 2(b)(ii) hereof, any breach of or failure to perform, observe or comply with any of the terms and conditions of any of the Conditions of Sale of the Other Lots shall be deemed to be a breach of these Conditions.

No refund of
premium on re-entry

(c) In the event of re-entry by the Government under sub-clause (a) or (b) of this General Condition, the Purchaser shall not be entitled to any refund of the premium paid by him or any part thereof or to any payment or compensation whatsoever whether in respect of the value of the land or any part thereof or any building or buildings erected or to be erected on the land or any part thereof or part of any such building or buildings or any amount

expended by the Purchaser in the preparation, formation or development of the lot or any part thereof or otherwise.

Lease

12. (a) When these Conditions have been complied with to the satisfaction of the Director, the Purchaser shall subject to approval of his title by the Director be entitled to a lease of the lot as described in the Particulars of the Lot hereof for the term stated in the preamble to these Conditions.

(b) The Purchaser shall execute and take up the lease of the lot when called upon to do so by the Director and shall pay the prescribed fees therefor. In the event of more than one building being erected on the lot, the Purchaser may be required to take up a separate lease for the site of each separate building and shall pay the prescribed fees for every additional lease so required to be taken up.

(c) Pending the issue of the lease, the tenancy of the lot shall be deemed to be upon and subject to, and such lease when issued shall be subject to and contain all exceptions, reservations, covenants, clauses and conditions as are now inserted in the leases issued by the Government of similar lots in Hong Kong as varied, modified or extended by these Conditions.

Definitions

13. (a) The expression "Purchaser" shall in these Conditions include the person entering into and executing this Agreement and where the context so admits or requires his executors, administrators and assigns and in the case of a corporation its successors and assigns, and the expression "lot", except where the context otherwise requires, means the lot stated in the Particulars of the Lot hereof. Where the context so admits or requires, words importing the masculine gender shall be deemed to include females and corporations, and words in the singular shall be deemed to include the plural and vice versa.

(b) The foregoing General Conditions shall be read and construed as varied or modified by the Special Conditions hereinafter contained, and the expression "these Conditions" whenever used shall mean and include the General and Special Conditions.

Marginal notes

14. The marginal notes to these Conditions shall not be deemed to be part of these Conditions and shall not affect the interpretation or construction thereof.

SPECIAL CONDITIONS

- Possession (1) Subject to payment of the balance of the premium in respect of the tendered lots referred to in paragraph 1 of the Form of Tender (Premium Submission) annexed hereto in the manner as provided in General Condition No. 2(a) hereof or payment of the sum in respect of the tendered lots referred to in paragraph 1 of the Form of Tender (Premium Submission) annexed hereto in the manner as provided in General Condition No. 2(b)(i) hereof (as the case may be) and the provisions of General Condition No. 1 hereof, possession of the lot shall be deemed to be given to the Purchaser on the date of this Agreement.
- Acknowledgement of the Existing Buildings and Structures (2) (a) The Purchaser hereby accepts and acknowledges that as at the date of this Agreement, there are some buildings and structures existing within the lot, the areas shown coloured yellow and blue on the plan marked "PLAN II" annexed hereto (hereinafter respectively referred to as "the Yellow Area" and "the Blue Area") and the area shown coloured yellow stippled black on the plan marked "PLAN I" annexed hereto (hereinafter referred to as "the Yellow Stippled Black Area") (such existing buildings and structures are hereinafter collectively referred to as "the Existing Buildings and Structures"). The Purchaser undertakes to demolish and remove the Existing Buildings and Structures at his own expense from the lot, the Yellow Area, the Yellow Stippled Black Area and the Blue Area (the works for demolition and removal of the Existing Buildings and Structures are hereinafter referred to as "the Demolition and Removal Works"). For the purpose of this Special Condition, the decision of the Director as to what constitute the Existing Buildings and Structures shall be final and binding on the Purchaser.
- (b) Without prejudice to the generality of General Condition No. 5 hereof, the Purchaser shall be deemed to have satisfied himself as to and have accepted the state and condition of the lot, the Yellow Area, the Yellow Stippled Black Area and the Blue Area existing as at the date of this Agreement subject to the presence, physical state and condition of the Existing Buildings and Structures, and no objection or claim whatsoever shall be made or raised against the Government by the Purchaser in respect of or on account of the same.
- Exclusion of warranty (c) (i) The Government gives no warranty or guarantee, express or implied, as to—
- (I) the presence, physical state, condition or safety of the Existing Buildings and Structures or any part thereof; or
- (II) whether the Existing Buildings and Structures or any part thereof were erected or installed or have remained in existence in compliance with the provisions of the Buildings Ordinance, any regulation made thereunder and any amending legislation (hereinafter referred to as "the Buildings Ordinance").
- (ii) The presence, physical state, condition or safety of the Existing Buildings and Structures or any part thereof or the

carrying out of the Demolition and Removal Works shall not in any way relieve the Purchaser of or release, discharge, lessen or vary the Purchaser's obligations under these Conditions or in any way affect or prejudice the rights and remedies of the Government under these Conditions or otherwise in respect of any breach, non-compliance, non-observance or non-performance by the Purchaser of any of his obligations under these Conditions.

No liability

(d) The Government shall have no responsibility or liability for any loss, damage, nuisance or disturbance whatsoever and howsoever caused to or suffered by the Purchaser or any other person arising whether directly or indirectly out of, in connection with or incidental to—

- (i) the presence, physical state, condition or safety of the Existing Buildings and Structures or any part thereof or the carrying out of the Demolition and Removal Works; or
- (ii) the fulfilment or non-fulfilment of any of the Purchaser's obligations under this Special Condition,

and no claim whatsoever shall be made against the Government by the Purchaser in respect of any such loss, damage, nuisance or disturbance.

Indemnity by the Purchaser

(e) The Purchaser shall indemnify and keep indemnified the Government from and against all liabilities, claims, losses, damages, expenses, charges, costs, demands, actions and proceedings whatsoever and howsoever arising whether directly or indirectly out of, in connection with or incidental to—

- (i) the presence, physical state, condition or safety of the Existing Buildings and Structures or any part thereof or the carrying out of the Demolition and Removal Works; or
- (ii) the fulfilment or non-fulfilment of any of the Purchaser's obligations under this Special Condition.

Acknowledgement by the Purchaser regarding the construction of the Infrastructure

(3) The Purchaser hereby accepts and acknowledges that as at the date of this Agreement, the proposed roads, the approximate extents and alignments of which are for identification purpose only shown by dashed lines and marked "PROPOSED ROAD L25" on the plan marked "PLAN I" annexed hereto (hereinafter referred to as "the Proposed Road L25"), "PROPOSED FOOTPATH" on the plan marked "PLAN II" annexed hereto, and "PROPOSED ROAD D6" and "PROPOSED ROAD P1" on the plans marked "PLAN I" and "PLAN II" annexed hereto, and the utility services serving the lot, the Yellow Area, the Yellow Stippled Black Area and the Blue Area (which roads and utility services are hereinafter collectively referred to as "the Infrastructure") have not been constructed. The Government gives no warranty or guarantee, express or implied, as to whether and when the Infrastructure will be constructed and completed. The Government shall have no responsibility or liability for any loss, damage, nuisance or disturbance whatsoever and howsoever caused to or suffered by the Purchaser or any other

person arising whether directly or indirectly out of, in connection with or incidental to the construction of the Infrastructure and whether and when the Infrastructure will be constructed and completed, and no claim whatsoever shall be made against the Government by the Purchaser in respect of any such loss, damage, nuisance or disturbance.

Formation and
construction of the
Yellow Area and the
Yellow Stippled
Black Area

- (4) (a) The Purchaser shall—
- (i) on or before 31 December 2033, at his own expense and in all respects to the satisfaction of the Director of Civil Engineering and Development (hereinafter referred to as “the D of CED”), form and construct that portion of the future public footpath within the Yellow Area in accordance with the Technical Schedule marked “Technical Schedule for the Yellow Area” annexed hereto (hereinafter referred to as “the Technical Schedule for the Yellow Area”) and the plans approved under sub-clause (c) of this Special Condition in a good workmanlike manner so that pedestrian traffic may be carried on the Yellow Area; and
 - (ii) on or before 31 December 2028, at his own expense and in all respects to the satisfaction of the D of CED, form and construct the Yellow Stippled Black Area in accordance with the Technical Schedule marked “Technical Schedule for the Yellow Stippled Black Area” annexed hereto (hereinafter referred to as “the Technical Schedule for the Yellow Stippled Black Area”) (the Technical Schedule for the Yellow Area and the Technical Schedule for the Yellow Stippled Black Area are hereinafter collectively referred to as “the Relevant Technical Schedules”) and the plans approved under sub-clause (c) of this Special Condition in a good workmanlike manner.

For the purpose of this Special Condition, the decision of the D of CED as to whether and when that portion of the future public footpath within the Yellow Area have been formed and constructed in compliance with sub-clause (a)(i) of this Special Condition and whether and when the Yellow Stippled Black Area have been formed and constructed in compliance with sub-clause (a)(ii) of this Special Condition shall be final and binding on the Purchaser.

Amendment of the
Relevant Technical
Schedules

- (b) (i) The D of CED shall have the right to amend, vary, alter, modify or substitute the Relevant Technical Schedules as he shall at his sole and absolute discretion deem fit.
- (ii) No amendment, variation, alteration, modification or substitution of the Relevant Technical Schedules shall be made by the Purchaser except with the prior written approval of the D of CED and if such approval is given, it shall be upon such terms and conditions as determined by the D of CED at his sole and absolute discretion.

- (iii) Any amendment, variation, alteration, modification or substitution by the D of CED under sub-clause (b)(i) of this Special Condition or by the Purchaser as approved by the D of CED under sub-clause (b)(ii) of this Special Condition shall be deemed to be incorporated into the Relevant Technical Schedules and form part thereof.
- (iv) If in the opinion of the D of CED (whose opinion shall be final and binding on the Purchaser) there exists any conflict between the provisions of the Relevant Technical Schedules and these Conditions, these Conditions shall prevail.

Submission of plans
for formation and
construction of the
Yellow Area and the
Yellow Stippled
Black Area

- (c) (i) The Purchaser shall at his own expense submit or cause to be submitted to the D of CED for his written approval respective plans for formation and construction of the Yellow Area and the Yellow Stippled Black Area, which shall include details and information fulfilling the relevant technical specifications and design requirements as to the levels, design, servicing and treatment of the Yellow Area and the Yellow Stippled Black Area and such other details and information as the D of CED may at his sole and absolute discretion require. The respective submission in respect of the Yellow Area and the Yellow Stippled Black Area as approved by the D of CED is hereinafter referred to as “the Approved Yellow Area Plans” and “the Approved Yellow Stippled Black Area Plans”.
- (ii) No amendment, variation, alteration, modification or substitution of the Approved Yellow Area Plans and the Approved Yellow Stippled Black Area Plans shall be made by the Purchaser except with the prior written approval of the D of CED and if such approval is given, it shall be upon such terms and conditions as determined by the D of CED at his sole and absolute discretion.
- (iii) Any amendment, variation, alteration, modification or substitution by the Purchaser as approved by the D of CED under sub-clause (c)(ii) of this Special Condition shall be deemed to be incorporated into the Approved Yellow Area Plans or the Approved Yellow Stippled Black Area Plans (as the case may be) and form part thereof.
- (iv) Subject to Special Condition No. (41) hereof, no site formation works shall be commenced on or within the Yellow Area or the Yellow Stippled Black Area until the relevant plans for the Yellow Area or the Yellow Stippled Black Area (as the case may be) referred to in sub-clause (c)(i) of this Special Condition shall have been approved by the D of CED. For the purposes of these Conditions, “site formation works” shall be as defined in the Buildings Ordinance.

Maintenance of the
Yellow Area and the
Yellow Stippled
Black Area

(d) The Purchaser shall, upon completion of the works referred to in sub-clause (a) of this Special Condition, and while he is in possession of the Yellow Area, the Yellow Stippled Black Area or any part of any of them, at his own expense and in all respects to the satisfaction of the D of CED, uphold, repair and maintain the Yellow Area and the Yellow Stippled Black Area and everything forming a portion of or pertaining to any of them in good and substantial repair and condition, except any part of the Yellow Area and the Yellow Stippled Black Area which has been re-delivered up to the Government in accordance with sub-clause (g)(iii) of this Special Condition, until such time as possession of the whole of the Yellow Area or the Yellow Stippled Black Area (as the case may be) has been re-delivered up to the Government in accordance with sub-clause (g)(iii) of this Special Condition.

Monitoring of works

- (e) (i) The D of CED shall have the right at his sole and absolute discretion to nominate any public officers (hereinafter referred to as “the Officers Nominated by D of CED”) who shall oversee and monitor the design, formation, construction, completion, upholding, repair and maintenance of the Yellow Area and the Yellow Stippled Black Area (hereinafter respectively referred to as “the Yellow Area Works” and “the Yellow Stippled Black Area Works”) in order to ensure that the Yellow Area Works and the Yellow Stippled Black Area Works are carried out in accordance with these Conditions.
- (ii) The Purchaser shall notify the Officers Nominated by D of CED of any condition, restriction, requirement and information affecting or relating to the formation and construction of the Yellow Area, the Yellow Stippled Black Area or any part of any of them or the Yellow Area Works or the Yellow Stippled Black Area Works forthwith upon the same becoming known to the Purchaser, his servants, agents, contractors and workmen and shall make available all drawings, site records, notices, letters, certificates, approvals and information and render all necessary assistance and co-operation to the Officers Nominated by D of CED when required by the Officers Nominated by D of CED.

Non-fulfilment

(f) In the event of non-fulfilment of any of the Purchaser’s obligations under sub-clauses (a) and (d) of this Special Condition, without prejudice to sub-clauses (k) and (l) of this Special Condition, the Government may carry out the necessary works at the cost of the Purchaser who shall pay to the Government on demand a sum equals to the cost of such works, such sum to be determined by the D of CED whose determination shall be final and binding on the Purchaser.

Possession of the
Yellow Area and the
Yellow Stippled
Black Area

- (g) (i) For the purpose only of carrying out the Demolition and Removal Works, the Preventive Works (as referred to in Special Condition No. (41)(b) hereof), the Contamination Assessment and the Decontamination Works (both as referred to in Special Condition No. (41)(c) hereof) within the Yellow Area and the Yellow Stippled Black Area and the works specified in sub-clauses (a) and (d) of this Special Condition,

the Purchaser shall on the date of this Agreement be granted possession of the Yellow Area and the Yellow Stippled Black Area.

- (ii) The Purchaser shall accept the Yellow Area and the Yellow Stippled Black Area in such state and condition and with such buildings, utilities, installations, structures and foundations as existing on the date of this Agreement and hereby agrees not to make any claim whatsoever against the Government in respect thereof.
- (iii) The Yellow Area and the Yellow Stippled Black Area or any part of any of them as the Director may at his sole discretion specify or require shall be re-delivered up to the Government on demand and in any event shall be deemed to have been re-delivered up to the Government by the Purchaser on the date of a letter from the Director indicating that these Conditions have been complied with to his satisfaction.

Supply of documents,
etc.

- (h) (i) The Purchaser shall, at his own expense and as soon as practicable but in any event no later than 56 calendar days from the date or respective dates of re-delivery of possession by the Purchaser of the Yellow Area and the Yellow Stippled Black Area or any part of any of them, provide to the D of CED all documents, drawings and materials relating thereto in accordance with the requirements of the Relevant Technical Schedules.
- (ii) For the purpose of sub-clause (h)(i) of this Special Condition, the Purchaser shall procure or cause to be procured the consent of the intellectual property right owners of all documents, drawings and materials in relation to the Yellow Area and the Yellow Stippled Black Area or any part of any of them to the use, copying, printing and modification of them and the disclosure and dissemination of them to any government department or third party by the Government, the D of CED, the Director, their officers, contractors, agents, workmen and any other persons authorized by any of them.
- (iii) The Purchaser hereby accepts and acknowledges that the obligation under sub-clause (h)(ii) of this Special Condition shall survive and continue to be binding on the Purchaser after the expiry or sooner determination of the term hereby agreed to be granted.

Restriction on use of
the Yellow Area and
the Yellow Stippled
Black Area

- (i) The Purchaser shall not without the prior written consent of the Director use the Yellow Area and the Yellow Stippled Black Area or any part of any of them for the purpose of storage or parking of vehicles or for the erection of any temporary structure or for any purposes other than for the carrying out of the Demolition and Removal Works, the Preventive Works (as referred to in Special Condition No. (41)(b) hereof), the Contamination Assessment and the Decontamination Works (both as referred to in Special

Condition No. (41)(c) hereof) and the works specified in sub-clauses (a) and (d) of this Special Condition. For the purposes of these Conditions, “vehicle” shall be as defined in the Road Traffic Ordinance, any regulation made thereunder and any amending legislation (hereinafter referred to as “the Road Traffic Ordinance”).

Access to the Yellow
Area and the Yellow
Stippled Black Area

(j) The Purchaser shall at all reasonable times while he is in possession of the Yellow Area and the Yellow Stippled Black Area or any part of any of them—

- (i) permit the Government, the D of CED, their officers, contractors, agents, workmen and any other persons authorized by any of them, with or without tools, equipment, plant, machinery or motor vehicles free of charge to have the right of free and unrestricted ingress, egress and regress to, from and through the lot, the Yellow Area and the Yellow Stippled Black Area or any part of any of them for the purposes of inspecting, checking, overseeing, monitoring and supervising any works to be carried out in compliance with sub-clauses (a) and (d) of this Special Condition and for carrying out, inspecting, checking and supervising the works under sub-clause (f) of this Special Condition and any other works which the D of CED may consider necessary in the Yellow Area and the Yellow Stippled Black Area or any part of any of them, and for the purpose of this sub-clause (j)(i), the decision of the D of CED as to what constitute reasonable times shall be final and binding on the Purchaser. For the purposes of these Conditions, “motor vehicle” shall be as defined in the Road Traffic Ordinance;
- (ii) permit the Government, the D of CED, their officers, contractors, agents, workmen and any other persons authorized by any of them and the relevant public utility companies authorized by the Government, with or without tools, equipment, plant, machinery or motor vehicles free of charge to have the right of free and unrestricted ingress, egress and regress to, from and through the lot, the Yellow Area and the Yellow Stippled Black Area or any part of any of them as the Government, the D of CED or the relevant public utility companies authorized by the Government may require for the purposes of any works to be carried out in, upon or under the Yellow Area and the Yellow Stippled Black Area or any part of any of them or any adjoining or neighbouring land including but not limited to inspecting, checking, maintaining, repairing, replacing, reinstating, diverting, decommissioning, demolishing and removing any pipes, wires, conduits, cable-ducts and other conducting media and ancillary equipment necessary for the provision of telephone, electricity, gas (if any) and other services serving or intended to serve the lot, the Yellow Area, the Yellow Stippled Black Area or any adjoining or neighbouring land, and the Purchaser shall co-operate fully with the Government,

the D of CED and the relevant public utility companies authorized by the Government on all matters relating to any of the aforesaid works to be carried out within the Yellow Area, the Yellow Stippled Black Area or any adjoining or neighbouring land, and for the purpose of this sub-clause (j)(ii), the decision of the D of CED as to what constitute reasonable times shall be final and binding on the Purchaser; and

- (iii) permit the officers of the Water Authority and any other persons authorized by them, with or without tools, equipment, plant, machinery or motor vehicles free of charge to have the right of free and unrestricted ingress, egress and regress to, from and through the lot, the Yellow Area and the Yellow Stippled Black Area or any part of any of them as the officers of the Water Authority or such authorized persons may require for the purposes of carrying out any works in relation to the operation, maintenance, repairing, replacement and alteration of any waterworks installations within the lot, the Yellow Area, the Yellow Stippled Black Area or any adjoining or neighbouring land. For the purposes of these Conditions, “Water Authority” shall be as defined in the Waterworks Ordinance, any regulation made thereunder and any amending legislation (hereinafter referred to as “the Waterworks Ordinance”), and for the purpose of this sub-clause (j)(iii), the decision of the Water Authority as to what constitute reasonable times shall be final and binding on the Purchaser.

Liquidated damages

- (k) (i) In addition to any other payment which may be demanded by the Government and without prejudice to the rights of the Government under these Conditions or otherwise, the Purchaser shall pay to the Government on demand as hereby agreed by way of liquidated damages and not as a penalty–
 - (I) if the Purchaser shall fail to complete the works referred to in sub-clause (a)(i) of this Special Condition in all respects to the satisfaction of the D of CED by the date specified in the said sub-clause (a)(i), a sum calculated at the rate of HK\$2,734.00 per calendar day from the date immediately following the date specified in the said sub-clause (a)(i) up to and including the date on which the works referred to in the said sub-clause (a)(i) have been completed in all respects to the satisfaction of the D of CED as provided in sub-clause (a) of this Special Condition; and
 - (II) if the Purchaser shall fail to complete the works referred to in sub-clause (a)(ii) of this Special Condition in all respects to the satisfaction of the D of CED by the date specified in the said sub-clause

(a)(ii), a sum calculated at the rate of HK\$2,371.00 per calendar day from the date immediately following the date specified in the said sub-clause (a)(ii) up to and including the date on which the works referred to in the said sub-clause (a)(ii) have been completed in all respects to the satisfaction of the D of CED as provided in sub-clause (a) of this Special Condition.

- (ii) For the avoidance of doubt, it is hereby agreed and declared that the acceptance of payment of any of the said sum of liquidated damages referred to in sub-clause (k)(i) of this Special Condition shall not discharge the Purchaser from any of his obligations remaining to be observed and performed.

Defects Liability
Period

- (l) (i) The Purchaser shall indemnify and keep indemnified the Government from and against all liabilities, claims, losses, damages, expenses, charges, costs, demands, actions and proceedings whatsoever and howsoever arising whether directly or indirectly out of, in connection with, or incidental to any defects, wants of repair, imperfections, breakdown, faults or any other outstanding works (whether in respect of workmanship, material, design or otherwise) on the Yellow Area and the Yellow Stippled Black Area and everything forming a portion of or pertaining to any of them—
- (I) which may exist on the date or respective dates of re-delivery of possession by the Purchaser of the Yellow Area and the Yellow Stippled Black Area or any part of any of them; and
- (II) which shall occur or become apparent within a period of 365 calendar days after the date or respective dates of re-delivery of possession by the Purchaser of the Yellow Area and the Yellow Stippled Black Area or any part of any of them (hereinafter referred to as “the Defects Liability Period”).
- (ii) Whenever required by the D of CED, the Purchaser shall at his own expense and within such time and to such standard and in such manner as may be specified by the D of CED, carry out all works of maintenance, repair, amendment, reconstruction and rectification and any other works as may be necessary to remedy and rectify any defects, wants of repair, imperfections, breakdown, faults or any other outstanding works (whether in respect of workmanship, material, design or otherwise) on the Yellow Area or the Yellow Stippled Black Area and everything forming a portion of or pertaining to any of them which shall occur or become apparent within the Defects Liability Period. In addition to the foregoing, the Purchaser shall at his own expense and within such time and to such standard and in such manner as may be specified by the D of CED, make good and rectify any

defects, wants of repair, imperfections, breakdown, faults and any other outstanding works (whether in respect of workmanship, material, design or otherwise) on the Yellow Area and the Yellow Stippled Black Area and everything forming a portion of or pertaining to any of them which may exist on the date or respective dates of re-delivery of possession by the Purchaser of the Yellow Area and the Yellow Stippled Black Area or any part of any of them.

- (iii) The D of CED will, shortly before the expiry of the Defects Liability Period, cause an inspection to be carried out in respect of the Yellow Area and the Yellow Stippled Black Area and everything forming a portion of or pertaining to any of them for the purpose of identifying any defects, wants of repair, imperfections, breakdown, faults or any other outstanding works (whether in respect of workmanship, material, design or otherwise) which may be evident. The D of CED reserves the right to serve upon the Purchaser within 30 calendar days after the expiry of the Defects Liability Period, a Schedule or Schedules of Defects specifying any defects, wants of repair, imperfections, breakdown, faults or any other outstanding works (whether in respect of workmanship, material, design or otherwise) which may be evident on the Yellow Area and the Yellow Stippled Black Area and everything forming a portion of or pertaining to any of them and the Purchaser shall at his own expense cause all necessary works and measures to be carried out so as to remedy and rectify the same within such time and to such standard and in such manner as may be specified by the D of CED.
- (iv) If the Purchaser shall fail to carry out any of the works referred to in sub-clauses (I)(ii) and (I)(iii) of this Special Condition, then any such works may be carried out by the Government and all costs and charges incurred in connection therewith by the Government as certified by the D of CED (whose certification shall be final and binding on the Purchaser) together with a sum equivalent to 20% of the costs and charges involved as an administrative fee shall on demand be paid by the Purchaser.

Guarantee

(m) The Purchaser shall procure from its parent or other associated company as shall be determined by the Director at his absolute discretion a written guarantee whereby such company unconditionally and irrevocably–

- (i) guarantees the performance of obligations of the Purchaser under this Special Condition; and
- (ii) undertakes to indemnify and keep indemnified the Government from and against all liabilities, claims, losses, damages, expenses, charges, costs, demands, actions and proceedings whatsoever and howsoever caused to or suffered

by the Government arising whether directly or indirectly out of, in connection with or incidental to any breach, non-compliance, non-observance or non-performance by the Purchaser of any of his obligations under this Special Condition.

The guarantee shall be subject to the laws of Hong Kong in a form to be approved by the Director and shall be delivered to him within 90 calendar days from the date of this Agreement. If the Purchaser has a parent or associated company incorporated outside of Hong Kong and if required by the Director, the Purchaser shall procure and furnish to the Director a performance bond or guarantee in a form acceptable in all respects to the satisfaction of the Director to be given by a bank licensed under section 16 of the Banking Ordinance, any regulation made thereunder and any amending legislation (hereinafter referred to as "the Banking Ordinance"). Such bond or guarantee shall be for a sum of HK\$526,213.00 for the Yellow Area and a sum of HK\$457,678.00 for the Yellow Stippled Black Area and shall be for the purpose of securing payment to the Government of any sum which shall have been demanded under sub-clause (l)(iv) of this Special Condition and has not been paid by the Purchaser to the Government.

No liability

(n) The Government shall have no responsibility or liability for any loss, damage, nuisance or disturbance whatsoever and howsoever caused to or suffered by the Purchaser or any other person arising whether directly or indirectly out of, in connection with or incidental to the fulfilment or non-fulfilment of any of the Purchaser's obligations under sub-clauses (a), (c), (d), (h), (i), (j), (k) and (l) of this Special Condition; or the exercise or non-exercise by the Government, the D of CED, the Director, their officers, contractors, agents, workmen, the officers of the Water Authority, the relevant public utility companies authorized by the Government or any other persons authorized by any of them of the discretion and rights conferred under this Special Condition, and no claim whatsoever shall be made against the Government by the Purchaser in respect of any such loss, damage, nuisance or disturbance.

Indemnity by the Purchaser

(o) The Purchaser shall indemnify and keep indemnified the Government from and against all liabilities, claims, losses, damages, expenses, charges, costs, demands, actions and proceedings whatsoever and howsoever arising whether directly or indirectly out of, in connection with or incidental to the fulfilment or non-fulfilment of any of the Purchaser's obligations under sub-clauses (a), (c), (d), (h), (i), (j), (k) and (l) of this Special Condition; or the exercise or non-exercise by the Government, the D of CED, the Director, their officers, contractors, agents, workmen, the officers of the Water Authority, the relevant public utility companies authorized by the Government or any other persons authorized by any of them of the discretion and rights conferred under this Special Condition.

(p) (i) Notwithstanding Special Condition No. (2) hereof, sub-clauses (a) to (o) of this Special Condition and Special Conditions Nos. (38), (39) and (41) hereof, the obligations and rights of the Purchaser in respect of the Yellow Area under Special Condition No. (2) hereof, sub-clauses (a) to (o)

of this Special Condition and Special Conditions Nos. (38), (39) and (41) hereof shall absolutely determine upon the Government giving to the Purchaser a written notice to that effect.

- (ii) The Government shall have no responsibility or liability for any loss, damage, nuisance or disturbance whatsoever and howsoever caused to or suffered by the Purchaser or any other person arising whether directly or indirectly out of, in connection with or incidental to the determination under sub-clause (p)(i) of this Special Condition, and no claim whatsoever shall be made against the Government by the Purchaser in respect of any such loss, damage, nuisance or disturbance.

(q) For the purpose of this Special Condition only, the expression “Purchaser” shall exclude his assigns.

Erection and
construction of the
Blue Area

- (5) (a) (i) The Purchaser shall on or before 31 December 2033, at his own expense and in all respects to the satisfaction of the Director of Leisure and Cultural Services (hereinafter referred to as “the D of LCS”), erect, construct, provide and landscape a public open space within the Blue Area in accordance with the Technical Schedule marked “Technical Schedule for the Blue Area” annexed hereto (hereinafter referred to as “the Technical Schedule for the Blue Area”) and the plans approved under sub-clause (c) of this Special Condition in a good workmanlike manner.
- (ii) For the purpose of this Special Condition, the decision of the D of LCS as to whether and when the public open space within the Blue Area has been erected, constructed, provided and landscaped in compliance with sub-clause (a)(i) of this Special Condition shall be final and binding on the Purchaser.

Amendment of the
Technical Schedule
for the Blue Area

- (b) (i) The D of LCS shall have the right to amend, vary, alter, modify or substitute the Technical Schedule for the Blue Area as he shall at his sole and absolute discretion deem fit.
- (ii) No amendment, variation, alteration, modification or substitution of the Technical Schedule for the Blue Area shall be made by the Purchaser except with the prior written approval of the D of LCS and if such approval is given, it shall be upon such terms and conditions as determined by the D of LCS at his sole and absolute discretion.
- (iii) Any amendment, variation, alteration, modification or substitution by the D of LCS under sub-clause (b)(i) of this Special Condition or by the Purchaser as approved by the D of LCS under sub-clause (b)(ii) of this Special Condition shall be deemed to be incorporated into the Technical Schedule for the Blue Area and form part thereof.

- (iv) If in the opinion of the D of LCS (whose opinion shall be final and binding on the Purchaser) there exists any conflict between the provisions of the Technical Schedule for the Blue Area and these Conditions, these Conditions shall prevail.
- Submission of plans for erection and construction of the Blue Area
- (c) (i) The Purchaser shall at his own expense submit or cause to be submitted to the D of LCS for his written approval plans for erection, construction, provision and landscaping of the Blue Area, which shall include details and information fulfilling the relevant technical specifications and design requirements as to the levels, design, servicing, treatment, planting and landscaping of the Blue Area and such other details and information as the D of LCS may at his sole and absolute discretion require. The submission as approved by the D of LCS is hereinafter referred to as “the Approved Blue Area Plans”.
- (ii) No amendment, variation, alteration, modification or substitution of the Approved Blue Area Plans shall be made by the Purchaser except with the prior written approval of the D of LCS and if such approval is given, it shall be upon such terms and conditions as determined by the D of LCS at his sole and absolute discretion.
- (iii) Any amendment, variation, alteration, modification or substitution by the Purchaser as approved by the D of LCS under sub-clause (c)(ii) of this Special Condition shall be deemed to be incorporated into the Approved Blue Area Plans and form part thereof.
- (iv) Subject to Special Condition No. (41) hereof, no site formation works shall be commenced on or within the Blue Area until the plans referred to in sub-clause (c)(i) of this Special Condition shall have been approved by the D of LCS.
- Maintenance of the Blue Area
- (d) The Purchaser shall, upon completion of the works referred to in sub-clause (a)(i) of this Special Condition, and while he is in possession of the Blue Area or any part thereof, at his own expense and in all respects to the satisfaction of the D of LCS, uphold, repair and maintain the Blue Area and everything forming a portion of or pertaining to it in good and substantial repair and condition, except any part of the Blue Area which has been re-delivered up to the Government in accordance with sub-clause (g)(iii) of this Special Condition, until such time as possession of the whole of the Blue Area has been re-delivered up to the Government in accordance with sub-clause (g)(iii) of this Special Condition.
- Monitoring of works
- (e) (i) The D of LCS shall have the right at his sole and absolute discretion to nominate any public officers (hereinafter referred to as “the Officers Nominated by D of LCS”) who shall oversee and monitor the design, erection, construction, provision, landscaping, completion, upholding, repair and

maintenance of the Blue Area (hereinafter collectively referred to as “the Blue Area Works”) in order to ensure that the Blue Area Works are carried out in accordance with these Conditions.

- (ii) The Purchaser shall notify the Officers Nominated by D of LCS of any condition, restriction, requirement and information affecting or relating to the erection, construction, provision and landscaping of the Blue Area or any part thereof or the Blue Area Works forthwith upon the same becoming known to the Purchaser, his servants, agents, contractors and workmen and shall make available all drawings, site records, notices, letters, certificates, approvals and information and render all necessary assistance and co-operation to the Officers Nominated by D of LCS when required by the Officers Nominated by D of LCS.

Non-fulfilment

- (f) In the event of non-fulfilment of any of the Purchaser’s obligations under sub-clauses (a)(i) and (d) of this Special Condition, without prejudice to sub-clauses (k) and (l) of this Special Condition, the Government may carry out the necessary works at the cost of the Purchaser who shall pay to the Government on demand a sum equals to the cost of such works, such sum to be determined by the D of LCS whose determination shall be final and binding on the Purchaser.

Possession of the Blue Area

- (g) (i) For the purpose only of carrying out the Demolition and Removal Works, the Preventive Works (as referred to in Special Condition No. (41)(b) hereof), the Contamination Assessment and the Decontamination Works (both as referred to in Special Condition No. (41)(c) hereof) within the Blue Area and the works specified in sub-clauses (a)(i) and (d) of this Special Condition, the Purchaser shall on the date of this Agreement be granted possession of the Blue Area.
- (ii) The Purchaser shall accept the Blue Area in such state and condition and with such buildings, utilities, installations, structures and foundations as existing on the date of this Agreement and hereby agrees not to make any claim whatsoever against the Government in respect thereof.
- (iii) The Blue Area or any part thereof as the Director may at his sole discretion specify or require shall be re-delivered up to the Government on demand and in any event shall be deemed to have been re-delivered up to the Government by the Purchaser on the date of a letter from the Director indicating that these Conditions have been complied with to his satisfaction.

Supply of documents, etc.

- (h) (i) The Purchaser shall, at his own expense and as soon as practicable but in any event no later than 56 calendar days from the date or respective dates of re-delivery of possession by the Purchaser of the Blue Area or any part thereof, provide

to the D of LCS all documents, drawings and materials relating thereto in accordance with the requirements of the Technical Schedule for the Blue Area.

- (ii) For the purpose of sub-clause (h)(i) of this Special Condition, the Purchaser shall procure or cause to be procured the consent of the intellectual property right owners of all documents, drawings and materials in relation to the Blue Area or any part thereof to the use, copying, printing and modification of them and the disclosure and dissemination of them to any government department or third party by the Government, the D of LCS, the Director, their officers, contractors, agents, workmen and any other persons authorized by any of them.
- (iii) The Purchaser hereby accepts and acknowledges that the obligation under sub-clause (h)(ii) of this Special Condition shall survive and continue to be binding on the Purchaser after the expiry or sooner determination of the term hereby agreed to be granted.

Restriction on use of
the Blue Area

- (i) The Purchaser shall not without the prior written consent of the Director use the Blue Area or any part thereof for the purpose of storage or parking of vehicles or for the erection of any temporary structure or for any purposes other than for the carrying out of the Demolition and Removal Works, the Preventive Works (as referred to in Special Condition No. (41)(b) hereof), the Contamination Assessment and the Decontamination Works (both as referred to in Special Condition No. (41)(c) hereof) and the works specified in sub-clauses (a)(i) and (d) of this Special Condition.

Access to the Blue
Area

- (j) The Purchaser shall at all reasonable times while he is in possession of the Blue Area or any part thereof–
 - (i) permit the Government, the D of LCS, the D of CED, their officers, contractors, agents, workmen and any other persons authorized by any of them, with or without tools, equipment, plant, machinery or motor vehicles free of charge to have the right of free and unrestricted ingress, egress and regress to, from and through the Blue Area or any part thereof for the purposes of inspecting, checking, overseeing, monitoring and supervising any works to be carried out in compliance with sub-clauses (a)(i) and (d) of this Special Condition and for carrying out, inspecting, checking and supervising the works under sub-clause (f) of this Special Condition and any other works which the D of LCS may consider necessary in the Blue Area or any part thereof, and for the purpose of this sub-clause (j)(i), the decision of the D of LCS as to what constitute reasonable times shall be final and binding on the Purchaser;
 - (ii) permit the Government, the D of LCS, the D of CED, their officers, contractors, agents, workmen and any other persons authorized by any of them and the relevant public utility

companies authorized by the Government, with or without tools, equipment, plant, machinery or motor vehicles free of charge to have the right of free and unrestricted ingress, egress and regress to, from and through the Blue Area or any part thereof as the Government, the D of LCS, the D of CED or the relevant public utility companies authorized by the Government may require for the purposes of any works to be carried out in, upon or under the Blue Area or any part thereof or any adjoining or neighbouring land including but not limited to inspecting, checking, maintaining, repairing, replacing, reinstating, diverting, decommissioning, demolishing and removing any pipes, wires, conduits, cable-ducts and other conducting media and ancillary equipment necessary for the provision of telephone, electricity, gas (if any) and other services serving or intended to serve the Blue Area or any adjoining or neighbouring land, and the Purchaser shall co-operate fully with the Government, the D of LCS, the D of CED and the relevant public utility companies authorized by the Government on all matters relating to any of the aforesaid works to be carried out within the Blue Area or any adjoining or neighbouring land, and for the purpose of this sub-clause (j)(ii), the decision of the D of LCS as to what constitute reasonable times shall be final and binding on the Purchaser; and

- (iii) permit the officers of the Water Authority and any other persons authorized by them, with or without tools, equipment, plant, machinery or motor vehicles free of charge to have the right of free and unrestricted ingress, egress and regress to, from and through the Blue Area or any part thereof as the officers of the Water Authority or such authorized persons may require for the purposes of carrying out any works in relation to the operation, maintenance, repairing, replacement and alteration of any waterworks installations within the Blue Area or any adjoining or neighbouring land, and for the purpose of this sub-clause (j)(iii), the decision of the Water Authority as to what constitute reasonable times shall be final and binding on the Purchaser.

Liquidated damages

- (k) (i) In addition to any other payment which may be demanded by the Government and without prejudice to the rights of the Government under these Conditions or otherwise, the Purchaser shall pay to the Government on demand as hereby agreed by way of liquidated damages and not as a penalty if the Purchaser shall fail to complete the works referred to in sub-clause (a)(i) of this Special Condition in all respects to the satisfaction of the D of LCS by the date specified in sub-clause (a)(i) of this Special Condition, a sum calculated at the rate of HK\$27,070.00 per calendar day from the date immediately following the date specified in sub-clause (a)(i) of this Special Condition up to and including the date on which the works referred to in the said sub-clause (a)(i) have

been completed in all respects to the satisfaction of the D of LCS as provided in sub-clause (a) of this Special Condition.

- (ii) For the avoidance of doubt, it is hereby agreed and declared that the acceptance of payment of any of the said sum of liquidated damages referred to in sub-clause (k)(i) of this Special Condition shall not discharge the Purchaser from any of his obligations remaining to be observed and performed.

Defects Liability and
Plant Establishment
Period

- (l) (i) The Purchaser shall indemnify and keep indemnified the Government from and against all liabilities, claims, losses, damages, expenses, charges, costs, demands, actions and proceedings whatsoever and howsoever arising whether directly or indirectly out of, in connection with, or incidental to any defects, wants of repair, imperfections, breakdown, faults or any other outstanding works (whether in respect of workmanship, material, design or otherwise) on the Blue Area and everything forming a portion of or pertaining to it and any health problems of any trees, shrubs or other plants within the Blue Area, including defects, disorders and such other factors or causes which may affect the health of such trees, shrubs or other plants (which health problems are hereinafter referred to as “Trees’ Health Problems”)–
 - (I) which may exist on the date or respective dates of re-delivery of possession by the Purchaser of the Blue Area or any part thereof; and
 - (II) which shall occur or become apparent within a period of 365 calendar days after the date or respective dates of re-delivery of possession by the Purchaser of the Blue Area or any part thereof (hereinafter referred to as “the Defects Liability and Plant Establishment Period”).
- (ii) Whenever required by the D of LCS, the Purchaser shall at his own expense and within such time and to such standard and in such manner as may be specified by the D of LCS, carry out all works of maintenance, repair, amendment, reconstruction and rectification and any other works as may be necessary to remedy and rectify any defects, wants of repair, imperfections, breakdown, faults or any other outstanding works (whether in respect of workmanship, material, design or otherwise) on the Blue Area and everything forming a portion of or pertaining to it which shall occur or become apparent within the Defects Liability and Plant Establishment Period. In addition to the foregoing, the Purchaser shall at his own expense and within such time and to such standard and in such manner as may be specified by the D of LCS, make good and rectify any defects, wants of repair, imperfections, breakdown, faults and any other outstanding works (whether in respect of workmanship,

material, design or otherwise) on the Blue Area and everything forming a portion of or pertaining to it which may exist on the date or respective dates of re-delivery of possession by the Purchaser of the Blue Area or any part thereof.

- (iii) In the event that due to any Trees' Health Problems which may exist on the date or respective dates of re-delivery of possession by the Purchaser of the Blue Area or any part thereof, any trees, shrubs or other plants within the Blue Area have not grown or developed within the Defects Liability and Plant Establishment Period to a state and condition to the satisfaction of the D of LCS, the Purchaser shall, if so required by the D of LCS, at the Purchaser's own expense and within such time and to such standard and in such manner as may be specified by the D of LCS, carry out replanting, landscaping works, tree maintenance measures or any other measures in all respects to the satisfaction of the D of LCS.
- (iv) The D of LCS will, shortly before the expiry of the Defects Liability and Plant Establishment Period, cause an inspection to be carried out in respect of the Blue Area and everything forming a portion of or pertaining to it for the purpose of identifying any defects, wants of repair, imperfections, breakdown, faults or any other outstanding works (whether in respect of workmanship, material, design or otherwise) and any Trees' Health Problems which may be evident. The D of LCS reserves the right to serve upon the Purchaser within 30 calendar days after the expiry of the Defects Liability and Plant Establishment Period, a Schedule or Schedules of Defects specifying any defects, wants of repair, imperfections, breakdown, faults or any other outstanding works (whether in respect of workmanship, material, design or otherwise) and any Trees' Health Problems which may be evident on the Blue Area and everything forming a portion of or pertaining to it and the Purchaser shall at his own expense cause all necessary works and measures to be carried out (including replanting, landscaping works, tree maintenance measures and any other measures specified in sub-clause (I)(iii) of this Special Condition) so as to remedy and rectify the same within such time and to such standard and in such manner as may be specified by the D of LCS.
- (v) If the Purchaser shall fail to carry out any of the works referred to in sub-clauses (I)(ii), (I)(iii) and (I)(iv) of this Special Condition, then any such works may be carried out by the Government and all costs and charges incurred in connection therewith by the Government as certified by the D of LCS (whose certification shall be final and binding on the Purchaser) together with a sum equivalent to 20% of the costs and charges involved as an administrative fee shall on demand be paid by the Purchaser.

Guarantee

(m) The Purchaser shall procure from its parent or other associated company as shall be determined by the Director at his absolute discretion a written guarantee whereby such company unconditionally and irrevocably–

- (i) guarantees the performance of obligations of the Purchaser under this Special Condition; and
- (ii) undertakes to indemnify and keep indemnified the Government from and against all liabilities, claims, losses, damages, expenses, charges, costs, demands, actions and proceedings whatsoever and howsoever caused to or suffered by the Government arising whether directly or indirectly out of, in connection with or incidental to any breach, non-compliance, non-observance or non-performance by the Purchaser of any of his obligations under this Special Condition.

The guarantee shall be subject to the laws of Hong Kong in a form to be approved by the Director and shall be delivered to him within 90 calendar days from the date of this Agreement. If the Purchaser has a parent or associated company incorporated outside of Hong Kong and if required by the Director, the Purchaser shall procure and furnish to the Director a performance bond or guarantee in a form acceptable in all respects to the satisfaction of the Director to be given by a bank licensed under section 16 of the Banking Ordinance. Such bond or guarantee shall be for a sum of HK\$22,799,000.00 and shall be for the purpose of securing payment to the Government of any sum which shall have been demanded under sub-clause (l)(v) of this Special Condition and has not been paid by the Purchaser to the Government.

No liability

(n) The Government shall have no responsibility or liability for any loss, damage, nuisance or disturbance whatsoever and howsoever caused to or suffered by the Purchaser or any other person arising whether directly or indirectly out of, in connection with or incidental to the fulfilment or non-fulfilment of any of the Purchaser's obligations under sub-clauses (a), (c), (d), (h), (i), (j), (k) and (l) of this Special Condition; or the exercise or non-exercise by the Government, the D of LCS, the D of CED, the Director, their officers, contractors, agents, workmen, the officers of the Water Authority, the relevant public utility companies authorized by the Government or any other persons authorized by any of them of the discretion and rights conferred under this Special Condition and no claim whatsoever shall be made against the Government by the Purchaser in respect of any such loss, damage, nuisance or disturbance.

Indemnity by the Purchaser

(o) The Purchaser shall indemnify and keep indemnified the Government from and against all liabilities, claims, losses, damages, expenses, charges, costs, demands, actions and proceedings whatsoever and howsoever arising whether directly or indirectly out of, in connection with or incidental to the fulfilment or non-fulfilment of any of the Purchaser's obligations under sub-clauses (a), (c), (d), (h), (i), (j), (k) and (l) of this Special Condition; or the exercise or non-exercise by the Government, the D of LCS, the D of CED, the Director, their officers, contractors, agents, workmen, the officers of the Water

Authority, the relevant public utility companies authorized by the Government or any other persons authorized by any of them of the discretion and rights conferred under this Special Condition.

(p) For the purpose of this Special Condition only, the expression “Purchaser” shall exclude his assigns.

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| Building covenant | (6) The Purchaser shall develop the lot by the erection thereon of a building or buildings complying in all respects with these Conditions and all Ordinances, bye-laws and regulations relating to building, sanitation and planning which are or may at any time be in force in Hong Kong, such building or buildings to be completed and made fit for occupation on or before 31 December 2033. |
| User | (7) The lot or any part thereof or any building erected or to be erected thereon shall not be used for any purpose other than for non-industrial (excluding godown, hotel and petrol filling station) purposes. |
| Preservation of trees | (8) No tree growing on the lot or adjacent thereto shall be removed or interfered with without the prior written consent of the Director, and if such consent is granted, the Director may impose such conditions as to transplanting, compensatory landscaping or replanting as he may deem appropriate. |
| Landscaping | (9) The Purchaser shall at his own expense landscape and plant with trees and shrubs any portion of the lot and podium (if any) not built upon and thereafter maintain and keep the same in a safe, clean, neat, tidy and healthy condition all to the satisfaction of the Director. |
| Development conditions | (10) Subject to these Conditions, upon development or redevelopment (which term refers solely to redevelopment contemplated in General Condition No. 7 hereof) of the lot or any part thereof– |
| Compliance with Buildings Ordinance | (a) any building erected or to be erected on the lot shall in all respects comply with the requirements of the Buildings Ordinance; |
| Compliance with Town Planning Ordinance | (b) no building may be erected on the lot or any part thereof, or on any area outside the lot and specified in these Conditions, nor may any development or use of the lot or any part thereof, or of any area outside the lot and specified in these Conditions take place, which does not in all respects comply with the requirements of the Town Planning Ordinance, any regulation made thereunder and any amending legislation; |
| Total gross floor area | (c) the total gross floor area of any building or buildings erected or to be erected on the lot shall not be less than 30,253 square metres and shall not exceed 50,420.5 square metres provided that–

(i) the total gross floor area of any building or buildings or part of any building or buildings erected or to be erected on the lot for private residential purpose shall not be less than 27,926 square metres and shall not exceed 46,542 square metres; and |

Minimum size of
residential units

- (ii) the total gross floor area of any building or buildings or part of any building or buildings erected or to be erected on the lot for non-industrial (excluding private residential, godown, hotel and petrol filling station) purposes shall not exceed 3,878.5 square metres;

- (d) (i) the saleable area of each residential unit erected or to be erected on the lot shall not be less than 26 square metres;

- (ii) for the purpose of this sub-clause (d)–

- (I) the expression “saleable area” means the floor area of a residential unit (including the floor area of any balcony, utility platform and verandah but excluding the area of any cockloft, bay window, parking space, yard, terrace, garden, flat roof, stairhood, roof and air-conditioning plant room);

- (II) subject to sub-clause (d)(ii)(IV) of this Special Condition, the floor area of a residential unit shall be measured from the exterior of the enclosing walls of the residential unit and shall include the area of the internal partitions and columns within such unit but shall exclude any of the Common Areas referred to in Special Condition No. (20)(a)(v) hereof;

- (III) subject to sub-clauses (d)(ii)(IV) and (d)(ii)(V) of this Special Condition, the floor area of a balcony, utility platform or verandah shall be measured from the exterior of the enclosing walls of the balcony, utility platform or verandah and shall include the area of the internal partitions and columns within such balcony, utility platform or verandah but shall exclude–

- (A) any of the Common Areas referred to in Special Condition No. (20)(a)(v) hereof; and

- (B) the area covered by any enclosing wall that abuts onto the residential unit;

- (IV) if any enclosing wall separates a residential unit, balcony, utility platform or verandah from an adjoining residential unit, balcony, utility platform or verandah, the measurement is to be taken from the middle of the wall;

- (V) if a balcony, utility platform or verandah is enclosed otherwise than by a solid wall, the floor area of such balcony, utility platform or verandah shall be measured from the external boundary of the balcony, utility platform or verandah; and

- (VI) the decision of the Director as to the calculation of the saleable area of a residential unit (including but not limited to what constitutes a cockloft, bay window, parking space, yard, terrace, garden, flat roof, stairhood, roof or air-conditioning plant room, how they are measured and what area is included or excluded from their measurement) shall be final and binding on the Purchaser; and
 - (iii) for the purposes of these Conditions (other than Special Conditions Nos. (23), (24) and (25) hereof), the decision of the Director as to what constitutes a residential unit shall be final and binding on the Purchaser;
- Building setback
- (e) (i) unless the Director of Buildings (hereinafter referred to as “the D of B”) agrees otherwise, the Purchaser shall at his own expense submit to the D of B for his written approval a plan or plans demonstrating the configuration and layout of all the buildings, structures, supports for buildings or structures and any projection erected or constructed or to be erected or constructed at or above the ground level of the lot for providing the setback areas from the boundaries of the lot, which submission shall in all respects be in compliance with the requirements of the D of B and include the paving and landscaping proposal of such setback areas and other relevant information as the D of B may require or specify at his sole discretion. The submission as approved by the D of B is hereinafter referred to as “the Approved Building Setback Submission”. Any building, structure, support for building or structure and any projection erected or constructed or to be erected or constructed on the lot shall in all respects comply with the Approved Building Setback Submission. For the purpose of this sub-clause (e)(i), the decision of the D of B as to what constitutes the ground level of the lot or whether there has been compliance with the Approved Building Setback Submission shall be final and binding on the Purchaser; and
 - (ii) no amendment, variation, alteration, modification or substitution of the Approved Building Setback Submission shall be made without the prior written approval of the D of B, and if such approval is given, it shall be upon such terms and conditions as determined by the D of B at his sole discretion;
- Building separation
- (f) (i) unless the D of B agrees otherwise, the Purchaser shall at his own expense submit to the D of B for his written approval a plan or plans demonstrating the configuration and layout of all the buildings or group of buildings erected or to be erected on the lot including but not limited to the continuous projected façade length, separating distance amongst and permeability of such buildings or group of buildings, which submission shall in all respects be in compliance with the

building separation requirements of the D of B and shall include such other relevant information as the D of B may require or specify at his sole discretion;

- (ii) the submission under sub-clause (f)(i) of this Special Condition as approved by the D of B is hereinafter referred to as “the Approved Building Separation Submission”. Any building or group of buildings erected or to be erected on the lot shall in all respects comply with the Approved Building Separation Submission. For the purpose of this sub-clause (f)(ii), the decision of the D of B as to whether there has been compliance with the Approved Building Separation Submission shall be final and binding on the Purchaser; and
- (iii) no amendment, variation, alteration, modification or substitution of the Approved Building Separation Submission shall be made without the prior written approval of the D of B, and if such approval is given, it shall be upon such terms and conditions as determined by the D of B at his sole discretion; and

Greenery Area

- (g) (i) the Purchaser shall at his own expense submit to the D of B for his written approval a plan or plans indicating such portion or portions of the lot or building or buildings erected or to be erected thereon at or within which greening (including but not limited to the provision of live plants with soil base) will be provided and maintained (hereinafter referred to as “the Greenery Area”), the layout and size of the Greenery Area and such other information (including but not limited to the location and particulars of the building works for the Greenery Area) as the D of B may require or specify at his sole discretion (which submission is hereinafter referred to as “the Greenery Submission”). The decision of the D of B as to what constitutes the provision of greening under the Greenery Submission and which portion or portions of the lot or building or buildings erected or to be erected thereon constitutes the Greenery Area shall be final and binding on the Purchaser. The submission as approved by the D of B is hereinafter referred to as “the Approved Greenery Submission”. For the purposes of these Conditions, “building works” shall be as defined in the Buildings Ordinance;
- (ii) the Purchaser shall at his own expense implement and complete the building works for the Greenery Area in accordance with the Approved Greenery Submission and shall thereafter maintain the same in all respects to the satisfaction of the D of B. No amendment, variation, alteration, modification or substitution of the Approved Greenery Submission shall be made without the prior written approval of the D of B, and if such approval is given, it shall be upon such terms and conditions as determined by the D of B at his sole discretion; and

- (iii) except with the prior written approval of the D of B, the Greenery Area as shown in the Approved Greenery Submission shall be designated as and form part of the Common Areas referred to in Special Condition No. (20)(a)(v) hereof, and shall not be used for any purpose other than as the Greenery Area in accordance with the layout, size, location and particulars as set out in the Approved Greenery Submission.

Provisional Gold
Rating

(11) The Purchaser shall, on or before 31 December 2033 or such other date as may be approved by the Director, at the Purchaser's own expense obtain a Provisional Gold Rating or above for the building or buildings erected or to be erected on the lot from the Hong Kong Green Building Council Limited or such other equivalent bodies as may be approved by the Director of Planning. The decision of the Director of Planning as to what constitute other equivalent bodies or whether there has been compliance with this Special Condition shall be final and binding on the Purchaser.

Provision of sales
office and show flats

(12) Notwithstanding the maximum gross floor areas permitted under Special Condition No. (10)(c) hereof, the Purchaser may use part or parts of the building erected or to be erected on the lot in accordance with these Conditions and erect on part or parts of the lot separate temporary structures for the purposes of a sales office and show flats and related marketing activities to facilitate the sale of the building or any part thereof erected or to be erected on the lot in accordance with these Conditions, provided that the scale and period of operation of such sales office and show flats and related marketing activities shall be subject to the prior written approval of the Director.

Recreational facilities

(13) (a) The Purchaser may erect, construct and provide within the lot such recreational facilities and facilities ancillary thereto (hereinafter collectively referred to as "the Facilities") as may be approved in writing by the Director. The type, size, design, height and disposition of the Facilities shall also be subject to the prior written approval of the Director.

(b) For the purpose of calculating the total gross floor areas stipulated in Special Condition No. (10)(c) hereof, subject to Special Condition No. (46)(d) hereof, any part of the Facilities provided within the lot in accordance with sub-clause (a) of this Special Condition which is for the common use and benefit of the residents of the residential block erected or to be erected on the lot and their bona fide visitors shall not be taken into account. The remaining part of the Facilities which, in the opinion of the Director, is not for such use shall be taken into account for such calculation. For the purposes of these Conditions (other than Special Conditions Nos. (23) and (24) hereof), the decision of the Director as to what constitutes a residential block shall be final and binding on the Purchaser.

(c) In the event that any part of the Facilities is exempted from the calculation of the total gross floor areas pursuant to sub-clause (b) of this Special Condition (hereinafter referred to as "the Exempted Facilities")–

- (i) the Exempted Facilities shall be designated as and form part of the Common Areas referred to in Special Condition No. (20)(a)(v) hereof;
- (ii) the Purchaser shall at his own expense maintain the Exempted Facilities in good and substantial repair and condition and shall operate the Exempted Facilities to the satisfaction of the Director; and
- (iii) the Exempted Facilities shall only be used by the residents of the residential block erected or to be erected on the lot and their bona fide visitors and by no other person.

Office
accommodation for
watchmen and
caretakers

(14) (a) Office accommodation for watchmen or caretakers or both may be provided within the lot subject to the following conditions–

- (i) such accommodation is in the opinion of the Director essential to the safety, security and good management of the residential block erected or to be erected on the lot;
- (ii) such accommodation shall not be used for any purpose other than the office accommodation for watchmen or caretakers or both, who are wholly and necessarily employed on the lot; and
- (iii) the location of any such accommodation shall first be approved in writing by the Director.

(b) (i) For the purpose of calculating the total gross floor areas stipulated in Special Condition No. (10)(c) hereof, subject to Special Condition No. (46)(d) hereof, there shall not be taken into account the office accommodation provided within the lot in accordance with sub-clause (a) of this Special Condition not exceeding the lesser of (I) or (II) below–

- (I) 0.2% of the total gross floor area of the building or any part or parts of the building or buildings erected or to be erected on the lot for private residential purpose; or
- (II) 5 square metres for every 50 residential units or part thereof erected or to be erected on the lot, or 5 square metres for every residential block erected or to be erected on the lot, whichever calculation provides the greater floor area of such accommodation.

Any gross floor area in excess of the lesser of (I) or (II) above shall be taken into account for such calculation.

- (ii) In calculating the total gross floor area of the building or part or parts of the building or buildings erected or to be erected on the lot referred to in sub-clause (b)(i)(I) of this Special Condition, there shall not be taken into account the floor

spaces which are excluded from the calculation of the gross floor area of the building erected or to be erected on the lot in accordance with these Conditions as to which the decision of the Director shall be final and binding on the Purchaser.

(c) The office accommodation provided within the lot in accordance with sub-clause (a) of this Special Condition shall be designated as and form part of the Common Areas referred to in Special Condition No. (20)(a)(v) hereof.

Quarters for
watchmen and
caretakers

(15) (a) Quarters for watchmen or caretakers or both may be provided within the lot subject to the following conditions–

- (i) such quarters shall be located in one of the residential blocks erected on the lot or in such other location as may be approved in writing by the Director; and
- (ii) such quarters shall not be used for any purpose other than the residential accommodation of watchmen or caretakers or both, who are wholly and necessarily employed for the residential block or blocks within the lot.

(b) For the purpose of calculating the total gross floor areas stipulated in Special Condition No. (10)(c) hereof, subject to Special Condition No. (46)(d) hereof, the quarters provided within the lot in accordance with sub-clause (a) of this Special Condition with a total gross floor area not exceeding 25 square metres shall not be taken into account. Any gross floor area in excess of 25 square metres shall be taken into account for such calculation.

(c) Quarters for watchmen or caretakers or both provided within the lot in accordance with sub-clause (a) of this Special Condition shall be designated as and form part of the Common Areas referred to in Special Condition No. (20)(a)(v) hereof.

Owners' Corporation
or Owners'
Committee office

(16) (a) One office for the use of the Owners' Corporation or the Owners' Committee may be provided within the lot subject to the following conditions–

- (i) such office shall not be used for any purpose other than for the meetings and administrative work of the Owners' Corporation or the Owners' Committee formed or to be formed in respect of the lot and the buildings erected or to be erected thereon; and
- (ii) the location of such office shall first be approved in writing by the Director.

(b) For the purpose of calculating the total gross floor areas stipulated in Special Condition No. (10)(c) hereof, subject to Special Condition No. (46)(d) hereof, an office provided within the lot in accordance with sub-clause (a) of this Special Condition with a total gross floor area not exceeding 20 square metres shall not be taken into account. Any gross floor area in excess of 20 square metres shall be taken into account for such calculation.

(c) An office provided within the lot in accordance with sub-clause (a) of this Special Condition shall be designated as and form part of the Common Areas referred to in Special Condition No. (20)(a)(v) hereof.

No exempt building

(17) No building shall be erected on the lot of a type which, by virtue of the Buildings Ordinance (Application to the New Territories) Ordinance, any regulation made thereunder and any amending legislation, is exempted from the provisions of the Buildings Ordinance.

Restriction on alienation before compliance

(18) Prior to compliance with these Conditions in all respects to the satisfaction of the Director, the Purchaser shall not, except with the prior written consent of the Director (provided that, for the avoidance of doubt, no written consent will be given by the Director under this Special Condition before the balance of the premium as provided in General Condition No. 2 hereof in respect of the tendered lots referred to in paragraph 1 of the Form of Tender (Premium Submission) annexed hereto shall have been paid in full in accordance with General Condition No. 2 hereof) and in conformity with any conditions imposed by him (including the payment of such fees as may be required by him)–

- (a) assign, part with the possession of or otherwise dispose of the lot or any part thereof or any interest therein or any building or part of any building thereon (whether by way of direct or indirect reservation, the grant of any right of first refusal, option or power of attorney, or any other method, arrangement or document of any description) or enter into any agreement so to do;
- (b) solicit or accept, whether directly or indirectly or through a solicitor, agent, contractor or trustee or through a company in which the Purchaser or its nominee is directly or indirectly the owner of shares or which is the owner of shares in the Purchaser or otherwise, any money, money's worth or other valuable consideration of any description pursuant to any transaction, present or future, conditional or unconditional whereby the lot or any part thereof or any interest therein or any building or part of any building thereon is or may be sold, assigned or otherwise disposed of or affected, or enter into any agreement so to do;
- (c) underlet the lot or any part thereof or any building or part of any building thereon or enter into any agreement so to do, unless the balance of the premium as provided in General Condition No. 2 hereof in respect of the tendered lots referred to in paragraph 1 of the Form of Tender (Premium Submission) annexed hereto shall have been paid in full in accordance with General Condition No. 2 hereof and the tenancy or lease of the lot or any part thereof or any building or part of any building thereon complies with the following terms and conditions–
 - (i) the term of the tenancy or lease shall not exceed 10 years in the aggregate including any right of renewal;
 - (ii) the tenancy or lease shall not commence until after the issue by the Building Authority of an occupation permit or a

temporary occupation permit under the Buildings Ordinance, covering the building or that part of the building to which the tenancy or lease relates; and for the purposes of these Conditions, "Building Authority" shall be as defined in the Buildings Ordinance;

- (iii) no premium shall be paid by the tenant or lessee;
 - (iv) the rent payable shall not exceed a rack rent;
 - (v) no rent shall be payable in advance for a period greater than 12 calendar months;
 - (vi) the user permitted in the tenancy agreement or lease or agreement for tenancy or lease shall comply with these Conditions; and
 - (vii) none of the terms and conditions in the tenancy agreement or lease or agreement for tenancy or lease shall contravene these Conditions; or
- (d) mortgage or charge the lot or any part thereof or any interest therein except for the purpose of the development thereof in accordance with these Conditions and then only by way of a building mortgage, it being agreed that for this purpose a building mortgage shall be one—
- (i) whereby the lot is mortgaged or charged in favour of a licensed bank or a registered deposit-taking company authorized under section 16 of the Banking Ordinance to secure monies (and interest thereon) advanced or to be advanced to the Purchaser for the purpose only of developing the lot in accordance with these Conditions and for the payment of legal and other professional fees in connection with such development and the mortgage (provided that such fees do not, in the aggregate, exceed 5% of the total amount secured by the mortgage), and for no other purpose;
 - (ii) under which such advances (in the case of work done) are to be made to the Purchaser only in amounts to be certified from time to time by the authorized person (as defined in the Buildings Ordinance and appointed by the Purchaser for the development of the lot) as having been incurred by the Purchaser for the development of the lot;
 - (iii) under which the Purchaser, the mortgagee and the Stakeholder (as hereinafter defined) are required, in the event of the Purchaser applying for the prior written consent of the Director under this Special Condition to enter into any agreement to dispose of any share or interest in the lot together with the right to the exclusive use and possession of any unit in the building erected or to be erected on the lot, to

enter into an agreement containing the terms and requirements as the Director may from time to time specify or require, including but not limited to the following–

- (I) all sums received by the Purchaser or the Stakeholder as purchase price or any part thereof under an agreement for sale and purchase in respect of any unit, share or interest in the lot (the terms of which have been approved by the mortgagee) (hereinafter referred to as “the ASP”) shall be paid into a bank account designated for the development of the lot and which must be opened, maintained and operated by the Stakeholder with the mortgagee (hereinafter referred to as “the Stakeholder Account”);
- (II) no monies shall be released from the Stakeholder Account except with the prior written approval of the mortgagee and in accordance with the terms of the ASP and the terms of the Director’s consent; and
- (III) the mortgagee irrevocably undertakes to the Purchaser to, upon completion of the sale and purchase, release unconditionally from the security of the building mortgage, any unit, share or interest in the lot, in respect of which the total purchase price under the ASP is fully paid into the Stakeholder Account;
- (iv) under which the mortgagee is obliged and irrevocably undertakes to, upon completion of the sale and purchase, release unconditionally from the security of the building mortgage, any unit, share or interest in the lot, in respect of which the total purchase price under the ASP is fully paid into the Stakeholder Account; and
- (v) for the purpose of this Special Condition, “the Stakeholder” means any solicitors firm for the time being appointed by the Purchaser to act as stakeholder in respect of the purchase price under the ASP.

Registration

(19) Every assignment, mortgage, charge, underletting for more than 3 years or other alienation of the lot or any part thereof or any interest therein shall be registered at the Land Registry.

Deed of Mutual
Covenant
incorporating
Management
Agreement (if any)

(20) (a) Notwithstanding that these Conditions shall have been observed and complied with to the satisfaction of the Director, the Purchaser shall not assign, mortgage, charge, part with the possession of or otherwise dispose of the lot or any part thereof or any interest therein or enter into any agreement so to do except by way of an assignment or other disposal of undivided shares in the whole of the lot together with the right to the exclusive use and occupation of individual floors and units in any building erected thereon and even then such assignment or other disposal shall be subject to the following conditions–

- (i) the Purchaser shall first submit to and obtain the written approval of the Director to a Deed of Mutual Covenant incorporating a Management Agreement (if any) (hereinafter referred to as “the DMC”) to be entered into between the Purchaser and the assignees from him of undivided shares in the whole of the lot;
- (ii) the DMC must be in a form and contain the provisions which the Director shall approve or require and it (and any approved amendment to it) must be registered by Memorial against the lot in the Land Registry;
- (iii) the Purchaser must comply with the approved terms and conditions of the DMC, and no amendment thereto may be made without the prior written approval of the Director and the payment of such fees as may be required;
- (iv) every assignment or other disposal of an undivided share or shares in the lot shall be subject to and with the benefit of the DMC;
- (v) in the DMC the Purchaser must allocate to those parts of the lot which comprise the common areas or amenities for the common use and benefit of owners for the time being of the lot (hereinafter referred to as “the Common Areas”) a number of undivided shares in the lot which in the opinion of the Director is appropriate;
- (vi) the Purchaser shall not assign, mortgage or charge (except by a building mortgage under Special Condition No. (18)(d) hereof) or otherwise dispose of or part with the possession of any undivided share allocated to the Common Areas or any interest therein or enter into any agreement so to do except that upon execution of the DMC, the whole of the undivided shares allocated to the Common Areas shall be assigned to and vested in the manager appointed in accordance with the DMC who must hold the said undivided shares on trust for the benefit of all owners for the time being of undivided shares in the lot;
- (vii) the DMC must provide that, subject to sub-clause (a)(viii) of this Special Condition, on termination of the manager’s appointment, the manager must assign the undivided shares allocated to the Common Areas free of costs or consideration to its successor in office; and
- (viii) if an Owners’ Corporation is formed under the Building Management Ordinance, any regulation made thereunder and any amending legislation, it may require the manager, in accordance with the DMC to assign the undivided shares allocated to the Common Areas and transfer the management

responsibilities to it free of costs or consideration, in which event, the said Owners' Corporation must hold them on trust for the benefit of all owners for the time being of undivided shares in the lot.

(b) Sub-clause (a) of this Special Condition shall not apply to—

- (i) an assignment, underletting, mortgage or charge of the lot as a whole; or
- (ii) an underletting of a part of the building erected on the lot.

(c) The DMC must—

- (i) not contain provisions which would in any way prohibit, prevent, hinder or prejudice the establishment or operation of residential care home as defined in the Residential Care Homes (Elderly Persons) Ordinance, any regulation made thereunder and any amending legislation (hereinafter referred to as “RCHE”), or residential care home for PWDs as defined in the Residential Care Homes (Persons with Disabilities) Ordinance, any regulation made thereunder and any amending legislation (hereinafter referred to as “RCHD”), or the use of the lot or any part thereof or any building or part of any building erected thereon for the purpose of RCHE or RCHD; and
- (ii) provide a provision to the effect that no provision in the DMC shall operate to prohibit, prevent, hinder or prejudice the establishment or operation of RCHE or RCHD or the use of the lot or any part thereof or any building or part of any building erected thereon for the purpose of RCHE or RCHD.

Restriction on
partitioning

(21) The Purchaser shall not, without the prior written consent of the Director, partition (whether by way of assignment or other disposal or by any other means) the lot or any part thereof or any section which has been partitioned with the prior written consent of the Director under this Special Condition. Where the lot has been partitioned with such consent, the provisions in Special Condition No. (20) hereof shall be applicable to each of the sections so partitioned, with the references to “the lot” under the said Special Condition being replaced and substituted by the relevant section.

Vehicular access

(22) (a) Upon development of the lot, a temporary access for construction vehicles to or from the lot may be permitted in such position and subject to such terms and conditions as may be imposed by the D of CED at his sole and absolute discretion and on the condition that the Purchaser shall at his own expense make his own arrangements from time to time for such temporary access. Upon completion of the development, the Purchaser shall, at his own expense within the time limit specified by the D of CED and in all respects to the satisfaction of the D of CED, reinstate the area upon which the temporary access was constructed.

(b) The Government gives no warranty or guarantee as to whether and when the temporary access as referred to in sub-clause (a) of this Special Condition will be available. The Government shall have no responsibility or liability for any loss, damage, nuisance or disturbance whatsoever or howsoever caused to or suffered by the Purchaser or any other person arising whether directly or indirectly out of, in connection with or incidental to any delay or failure by the Purchaser or otherwise to arrange such temporary access, and no claim whatsoever shall be made against the Government by the Purchaser in respect of any such loss, damage, nuisance or disturbance.

(c) Upon redevelopment (which term refers solely to redevelopment contemplated in General Condition No. 7 hereof) of the lot, a temporary access for construction vehicles to or from the lot may be permitted in such position and subject to such conditions as may be imposed by the Director. Upon completion of the redevelopment, the Purchaser shall, at his own expense within the time limit specified by the Director and in all respects to the satisfaction of the Director, reinstate the area upon which the temporary access was constructed.

(d) Upon completion of the construction of the Proposed Road L25, the Purchaser shall have no right of ingress or egress to or from the lot for the passage of motor vehicles except between the points X and Y through Z shown and marked on the plan marked "PLAN I" annexed hereto or at such other points as may be approved in writing by the Director.

(e) For the purpose of this Special Condition, the decision of the D of CED as to whether the construction of the Proposed Road L25 is completed shall be final and binding on the Purchaser.

Parking requirements

Residential Parking
Spaces

(23) (a) (i) Spaces shall be provided within the lot to the satisfaction of the Commissioner for Transport (hereinafter referred to as "the C for T") for the parking of motor vehicles licensed under the Road Traffic Ordinance at the rate to be calculated by reference to the respective size of the residential units erected or to be erected on the lot as set out in the table below—

Size of each residential unit	Number of the residential parking spaces to be provided under this sub-clause (a)(i)
Less than 40 square metres	One space for every 16.3 residential units or part thereof
Not less than 40 square metres but less than 70 square metres	One space for every 6.8 residential units or part thereof
Not less than 70 square metres but less than 100 square metres	One space for every 3.4 residential units or part thereof
Not less than 100 square metres but less than 130 square metres	One space for every 2.0 residential units or part thereof
Not less than 130 square metres but less than 160 square metres	One space for every 1.5 residential units or part thereof
Not less than 160 square metres	One space for every 1.2 residential units or part thereof

The spaces to be provided under this sub-clause (a)(i) (as may be varied under Special Condition No. (26) hereof) are hereinafter referred to as “the Residential Parking Spaces”.

(ii) For the purpose of sub-clause (a)(i) of this Special Condition, the total number of the Residential Parking Spaces to be provided under the said sub-clause (a)(i) shall be the aggregate of the respective number of the Residential Parking Spaces calculated by reference to the respective size of each residential unit in terms of gross floor area as set out in the table of the said sub-clause (a)(i); and for the purposes of this Special Condition and Special Condition No. (25) hereof, the term “size of each residential unit in terms of gross floor area” shall mean the sum of (I) and (II) below–

(I) the gross floor area of a residential unit exclusively used and enjoyed by the resident of that unit, which shall be measured from the exterior of the enclosing walls or parapet of such unit except where such enclosing walls separate two adjoining units in which case the measurement shall be taken from the middle of those walls, and shall include the internal partitions and columns within such unit, but, for the avoidance of doubt, shall exclude all floor area within such unit which is not taken into account for the calculation of the total gross floor areas stipulated in Special Condition No. (10)(c) hereof; and

(II) the pro-rata gross floor area of the Residential Common Area (as hereinafter defined) in respect of a residential unit, and in so calculating, the total gross floor area of the residential common area, which is for the common use and benefit of the residents of the residential block erected or to be erected on the lot, outside the enclosing walls of the residential units but, for the avoidance of doubt, excluding all floor area which is not taken into account for the calculation of the total gross floor areas stipulated in Special Condition No. (10)(c) hereof (which residential common area is hereinafter referred to as “the Residential Common Area”) shall be apportioned to a residential unit by the following formula–

$$\begin{array}{l} \text{The total gross floor} \\ \text{area of the} \\ \text{Residential Common} \\ \text{Area} \end{array} \times \frac{\begin{array}{l} \text{The gross floor area of a residential unit as} \\ \text{calculated under sub-clause (a)(ii)(I) of this} \\ \text{Special Condition} \end{array}}{\begin{array}{l} \text{The total gross floor area of all residential} \\ \text{units as calculated under sub-clause (a)(ii)(I)} \\ \text{of this Special Condition} \end{array}}$$

Visitors' Parking
Spaces

(iii) Additional spaces for the parking of motor vehicles licensed under the Road Traffic Ordinance shall be provided within

the lot to the satisfaction of the C for T at the rate to be calculated by reference to the number of residential units provided in any residential block erected or to be erected on the lot as set out in the table below subject to a minimum of two such spaces being provided within the lot–

Number of residential units per residential block	Number of the visitors' parking spaces to be provided under this sub-clause (a)(iii) per residential block
30 or below	1
31 to 45	2
46 to 60	3
61 to 75	4
above 75	5

The spaces to be provided under this sub-clause (a)(iii) (as may be varied under Special Condition No. (26) hereof) are hereinafter referred to as “the Visitors’ Parking Spaces”.

- (b) (i) Spaces shall be provided within the lot to the satisfaction of the C for T for the parking of motor vehicles licensed under the Road Traffic Ordinance at the following rates–

Office Parking
Spaces

- (I) one space for every 175 square metres or part thereof of the gross floor area of the building or buildings or part or parts of the building or buildings erected or to be erected on the lot for office purpose (the spaces to be provided under this sub-clause (b)(i)(I) (as may be varied under Special Condition No. (26) hereof) are hereinafter referred to as “the Office Parking Spaces”); and

Non-Industrial
Parking Spaces

- (II) one space for every 150 square metres or part thereof of the gross floor area of the building or buildings or part or parts of the building or buildings erected or to be erected on the lot for non-industrial (excluding private residential, office, godown, hotel and petrol filling station) purposes (the spaces to be provided under this sub-clause (b)(i)(II) (as may be varied under Special Condition No. (26) hereof) are hereinafter referred to as “the Non-Industrial Parking Spaces”).

- (ii) For the purpose of calculating the number of the Office Parking Spaces and the Non-Industrial Parking Spaces to be provided respectively under sub-clauses (b)(i)(I) and (b)(i)(II) of this Special Condition, any floor area to be used for parking, loading and unloading purposes shall be excluded.

Parking Spaces for Disabled Persons

(c) Out of the Residential Parking Spaces, the Visitors' Parking Spaces, the Office Parking Spaces and the Non-Industrial Parking Spaces, the Purchaser shall reserve and designate such number of spaces for the parking of motor vehicles by disabled persons (which spaces to be so reserved and designated are hereinafter referred to as "the Parking Spaces for Disabled Persons") as the Building Authority may require or approve.

Motor cycle parking spaces

(d) Spaces shall be provided within the lot to the satisfaction of the C for T for the parking of motor cycles licensed under the Road Traffic Ordinance at the following rates—

Residential Motor Cycle Parking Spaces

(i) one space for every 83 residential units or part thereof provided in the building erected or to be erected on the lot (the spaces to be provided under this sub-clause (d)(i) (as may be varied under Special Condition No. (26) hereof) are hereinafter referred to as "the Residential Motor Cycle Parking Spaces");

Office Motor Cycle Parking Spaces

(ii) 10% of the total number of the Office Parking Spaces (the spaces to be provided under this sub-clause (d)(ii) (as may be varied under Special Condition No. (26) hereof) are hereinafter referred to as "the Office Motor Cycle Parking Spaces"); and

Non-Industrial Motor Cycle Parking Spaces

(iii) 10% of the total number of the Non-Industrial Parking Spaces (the spaces to be provided under this sub-clause (d)(iii) (as may be varied under Special Condition No. (26) hereof) are hereinafter referred to as "the Non-Industrial Motor Cycle Parking Spaces").

If the respective number of the Office Motor Cycle Parking Spaces or the Non-Industrial Motor Cycle Parking Spaces to be provided under sub-clauses (d)(ii) and (d)(iii) of this Special Condition is a decimal number, the same shall be rounded up to the next whole number.

Dimensions of parking spaces

- (e) (i) Except for the Parking Spaces for Disabled Persons, each of the Residential Parking Spaces, the Visitors' Parking Spaces, the Office Parking Spaces and the Non-Industrial Parking Spaces shall measure 2.5 metres in width and 5.0 metres in length with minimum headroom of 2.4 metres.
- (ii) The dimensions of each of the Parking Spaces for Disabled Persons shall be as the Building Authority may require or approve.
- (iii) Each of the Residential Motor Cycle Parking Spaces, the Office Motor Cycle Parking Spaces and the Non-Industrial Motor Cycle Parking Spaces shall measure 1.0 metre in width and 2.4 metres in length with minimum headroom of 2.4 metres.

Definitions, use, etc.	<p>(f) (i) For the purposes of these Conditions, “disabled person” and “motor cycle” shall be as defined in the Road Traffic Ordinance.</p> <p>(ii) For the purposes of Special Conditions Nos. (23), (24) and (25) hereof, the decision of the C for T as to what constitute a residential unit and a residential block shall be final and binding on the Purchaser.</p> <p>(iii) The Residential Parking Spaces, the Visitors’ Parking Spaces, the Office Parking Spaces, the Non-Industrial Parking Spaces, the Parking Spaces for Disabled Persons, the Residential Motor Cycle Parking Spaces, the Office Motor Cycle Parking Spaces and the Non-Industrial Motor Cycle Parking Spaces shall not be used for any purpose other than those respectively stipulated in sub-clauses (a)(i), (a)(iii), (b)(i), (c) and (d) of this Special Condition and in particular the said spaces shall not be used for the storage, display or exhibiting of motor vehicles for sale or otherwise or for the provision of motor vehicle cleaning and beauty services.</p>
Loading and unloading requirements	<p>(24) (a) Spaces shall be provided within the lot to the satisfaction of the C for T for the loading and unloading of goods vehicles licensed under the Road Traffic Ordinance at the following rates–</p>
Requirements for private residential purpose	<p>(i) one space for every 800 residential units or part thereof in the building or buildings erected or to be erected on the lot subject to a minimum of one loading and unloading space for each residential block erected or to be erected on the lot, such loading and unloading space to be located adjacent to or within each residential block;</p>
Requirements for office purpose	<p>(ii) one space for every 2,500 square metres or part thereof of the gross floor area of the building or buildings or part or parts of the building or buildings erected or to be erected on the lot for office purpose; and</p>
Requirements for non-industrial (excluding private residential, office, godown, hotel and petrol filling station) purposes	<p>(iii) one space for every 1,000 square metres or part thereof of the gross floor area of the building or buildings or part or parts of the building or buildings erected or to be erected on the lot for non-industrial (excluding private residential, office, godown, hotel and petrol filling station) purposes.</p>
	<p>The spaces to be provided for loading and unloading of goods vehicles under this sub-clause (a) (as may be varied under Special Condition No. (26) hereof) are hereinafter collectively referred to as “the Loading and Unloading Spaces”. For the purpose of this Special Condition, “goods vehicle” shall be as defined in the Road Traffic Ordinance.</p>
Dimensions of Loading and Unloading Spaces	<p>(b) (i) Each of the spaces provided under sub-clause (a)(i) of this Special Condition (as may be varied under Special Condition</p>

No. (26) hereof) shall measure 3.5 metres in width and 11.0 metres in length with minimum headroom of 4.7 metres.

(ii) Out of the total number of spaces provided under sub-clause (a)(ii) of this Special Condition (as may be varied under Special Condition No. (26) hereof)–

(I) 65% of which shall each measure 3.5 metres in width and 7.0 metres in length with minimum headroom of 3.6 metres provided that if the number of spaces so calculated is a decimal number, the C for T may at his absolute discretion round up or down the number to the next whole number; and

(II) the remaining number of spaces shall each measure 3.5 metres in width and 11.0 metres in length with minimum headroom of 4.7 metres.

(iii) Out of the total number of spaces provided under sub-clause (a)(iii) of this Special Condition (as may be varied under Special Condition No. (26) hereof)–

(I) 65% of which shall each measure 3.5 metres in width and 7.0 metres in length with minimum headroom of 3.6 metres provided that if the number of spaces so calculated is a decimal number, the C for T may at his absolute discretion round up or down the number to the next whole number; and

(II) the remaining number of spaces shall each measure 3.5 metres in width and 11.0 metres in length with minimum headroom of 4.7 metres.

(c) For the purpose of calculating the number of spaces to be provided under sub-clauses (a)(ii) and (a)(iii) of this Special Condition (as may be respectively varied under Special Condition No. (26) hereof), any floor area to be used for parking, loading and unloading purposes shall be excluded.

(d) The Loading and Unloading Spaces shall not be used for any purpose other than for the loading and unloading of goods vehicles in connection with the building referred to therein and in particular the said spaces shall not be used for the storage, display or exhibiting of motor vehicles for sale or otherwise or for the provision of motor vehicle cleaning and beauty services.

Bicycle Parking
Spaces

(25) (a) Spaces shall be provided within the lot to the satisfaction of the C for T for the parking of bicycles at the following rates–

(i) one space for every 5 residential units or part thereof with the size of each residential unit in terms of gross floor area being less than 70 square metres;

- (ii) one space for every 550 square metres or part thereof of the gross floor area of the building or buildings or part or parts of the building or buildings erected or to be erected on the lot for office purpose; and
- (iii) one space for every 250 square metres or part thereof of the gross floor area of the building or buildings or part or parts of the building or buildings erected or to be erected on the lot for non-industrial (excluding private residential, office, godown, hotel and petrol filling station) purposes.

The spaces to be provided under this sub-clause (a) (as may be varied under Special Condition No. (26) hereof) are hereinafter referred to as “the Bicycle Parking Spaces”.

(b) Each of the Bicycle Parking Spaces shall be of such dimensions as may be approved in writing by the C for T.

(c) For the purpose of calculating the number of spaces to be provided under sub-clauses (a)(ii) and (a)(iii) of this Special Condition (as may be respectively varied under Special Condition No. (26) hereof), any floor area to be used for parking, loading and unloading purposes shall be excluded.

Definitions, use, etc.

- (d) (i) For the purposes of these Conditions, “bicycle” shall be as defined in the Road Traffic Ordinance.
- (ii) The Bicycle Parking Spaces shall not be used for any purpose other than for the parking of bicycles and in particular the said spaces shall not be used for the storage, display or exhibiting of bicycles for sale or otherwise or for the servicing of bicycles.

Flexibility in parking, loading and unloading provisions

(26) (a) Notwithstanding Special Conditions Nos. (23)(a)(i), (23)(a)(iii), (23)(b)(i), (23)(d)(i) and (25)(a)(i) hereof, the Purchaser may increase or reduce the respective number of spaces required to be provided under the said Special Conditions by not more than 5% provided that the total number of spaces so increased or reduced shall not exceed 50.

(b) In addition to sub-clause (a) of this Special Condition, the Purchaser may increase or reduce the respective number of the Residential Parking Spaces and the Residential Motor Cycle Parking Spaces (without taking into account the spaces calculated in sub-clause (a) of this Special Condition) by not more than 5%.

(c) Notwithstanding Special Conditions Nos. (23)(a)(i), (23)(a)(iii), (23)(b)(i), (23)(d), (23)(e)(i), (23)(e)(iii), (24)(a), (24)(b) and (25)(a) hereof and sub-clauses (a) and (b) of this Special Condition, the Purchaser may increase or reduce the respective number, ratio and dimensions of spaces required to be provided under the said Special Conditions or sub-clauses to such other numbers, ratios and dimensions as may be approved in writing by the C for T, and such increase or reduction shall also be subject to the prior written approval of the Director, who may, at his sole and absolute discretion,

give his approval subject to such terms and conditions as he sees fit, including the payment by the Purchaser of any premium and administrative fee as shall be determined by the Director.

EV charging facilities (27) (a) The Purchaser shall—

(i) on or before 31 December 2033 or such other date as may be approved by the Director, at the Purchaser's own expense in such manner, at such locations and to such standards and designs as may be required or approved in writing by the Director of Electrical and Mechanical Services (hereinafter referred to as "the D of EMS") and in all respects in compliance with the Electricity Ordinance, any regulation made thereunder and any amending legislation, provide and install—

(I) charging facilities for electric vehicles (hereinafter referred to as "EV"), including but not limited to fixed electrical installations, installations of final circuits and associated ancillary installations; and

(II) an EV charger with output power of not less than 7 kilowatts (hereinafter referred to as "EV Charger"),

for each of the Residential Parking Spaces, the Visitors' Parking Spaces, the Office Parking Spaces, the Non-Industrial Parking Spaces, the Parking Spaces for Disabled Persons, the Residential Motor Cycle Parking Spaces, the Office Motor Cycle Parking Spaces and the Non-Industrial Motor Cycle Parking Spaces. For the avoidance of doubt, an EV Charger should be provided and installed for each and every such parking spaces; and

(ii) thereafter, throughout the term hereby agreed to be granted, at the Purchaser's own expense and in all respects to the satisfaction of the D of EMS upkeep, maintain and repair the charging facilities for EV and EV Chargers provided and installed under sub-clause (a)(i) of this Special Condition in good and substantial repair and operational conditions.

(b) For the purpose of sub-clause (a) of this Special Condition, the decision of the D of EMS as to what constitute charging facilities for EV or an EV Charger shall be final and binding on the Purchaser.

Access for inspection (28) (a) The Purchaser shall at all times throughout the term hereby agreed to be granted permit the Government, the C for T, the D of EMS, their officers, contractors, agents, workmen and any other persons authorized by any of them, with or without tools, equipment, plant, machinery or motor vehicles free of charge to have the right of free and unrestricted ingress, egress and regress to, from and through the lot and the Yellow Stippled Black Area (while the Purchaser is in possession of the same or any part thereof) or any part of any of them and any building erected or to be erected thereon for the purposes

of inspecting, checking or ascertaining that there is no breach of or failure to comply with Special Conditions Nos. (23), (24), (25), (26) and (27) hereof by the Purchaser.

No liability

(b) The Government shall have no responsibility or liability for any loss, damage, nuisance or disturbance whatsoever and howsoever caused to or suffered by the Purchaser or any other person arising whether directly or indirectly out of, in connection with or incidental to the exercise or non-exercise by the Government, the C for T, the D of EMS, their officers, contractors, agents, workmen or any other persons authorized by any of them of the rights conferred under sub-clause (a) of this Special Condition, and no claim whatsoever shall be made against the Government by the Purchaser in respect of any such loss, damage, nuisance or disturbance.

Indemnity by the Purchaser

(c) The Purchaser shall indemnify and keep indemnified the Government from and against all liabilities, claims, losses, damages, expenses, charges, costs, demands, actions and proceedings whatsoever and howsoever arising whether directly or indirectly out of, in connection with or incidental to the exercise or non-exercise by the Government, the C for T, the D of EMS, their officers, contractors, agents, workmen or any other persons authorized by any of them of the rights conferred under sub-clause (a) of this Special Condition.

Parking, loading and unloading spaces etc. excluded from gross floor area calculation

(29) (a) For the purpose of calculating the total gross floor areas stipulated in Special Condition No. (10)(c) hereof, there shall not be taken into account—

- (i) the Residential Parking Spaces, the Visitors' Parking Spaces, the Office Parking Spaces, the Non-Industrial Parking Spaces, the Parking Spaces for Disabled Persons, the Residential Motor Cycle Parking Spaces, the Office Motor Cycle Parking Spaces and the Non-Industrial Motor Cycle Parking Spaces (hereinafter collectively referred to as "the Spaces"), if they are provided—
 - (I) below the ground level;
 - (II) in any two floors at or above the ground level of the building or buildings erected or to be erected on the lot; or
 - (III) in any floor or floors at or above the ground level of the building or buildings erected or to be erected on the lot other than the two floors referred to in sub-clause (a)(i)(II) of this Special Condition as may be approved in writing by the Director, provided that they have been excluded by the Building Authority from the calculation of gross floor area under the Buildings Ordinance;
- (ii) the Loading and Unloading Spaces, if they are provided at or below the ground level; and

(iii) the Bicycle Parking Spaces.

(b) (i) Other than the spaces referred to in sub-clauses (a)(i)(II) and (a)(i)(III) of this Special Condition, if–

(I) any of the Spaces are provided at or above the ground level; or

(II) any of the Loading and Unloading Spaces are provided above the ground level,

50% of such spaces together with 50% of the other areas including but not limited to lift lobbies, landings, pedestrian access routes, manoeuvring and circulation areas and plant rooms serving such spaces shall be taken into account for the calculation of the respective total gross floor areas stipulated in Special Condition No. (10)(c) hereof as to which the decision of the Director shall be final and binding on the Purchaser.

(ii) Notwithstanding sub-clause (b)(i) of this Special Condition, the Director at his sole discretion may subject to the payment by the Purchaser of any premium and administrative fee as shall be determined by the Director exclude any of the spaces and other areas referred to in the said sub-clause (b)(i) from the calculation of the respective total gross floor areas stipulated in Special Condition No. (10)(c) hereof as to which the decision of the Director shall be final and binding on the Purchaser.

(c) For the purpose of this Special Condition, the decision of the Director as to what constitute a floor and the ground level or whether any space is at, above or below the ground level and what constitute other areas serving those spaces referred to in sub-clause (b)(i) of this Special Condition shall be final and binding on the Purchaser.

Restriction on
alienation of the
Residential Parking
Spaces and the
Residential Motor
Cycle Parking Spaces

(30) (a) Throughout the term hereby agreed to be granted whether prior to or after compliance with these Conditions in all respects to the satisfaction of the Director, the Residential Parking Spaces and the Residential Motor Cycle Parking Spaces shall not be assigned except–

(i) together with undivided shares in the lot giving the right of exclusive use and possession of a residential unit in the building erected or to be erected on the lot; or

(ii) to a person who is already the owner of undivided shares in the lot with the right of exclusive use and possession of a residential unit in the building erected or to be erected on the lot,

provided that in any event not more than 3 in number of the total of the Residential Parking Spaces and the Residential Motor Cycle Parking Spaces

shall be assigned to the owner of any one residential unit in the building erected or to be erected on the lot.

(b) Notwithstanding sub-clause (a) of this Special Condition, the Purchaser may, with the prior written consent of the Director, assign all the Residential Parking Spaces and all the Residential Motor Cycle Parking Spaces as a whole, but only to a wholly-owned subsidiary company of the Purchaser.

(c) Sub-clause (a) of this Special Condition shall not apply to an assignment of the lot as a whole.

(d) Sub-clauses (a) and (b) of this Special Condition shall not apply to the Parking Spaces for Disabled Persons.

Restriction on
alienation of the
Office Parking
Spaces and the Office
Motor Cycle Parking
Spaces

(31) (a) Throughout the term hereby agreed to be granted whether prior to or after compliance with these Conditions in all respects to the satisfaction of the Director, the Office Parking Spaces and the Office Motor Cycle Parking Spaces shall not be assigned except–

- (i) together with undivided shares in the lot giving the right of exclusive use and possession of a unit for office purpose in the building erected or to be erected on the lot; or
- (ii) to a person who is already the owner of undivided shares in the lot with the right of exclusive use and possession of a unit for office purpose in the building erected or to be erected on the lot.

(b) Notwithstanding sub-clause (a) of this Special Condition, the Purchaser may, with the prior written consent of the Director, assign all the Office Parking Spaces and all the Office Motor Cycle Parking Spaces as a whole, but only to a wholly-owned subsidiary company of the Purchaser.

(c) Sub-clause (a) of this Special Condition shall not apply to an assignment of the lot as a whole.

(d) Sub-clauses (a) and (b) of this Special Condition shall not apply to the Parking Spaces for Disabled Persons.

Restriction on
alienation of the Non-
Industrial Parking
Spaces and the Non-
Industrial Motor
Cycle Parking Spaces

(32) (a) Throughout the term hereby agreed to be granted whether prior to or after compliance with these Conditions in all respects to the satisfaction of the Director, the Non-Industrial Parking Spaces and the Non-Industrial Motor Cycle Parking Spaces shall not be assigned except–

- (i) together with undivided shares in the lot giving the right of exclusive use and possession of a unit for non-industrial (excluding private residential, office, godown, hotel and petrol filling station) purposes in the building erected or to be erected on the lot; or
- (ii) to a person who is already the owner of undivided shares in the lot with the right of exclusive use and possession of a unit

for non-industrial (excluding private residential, office, godown, hotel and petrol filling station) purposes in the building erected or to be erected on the lot.

(b) Notwithstanding sub-clause (a) of this Special Condition, the Purchaser may, with the prior written consent of the Director, assign all the Non-Industrial Parking Spaces and all the Non-Industrial Motor Cycle Parking Spaces as a whole, but only to a wholly-owned subsidiary company of the Purchaser.

(c) Sub-clause (a) of this Special Condition shall not apply to an assignment of the lot as a whole.

(d) Sub-clauses (a) and (b) of this Special Condition shall not apply to the Parking Spaces for Disabled Persons.

Common Areas (33) Notwithstanding Special Conditions Nos. (30), (31) and (32) hereof, the Visitors' Parking Spaces, the Parking Spaces for Disabled Persons, the Loading and Unloading Spaces and the Bicycle Parking Spaces shall be designated as and form part of the Common Areas.

Parking Information (34) (a) The Purchaser shall–

(i) at his own expense submit or cause to be submitted to the C for T for his written approval a plan or plans showing the locations and dimensions of the areas or spaces designated for accommodating such facilities, installations and equipment (hereinafter referred to as “the Facilities, Installations and Equipment”) to be provided and installed in, on or within any building, structure or floor space on the lot, which plan or plans shall contain such information as the C for T may require or specify at his sole and absolute discretion (hereinafter collectively referred to as “the Parking Information System Area”) for the purpose of submitting information relating to and associated with–

(I) the Non-Industrial Parking Spaces and the Non-Industrial Motor Cycle Parking Spaces; and

(II) the Visitors' Parking Spaces in the event that not less than 10 such spaces are provided or to be provided within the lot,

including but not limited to the numbers and types of vacant spaces for the parking of motor vehicles (hereinafter collectively referred to as “the Parking Information”) as required under and in accordance with sub-clause (b) of this Special Condition. No building works (other than site formation works and the Demolition and Removal Works) shall be commenced on the lot until such approval shall have been obtained;

- (ii) on or before 31 December 2033 or such other date as may be approved by the Director, at the Purchaser's own expense carry out and complete in all respects to the satisfaction of the C for T the works for the Parking Information System Area in accordance with the plan or plans approved under sub-clause (a)(i) of this Special Condition; and at the Purchaser's own expense provide and install the Facilities, Installations and Equipment and shall thereafter at all times during the term hereby agreed to be granted, maintain at the Purchaser's own expense the Parking Information System Area and the Facilities, Installations and Equipment in good and substantial repair and conditions for the purpose of fulfilling the Purchaser's obligations under sub-clause (b) of this Special Condition and in all respects to the satisfaction of the C for T; and
- (iii) at all reasonable times throughout the term hereby agreed to be granted permit the Government, the C for T, the Director, their officers, contractors, agents, workmen and any other persons authorized by any of them, with or without tools, equipment, plant, machinery or motor vehicles free of charge to have the right of free and unrestricted ingress, egress and regress to, from and through the lot and the Yellow Stippled Black Area (while the Purchaser is in possession of the same or any part thereof) or any part of any of them and any building erected or to be erected on the lot for the purposes of inspecting, checking and supervising any works to be carried out in compliance with sub-clause (a)(ii) of this Special Condition. For the purpose of this Special Condition, the decision of the C for T as to what constitute reasonable times shall be final and binding on the Purchaser.

(b) The Purchaser shall, commencing on a date to be decided and specified in writing by the C for T (as to which the decision of the C for T shall be final and binding on the Purchaser) and thereafter at all times throughout the term hereby agreed to be granted, at the Purchaser's own expense and in all respects to the satisfaction of the C for T, submit or cause to be submitted to the C for T the Parking Information in such format and at such time and intervals as the C for T may from time to time require or specify in writing (as to which the decision of the C for T shall be final and binding on the Purchaser).

(c) The Purchaser hereby—

- (i) gives his consent to the Government, the C for T, their officers, contractors, agents, workmen and any other persons authorized by any of them, at their sole and absolute discretion, to process, use and copy the Parking Information and to disclose and disseminate the Parking Information, whether as submitted or after processing, in such format and by such media, to any government department or third party (whether individual, firm, corporate body, members of the

public or other organization) as the C for T shall at his sole and absolute discretion consider appropriate for searching, viewing, copying, printing, disseminating, utilizing, analyzing, researching or otherwise by such government department or third party; and

- (ii) accepts and acknowledges that the Government, the C for T, their officers, contractors, agents, workmen and any other persons authorized by any of them shall have the sole and absolute discretion and right to decide whether or not to process, use or copy the Parking Information or to disclose and disseminate the Parking Information, whether as submitted or after processing, in whatever format and by whatever media, to any government department or third party as provided in sub-clause (c)(i) of this Special Condition.

No liability

(d) The Government shall have no responsibility or liability for any loss, damage, nuisance or disturbance whatsoever and howsoever caused to or suffered by the Purchaser or any other person arising whether directly or indirectly out of, in connection with or incidental to the fulfilment or non-fulfilment of any of the Purchaser's obligations under sub-clauses (a) and (b) of this Special Condition; any omission or mistake in the Parking Information; any omission, mistake, neglect or default by the Purchaser in relation to the submission of the Parking Information in accordance with sub-clause (b) of this Special Condition; the exercise or non-exercise by the Government, the C for T, the Director, their officers, contractors, agents, workmen or any other persons authorized by any of them of the discretion and rights conferred under sub-clauses (a)(iii) and (c) of this Special Condition; or the searching, viewing, copying, printing, disseminating, utilizing, analyzing, researching or otherwise of the Parking Information by any government department or third party as provided under sub-clause (c) of this Special Condition, and no claim whatsoever shall be made against the Government by the Purchaser in respect of any such loss, damage, nuisance or disturbance.

Indemnity by the Purchaser

(e) The Purchaser shall indemnify and keep indemnified the Government from and against all liabilities, claims, losses, damages, expenses, charges, costs, demands, actions and proceedings whatsoever and howsoever arising whether directly or indirectly out of, in connection with or incidental to the fulfilment or non-fulfilment of any of the Purchaser's obligations under sub-clauses (a) and (b) of this Special Condition; any omission or mistake in the Parking Information; any omission, mistake, neglect or default by the Purchaser in relation to the submission of the Parking Information in accordance with sub-clause (b) of this Special Condition; or the exercise or non-exercise by the Government, the C for T, the Director, their officers, contractors, agents, workmen or any other persons authorized by any of them of the discretion and rights conferred under sub-clauses (a)(iii) and (c) of this Special Condition.

(f) The Parking Information System Area shall be designated as and form part of the Common Areas.

Deposit of Car Park
Layout Plans

(35) (a) The Purchaser shall at his own expense deposit with the Director and submit to the C for T a plan or plans approved by the C for T indicating the layout of all the parking, loading and unloading spaces to be provided within the lot in accordance with Special Conditions Nos. (23), (24) and (25) hereof (as may be respectively varied under Special Condition No. (26) hereof) and the spaces which are the subject of the Parking Information to be designated within the lot in accordance with Special Condition No. (34)(a)(i) hereof, or a copy of such plan or plans certified by an authorized person (as defined in the Buildings Ordinance) (hereinafter referred to as “the Car Park Layout Plans”). No amendment, variation, alteration, modification or substitution of the Car Park Layout Plans shall be made without the prior written approval of the C for T.

(b) The parking, loading and unloading spaces indicated on the Car Park Layout Plans shall not be used for any purpose other than for the purposes set out respectively in Special Conditions Nos. (23), (24) and (25) hereof. The Purchaser shall maintain all parking, loading and unloading spaces and other areas, including but not limited to the lifts, landings and manoeuvring and circulation areas indicated on the Car Park Layout Plans in accordance with the Car Park Layout Plans.

(c) Except for the spaces indicated on the Car Park Layout Plans, no part of the lot or any building or structure thereon shall be used for the purposes of parking, loading and unloading of motor vehicles or parking of bicycles.

(d) No transaction (except a tenancy agreement or lease or an agreement for such tenancy or lease under Special Condition No. (18)(c) hereof and a building mortgage under Special Condition No. (18)(d) hereof or such other transactions as the Director may approve) affecting the lot or any part thereof or any building or part of any building erected or to be erected on the lot shall be entered into prior to the deposit and submission of the Car Park Layout Plans in accordance with sub-clause (a) of this Special Condition.

(e) The Purchaser hereby–

- (i) gives his consent to the Government, the C for T, the Director, their officers, contractors, agents, workmen and any other persons authorized by any of them, at their sole and absolute discretion, to view, use, copy and modify the Car Park Layout Plans and to disclose and disseminate the Car Park Layout Plans by any means and in any manner (including but not limited to electronic means or through electronic platforms) to any government department or third party (whether individual, firm, corporate body, members of the public or other organization) as the Government, the C for T or the Director shall at their sole and absolute discretion consider appropriate for searching, viewing, copying, printing, disseminating, utilizing, analyzing, researching or otherwise, whether in response to public or media enquiries or otherwise, or on the Government’s, the C for T’s or the Director’s own accord; and

- (ii) accepts and acknowledges that the Government, the C for T, the Director, their officers, contractors, agents, workmen and any other persons authorized by any of them shall have the sole and absolute discretion and right to decide whether or not to view, use, copy, modify, disclose or disseminate the Car Park Layout Plans as provided under sub-clause (e)(i) of this Special Condition.

(f) For the purpose of sub-clause (e) of this Special Condition, the Purchaser shall procure or cause to be procured the consent of the intellectual property right owners of the Car Park Layout Plans to the viewing, use, copying, modifying, disclosure and dissemination of the Car Park Layout Plans by the Government, the C for T, the Director, their officers, contractors, agents, workmen and any other persons authorized by any of them and to the searching, viewing, copying, printing, disseminating, utilizing, analyzing, researching or otherwise of the Car Park Layout Plans by any government department or third party.

(g) The Purchaser hereby accepts and acknowledges that the consent given under sub-clause (e) and the obligation under sub-clause (f) of this Special Condition shall survive and continue to be binding on the Purchaser after the expiry or sooner determination of the term hereby agreed to be granted.

No liability

(h) The Government shall have no responsibility or liability for any loss, damage, nuisance or disturbance whatsoever and howsoever caused to or suffered by the Purchaser or any other person arising whether directly or indirectly out of, in connection with or incidental to the fulfilment or non-fulfilment of any of the Purchaser's obligations under sub-clauses (a), (b), (c), (d) and (f) of this Special Condition; any omission or mistake in the Car Park Layout Plans; the exercise or non-exercise by the Government, the C for T, the Director, their officers, contractors, agents, workmen or any other persons authorized by any of them of the discretion and rights conferred under sub-clause (e) of this Special Condition; or the searching, viewing, copying, printing, disseminating, utilizing, analyzing, researching or otherwise of the Car Park Layout Plans by any government department or third party as provided under sub-clause (e)(i) of this Special Condition, and no claim whatsoever shall be made against the Government by the Purchaser in respect of any such loss, damage, nuisance or disturbance.

Indemnity by the Purchaser

(i) The Purchaser shall indemnify and keep indemnified the Government from and against all liabilities, claims, losses, damages, expenses, charges, costs, demands, actions and proceedings whatsoever and howsoever arising whether directly or indirectly out of, in connection with or incidental to the fulfilment or non-fulfilment of any of the Purchaser's obligations under sub-clauses (a), (b), (c), (d) and (f) of this Special Condition; or any omission or mistake in the Car Park Layout Plans.

Set back

(36) The Purchaser shall not cut away, remove or set back any Government land adjacent to or adjoining the lot or carry out any building-up, filling-in or any slope treatment works of any kind whatsoever on any

Government land except with the prior written consent of the Director who may, at his sole discretion, give his consent subject to such terms and conditions as he sees fit, including the grant of additional Government land as an extension to the lot at such premium as he may determine.

Cutting away

(37) (a) Where there is or has been any cutting away, removal or setting back of any land, or any building-up, filling-in or slope treatment works of any kind whatsoever, whether with or without the prior written consent of the Director, either within the lot or on any Government land, which is or was done for the purpose of or in connection with the formation, levelling or development of the lot or any part thereof or any other works required to be done by the Purchaser under these Conditions, or for any other purpose, the Purchaser shall at his own expense carry out and construct such slope treatment works, retaining walls or other support, protection, drainage, ancillary or other works as shall or may then or at any time thereafter be necessary to protect and support such land within the lot and also any adjacent or adjoining Government or leased land and to obviate and prevent any falling away, landslip or subsidence occurring thereafter. The Purchaser shall at all times during the term hereby agreed to be granted maintain at his own expense the said land, slope treatment works, retaining walls or other support, protection, drainage, ancillary or other works in good and substantial repair and condition to the satisfaction of the Director.

(b) Nothing in sub-clause (a) of this Special Condition shall prejudice the Government's rights under these Conditions, in particular Special Condition No. (36) hereof.

(c) In the event that as a result of or arising out of any formation, levelling, development or other works done by the Purchaser or owing to any other reason, any falling away, landslip or subsidence occurs at any time, whether in or from any land, within the lot or from any adjacent or adjoining Government or leased land, the Purchaser shall at his own expense reinstate and make good the same to the satisfaction of the Director and shall indemnify and keep indemnified the Government from and against all liabilities, claims, losses, damages, expenses, charges, costs, demands, actions and proceedings whatsoever and howsoever arising whether directly or indirectly out of, in connection with or incidental to such falling away, landslip or subsidence.

(d) In addition to any other rights or remedies herein provided for breach of any of these Conditions, the Director shall be entitled by notice in writing to call upon the Purchaser to carry out, construct and maintain the said land, slope treatment works, retaining walls or other support, protection, drainage, ancillary or other works or to reinstate and make good any falling away, landslip or subsidence, and if the Purchaser shall neglect or fail to comply with the notice to the satisfaction of the Director within the period specified therein, the Director may forthwith execute and carry out any necessary works and the Purchaser shall on demand repay to the Government the cost thereof, together with any administrative or professional fees and charges.

(e) The Purchaser shall indemnify and keep indemnified the Government from and against all liabilities, claims, losses, damages, expenses,

charges, costs, demands, actions and proceedings whatsoever and howsoever arising whether directly or indirectly out of, in connection with or incidental to the fulfilment or non-fulfilment of any of the Purchaser's obligations under sub-clauses (a), (c) and (d) of this Special Condition; or the exercise or non-exercise by the Director of the rights conferred under sub-clause (d) of this Special Condition.

Spoil or debris

(38) (a) In the event of earth, spoil, debris, construction waste or building materials (hereinafter collectively referred to as "the Waste") from the lot, the Yellow Area (while the Purchaser is in possession of the same or any part thereof), the Yellow Stippled Black Area (while the Purchaser is in possession of the same or any part thereof), the Blue Area (while the Purchaser is in possession of the same or any part thereof) or from other areas affected by any development of the lot being eroded, washed down or dumped onto public lanes or roads or into or onto road-culverts, foreshore or seabed, sewers, storm-water drains or nullahs or other Government properties (hereinafter collectively referred to as "the Government Properties"), the Purchaser shall at his own expense remove the Waste from and make good any damage done to the Government Properties. The Purchaser shall indemnify and keep indemnified the Government from and against all liabilities, claims, losses, damages, expenses, charges, costs, demands, actions and proceedings whatsoever and howsoever arising whether directly or indirectly out of, in connection with or incidental to any damage or nuisance to private property caused by such erosion, washing down or dumping; or the fulfilment or non-fulfilment of any of the Purchaser's obligations under this Special Condition.

(b) Notwithstanding sub-clause (a) of this Special Condition, the Director may (but is not obliged to), at the request of the Purchaser, remove the Waste from and make good any damage done to the Government Properties and the Purchaser shall pay to the Government on demand the cost thereof.

Damage to Services

(39) The Purchaser shall take or cause to be taken all proper and adequate care, skill and precautions at all times, and particularly when carrying out construction, maintenance, renewal or repair works (hereinafter referred to as "the Works"), to avoid causing any damage, disturbance or obstruction to any Government or other drain, waterway or watercourse, water main, road, footpath, street furniture, sewer, nullah, pipe, cable, wire, utility service or any other works or installations being or running upon, over, under or adjacent to the lot, the Yellow Area, the Yellow Stippled Black Area or the Blue Area or any part of any of them (hereinafter collectively referred to as "the Services"). The Purchaser shall prior to carrying out any of the Works make or cause to be made such proper search and enquiry as may be necessary to ascertain the present position and levels of the Services; and shall submit his proposals for dealing with any of the Services which may be affected by the Works in writing to the Director for his approval in all respects; and shall not carry out any works whatsoever until the Director shall have given his written approval to the Works and to such aforesaid proposals. The Purchaser shall comply with and at his own expense meet any requirements which may be imposed by the Director in respect of the Services in granting the aforesaid approval, including the cost of any necessary diversion, relaying or reinstatement. The Purchaser shall at his own expense and in all respects to the satisfaction of the Director repair, make good and reinstate any damage,

disturbance or obstruction caused to the lot, the Yellow Area, the Yellow Stippled Black Area or the Blue Area or any part of any of them or any of the Services in any manner arising out of the Works (except for nullah, sewer, storm-water drain or water main, the making good of which shall be carried out by the Director, unless the Director elects otherwise, and the Purchaser shall pay to the Government on demand the cost of such works). If the Purchaser fails to carry out any such necessary diversion, relaying, repairing, making good and reinstatement of the lot, the Yellow Area, the Yellow Stippled Black Area or the Blue Area or any part of any of them or of any of the Services to the satisfaction of the Director, the Director may carry out any such diversion, relaying, repairing, making good or reinstatement as he considers necessary and the Purchaser shall pay to the Government on demand the cost of such works. The Purchaser shall indemnify and keep indemnified the Government from and against all liabilities, claims, losses, damages, expenses, charges, costs, demands, actions and proceedings whatsoever and howsoever arising whether directly or indirectly out of, in connection with or incidental to any damage or nuisance caused by the Works; the fulfilment or non-fulfilment of any of the Purchaser's obligations under this Special Condition; or the exercise or non-exercise by the Director of the rights conferred under this Special Condition.

Construction of
drains and channels

(40) (a) The Purchaser shall construct and maintain at his own expense and to the satisfaction of the Director such drains and channels, whether within the boundaries of the lot or on Government land, as the Director may consider necessary to intercept and convey into the nearest stream-course, catchpit, channel or Government storm-water drain all storm-water or rain-water falling or flowing on to the lot, and the Purchaser shall be solely liable for and shall indemnify and keep indemnified the Government from and against all liabilities, claims, losses, damages, expenses, charges, costs, demands, actions and proceedings whatsoever and howsoever arising whether directly or indirectly out of, in connection with or incidental to any damage or nuisance caused by such storm-water or rain-water.

Connecting drains
and sewers

(b) The works of connecting any drains and sewers from the lot to the Government storm-water drains and sewers, when laid and commissioned, may be carried out by the Director who shall not be liable to the Purchaser for any loss or damage thereby occasioned and the Purchaser shall pay to the Government on demand the cost of such connection works. Alternatively, the said connection works may be carried out by the Purchaser at his own expense and to the satisfaction of the Director and in such case any section of the said connection works which is constructed within Government land shall be maintained by the Purchaser at his own expense and upon demand be handed over by the Purchaser to the Government for future maintenance thereof at the expense of the Government and the Purchaser shall pay to the Government on demand the cost of the technical audit in respect of the said connection works. The Director may, upon failure of the Purchaser to maintain any section of the said connection works which is constructed within Government land, carry out such maintenance works as he considers necessary and the Purchaser shall pay to the Government on demand the cost of such works. The Purchaser shall indemnify and keep indemnified the Government from and against all liabilities, claims, losses, damages, expenses, charges, costs, demands, actions and proceedings whatsoever and howsoever arising whether directly or indirectly out of, in connection with or incidental to the fulfilment or non-

fulfilment of any of the Purchaser's obligations under this Special Condition; or the exercise or non-exercise by the Director of the rights conferred under this sub-clause (b).

Decontamination

(41) (a) Without prejudice to the generality of the provisions of General Condition No. 5 hereof, the Purchaser hereby expressly accepts and acknowledges that the Yellow Area, the Yellow Stippled Black Area and the Blue Area may be contaminated with contaminants.

(b) The Purchaser shall take or cause to be taken such action as shall be necessary to avoid soil and groundwater contamination to the lot, the Yellow Area (while the Purchaser is in possession of the same or any part thereof), the Yellow Stippled Black Area (while the Purchaser is in possession of the same or any part thereof), the Blue Area (while the Purchaser is in possession of the same or any part thereof) and any adjacent or adjoining Government land or any part thereof or any building or structure thereon (whether on, above or below the ground level) arising out of the development, redevelopment or use of the lot, the Yellow Area (while the Purchaser is in possession of the same or any part thereof), the Yellow Stippled Black Area (while the Purchaser is in possession of the same or any part thereof) or the Blue Area (while the Purchaser is in possession of the same or any part thereof) or otherwise. The Purchaser shall at his own expense carry out all necessary works (hereinafter referred to as "Preventive Works") to prevent such soil and groundwater contamination occurring.

(c) The Purchaser shall carry out at the Purchaser's own expense and in all respects to the satisfaction of the Director of Environmental Protection (hereinafter referred to as "the D of EP") a soil and groundwater contamination assessment (hereinafter referred to as "Contamination Assessment") in respect of the Yellow Area (while the Purchaser is in possession of the same or any part thereof), the Yellow Stippled Black Area (while the Purchaser is in possession of the same or any part thereof), the Blue Area (while the Purchaser is in possession of the same or any part thereof) and any adjacent or adjoining Government land and shall within 6 calendar months from the date of this Agreement or such other period as may be approved by the Director, at the Purchaser's own expense and in all respects to the satisfaction of the D of EP, submit or cause to be submitted to the D of EP for his approval in writing a report on the Contamination Assessment. The Purchaser shall at his own expense and in all respects to the satisfaction of the D of EP carry out and complete in such manner and within such time limit as the D of EP shall specify such decontamination or other works as shall be required by the D of EP (hereinafter referred to as "Decontamination Works") in respect of the Yellow Area (while the Purchaser is in possession of the same or any part thereof), the Yellow Stippled Black Area (while the Purchaser is in possession of the same or any part thereof), the Blue Area (while the Purchaser is in possession of the same or any part thereof) and any adjacent or adjoining Government land. No building works (other than the Demolition and Removal Works) shall be commenced on the Yellow Area, the Yellow Stippled Black Area or the Blue Area until the relevant Contamination Assessment for the Yellow Area, the Yellow Stippled Black Area or the Blue Area (as the case may be) shall have been approved in writing by the D of EP and the relevant Decontamination Works for the Yellow Area, the Yellow Stippled Black Area

or the Blue Area (as the case may be), if required, shall have been completed under this sub-clause (c) in all respects to the satisfaction of the D of EP.

(d) If the Purchaser shall in any respect neglect or fail to carry out the Preventive Works, Contamination Assessment or Decontamination Works (hereinafter collectively referred to as “Preventive and Decontamination Works”) in accordance with sub-clauses (b) and (c) of this Special Condition–

- (i) the D of CED may at his sole discretion execute and carry out any of the Preventive and Decontamination Works and the Purchaser shall on demand pay to the D of CED the cost thereof as shall be determined by the D of CED whose determination shall be final and binding on the Purchaser; or
- (ii) at the option of the D of CED, the Purchaser shall on demand pay to the D of CED in one lump sum an amount equal to the estimated cost of carrying out any of the Preventive and Decontamination Works which estimated cost shall be determined by the D of CED at his sole discretion. In the event of the said lump sum payment being insufficient to cover the cost of carrying out the Preventive and Decontamination Works whether by the D of CED or by any person entrusted with the Preventive and Decontamination Works, the Purchaser shall on demand pay the shortfall to the D of CED, such sum to be determined by the D of CED whose determination shall be final and binding on the Purchaser.

(e) For the purpose of carrying out the Preventive and Decontamination Works under sub-clause (d) of this Special Condition, the Purchaser shall at all reasonable times permit the Government, the D of CED, their officers, contractors, agents, workmen and any other persons authorized by any of them, with or without tools, equipment, plant, machinery or motor vehicles free of charge to have the right of free and unrestricted ingress, egress and regress to, from and through the lot, the Yellow Area (while the Purchaser is in possession of the same or any part thereof), the Yellow Stippled Black Area (while the Purchaser is in possession of the same or any part thereof) and the Blue Area (while the Purchaser is in possession of the same or any part thereof) or any part of any of them and any building or structure thereon. For the purpose of this Special Condition, the decision of the D of CED as to what constitute reasonable times shall be final and binding on the Purchaser.

No liability

(f) The Government shall have no responsibility or liability for any loss, damage, nuisance or disturbance whatsoever and howsoever caused to or suffered by the Purchaser or any other person arising whether directly or indirectly out of, in connection with or incidental to the fulfilment or non-fulfilment of any of the Purchaser’s obligations under this Special Condition; or the exercise or non-exercise by the Government, the D of CED, their officers, contractors, agents, workmen or any other persons authorized by any of them of any of the rights conferred under sub-clauses (d) and (e) of this Special Condition, and no claim whatsoever shall be made against the Government by the Purchaser in respect of any such loss, damage, nuisance or disturbance.

Indemnity by the Purchaser

(g) The Purchaser shall indemnify and keep indemnified the Government from and against all liabilities, claims, losses, damages, expenses, charges, costs, demands, actions and proceedings whatsoever and howsoever arising whether directly or indirectly out of, in connection with or incidental to the fulfilment or non-fulfilment of any of the Purchaser's obligations under this Special Condition; or the exercise or non-exercise by the Government, the D of CED, their officers, contractors, agents, workmen or any other persons authorized by any of them of any of the rights conferred under sub-clauses (d) and (e) of this Special Condition.

Automatic meter reading for fresh water supplies

(42) (a) The Purchaser shall on or before 31 December 2033 or such other date as may be approved by the Director, at the Purchaser's own expense and in all respects to the satisfaction of the Water Authority provide and install an outstation or outstations together with facilities and associated equipment as may be required by the Water Authority at its sole discretion on the lot or any part thereof or within any building erected or to be erected thereon for automatic meter reading for fresh water supplies (such outstation or outstations together with the facilities and associated equipment as aforesaid are hereinafter collectively referred to as "the AMR Outstations") in accordance with the AMR Outstation Proposals approved by the Water Authority under sub-clause (b) of this Special Condition and the Waterworks Ordinance.

(b) The Purchaser shall at his own expense and in all respects to the satisfaction of the Water Authority submit or cause to be submitted to the Water Authority for its approval in writing proposals for the provision and installation of the AMR Outstations (hereinafter referred to as "the AMR Outstation Proposals"), containing, among others, such information and particulars as the Water Authority at its sole discretion may require, including but not limited to—

- (i) a layout plan showing the locations of the AMR Outstations;
- (ii) details of the design, layout and equipment for building up the AMR Outstations; and
- (iii) details of the area or space designated or to be designated for accommodating the AMR Outstations and facilitating inspection and maintenance thereof (the said area or space as approved by the Water Authority is hereinafter referred to as "the AMR Area or Space").

(c) No provision or installation works of the AMR Outstations shall be commenced on the lot until the AMR Outstation Proposals shall have been approved in writing by the Water Authority under sub-clause (b) of this Special Condition. The AMR Outstations provided and installed in accordance with the AMR Outstation Proposals approved by the Water Authority under sub-clause (b) of this Special Condition are hereinafter referred to as "the Approved AMR Outstations".

(d) The Purchaser shall at his own expense and in all respects to the satisfaction of the Water Authority, operate, maintain and repair the Approved AMR Outstations in good repair and operational condition until the Approved AMR Outstations shall have been delivered up to the Water Authority in accordance with sub-clause (g) of this Special Condition.

(e) No structure, object or material of whatsoever nature which may prevent or disrupt the inspection, checking, operation, maintenance, repair, renewal, demolition, removal, replacement and re-provisioning of the Approved AMR Outstations shall be erected or placed on, over, above, under, below or within the AMR Area or Space. Where in the opinion of the Water Authority (whose opinion shall be final and binding on the Purchaser), there are structures, objects or materials erected or placed on, over, above, under, below or within the AMR Area or Space which may prevent or disrupt the inspection, checking, operation, maintenance, repair, renewal, demolition, removal, replacement or re-provisioning of the Approved AMR Outstations, the Water Authority shall be entitled by notice in writing to call upon the Purchaser, at the Purchaser's own expense and in all respects to the satisfaction of the Water Authority, to demolish or remove such structures, objects or materials and to reinstate the AMR Area or Space within such period as specified in the notice.

(f) In the event of the non-fulfilment of any of the Purchaser's obligations under sub-clauses (a), (d) and (e) of this Special Condition, the Water Authority may carry out the necessary works at the cost of the Purchaser who shall pay to the Water Authority on demand a sum equal to the cost thereof, such sum to be determined by the Water Authority whose determination shall be final and binding on the Purchaser.

(g) The Approved AMR Outstations or any of them as required shall be delivered up to the Water Authority by the Purchaser on demand on such date as specified by the Water Authority in writing, and in any event shall be deemed to have been delivered up to the Water Authority by the Purchaser on the date of a letter from the Director indicating that these Conditions have been complied with to his satisfaction.

(h) The Purchaser shall at all times throughout the term hereby agreed to be granted permit the Water Authority, its officers, contractors, agents, its or their workmen and any other persons authorized by the Water Authority with or without tools, equipment, plant, machinery or motor vehicles free of charge to have the right of free and unrestricted ingress, egress and regress to, from and through the lot and the Yellow Stippled Black Area (while the Purchaser is in possession of the same or any part thereof) or any part of any of them and any building erected or to be erected on the lot for the purposes of-

- (i) inspecting, checking and supervising any works required to be carried out by the Purchaser under sub-clauses (a), (d) and (e) of this Special Condition;
- (ii) carrying out any works under sub-clause (f) of this Special Condition; and

- (iii) inspecting, checking, operating, maintaining, repairing, renewing, demolishing, removing, replacing and re-provisioning the Approved AMR Outstations or any of them after the Approved AMR Outstations or any of them shall have been delivered up to the Water Authority in accordance with sub-clause (g) of this Special Condition and any other works which the Water Authority may consider necessary.

No liability

(i) The Government shall have no responsibility or liability for any loss, damage, nuisance or disturbance whatsoever and howsoever caused to or suffered by the Purchaser or any other person arising whether directly or indirectly out of, in connection with or incidental to the fulfilment or non-fulfilment of any of the Purchaser's obligations under sub-clauses (a), (d) and (e) of this Special Condition; or the exercise or non-exercise by the Water Authority, its officers, contractors, agents, its or their workmen or any other persons authorized by the Water Authority of any of the rights conferred under sub-clauses (f) and (h) of this Special Condition, and no claim whatsoever shall be made against the Government by the Purchaser in respect of any such loss, damage, nuisance or disturbance.

Indemnity by the Purchaser

(j) The Purchaser shall indemnify and keep indemnified the Government from and against all liabilities, claims, losses, damages, expenses, charges, costs, demands, actions and proceedings whatsoever and howsoever arising whether directly or indirectly out of, in connection with or incidental to the fulfilment or non-fulfilment of any of the Purchaser's obligations under sub-clauses (a), (d) and (e) of this Special Condition; or the exercise or non-exercise by the Water Authority, its officers, contractors, agents, its or their workmen or any other persons authorized by the Water Authority of any of the rights conferred under sub-clauses (f) and (h) of this Special Condition.

Noise impact assessment

(43) (a) The Purchaser shall within 6 calendar months from the date of this Agreement or such other period as may be approved by the Director, at the Purchaser's own expense and in all respects to the satisfaction of the D of EP, submit or cause to be submitted to the D of EP for his approval in writing a noise impact assessment (hereinafter referred to as "the NIA") of the development of the lot, containing, among others, such information and particulars as the D of EP may require, including all adverse noise impacts on and as may arise from the development of the lot, and recommendations for mitigation measures, improvement works and other measures and works.

(b) The Purchaser shall at his own expense and within such time limit as may be stipulated by the D of EP carry out and implement the recommendations contained in the NIA as approved by the D of EP under sub-clause (a) of this Special Condition (hereinafter referred to as "the Approved Noise Mitigation Measures") in all respects to the satisfaction of the D of EP.

(c) No building works (other than site formation works and the Demolition and Removal Works) shall be commenced on the lot or any part thereof until the NIA shall have been approved in writing by the D of EP under sub-clause (a) of this Special Condition.

(d) For the avoidance of doubt and without prejudice to the generality of General Condition No. 5 hereof, the Purchaser hereby accepts and acknowledges that the Purchaser shall have the sole responsibility to carry out and implement at his own expense the Approved Noise Mitigation Measures in all respects to the satisfaction of the D of EP.

No liability

(e) The Government shall have no responsibility or liability for any loss, damage, nuisance or disturbance whatsoever and howsoever caused to or suffered by the Purchaser or any other person arising whether directly or indirectly out of, in connection with or incidental to the fulfilment or non-fulfilment of any of the Purchaser's obligations under this Special Condition, and no claim whatsoever shall be made against the Government by the Purchaser in respect of any such loss, damage, nuisance or disturbance.

Indemnity by the Purchaser

(f) The Purchaser shall indemnify and keep indemnified the Government from and against all liabilities, claims, losses, damages, expenses, charges, costs, demands, actions and proceedings whatsoever and howsoever arising whether directly or indirectly out of, in connection with or incidental to the fulfilment or non-fulfilment of any of the Purchaser's obligations under this Special Condition.

Noise Barrier

(44) In the event that the Approved Noise Mitigation Measures comprise the erection or construction of a noise barrier or noise barriers on the lot with projection extending beyond the boundary of the lot and over or above any adjoining Government land (hereinafter referred to as "the Noise Barrier"), the following conditions shall apply—

- (a) the Purchaser shall at his own expense design, erect and construct the Noise Barrier in accordance with the plans approved by the Building Authority and in all respects in compliance with the requirements of the Buildings Ordinance;
- (b) no foundation or support for the Noise Barrier may be erected on, upon or underneath any Government land adjoining the lot;
- (c) no alteration, addition, replacement or attachment whatsoever shall be made or affixed to or upon the Noise Barrier or any part thereof except with the prior written approval of the D of EP;
- (d) the Purchaser shall at all times and at his own expense uphold, maintain and repair the Noise Barrier or (where approved by the D of EP) any replacement thereof in good and substantial repair and condition and in all respects to the satisfaction of the D of EP;
- (e) the Noise Barrier shall not be used for any purpose other than as a noise barrier, and except with the prior written consent of the Director, the Purchaser shall not use or suffer or allow to be used the Noise Barrier or any part thereof for advertising or for the display of any signs, notices or posters whatsoever;
- (f) subject to the prior written approval of the Director, the Purchaser, his contractors, agents, workmen and any other persons authorized

by the Purchaser shall be permitted to enter into the Government land adjoining the lot with or without tools, equipment, plant, machinery or motor vehicles for the purposes of carrying out any works under this Special Condition in relation to the part of the Noise Barrier projecting over the Government land;

- (g) the Purchaser shall at all times take such precautions as may be necessary to prevent any damage or injury being caused to any Government land adjoining the lot and the Noise Barrier or to any persons or vehicles entering or using any Government land adjoining the lot and the Noise Barrier as a result of the erection, construction, presence, use, repair, maintenance, inspection, cleaning, renewal, alteration, replacement, demolition or removal of the Noise Barrier or any part thereof or the addition or attachment to the Noise Barrier or any part thereof;
- (h) the Director shall, at any time and at his sole and absolute discretion, have the right to serve upon the Purchaser a written notice requiring the Purchaser to demolish and remove the part of the Noise Barrier that projects over the Government land without any replacement within 6 calendar months from the date of the written notice and upon receipt of such written notice, the Purchaser shall at his own expense demolish and remove the aforesaid part of the Noise Barrier within such period as stipulated in such written notice and in all respects to the satisfaction of the Director;
- (i) in the event of non-fulfilment of any of the Purchaser's obligations under this Special Condition, the Government may (but is not obliged to) carry out the necessary works and the Purchaser shall pay to the Government on demand a sum equal to the cost thereof, such sum to be determined by the D of EP whose determination shall be final and binding on the Purchaser;
- (j) the Purchaser shall at all times throughout the term hereby agreed to be granted permit the Government, the D of EP, the Director, their officers, contractors, agents, workmen and any other persons authorized by any of them, with or without tools, equipment, plant, machinery or motor vehicles free of charge to have the right of free and unrestricted ingress, egress and regress to, from and through the lot and the Yellow Stippled Black Area (while the Purchaser is in possession of the same or any part thereof) or any part of any of them and any building erected or to be erected thereon for the purposes of inspecting, checking and supervising any works to be carried out in accordance with sub-clauses (a), (d), (g) and (h) of this Special Condition and carrying out any works in accordance with sub-clause (i) of this Special Condition or any other works which the D of EP or the Director may consider necessary;
- (k) the Government shall have no responsibility or liability for any loss, damage, nuisance or disturbance whatsoever and howsoever caused to or suffered by the Purchaser or any other person arising whether directly or indirectly out of, in connection with or incidental to the

No liability

fulfilment or non-fulfilment of any of the Purchaser's obligations under this Special Condition; the carrying out of any works by the Government under sub-clause (i) of this Special Condition; or the exercise or non-exercise by the Government, the D of EP, the Director, their officers, contractors, agents, workmen or any other persons authorized by any of them of the rights conferred under sub-clause (j) of this Special Condition, and no claim whatsoever shall be made against the Government by the Purchaser in respect of any such loss, damage, nuisance or disturbance; and

Indemnity by the Purchaser

- (1) the Purchaser shall indemnify and keep indemnified the Government from and against all liabilities, claims, losses, damages, expenses, charges, costs, demands, actions and proceedings whatsoever and howsoever arising whether directly or indirectly out of, in connection with or incidental to the fulfilment or non-fulfilment of any of the Purchaser's obligations under this Special Condition; the carrying out of any works by the Government under sub-clause (i) of this Special Condition; or the exercise or non-exercise by the Government, the D of EP, the Director, their officers, contractors, agents, workmen or any other persons authorized by any of them of the rights conferred under sub-clause (j) of this Special Condition.

(45) Wherever in these Conditions it is provided that-

Supervisory and overhead charges

- (a) the Government or any public officer shall or may carry out works of any description on the lot or any part thereof or outside the lot (whether on behalf of the Purchaser or on the failure of the Purchaser to carry out such works or otherwise) at the cost of the Purchaser or that the Purchaser shall pay or repay to the Government or the public officer on demand the cost of such works, such cost shall include such supervisory and overhead charges as may be fixed by the Government or the public officer; or

Prior approval or consent

- (b) the prior approval or consent of the Government or any public officer is required, it or he may give the approval or consent on such terms and conditions as it or he sees fit or refuse it at its or his absolute discretion; and
- (c) for the purposes of these Conditions, "public officer" shall be as defined in the Interpretation and General Clauses Ordinance, any regulation made thereunder and any amending legislation.

Definition of gross floor area

- (46) (a) For the purposes of these Conditions, the expression "gross floor area" means the area contained within the external faces of the external walls (or in the absence of such walls the external perimeters) of any building erected or to be erected on the lot measured at each floor level (including any floor below the ground level of the lot), together with the area of each balcony in such building, which shall be calculated from the overall dimensions of the balcony (including the thickness of the sides thereof).

(b) Notwithstanding sub-clause (a) of this Special Condition, the Director at his sole discretion may–

(i) in calculating the gross floor area of any building erected or to be erected on the lot (in addition to any floor space which may be excluded by Special Conditions Nos. (13)(b), (14)(b), (15)(b), (16)(b) and (29) hereof), subject to sub-clause (d) of this Special Condition, exclude–

(I) any sunshade, reflector or floor space that he is satisfied is constructed or intended to be used solely for the parking or for the loading or unloading of motor vehicles or occupied solely by machinery or equipment for any lift, air-conditioning or heating system or any similar service and any space for refuse disposal;

(II) any structure or floor space, including but not limited to balcony, utility platform, corridor, lift lobby, communal sky garden, acoustic fin, noise barrier, wing wall, wind catcher or funnel, non-structural prefabricated external wall the thickness of which does not exceed 150 millimetres, or any part thereof (hereinafter collectively referred to as “Environmentally Friendly or Innovative Features”) and any other structure or floor space which in the opinion of the Building Authority is an Environmentally Friendly or Innovative Feature (as to which the opinion of the Building Authority shall be conclusive) and which, for that reason, has been excluded by the Building Authority from the calculation of gross floor area under the Buildings Ordinance; and

(III) any structure or floor space other than that referred to in sub-clauses (b)(i)(I), (b)(i)(II) and (b)(ii) of this Special Condition, which has been excluded by the Building Authority from the calculation of the gross floor area under the Buildings Ordinance provided that the Director at his sole discretion may require the payment by the Purchaser of an additional premium and administrative fee as shall be determined by the Director for any structure or floor space excluded under this sub-clause (b)(i)(III); and

Calculation of gross floor area in buildings with curtain wall system forming external face of building

(ii) accept, for the purpose of calculating the gross floor area, the outer face of the structural elements of any building erected or to be erected on the lot as the external wall where a curtain wall system forms the external face of any building erected or to be erected on the lot provided that the curtain wall system for any building erected or to be erected on the lot or any part or parts thereof–

- (I) for private residential purpose shall project no more than 200 millimetres from the outer face of the structural elements; and
- (II) for non-industrial (excluding private residential, godown, hotel and petrol filling station) purposes shall project no more than 250 millimetres from the outer face of the structural elements,

and the outer face of the structural elements may be accepted by the Building Authority as the external wall for the purpose of calculating the gross floor area and provided also that the Director shall have the sole discretion in deciding what comprises a structural element of any building erected or to be erected on the lot or any part thereof.

(c) Communal sky gardens and any other structure or floor space referred to in sub-clause (b)(i) of this Special Condition shall, if so required by the Director, be designated as and form part of the Common Areas.

Cap on concession

(d) (i) The floor spaces of the features listed in sub-clause (e) of this Special Condition which serve or are intended to serve the building or part of the building erected or to be erected on the lot for—

- (I) private residential purpose which may in accordance with these Conditions be excluded from the calculation of the total gross floor areas stipulated in Special Condition No. (10)(c) hereof shall not in the aggregate exceed 10% of the total gross floor area of the building or any part or parts of the building erected or to be erected on the lot to be used for such purpose; and
- (II) non-industrial (excluding private residential, godown, hotel and petrol filling station) purposes which may in accordance with these Conditions be excluded from the calculation of the total gross floor areas stipulated in Special Condition No. (10)(c) hereof shall not in the aggregate exceed 10% of the total gross floor area of the building or any part or parts of the building erected or to be erected on the lot for such purposes,

provided that the decision of the Building Authority as to whether any floor space of the features listed in sub-clause (e) of this Special Condition or any part thereof falls within sub-clauses (d)(i)(I) or (d)(i)(II) of this Special Condition shall be final and binding on the Purchaser.

- (ii) In calculating the total gross floor area of the building or any part of the building erected or to be erected on the lot referred

to respectively in sub-clauses (d)(i)(I) and (d)(i)(II) of this Special Condition, there shall not be taken into account the floor spaces which are excluded from the calculation of the gross floor area of the building erected or to be erected on the lot in accordance with these Conditions as to which the decision of the Director shall be final and binding on the Purchaser.

(e) The features referred to in sub-clause (d)(i) of this Special Condition are—

- (i) the Facilities provided in accordance with Special Condition No. (13) hereof;
- (ii) office accommodation for watchmen and caretakers or both provided in accordance with Special Condition No. (14) hereof;
- (iii) quarters for watchmen or caretakers or both provided in accordance with Special Condition No. (15) hereof;
- (iv) office for the use of the Owners' Corporation or the Owners' Committee provided in accordance with Special Condition No. (16) hereof;
- (v) plant room which has been decided by the Building Authority as non-mandatory or non-essential plant room, including but not limited to boiler room, room occupied by machinery or equipment for air-conditioning or heating system, SMATV room (as to which the decision of the Building Authority shall be final and binding on the Purchaser), and pipe duct and air duct connected to such plant room;
- (vi) chimney shaft;
- (vii) balcony, utility platform and non-structural prefabricated external wall the thickness of which does not exceed 150 millimetres;
- (viii) void over the main or common entrance of any building or part or parts of any building erected or to be erected on the lot which is intended to be used for non-industrial (excluding private residential, godown, hotel and petrol filling station) purposes;
- (ix) void in a duplex unit in any building erected or to be erected on the lot which is intended to be used for private residential purpose; and
- (x) projection which projects more than 750 millimetres from the external wall of any building erected or to be erected on the lot.

No grave or
columbarium
permitted

(47) (a) No grave or columbarium shall be erected or made on the lot, nor shall any human remains or animal remains whether in earthenware jars, cinerary urns or otherwise be interred therein or deposited thereon.

(b) No memorial tablets shall be placed on the lot or any part thereof or in any building erected or to be erected on the lot for non-industrial (excluding private residential, godown, hotel and petrol filling station) purposes.

Contracts (Rights of
Third Parties)
Ordinance

(48) Notwithstanding any other provisions of this Agreement including any provision which purports to confer a benefit on a person who is not a party to this Agreement, this Agreement is not intended to and does not give any person who is not a party to this Agreement any right to enforce any provisions of this Agreement under the Contracts (Rights of Third Parties) Ordinance, any regulation made thereunder and any amending legislation (hereinafter referred to as “the Contracts (Rights of Third Parties) Ordinance”); and a person who is not a party to this Agreement shall not have any right under the Contracts (Rights of Third Parties) Ordinance to enforce any provision of this Agreement.

**TECHNICAL SCHEDULE
FOR THE YELLOW AREA**

**Public Road System
at Site H8, Hung Shui Kiu/ Ha Tsuen New Development Area**

Date : December 2025

TECHNICAL SCHEDULE FOR THE YELLOW AREA

Public Road System at Hung Shui Kiu/ Ha Tsuen New Development Area

1.	General Requirements		<p>The Purchaser is entirely responsible for the design and construction of the Yellow Area (is hereinafter referred to as “the Service”) referred to in Special Condition No. (4)(a) of the Conditions of Sale to which this Technical Schedule is annexed (“the C/S”).</p> <p>The Service shall be designed and constructed to the satisfaction of the Director of Civil Engineering and Development (“D of CED”) and relevant management and maintenance departments including the D of CED and the Director of Highways (“D of HyD”), the Commissioner for Transport (“C for T”), the Director of Drainage Services (“the D of DS”), the Director of Electrical and Mechanical Services (“the D of EMS”) and the Director of Food and Environmental Hygiene (“the D of FEH”) for their functional and operational needs. The Purchaser shall observe and comply with the following requirements in this Technical Schedule to the satisfaction of the D of CED and relevant management and maintenance departments. The D of CED, the D of HyD, the C for T, the D of DS, the D of EMS and the D of FEH are hereinafter collectively referred to as “the Government Representatives”.</p>	
2.	Scope	(a)	The scope of the Service shall comprise the Public Road System (hereafter referred to as “the PRS”) with the following main items:	
			i.	Site clearance works including, but not limited to, demolition of structures as required.
			ii.	Site investigation works including the land contamination investigation.
			iii.	Land decontamination works.
			iv.	Site formation works and associated geotechnical works and drainage works.
			v.	The proposed footpath along local open space at (Site 3-37 as shown in Annex I and associated road lighting, provisions for smart lamp posts, traffic aids, footpath, pavement and road surfacing, kerbs, railings, pedestrian crossing, landscaping works and irrigation system.
			vi.	The associated works including drainage.

			vii.	The associated tree felling, transplanting and compensatory works.
			viii.	Carry out and fulfill the requirements of road safety audits according to the Transport Department's Transport Planning and Design Manual ("the TPDM") Volume 5 Chapter 7.
			ix.	Design, supply, delivering to site, installation, testing, commissioning until the corrections of all defects for the public lighting installation including road lighting system and provisions for smart lamp posts for roadworks at the proposed footpath along local open space at Site 3-37 as shown in Annex I.
			x.	Design, supply, delivering to site, installation, testing, commissioning until the corrections of all defects for all electrical and mechanical works.
			xi.	Utilities' works.
			xii.	Implementation of all necessary Environmental Monitoring and Audit measures as required under relevant environmental permit.
			xiii.	Other works which are shown on the Drawings or specified in the Specifications; and
			xiv.	Temporary works, other associated and ancillary works related to the above items.
		(b)	The Yellow Area as detailed in Annex I and this Technical Schedule.	
3.	Design and Construction	(a)	The Purchaser's design shall observe the landscape character of the area and should be elegant and attractive in appearance and in harmony with the nearby commercial developments, infrastructure works of interface parties, public transport interchange ("the PTI") and open spaces. The PRS shall be designed and constructed in compliance with this Technical Schedule and Annex I, which are capable of being wholly managed and maintained by the Government of the Hong Kong Special Administrative Region ("the Government") or the Government Representatives. The Service should be up to the Government Representatives' satisfaction and agreement.	

		(b)	The Purchaser's development shall not adversely affect the users of the Service including any encroachment upon the Service and projections from the development. The Purchaser shall be responsible for any subsequent mitigation measures / works in full costs if required as instructed by the Government Representatives.
		(c)	The design interface shall observe and coordinate with the planned roads and infrastructure works under other interface parties' contracts, the planned developments and planned/enhanced streetscape/open space design nearby area as appropriate.
		(d)	The Purchaser provides inputs for the preparation of, and carry out all public and departmental consultation processes for the Service.
		(e)	The Purchaser shall establish 2 level steering/working groups with regulation meetings to ensure smooth approval on submissions and construction.
		(f)	The Purchaser shall prepare necessary submissions, review, assess and obtain approvals of the Government or the Government Representatives for the temporary traffic arrangements for the Service. The Purchaser shall establish a Traffic Management Liaison Group ("the TMLG") to discuss all traffic-related matters and endorse all Purchaser's traffic impact assessment and traffic-related proposals, Members of the TMLG shall be those parties from relevant Government Representatives including but not limited to Fire Services Department, relevant Rural Committees, District Offices and Councils, Transport Department, Hong Kong Police Force.
		(g)	The Purchaser shall coordinate with CEDD on identification of maintenance and management parties of the Service, and obtain the agreements from maintenance and management parties on the maintenance and management responsibilities of the Service.
		(h)	The Purchaser shall hand over the completed works in relation to the Service to relevant maintenance and management parties and authorities, unless otherwise specified in the Technical Schedule.
		(i)	<u>General Obligations</u>
		i.	The Purchaser shall comply with the latest versions of all relevant circulars, standing instructions, standard drawings technical memoranda and policy documents issued by the respective Government departments, utility undertakers, maintenance authorities or the suchlike organisations.
		ii.	The Purchaser provides engineering and technical inputs or comments on other development proposals that have interface with the Service.

			iii.	The Purchaser shall carry out all necessary surveys, level measurements, monitoring works, investigations and inquiries as are needed for the satisfactory Completion of the Service, including taking readings of monitoring equipment. For avoidance of doubt, all land topographical surveys and tree surveys necessary for the Service are to be carried out by qualified land surveyors and relevant specialists.
			iv.	The Purchaser consults and liaises directly with departments, utility undertakings, authorities, bodies, Purchaser, developers or persons to obtain information and on matters related to the Service and obtain comments and agreement to the proposals, and to ensure smooth coordination. The Purchaser copies all correspondence to the Government Representatives. The Purchaser shall consult other relevant parties if required. For the purpose of soliciting utility information and utility circulation, the Purchaser includes Electronic Layout Plans in addition to hard copies of layout plans in accordance with ETWB TCW No. 7/2003 and 7/2003A (or its latest revision).
			v.	The Purchaser shall comply with the requirements of the General Specification for Civil Engineering Works, 2020 Edition and the Corrigendum Nos. 1/2021, 2/2021, 3/2021, 1/2022, 2/2022, 3/2022, 4/2022, 1/2023, 1/2024 and 2/2024 together with any latest amendment issued by Civil Engineering and Development Department (“the CEDD”). In the case of any inconsistency the Technical Schedule and the Drawings shall prevail over the provisions contained in the General Specification for Civil Engineering Works.
			vi.	The Purchaser shall comply with the requirements given in 2013 edition of the Structures Design Manual for Highways and Railways together with its Amendment No. 1/2018, 1/2020, 1/2021, 1/2023 and 2/2023 together with any latest amendment published by Highways Department (“HyD”). In case of doubt, Chief Highway Engineer/Bridges & Structures of the HyD shall be consulted.
			vii.	The Purchaser shall comply with the requirements given in latest version of the TPDM together with any latest amendment published by the Transport Department (“TD”). In case of doubt, Chief Traffic Engineer (New Territories West) of the TD shall be consulted.

			viii.	The Purchaser shall comply with the requirements given in General Specification for Civil Engineering Works, 2020 Edition as stated in item v and the relevant CEDD Geotechnical Engineering Office (“GEO”) publications. In case of doubt, GEO of CEDD shall be consulted.
			ix.	The Purchaser complies with the requirements of the technical circulars, memorandum and documents issued by the Government bureaux and departments unless otherwise agrees with the Government Representatives.
			x.	<p>The Purchaser takes cognisance of the need to comply with the relevant ordinances, by-laws, regulations and rules for the time being in force in HK, and in particular the following ordinances:</p> <ul style="list-style-type: none"> (a) Air Pollution Control Ordinance (Cap. 311); (b) Antiquities and Monuments Ordinance (Cap. 53); (c) Buildings Ordinance (Cap. 123); (d) Dangerous Goods Ordinance (Cap. 295); (e) Dumping at Sea Ordinance (Cap. 466); (f) Electricity Ordinance (Cap. 406); (g) EIAO (Cap. 499); (h) Factories and Industrial Undertaking Ordinance (Cap. 59); (i) Fire Services Ordinance (Cap. 95); (j) Foreshore and Sea-bed (Reclamations) Ordinance (Cap. 127); (k) Forests and Countryside Ordinance (Cap. 96); (l) Gas Safety Ordinance (Cap. 51); (m) Land (Miscellaneous Provisions) Ordinance (Cap. 28); (n) Lands Resumption Ordinance (Cap. 124); (o) Land Acquisition (Possessory Title) Ordinance (Cap. 130); (p) Land Drainage Ordinance (Cap. 446);

				<p>(q) Mass Transit Railway Ordinance (Cap. 556);</p> <p>(r) Noise Control Ordinance (Cap. 400);</p> <p>(s) Public Bus Services Ordinance (Cap. 230);</p> <p>(t) Public Health and Municipal Services Ordinance (Cap. 132);</p> <p>(u) Protection of Endangered Species of Animals and Plants Ordinance (Cap 586);</p> <p>(v) Railways Ordinance (Cap. 519);</p> <p>(w) Road (Works, Use and Compensation) Ordinance (Cap. 370);</p> <p>(x) Road Traffic Ordinance (Cap. 374);</p> <p>(y) Sewage Tunnel (Statutory Easements) Ordinance (Cap. 438);</p> <p>(z) Town Planning Ordinance (Cap. 131);</p> <p>(aa) Waste Disposal Ordinance (Cap. 354);</p> <p>(ab) Waterworks Ordinance (Cap. 102);</p> <p>(ac) Water Pollution Control Ordinance (Cap. 358);</p> <p>(ad) Water Pollution Control (Sewerage) Regulation (Cap. 358AL); and</p> <p>(ae) Wild Animals Protection Ordinance (Cap. 170).</p> <p>The Purchaser informs the Government Representatives as early as possible of the need to take action under any ordinance. The Government Representatives, upon receipt of the necessary papers, drawings, etc. from the Purchaser, arranges for the necessary action to be taken. The Purchaser allows for sufficient time in programming of the Service for procedures to be completed under the ordinances.</p>
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			xi.	The Purchaser draws the attention of the Government Representatives to the need to consider any legal implications and consequences arising out of or in relation to the Service.
			xii.	The Purchaser shall make sure that the Service will not result in any undue interruption to existing services and facilities.
			xiii.	The Purchaser shall observe and follow relevant guidelines set out in the Project Administration Handbook (“the PAH”) for Civil Engineering Works, 2022 Edition and the Amendment Nos. 1/2023, 2/2023, 3/2023, 4/2023, 5/2023, 6/2023, 7/2023, 1/2024, 2/2024, 3/2024, 4/2024 and 5/2024 together with any latest amendment issued by the CEDD to ensure smooth delivery and handing over of the Service. The Purchaser shall agree with the respective departments the arrangements for handing over the completed works and the land, including any acceptance and commissioning tests that may be required.
			xiv.	CAD drawings, except those 2D drawings which are generated from the 3D BIM model, are prepared conforming to the CAD Standard for Works Projects version 1.03.00 (or the later versions as agreed between the corresponding department(s) and the Purchaser from time to time) as posted on the Development Bureau’s (“the DEVB”) web site.
			xv.	The Purchaser complies with all reasonable instructions of the Government Representatives and with all relevant circulars, standing instructions and technical memoranda as directed by the Government Representatives.
			xvi.	The Purchaser observes and follows relevant guidelines set out in the PAH to ensure smooth delivery and handing over of the Service and all completed works respectively. The Purchaser agrees with the respective departments the arrangements for handing over the completed works and the land, including any acceptance and commissioning tests that may be required. The Purchaser ensures that the agreed arrangements is fully allowed.

			xvii.	The Purchaser shall communicate and correspond directly with other relevant Government departments, corporates and private organisations to obtain information in connection with the Service, copying such correspondence to the Government Representatives. Any problem in communication or liaison is referred to the Government Representatives for assistance.
			xviii.	The Purchaser is responsible for arranging and directing the inspection and testing of materials, proprietary products and plant involved in the Service.
			xix.	The Purchaser shall obtain approvals and Excavation Permits (“the XP”) from the Lands Department (“the LandsD”) and the HyD for works in relation to the Service on unleased Government land and streets maintained by the HyD respectively under the Land (Miscellaneous Provisions) Ordinance (Cap. 28). The Purchaser shall prepare drawings and relevant information required for applications of the XPs. The Purchaser shall input update, maintain and upload/download the data required for the XP applications through the respective departments, such as the HyD, the LandsD, relevant authorities and utility undertakers to obtain the XPs for works in relation the Service. The Purchaser informs the Government Representatives the progress and status of the XP applications and identify problems that may cause possible delay to the programme of the Service.
			xx.	The Purchaser prepares summaries of comments on the submissions of the Service received from various departments, authorities, bodies and persons from consultations and circulation of the submissions. These summaries also include: (1) the Purchaser’s responses/replies; (2) advice/recommendations for further action to address the comments; and (3) action taken to resolve those comments and results.

			xxi.	The Purchaser identifies all existing or planned facilities, installations and rights that will be temporarily or permanently affected by the Service, recommends optimum diversion / relocation solutions, and submits the proposals to relevant parties for comments and agreement. The Purchaser liaises and assists in negotiation for any reprovisioning works that may be required. The Purchaser makes sure that the reprovisioning works will not result in any undue interruption to existing services and facilities.
			xxii.	The Purchaser maintains liaison/coordination with the gas services providers in respect of the exact location of existing or planned gas pipe routes/gas installations in the vicinity of the proposed works area and the minimum set back distance away from the gas pipes/gas installations if any excavation works are required during the design and construction stages of the Service. The Purchaser also notes the requirements of the Electrical and Mechanical Services Department's ("EMSD") Code of Practice on Avoiding Danger from Gas Pipes.
		(j)	<u>Specific Obligations</u>	
			i.	<p>The Purchaser identifies any requirements on reprovisioning works as a result of the Service and assist in negotiations with the concerned parties, including various departments, the MTR Corporation Limited, utility companies etc, for any reprovisioning works that may be required. The Purchaser also prepares detailed design necessary for reprovisioning and modification works for existing facilities and installations affected by the Service. The Purchaser makes sure that the reprovisioning works will not result in any undue interruption to existing services and facilities.</p> <p>The Purchaser ensures that the detailed design of the road works adequately takes accounts of the interface and railway protection issues.</p>
			ii.	<p>Building Information Modelling</p> <p>The Purchaser adopts BIM in accordance with the specifications and submission requirements as stipulated in DEVB TCW No. 2/2021 in providing the Service, and subsumes relevant BIM elements/submissions in relevant deliverables including but not limited to the deliverables "BIM Execution Plan" and "Proposal of Asset/COBie information".</p>

			iii.	Purchaser complies with the latest version of Drainage Services Department (“the DSD”) BIM Modelling Manual for the BIM of drainage system and sewerage system which will be handed over to the DSD.
		(k)	<u>General Services</u> The Purchaser carries out at least the general services set out below:	
			i.	Prepare detailed designs, specifications for works, drawings, dimensions, sections, plans with such design data, calculations, design parameters and assumptions and other information, including but not limited to the relevant findings/proposals pertaining to the Service as might be required for the purpose of or in connection with the Service and circulate the aforementioned to all the Government Representatives concerned for comment and agreement.
			ii.	Liaise with the vendors, manufacturers or suppliers of plant, materials and proprietary products, if any, and take all necessary steps to obtain from them all details necessary for the timely Completion of the Service.
			iii.	Prepare lighting design with calculations to Chief Engineer/Lighting of the HyD for comment before the lighting installation.
			iv.	Identify all facilities and installations affected by the Service and the maintenance and management parties of these affected items.
			v.	Identify any requirements on reprovisioning works as a result of the Service works and assist in negotiations with the concerned parties for any reprovisioning works that may be required.
			vi.	Prepare necessary traffic layout plans showing the traffic arrangements for vehicular, pedestrian and cycling traffic.
			vii.	Obtain the agreement of relevant Government departments and management and maintenance authorities and parties to drawings and specifications.

			viii.	Submit design calculations including a statement of the standards, procedures, and codes of practice adopted together with a certificate of design processes and independent check of the designs, in a form to be agreed later, to the Government Representatives on completion of the design.
			ix.	Obtain written agreement of relevant departments and maintenance authorities to take over the completed works for management and maintenance.
			x.	Observe the requirements of DEVB TCW No. 2/2015 concerning the adoption of energy efficient features and renewable energy technologies, including but not limited to LED street lighting with PV panel, in government projects and installations.
			xi.	The Purchaser shall consult GEO on all matters relating to registration of new or modified slope features under WBTC No. 2/2018, designs and construction of permanent slopes and retaining walls under ETWB TCW Nos. 29/2002 and 29/2002A, and checking certificates for slopes and retaining walls under ETWB TCW No. 20/2004.
			xii.	The Purchaser shall identify any statutory and consultative processes associated with the geotechnical works necessary to ensure the timely implementation of the Service. The Purchaser shall prepare all geotechnical submissions required by GEO of CEDD and obtains the necessary endorsements.
			xiii.	The Purchaser shall review and agree with GEO of CEDD to identify the “list of slopes and retaining walls”, which could affect or be affected by the proposed works under the Service.
			xiv.	The Purchaser identifies all existing, planned or proposed utilities facilities, services and installations which, will be affected/being affected by, or will be installed in conjunction with the Service and recommend any plans for installation / diversion and any provisions for accommodating these utilities, facilities, services and installations in conjunction with the Service.

			xv.	The Purchaser endeavours not to affect these utility services in performing this services and provides justifications if any diversion/relocation of any utilities is needed. The Purchaser liaises with the utility undertakers and relevant departments to resolve any conflicts matters between the utilities and the Service and confirm which existing utilities need to be accommodated in the Service.
			xvi.	The Purchaser consults the relevant Government departments and utility undertakers and consolidates the user requirements and demands for different utility services including but not limited to power supply,, water supply, district cooling system, gas mains, telecommunication, public road lights for the Service.
			xvii.	The Purchaser shall liaise and coordinate with relevant utility undertakers, interface parties and relevant Government departments/parties regarding their proposed laying of new services, in advance of, or in conjunction with the Service for meeting the completion.
			xviii.	The Purchaser shall consult, liaise and coordinate with relevant utility undertakers, interface parties and relevant Government departments/parties to drive for advance and timely planning, laying and connection of all required utilities/services to tie-in with the timely commissioning of the Service.
			xix.	The Purchaser shall consult, liaise and coordinate with other Government departments, interface parties, utilities undertakings and other authorities, bodies, consultants, developers or persons on matters related to the Service and obtain their requirements, comments, agreements and approvals where necessary. The Purchaser is responsible for coordination of all works in respect of utilities and other services rendered necessary for the Service.
			xx.	The Purchaser shall designate any utility reserves for the exclusive use by the utilities to be installed in conjunction with the Service or at a later stage, taking into consideration the utility maintenance requirements and the need of avoiding constraint on the street planting and disturbance to the pedestrian environment and the associated works of the Service.
			xxi.	The Purchaser prepares electronic utility layout plans in accordance with ETWB TCW No. 7/2003.

			xxii.	The Purchaser is responsible for coordinating and managing the provision of utilities including, but not limited to, power supply, water supply, drainage, sewerage, telecommunication, gas mains, etc. for the facilities for the Service.
			xxiii.	The Purchaser shall prepare a report on utility and updates it regularly as directed by the Government Representatives. The report includes, but not limited to, the summary of conflict/potential conflict between the Service and the existing / planned facilities and installations, solution identified and agreements reached with respective utilities undertakers or owners of underground structures.
		(l)	<u>Specific Services</u>	
			Without prejudicing the duties that the Purchaser has to perform under the Service, the Purchaser shall carry out at least the specific services set out below.	
			i.	Carries out detailed design and construction of any highway structures and the roadworks, including design of all road geometry, footpaths traffic aids, road lighting, street furniture, road drainage system, formation works, barrier free facilities, associated electrical and mechanical works. The Purchaser shall liaise with the CEDD, the HyD and interface parties obtain their agreement on the design.
			ii.	Carries out detailed design and construction of the drainage works affected by the roadworks and site formation works. The Purchaser shall carry out detailed design of temporary, interim and permanent drainage works including the drainage diversion proposal. The Purchaser shall prepare the submissions of the Drainage Impact Assessment in accordance with ETWB TC(W) No. 2/2006 and the DSD's Technical Circular No. 1/2017. The Purchaser shall liaise with the DSD, the HyD and the CEDD and obtain their agreement on the submissions for the Service, and coordinate with relevant interface parties on their proposal.

			iii.	Agrees with the DSD over the design of the temporary, interim and permanent drainage and sewerage works as necessary. The Purchaser ensures the design complies with the current design standards and requirements of the DSD (for drainage and sewerage works) and the HyD (for exclusive road drainage). The Purchaser submits the proposals to the CEDD, the DSD (for drainage and sewerage works) and the HyD (for exclusive road drainage) for comments and approval prior to the commencement of the works. The Purchaser shall also liaise and coordinate with relevant interface parties for the above proposals.
			iv.	Carries out detailed design and construction of the temporary and permanent water supply works including fresh water and flushing water supplies. The Purchaser ensures the detailed design of all water supply works complies with Water Supplies Department (“the WSD”)’s current design standards and requirements, and submits the water supply works proposals to the WSD for comments and approval prior to the commencement of the works. The Purchaser carries out hydraulic assessment and surge analysis for the water supply system, including the existing water mains affected by the Service and proposed water supply works.
			v.	Prepares detailed design of any electrical and mechanical works, including all lighting, signage, traffic control and surveillance facilities necessary for the efficient operation of the Service. The Purchaser shall ensure the detailed design and construction of all the E&M works complies with the TD, the EMSD and the HyD’s latest design standards and requirements, and submits the detailed design proposals to the TD, the EMSD and the HyD for comments and approval prior to the commencement of the works.
			vi.	Prepares necessary road layout plans and traffic layout plans showing the road arrangement and traffic and transport arrangements for vehicular, pedestrian and cycling traffic that affected by the Service. The Purchaser shall submit the detailed design proposals to the TD, and the HyD for comments and approval prior to the commencement of the works.

			vii.	The Purchaser shall identify and report to the Government departments the presence of hazardous materials on site. If the Purchaser encounters any hazardous materials, including but not limited to asbestos, during the site clearance, the Purchaser shall employ specialist to the acceptance of relevant Government Departments including the EPD to dispose the hazardous materials. The Purchaser shall submit to relevant Government Departments method of disposal and location for disposal etc. for acceptance. The Purchaser shall seek agreement with the relevant Government departments the location of disposing the hazardous material.
			viii.	Reviews the method stated in the Environmental impact assessment (“the EIA”) Report AEIAR-203/2016 - Hung Shui Kiu New Development Area and recommends effective method(s) to treat any contaminated soil that may be present within the boundary of the Service.
			ix.	Carries out the detailed design of the environmental mitigation measures as recommended in the approved the EIA Report, and carry out the construction thereof.
			x.	The Purchaser shall identify any unsuitable ground material / soil such as soft clay, marine / pond mud, etc. within the Service and carry out any ground modification works as necessary.
			xi.	The Purchaser shall arrange site visits with the Government Representatives, as and when required.

			xii.	<p>The Purchaser shall carry out tree survey and agree the tree survey boundary with CEDD prior to carrying out the relevant tree surveys for the Service. The format of the tree surveys shall follow the DEVB TC (W) No. 4/2020. The Purchaser shall submit a Tree Preservation and Removal Proposal (“the TPRP”), which shall contain necessary documents giving the tree survey information, tree protection plan and method statement, tree treatment recommendations, and compensatory planting proposal, for approval by Tree Works Vetting Panel (“TWVP”) of CEDD in accordance with WBTC no. 25/93, 17/2000, DEVB TCW No. 6/2015, DEVB TCW No. 4/2020, DEVB TCW No. 1/2018 and the GEO Publication No. 1/2011 or their updated version before the commencement of tree removal. The compensatory planting proposal shall be developed taking into account the tree loss, ecological enhancement and the landscape and visual impact mitigation measures proposed in the approved the EIA.</p> <p>The Purchaser submits the TPRP and Compensatory Planting Proposal to the relevant management and maintenance parties with reference to the DEVB TCW No. 6/2015 for agreement; and TWVP of CEDD for approval with reference to the DEVB TCW No. 4/2020 or its updated version. Sufficient time shall be allowed for public consultation, obtaining approval, sourcing of receptor location and preparation works for the tree removal/ transplanting operation. Prior to the commencement of tree surveys and submission of the TPRP and compensatory planting proposals, the Purchaser shall coordinate with the relevant interface parties of contracts.</p> <p>The Purchaser’s attention is drawn that competent member of the site supervisory staff to oversee and supervise tree works related to horticultural operations and preservation of trees within the Site, including, but without limitation to, planting, transplanting, tree risk assessment and management, tree surgery work and control of pest and disease affecting trees for the Service. The training qualification and work experience of the assigned person shall comply with the requirements in the Registration Scheme for Tree Management Personnel which could be download at the DEVB’s website https://www.greening.gov.hk/rstmp/en/introduction/index.html. The TPRP and Compensatory Planting Proposal shall be duly signed by the Registered Landscape Architect.</p>
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			xiii.	<p>The Purchaser shall carry out tree risk assessment and management (“the TRAM”) exercise in accordance with the latest edition of DEVB’s “Guidelines for TRAM”, “Guidelines on Audit of Tree Risk Assessment” or its latest version (Audit Guideline), if applicable.</p>
			xiv.	<p>The Purchaser shall be responsible to carry out site appraisal, prepare and submit Contamination Assessment Plan (“the CAP”) for the Service to the acceptance of the Environmental Team and Independent Environmental Checker of Hung Shui Kiu / Ha Tsuen New Development Area and the EPD. The Purchaser shall conduct the land contamination assessment against the appropriate Risk-based Remediation Goals as stipulated in the EPD’s “Guidance Manual for Use of Risk-based Remediation Goals for Contaminated Land Management”.</p> <p>The Purchaser shall carry out site appraisal and land contamination investigation for the Service to identify any potentially contaminated sites and hot spots within the Service. The Purchaser shall prepare the CAP in accordance with the “Practice Guide for Investigation and Remediation of Contaminated Land”, “Guidance Note for Contaminated Land Assessment and Remediation”, “Guidance Manual for Use of Risk-based Remediation Goals for Contaminated Land Management” and submit to the EPD for approval.</p> <p>The Purchaser shall be responsible for carrying out the environmental ground investigation works according to the CAP agreed by the EPD, “Practice Guide for Investigation and Remediation of Contaminated Land”, “Guidance Note for Contaminated Land Assessment and Remediation” and “Guidance Manual for Use of Risk-based Remediation Goals for Contaminated Land Management”, and prepare Contamination Assessment Report (“the CAR”) to the Environmental Team and Independent Environmental Checker of Hung Shui Kiu / Ha Tsuen New Development Area and submit to the EPD for approval. For land contamination assessments, samples shall be collected by drillholes or trial pits as per the CAP. Underground utility survey shall be conducted before conducting intrusive investigations, and care shall be taken during excavation of inspection pits to avoid damaging the underground utilities.</p>

				<p>The Purchaser shall prepare Remediation Action Plan (“the RAP”), if land contamination is identified accordingly but not limited to the requirements of “Practice Guide for Investigation and Remediation of Contaminated Land” of the EPD and submit to the EPD for approval. The Purchaser shall carry out decontamination works in accordance with the RAP approved by the EPD with full-time supervision by a qualified Land Contamination Specialist. Prior to the decontamination works, the Contractor shall prepare and submit a method statement, which includes the location of decontamination works and the details of decontamination methodology and procedures to the EPD for approval. The Contractor shall carry out the decontamination works according to the CAR and RAP accepted by the Project Manager and the EPD.</p> <p>The Remediation Report (“the RR”) shall report the decontamination process and demonstrate that contaminated soil is all removed, properly handled, decontaminated and reinstated. The RR shall provide details including but not limited to the decontamination works carried out, types and volume of contaminated soil, standards and levels of treatment and locations of all disposal sites (including record of disposal) within the contaminated sites identified. The Purchaser shall submit the RR prepared by the approved Land Contamination Specialist no later than one month after completion of the decontamination works.</p>
		(m)	<p><u>Special Services during the Construction Phase of the Service</u></p> <p>The Purchaser carries out at least the activities, procedures and all other necessary services set out below during the Construction Phase of the Service:</p>	
			i.	Establish appropriate liaison channels among the contractors, departments and utility undertakings to facilitate smooth progress of the contract works.
			ii.	Supervise and direct the execution of the Service including monitoring of environmental, drainage and traffic impacts of construction activities and taking appropriate actions to control and mitigate such impacts as necessary.
			iii.	Prepare publicity materials required for the implementation of traffic management measures and environmental mitigation measures, and attend District Councils and / or committees established thereunder and other publicity meetings.

			iv.	Advise on, arrange where necessary and direct the inspection and testing of materials and plant supplied for the Service.
			v.	Invite CEDD, the management and maintenance parties and authorities to inspect the Service in advance and ensure that the Service are properly and thoroughly inspected or tested, temporary works removed and acceptable remedial works are carried out prior to handing over of the Service to management and maintenance parties and authorities.
			vi.	Prepare Operation and Maintenance (“the O&M”) Manuals providing all information necessary for the corresponding departments to take over and maintain the Service, including maintenance manuals for all roadworks, highway structures, drainage works, fire hydrants and electrical & mechanical works.
			vii.	Prepare recommended lists of spares, plant and equipment for civil and electrical & mechanical works and assist in ordering them from contractors or suppliers to ensure smooth operation and maintenance of the Service.
			viii.	Keep and supply records of all temporary and permanent traffic management measures which might be susceptible to compensation claims and submit to Government Representatives.
			ix.	Prepare and deliver ‘as-constructed’ drawings showing in full detail of the Service and utility works as actually carried out together with calculations, information and the O&M Manuals necessary for the maintenance of the Service, if applicable and submit all records and accounts relating to the Service. The number of copies required for the calculations, the O&M Manuals and other records is agreed with relevant Government departments. To incorporate all changes in design made in the Construction Phase, the Purchaser updates and submits this together with the revised design calculations and the corresponding the design in the format acceptable to Government Representatives.
			x.	Arrange before expiry of each of the maintenance periods of the Service, a final joint inspection of the Service with CEDD, the management and maintenance parties and authorities. The as-constructed drawings and the O&M Manuals are submitted prior to this final inspection.

			xi.	Submit the as-constructed drawings and the O&M Manuals together with all survey data for preparation of the as-constructed drawings in electronic files facilitate subsequent input into the Land Information System in the LandsD.
			xii.	Submit one full set of finalised “as constructed” film transparency drawings, or the format as agreed with relevant management and maintenance parties showing in full detail of the Service as actually carried out together with all relevant records including final design calculations and information necessary for the maintenance of the Service to relevant management and maintenance parties and authorities. For the “as-constructed” traffic aids drawings, the digital files should be in the format acceptable to the TD.
			xiii.	Submit a full set of all site records relating to the Service with proper classification/indexing system to enable easy retrieval of information.
			xiv.	Carry out, in relation to all electrical and mechanical works, as well as traffic control and surveillance equipment, a detailed inspection of the installations with the Purchaser and Government departments prior to the expiration of the maintenance period to determine exact defects may have occurred and thereafter arrange carrying out the necessary repairs.
			xv.	The Purchaser carries out all duties imposed under the Land (Miscellaneous Provisions) Ordinance or under the conditions of the XP and, where applicable, EXP in so far as such duties have not been imposed only on the contractors as Nominated Permittees under the Land (Miscellaneous Provisions) Ordinance.
4.	Interface parties	(a)	The Purchaser shall coordinate thoroughly with the following interface parties whose works will involve interfacing with the Service, and shall agree with these parties the details of interfaces and interfacing construction arrangement including programme of works interfacing the Service, the details between the works under interface parties and the Service, site activities, access arrangement, construction sequences, methodology and working spaces. These interfacing parties include, but not be limited to the following:	
			i.	The designer(s), consultant(s) and contractor(s) of Contract No. YL/2023/04 - Hung Shui Kiu/Ha Tsuen New Development Area Second Phase Development - Contract 4 - Site Formation and Engineering Infrastructure Works. (hereinafter referred to as “YL/2023/03”).

			ii.	The designer(s), consultant(s) and contractor(s) of Contract No. YL/2023/05 - Hung Shui Kiu/Ha Tsuen New Development Area Second Phase Development - Contract 5 - Site Formation and Engineering Infrastructure Works. (hereinafter referred to as “YL/2023/05”).
			iii.	The designer(s), consultant(s) and contractor(s) of Contract No. YL/2023/06 - Hung Shui Kiu/Ha Tsuen New Development Area Second Phase Development - Contract 6 - Site Formation and Engineering Infrastructure Works. (hereinafter referred to as “YL/2023/06”).
			iv.	The CEDD and their designer(s), consultant(s) and contractor(s) CEDD and their designer(s), consultant(s) and contractor(s) of Agreement No. CE7/2024 (HY) - Road Works for Smart and Green Mass Transit System (SGMTS) Phase 1 in Hung Shui Kiu / Ha Tsuen New Development Area Investigation, Design and Construction / Green Transit System (GTS) for Hung Shui Kiu / Ha Tsuen New Development Area.
			v.	Architectural Services Department (ArchSD) / LCSD / relevant Government Departments and their designer(s), consultant(s) and contractor(s) for local open space at Site 3-37 as shown in Annex I.
			vi.	The stakeholders of the existing villages such as San Sang San Tsuen / houses / residential buildings, buildings, etc. to the boundaries of the site.
			vii.	Yuen Long District Office and their contractor(s) for the maintenance / improvement works.
			viii.	Road lighting and cabling works by contractors of the Lighting Division of the HyD.
			ix.	District and/or maintenance works by contractors of the HyD and other concerned departments.
			x.	Utility undertakings (including but not limited to DSD, WSD, EMSD, CLP Power Hong Kong Limited, The Hong Kong and China Gas Company Limited, Hong Kong Broadband Network Limited, Hong Kong Telecommunications (HKT) Limited, HGC Global Communications Limited, Hong Kong Cable Television Limited, Wharf T&T Limited) and their contractors.
			xi.	Any contractor(s) with valid Excavation Permit.

		(b)	The Purchaser's attention is drawn to the interfaces with other works to be undertaken in the vicinity the Service, in particular the items as listed below. The Purchaser shall liaise with the interface parties, relevant management and maintenance parties and authorities and the Government Representatives.	
			i.	The Purchaser shall coordinate with the interface parties on the temporary drainage management to prevent drainage performance of any existing drainage and stormwater collection system being adversely affected; to avoid stormwater from getting into low point area; and to avoid causing any flooding hazards to the surrounding lands and associated drainage systems. The Purchaser shall coordinate with the interface parties to maintain the temporary drainage system until the completion of the permanent drainage system and ensure that the operation of the temporary drainage system is adequate and effective throughout the Service and provide enhancement to the temporary drainage systems when necessary.
			ii.	During the construction of the Service, the Purchaser shall coordinate with the interface parties including YL/2023/05, YL/2023/06, Site 3-33 as shown in Annex I, and open space at Site 3-37 as shown in Annex I on the arrangement of hoarding and / or fencing between the boundaries of the site under interface parties and the Service. The Purchaser shall also carry out monitoring of settlement and movement of adjacent ground and adjoining construction sites and take all necessary precautions to protect the completed works of the Service from the effects of vibration, undermining, or other earth movements which may cause by the construction works in the proximity to the Service.
			iii.	The Purchaser shall coordinate and liaise with interface parties including YL/2023/05, YL/2023/06, open space at Site 3-37 as shown in Annex I on the exact profile, alignment, invert level, manholes location, road levels, road geometry, roadworks, site formation and interface details between the works under interface parties and the works of footpath along Site 3-37 as shown in Annex I prior to the commencement of the construction works of works under footpath along Site 3-37 as shown in Annex I. Prior to the commencement of the Service, the Purchaser shall liaise with interface parties YL/2023/05, YL/2023/06, SGMST in HSK/HT NDA and open space at Site 3-37 as shown in Annex I on their works programme, the construction activities, construction space required / methodology, etc., in particular the construction programme of drainage system and footpath of Road P1 and footpath along

				SGMTS. The Purchaser shall arrange and participate the joint inspections and site walks with relevant Purchaser's representatives and interface parties when necessary.
			iv.	The Purchaser shall coordinate with interface parties YL/2023/04, YL/2023/05, YL/2023/06 and SGMTS in HSK/HT NDA to gain access for the Service. This access arrangement shall be fully coordinated through meetings, inspections and documented for subsequent implementation. Detailed arrangement including but not limited to the exact extent, timing and working spaces at the interface between the Service and the interface parties are to be agreed and coordinated.
			v.	<p>The Purchaser shall liaise closely with the interface parties to agree reasonable, uninterrupted, free and safe construction accesses as well as the delivery routes for the Service. The Purchaser shall agree with the interface parties on an evacuation plan for emergency and obtain the agreement from the Government representatives. The Purchaser shall also be responsible for setting up his own security system for the Service.</p> <p>The Purchaser shall allow the village representatives / local resident / public to have reasonable and safe access to existing graves that next to the Site 3-32 as shown in Annex I and adjoining San Sang San Tsuen.</p>
5.	Location and access			<p>The PRS shall be located as shown in the drawings as detailed in Annex I of this Technical Schedule.</p> <p>Existing Ha Tsuen Road (Road D5), Tin Ha Road, Ping Ha Road, Road L1 and Road L30 are the main access to the PRS.</p>
6.	Existing Tree(s)			Existing trees, if any, on site or adjoining the site should be protected and preserved by incorporating them into the new landscape design. Should pruning / transplanting / felling be deemed necessary, the Purchaser shall be responsible for obtaining statutory approval from CEDD and any other relevant authority and for the cost associated with tree retention (including protection and pruning) / transplanting / felling plus 12-month Establishment Works for the protected/transplanted trees.
7.	Readiness			The Service shall be designed and constructed as self-contained facilities capable of being wholly managed and maintained by the Government independently.
8.	Inclusion			The Service shall be provided with full fitting-out provisions that fulfill the requirements stated in this Technical Schedule.

			Provisions shall be provided in accordance with Annex I of this Technical Schedule, together with any other necessary associated and ancillary maintenance spaces, services, facilities and items as may be required and deemed necessary by the Government Representatives.	
9.	Materials and Workmanship	(a)	<p>The Service shall be designed and constructed by the Purchaser in accordance with good practice generally and to the particular requirements of this Technical Schedule in such a way that future maintenance costs and energy costs are minimized and to a standard at least as high as that achieved in comparable government-built facilities.</p> <p>Materials and workmanship for all external finishes and features that form an integral part of the Service shall be low maintenance, environmentally friendly, in compliance with all standards indicated herein or as may be required by the Government Representatives, and shall be compatible with the finishes and features of other integral or adjacent accommodation within the lot erected by the Purchaser in accordance with the C/S. Particular attention should be given to appropriate specifications and detailing due to heavy-duty use and potential vandalism to which public open spaces are liable.</p> <p>The Purchaser shall comply with all latest versions of statutory Ordinances, Regulations, standards, specifications and Codes of Practice relevant to public works contracts in Hong Kong Special Administrative Region (“Hong Kong”).</p>	
		(b)	<p>The Purchaser shall engage the approved suppliers or specialist contractors on the “List of Approved Suppliers of Materials and Specialist Contractors for Public works” as listed in https://www.devb.gov.hk/en/construction_sector_matters/contractors/supplier/index.html for the Service including, but not limited to:</p>	
			i.	Electrical Installation
			ii.	Low Voltage Cubicle Switchboard Installation

		(c)	The Purchaser shall warrant that all professional skill and care shall be exercised in the preparation of the design of the Service and in the preparation of all details and calculations relating thereto.
10.	Responsibilities		<p>The Purchaser is entirely responsible for the design, supervision and construction of the Service irrespective of any vetting, checking or inspections/comments that may be carried out or given by the Government Representatives.</p> <p>The submission of design proposals to or the inspection of the construction works by, or any agreements/acceptances by the Government Representatives shall not relieve the Purchaser from his responsibility for satisfactory compliance with the above stipulations and requirements under this Technical Schedule.</p> <p>The Purchaser is entirely responsible for the handover of the Service to relevant management and maintenance parties and authorities.</p> <p>The Purchaser shall not consider the Service be substantially completed without the prior agreement from the Government Representatives.</p>
11.	Submissions	(a)	<p>The Purchaser shall submit his design proposals for the Government Representatives' agreement for the Service for all stages, including all relevant layout plans, sections, elevations, details, etc. The relevant Government departments and authorities, should be consulted and agreed on the detailed design and submissions of the Service before implementation.</p> <p>The plans shall be at a scale of 1:200 or larger and shall contain information on the design proposals of the Service or other scale as instructed by the Government Representatives, including a survey and treatment of existing trees, site layout, site formation levels, general arrangement, road geometry, structural details, and such other information as the Government Representatives may require.</p> <p>All submissions shall comply with requirements in the relevant guidance notes, technical circulars, memorandum, practice notes, standard drawings and code of practice, design manual, etc. issued by CEDD, HyD, DSD, WSD, TD, Planning Department, Bureaus, Leisure and Cultural Services Department, EMSD, LandsD and Buildings Department.</p>
		(b)	The extent, boundary, location and the term of "the Service" shall be clearly demarcated in all submissions, including general layout plans of the Service to demonstrate the design and disposition are in compliance with lease conditions.

		(c)	Samples of all proposed finishing materials and major building services installations (with samples if on request by the Government Representatives) shall be submitted for the Government Representatives' agreement prior to the placement of orders.
		(d)	The Purchaser shall prepare presentation papers and drawings and make presentations to the concerned District Council and relevant management and maintenance departments as and when requested by the Government Representatives.
		(e)	The Purchaser shall allow sufficient lead-time, at least 30 calendar days shall be allowed after receiving the submissions, for the Government Representatives to comment on the submissions.
12.	Approvals/ agreements		<p>All references to approval/agreement in this Technical Schedule shall be deemed to be approval/agreement in writing by the specified approving/agreeing parties and all submissions for approval/ agreement shall be made at an early date.</p> <p>The Purchaser shall allow sufficient lead-time for the Government Representatives to comment on design/materials submissions.</p> <p>Programme of submission shall also be submitted in advance to the Government Representatives to facilitate the checking process in master layout stage and also during various design stages and project stages.</p>
			<p>Agreement of the submissions shall be limited to standards of provision, general safety and general principles of design. The Purchaser shall be responsible for the detailed design and shall ensure that such design complies fully with the requirements of this Technical Schedule and the specifications referred to herein, as well as all currently enforced Ordinances, Regulations, Code of Practices, Circulars, etc.</p> <p>The Purchaser is entirely responsible for the design, supervision and construction of the Service, irrespective of any approval / agreement, vetting, checking or inspections/comments that may be carried out or given by the Government Representatives. Any pertaining approval / agreement / acceptance from the Government Representatives shall not relieve the Purchaser from his responsibilities for satisfactory compliance with the stipulations.</p> <p>The Purchaser shall not consider the Service be substantially completed without the prior agreement from the Government Representatives.</p>

13.	Inspections and Induction		The Purchaser shall conduct/arrange site inspections/ meetings as and when required by the Government Representatives, including but not limited to the followings:	
			-	before substantial completion;
			-	upon substantial completion;
			-	prior to handover;
			-	for handover;
			-	at the end of the Defects Liability Period
			-	for briefing(s) on specified electrical/mechanical and/or other installations; and
			-	at any times as may be required by the Government Representatives.
			<p>to be attended by the Government staff and/or their agents, and as required by the Government Representatives.</p> <p>On completion of the Service, the Purchaser shall conduct/arrange briefing and training sessions, on all aspects of the electrical/mechanical or other installations related to the Service to be attended by the Government staff and/or their agents, to the satisfaction of the Government Representatives.</p>	
14.	Record Drawings and Documents to be Provided		The Purchaser shall provide within 8 weeks from the respective dates of delivery of possession of the Service, three (3) complete sets, or otherwise specified, of the following documents in relation to the Service to the Government Representatives:	
		(a)	As-built/installed, scaled and dimensioned record the E&M drawings (including all wiring circuit diagrams down to component level), roadworks drawings, structural and geotechnical drawings (including layout plans and details drawings) and landscape drawings, in the agreed format;	
		(b)	Paper prints for all drawings as (a) above;	

		(c)	<p>Computer disk for all the as-built/installed drawings as (a) above and the digital files consolidating all approved revisions. The CAD drawings shall be prepared conforming to the CAD Standard for Works Project version 1.03.00 (or later versions as agreed between the Purchaser and the Government departments from time to time) as posted on the Development Bureau's web site http://www.devb.gov.hk/cswp;</p> <p>Each computer disk shall be in CD-ROM/ DVD-ROM, labelled, with cross reference to a printed list of files detailing the contents and purpose of each files and supplied in the sturdy plastic container;</p> <p>The draft as-built drawings shall be submitted to the Government Representatives for comment one month before the completion of construction on the Service;</p>
		(d)	Fire Service Installation Certificate and Dangerous Goods Store License (if applicable);
		(e)	Certificate of Permanent Water Supply Connection;
		(f)	Permanent drainage system connection completion letter/memo from the DSD;
		(g)	Operation, maintenance manuals and test reports for all systems, plant, equipment and other items as appropriate which shall be bound in separate volumes for different systems;
		(h)	Any other essential drawings, information, details and certificates relating to the Yellow Area as may be required by the Government Representatives;
		(i)	Works Completion Certificate for Electrical Installation (WR1) as required by the Electricity Ordinance;
		(j)	Maintenance Manual for the General and Specific Basic Provisions to be handed over to relevant management and maintenance departments covering list of items of works and installations requiring routine maintenance, the recommended frequency of routine maintenance inspection and the recommended maintenance cycle of works and installations;
		(k)	Structural statutory compliance certificate and Checking Report (when structural / geotechnical design submission to the Government Representatives is required);
		(l)	Cleansing, disinfection and flushing reports of hot, cold water systems and other water using systems/apparatus;

		(m)	Schedule of keys;
		(n)	For record drawings and documents submission related to BIM, please refers to the advisory requirement under the related clauses of this Technical Schedule; and
		(o)	Any other essential information, details and certificates relating to the Service as may be requested by the Government Representatives.
		(p)	All items above and a draft of the Maintenance Manual shall be submitted before the handover.
15.	Defects Liability and Maintenance		<p>The Purchaser shall at his own expense provide free maintenance for the Service within the Defects Liability Period (as defined in Special Condition No. (4)(I)(i)(II) of the C/S). The free maintenance shall include routine maintenance of all plant and equipment, emergency repairs and fault attendance. Maintenance of building services systems shall be in accordance with the requirements as stipulated in the GS. A maintenance schedule shall be submitted to the Government Representatives for agreement prior to the handover of the Service.</p> <p>All relevant Certificates for compliance with statutory requirements if expired before the end of the Defects Liability Period (as defined in Special Condition No. (4)(I)(i)(II) of the C/S) shall be renewed.</p>
16.	The PRS Requirements		The Service shall be designed and constructed to the satisfaction of the Government Representatives to incorporate, inter alia, the following requirements wherever applicable:
	Safety	(a)	The PRS design shall also take into account safety aspects; slippery surfaces, entrapment, sharp edges and corners shall be avoided. Railings, structures and inclined surfaces that encourage climbing and misuse as play equipment shall be avoided. Handrails to steps and anti-slip surface/foot-grip strips to treads of steps and gradient floor shall be provided.
		(b)	The boundaries of the Service shall be demarcated as appropriate in accordance with Annex I of this Technical Schedule and/or as agreed with the Government Representatives and the HyD.
		(c)	The Purchaser shall comply with all latest versions of statutory Ordinances, Regulations, standards, specifications and Codes of Practice relevant to public works contracts in Hong Kong.

	Electrical Installation	(a)	The electrical installation shall be carried out in concealed PVC conduit except in areas with cover such as inside false ceiling void, pipeduct, under raised floor void, meter/switch room and in outdoor areas where it shall be carried out in exposed G.I. conduits. The electrical installation shall comply with the latest edition and subsequent addendum/ corrigendum/ amendments of IEC 60364, Code of Practice For the Electricity (Wiring) Regulations issued by the EMSD, and to the satisfaction of the Government Representatives and the local power supply company.
	Electricity Supply and Metering	(b)	Electricity supply to the facilities of the PRS shall be independently metered. The electricity supply to the facilities of the PRS shall be independently metered to the satisfaction of the Government Representatives and the requirements of local power supply company.
			The Purchaser shall employ a competent consultant with experiences in electrical load calculations and design experience to carry out a detail electrical load calculations based on the information/requirements as listed in this Technical Schedule and submit all the relevant electrical load design calculations for the Service to the Government Representatives and the Lighting Division of the HyD for agreement prior to the commencement of all the required detail design works.
			Provision shall be allowed in the design of the electricity system for bulk tariff metering in case the power consumption so warrants.
			All equipment shall be easily accessible and not obstructive. Switchgears shall be installed inside switch/meter room and adequate space shall be provided within the meter room, or other location agreed by the Government Representatives, for servicing and replacing equipment.

	Lighting	(c)	<p>The lighting design shall comply with the latest version of Public Lighting Design Manual (“the PLDM”) published by the HyD.</p> <p>The public lighting installations shall be designed to appropriate lighting levels in an energy efficient and environmental-friendly manner. In PLDM, there are requirements on lighting level, uniformity, reliability, durability, etc. for different types of roads and highway structures.</p> <p>Lighting designers shall prepare the lighting scheme strictly according to the specified limits or values in PLDM for approval by the Lighting Division of the HyD.</p> <p>All lighting designs, computer simulations, shop drawings and proposed materials/equipment shall be submitted to the Lighting Division of the HyD for approval before installation. The Lighting Division of the HyD will not take over any completed lighting installations without prior approval.</p>
	Water Supply Requirements		<p>The fresh water supply to the Service shall be independently metered. The fresh water pipes and fittings shall be of appropriate materials in compliance with the latest WSD’s requirements.</p> <p>Separate fresh water supplies shall be provided in accordance with the requirements of the Director of Water Supplies. Water connections and supply shall be subject to the formal approval of the Director of Water Supplies.</p> <p>The water supply shall include potable (fresh) water, irrigation water, cleansing water and fire services water supplies as necessary. The meters shall be easily accessed but shall not be exposed conspicuously.</p> <p>The water supply pipes and fittings shall comply with the Hong Kong Waterworks Regulations and Hong Kong Waterworks Standard Requirements.</p>
17.	Waste Management Requirements		<p>The Purchaser shall control contractor and construction works sites on proper Construction and Demolition Material (“the C&DM”) management and disposal by preparing and implementing a plan setting out the waste management measures. The plan shall include appropriate mitigation means to avoid, reduce, reuse and recycle inert construction waste including proper control measures or steps be taken during day-to-day operation. The Purchaser shall provide the following measures into the works contract for implementation at the construction stage so as to reduce generation and disposal of the C&DM:</p>

			(a)	separation of non-inert and inert portions of the C&DM for disposal;
			(b)	re-use of suitable excavated materials as general filling material on-site to minimize off-site disposal of the C&DM;
			(c)	use of prefabricated formwork for temporary works on site to minimize generation of the C&DM; and
			(d)	control the disposal of the C&DM to the designated public filling facility and landfill by a trip-ticket system.
18.	Signage	External signage including directional signage, composite notices boards, illuminated signs, name plaques, logos, location maps, markings, etc. in both Chinese and English shall be provided as where deemed necessary by the Government Representatives. Details of placement, locations and design including materials, lettering and graphics shall be submitted for the Government Representatives' agreement.		

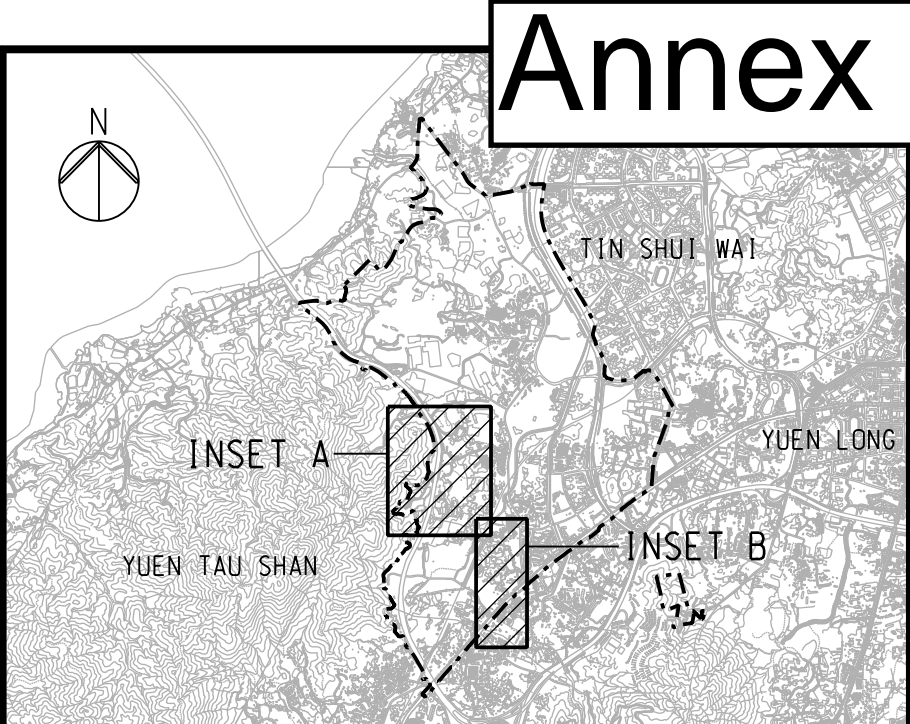
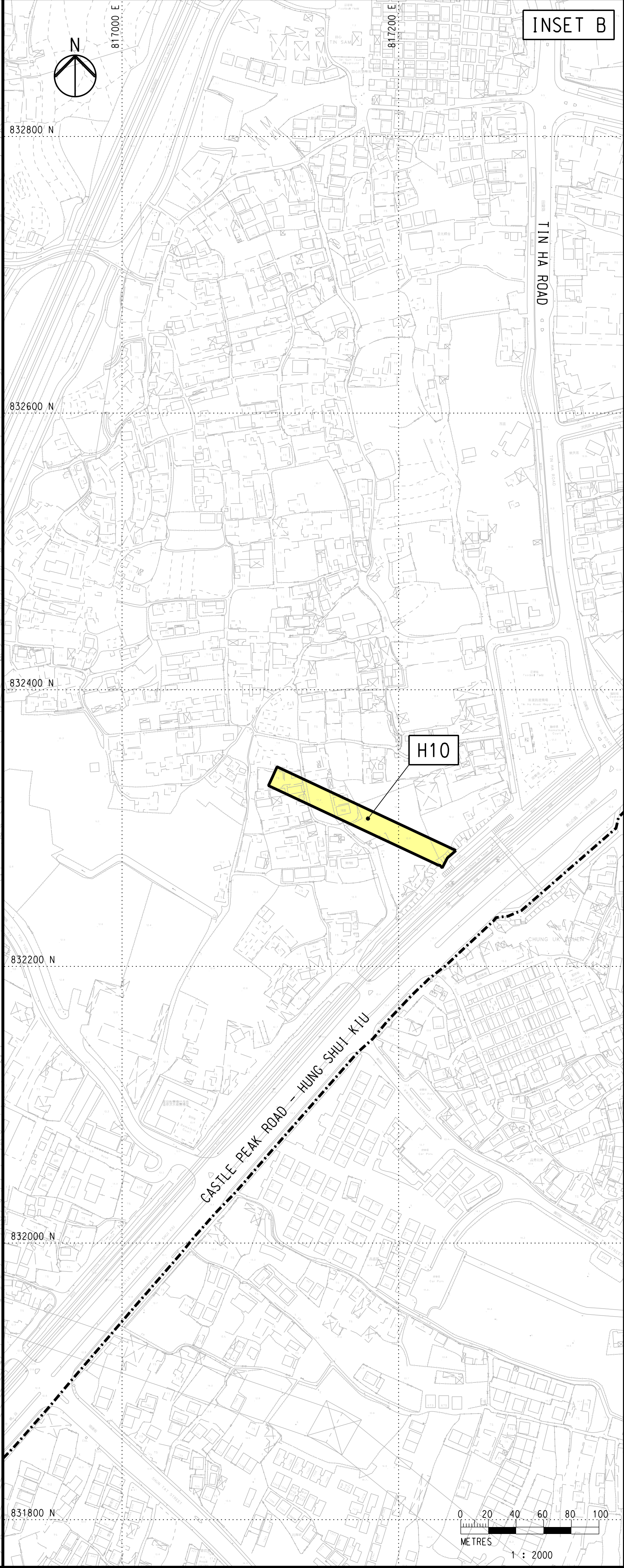
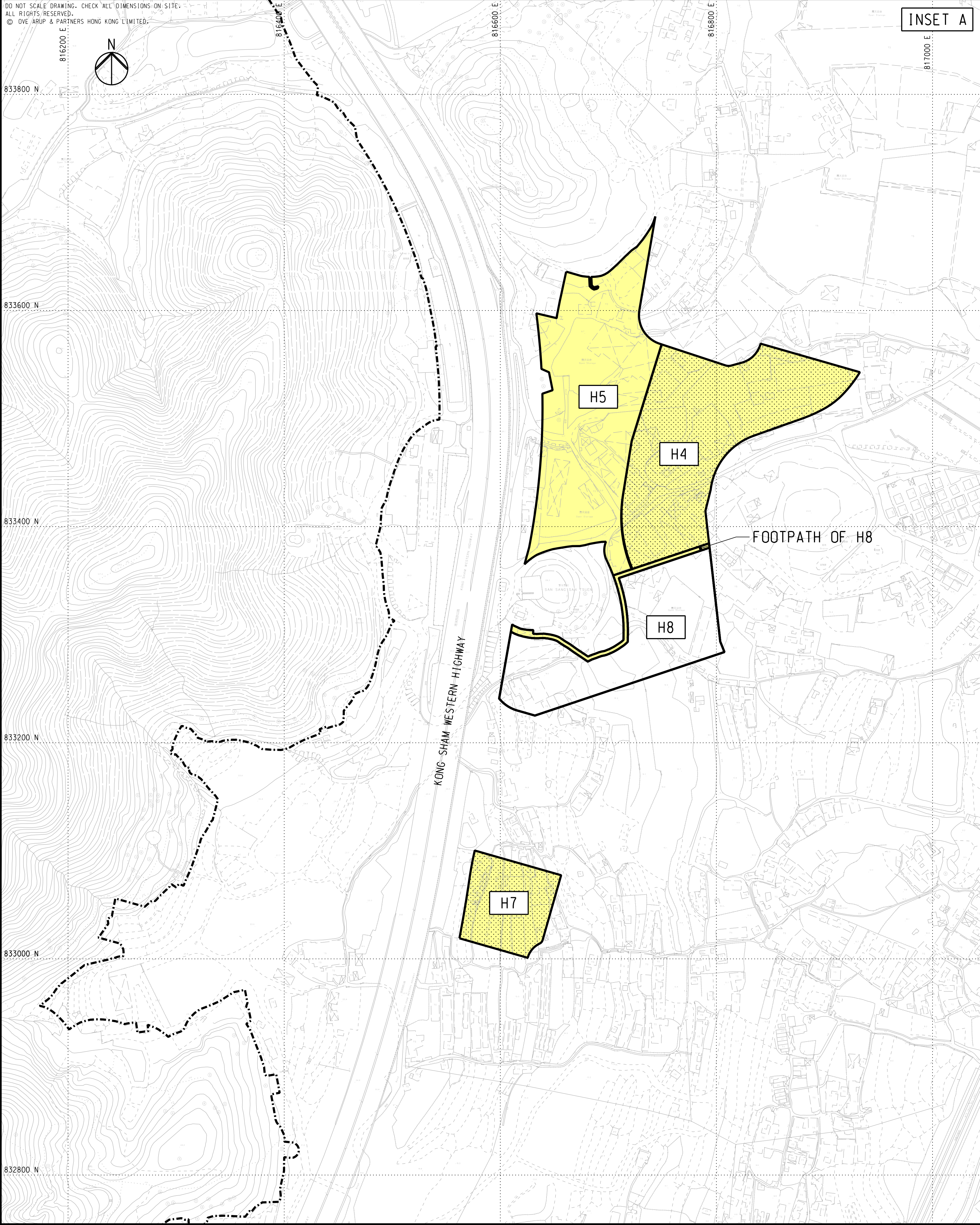
List of Annexes

Annex I

Drawings

- Large-Scale Land Disposal in HSK/HT NDA Overall Layout
- Part of Site (H8-FP) Setting Out
- General Layout
- Road Works (Road Pavement and Paving Layout, Kerb and Street Furniture Layout, Roadworks Details & Paving Details)
- Road Lighting Layout and Demolition
- Drainage Layout
- Fresh Water Supply Works Layout
- Existing and Proposed Power Cables
- Existing and Proposed Telecom Layout

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Date : 12/24/2025




KEY PLAN

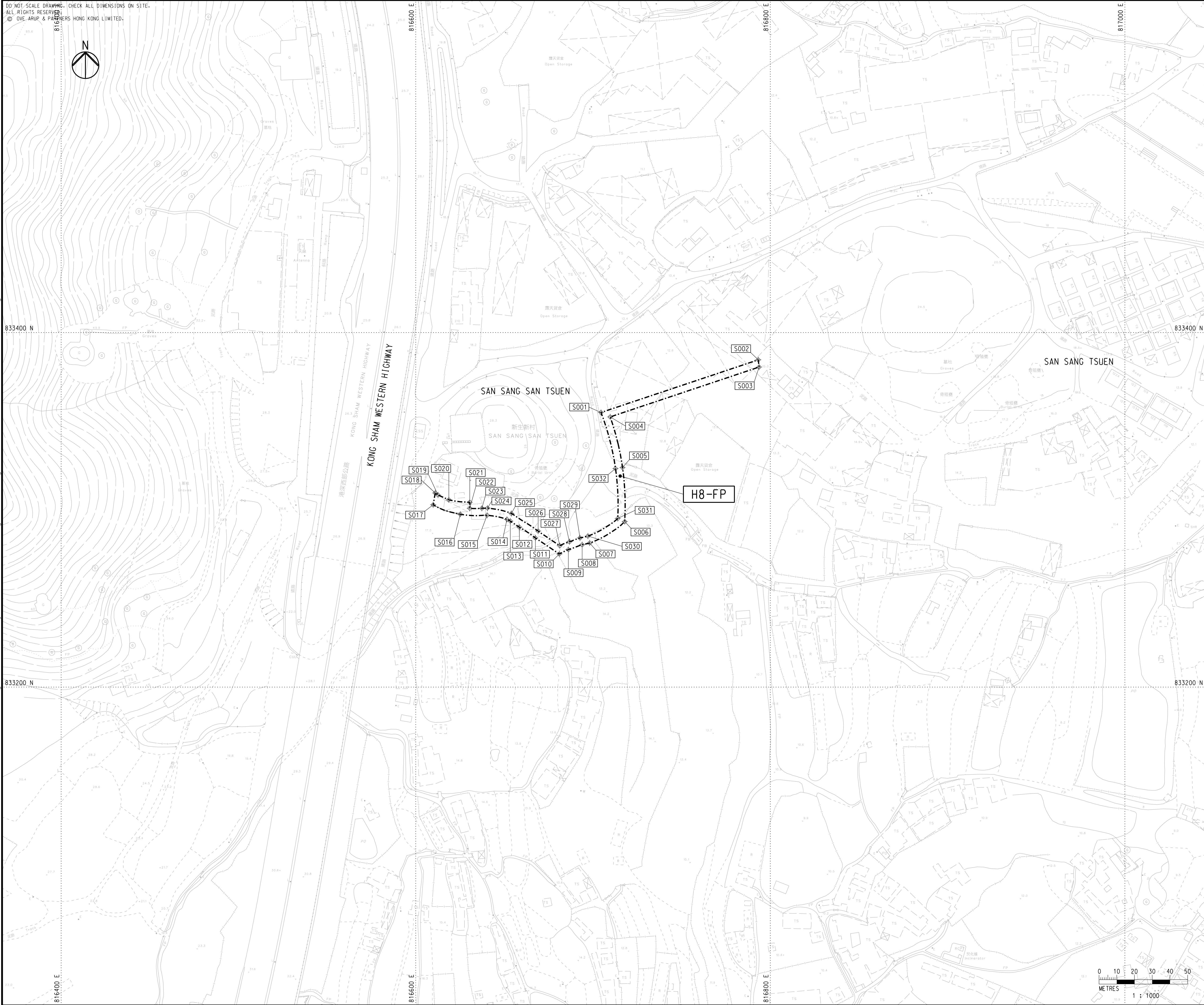
LEGEND

----- SITE BOUNDARY

AREA	SITE NO.
H4	SITE 3-33
H5	SITE 3-32
H7	SITE 4-2
H8	SITE 3-37
H10	PEDESTRIAN STREET

C	THIRD ISSUE	KF	12/25
B	SECOND ISSUE	KF	12/25
A	FIRST ISSUE	KF	09/25
Rev	Description	By	Date
Consultant			
ARUP			
Project Title			
Agreement No. CE 1/2020 (CE) Hung Shui Kiu / Ha Tsuen New Development Area Package A Works for Second Phase Development – Design and Construction			
Drawing title			
LARGE-SCALE LAND DISPOSAL IN HSK / HT NDA OVERALL LAYOUT PLAN			
Drawing no.		Rev.	
278463/SK/C/461		C	
Drawn RY	Date 09/25	Checked EH	Approved KKC
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LEGEND

PART OF SITE (H8-FP)

SETTING OUT POINT

SETTING OUT POINT	EASTING	NORTHING
S001	816704.500	833354.882
S002	816793.216	833384.578
S003	816793.680	833380.515
S004	816709.686	833352.393
S005	816716.634	833323.810
S006	816717.887	833293.363
S007	816698.102	833281.286
S008	816693.882	833280.305
S009	816686.081	833277.541
S010	816680.999	833275.099
S011	816667.493	833284.126
S012	816656.454	833290.198
S013	816653.341	833293.623
S014	816651.446	833294.606
S015	816640.259	833286.933
S016	816625.121	833297.515
S017	816609.822	833302.815
S018	816610.990	833309.488
S019	816612.547	833308.352
S020	816618.639	833305.644
S021	816630.473	833304.245
S022	816630.457	833300.843
S023	816637.297	833300.853
S024	816640.474	833300.939
S025	816653.929	833297.918
S026	816669.023	833288.013
S027	816681.253	833279.740
S028	816686.682	833281.963
S029	816692.641	833284.122
S030	816697.108	833285.177
S031	816713.945	833295.126
S032	816712.673	833323.248

CURVE CENTER	EASTING	NORTHING	RADIUS
S004-S005	816568.928	833303.227	149.100
S005-S006	816565.508	833302.343	152.600
S006-S007	816678.686	833335.339	57.400
S014-S015	816634.954	833239.431	57.700
S015-S016	816633.905	833344.367	47.700
S016-S017	816631.541	833340.785	43.700
S020-S021	816630.321	833353.732	48.500
S024-S025	816640.192	833264.803	35.900
S030-S031	816679.896	833332.823	50.700
S032-S001	816560.204	833301.314	154.000

C	THIRD ISSUE	KF	12/25
B	SECOND ISSUE	KF	09/25
A	FIRST ISSUE	KF	07/25
Rev	Description	By	Date

Consultant

ARUP

Project Title

Agreement No. CE 71/2020 (CE)
Hung Shui Kiu / Ha Tsuen
New Development Area Package B
Works for Second Phase Development
– Design and Construction

Drawing title

PART OF SITE (H8-FP)
SETTING OUT PLAN

Drawing no.

282748/POS/SK/H8-FP

Rev.

C

Drawn

RY

Date

07/25

Checked

EH

Approved

KKC

Scale

1:1000 @ A1

Status

PRELIMINARY

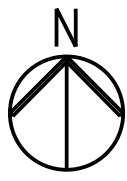
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FOR CONTINUATION
SEE DRG 282748/C6/GEN/1114

MATCH LINE



833400 N

KONG SHAM WESTERN HIGHWAY

KONG SHAM WESTERN HIGHWAY

ROAD P1 (SOUTHBOUND)
(BY OTHER HSK/HT NDA SECOND PHASE DEVELOPMENT CONTRACT)

SITE 3-32
(ENTERPRISE AND
TECHNOLOGY PARK)

SITE 3-33
(ENTERPRISE AND
TECHNOLOGY PARK)

SITE 3-38
(GREEN BELT)

新生新村
SAN SANG SAN TSUEN
SAN SANG SAN TSUEN

SITE 3-37
(LOCAL OPEN SPACE)

PROPOSED CYCLE
PARKING AREA

SITE 3-36
(LOCAL OPEN SPACE)
(BY OTHER HSK/HT NDA SECOND
PHASE DEVELOPMENT CONTRACT)

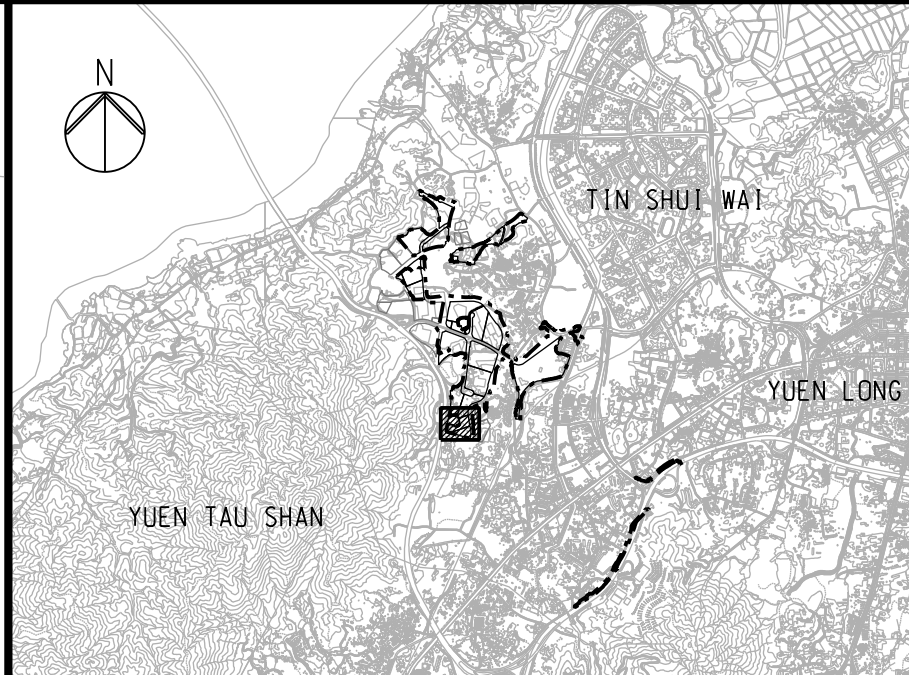
PROPOSED CYCLE
PARKING AREA

SITE 3-40
(ENTERPRISE AND
TECHNOLOGY PARK)
(BY OTHER HSK/HT NDA SECOND
PHASE DEVELOPMENT CONTRACT)

SITE 3-39
(ENTERPRISE AND
TECHNOLOGY PARK)

PROPOSED PEDESTRIAN SUBWAY SW3
(BY OTHER HSK/HT NDA
SECOND PHASE DEVELOPMENT CONTRACT)

ROAD D6
(BY OTHER HSK/HT NDA SECOND
PHASE DEVELOPMENT CONTRACT)



KEY PLAN

NOTES

1. FOR NOTES AND LEGEND, REFER TO DRAWING NO.
282748/C6/GEN/1101.



Yellow Area

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Project Title
Contract No. YL/2023/06
Hung Shui Kiu/Ha Tsuen
New Development Area
Second Phase Development - Contract 6 -
Site Formation and Engineering
Infrastructure Works

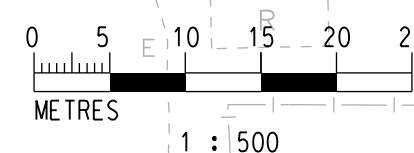
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(SHEET 15)

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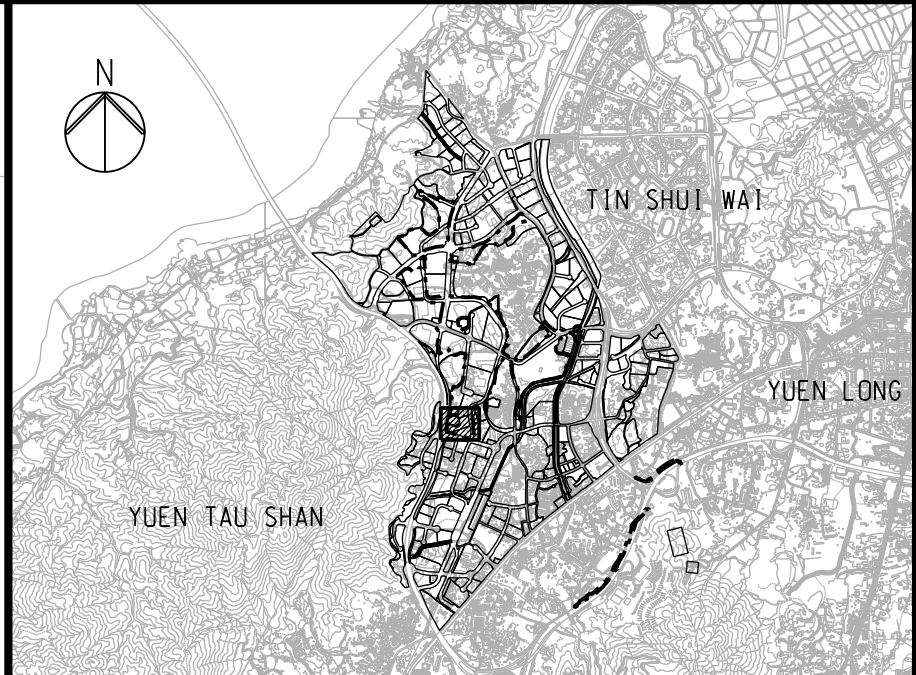
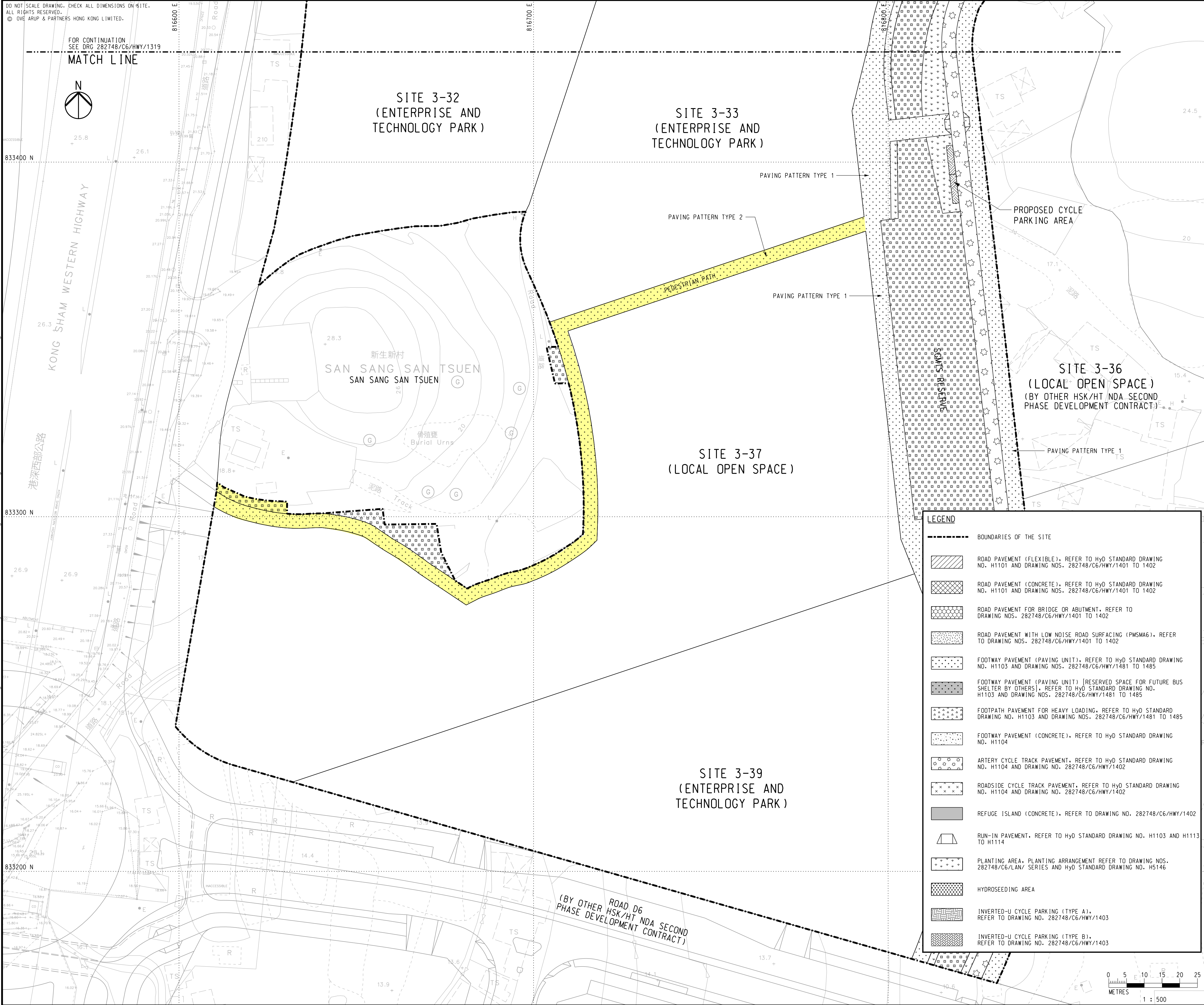
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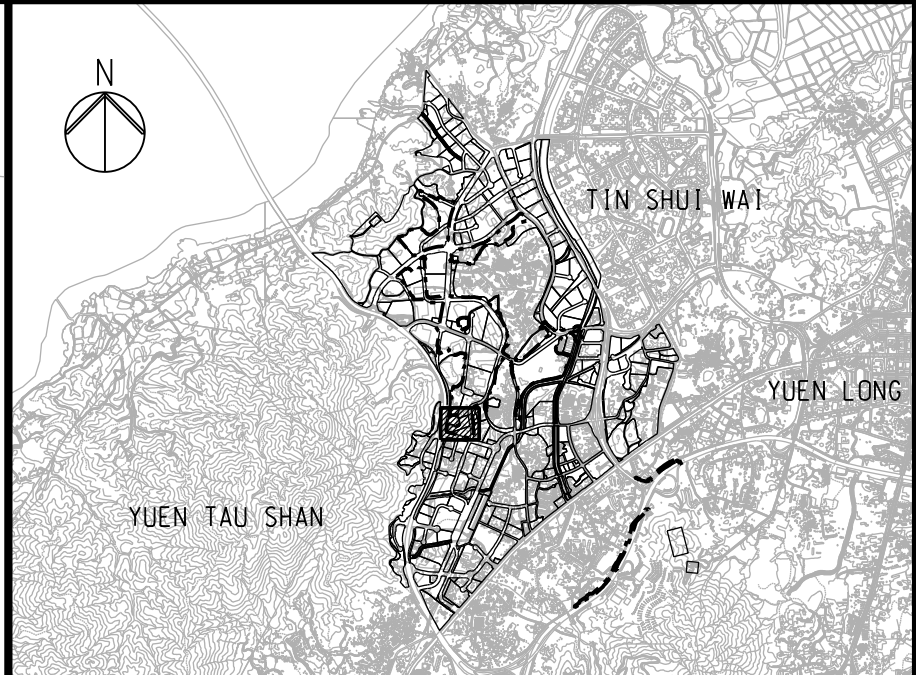
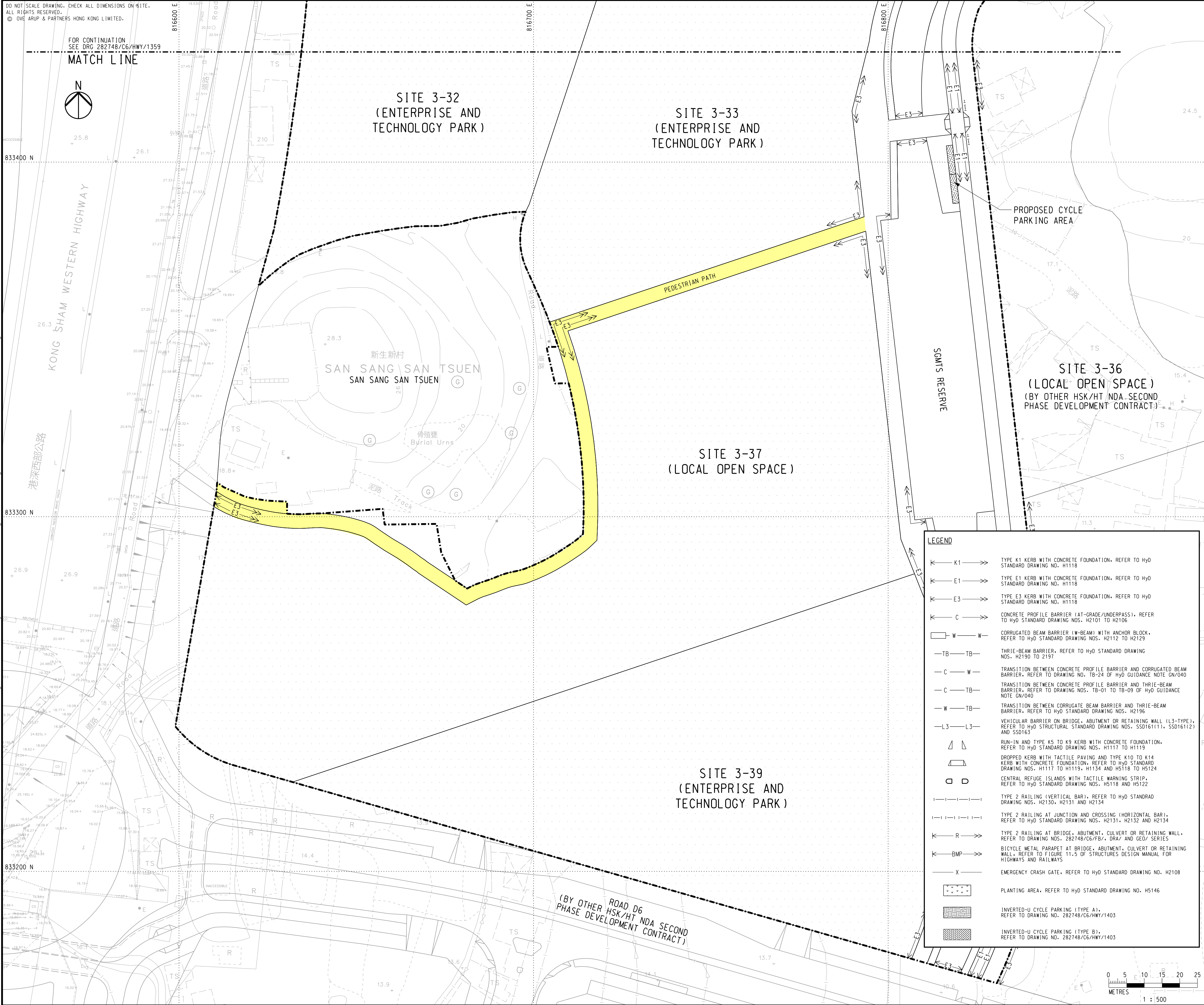
KEY PLAN

NOTES
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	ROAD PAVEMENT (CONCRETE), REFER TO HYD STANDARD DRAWING NO. H1101 AND DRAWING NOS. 282748/C6/HWY/1401 TO 1402		
	ROAD PAVEMENT FOR BRIDGE OR ABUTMENT, REFER TO DRAWING NOS. 282748/C6/HWY/1401 TO 1402		
	ROAD PAVEMENT WITH LOW NOISE ROAD SURFACING (PMSMA6), REFER TO DRAWING NOS. 282748/C6/HWY/1401 TO 1402		
	FOOTWAY PAVEMENT (PAVING UNIT), REFER TO HYD STANDARD DRAWING NO. H1103 AND DRAWING NOS. 282748/C6/HWY/1481 TO 1485		
	FOOTWAY PAVEMENT (PAVING UNIT) [RESERVED SPACE FOR FUTURE BUS SHELTER BY OTHERS], REFER TO HYD STANDARD DRAWING NO. H1103 AND DRAWING NOS. 282748/C6/HWY/1481 TO 1485		
	FOOTPATH PAVEMENT FOR HEAVY LOADING, REFER TO HYD STANDARD DRAWING NO. H1103 AND DRAWING NOS. 282748/C6/HWY/1481 TO 1485		
	FOOTWAY PAVEMENT (CONCRETE), REFER TO HYD STANDARD DRAWING NO. H1104		
	ARTERY CYCLE TRACK PAVEMENT, REFER TO HYD STANDARD DRAWING NO. H1104 AND DRAWING NO. 282748/C6/HWY/1402		
	ROADSIDE CYCLE TRACK PAVEMENT, REFER TO HYD STANDARD DRAWING NO. H1104 AND DRAWING NO. 282748/C6/HWY/1402		
	REFUGE ISLAND (CONCRETE), REFER TO DRAWING NO. 282748/C6/HWY/1402		
	RUN-IN PAVEMENT, REFER TO HYD STANDARD DRAWING NO. H1103 AND H1113 TO H1114		
	PLANTING AREA, PLANTING ARRANGEMENT REFER TO DRAWING NOS. 282748/C6/LAN/ SERIES AND HYD STANDARD DRAWING NO. H5146		
	HYDROSEEDING AREA		
	INVERTED-U CYCLE PARKING (TYPE A), REFER TO DRAWING NO. 282748/C6/HWY/1403		
	INVERTED-U CYCLE PARKING (TYPE B), REFER TO DRAWING NO. 282748/C6/HWY/1403		

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282748/C6/HWY/1320		00	
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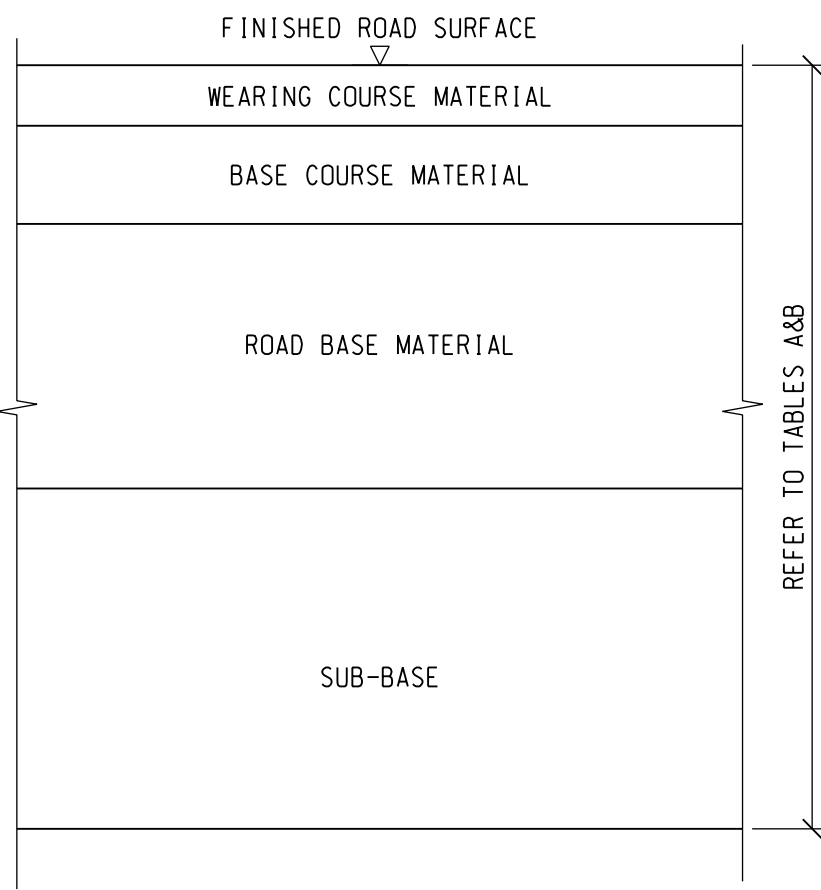
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Rev	Description	By	Date
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Project Title			
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Hung Shui Kiu/Ha Tsuen			
New Development Area			
Second Phase Development - Contract 6 -			
Site Formation and Engineering			
Infrastructure Works			
Drawing title			
KERB AND STREET			
FURNITURE LAYOUT PLAN			
(SHEET 10)			
Drawing no.		Rev.	
282748/C6/HWY/1360		00	
Drawn	Date	Checked	Approved
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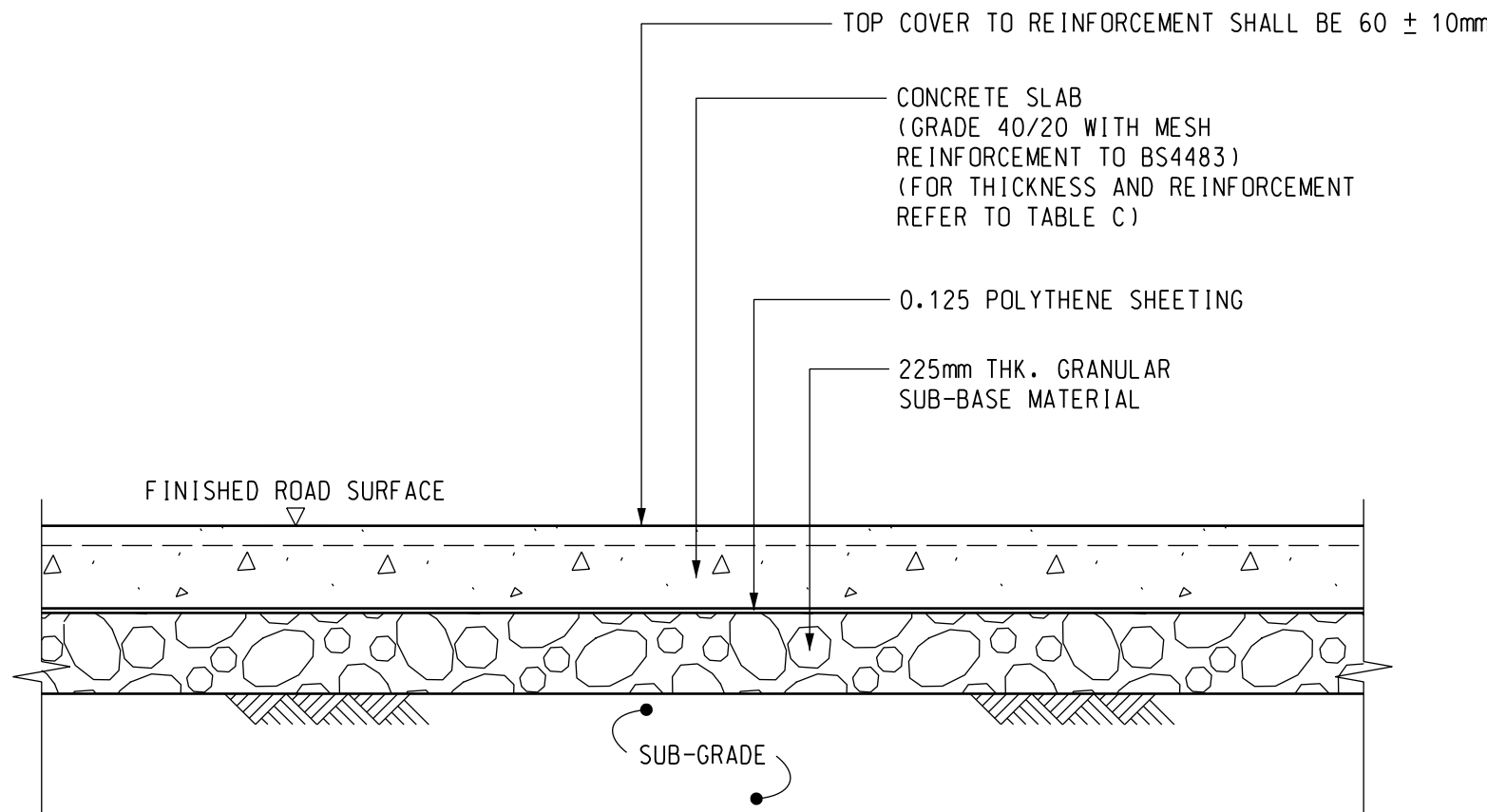
NOTES

- ALL DIMENSIONS ARE TO BE IN MILLIMETERS, UNLESS OTHERWISE STATED.
- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL ROADWORK DRAWINGS AND HyD STANDARD DRAWING.
- DROP KERBS IN ACCORDANCE WITH HyD STANDARD DRAWING NO. H1117 SHALL BE PROVIDED AT PEDESTRIAN CROSSINGS.
- FOR DETAILS OF PAVEMENT IN FOOTPATH AND VERGE AREA, REFER TO DRAWING NOS. 282748/C6/HWY/1481 AND HyD STANDARD DRAWING NO. H5136.
- FOR DETAIL OF REINSTATEMENT OF PAVING, REFER TO HyD STANDARD DRAWING NOS. H1124 TO H1131.
- THE KERB & PAVING LAYOUT PLANS SHOW THE GENERAL PATTERN OF VARIOUS TYPES OF PAVEMENT CONSTRUCTION. THE EXACT LIMIT OF EACH TYPE OF PAVEMENT CONSTRUCTION SHALL BE REVIEWED BY THE CONTRACTOR ACCORDING TO SITE CONDITION AND ACCEPTED BY THE PROJECT MANAGER.
- THE CONDITION OF EXISTING PAVEMENT AREAS SHALL BE REVIEWED AT THE TIME OF CONSTRUCTION. THE PROJECT MANAGER MAY INSTRUCT THAT LOCALISED REPAIRS BY PARTIAL OR COMPLETE RE-CONSTRUCTION TO BE CARRIED OUT.
- THE CONTRACTOR SHALL CARRY OUT THE CBR AND PLASTICITY INDEX TESTS TO DETERMINE THE SUBGRADE MODULUS OF ELASTICITY OF EXISTING GROUND PRIOR TO THE COMMENCEMENT OF ROAD CONSTRUCTION. THE NUMBERS AND LOCATIONS FOR TESTS SHALL BE REVIEWED ON SITE TO SUIT SITE CONDITIONS. THE THICKNESS OF ROAD BASE AND SUB BASE TO BE USED IN THE WORKS SHALL BE ACCEPTED BY THE PROJECT MANAGER.
- EXISTING ROAD BITUMINOUS LAYERS, CONCRETE PAVING, SUBBASE, ROADSIDE KERBS, TRAFFIC ISLAND, CENTRAL RESERVE AND PLANTER WALL WITHIN THE EXTENT OF PROPOSED CARRIAGEWAY, ACCESS ROAD, FOOTWAY, AMENITY AND PLANTING AREA EXCEPT STATED OTHERWISE AND ANYTHING WHICH IN THE OPINION OF THE PROJECT MANAGER AFFECTING THE COMPLETION OF WORKS SHALL BE REMOVED OFF SITE BY THE CONTRACTOR PRIOR TO LAYING NEW PAVING MATERIAL EXCEPT STATED OTHERWISE. THE CONDITIONS OF SUB-GRADE SHALL BE INSPECTED BY THE SUPERVISOR WITHOUT OBJECTION PRIOR TO LAYING OF SUB-BASE.
- ALL EXISTING GROUND LEVEL FURNITURES AND PAVING DISTURBED BY THE CONSTRUCTION OF THE WORKS, UNLESS STATED OTHERWISE, SHALL BE REINSTATED TO ORIGINAL CONDITION.
- THE CONCRETE PAVEMENT DESIGN SHALL BE VERIFIED AND AGREED WITH THE PROJECT MANAGER UPON ACHIEVING THE CBR TEST RESULTS.
- EXISTING ROAD PAVEMENT UNDERNEATH NEW ROAD CONSTRUCTION SHALL BE REMOVED DOWN TO THE BOTTOM OF SUB-BASE FOR NEW ROAD CONSTRUCTION, UNLESS ACCEPTED OTHERWISE BY THE PROJECT MANAGER.
- FOR DETAILS OF TRANSITION BETWEEN CONCRETE AND FLEXIBLE PAVEMENTS, REFER TO HyD STANDARD DRAWING NO. H1110.
- JOINTS IN BITUMINOUS MATERIALS LAYERS, REFER TO HyD STANDARD DRAWING NO. H1101.
- DETAILS OF EXPANSION JOINT IN CONCRETE CARRIAGEWAY, REFER TO HyD STANDARD DRAWING NO. H1105. MAX. SPACING OF EXPANSION JOINT IS 60m.
- DETAILS OF CONTRACTION JOINT IN CONCRETE CARRIAGEWAY, REFER TO HyD STANDARD DRAWING NO. H1106. MAX. SPACING OF CONTRACTION JOINT IS:
 - 20m FOR REINFORCED CONCRETE PAVEMENT
 - 5m FOR UNREINFORCED CONCRETE PAVEMENT $\geq 250\text{mm}$ THK.
 - 4m FOR UNREINFORCED CONCRETE PAVEMENT $\leq 250\text{mm}$ THK.
- THE MAXIMUM SPACING BETWEEN LONGITUDINAL JOINTS FOR CONCRETE PAVEMENT SHALL BE 6000mm.
- THE CONTRACTOR SHALL DESIGN THE PAVEMENT JOINT ARRANGEMENT IN PROPOSED CONCRETE PAVEMENT CONSTRUCTION TAKING INTO ACCOUNT THE SITE CONDITIONS AND SUBMIT THE DESIGN DETAILS TO THE PROJECT MANAGER FOR ACCEPTANCE FOUR WEEKS PRIOR TO CONCRETE LAYING.
- DETAILS OF LONGITUDINAL AND ISOLATION JOINTS IN CONCRETE CARRIAGEWAY, REFER TO HyD STANDARD DRAWING NOS. H1107, H1111 AND H1112. MIN. AND MAX. SPACING OF LONGITUDINAL JOINT SHALL BE 1m AND 6m RESPECTIVELY, SUBJECT TO THAT IT IS PROVIDED BETWEEN TRAFFIC LANES AT OR NEAR LANE LINES. ISOLATION JOINT SHALL BE PROVIDED AT ROAD JUNCTION, MANHOLES, OTHER OPENINGS AS APPROPRIATE.
- THE EXACT LIMIT OF TIE-IN WITH THE EXISTING PAVEMENT SHALL BE DETERMINED ON SITE AND ACCEPTED BY THE PROJECT MANAGER.



DETAILS OF FLEXIBLE PAVEMENT

N.T.S.



DETAILS OF CONCRETE PAVEMENT

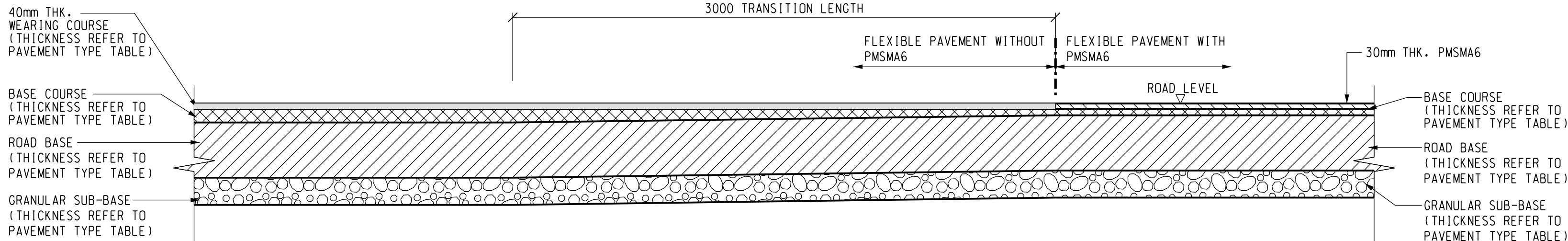
N.T.S.

TABLE A. MINIMUM CAPPING LAYER/SUB-BASE REQUIREMENTS

SUB-GRADE MODULUS OF ELASTICITY (MPa)	SUB-GRADE CBR VALUE (%)	PLASTICITY INDEX (I _p) (%)	MINIMUM THICKNESS (mm)	
			CAPPING LAYER	GRANULAR SUB-BASE
< 20	-	> 50	600	150
20 - < 50	-	> 20 - 50	350	150
50 - < 150	5 - < 15	≤ 20	-	225
≥ 150	≥ 15	-	-	150

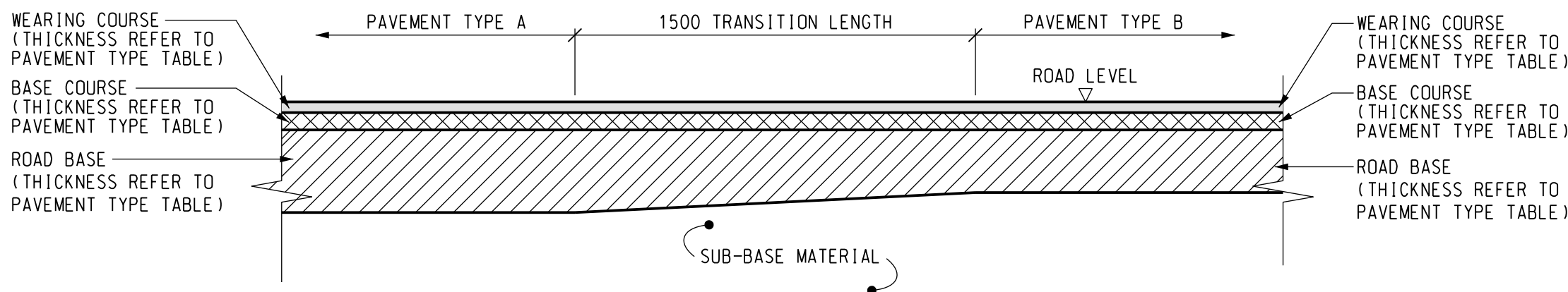
NOTE

- FOR WEAK SUBGRADES (<50 MPa), AN OVERLAYING CAPPING LAYER OF MIN. CBR VALUE OF 15% IS REQUIRED.
- FOR ABNORMALLY WEAK SUBGRADE (<20 MPa), GEOTEXTILES MAY BE USED TO SEPARATE THE SOIL AND THE CAPPING LAYER IN ORDER TO REDUCE DEFORMATIONS UNDER CONSTRUCTION TRAFFIC.



TYPICAL JOINT DETAIL BETWEEN FLEXIBLE PAVEMENTS WITH AND WITHOUT LOW NOISE ROAD SURFACING

N.T.S.



TIE-IN OF FLEXIBLE PAVEMENT OF DIFFERENT THICKNESS (WITHOUT LOW NOISE ROAD SURFACING)

NOTE:

- TYPE A REPRESENTS PAVEMENT TYPE OF GREATER THICKNESS.
- IF PROPOSED SUB-BASE THICKNESS DOES NOT MATCH, 1500 TIE-IN WILL BE REQUIRED FOR THICKNESS TRANSITION.

N.T.S.

ROAD PAVEMENT CONSTRUCTION (CONCRETE)
TABLE C. TO BE READ IN CONJUNCTION WITH HyD
STANDARD DRAWING NO. H1102

SUBGRADE, E (MPa)	CARRIAGEWAY			
	50	100	150	200
CONCRETE SLAB THICKNESS (mm)	240	230	230	225
MESH REINFORCEMENT	C636 MESH OF BS 4483	C503 MESH OF BS 4483	C503 MESH OF BS 4483	C503 MESH OF BS 4483

TABLE B. ROAD PAVEMENT CONSTRUCTION (FLEXIBLE) TO BE READ
IN CONJUNCTION WITH HyD STANDARD DRAWING NO. H1101

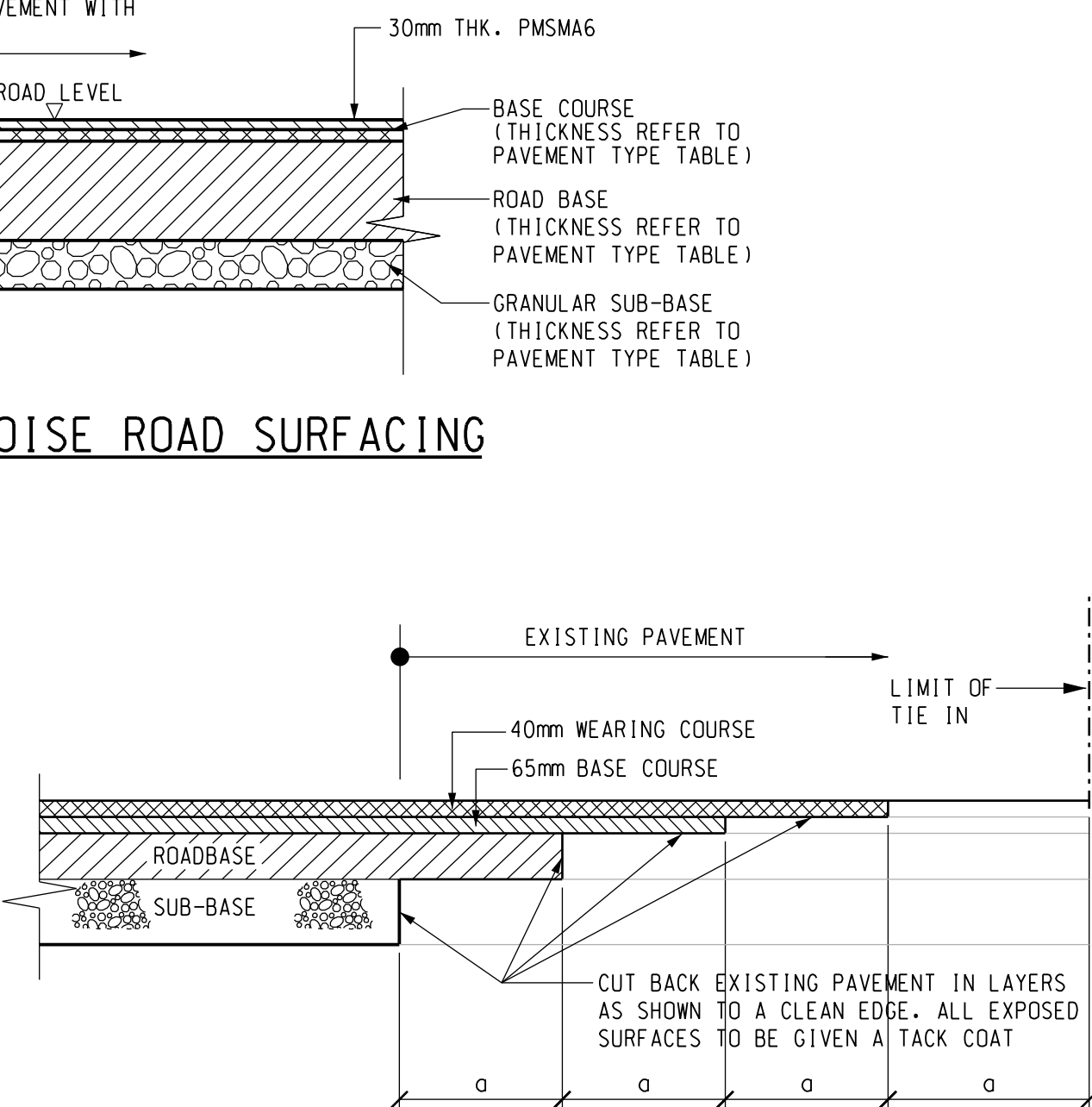
PAVEMENT STRUCTURE	THICKNESS (mm)	MATERIAL CHOICE
WEARING % COURSE	30	6mm NOMINAL SIZE POLYMER MODIFIED STONE MASTIC ASPHALT (PMSMA6)
	40	20mm NOMINAL SIZE WEARING COURSE MATERIAL (WC20)
BASE COURSE	65	28mm NOMINAL SIZE BASE COURSE MATERIAL
ROAD * BASE	405 365 335 305 285	37.5mm NOMINAL SIZE ROAD BASE MATERIAL (APPLY FOR PMSMA6)
	395 355 325 295 275	37.5mm NOMINAL SIZE ROAD BASE MATERIAL (APPLY FOR WC20)
SUB BASE	**	GRANULAR SUBBASE

*

I	II	III	IV	V
---	----	-----	----	---

** SEE TABLE A

- I 50 < Esub-grade ≤ 100 MPa
II 100 < Esub-grade ≤ 150 MPa
III 150 < Esub-grade ≤ 200 MPa
IV 200 < Esub-grade ≤ 250 MPa
V Esub-grade > 250 MPa
- % MATERIAL CHOICE REFER TO DRAWING NOS. 282748/C6/HWY/1311 TO 1327



TIE-IN OF NEW PAVEMENT CONSTRUCTION
WITH EXISTING ROAD PAVEMENT

N.T.S.

- a = 150 FOR LONGITUDINAL JOINT
a = 500 FOR TRANSVERSE JOINT

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Second Phase Development - Contract 6 -
Site Formation and Engineering
Infrastructure Works

Drawing title
**ROADWORKS DETAILS
(SHEET 1)**

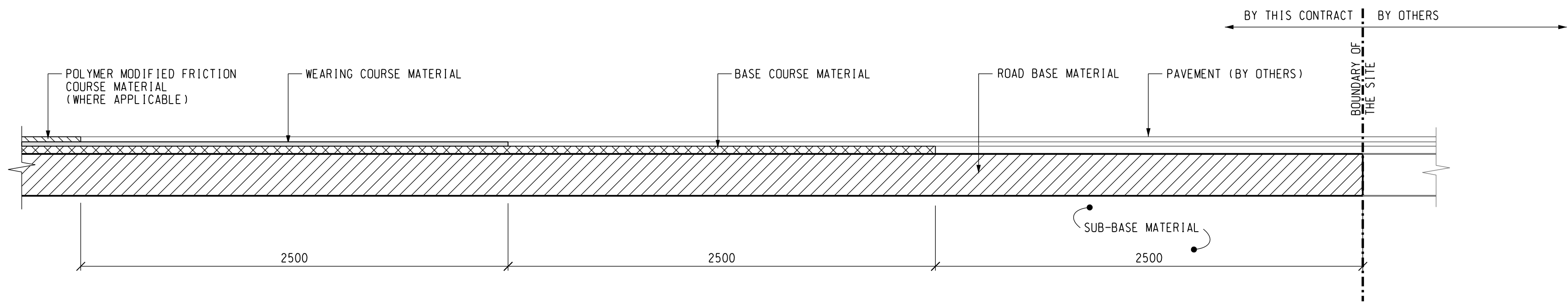
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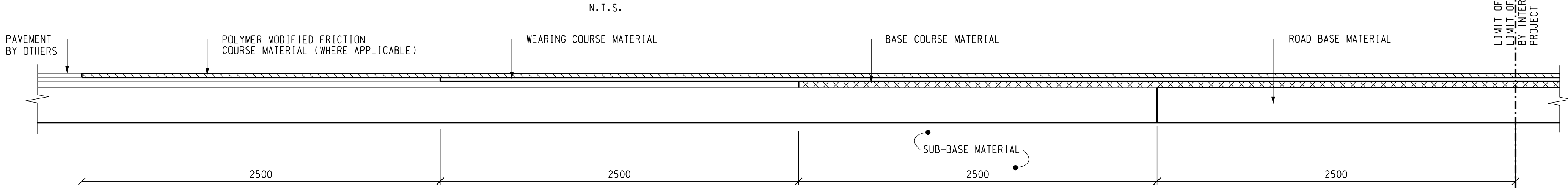


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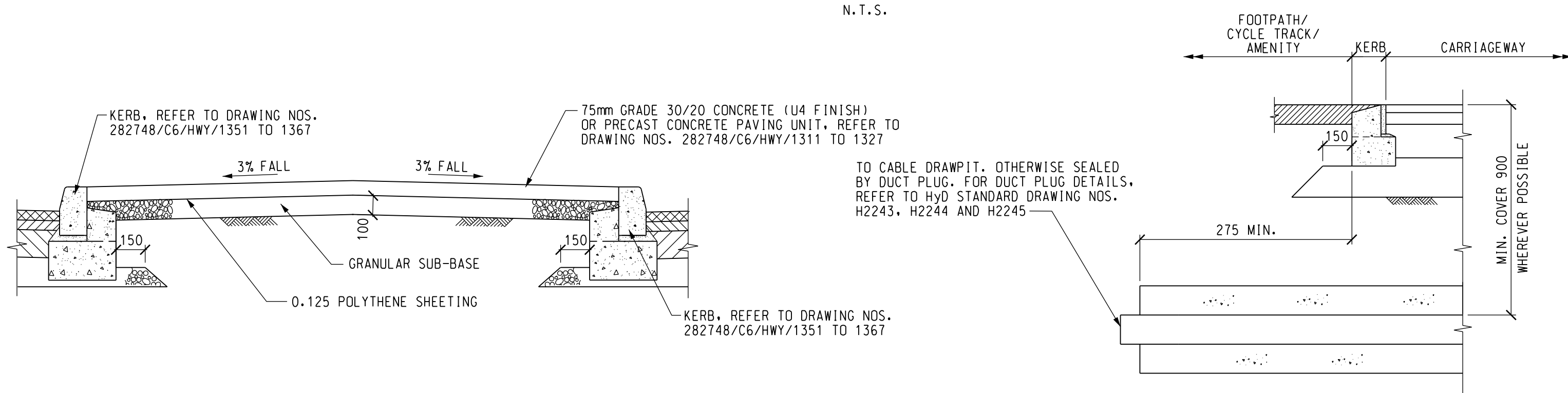
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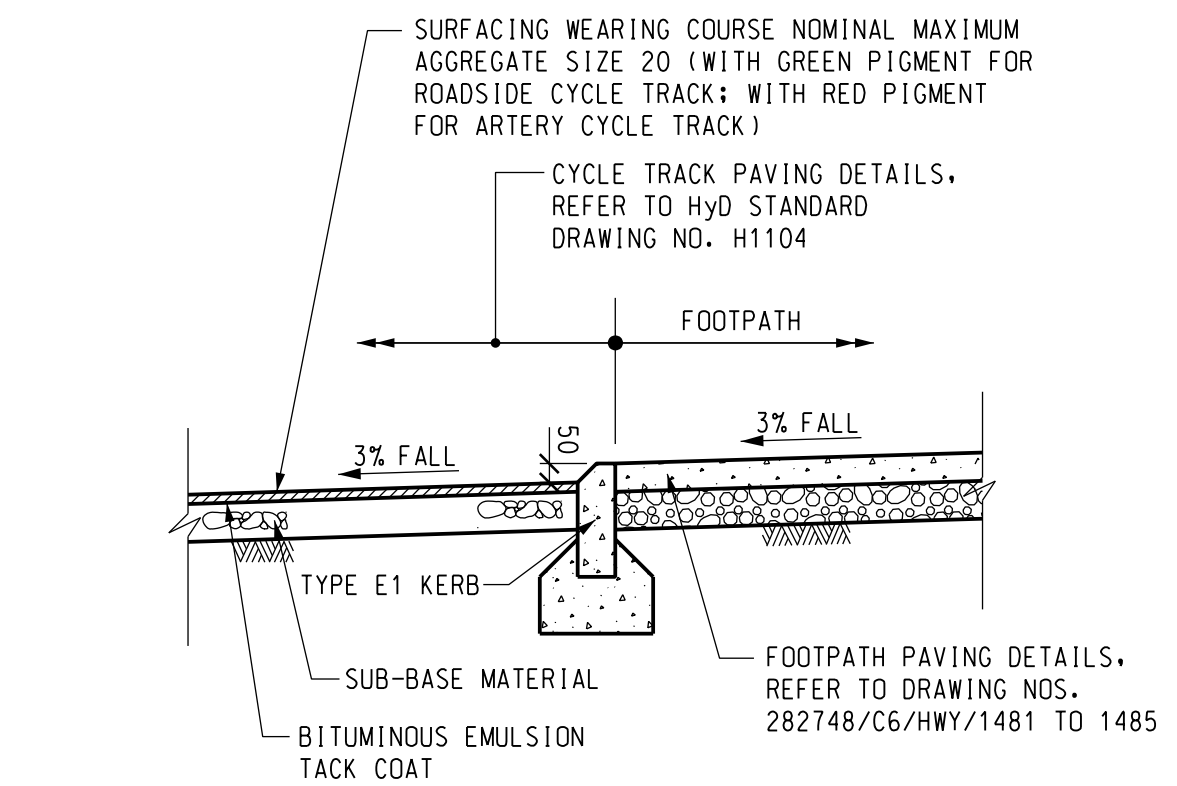
DEMARCATON OF PAVEMENT WITH INTERFACE PROJECT (ARRANGEMENT 'A')



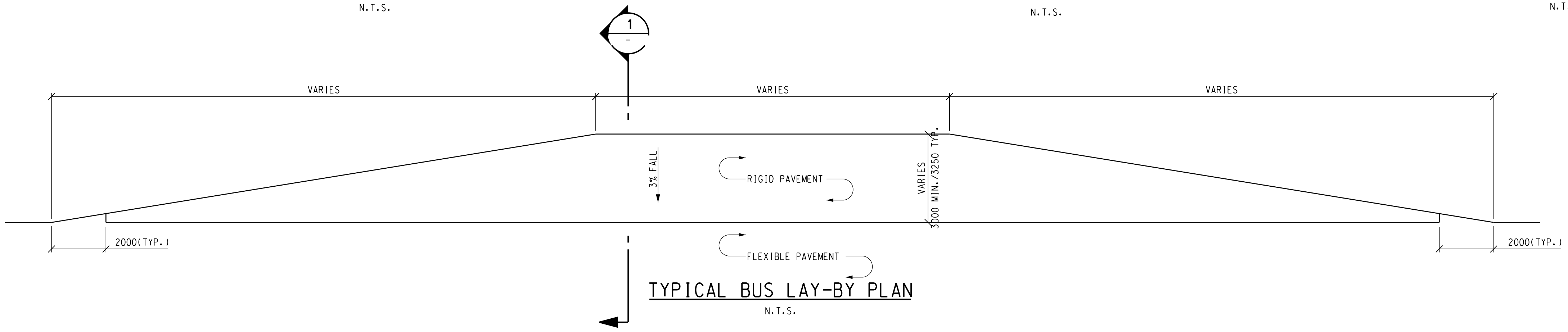
DEMARCATON OF PAVEMENT WITH INTERFACE PROJECT (ARRANGEMENT 'B')



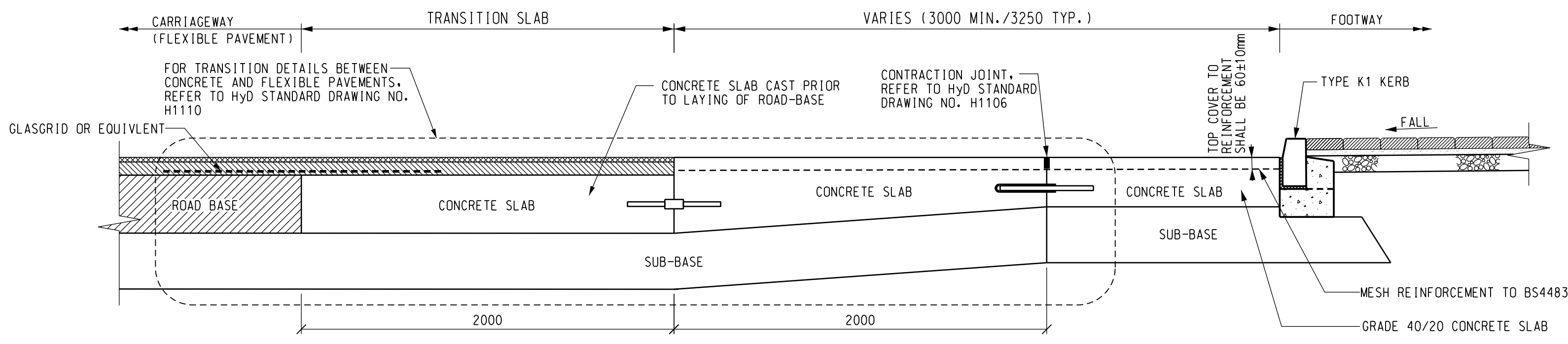
DETAILS OF REFUGE ISLAND SURFACING



TYPICAL KERB CONSTRUCTION BETWEEN CYCLE TRACK AND FOOTPATH



TYPICAL BUS LAY-BY PLAN



SECTION 1 SCALE N.T.S.

NOTES
1. FOR NOTES, REFER TO DRAWING NO. 282748/C6/HWY/1401.

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ROADWORKS DETAILS			
(SHEET 2)			
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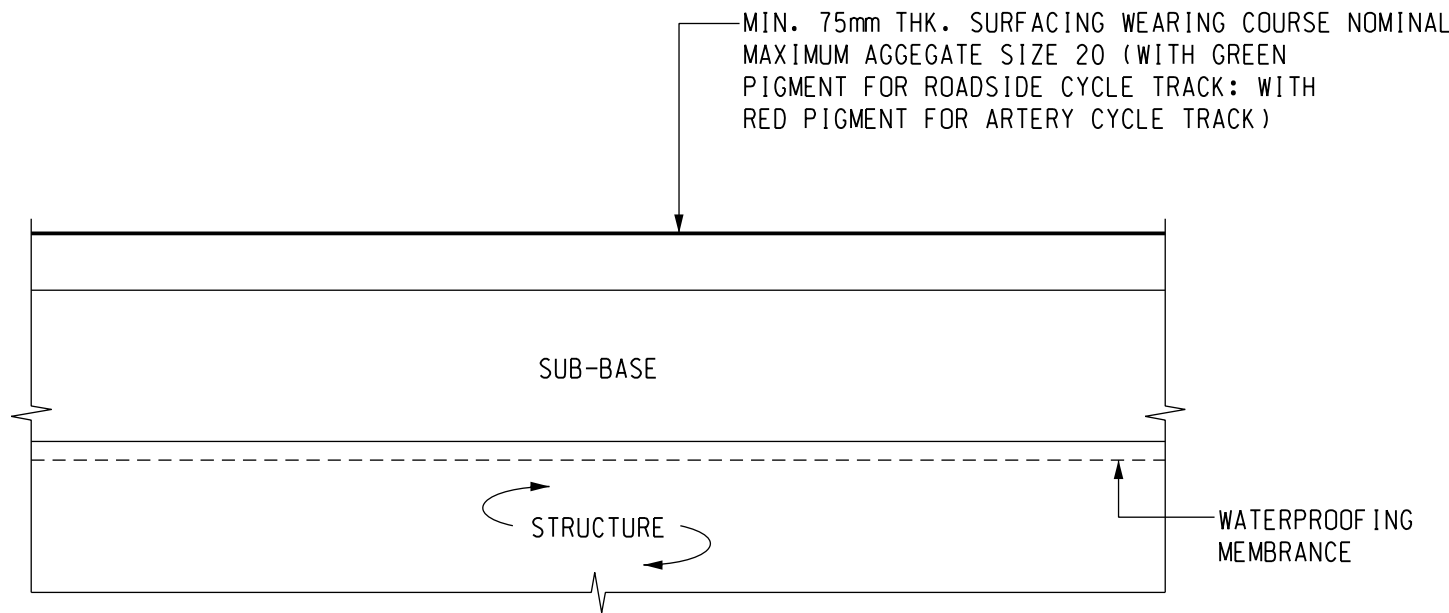
Drawing title
ROADWORKS DETAILS (SHEET 3)

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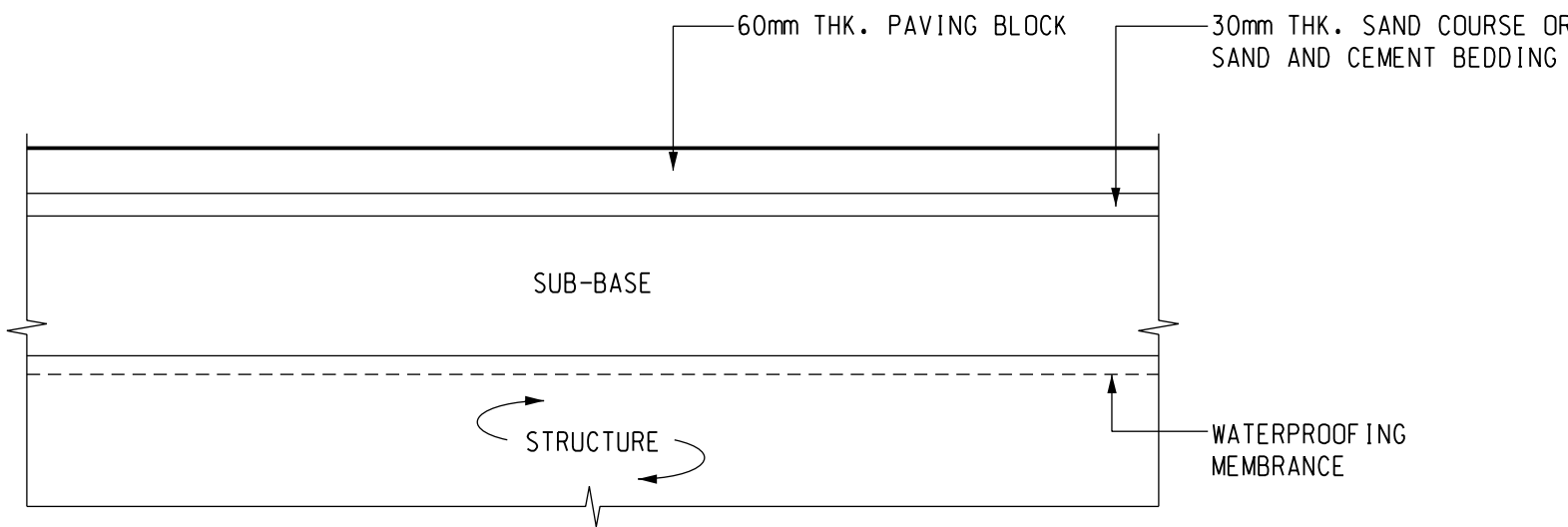
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CYCLE TRACK PAVEMENT ON STRUCTURE
N.T.S.



FOOTPATH PAVEMENT ON STRUCTURE
N.T.S.

NOTES

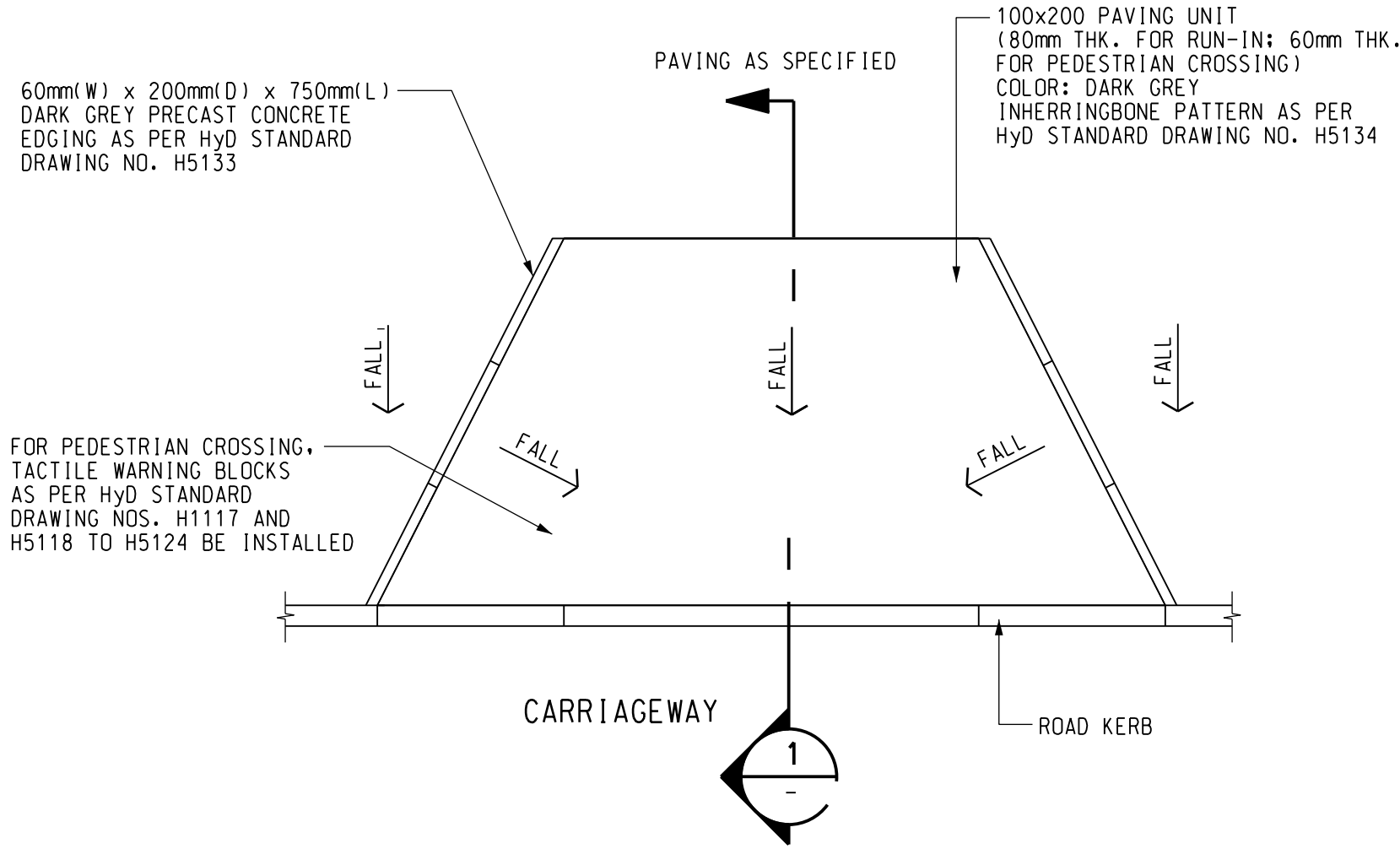
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Drawing title			
ROADWORKS DETAILS (SHEET 4)			
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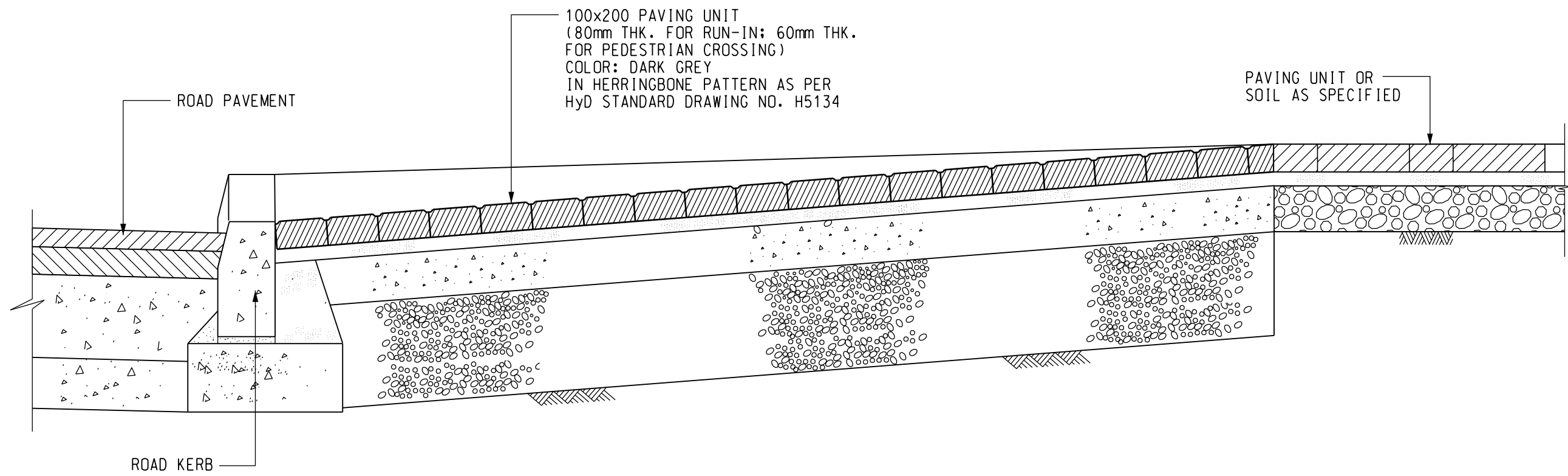
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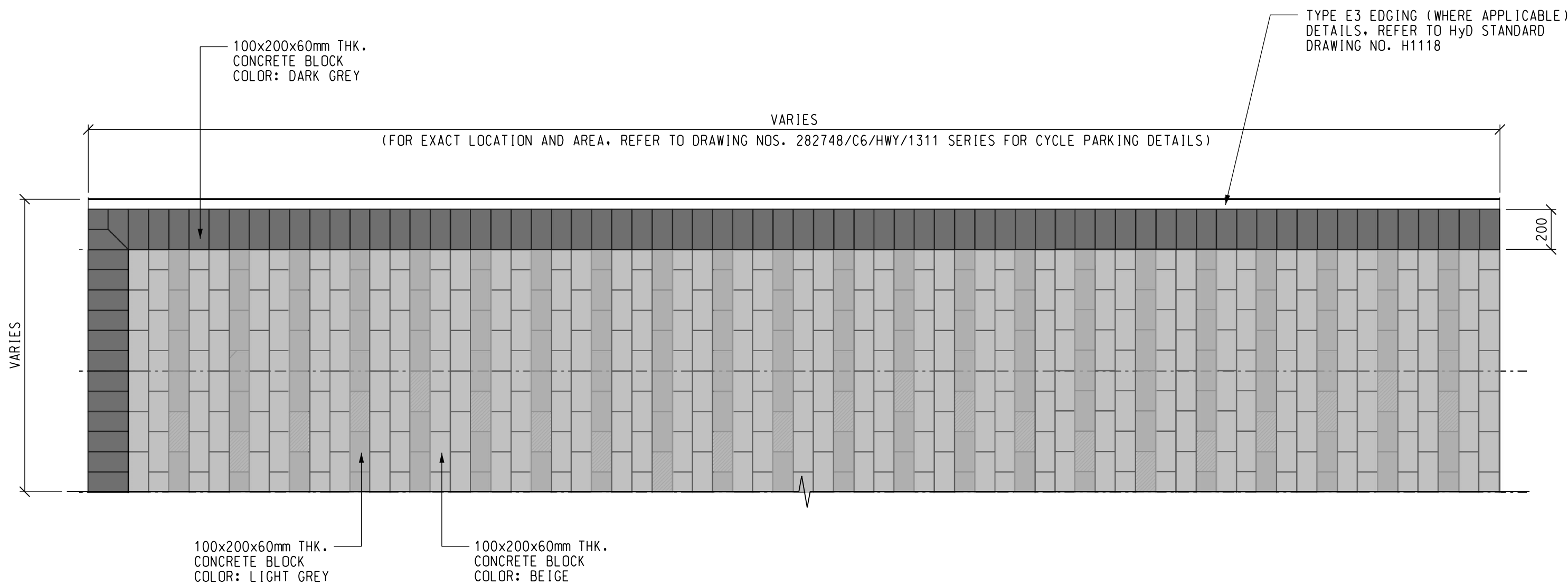
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**TYPICAL RUN-IN / PEDESTRIAN
CROSSING DETAIL PLAN**
N.T.S.



SECTION 1
SCALE N.T.S.



DETAIL A
SCALE N.T.S.

PROPOSED PAVING PATTERN

ALL FLOOR FINISHES SHALL HAVE A SLIP RESISTENCE OF NOT LESS THAN 65 TRL PENDULUM VALVE UNDER WET CONDITION AND/OR COMPLY WITH THE GUIDELINES ON UNIVERSAL ACCESSIBILITY-BEST PRACTICES AND GUIDELINES' (ASD).

NOTES

- FOR PAVING PATTERN LAYOUT PLANS, REFER TO DRAWING NOS. 282748/C6/HWY/1311/ SERIES.
- THE EXTENT / DISTRIBUTION OF PAVING SHALL BE CONFIRMED ON SITE WITH THE SUPERVISOR.
- ALL PAVING UNITS SHALL BE PRECAST CONCRETE PAVING UNITS TYPE "B" AS SPECIFIED IN HYD STANDARD DRAWINGS, G.S. AND P.S.
- ALL PAVING UNITS SHALL BE GRADE A UNITS AND COMPLY WITH G.S. CLAUSE 11.66 ADDITIONAL REQUIREMENTS FOR GRADE A UNITS.
- ALL CUTTING AND TRIMMING OF PAVING UNITS SHALL COMPLY WITH HYD GN/044C GUIDANCE NOTES ON DESIGN AND CONSTRUCTION OF PAVEMENTS WITH PAVING UNITS.
- PAVING UNITS-JOINT STABILIZING SEALER SHALL COMPLY WITH HYD STANDRAD DRAWING NO. H5127.
- FOR PAVING UNITS CONTAINING RECYCLED GLASS CULLET OF 20% TO 25% BY WEIGHT OF THE TOTAL AGGREGATES, EACH UNIT SHALL BEAR AN ADDITIONAL SPACER NIB AS IN IDENTIFICATION MARK ON ONE OF THE VERTICAL SURFACES OF THE UNIT AS SHOWN IN THE MANUFACTURER'S CATALOGUE.
- COPING STONE END PIECE SHALL BE NEATLY CUT USING A PAVER SCOUR OR MECHANICAL OR HYDRAULIC GUILLOTINE AND FITTED SUBSEQUENTLY. CUT PIECE OF COPING STONES WHICH ARE SMALLER IN SIZE THAN 300mm OF A FULL BLOCK SHALL NOT BE USED, WHILE COPING SIZE LONGER THAN 900mm IS ACCEPTABLE TO AVOID THE SITUATION.
- ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SPECIFIED.
- ALL FLOOR FINISHES SHALL HAVE A SLOP RESISTANCE OF NOT LESS THAN 65 TRL PENDULUM VALUE UNDER WET CONDITION AND/OR COMPLY WITH THE GUIDELINES ON UNIVERSAL ACCESSIBILITY-BEST PRACTICES AND GUIDELINES' (ASD).
- THE CONTRACTOR SHALL SUBMIT THE FOLLOWING ITEMS FOR THE PROJECT MANAGER'S APPROVAL:-
 - MANUFACTURER'S CONCRETE PAVING BLOCK (GRADE A)'S CATALOGUE SHEETS, BROCHURES, DIAGRAMS, SCHEDULES, ILLUSTRATIONS, AND OTHER STANDARD DESCRIPTIVE DATA.
 - CERTIFICATES SUPPORTING THE MATERIAL AND PERFORMANCES OF THE CONCRETE PAVER BLOCK (GRADE A) IN FULL COMPLIANCE WITH THE HYD STANDARD DRAWING NO. H5102, AND CEDD G.S. CLAUSE 11.69 - PARTICULARS OF PAVING UNITS - ADDITIONAL REQUIREMENTS FOR GRADE A UNITS.
 - SAMPLES FOR VERIFICATION PURPOSES ON FULL-SIZE UNITS OF EACH TYPE OF UNIT CONCRETE PAVING BLOCK (GRADE A) INDICATED, IN SETS FOR EACH COLOUR, TEXTURE AND PATTERN SPECIFIED, SHOWING FULL RANGE OF VARIATIONS OF COLOUR TO BE EXPECTED IN THE COMPLETED WORKS TO THE SATISFACTION AND APPROVAL OF THE PROJECT MANAGER. THE CONTRACTOR SHALL SUBMIT SAMPLES OF CONCRETE PAVING BLOCK IN ACCORDANCE WITH THE CEDD G.S. CLAUSE 11.71-SAMPLES OF MATERIALS - ADDITIONAL REQUIREMENTS FOR GRADE A UNITS.
 - SHOP DRAWINGS: THE CONTRACTOR SHALL PREPARE CONCRETE PAVING BLOCK INSTALLATION DRAWINGS TO ILLUSTRATE EACH PORTION OF THE PAVING PATTERNS INCLUDING FABRICATION, LAYING PATTERNS, SETTING-OUT DETAILS. SHOP DRAWINGS INCLUDE SPECIALLY PREPARED TECHNICAL DATA FOR LAYING THE PAVING PATTERNS, INCLUDING DRAWINGS, DIAGRAMS, SCHEDULES OF PAVING WORKS, INSTALLATION PAVING PATTERNS ARRANGEMENT, PAVING PATTERN INTERFACE ARRANGEMENT, CALCULATIONS AND MEASUREMENTS.
 - THE CONTRACTOR SHALL CROSS REFERENCE OF THE PROPOSED SHOP DRAWINGS TO THE DESIGN PAVING PATTERNS IN DRAWING NOS. 282748/C6/HWY/1481 TO 1485, AND THE PAVING PLANS IN DRAWINGS NOS. 282748/C6/HWY/1311/ SERIES. THE PROPOSED PAVING PATTERN AS INDICATED IN DRAWING NOS. 282748/C6/HWY/1481 TO 1485 ARE INDICATIVE AND SHOWN THE PATTERN DESIGN INTENTION ONLY. THE CONTRACTOR SHALL VERIFY FIELD MEASUREMENTS AND FIELD CONSTRUCTION CRITERIA TO PREPARE THE SHOP DRAWINGS FOR THE LAYING PATTERN. THE CONTRACTOR SHALL CALCULATE AND ARRANGE THE OVERALL CONFIGURATION AND THE MAIN DIRECTION OF THE FOOTPATH SO AS TO MINIMIZE THE CUTTING OF CONCRETE PAVING BLOCKS AND ALLOW MAJOR CHANGES IN DIRECTION OF PAVING UNITS WITHOUT MAJOR VARIATIONS ON THE LAYING PATTERN.

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Project Title

Contract No. YL/2023/06

Hung Shui Kiu/Ha Tsuen

New Development Area

Second Phase Development - Contract 6 -

Site Formation and Engineering

Infrastructure Works

Drawing title

PAVING DETAILS

(SHEET 1)

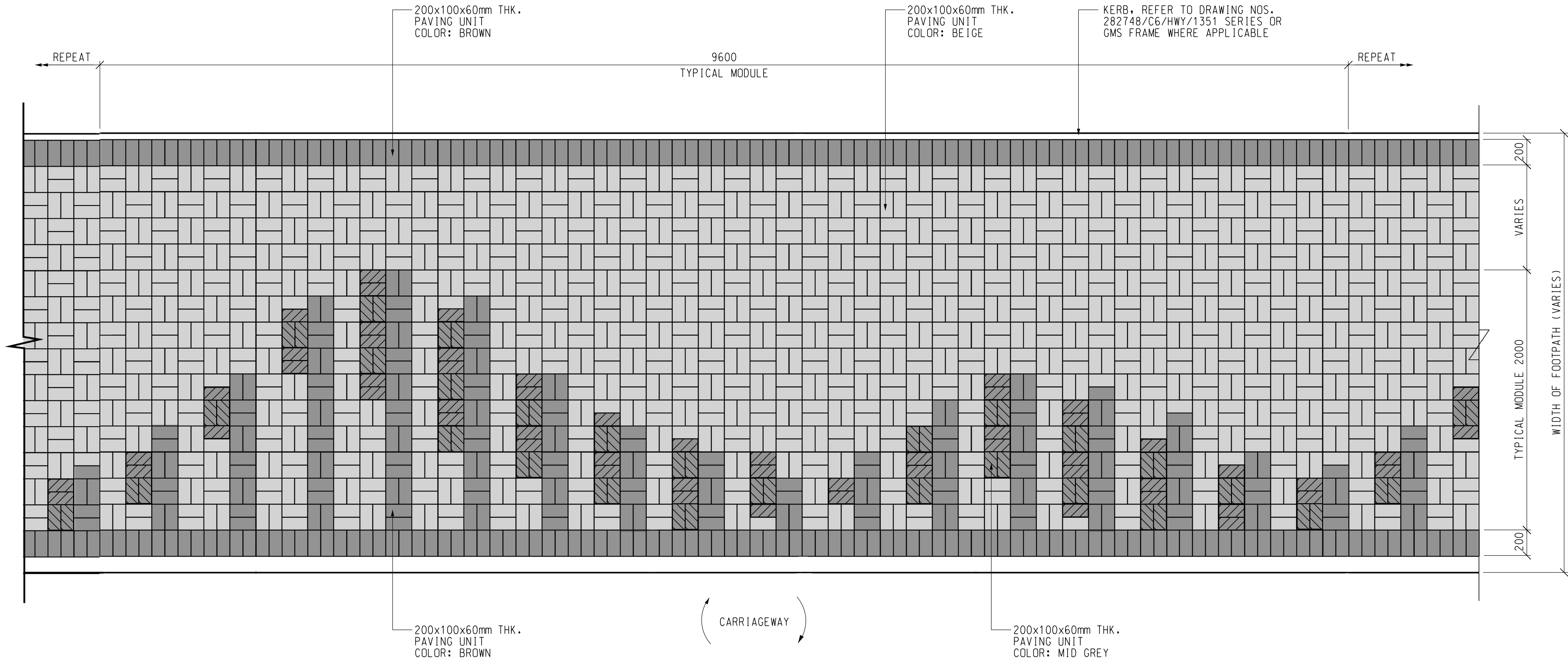
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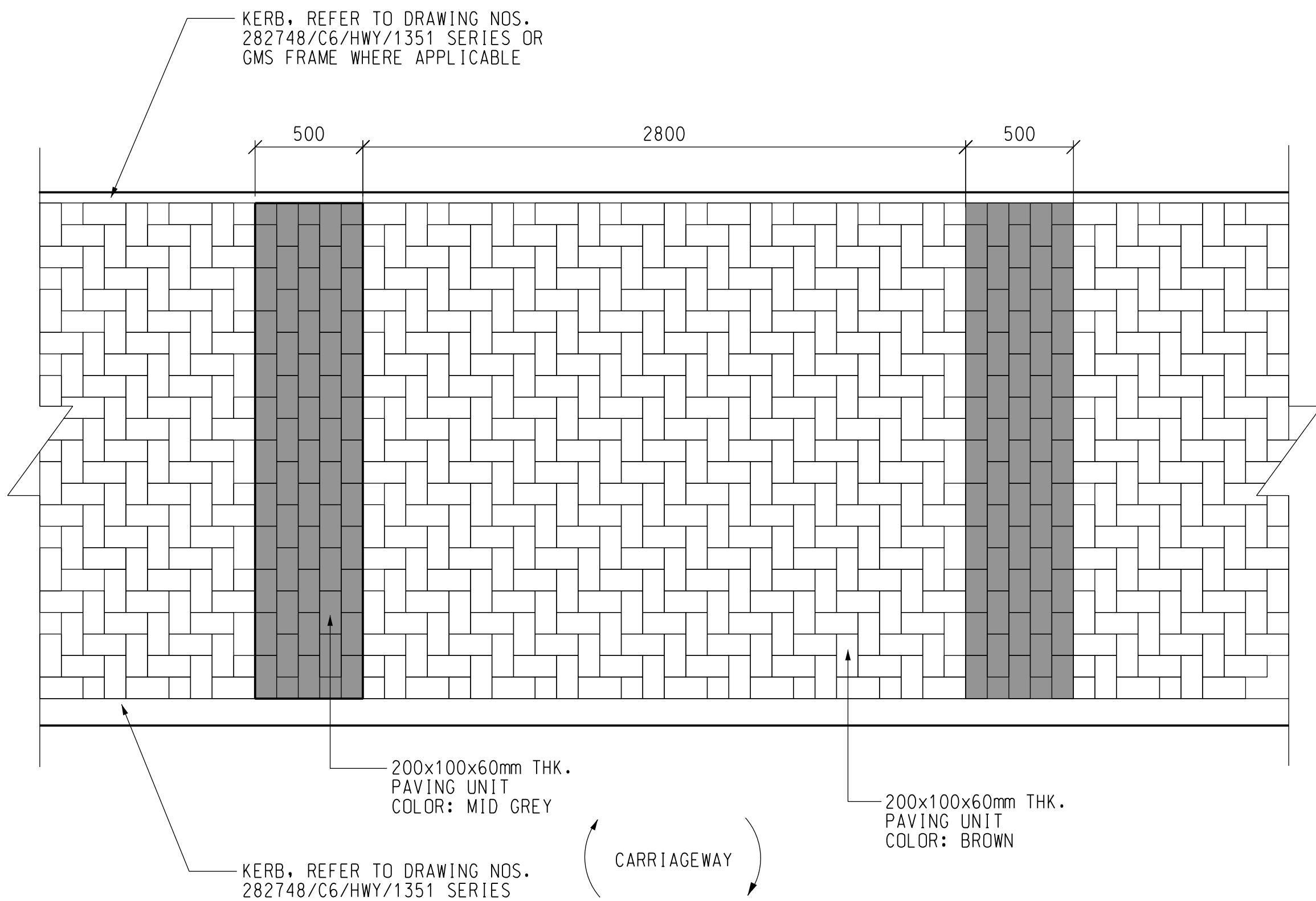


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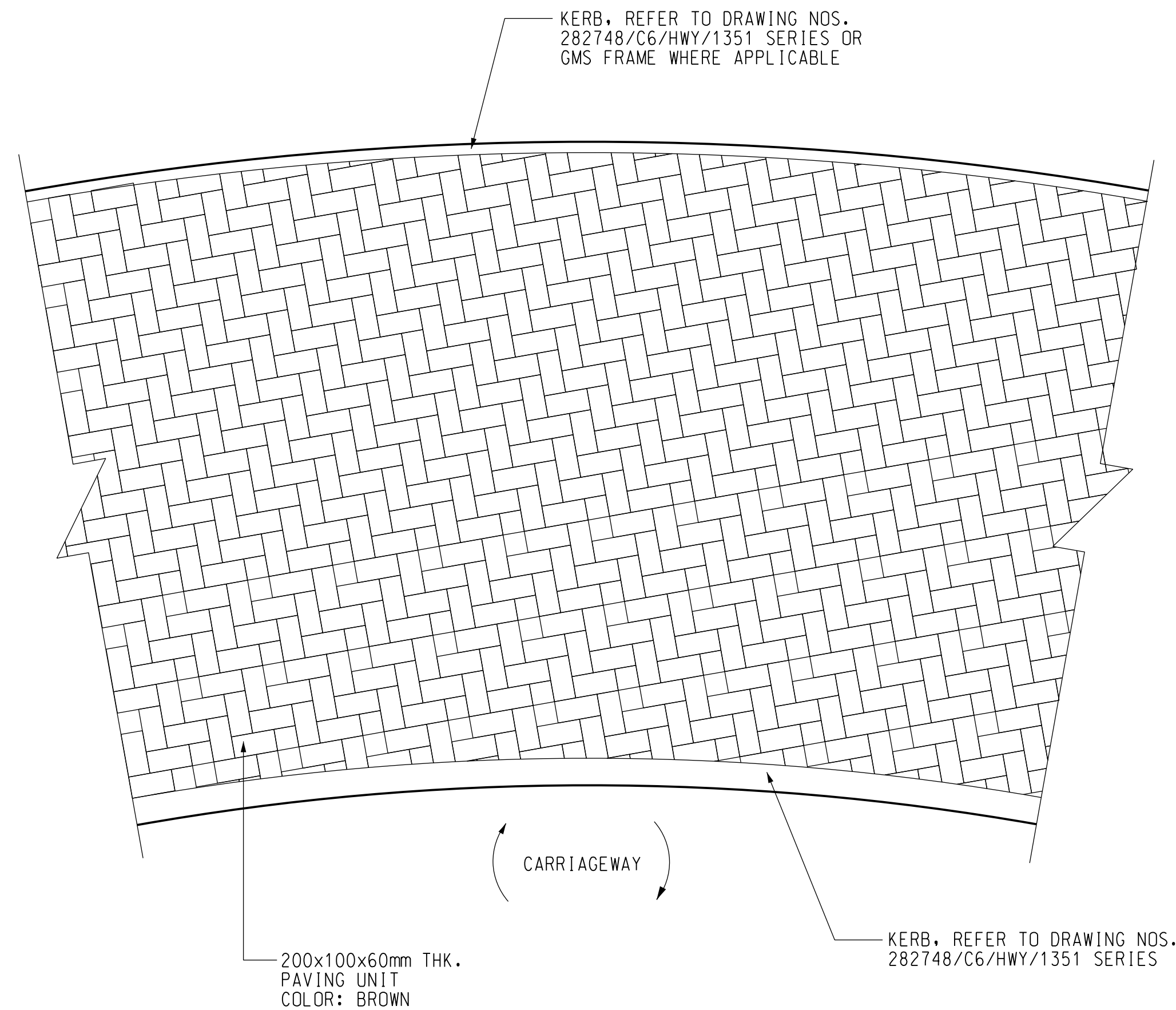
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PAVING PATTERN (TYPE 1)
SCALE N.T.S.



PAVING PATTERN (TYPE 2) ALONG STRAIGHT SECTION
SCALE N.T.S.



PAVING PATTERN (TYPE 2) ALONG CURVE SECTION
SCALE N.T.S.

NOTES

- FOR NOTES AND LEGEND, REFER TO DRAWING NO. 282748/C6/HWY/1301 AND 1481.

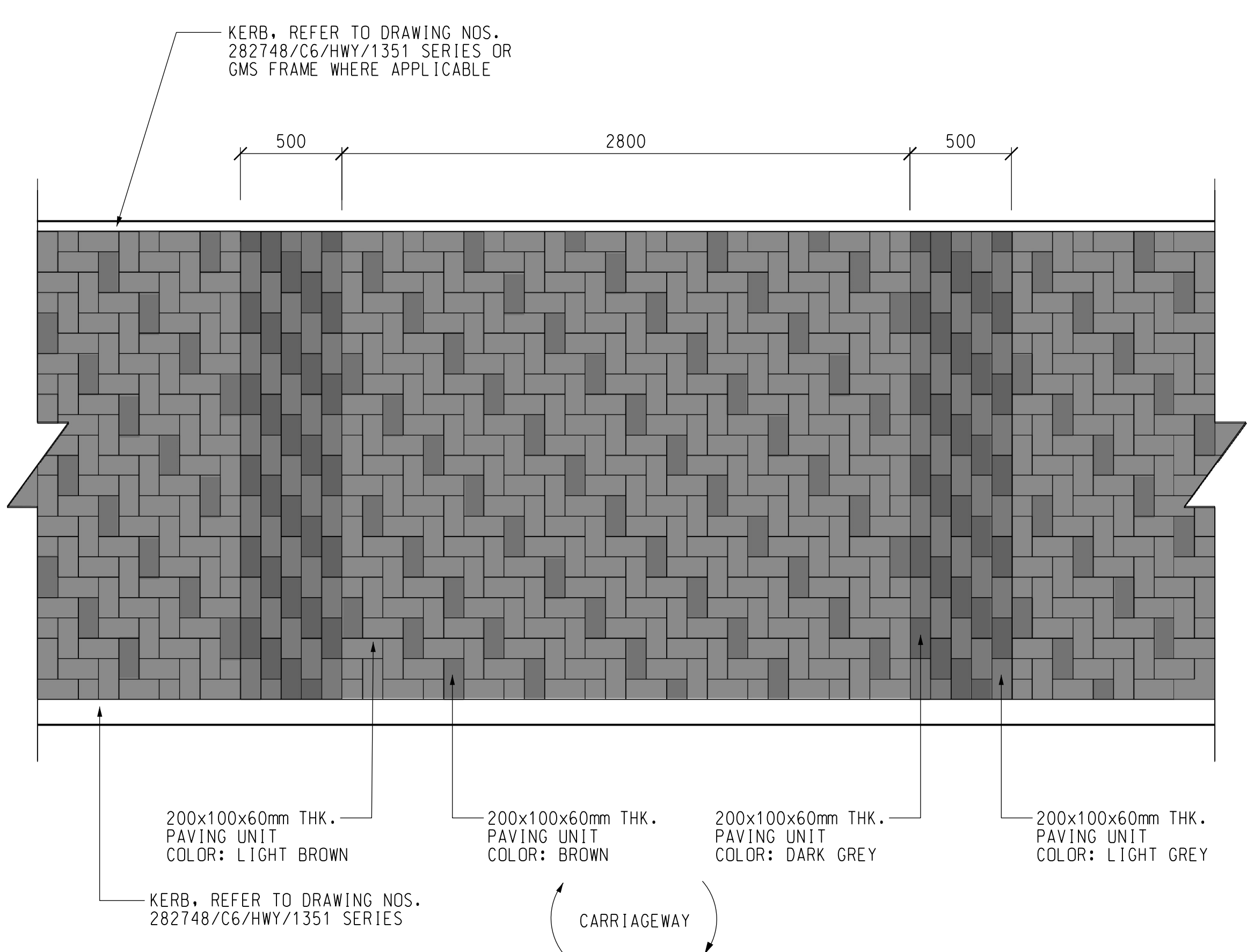
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PAVING DETAILS			
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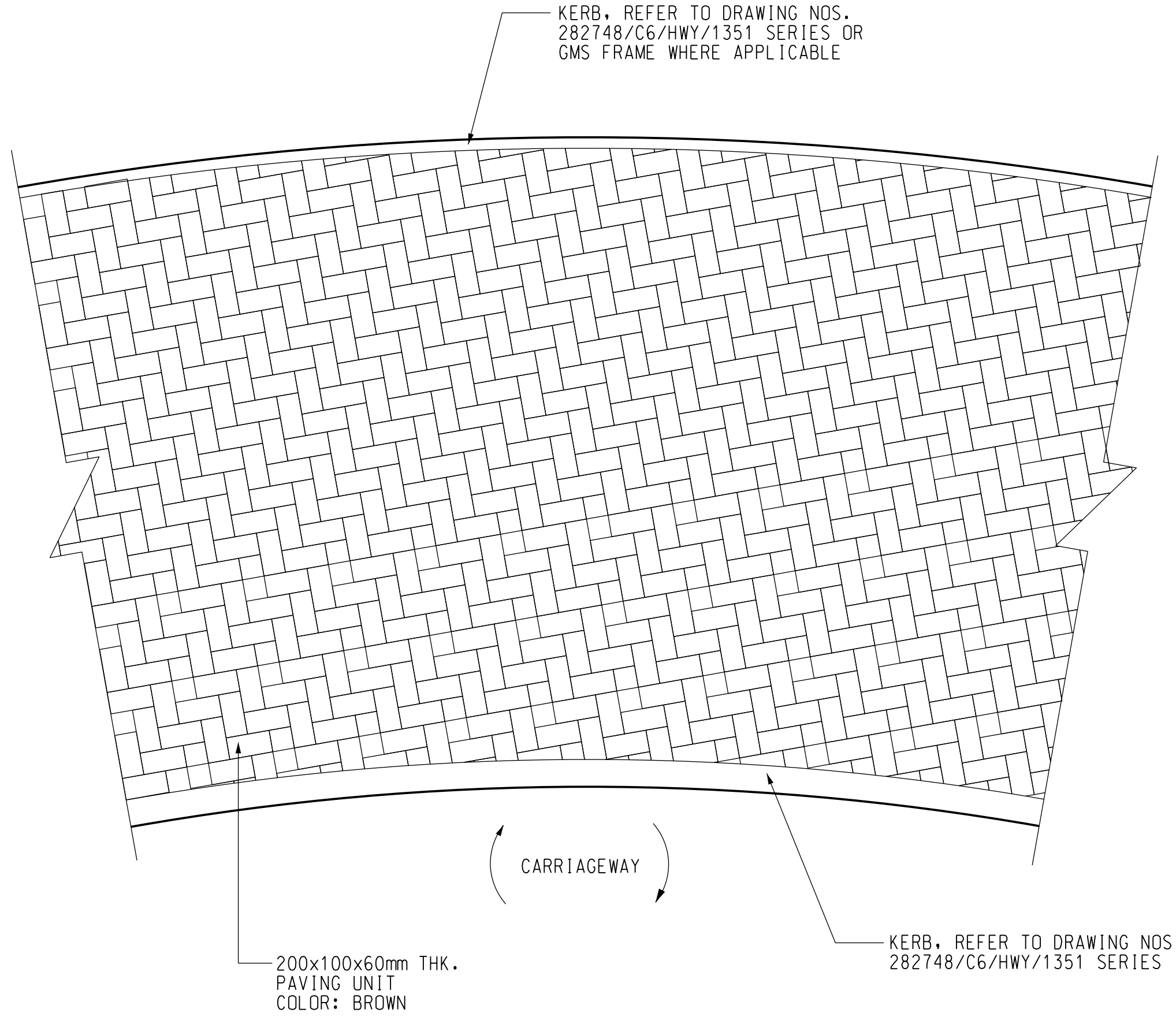


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PAVING PATTERN (TYPE 3) ALONG STRAIGHT SECTION
SCALE N.T.S.



PAVING PATTERN (TYPE 3) ALONG CURVE SECTION
SCALE N.T.S.

NOTES

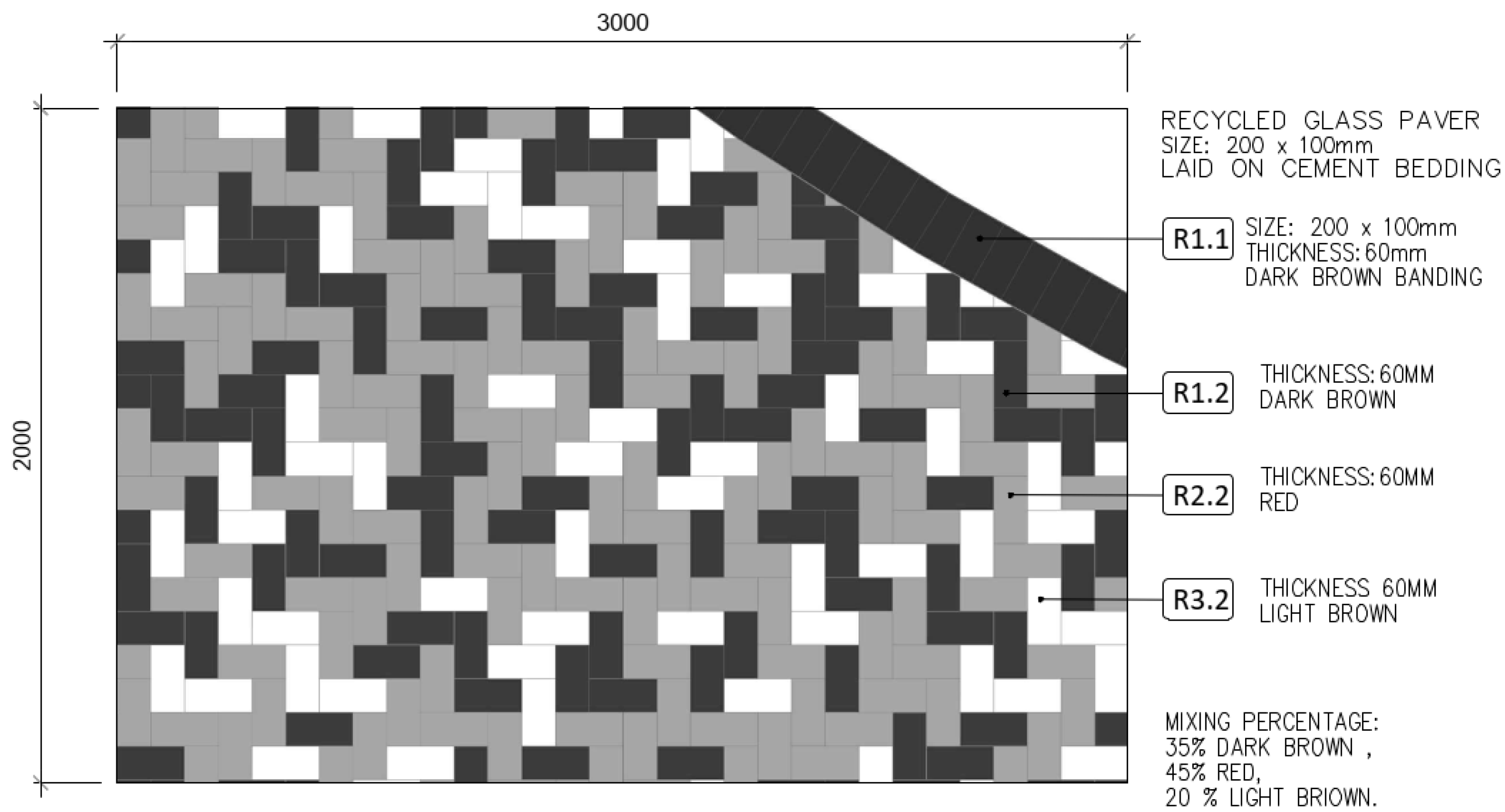
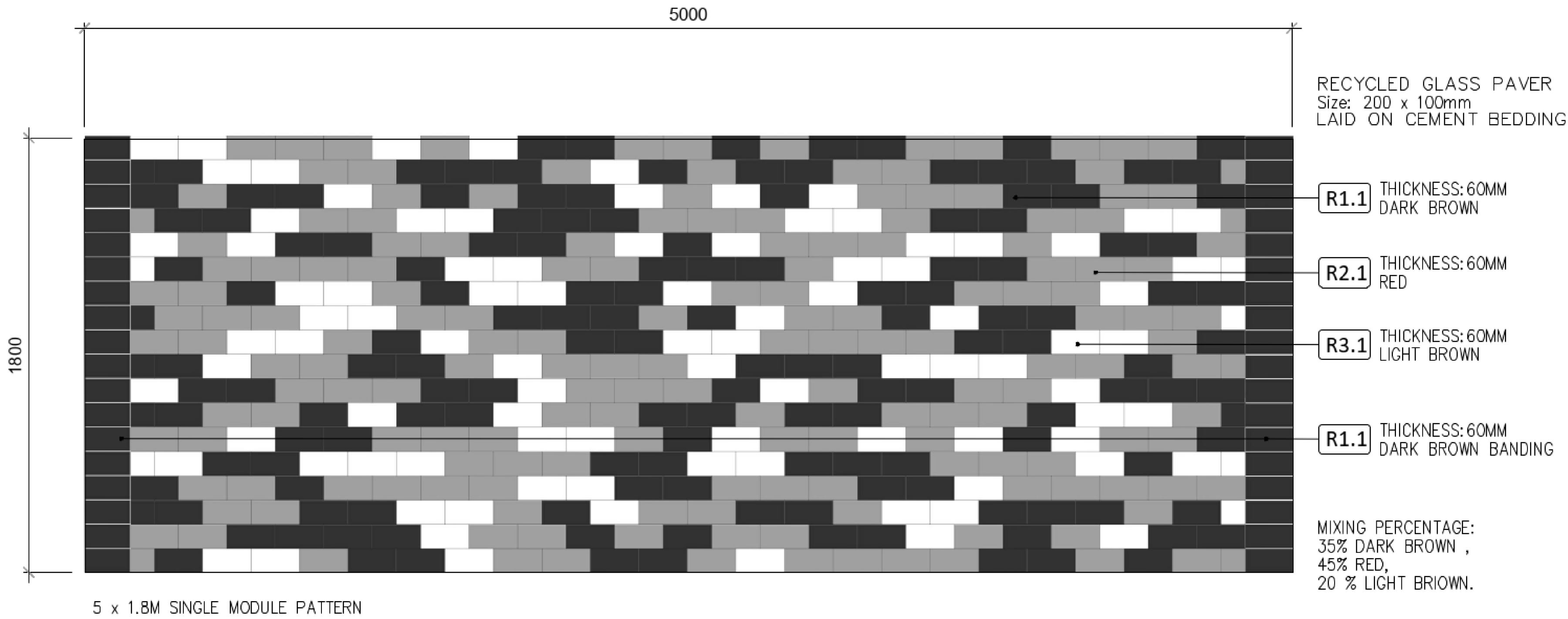
1. FOR NOTES AND LEGEND, REFER TO DRAWING NO. 282748/C6/HWY/1301 AND 1481.

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Drawing title			
PAVING DETAILS			
(SHEET 3)			
Drawing no.			Rev.
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PAVING PATTERN (TYPE 7)
N.T.S.

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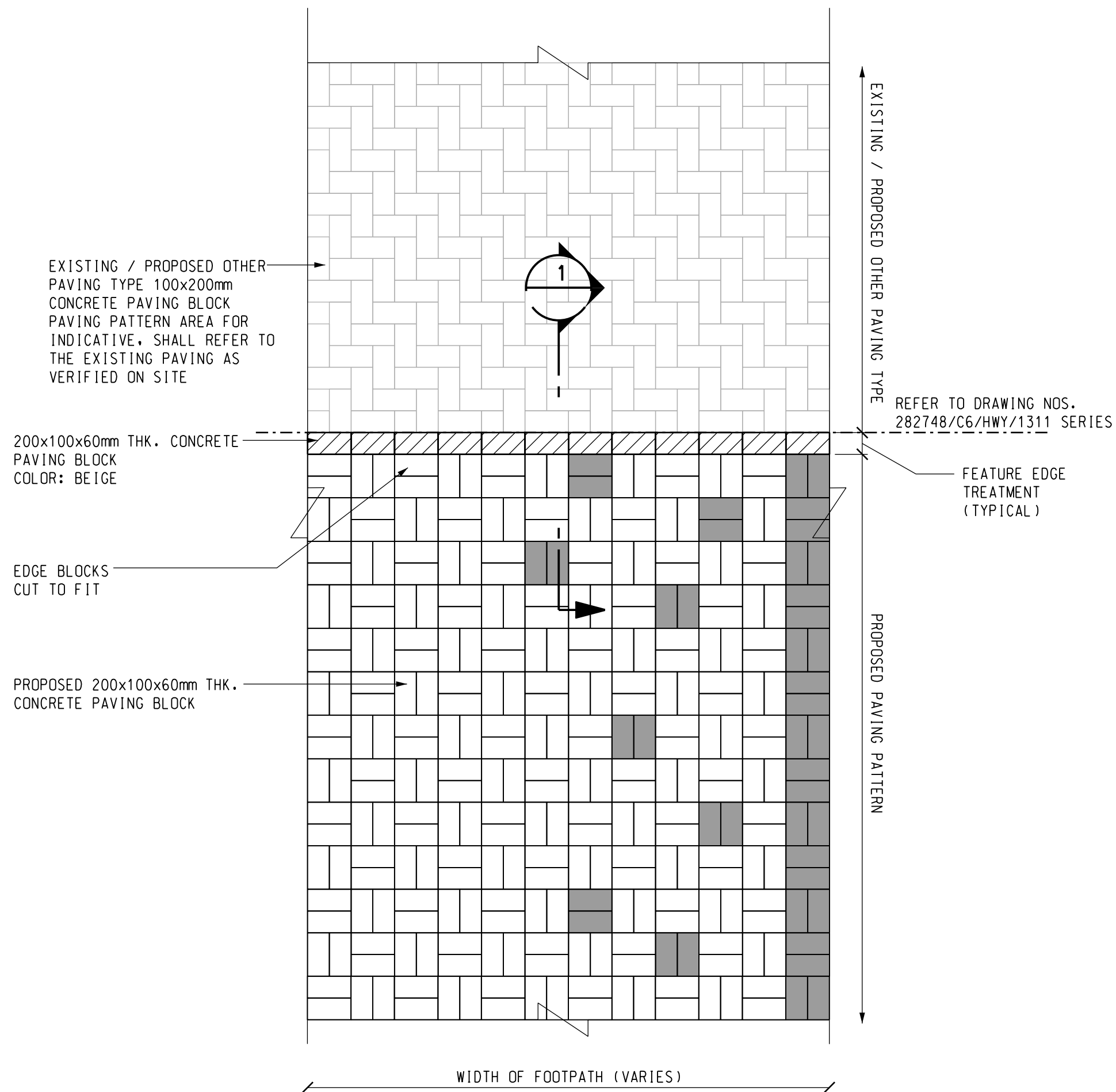
1. FOR NOTES AND LEGEND, REFER TO DRAWING
NO. 282748/C6/HWY/1301 AND 1481.

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PAVING DETAILS			
(SHEET 4)			
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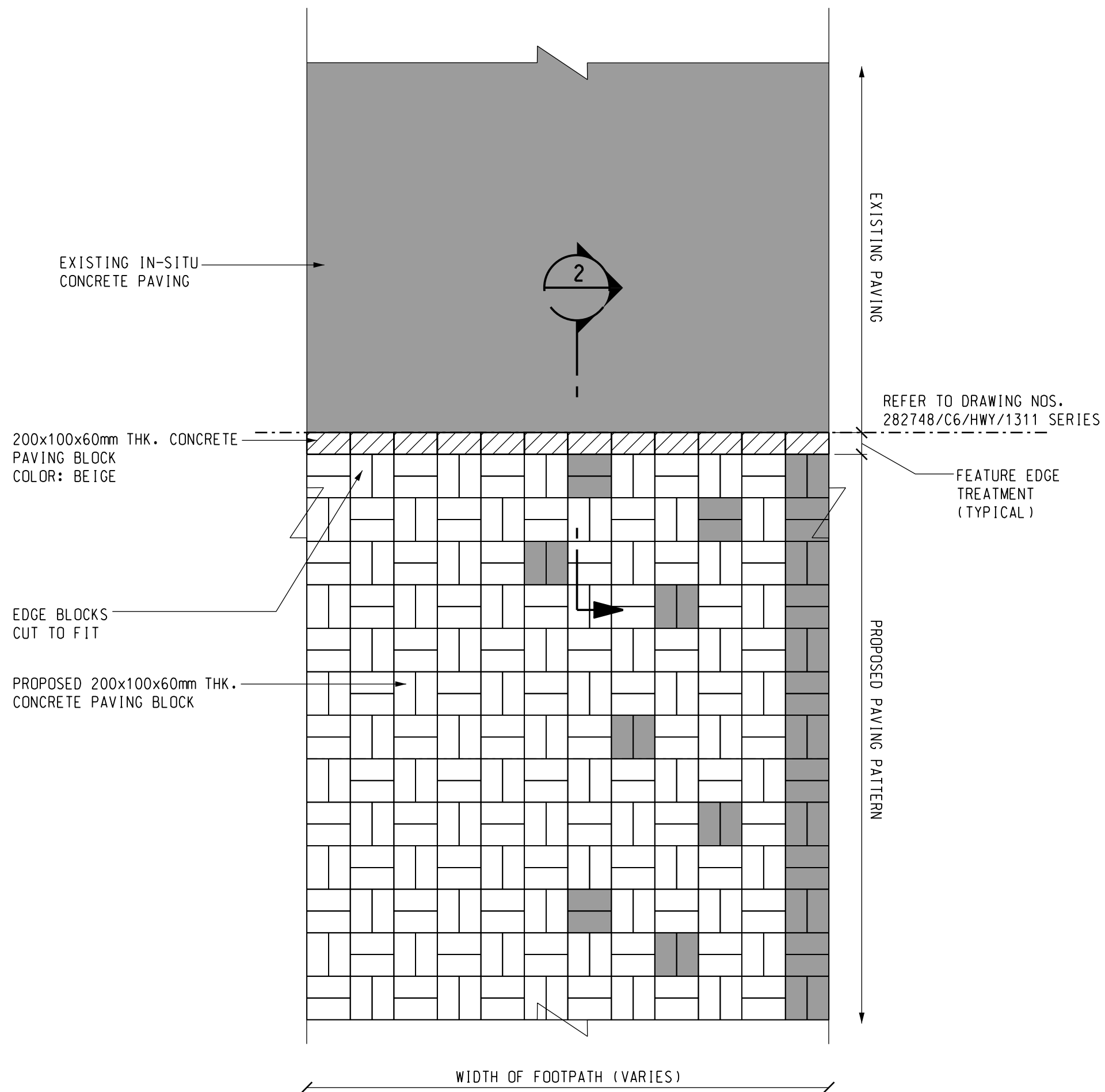


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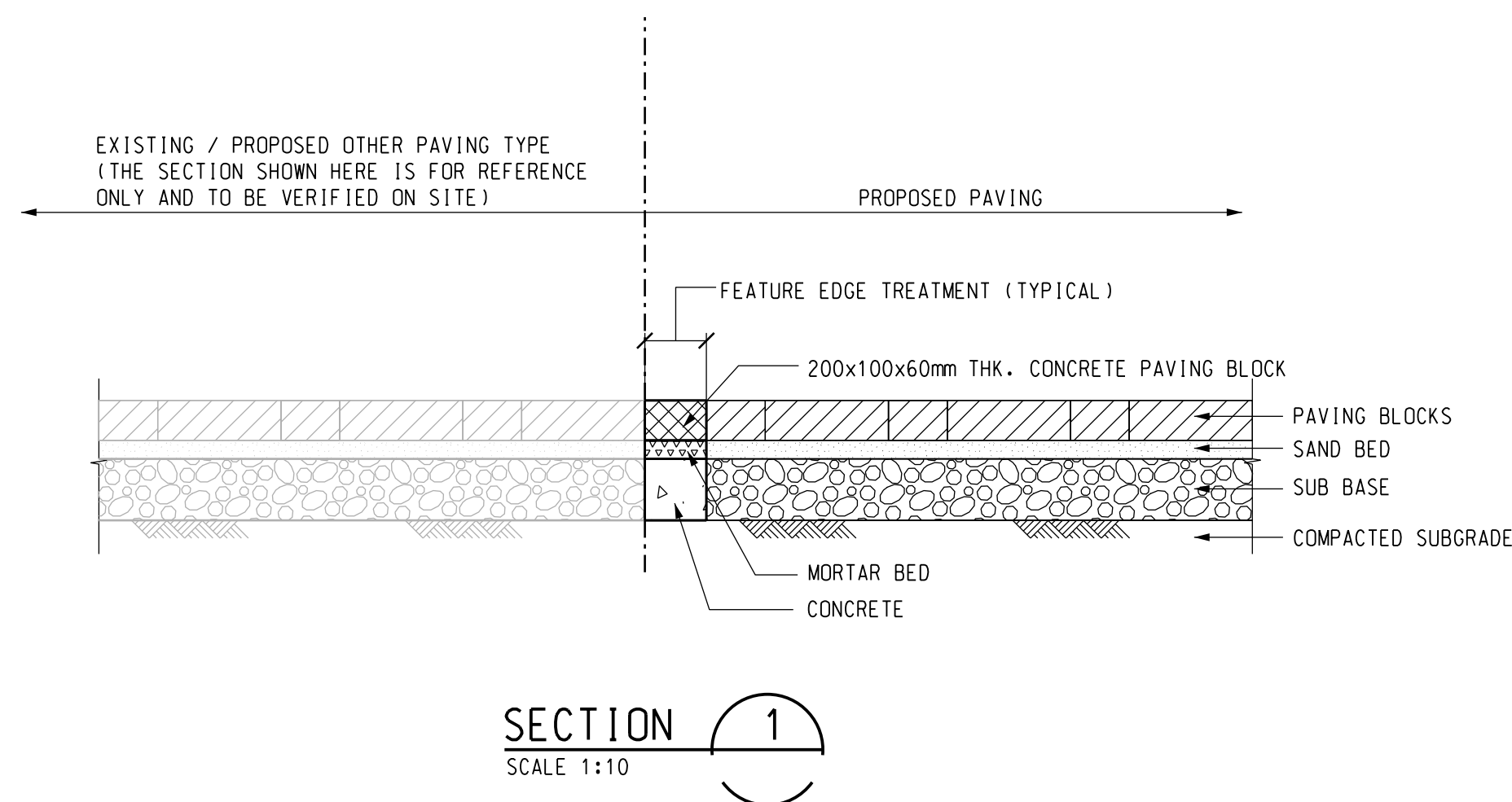
PAVING INTERFACE DETAILS

DETAIL A
SCALE 1:20



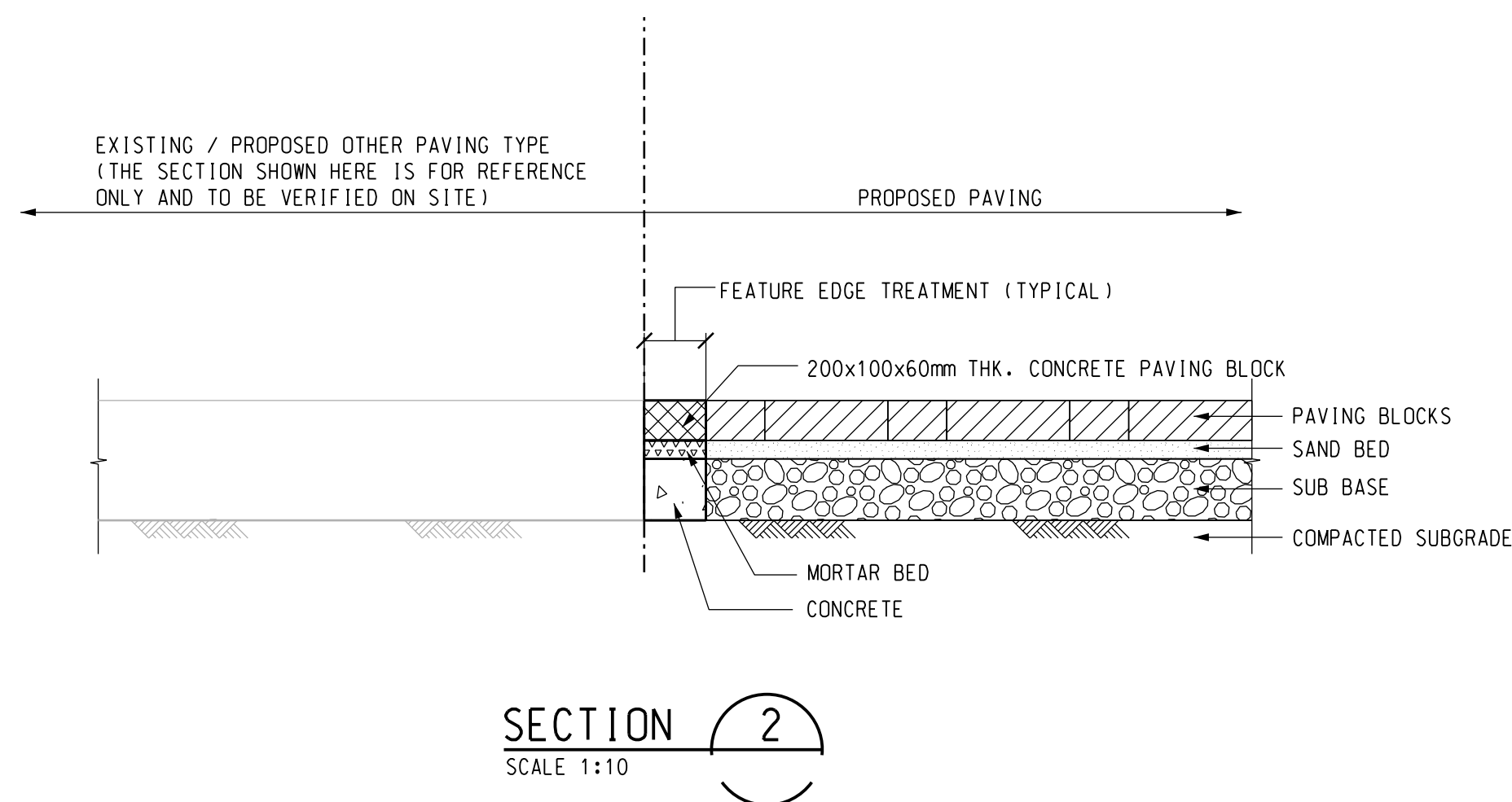
PAVING INTERFACE DETAILS

DETAIL B
SCALE 1:20



TYPICAL EDGE TREATMENT FOR PAVING INTERFACE
WITH EXISTING 200x100 CONCRETE PAVING - SECTION

SECTION 1
SCALE 1:10



TYPICAL EDGE TREATMENT FOR PAVING INTERFACE
WITH EXISTING 200x100 CONCRETE PAVING - SECTION

SECTION 2
SCALE 1:10

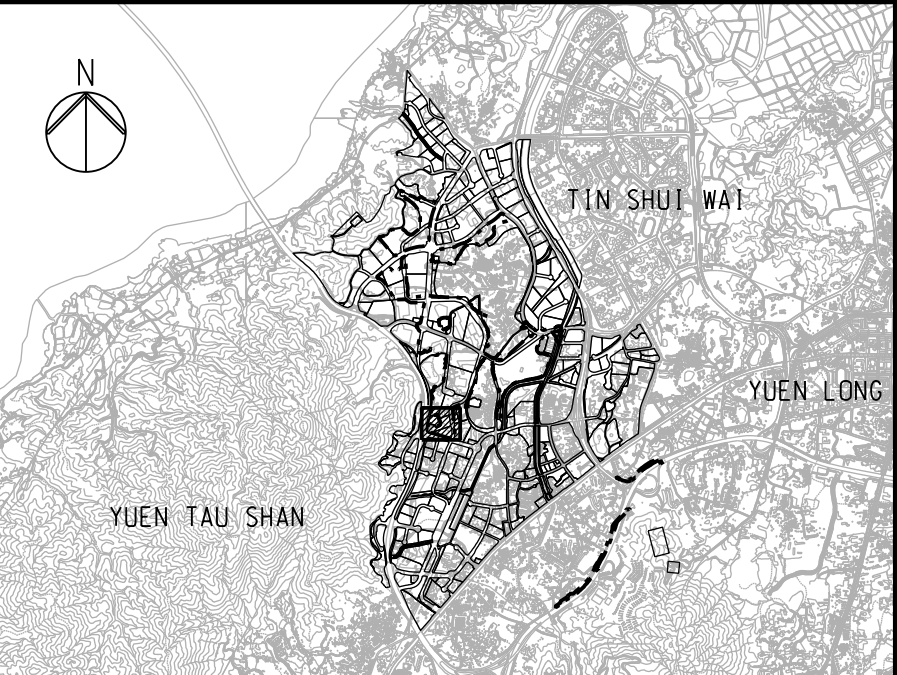
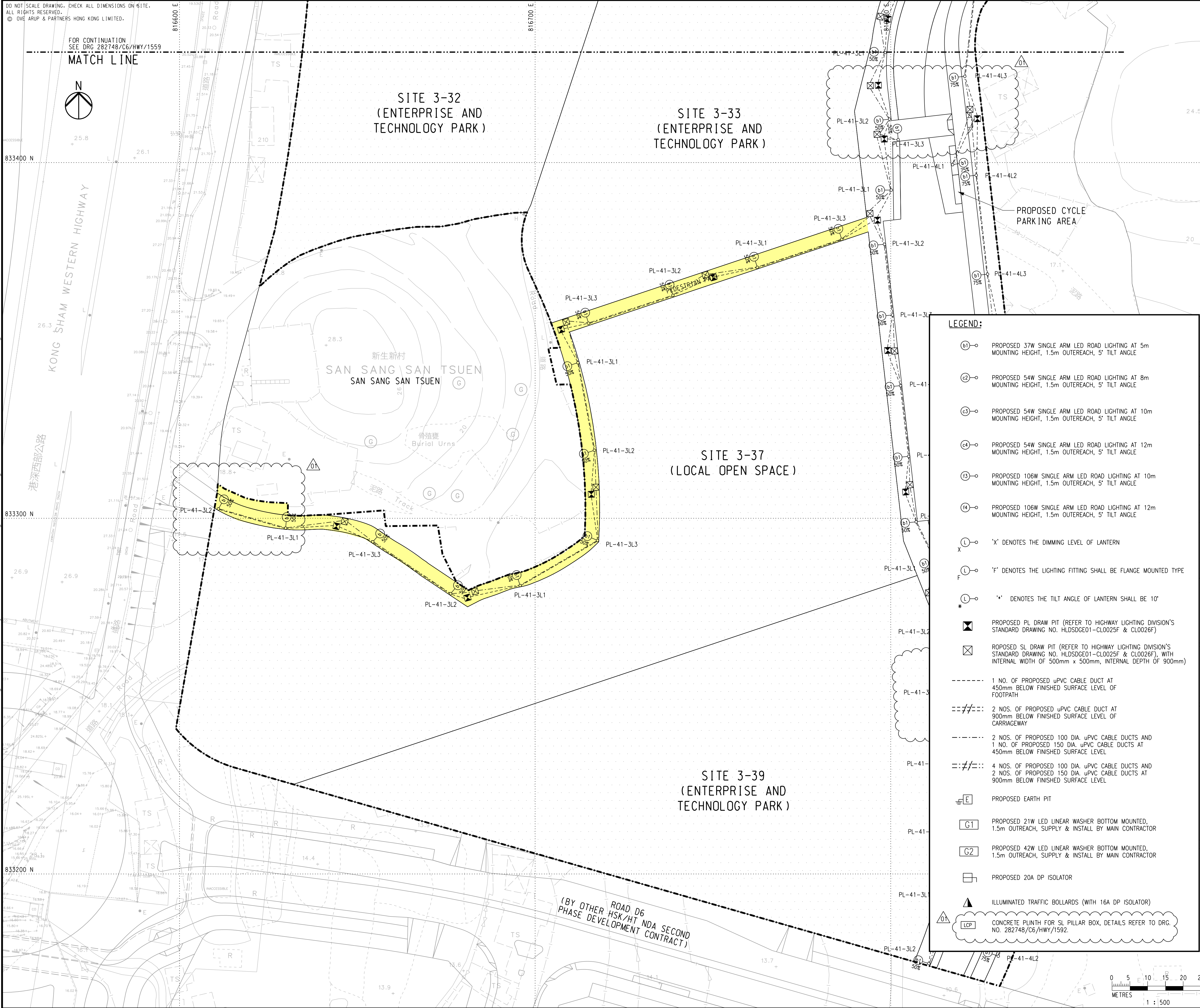


NOTES

- FOR NOTES AND LEGEND, REFER TO DRAWING NO. 282748/C6/HWY/1301 AND 1481.
- FOR PROPOSED PAVING AT FOOTPATH PATTERN, REFER TO DRAWING NOS. 282748/C6/HWY/1311 SERIES.
- FOR PAVING PATTERN ARRANGEMENT, REFER TO DRAWING NOS. 282748/C6/HWY/1481 TO 1485.

00	TENDER ISSUE	SL	12/24
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Consultant			
ARUP			
Project Title			
Contract No. YL/2023/06			
Hung Shui Kiu/Ha Tsuen			
New Development Area			
Second Phase Development - Contract 6 -			
Site Formation and Engineering			
Infrastructure Works			
Drawing title			
PAVING DETAILS			
(SHEET 5)			
Drawing no.			
282748/C6/HWY/1485			
Rev.			
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Date : 1/20/2025



KEY PLAN

- NOTES
1. DRAWINGS SHALL BE READ IN CONJUNCTION WITH SPECIFICATION.
 2. FOR LEGEND, NOTES AND ABBREVIATION, REFER TO DRAWING NO. 282748/C6/HWY/1550.

- LEGEND:
- (b1) PROPOSED 37W SINGLE ARM LED ROAD LIGHTING AT 5m MOUNTING HEIGHT, 1.5m OUTREACH, 5° TILT ANGLE
 - (c2) PROPOSED 54W SINGLE ARM LED ROAD LIGHTING AT 8m MOUNTING HEIGHT, 1.5m OUTREACH, 5° TILT ANGLE
 - (c3) PROPOSED 54W SINGLE ARM LED ROAD LIGHTING AT 10m MOUNTING HEIGHT, 1.5m OUTREACH, 5° TILT ANGLE
 - (c4) PROPOSED 54W SINGLE ARM LED ROAD LIGHTING AT 12m MOUNTING HEIGHT, 1.5m OUTREACH, 5° TILT ANGLE
 - (t3) PROPOSED 106W SINGLE ARM LED ROAD LIGHTING AT 10m MOUNTING HEIGHT, 1.5m OUTREACH, 5° TILT ANGLE
 - (t4) PROPOSED 106W SINGLE ARM LED ROAD LIGHTING AT 12m MOUNTING HEIGHT, 1.5m OUTREACH, 5° TILT ANGLE
 - X 'X' DENOTES THE DIMMING LEVEL OF LANTERN
 - F 'F' DENOTES THE LIGHTING FITTING SHALL BE FLANGE MOUNTED TYPE
 - * '°' DENOTES THE TILT ANGLE OF LANTERN SHALL BE 10°
 - PROPOSED PL DRAW PIT (REFER TO HIGHWAY LIGHTING DIVISION'S STANDARD DRAWING NO. HLSDSGE01-CL0025F & CL0026F)
 - PROPOSED SL DRAW PIT (REFER TO HIGHWAY LIGHTING DIVISION'S STANDARD DRAWING NO. HLSDSGE01-CL0025F & CL0026F), WITH INTERNAL WIDTH OF 500mm x 500mm, INTERNAL DEPTH OF 900mm)
 - 1 NO. OF PROPOSED uPVC CABLE DUCT AT 450mm BELOW FINISHED SURFACE LEVEL OF FOOTPATH
 - 2 NOS. OF PROPOSED uPVC CABLE DUCT AT 900mm BELOW FINISHED SURFACE LEVEL OF CARRIAGEWAY
 - 2 NOS. OF PROPOSED 100 DIA. uPVC CABLE DUCTS AND 1 NO. OF PROPOSED 150 DIA. uPVC CABLE DUCTS AT 450mm BELOW FINISHED SURFACE LEVEL
 - 4 NOS. OF PROPOSED 100 DIA. uPVC CABLE DUCTS AND 2 NOS. OF PROPOSED 150 DIA. uPVC CABLE DUCTS AT 900mm BELOW FINISHED SURFACE LEVEL
 - PROPOSED EARTH PIT
 - G1 PROPOSED 21W LED LINEAR WASHER BOTTOM MOUNTED, 1.5m OUTREACH, SUPPLY & INSTALL BY MAIN CONTRACTOR
 - G2 PROPOSED 42W LED LINEAR WASHER BOTTOM MOUNTED, 1.5m OUTREACH, SUPPLY & INSTALL BY MAIN CONTRACTOR
 - PROPOSED 20A DP ISOLATOR
 - ILLUMINATED TRAFFIC BOLLARDS (WITH 16A DP ISOLATOR)
 - LCP CONCRETE PLINTH FOR SL PILLAR BOX, DETAILS REFER TO DRG. NO. 282748/C6/HWY/1592.

01	TENDER ADDENDUM NO. 2	KMHW	01/25
00	TENDER ISSUE	KMHW	12/24
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Consultant			
ARUP			
Project Title			
Contract No. YL/2023/06			
Hung Shui Kiu/Ha Tsuen			
New Development Area			
Second Phase Development - Contract 6 -			
Site Formation and Engineering			
Infrastructure Works			
Drawing title			
ROAD LIGHTING LAYOUT PLAN			
(SHEET 10)			
Drawing no.			Rev.
282748/C6/HWY/1560			01
Drawn	Date	Checked	Approved
KH	12/24	KMHW	JL
Scale	1:500 @ A1		Status
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FOR CONTINUATION
SEE DRG 282748/C6/HWY/1614

MATCH LINE



SITE 3-32
(ENTERPRISE AND
TECHNOLOGY PARK)

SITE 3-33
(ENTERPRISE AND
TECHNOLOGY PARK)

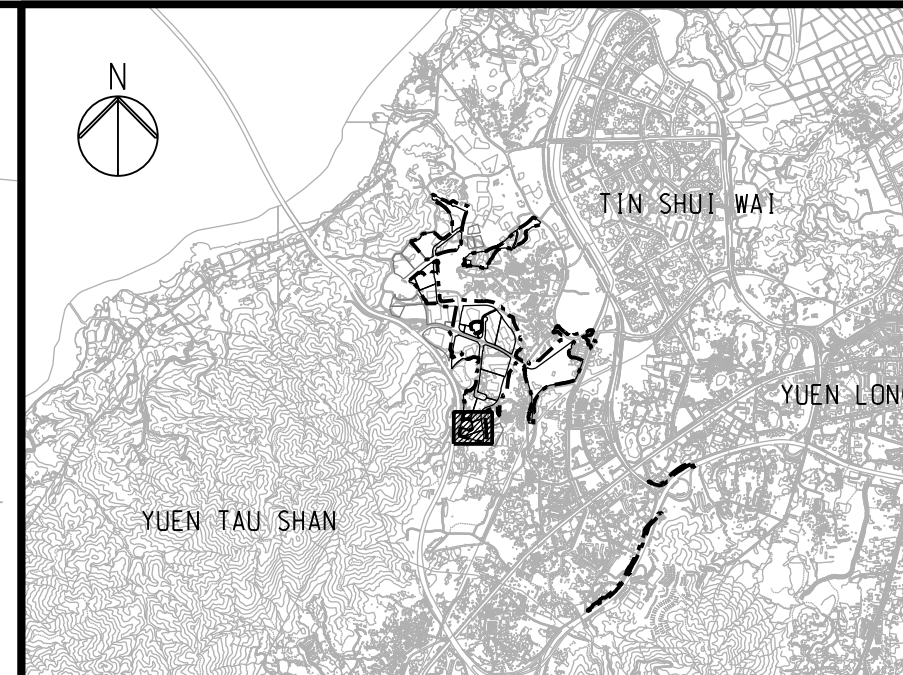
SITE 3-36
(LOCAL OPEN SPACE)
(BY OTHER HSK/HT NDA SECOND
PHASE DEVELOPMENT CONTRACT)

SITE 3-37
(LOCAL OPEN SPACE)

SITE 3-40
(ENTERPRISE AND
TECHNOLOGY PARK)
(BY OTHER HSK/HT NDA SECOND
PHASE DEVELOPMENT CONTRACT)

SITE 3-39
(ENTERPRISE AND
TECHNOLOGY PARK)

(BY OTHER ROAD D6
PHASE DEVELOPMENT HSK/HT NDA SECOND
CONTRACT)






KEY PLAN

NOTES

1. FOR GENERAL NOTES AND LEGEND, REFER TO
DRAWING NO. 282748/C6/HWY/1601.

LEGEND

-  BOUNDARIES OF THE SITE
 EXISTING LIGHTING FACILITIES
 EXISTING LIGHTING FACILITIES
 TO BE DEMOLISHED

00	TENDER ISSUE	PY	12/24
Rev	Description	By	Date

Consultant	
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ARUP

Project Title
Contract No. YL/2023/06
Hung Shui Kiu/Ha Tsuen
New Development Area
Second Phase Development - Contract 6 -
Site Formation and Engineering
Infrastructure Works

Drawing title

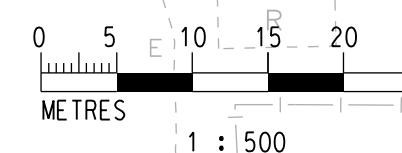
ROAD LIGHTING
DEMOLITION PLAN
(SHEET 15)

Drawing no. 282748/C6/HWY/1615		Rev. 00	
Drawn MAN	Date 12/24	Checked EH	Approved KKC
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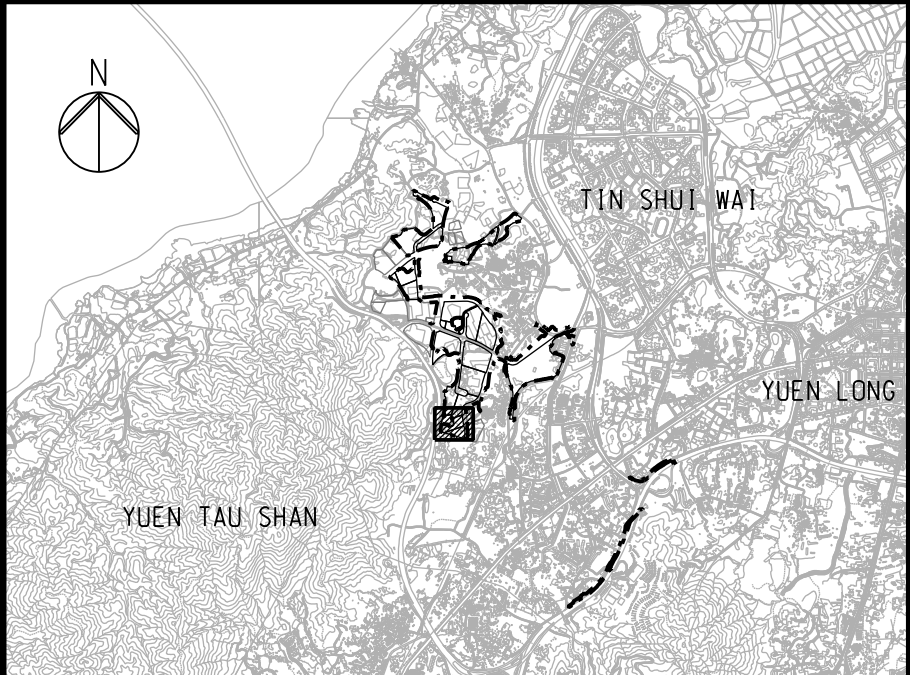
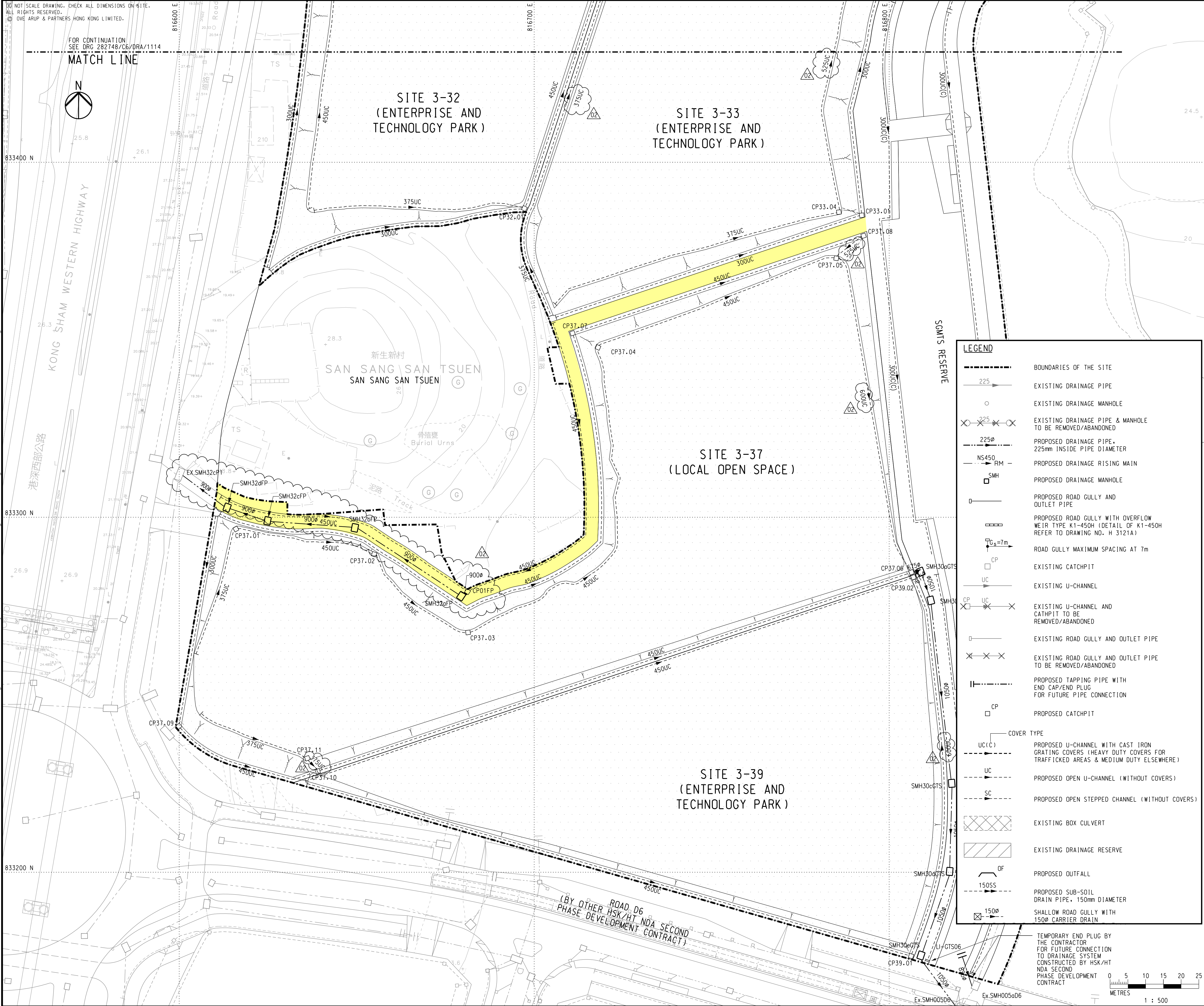
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KEY PLAN

NOTES
1. FOR GENERAL NOTES AND LEGEND, REFER TO DRAWING NO. 282748/C6/DRA/1001.

LEGEND

---	BOUNDARIES OF THE SITE
225	EXISTING DRAINAGE PIPE
o	EXISTING DRAINAGE MANHOLE
X-X-X	EXISTING DRAINAGE PIPE & MANHOLE TO BE REMOVED/ABANDONED
225	PROPOSED DRAINAGE PIPE, 225mm INSIDE PIPE DIAMETER
NS450 RM	PROPOSED DRAINAGE RISING MAIN
SMH	PROPOSED DRAINAGE MANHOLE
---	PROPOSED ROAD GULLY AND OUTLET PIPE
---	PROPOSED ROAD GULLY WITH OVERFLOW WEIR TYPE K1-450H (DETAIL OF K1-450H REFER TO DRAWING NO. H 3121A)
G _s =7m	ROAD GULLY MAXIMUM SPACING AT 7m
CP	EXISTING CATCHPIT
UC	EXISTING U-CHANNEL
X-X-X	EXISTING U-CHANNEL AND CATCHPIT TO BE REMOVED/ABANDONED
---	EXISTING ROAD GULLY AND OUTLET PIPE
X-X-X	EXISTING ROAD GULLY AND OUTLET PIPE TO BE REMOVED/ABANDONED
---	PROPOSED TAPPING PIPE WITH END CAP/END PLUG FOR FUTURE PIPE CONNECTION
CP	PROPOSED CATCHPIT
COVER TYPE	
UC(C)	PROPOSED U-CHANNEL WITH CAST IRON GRATING COVERS (HEAVY DUTY COVERS FOR TRAFFICKED AREAS & MEDIUM DUTY ELSEWHERE)
UC	PROPOSED OPEN U-CHANNEL (WITHOUT COVERS)
SC	PROPOSED OPEN STEPPED CHANNEL (WITHOUT COVERS)
X-X-X	EXISTING BOX CULVERT
---	EXISTING DRAINAGE RESERVE
DF	PROPOSED OUTFALL
150SS	PROPOSED SUB-SOIL DRAIN PIPE, 150mm DIAMETER
150	SHALLOW ROAD GULLY WITH 150mm CARRIER DRAIN
150	TEMPORARY END PLUG BY THE CONTRACTOR FOR FUTURE CONNECTION TO DRAINAGE SYSTEM CONSTRUCTED BY HSK/HT NDA SECOND PHASE DEVELOPMENT CONTRACT

02	TENDER ADDENDUM NO. 3	KK	02/25
01	TENDER ADDENDUM NO. 2	KK	01/25
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Consultant

ARUP

Project Title
Contract No. YL/2023/06
Hung Shui Kiu/Ha Tsuen
New Development Area
Second Phase Development - Contract 6 -
Site Formation and Engineering
Infrastructure Works

Drawing title
**DRAINAGE LAYOUT PLAN
(SHEET 15)**

Drawing no.
282748/C6/DRA/1115

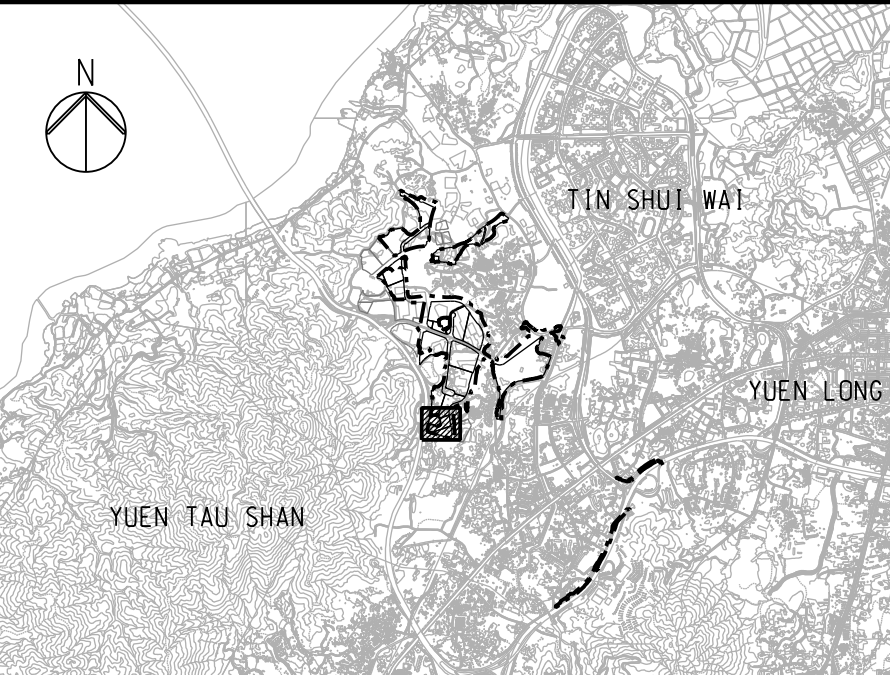
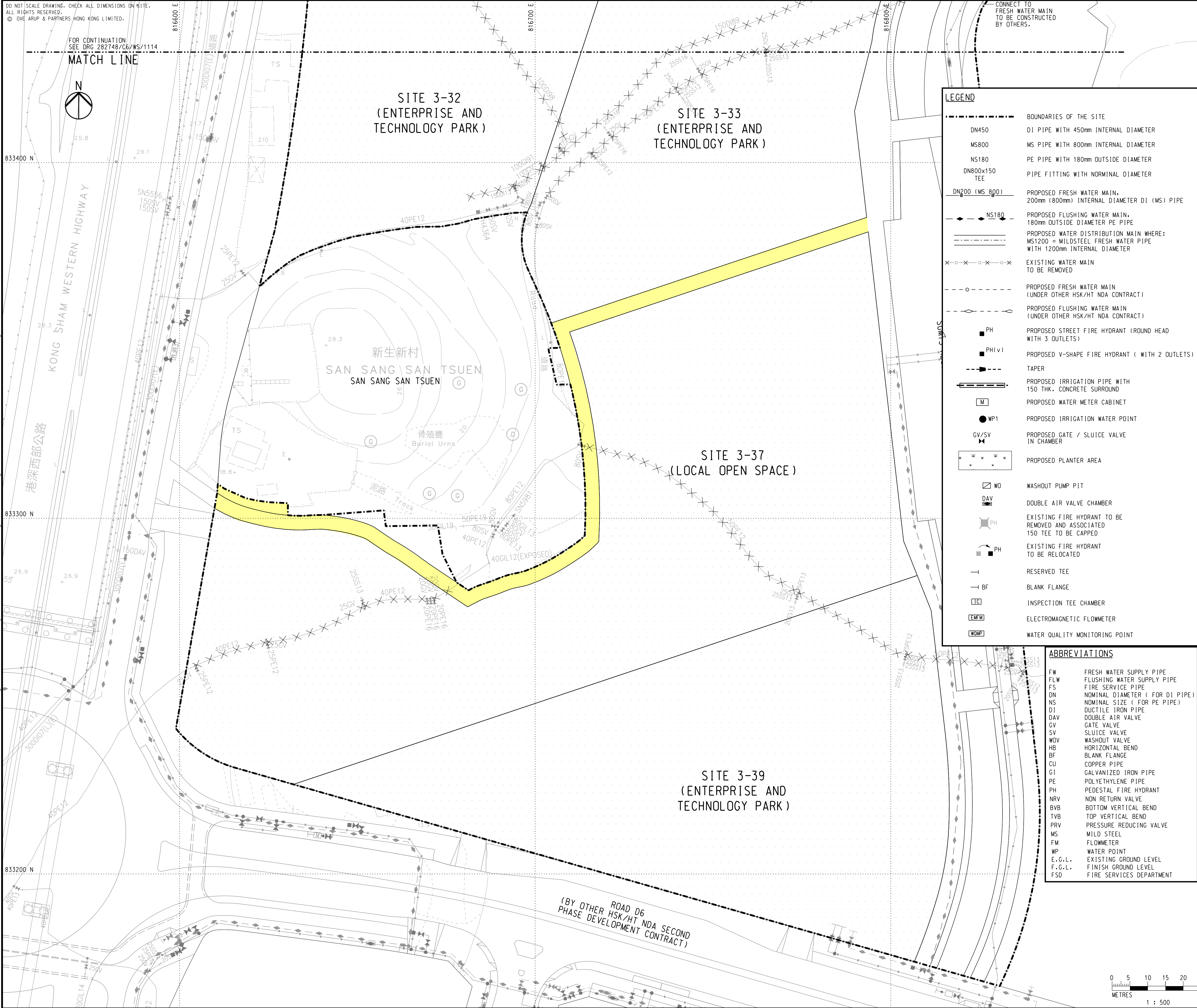
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KEY PLAN

NOTES

- FOR GENERAL NOTES AND LEGEND, REFER TO DRAWING NO. 282748/C6/WS/1001.

LEGEND

DN450

MS800

NS180

DN800x150 TEE

DN200 (MS 800)

NS180

EXISTING WATER MAIN TO BE REMOVED

PROPOSED FRESH WATER MAIN (UNDER OTHER HSK/HT NDA CONTRACT)

PROPOSED FLUSHING WATER MAIN (UNDER OTHER HSK/HT NDA CONTRACT)

PROPOSED STREET FIRE HYDRANT (ROUND HEAD WITH 3 OUTLETS)

PROPOSED V-SHAPE FIRE HYDRANT (WITH 2 OUTLETS)

TAPER

PROPOSED IRRIGATION PIPE WITH 150 THK. CONCRETE SURROUND

PROPOSED WATER METER CABINET

PROPOSED IRRIGATION WATER POINT

PROPOSED GATE / SLUICE VALVE IN CHAMBER

PROPOSED PLANTER AREA

WO

DAV

PH

PH

RESERVED TEE

BF

IC

EMFM

WQMP

BOUNDARIES OF THE SITE

D1 PIPE WITH 450mm INTERNAL DIAMETER

MS PIPE WITH 800mm INTERNAL DIAMETER

PE PIPE WITH 180mm OUTSIDE DIAMETER

PIPE FITTING WITH NORNMAL DIAMETER

PROPOSED FRESH WATER MAIN, 200mm (800mm) INTERNAL DIAMETER D1 (MS) PIPE

PROPOSED FLUSHING WATER MAIN, 180mm OUTSIDE DIAMETER PE PIPE

PROPOSED WATER DISTRIBUTION MAIN WHERE: MS1200 = MILDSTEEL FRESH WATER PIPE WITH 1200mm INTERNAL DIAMETER

PROPOSED FRESH WATER MAIN (UNDER OTHER HSK/HT NDA CONTRACT)

PROPOSED FLUSHING WATER MAIN (UNDER OTHER HSK/HT NDA CONTRACT)

PROPOSED STREET FIRE HYDRANT (ROUND HEAD WITH 3 OUTLETS)

PROPOSED V-SHAPE FIRE HYDRANT (WITH 2 OUTLETS)

TAPER

PROPOSED IRRIGATION PIPE WITH 150 THK. CONCRETE SURROUND

PROPOSED WATER METER CABINET

PROPOSED IRRIGATION WATER POINT

PROPOSED GATE / SLUICE VALVE IN CHAMBER

PROPOSED PLANTER AREA

WASHOUT PUMP PIT

DOUBLE AIR VALVE CHAMBER

EXISTING FIRE HYDRANT TO BE REMOVED AND ASSOCIATED 150 TEE TO BE CAPPED

EXISTING FIRE HYDRANT TO BE RELOCATED

RESERVED TEE

BLANK FLANGE

INSPECTION TEE CHAMBER

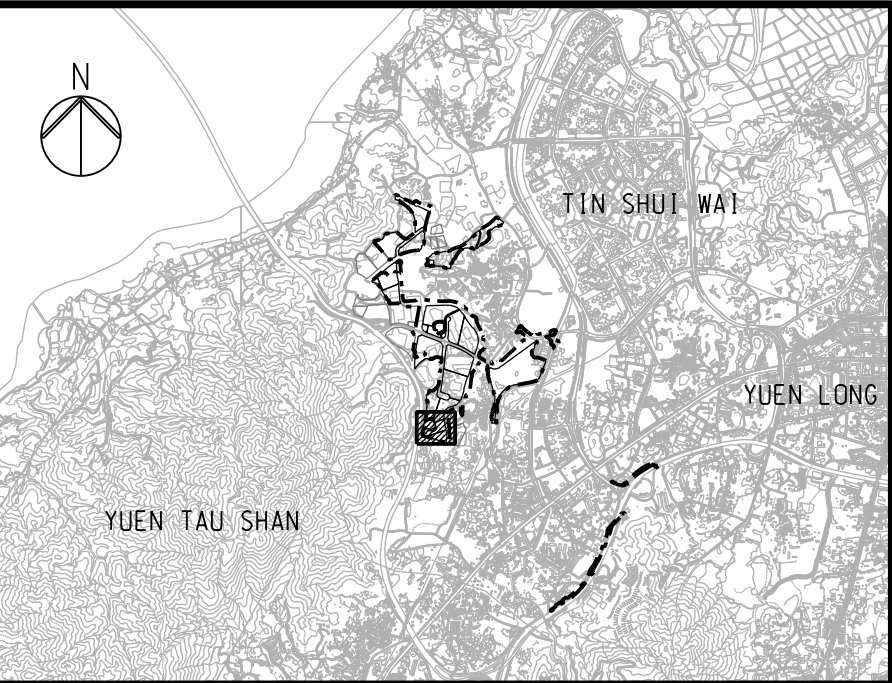
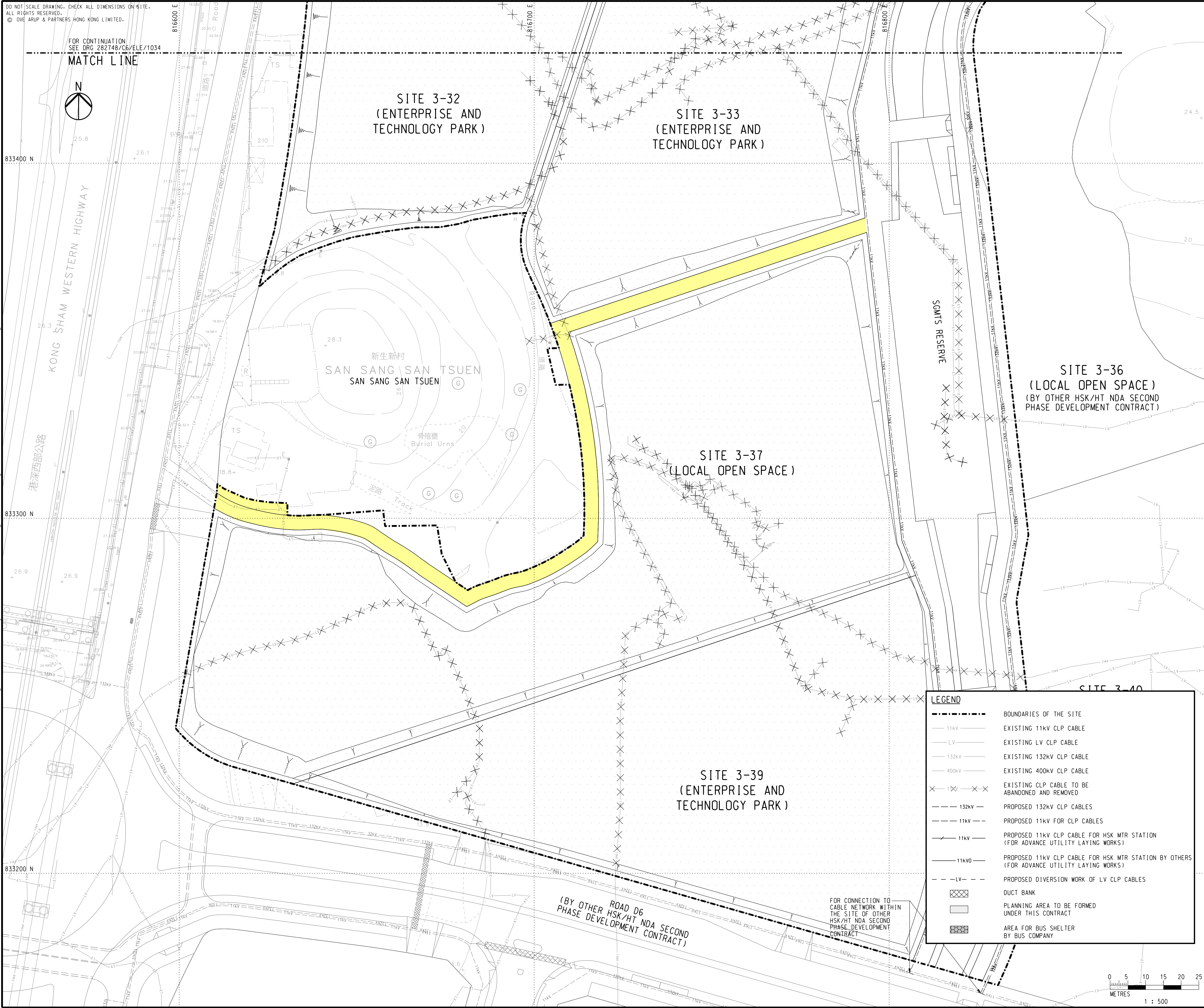
ELECTROMAGNETIC FLOWMETER

WATER QUALITY MONITORING POINT

ABBREVIATIONS	
FW	FRESH WATER SUPPLY PIPE
FLW	FLUSHING WATER SUPPLY PIPE
FS	FIRE SERVICE PIPE
DN	NOMINAL DIAMETER (FOR D1 PIPE)
NS	NOMINAL SIZE (FOR PE PIPE)
D1	DUCTILE IRON PIPE
DAV	DOUBLE AIR VALVE
GV	GATE VALVE
SV	SLUICE VALVE
WQV	WASHOUT VALVE
HB	HORIZONTAL BEND
BF	BLANK FLANGE
CU	COPPER PIPE
GI	GALVANIZED IRON PIPE
PE	POLYETHYLENE PIPE
PH	PEDESTAL FIRE HYDRANT
NRV	NON RETURN VALVE
BVB	BOTTOM VERTICAL BEND
TVB	TOP VERTICAL BEND
PRV	PRESSURE REDUCING VALVE
MS	MILD STEEL
FM	FLOWMETER
WP	WATER POINT
E.G.L.	EXISTING GROUND LEVEL
F.G.L.	FINISH GROUND LEVEL
FSD	FIRE SERVICES DEPARTMENT

00	TENDER ISSUE	KK	12/24		
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Project Title					
Contract No. YL/2023/06					
Hung Shui Kiu/Ha Tsuen					
New Development Area					
Second Phase Development - Contract 6 -					
Site Formation and Engineering					
Infrastructure Works					
Drawing title					
FRESH WATER SUPPLY WORKS					
LAYOUT PLAN					
(SHEET 15)					
Drawing no.			Rev.		
282748/C6/WS/1115			00		
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KEY PLAN

- NOTES
- DRAWPITS AND CROSS ROAD DUCT EXCEPT THOSE UNDER THE RUN-IN TO BE DESIGNED AND INSTALLED BY THE UTILITIES UNDERTAKERS.
 - NO ABANDONMENT OR REMOVAL OF THE EXISTING CLP FACILITIES UNLESS PERMISSION IS GIVEN BY CLP.
 - DIMENSIONS IN MILLIMETRE UNLESS OTHERWISE NOTED.
 - FOR GENERAL NOTES AND LEGEND, REFER TO DRAWING NO. 282748/C6/ELE/1001.

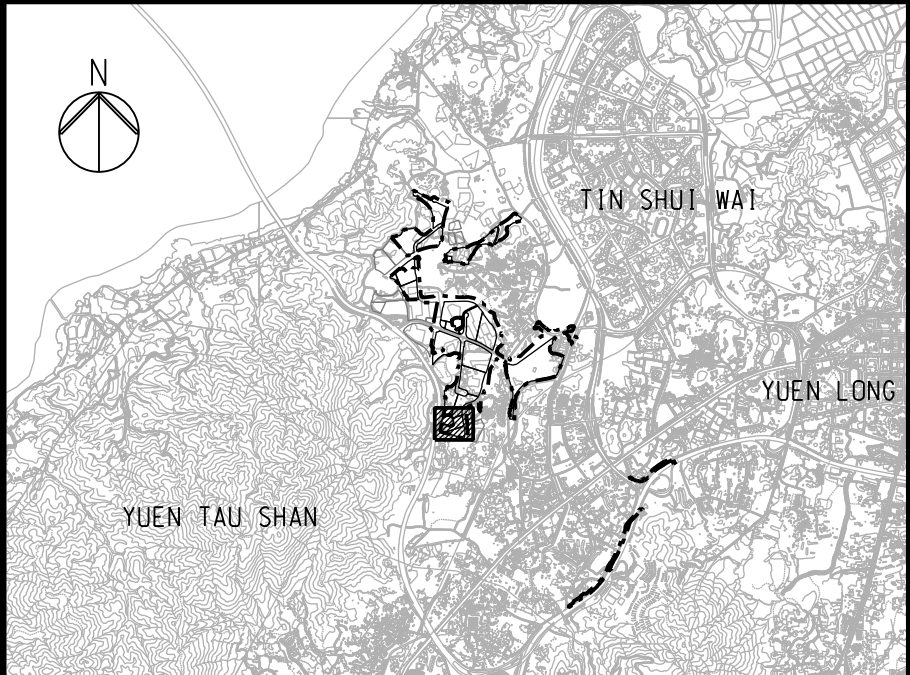
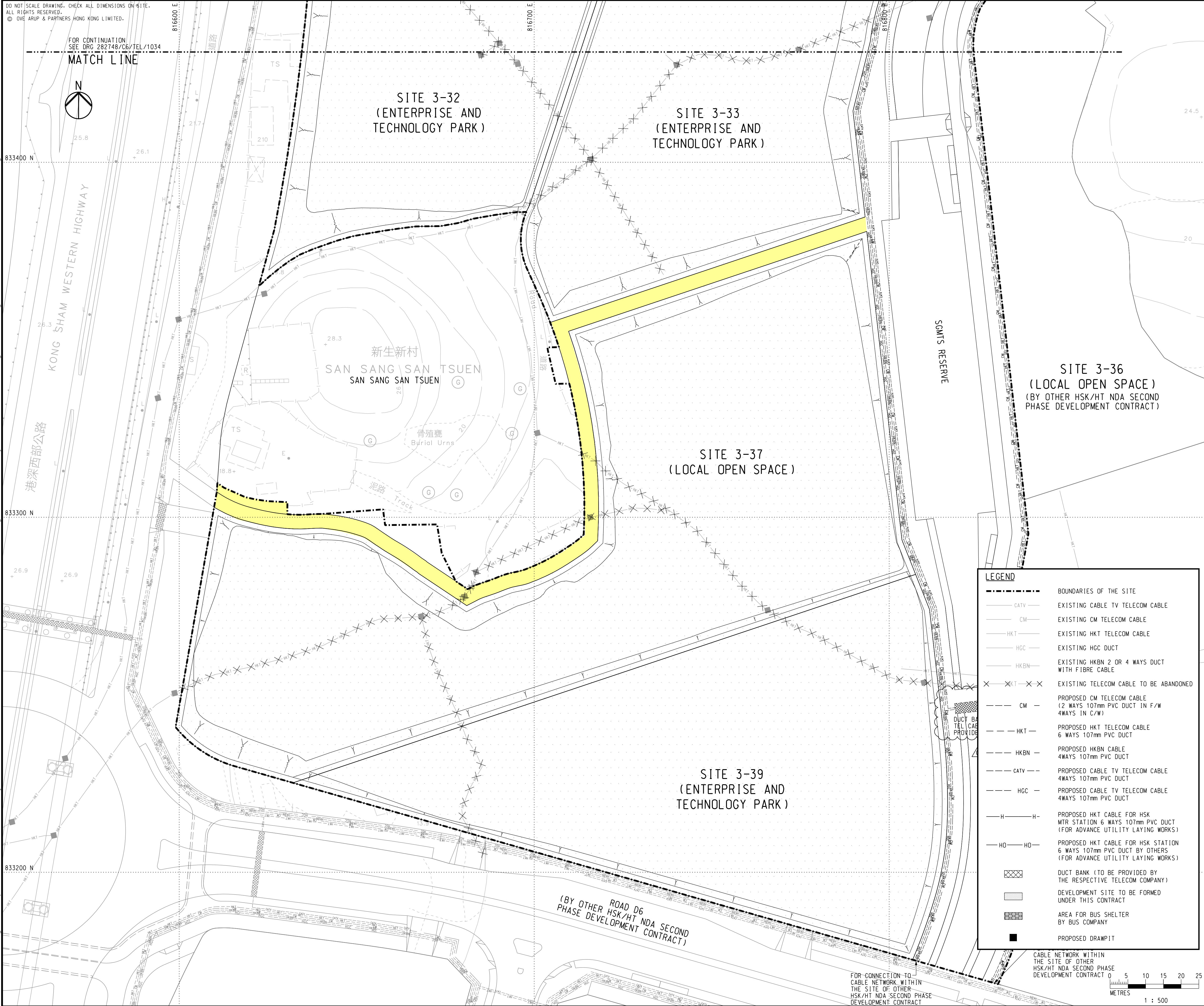
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Project Title			
Contract No. YL/2023/06			
Hung Shui Kiu/Ha Tsuen			
New Development Area			
Second Phase Development - Contract 6 -			
Site Formation and Engineering			
Infrastructure Works			
Drawing title			
EXISTING AND PROPOSED			
POWER CABLES			
(SHEET 15)			
Drawing no.			Rev.
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KEY PLAN

NOTES

- DRAWPITS AND CROSS ROAD DUCT EXCEPT THOSE UNDER THE RUN-IN TO BE DESIGNED AND INSTALLED BY THE UTILITIES UNDERTAKERS.
- NO ABANDONMENT OR REMOVAL OF THE EXISTING TELECOM FACILITIES UNLESS PERMISSION IS GIVEN BY TELECOM COMPANIES.
- DIMENSIONS IN MILLIMETRE UNLESS OTHERWISE NOTED.
- FOR GENERAL NOTES AND LEGEND, REFER TO DRAWING NO. 282748/C6/TEL/1001.

01	TENDER ADDENDUM NO. 1	CW	01/25
00	TENDER ISSUE	CW	12/24
Rev	Description	By	Date

Consultant

ARUP

Project Title

Contract No. YL/2023/06

Hung Shui Kiu/Ha Tsuen

New Development Area

Second Phase Development - Contract 6 -

Site Formation and Engineering

Infrastructure Works

Drawing title

EXISTING AND PROPOSED

TELECOM LAYOUT PLAN

(SHEET 15)

Drawing no.	282748/C6/TEL/1035	Rev.	01
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土木工程拓展署

Civil Engineering and

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**TECHNICAL SCHEDULE
FOR THE YELLOW STIPPLED BLACK AREA**

**Site Formation Works
at Site H7, Hung Shui Kiu / Ha Tsuen New Development Area**

Date : December 2025

TECHNICAL SCHEDULE

Site Formation Works

at Hung Shui Kiu/ Ha Tsuen New Development Area

1.	General Requirements		<p>The Purchaser is entirely responsible for the design and construction of the Yellow Stippled Black Area (hereinafter referred to as “the Service”) referred to in Special Condition No. (4)(a)(ii) of the Conditions of Sale to which this Technical Schedule is annexed (“the C/S”).</p> <p>The Service shall be designed and constructed to the satisfaction of the Director of Civil Engineering and Development (“D of CED”) and relevant management and maintenance departments including, the Director of Drainage Services (“D of DS”), for their functional and operational needs. The Purchaser shall observe and comply with the following requirements in this Technical Schedule to the satisfaction of the D of CED and relevant management and maintenance departments. The D of CED, and the D of DS are hereinafter collectively referred to as “the Government Representatives”.</p>	
2.	Scope	(a)	The scope of the Service shall comprise the Site Formation Works (“the SFW”) with the following main items:	
			i.	Site clearance works including, but not limited to, demolition of structures as required.
			ii.	Site investigation works including the land contamination investigation.
			iii.	Land decontamination works.
			iv.	Site formation works and associated geotechnical works and drainage works.
			v.	The associated tree felling, transplanting and compensatory works.
			vi.	Implementation of all necessary Environmental Monitoring and Audit measures as required under relevant environmental permit.
			vii.	Other works which are shown on the Drawings or specified in the Specifications; and
			viii.	Temporary works, other associated and ancillary works related to the above items.

		(b)	The Yellow Stippled Black Area as detailed in Annex I and this Technical Schedule.
3.	Design and Construction	(a)	The SFW shall be designed and constructed in compliance with this Technical Schedule and Annex 1, which are capable of being wholly managed and maintained by the Government of the Hong Kong Special Administrative Region (“the Government”) or the Government Representatives. The Service should be up to the Government Representatives’ satisfaction and agreement.
		(b)	The Purchaser’s development shall not adversely affect the users of the Service including any encroachment upon the Service and projections from the development. The Purchaser shall be responsible for any subsequent mitigation measures / works in full costs if required as instructed by the Government Representatives.
		(c)	The design interface shall observe and coordinate with the planned roads and infrastructure works under other interface parties’ contracts, the planned developments and planned/enhanced streetscape/open space design nearby area as appropriate.
		(d)	The Purchaser provides inputs for the preparation of, and carry out all public and departmental consultation processes for the Service.
		(e)	The Purchaser shall establish 2 level steering/working groups with regulation meetings to ensure smooth approval on submissions and construction.
		(f)	The Purchaser shall prepare necessary submissions, review, assess and obtain approvals of the Government or the Government Representatives for the temporary traffic arrangements for the Service. The Purchaser shall establish a Traffic Management Liaison Group (“the TMLG”) to discuss all traffic-related matters and endorse all Purchaser’s traffic impact assessment and traffic-related proposals, Members of the TMLG shall be those parties from relevant Government Representatives including but not limited to Fire Services Department, relevant Rural Committees, District Offices and Councils, Transport Department (“TD”), Highways Department (“HyD”), Hong Kong Police Force.
		(g)	The Purchaser shall coordinate with CEDD on identification of maintenance and management parties of the Service, and obtain the agreements from maintenance and management parties on the maintenance and management responsibilities of the Service.
		(h)	The Purchaser shall hand over the completed works in relation to the Service to relevant maintenance and management parties and authorities.
		(i)	<u>General Obligations</u>

			i.	The Purchaser shall comply with the latest versions of all relevant circulars, standing instructions, standard drawings technical memoranda and policy documents issued by the respective Government departments, utility undertakers, maintenance authorities or the suchlike organisations.
			ii.	The Purchaser provides engineering and technical inputs or comments on other development proposals that have interface with the Service.
			iii.	The Purchaser shall carry out all necessary surveys, level measurements, monitoring works, investigations and inquiries as are needed for the satisfactory Completion of the Service, including taking readings of monitoring equipment. For avoidance of doubt, all land topographical surveys and tree surveys necessary for the Service are to be carried out by qualified land surveyors and relevant specialists.
			iv.	The Purchaser consults and liaises directly with departments, utility undertakings, authorities, bodies, Purchaser, developers or persons to obtain information and on matters related to the Service and obtain comments and agreement to the proposals, and to ensure smooth coordination. The Purchaser copies all correspondence to the Government Representatives. The Purchaser shall consult other relevant parties if required. For the purpose of soliciting utility information and utility circulation, the Purchaser includes Electronic Layout Plans in addition to hard copies of layout plans in accordance with ETWB TCW No. 7/2003 and 7/2003A (or its latest revision).
			v.	The Purchaser shall comply with the requirements of the General Specification for Civil Engineering Works, 2020 Edition and the Corrigendum Nos. 1/2021, 2/2021, 3/2021, 1/2022, 2/2022, 3/2022, 4/2022, 1/2023, 1/2024 and 2/2024 together with any latest amendment issued by Civil Engineering and Development Department (“the CEDD”). In the case of any inconsistency the Technical Schedule and the Drawings shall prevail over the provisions contained in the General Specification for Civil Engineering Works.

			vi.	The Purchaser shall comply with the requirements given in General Specification for Civil Engineering Works, 2020 Edition as stated in item v and the relevant CEDD Geotechnical Engineering Office (“the GEO”) publications. In case of doubt, the GEO of the CEDD shall be consulted.
			vii.	The Purchaser complies with the requirements of the technical circulars, memorandum and documents issued by the Government bureaux and departments unless otherwise agrees with the Government Representatives.
			viii.	<p>The Purchaser takes cognisance of the need to comply with the relevant ordinances, by-laws, regulations and rules for the time being in force in HK, and in particular the following ordinances:</p> <ul style="list-style-type: none"> (a) Air Pollution Control Ordinance (Cap. 311); (b) Antiquities and Monuments Ordinance (Cap. 53); (c) Buildings Ordinance (Cap. 123); (d) Dangerous Goods Ordinance (Cap. 295); (e) Dumping at Sea Ordinance (Cap. 466); (f) Electricity Ordinance (Cap. 406); (g) Environmental Impact Assessment Ordinance (Cap. 499); (h) Factories and Industrial Undertaking Ordinance (Cap. 59); (i) Fire Services Ordinance (Cap. 95); (j) Foreshore and Sea-bed (Reclamations) Ordinance (Cap. 127); (k) Forests and Countryside Ordinance (Cap. 96); (l) Gas Safety Ordinance (Cap. 51); (m) Land (Miscellaneous Provisions) Ordinance (Cap. 28); (n) Lands Resumption Ordinance (Cap. 124); (o) Land Acquisition (Possessory Title) Ordinance (Cap. 130);

				<p>(p) Land Drainage Ordinance (Cap. 446);</p> <p>(q) Mass Transit Railway Ordinance (Cap. 556);</p> <p>(r) Noise Control Ordinance (Cap. 400);</p> <p>(s) Public Bus Services Ordinance (Cap. 230);</p> <p>(t) Public Health and Municipal Services Ordinance (Cap. 132);</p> <p>(u) Protection of Endangered Species of Animals and Plants Ordinance (Cap 586);</p> <p>(v) Railways Ordinance (Cap. 519);</p> <p>(w) Road (Works, Use and Compensation) Ordinance (Cap. 370);</p> <p>(x) Road Traffic Ordinance (Cap. 374);</p> <p>(y) Sewage Tunnel (Statutory Easements) Ordinance (Cap. 438);</p> <p>(z) Town Planning Ordinance (Cap. 131);</p> <p>(aa) Waste Disposal Ordinance (Cap. 354);</p> <p>(ab) Waterworks Ordinance (Cap. 102);</p> <p>(ac) Water Pollution Control Ordinance (Cap. 358);</p> <p>(ad) Water Pollution Control (Sewerage) Regulation (Cap. 358AL); and</p> <p>(ae) Wild Animals Protection Ordinance (Cap. 170).</p> <p>The Purchaser informs the Government Representatives as early as possible of the need to take action under any ordinance. The Government Representatives, upon receipt of the necessary papers, drawings, etc. from the Purchaser, arranges for the necessary action to be taken. The Purchaser allows for sufficient time in programming of the Service for procedures to be completed under the ordinances.</p>
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			ix.	The Purchaser draws the attention of the Government Representatives to the need to consider any legal implications and consequences arising out of or in relation to the Service.
			x.	The Purchaser shall make sure that the Service will not result in any undue interruption to existing services and facilities.
			xi.	The Purchaser shall observe and follow relevant guidelines set out in the Project Administration Handbook (“the PAH”) for Civil Engineering Works, 2022 Edition and the Amendment Nos. 1/2023, 2/2023, 3/2023, 4/2023, 5/2023, 6/2023, 7/2023, 1/2024, 2/2024, 3/2024, 4/2024 and 5/2024 together with any latest amendment issued by the CEDD to ensure smooth delivery and handing over of the Service. The Purchaser shall agree with the respective departments the arrangements for handing over the completed works and the land, including any acceptance and commissioning tests that may be required.
			xii.	CAD drawings, except those 2D drawings which are generated from the 3D BIM model, are prepared conforming to the CAD Standard for Works Projects version 1.03.00 (or the later versions as agreed between the corresponding department(s) and the Purchaser from time to time) as posted on the Development Bureau (“the DEVB”)’s web site.
			xiii.	The Purchaser complies with all reasonable instructions of the Government Representatives and with all relevant circulars, standing instructions and technical memoranda as directed by the Government Representatives.
			xiv.	The Purchaser observes and follows relevant guidelines set out in the PAH to ensure smooth delivery and handing over of the Service and all completed works respectively. The Purchaser agrees with the respective departments the arrangements for handing over the completed works and the land, including any acceptance and commissioning tests that may be required. The Purchaser ensures that the agreed arrangements is fully allowed.

			xv.	The Purchaser shall communicate and correspond directly with other relevant Government departments, corporates and private organisations to obtain information in connection with the Service, copying such correspondence to the Government Representatives. Any problem in communication or liaison is referred to the Government Representatives for assistance.
			xvi.	The Purchaser is responsible for arranging and directing the inspection and testing of materials, proprietary products and plant involved in the Service.
			xvii.	The Purchaser shall obtain approvals and Excavation Permits (“the XP”) from the Lands Department (“the LandsD”) and the HyD for works in relation to the Service on unleased Government land and streets maintained by the HyD respectively under the Land (Miscellaneous Provisions) Ordinance (Cap. 28). The Purchaser shall prepare drawings and relevant information required for applications of the XPs The Purchaser shall input update, maintain and upload/download the data required for the XP applications through the respective departments, such as the HyD, the LandsD, relevant authorities and utility undertakers to obtain the XPs for works in relation the Service. The Purchaser informs the Government Representatives the progress and status of the XP applications and identify problems that may cause possible delay to the programme of the Service.
			xviii.	The Purchaser prepares summaries of comments on the submissions of the Service received from various departments, authorities, bodies and persons from consultations and circulation of the submissions. These summaries also include: (1) the Purchaser’s responses/replies; (2) advice/recommendations for further action to address the comments; and (3) action taken to resolve those comments and results.

			xix.	The Purchaser identifies all existing or planned facilities, installations and rights that will be temporarily or permanently affected by the Service, recommends optimum diversion / relocation solutions, and submits the proposals to relevant parties for comments and agreement. The Purchaser liaises and assists in negotiation for any reprovisioning works that may be required. The Purchaser makes sure that the reprovisioning works will not result in any undue interruption to existing services and facilities.
			xx.	The Purchaser maintains liaison/coordination with the gas services providers in respect of the exact location of existing or planned gas pipe routes/gas installations in the vicinity of the proposed works area and the minimum set back distance away from the gas pipes/gas installations if any excavation works are required during the design and construction stages of the Service. The Purchaser also notes the requirements of the Electrical and Mechanical Services Department's ("EMSD") Code of Practice on Avoiding Danger from Gas Pipes.
		(j)	<u>Specific Obligations</u>	
			i.	The Purchaser identifies any requirements on reprovisioning works as a result of the Service and assist in negotiations with the concerned parties, including various departments, the MTR Corporation Limited, utility companies etc, for any reprovisioning works that may be required. The Purchaser also prepares detailed design necessary for reprovisioning and modification works for existing facilities and installations affected by the Service. The Purchaser makes sure that the reprovisioning works will not result in any undue interruption to existing services and facilities.
			ii.	<p>Building Information Modelling</p> <p>The Purchaser adopts BIM in accordance with the specifications and submission requirements as stipulated in DEVB TCW No. 9/2019 in providing the Service, and subsumes relevant BIM elements/submissions in relevant deliverables including but not limited to the deliverables "BIM Execution Plan" and "Proposal of Asset/COBie information".</p>
			iii.	Purchaser complies with the latest version of the Drainage Services Department ("the DSD") BIM Modelling Manual for the BIM of drainage system and sewerage system which will be handed over to the DSD.

		(k)	<u>General Services</u> The Purchaser carries out at least the general services set out below:	
			i.	Prepare detailed designs, specifications for works, drawings, dimensions, sections, plans with such design data, calculations, design parameters and assumptions and other information, including but not limited to the relevant findings/proposals pertaining to the Service as might be required for the purpose of or in connection with the Service and circulate the aforementioned to all the Government Representatives concerned for comment and agreement.
			ii.	Liaise with the vendors, manufacturers or suppliers of plant, materials and proprietary products, if any, and take all necessary steps to obtain from them all details necessary for the timely Completion of the Service.
			iii.	Identify all facilities and installations affected by the Service and the maintenance and management parties of these affected items.
			iv.	Identify any requirements on reprovisioning works as a result of the Service works and assist in negotiations with the concerned parties for any reprovisioning works that may be required.
			v.	Prepare necessary traffic layout plans showing the traffic arrangements for vehicular, pedestrian and cycling traffic.
			vi.	Obtain the agreement of relevant Government departments and management and maintenance authorities and parties to drawings and specifications.
			vii.	Submit design calculations including a statement of the standards, procedures, and codes of practice adopted together with a certificate of design processes and independent check of the designs, in a form to be agreed later, to the Government Representatives on completion of the design.
			viii.	Obtain written agreement of relevant departments and maintenance authorities to take over the completed works for management and maintenance.

			ix.	Observe the requirements of DEVB TCW No. 2/2015 concerning the adoption of energy efficient features and renewable energy technologies, including but not limited to LED street lighting with PV panel, in Government projects and installations.
			x.	The Purchaser identifies all existing, planned or proposed utilities, facilities, services and installations which, will be affected/being affected by, or will be installed in conjunction with the Service and recommend any plans for installation / diversion and any provisions for accommodating these utilities, facilities, services and installations in conjunction with the Service.
			xi.	The Purchaser endeavours not to affect these utility services in performing this services and provides justifications if any diversion/relocation of any utilities is needed. The Purchaser liaises with the utility undertakers and relevant departments to resolve any conflicts matters between the utilities and the Service and confirm which existing utilities need to be accommodated in the Service.
			xii.	The Purchaser shall consult, liaise and coordinate with relevant utility undertakers, interface parties and relevant Government departments/parties to drive for advance and timely planning, laying and connection of all required utilities/services to tie-in with the timely commissioning of the Service.
			xiii.	The Purchaser shall consult, liaise and coordinate with other Government departments, interface parties, utilities undertakings and other authorities, bodies, consultants, developers or persons on matters related to the Service and obtain their requirements, comments, agreements and approvals where necessary. The Purchaser is responsible for coordination of all works in respect of utilities and other services rendered necessary for the Service.
			xiv.	The Purchaser shall designate any utility reserves for the exclusive use by the utilities to be installed in conjunction with the Service or at a later stage, taking into consideration the utility maintenance requirements and the need of avoiding constraint on the street planting and disturbance to the pedestrian environment and the associated works of the Service.
			xv.	The Purchaser prepares electronic utility layout plans in accordance with ETWB TCW No. 7/2003.

		(l)	<u>Specific Services</u>	
			Without prejudicing the duties that the Purchaser has to perform under the Service, the Purchaser shall carry out at least the specific services set out below.	
			i.	Carries out detailed design of site formation works, including design of site formation drainage, slope stabilization, permanent earth retaining structures, slopes, ground improvement / treatment if necessary. The Purchaser shall liaise with GEO of CEDD and interface parties obtain their agreement on the design.
			ii.	The Purchaser shall carry out detailed design of temporary, interim and permanent drainage works including the drainage diversion proposal. The Purchaser shall prepare the submissions of the Drainage Impact Assessment in accordance with ETWB TC(W) No. 2/2006 and the DSD's Technical Circular No. 1/2017. The Purchaser shall liaise with the DSD and obtain their agreement on the submissions for the Service, and coordinate with relevant interface parties on their proposal.
			iii.	Agrees with the DSD over the design of the temporary, interim and permanent drainage and sewerage works as necessary. The Purchaser ensures the design complies with the current design standards and requirements of the DSD (for drainage and sewerage works) The Purchaser submits the proposals to the DSD (for drainage and sewerage works) for comments and approval prior to the commencement of the works. The Purchaser shall also liaise and coordinate with relevant interface parties for the above proposals.
			iv.	Prepares necessary road layout plans and traffic layout plans showing the road arrangement and traffic and transport arrangements for vehicular, pedestrian and cycling traffic that affected by the Service. The Purchaser shall submit the detailed design proposals to the TD, and the HyD for comments and approval prior to the commencement of the works.

			v.	The Purchaser shall identify and report to the Government departments the presence of hazardous materials on site. If the Purchaser encounters any hazardous materials, including but not limited to asbestos, during the site clearance, the Purchaser shall employ specialist to the acceptance of relevant Government departments including the EPD to dispose the hazardous materials. The Purchaser shall submit to relevant Government departments method of disposal and location for disposal etc. for acceptance. The Purchaser shall seek agreement with the relevant Government departments the location of disposing the hazardous material.
			vi.	Reviews the method stated in the Environmental Impact Assessment (“the EIA”) Report AEIAR-203/2016 - Hung Shui Kiu New Development Area and recommends effective method(s) to treat any contaminated soil that may be present within the boundary of the Service.
			vii.	Carries out the detailed design of the environmental mitigation measures as recommended in the approved EIA Report, and carry out the construction thereof.
			viii.	The Purchaser shall identify any unsuitable ground material / soil such as soft clay, marine / pond mud, etc. within the Service and carry out any ground modification works as necessary.
			ix.	The Purchaser shall arrange site visits with the Government Representatives, as and when required.
			x.	The Purchaser shall carry out tree survey and agree the tree survey boundary with CEDD prior to carrying out the relevant tree surveys for the Service. The format of the tree surveys shall follow DEVB TC (W) No. 4/2020. The Purchaser shall submit a Tree Preservation and Removal Proposal (“the TPRP”), which shall contain necessary documents giving the tree survey information, tree protection plan and method statement, tree treatment recommendations, and compensatory planting proposal, for approval by Tree Works Vetting Panel (“TWVP”) of CEDD in accordance with WBTC no. 25/93, 17/2000, DEVB TCW No. 6/2015, DEVB TCW No. 4/2020, DEVB TCW No. 1/2018 and GEO Publication No. 1/2011 or their updated version before the commencement of tree removal. The compensatory planting proposal shall be developed taking into account the tree loss, ecological enhancement and the landscape and visual impact mitigation measures proposed in the approved EIA.

				<p>The Purchaser submits the TPRP and Compensatory Planting Proposal to the relevant management and maintenance parties with reference to DEVB TCW No. 6/2015 for agreement; and TWVP of CEDD for approval with reference to DEVB TCW No. 4/2020 or its updated version. Sufficient time shall be allowed for public consultation, obtaining approval, sourcing of receptor location and preparation works for the tree removal/ transplanting operation. Prior to the commencement of tree surveys and submission of the TPRP and compensatory planting proposals, the Purchaser shall coordinate with the relevant interface parties of contracts.</p> <p>The Purchaser's attention is drawn that competent member of the site supervisory staff to oversee and supervise tree works related to horticultural operations and preservation of trees within the Site, including, but without limitation to, planting, transplanting, tree risk assessment and management, tree surgery work and control of pest and disease affecting trees for the Service. The training qualification and work experience of the assigned person shall comply with the requirements in the Registration Scheme for Tree Management Personnel which could be download at the DEVB's website https://www.greening.gov.hk/rstmp/en/introduction/index.html. The TPRP and Compensatory Planting Proposal shall be duly signed by the Registered Landscape Architect.</p>
			xi.	<p>The Purchaser shall carry out tree risk assessment and management ("the TRAM") exercise in accordance with the latest edition of the DEVB's "Guidelines for Tree Risk Assessment and Management Arrangement" ("the TRAM Guidelines"), "Guidelines on Audit of Tree Risk Assessment" or its latest version ("the Audit Guideline"), if applicable.</p>

			xii.	<p>The Purchaser shall be responsible to carry out site appraisal, prepare and submit Contamination Assessment Plan (“the CAP”) for the Service to the acceptance of the Environmental Team and Independent Environmental Checker of Hung Shui Kiu / Ha Tsuen New Development Area and the EPD. The Purchaser shall conduct the land contamination assessment against the appropriate Risk-based Remediation Goals as stipulated in the EPD’s “Guidance Manual for Use of Risk-based Remediation Goals for Contaminated Land Management”.</p> <p>The Purchaser shall carry out site appraisal and land contamination investigation for the Service to identify any potentially contaminated sites and hot spots within the Service. The Purchaser shall prepare the CAP in accordance with the “Practice Guide for Investigation and Remediation of Contaminated Land, “Guidance Note for Contaminated Land Assessment and Remediation”, “Guidance Manual for Use of Risk-based Remediation Goals for Contaminated Land Management” and submit to the EPD for approval.</p> <p>The Purchaser shall be responsible for carrying out the environmental ground investigation works according to the CAP agreed by the EPD, “Practice Guide for Investigation and Remediation of Contaminated Land, “Guidance Note for Contaminated Land Assessment and Remediation” and “Guidance Manual for Use of Risk-based Remediation Goals for Contaminated Land Management”, and prepare Contamination Assessment Report (“the CAR”) to the Environmental Team and Independent Environmental Checker of Hung Shui Kiu / Ha Tsuen New Development Area and submit to the EPD for approval. For land contamination assessments, samples shall be collected by drillholes or trial pits as per the CAP. Underground utility survey shall be conducted before conducting intrusive investigations, and care shall be taken during excavation of inspection pits to avoid damaging the underground utilities.</p>
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				<p>The Purchaser shall prepare Remediation Action Plan (“the RAP”), if land contamination is identified accordingly but not limited to the requirements of “Practice Guide for Investigation and Remediation of Contaminated Land” of the EPD and submit to the EPD for approval. The Purchaser shall carry out decontamination works in accordance with the RAP approved by the EPD with full-time supervision by a qualified Land Contamination Specialist. Prior to the decontamination works, the Contractor shall prepare and submit a method statement, which includes the location of decontamination works and the details of decontamination methodology and procedures to the EPD for approval. The Contractor shall carry out the decontamination works according to the CAR and the RAP accepted by the Project Manager and the EPD.</p> <p>The Remediation Report (“the RR”) shall report the decontamination process and demonstrate that contaminated soil is all removed, properly handled, decontaminated and reinstated. The RR shall provide details including but not limited to the decontamination works carried out, types and volume of contaminated soil, standards and levels of treatment and locations of all disposal sites (including record of disposal) within the contaminated sites identified. The Purchaser shall submit the RR prepared by the approved Land Contamination Specialist no later than one month after completion of the decontamination works.</p>
		(m)	<p><u>Special Services during the Construction Phase of the Service</u></p> <p>The Purchaser carries out at least the activities, procedures and all other necessary services set out below during the Construction Phase of the Service:</p>	
			i.	Establish appropriate liaison channels among the contractors, departments and utility undertakings to facilitate smooth progress of the contract works.
			ii.	Supervise and direct the execution of the Service including monitoring of environmental, drainage and traffic impacts of construction activities and taking appropriate actions to control and mitigate such impacts as necessary.
			iii.	Prepare publicity materials required for the implementation of traffic management measures and environmental mitigation measures, and attend District Councils and / or committees established thereunder and other publicity meetings.

			iv.	Advise on, arrange where necessary and direct the inspection and testing of materials and plant supplied for the Service.
			v.	Invite CEDD, the management and maintenance parties and authorities to inspect the Service in advance and ensure that the Service are properly and thoroughly inspected or tested, temporary works removed and acceptable remedial works are carried out prior to handing over of the Service to management and maintenance parties and authorities.
			vi.	Prepare Operation and Maintenance (“the O&M”) Manuals providing all information necessary for the corresponding departments to take over and maintain the Service, including maintenance manuals for all newly formed / modified / upgraded man-made slopes / retaining structures, and other geotechnical features in accordance with Geoguide 5 and other GEO requirements, relevant test reports and records for soil compaction, maintenance requirements for landscape works including proprietary greening product and maintenance manuals for all highway structures, drainage works, fire hydrants and electrical & mechanical works, if any. Apply for GEO Checking Certificate for slopes and retaining walls from GEO in accordance with ETWB TCW No. 20/2004.
			vii.	Prepare recommended lists of spares, plant and equipment for civil works and assist in ordering them from contractors or suppliers to ensure smooth O&M of the Service.
			viii.	Keep and supply records of all temporary and permanent traffic management measures which might be susceptible to compensation claims and submit to Government Representatives.

			ix.	Prepare and deliver ‘as-constructed’ drawings showing in full detail of the Service as actually carried out together with calculations, information and the O&M Manuals including Slope Maintenance Manuals necessary for the maintenance of the Service, if applicable and submit all records and accounts relating to the Service. The number of copies required for the calculations, the O&M Manuals including Slope Maintenance Manuals and other records is agreed with relevant Government departments. To incorporate all changes in design made in the Construction Phase, the Purchaser updates and submits this together with the revised design calculations and the corresponding the design to Government Representatives.
			x.	Arrange before expiry of each of the maintenance periods of the Service, a final joint inspection of the Service with CEDD, the management and maintenance parties and authorities. The as-constructed drawings and the O&M Manuals including Slope Maintenance Manuals are submitted prior to this final inspection.
			xi.	Submit the as-constructed drawings and the O&M Manuals including Slope Maintenance Manuals together with all survey data for preparation of the as-constructed drawings in electronic files facilitate subsequent input into the Land Information System in the LandsD.
			xii.	Submit one full set of finalised “as constructed” film transparency drawings, or the format as agreed with relevant management and maintenance parties showing in full detail of the Service as actually carried out together with all relevant records including final design calculations and information necessary for the maintenance of the Service to relevant management and maintenance parties and authorities.
			xiii.	Submit a full set of all site records relating to the Service with proper classification/indexing system to enable easy retrieval of information.
			xiv.	The Purchaser carries out all duties imposed under the Land (Miscellaneous Provisions) Ordinance or under the conditions of the XP and, where applicable, EXP in so far as such duties have not been imposed only on the contractors as Nominated Permittees under the Land (Miscellaneous Provisions) Ordinance.

4.	Interface parties	(a)	The Purchaser shall coordinate thoroughly with the following interface parties whose works will involve interfacing with the Service, and shall agree with these parties the details of interfaces and interfacing construction arrangement including programme of works interfacing the Service, the details between the works under interface parties and the Service, site activities, access arrangement, construction sequences, methodology and working spaces. These interfacing parties include, but not be limited to the following:	
			i.	The designer(s), consultant(s) and contractor(s) of Contract No. YL/2023/03 - Hung Shui Kiu/Ha Tsuen New Development Area Second Phase Development - Contract 3 - Site Formation and Engineering Infrastructure Works (hereinafter referred to as “YL/2023/03”).
			ii.	The designer(s), consultant(s) and contractor(s) of Contract No. YL/2023/04 - Hung Shui Kiu/Ha Tsuen New Development Area Second Phase Development - Contract 4 - Site Formation and Engineering Infrastructure Works (hereinafter referred to as “YL/2023/04”).
			iii.	The designer(s), consultant(s) and contractor(s) of Contract No. YL/2023/05 - Hung Shui Kiu/Ha Tsuen New Development Area Second Phase Development - Contract 5 - Site Formation and Engineering Infrastructure Works (hereinafter referred to as “YL/2023/05”).
			iv.	Developers and their designer(s), consultant(s) and contractor(s) of site at Site 4-1.
			v.	Architectural Services Department (ArchSD) / relevant Government Departments and their designer(s), consultant(s) and contractor(s) of Government, Institution or Community (GI/C) sites (Divisional Fire Station cum Ambulance Depot cum Staff Quarters and Community Hall and Sports Centre).
			vi.	Housing Department (“HD”) and their designer(s), consultant(s) and contractor(s) for the Public Housing sites.
			vii.	The stakeholders of the existing villages near Ting Yick Road / houses / residential buildings, buildings, etc. to the boundaries of the site.
			viii.	Yuen Long District Office and their contractor(s) for the maintenance / improvement works.

			ix.	District and/or maintenance works by contractors of HyD and other concerned departments.
			x.	Utility undertakings (including but not limited to DSD, WSD, EMSD, CLP Power Hong Kong Limited, The Hong Kong and China Gas Company Limited, Hong Kong Broadband Network Limited, Hong Kong Telecommunications (HKT) Limited, HGC Global Communications Limited, Hong Kong Cable Television Limited, Wharf T&T Limited) and their contractors.
			xi.	Any contractor(s) with valid Excavation Permit.
		(b)		The Purchaser's attention is drawn to the interfaces with other works to be undertaken in the vicinity the Service, in particular the items as listed below. The Purchaser shall liaise with the interface parties, relevant management and maintenance parties and authorities and the Government Representatives.
			i.	<p>The Purchaser shall coordinate with the interface parties on the temporary drainage management to prevent drainage performance of any existing drainage and stormwater collection system being adversely affected; to avoid stormwater from getting into low point area; and to avoid causing any flooding hazards to the surrounding lands and associated drainage systems. The Purchaser shall coordinate with the interface parties to maintain the temporary drainage system until the completion of the permanent drainage system and ensure that the operation of the temporary drainage system is adequate and effective throughout the Service and provide enhancement to the temporary drainage systems when necessary.</p> <p>The Purchaser shall also coordinate and liaise with the interface parties including YL/2023/04 and YL/2023/05 on the construction programme of Road P1, Road D6, Road L18, Road L25 and associated site formation, footpath and cycle track and pedestrian subways.</p>
			ii.	During the construction of the Service, the Purchaser shall coordinate with the interface parties including YL/2023/04, YL/2023/05, HD and site at Site 4-1 as shown in Annex I, on the arrangement of hoarding and / or fencing between the boundaries of the site under interface parties and the Service. The Purchaser shall also carry out monitoring of settlement and movement of adjacent ground and adjoining construction sites and take all necessary precautions to protect the completed works of the Service from the effects of vibration, undermining, or other earth movements which may

				cause by the construction works in the proximity to the Service.
			iii.	<p>The Purchaser shall coordinate and liaise with interface parties including YL/2023/04, YL/2023/05, HD and site at Site 4-1 as shown in Annex I, on the lead in locations, invert level and manholes, valves location, road levels, road geometry, roadworks, site formation, geotechnical structures, amenity, and interface details between the works under interface parties and the works under Site 4-2 as shown in Annex I prior to the commencement of the construction works of the works under Site 4-2 as shown in Annex I. Prior to the commencement of the Service, the Purchaser shall liaise with interface parties YL/2023/04, YL/2023/05, HD and site at Site 4-1 as shown in Annex I on their works programme, the construction activities, construction space required/ methodology, etc., in particular the construction programme of Road P1, Road D6, Road L18, Road L25, the site formation works, drainage system, sewerage system and water supply works adjacent to Site 4-2 as shown in Annex I.</p> <p>The Purchaser shall arrange and participate the joint inspections and site walks with relevant Purchaser's representatives and interface parties when necessary.</p>
			iv.	<p>The Purchaser shall coordinate with interface parties YL/2023/03, YL/2023/04, YL/2023/05 and HD to gain access for the Service. This access arrangement shall be fully coordinated through meetings, inspections and documented for subsequent implementation. Detailed arrangement including but not limited to the exact extent, timing and working spaces at the interface between the Service and the interface parties are to be agreed and coordinated.</p>
			v.	<p>The Purchaser shall liaise closely with the interface parties to agree reasonable, uninterrupted, free and safe construction accesses as well as the delivery routes for the Service. The Purchaser shall agree with the interface parties on an evacuation plan for emergency and obtain the agreement from the Government representatives. The Purchaser shall also be responsible for setting up his own security system for the Service.</p>

5.	Location and access		<p>The SFW shall be located as shown in the drawings as detailed in Annex I of this Technical Schedule.</p> <p>Existing Castle Peak Road, Yick Yuen Road, Tin Ha Road, Road D6, Road L25, Road L30 and Road P1 are the main access to the SFW.</p>
6.	Existing Tree(s)		<p>Existing trees, if any, on site or adjoining the site should be protected and preserved by incorporating them into the new landscape design. Should pruning / transplanting / felling be deemed necessary, the Purchaser shall be responsible for obtaining statutory approval from CEDD and any other relevant authority and for the cost associated with tree retention (including protection and pruning) / transplanting / felling plus 12-month Establishment Works for the protected/transplanted trees.</p>
7.	Readiness		<p>The Service shall be designed and constructed as self-contained facilities capable of being wholly managed and maintained by the Government independently.</p>
8.	Inclusion		<p>The Service shall be provided with full fitting-out provisions that fulfill the requirements stated in Annex I of this Technical Schedule.</p> <p>Provisions shall be provided in accordance with Annex I of this Technical Schedule, together with any other necessary associated and ancillary maintenance spaces, services, facilities and items as may be required and deemed necessary by the Government Representatives.</p>

9.	Materials and Workmanship	(a)	<p>The Service shall be designed and constructed by the Purchaser in accordance with good practice generally and to the particular requirements of this Technical Schedule in such a way that future maintenance costs and energy costs are minimized and to a standard at least as high as that achieved in comparable Government-built facilities.</p> <p>Materials and workmanship for all external finishes and features that form an integral part of the Service shall be low maintenance, environmentally friendly, in compliance with all standards indicated herein or as may be required by the Government Representatives, and shall be compatible with the finishes and features of other integral or adjacent accommodation within the lot erected by the Purchaser in accordance with the C/S. Particular attention should be given to appropriate specifications and detailing due to heavy-duty use and potential vandalism to which public open spaces are liable.</p> <p>The Purchaser shall comply with all latest versions of statutory Ordinances, Regulations, standards, specifications and Codes of Practice relevant to public works contracts in the Hong Kong Special Administrative Region (“Hong Kong”).</p>
		(b)	<p>The Purchaser shall engage the approved suppliers or specialist contractors on the “List of Approved Suppliers of Materials and Specialist Contractors for Public works” as listed in https://www.devb.gov.hk/en/construction_sector_matters/contractors/supplier/index.html for the Service as necessary.</p>
		(c)	<p>The Purchaser shall warrant that all professional skill and care shall be exercised in the preparation of the design of the Service and in the preparation of all details and calculations relating thereto.</p>

10.	Responsibilities		<p>The Purchaser is entirely responsible for the design, supervision and construction of the Service irrespective of any vetting, checking or inspections/comments that may be carried out or given by the Government Representatives.</p> <p>The submission of design proposals to or the inspection of the construction works by, or any agreements/acceptances by the Government Representatives shall not relieve the Purchaser from his responsibility for satisfactory compliance with the above stipulations and requirements under this Technical Schedule.</p> <p>The Purchaser is entirely responsible for the handover of the Services to relevant management and maintenance parties and authorities.</p> <p>The Purchaser shall not consider the Service be substantially completed without the prior agreement from the Government Representatives.</p>
11.	Submissions	(a)	<p>The Purchaser shall submit his design proposals for the Government Representatives' agreement for the Service for all stages, including all relevant layout plans, sections, elevations, details, etc. The relevant Government departments and authorities, should be consulted and agreed on the detailed design and submissions of the Service before implementation.</p> <p>The plans shall be at a scale of 1:200 or larger and shall contain information on the design proposals of the Service or other scale as instructed by the Government Representatives, including a survey and treatment of existing trees, site layout, site formation levels, general arrangement, details, and such other information as the Government Representatives may require.</p> <p>All submissions shall comply with requirements in the relevant guidance notes, technical circulars, memorandum, practice notes and code of practice, design manual, etc. issued by CEDD, HyD, DSD, WSD, TD, Planning Department, Bureaus and Buildings Department.</p>
		(b)	<p>The extent, boundary, location and the term of "the Service" shall be clearly demarcated in all submissions, including general layout plans of the Service to demonstrate the design and disposition are in compliance with lease conditions.</p>
		(c)	<p>Samples of all proposed finishing materials and major building services installations (with samples if on request by the Government Representatives) shall be submitted for the Government Representatives' agreement prior to the placement of orders.</p>

		(d)	The Purchaser shall prepare presentation papers and drawings and make presentations to the concerned District Council and relevant management and maintenance departments as and when requested by the Government Representatives.
		(e)	The Purchaser shall allow sufficient lead-time, at least 30 calendar days shall be allowed after receiving the submissions, for the Government Representatives to comment on the submissions.
12.	Approvals/ agreements		<p>All references to approval/agreement in this Technical Schedule shall be deemed to be approval/agreement in writing by the specified approving/agreeing parties and all submissions for approval/ agreement shall be made at an early date.</p> <p>The Purchaser shall allow sufficient lead-time for the Government Representatives to comment on design/materials submissions.</p> <p>Programme of submission shall also be submitted in advance to the Government Representatives to facilitate the checking process in master layout stage and also during various design stages and project stages.</p>
			<p>Agreement of the submissions shall be limited to standards of provision, general safety and general principles of design. The Purchaser shall be responsible for the detailed design and shall ensure that such design complies fully with the requirements of this Technical Schedule and the specifications referred to herein, as well as all currently enforced Ordinances, Regulations, Code of Practices, Circulars, etc.</p> <p>The Purchaser is entirely responsible for the design, supervision and construction of the Service, irrespective of any approval / agreement, vetting, checking or inspections/comments that may be carried out or given by the Government Representatives. Any pertaining approval / agreement / acceptance from the Government Representatives shall not relieve the Purchaser from his responsibilities for satisfactory compliance with the stipulations.</p> <p>The Purchaser shall not consider the Service be substantially completed without the prior agreement from the Government Representatives.</p>

13.	Inspections and Induction		The Purchaser shall conduct/arrange site inspections/ meetings as and when required by the Government Representatives, including but not limited to the followings:	
			-	before substantial completion;
			-	upon substantial completion;
			-	prior to handover;
			-	for handover;
			-	at the end of the Defects Liability Period
			-	for briefing(s) on specified electrical/mechanical and/or other installations; and
			-	at any times as may be required by the Government Representatives.
			<p>to be attended by the Government staff and/or their agents, and as required by the Government Representatives.</p> <p>On completion of the Service, the Purchaser shall conduct/arrange briefing and training sessions, on all aspects of the electrical/mechanical or other installations related to the Service to be attended by the Government staff and/or their agents, to the satisfaction of the Government Representatives.</p>	
14.	Record Drawings and Documents to be Provided		The Purchaser shall provide within 8 weeks from the respective dates of delivery of possession of the Service, three (3) complete sets, or otherwise specified, of the following documents in relation to the Service to the Government Representatives:	
		(a)	As-built/installed, scaled and dimensioned record site formation works drawings, site formation drainage details, structural and geotechnical drawings (including layout plans and details drawings), in the agreed format;	
		(b)	Paper prints for all drawings as (a) above;	

		(c)	<p>Computer disk for all the as-built/installed drawings as (a) above and the digital files consolidating all approved revisions. The CAD drawings shall be prepared conforming to the CAD Standard for Works Project version 1.03.00 (or later versions as agreed between the Purchaser and the Government departments from time to time) as posted on the Development Bureau's web site http://www.devb.gov.hk/cswp;</p> <p>Each computer disk shall be in CD-ROM/ DVD-ROM, labelled, with cross reference to a printed list of files detailing the contents and purpose of each files and supplied in the sturdy plastic container;</p> <p>The draft as-built drawings shall be submitted to the Government Representatives for comment one month before the completion of construction on the Service;</p>
		(d)	Fire Service Installation Certificate and Dangerous Goods Store License (if applicable);
		(e)	Operation, maintenance manuals and test reports for all systems, plant, equipment and other items as appropriate which shall be bound in separate volumes for different systems;
		(f)	Any other essential drawings, information, details and certificates relating to the Yellow Stippled Black Area as may be required by the Government Representatives;
		(g)	Maintenance Manual for the General and Specific Basic Provisions to be handed over to relevant management and maintenance departments covering list of items of works and installations requiring routine maintenance, the recommended frequency of routine maintenance inspection and the recommended maintenance cycle of works and installations;
		(h)	Structural statutory compliance certificate and Checking Report (when structural / geotechnical design submission to the Government Representatives is required);
		(i)	Schedule of keys;
		(j)	For record drawings and documents submission related to BIM, please refers to the advisory requirement under the related clauses of this Technical Schedule; and
		(k)	Any other essential information, details and certificates relating to the Service as may be requested by the Government Representatives.

		(l)	All items above and a draft of the Maintenance Manual shall be submitted before the handover.	
15.	Defects Liability and Maintenance		<p>The Purchaser shall at his own expense provide free maintenance for the Service within the Defects Liability Period (as defined in the Special Condition No. (4)(l)(i)(II) of C/S). The free maintenance shall include routine maintenance of all plant and equipment, emergency repairs and fault attendance. Maintenance of building services systems shall be in accordance with the requirements as stipulated in the GS. A maintenance schedule shall be submitted to the Government Representatives for agreement prior to the handover of the Service.</p> <p>All relevant Certificates for compliance with statutory requirements if expired before the end of the Defects Liability Period (as defined in Special Condition No. (4)(l)(i)(II) of the C/S) shall be renewed.</p>	
16.	The SFW Requirements	The Service shall be designed and constructed to the satisfaction of the Government Representatives to incorporate, inter alia, the following requirements wherever applicable:		
	Safety	(a)	The SFW design shall also take into account safety aspects;	
		(b)	The boundaries of the Service shall be demarcated as appropriate in accordance with Annex I of this Technical Schedule and/or as agreed with the Government Representatives.	
		(c)	The Purchaser shall comply with all latest versions of statutory Ordinances, Regulations, standards, specifications and Codes of Practice relevant to public works contracts in Hong Kong.	
17.	Waste Management Requirements		<p>The Purchaser shall control contractor and construction works sites on proper Construction and Demolition Material (“the C&DM”) management and disposal by preparing and implementing a plan setting out the waste management measures. The plan shall include appropriate mitigation means to avoid, reduce, reuse and recycle inert construction waste including proper control measures or steps be taken during day-to-day operation. The Purchaser shall provide the following measures into the works contract for implementation at the construction stage so as to reduce generation and disposal of the C&DM:</p>	
			(a)	separation of non-inert and inert portions of the C&DM for disposal;
			(b)	re-use of suitable excavated materials as general filling material on-site to minimize off-site disposal of the C&DM;

			(c)	use of prefabricated formwork for temporary works on site to minimize generation of the C&DM; and
			(d)	control the disposal of the C&DM to the designated public filling facility and landfill by a trip-ticket system.

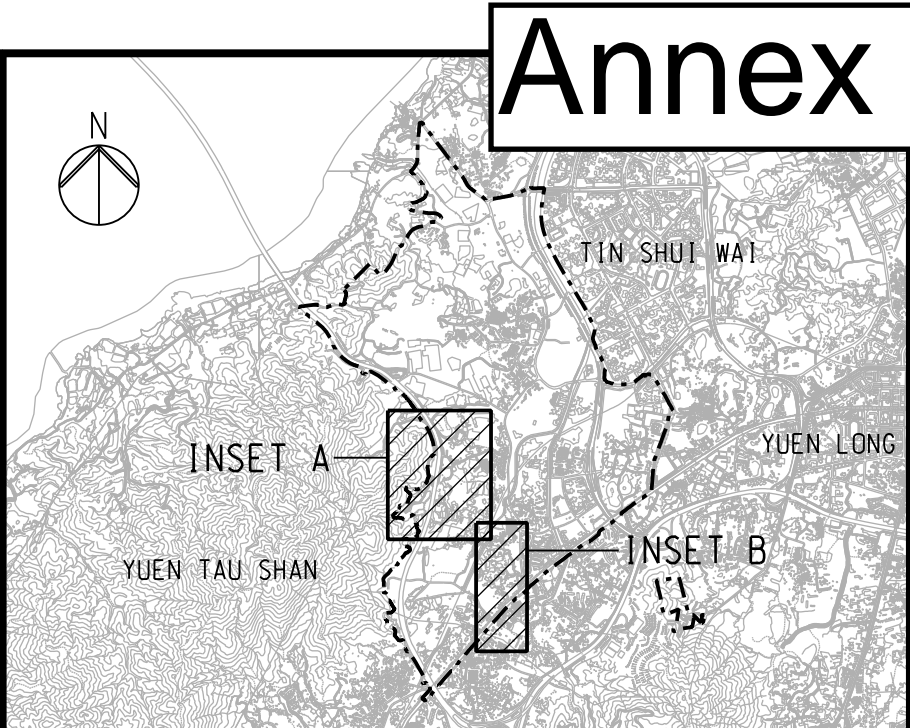
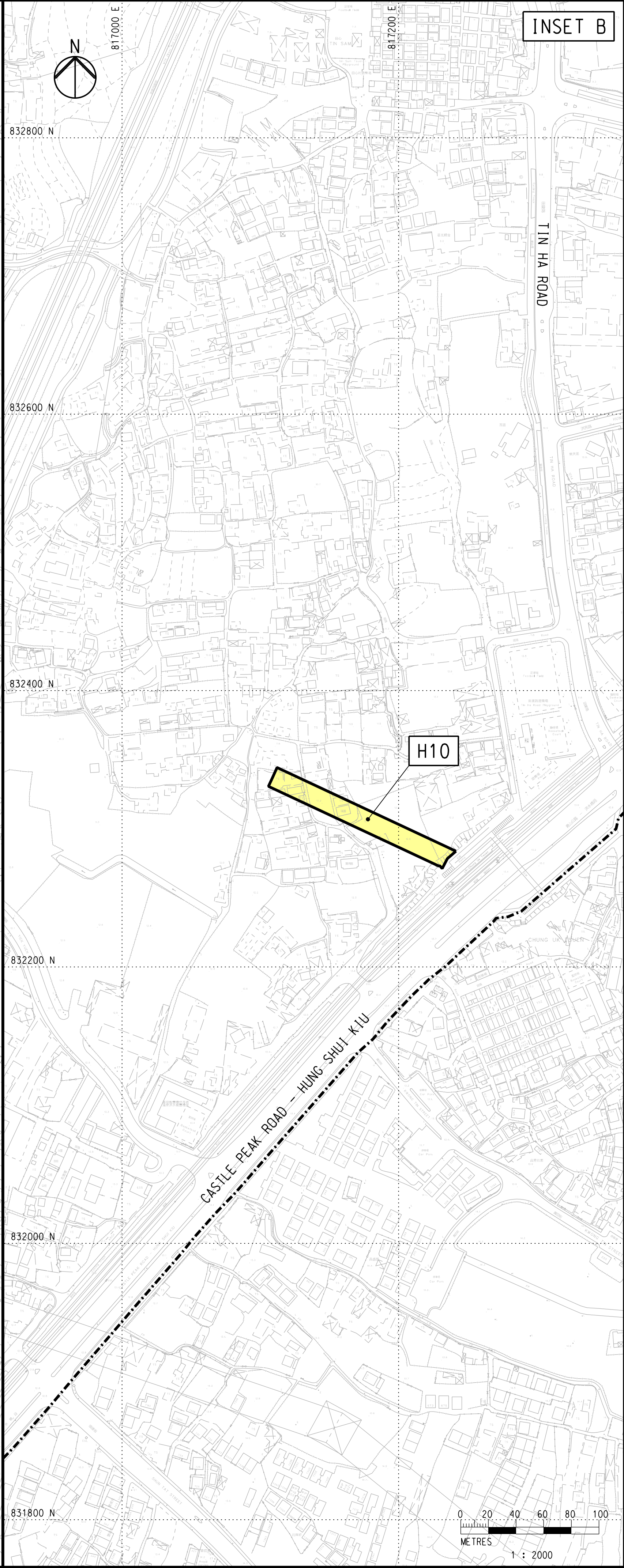
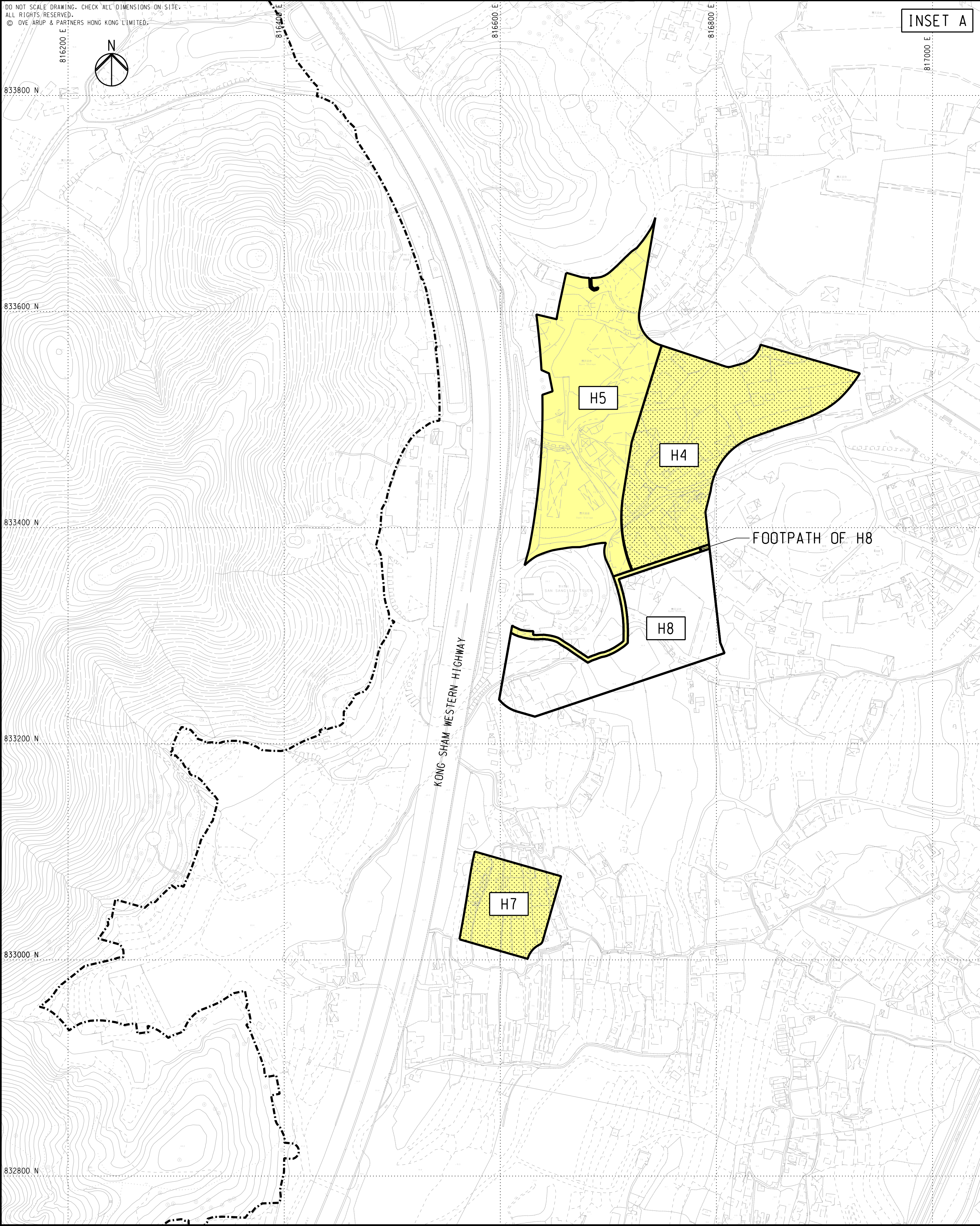
List of Annex

Annex I

Drawings

- Large-Scale Land Disposal in HSK/HT NDA Overall Layout
- Setting Out
- General Layout
- Road Lighting Demolition
- Site Formation Works Layout
- Hydroseeding Layout
- Drainage Layout
- Sewerage Layout
- Fresh Water Supply Works Layout
- Flushing Water Supply Works Layout
- Existing and Proposed Power Cables
- Existing and Proposed Gas Mains
- Existing and Proposed Telecom Layout

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Date : 12/24/2025



LEGEND

----- SITE BOUNDARY

AREA	SITE NO.
H4	SITE 3-33
H5	SITE 3-32
H7	SITE 4-2
H8	SITE 3-37
H10	PEDESTRIAN STREET

Rev	Description	By	Date
C	THIRD ISSUE	KF	12/25
B	SECOND ISSUE	KF	12/25
A	FIRST ISSUE	KF	09/25

Consultant

ARUP

Project Title

Agreement No. CE 1/2020 (CE)
Hung Shui Kiu / Ha Tsuen
New Development Area Package A
Works for Second Phase Development
– Design and Construction

Drawing title

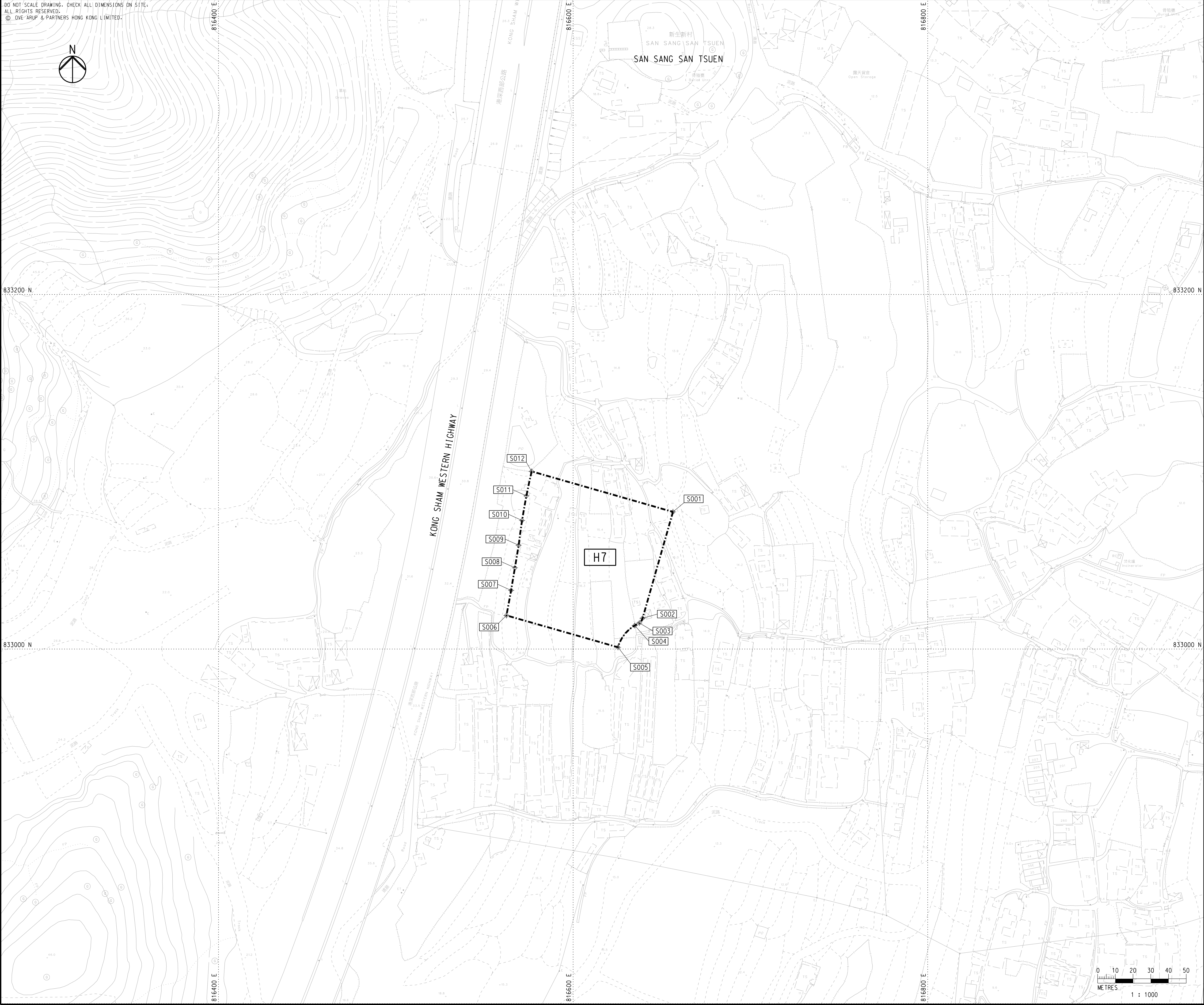
LARGE-SCALE LAND DISPOSAL
IN HSK / HT NDA
OVERALL LAYOUT PLAN

Drawing no.		Rev.	
278463/SK/C/461		C	
Drawn RY	Date 09/25	Checked EH	Approved KKC
Scale 1:2000 @ A1		Status PRELIMINARY	

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LEGEND

PART OF SITE (H7)

S001

SETTING OUT POINT

SETTING OUT POINT	EASTING	NORTHING
S001	816656.315	833077.373
S002	816639.183	833017.378
S003	816637.326	833014.714
S004	816634.764	833013.299
S005	816625.308	833001.017
S006	816562.417	833018.976
S007	816565.041	833033.111
S008	816567.174	833045.833
S009	816569.308	833058.554
S010	816571.221	833072.526
S011	816573.660	833086.416
S012	816576.623	833100.204

CURVE CENTER	EASTING	NORTHING	RADIUS
S002-S003	816634.038	833018.986	5.400
S004-S005	816645.501	832995.251	21.000

Rev	Description	By	Date
C	THIRD ISSUE	KF	12/25
B	SECOND ISSUE	KF	12/25
A	FIRST ISSUE	KF	07/25

Consultant

ARUP

Project Title

Agreement No. CE 71/2020 (CE)
Hung Shui Kiu / Ha Tsuen
New Development Area Package B
Works for Second Phase Development
– Design and Construction

Drawing title

PART OF SITE (H7)
SETTING OUT PLAN

Drawing no.

282748/POS/SK/H7

Rev.

C

Drawn	Date	Checked	Approved
RY	07/25	EH	KKC

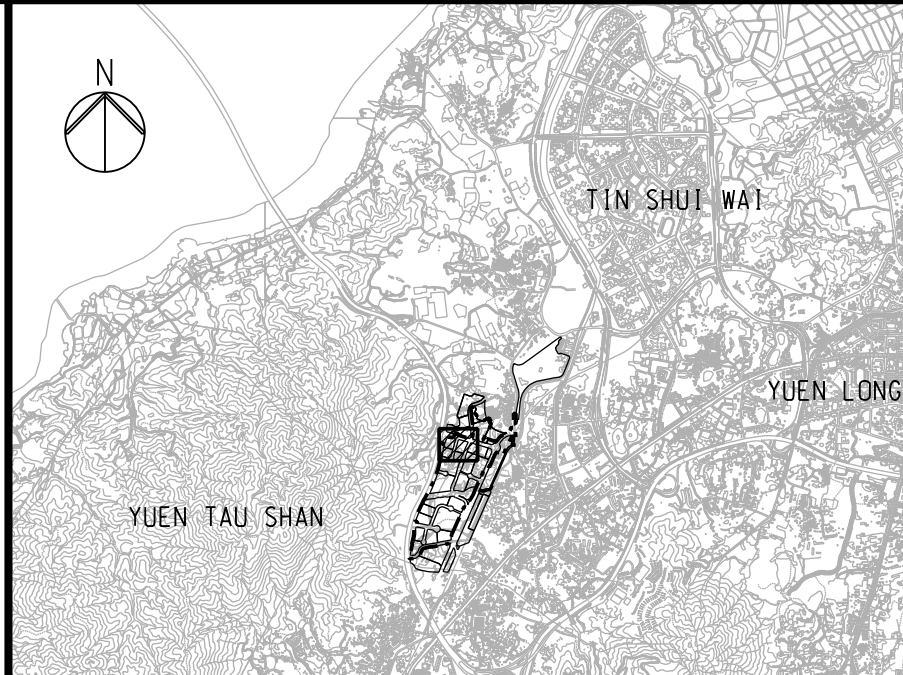
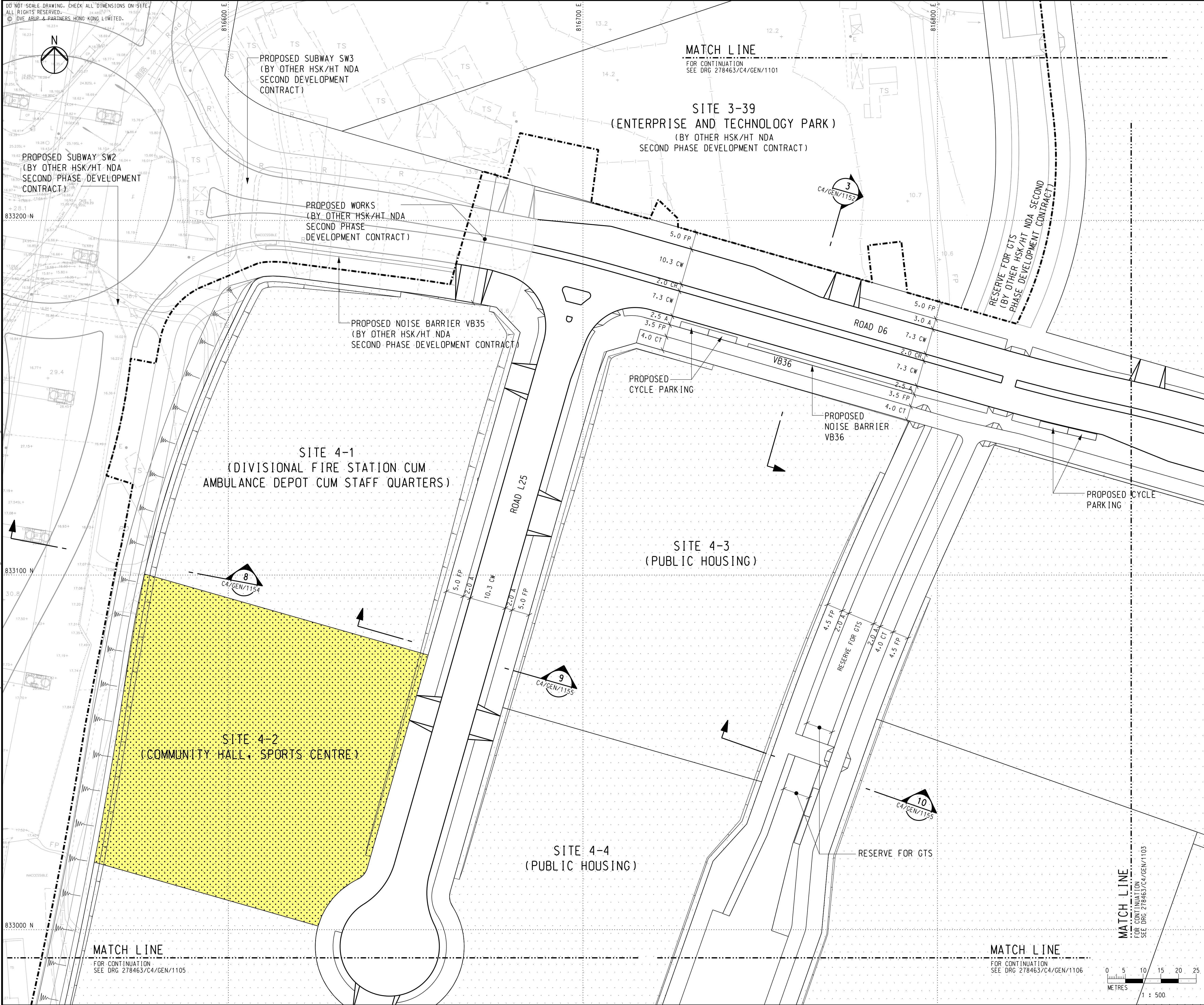
Scale	Status
1:1000 @ A1	PRELIMINARY

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KEY PLAN

NOTES
1. FOR GENERAL NOTES AND LEGEND, REFER TO DRAWING NO. 278463/C4/GEN/1101.

Yellow Stippled Black Area

Rev	Description	By	Date
00	TENDER ISSUE	PY	02/24

Consultant

ARUP

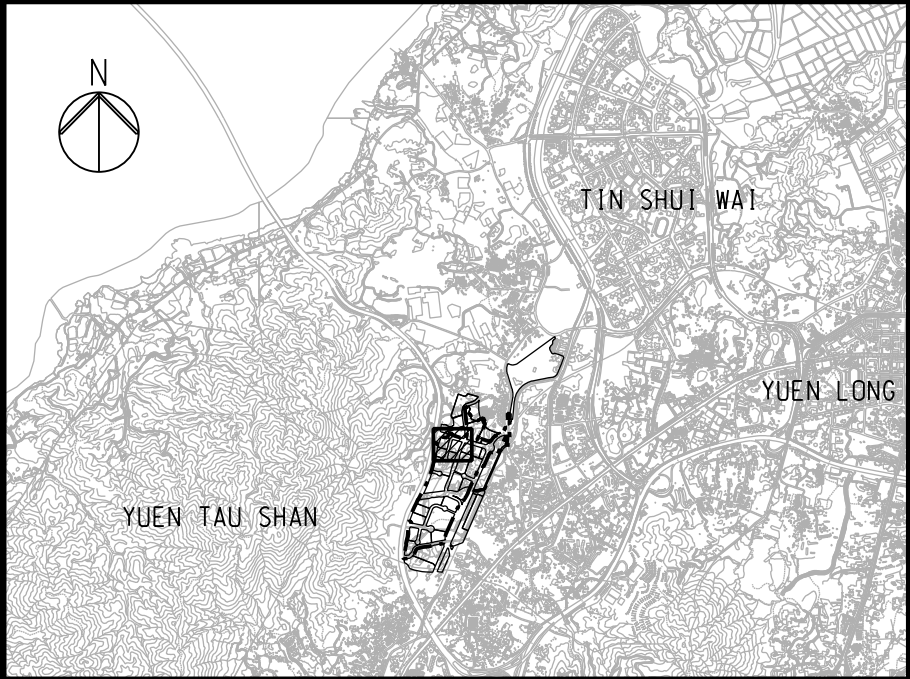
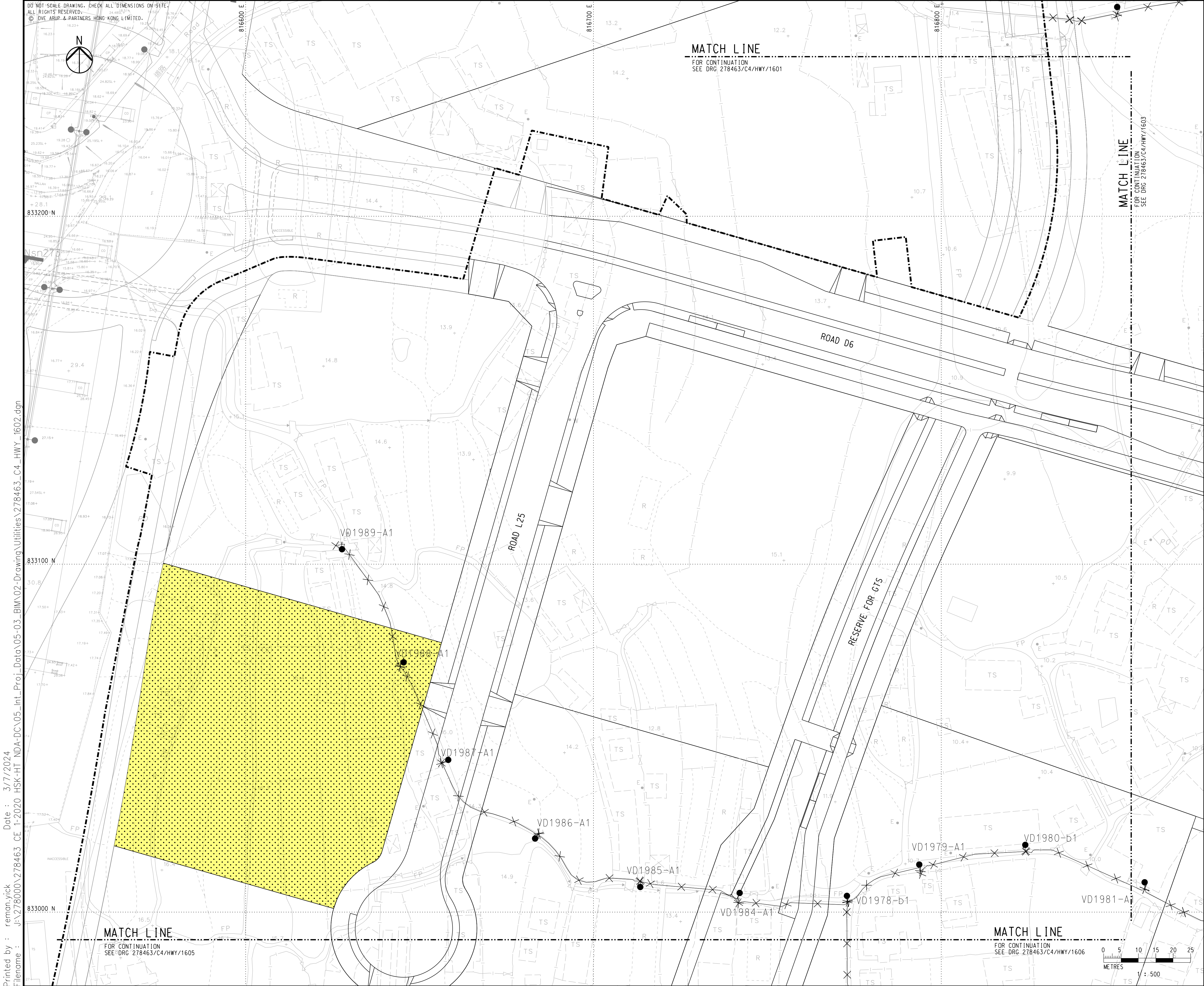
Project Title
Contract No. YL/2023/04
Hung Shui Kiu/Ha Tsuen
New Development Area
Second Phase Development - Contract 4 -
Site Formation and Engineering
Infrastructure Works

Drawing title
**GENERAL LAYOUT PLAN
(SHEET 2)**

Drawing no. 278463/C4/GEN/1102		Rev. 00	
Drawn DT	Date 02/24	Checked EH	Approved DL
Scale 1:500 @ A1		Status TENDER	

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KEY PLAN

NOTES

1. FOR GENERAL NOTES AND LEGEND, REFER TO
DRAWING NO. 278463/C4/HWY/1601.

LEGEND

- BOUNDARIES OF THE SITE
- L EXISTING LIGHTING FACILITIES
- ✕ L EXISTING LIGHTING FACILITIES
TO BE DEMOLISHED

00	TENDER ISSUE	KMH	02/24
Rev	Description	By	Date

Consultant

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Project Title
Contract No. YL/2023/04
Hung Shui Kiu/Ha Tsuen
New Development Area
Second Phase Development - Contract 4 -
Site Formation and Engineering
Infrastructure Works

Drawing title
ROAD LIGHTING
DEMOLITION PLAN
(SHEET 2)

Drawing no.	278463/C4/HWY/1602	Rev.	00
Drawn	Date	Checked	Approved
TP	02/24	JL	DL
Scale	1:500 @ A1	Status	TENDER

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NOTES

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- THE EXTENT OF SLOPE WORKS SHOWN ON THIS DRAWING IS INDICATIVE ONLY. REFER TO DRAWING NO. 278463/C4/GEO/4221-4231 FOR DETAILS.

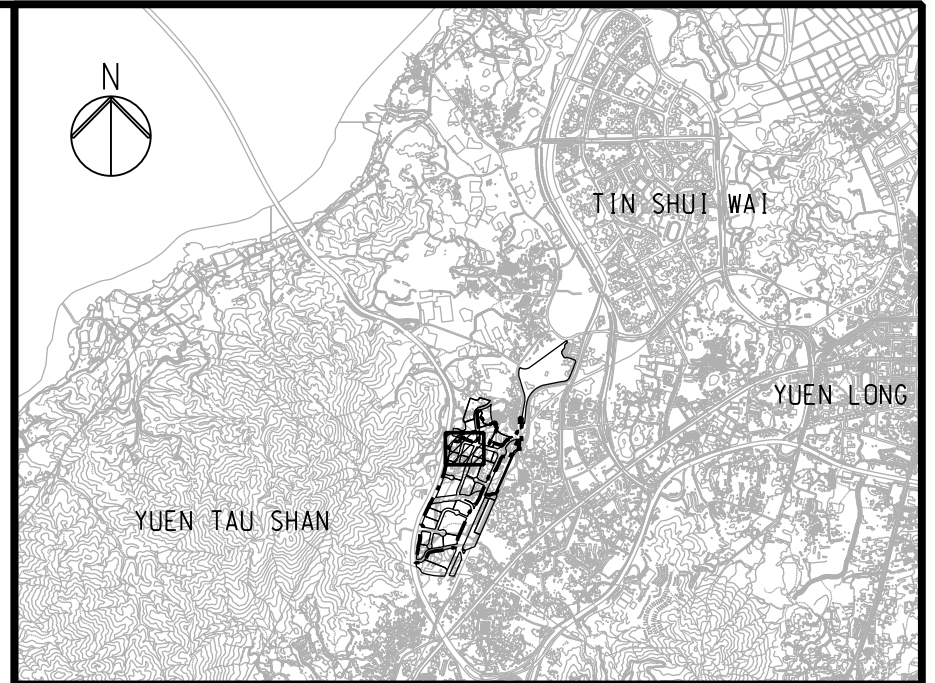
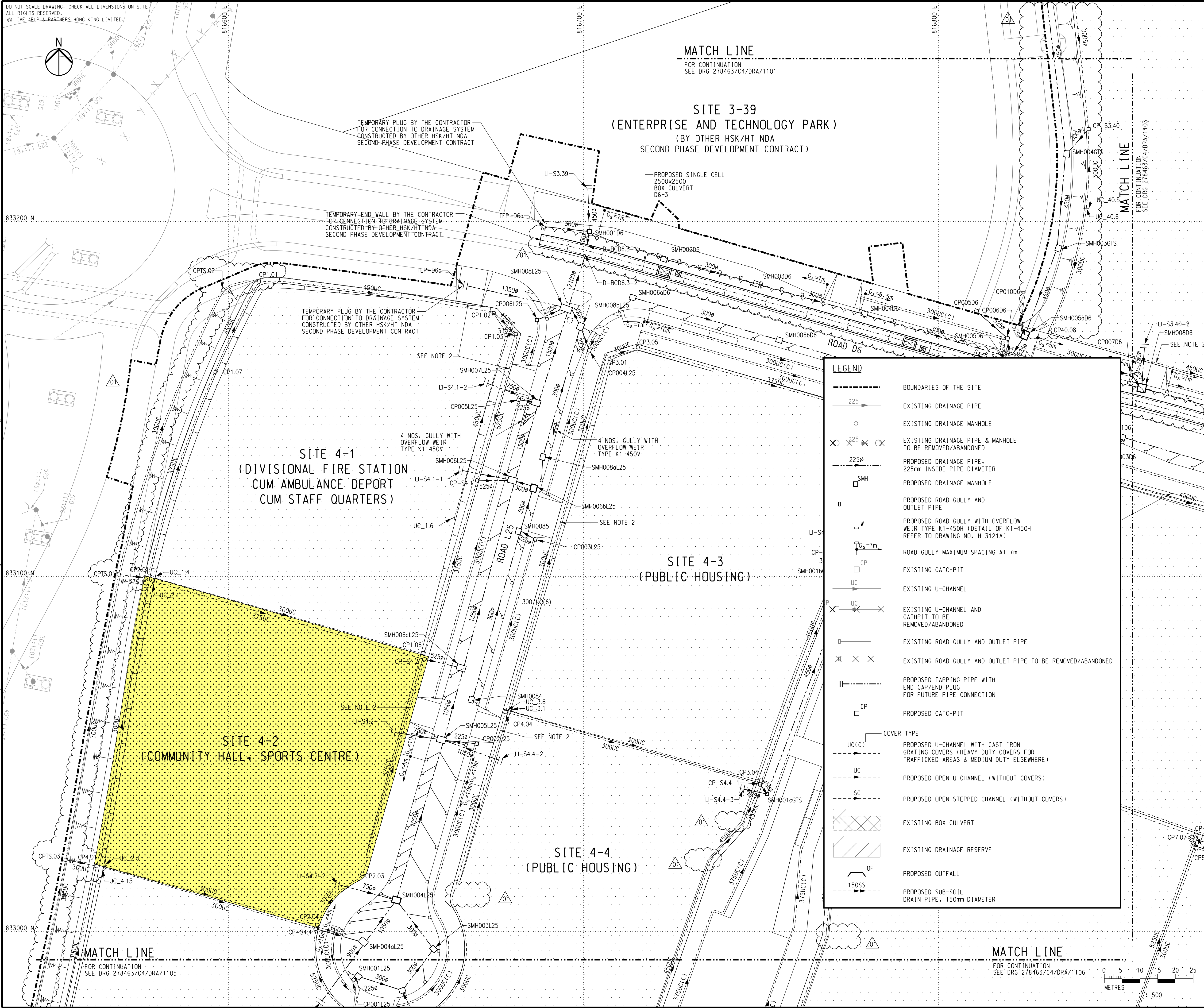
LEGEND

- BOUNDARIES OF THE SITE
- PROPOSED HYDROSEEDING

00	TENDER ISSUE	KL	02/24
Rev	Description	By	Date
Consultant			
ARUP			
Project Title			
Contract No. YL/2023/04			
Hung Shui Kiu/Ha Tsuen			
New Development Area			
Second Phase Development - Contract 4 -			
Site Formation and Engineering			
Infrastructure Works			
Drawing title			
HYDROSEEDING			
LAYOUT PLAN			
(SHEET 1)			
Drawing no.			Rev.
278463/C4/GEO/4711			00
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AC	02/24	HYJL	DL
Scale	1:1000 @ A1		Status
			TENDER



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KEY PLAN

NOTES

1. FOR GENERAL NOTES AND LEGEND, REFER TO DRAWING NO. 278463/C4/DRA/1001.
2. PROPOSED U-CHANNELS AT RUN-INS SHALL BE PROVIDED WITH HEAVY DUTY CAST IRON COVERS AS SHOWN ON THE DRAWINGS.
3. SPACING OF ROAD GULLIES THUS SHOWN:

← $G_s = 9m$ | GULLY SPACING, 9m MAXIMUM

01	TENDER ADDENDUM NO. 1	EF	03/24
00	TENDER ISSUE	EF	02/24
Rev	Description	By	Date

ARUP

Project Title
Contract No. YL/2023/04
Hung Shui Kiu/Ha Tsuen
New Development Area
Second Phase Development - Contract 4 -
Site Formation and Engineering
Infrastructure Works

DRAINAGE LAYOUT PLAN
(SHEET 2)

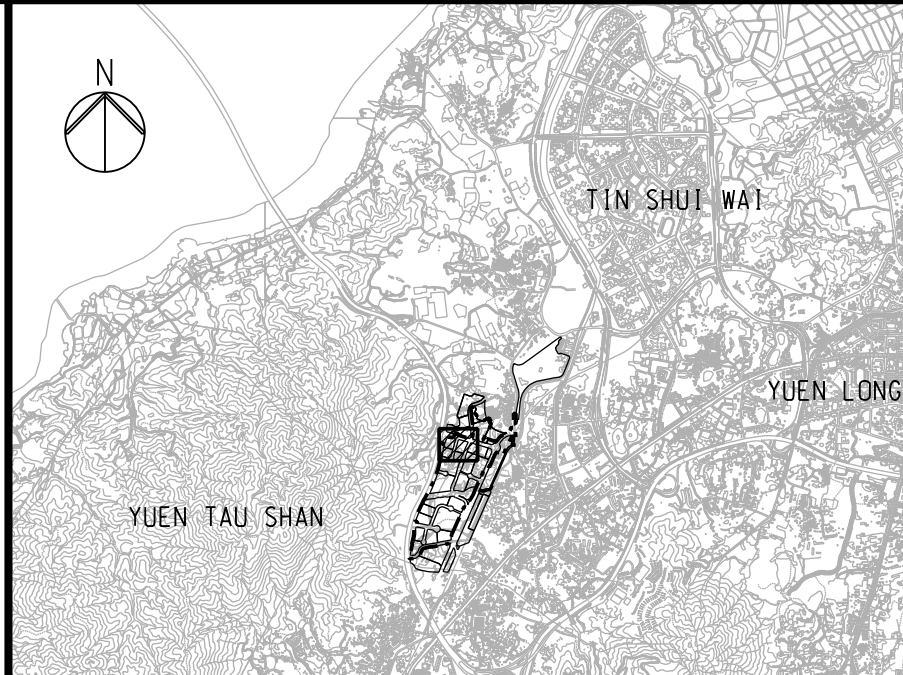
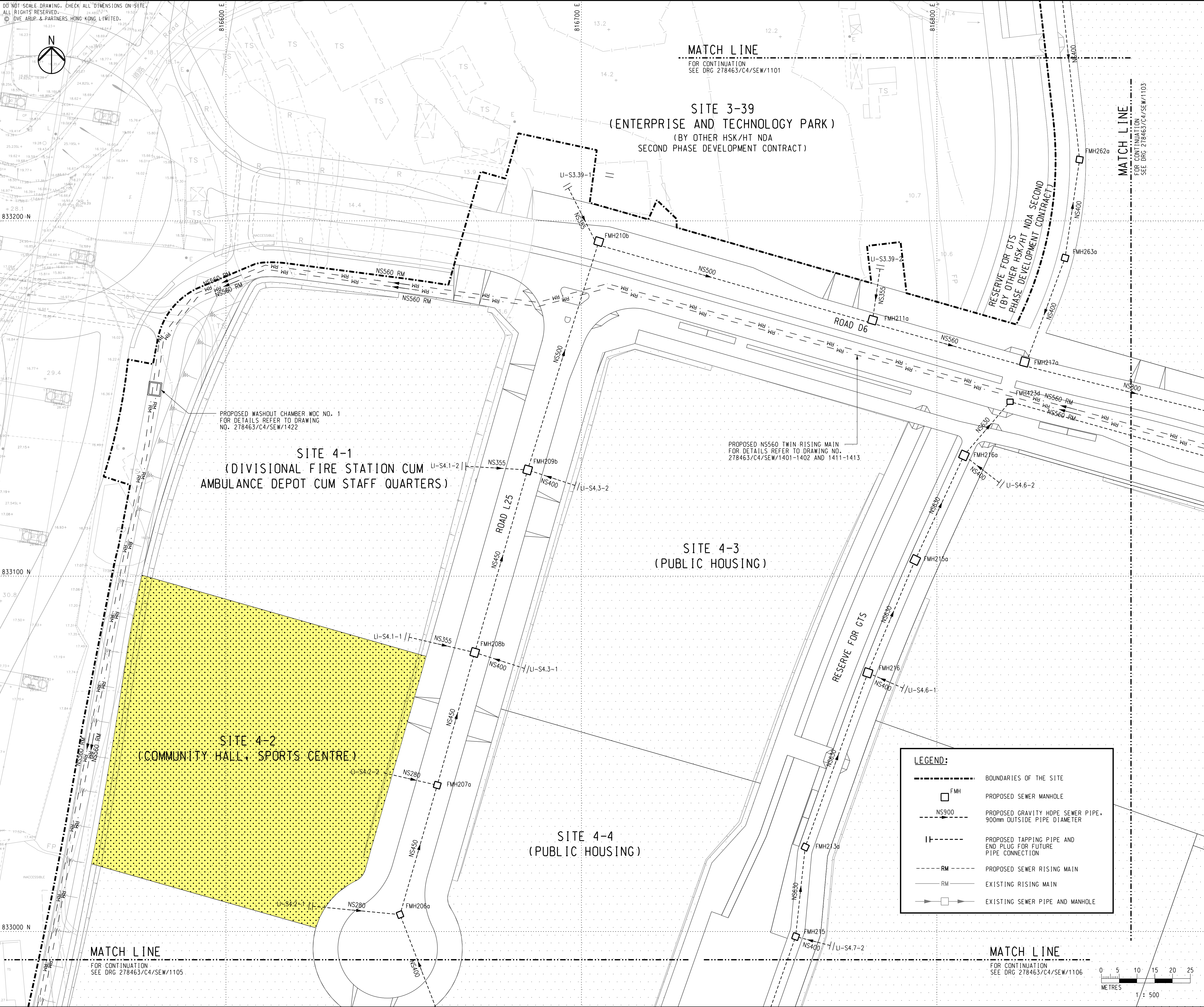
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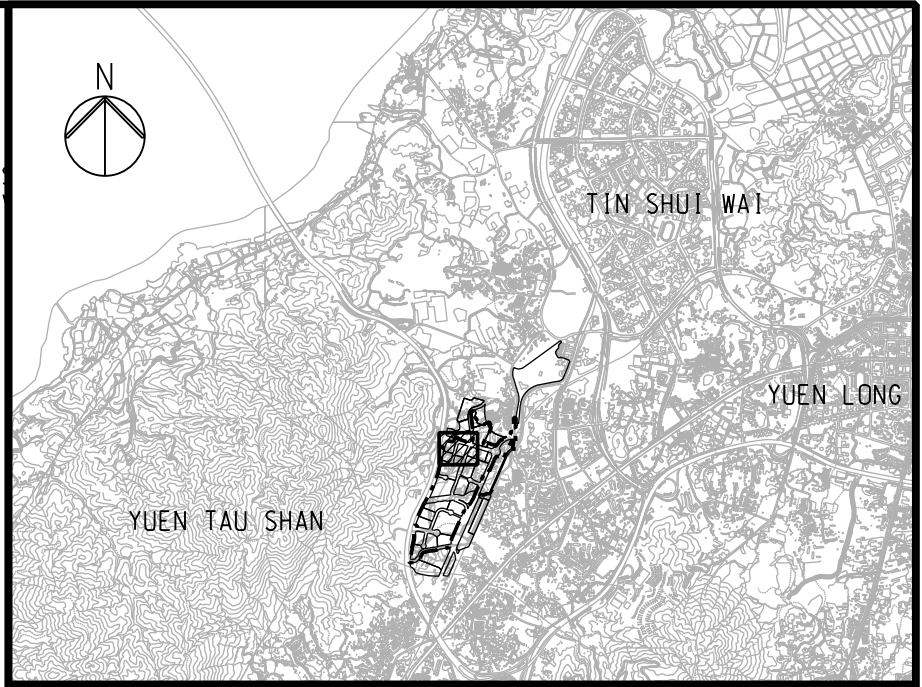
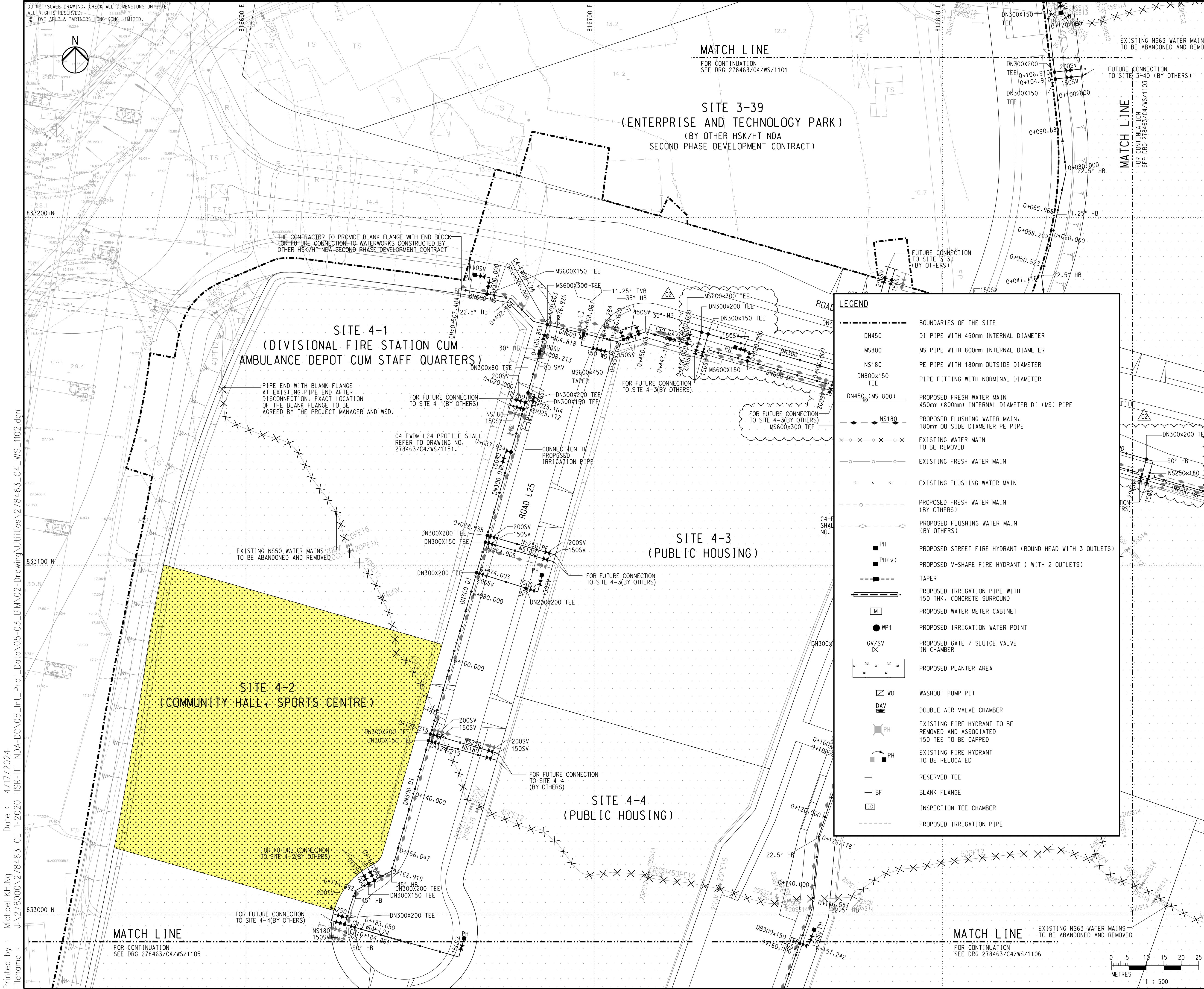
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Rev	Description	By	Date
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ARUP			
Project Title Contract No. YL/2023/04 Hung Shui Kiu/Ha Tsuen New Development Area Second Phase Development - Contract 4 - Site Formation and Engineering Infrastructure Works			
Drawing title SEWERAGE LAYOUT PLAN (SHEET 2)			
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KEY PLAN

NOTES

1. FOR GENERAL NOTES AND LEGEND, REFER TO DRAWING NO. 278463/C4/WS/1101.

ABBREVIATIONS	
FW	FRESH WATER SUPPLY PIPE
FLW	FLUSHING WATER SUPPLY PIPE
FS	FIRE SERVICE PIPE
DN	NOMINAL DIAMETER (FOR DI PIPE)
NS	NOMINAL SIZE (FOR PE PIPE)
DI	DUCTILE IRON PIPE
DAV	DOUBLE AIR VALVE
GV	GATE VALVE
SV	SLUICE VALVE
WOV	WASHOUT VALVE
HB	HORIZONTAL BEND
BF	BLANK FLANGE
CU	COPPER PIPE
GI	GALVANIZED IRON PIPE
PE	POLYETHYLENE PIPE
PH	PEDESTAL FIRE HYDRANT
NRV	NON RETURN VALVE
BVB	BOTTOM VERTICAL BEND
TVB	TOP VERTICAL BEND
PRV	PRESSURE REDUCING VALVE
MS	MILD STEEL
FM	FLOWMETER
WP	WATER POINT
E.G.L.	EXISTING GROUND LEVEL
F.G.L.	FINISH GROUND LEVEL
FSD	FIRE SERVICES DEPARTMENT

02	TENDER ADDENDUM NO. 2	EF	04/24
01	TENDER ADDENDUM NO. 1	EF	03/24
00	TENDER ISSUE	EF	02/24
Rev	Description	By	Date

Consultant

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Project Title

Contract No. YL/2023/04

Hung Shui Kiu/Ha Tsuen

New Development Area

Second Phase Development - Contract 4 -

Site Formation and Engineering

Infrastructure Works

Drawing title

FRESH WATER SUPPLY WORKS

LAYOUT PLAN

(SHEET 2)

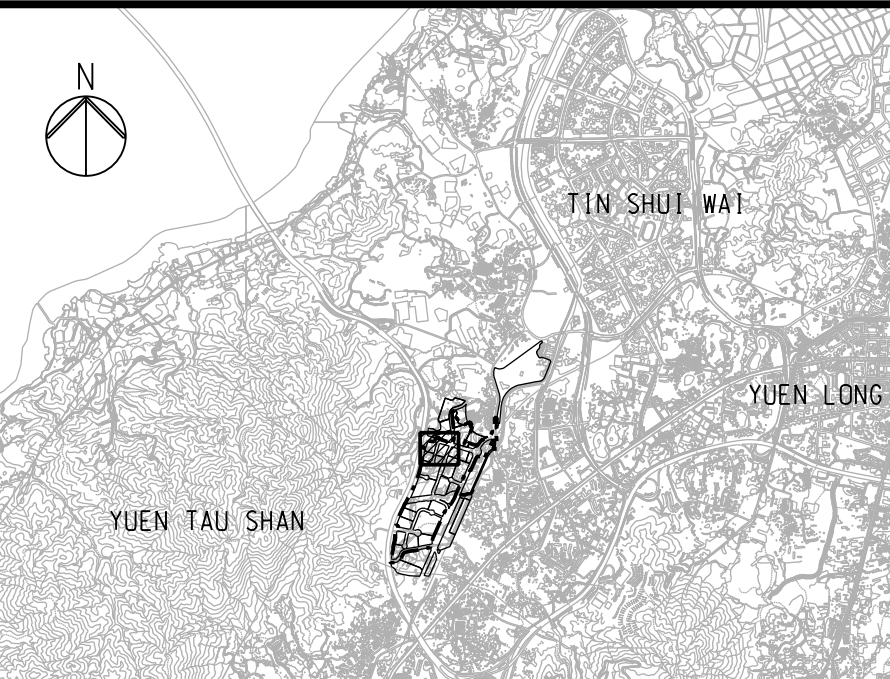
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278463/C4/WS/1102		02	
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NOTES

1. FOR GENERAL NOTES AND LEGEND, REFER TO
DRAWING NO. 278463/C4/WS/1301.

FW	FRESH WATER SUPPLY PIPE
FLW	FLUSHING WATER SUPPLY PIPE
FS	FIRE SERVICE PIPE
DN	NOMINAL DIAMETER (FOR DI PIPE)
NS	NOMINAL SIZE (FOR PE PIPE)
DI	DUCTILE IRON
DAV	DOUBLE AIR VALVE
GV	GATE VALVE
SV	SUICIDE VALVE
WV	WASHOUT VALVE
HB	HORIZONTAL BEND
BF	BLANK FLANGE
CU	COPPER PIPE
GI	GALVANIZED IRON PIPE
PE	POLYETHYLENE PIPE
PH	PEDESTAL FIRE HYDRANT
NRV	NON RETURN VALVE
BVB	BOTTOM VERTICAL BEND
TVB	TOP VERTICAL BEND
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E.G.L.	EXISTING GROUND LEVEL
F.G.L.	FINISH GROUND LEVEL
FSD	FIRE SERVICES DEPARTMENT

02	TENDER ADDENDUM NO. 2	EF	04/24
01	TENDER ADDENDUM NO. 1	EF	03/24
00	TENDER ISSUE	EF	02/24
Rev	Description	By	Date

Consultant

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Project Title
Contract No. YL/2023/04
Hung Shui Kiu/Ha Tsuen
New Development Area
Second Phase Development - Contract 4 -
Site Formation and Engineering
Infrastructure Works

Drawing title

FLUSHING WATER SUPPLY WORKS
LAYOUT PLAN
(SHEET 2)

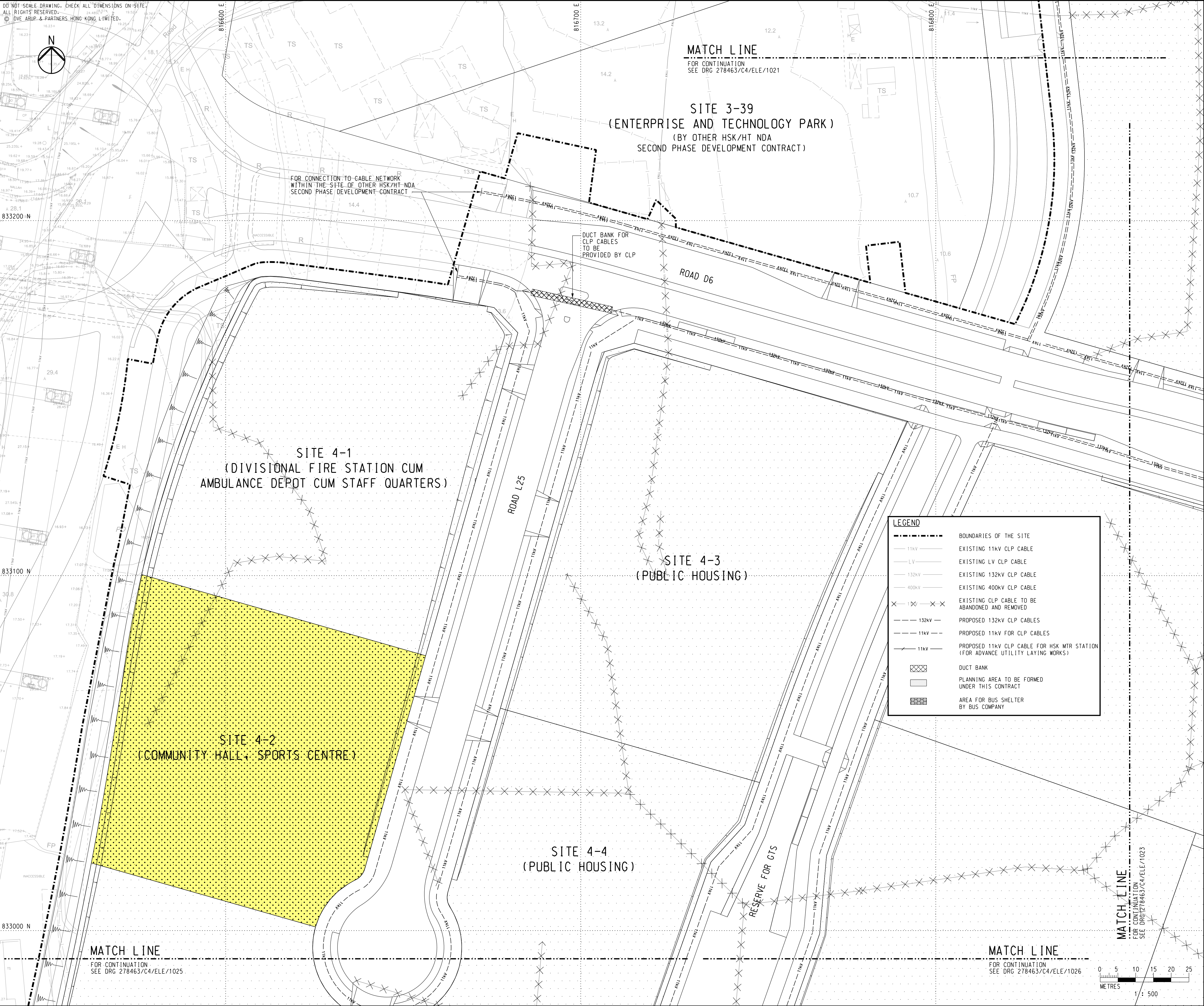
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MATCH LINE

FOR CONTINUATION
SEE DRG 278463/C4/GAS/1021

SITE 3-39
(ENTERPRISE AND TECHNOLOGY PARK)
(BY OTHER HSK/HT NDA
SECOND PHASE DEVELOPMENT CONTRACT)

FOR CONNECTION TO NETWORK
WITHIN THE SITE OF OTHER HSK/HT NDA
SECOND PHASE DEVELOPMENT CONTRACT

SITE 4-1
(DIVISIONAL FIRE STATION CUM
AMBULANCE DEPOT CUM STAFF QUARTERS)

SITE 4-3
(PUBLIC HOUSING)

SITE 4-2
(COMMUNITY HALL, SPORTS CENTRE)

SITE 4-4
(PUBLIC HOUSING)

FOR FUTURE CONNECTION
ALIGNMENT TO BE ADVISED BY OTHERS

RESERVE FOR GTS

LEGEND

Map of the area around the proposed MP400 gas main. The map shows the proposed gas main (MP400) and existing gas mains (MP315 and LPB315). It also shows the planning area (shaded area) and the bus shelter area (area with bus symbols). The map is oriented with North at the top.

Legend:

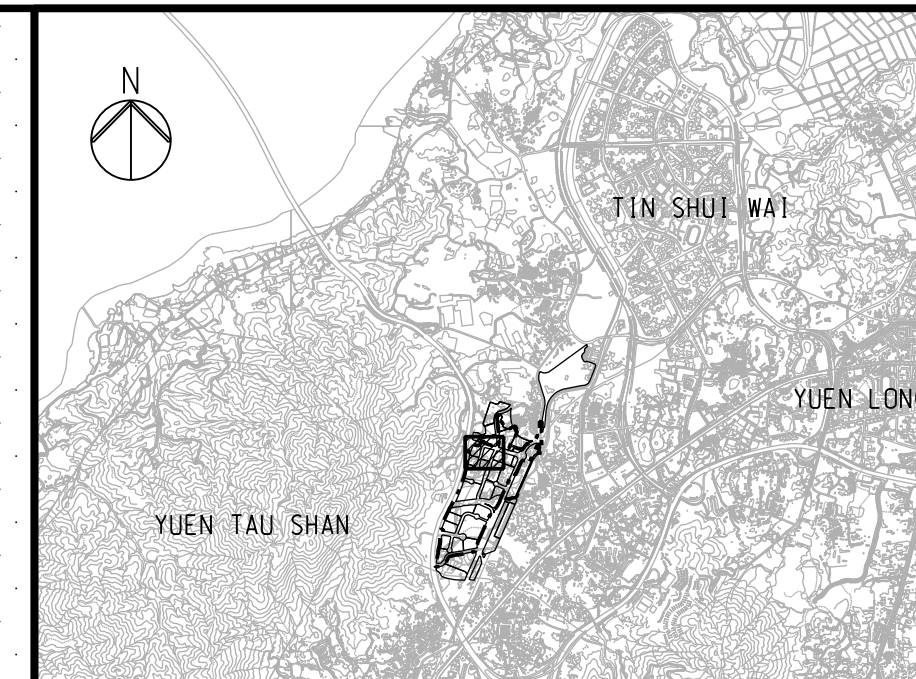
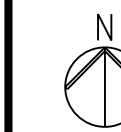
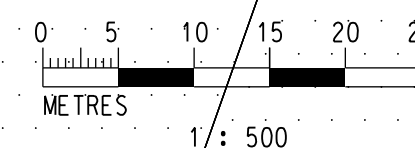
- BOUNDARIES OF THE SITE
- HONG KONG AND CHINA GAS COMPANY LIMITED
- EXISTING GAS MAINS
- PROPOSED MP315 GAS MAINS
- PROPOSED LPB315 GAS MAINS
- PROPOSED MP400 GAS MAINS
- PROPOSED LPB400 GAS MAINS
- PROPOSED MP TO LPB GOVERNOR KIOSK (BY HKCGC)
- PLANNING AREA TO BE FORMED UNDER THIS CONTRACT
- AREA FOR BUS SHELTER BY BUS COMPANY

MATCH LINE

FOR CONTINUATION
SEE DRG. 278463/C4/GAS/1025

MATCH LINE

FOR CONTINUATION
SEE DRG 278463/C4/GAS/1026



KEY PLAN

NOTES

1. DRAWPIITS AND CROSS ROAD DUCT EXCEPT THOSE UNDER THE RUN-IN TO BE DESIGNED AND INSTALLED BY THE UTILITIES UNDERTAKERS.
2. NO ABANDONMENT OR REMOVAL OF THE EXISTING CLP FACILITIES UNLESS PERMISSION IS GIVEN BY CLP.
3. DIMENSIONS IN MILLIMETRE UNLESS OTHERWISE NOTED.
4. FOR GENERAL NOTES AND LEGEND, REFER TO DRAWING NO. 278463/C4/GAS/1001.

01	TENDER ADDENDUM NO. 2	EF	04/24
00	TENDER ISSUE	EF	02/24
Rev	Description	By	Date

	Consultant

ARUP

Project Title
Contract No. YL/2023/04
Hung Shui Kiu/Ha Tsuen
New Development Area
Second Phase Development - Contract 4 -
Site Formation and Engineering
Infrastructure Works

Drawing title

EXISTING AND PROPOSED
GAS MAINS
(SHEET 2)

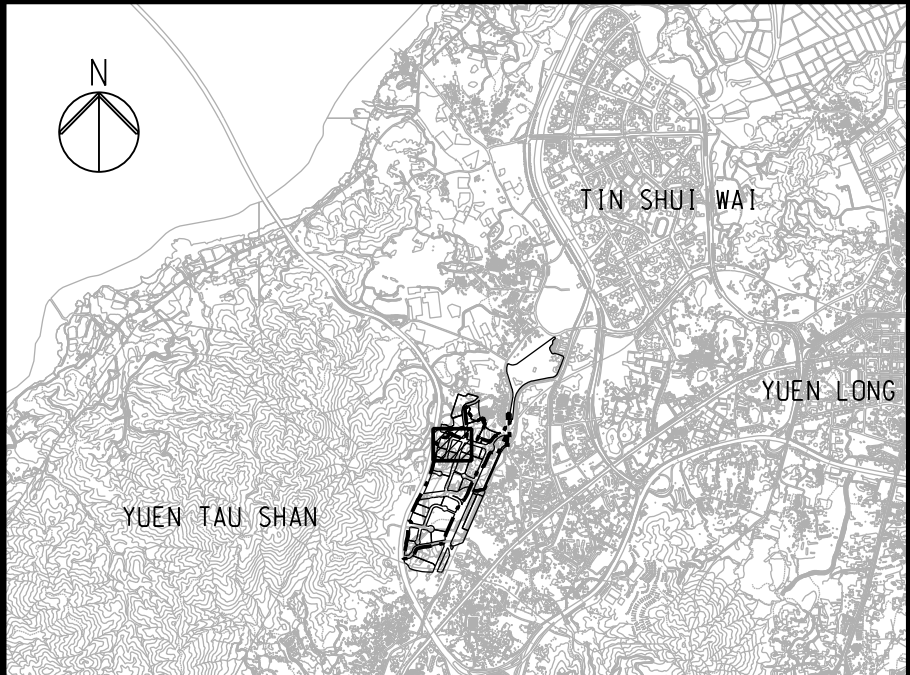
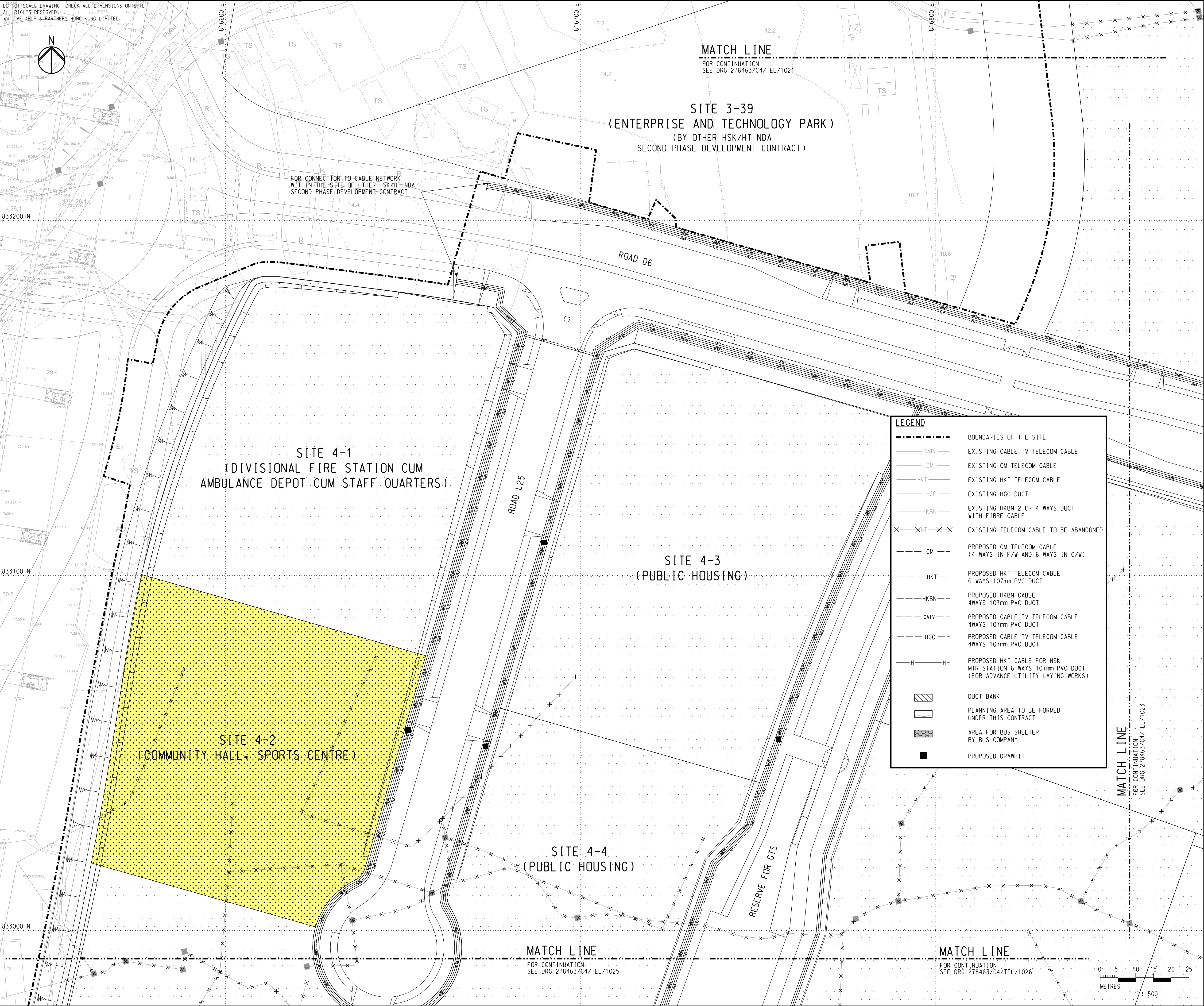
Drawing no. 278463/C4/GAS/1022			Rev. 01
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Civil Engineering and
Development Department

Date : 07/03/2024
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KEY PLAN

NOTES

- DRAWPITS AND CROSS ROAD DUCT EXCEPT THOSE UNDER THE RUN-IN TO BE DESIGNED AND INSTALLED BY THE UTILITIES UNDERTAKERS.
- NO ABANDONMENT OR REMOVAL OF THE EXISTING TELECOM FACILITIES UNLESS PERMISSION IS GIVEN BY TELECOM COMPANIES.
- DIMENSIONS IN MILLIMETRE UNLESS OTHERWISE NOTED.
- FOR GENERAL NOTES AND LEGEND, REFER TO DRAWING NO. 278463/C4/TEL/1001.

00	TENDER ISSUE	EF	02/24
Rev	Description	By	Date

Consultant

ARUP

Project Title

Contract No. YL/2023/04

Hung Shui Kiu/Ha Tsuen

New Development Area

Second Phase Development - Contract 4 -

Site Formation and Engineering

Infrastructure Works

Drawing title

EXISTING AND PROPOSED

TELECOM LAYOUT PLAN

(SHEET 2)

Drawing no.	278463/C4/TEL/1022	Rev.	00
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**TECHNICAL SCHEDULE
FOR
THE BLUE AREA**

Public Open Space

at

**Site H8, Hung Shui Kiu / Ha Tsuen New Development Area, New Territories
(Hung Shui Kiu Town Lot No. 21)**

Date : December 2025

TECHNICAL SCHEDULE FOR THE BLUE AREA

Public Open Space Site H8, Hung Shui Kiu / Ha Tsuen New Development Area, New Territories (Hung Shui Kiu Town Lot No. 21)

1. General Requirements

The Purchaser is entirely responsible for the design and construction of the Blue Area referred to in Special Condition No. (5)(a) of the Conditions of Sale to which this Technical Schedule is annexed (“C/S”).

The Blue Area as detailed in Annex I shall be designed and constructed to the satisfaction of the Director of Leisure and Cultural Services (“DLCS”) for their functional and operational needs. The Purchaser shall observe and comply with the following requirements in this Technical Schedule to the satisfaction of DLCS. The role of the Director of Architectural Services (“DArchS”) is the Technical Advisor to DLCS. DLCS and DArchS are hereinafter referred to as “the Government Representatives” and “the Technical Advisor” respectively.
2. Scope

The scope of the Blue Area shall comprise the Public Open Space “POS”) on ground level with the following facilities:

 - (a)
 - i. A Service Block with management office, baby care room, first aid room, store rooms;
 - ii. A set of Toilets cum Changing Rooms with hot-water showering facilities;
 - iii. One Futsal Pitch (cum Handball Courts);
 - iv. Jogging track;
 - v. An Adventurous/Innovative Inclusive Playground and Fitness Stations with shelter areas;
 - vi. Landscaped Sitting-out Area;
 - vii. Water Feature with Filtration Plant System;
 - viii. Service Yard;
 - ix. A security guard booth;
 - x. Two loading / unloading areas for heavy vehicles in size 3.5m width X 11m length with minimum headroom 4.8m;
 - xi. One uncovered parking space for ambulance and two uncovered parking space for heavy vehicles in size 3.5m width X 11m length with minimum headroom 4.8m;
 - (b) The Net Operational Floor Area (“NOFA”) of the Blue Area as detailed in Annex V of this Technical Schedule does not include any structures and partitions, circulation areas, staircases, staircase halls, lift landings, space occupied by toilet facilities, bathrooms, mechanical and electrical services such as lifts and air-conditioning systems, parking

spaces, lay-bys, loading and unloading spaces and other spaces to be provided “As appropriate” in area.

- (c) The Blue Area shall be adequately designed and provided by the Purchaser and shall comply with location and access requirement detailed in Clause 3 immediately below and with accommodations, facilities and provisions as detailed in the Annexes of this Technical Schedule.
- (d) Apart from the accommodations and provisions mentioned above and in the Annexes of this Technical Schedule, the Purchaser shall provide all necessary associated and ancillary maintenance spaces, services, facilities and items as may be required and deemed necessary by the Government Representatives for the operation of the Blue Area.

3. Design

- (a) The design of POS shall observe the landscape character of the area and should be elegant and attractive in appearance and in harmony with the nearby commercial environment and development. The design of the POS should be up to the DLCS and the DArchS’s satisfaction and agreement.
- (b) The Purchaser’s development shall not adversely affect the users of this POS including any encroachment upon the POS and projections from the development. The Purchaser shall be responsible for any subsequent mitigation measures/works in full costs if required as instructed by DArchS.
- (c) The design interface of the POS at street level shall observe and coordinate with the planned/enhanced streetscape/open space design nearby area as appropriate.

4. Location and access

The POS shall be located conveniently to the general public including the disabled persons and easily accessible directly from street level by a separate 24-hour access segregated from those to the remainder of the development. Clear signage shall be provided by the Purchaser to facilitate the public to locate the POS. Park entrances should be provided at suitable locations to facilitate access by members of the public from surrounding. The main entrance should be prominent and near the main road for convenient access. Lockable gates should be provided for entrances in connection with any private land. Entry point suitable for vehicular access and sufficient space for loading/unloading with lockable bollards for segregation from pedestrians and screened by planting for Leisure and Cultural Services Department (“LCSD”)’s maintenance if so required, should be provided and located south of the development site.

Maintenance access and working space for staff and equipments/facilities shall be provided to all parts of the POS.

The Purchaser shall coordinate with interface parties – Contract Nos. YL/2023/04, YL/2023/05 and YL/2023/06 –Hung Shui Kiu/Ha Tsuen

New Development Area Second Phase Development - Contracts 4, 5 and 6 - Site Formation and Engineering Infrastructure Works to gain access for construction of the Blue Area. This access arrangement shall be fully coordinated through meetings, inspections and documented for subsequent implementation. Detailed arrangement including but not limited to the exact extent, timing and working spaces at the interface between the construction of the Blue Area and the interface parties are to be agreed and coordinated.

The Purchaser shall liaise closely with the interface parties to agree reasonable, uninterrupted, free and safe construction accesses as well as the delivery routes for the construction of the Blue Area. The Purchaser shall agree with the interface parties on an evacuation plan for emergency and obtain the agreement from the interface parties.

5. Existing Tree(s) Existing trees, if any, on site or adjoining the site should be protected and preserved by incorporating them into the new landscape design. Should pruning/transplanting/felling be deemed necessary, the Purchaser shall be responsible for obtaining approval from the DLCS and for the cost associated with tree retention (including protection and pruning) /transplanting/felling plus 12-month Establishment Works for the protected/transplanted trees.
6. Operation The Blue Area shall be designed and constructed as self-contained facilities capable of being wholly managed, maintained and operated by the Government of the Hong Kong Special Administrative Region (“the Government”) independently.
7. Inclusion The Blue Area shall be landscaped and provided with full fitting-out provisions, including finishes, fittings, environmental and building services installation that fulfill the requirements stated in Annex V Part (C) of this Technical Schedule.

Provisions shall be provided in accordance with the Annexes of this Technical Schedule, together with any other necessary associated and ancillary maintenance spaces, services, facilities and items as may be required and deemed necessary by the Government Representatives.
8. Unrelated Facilities and Services No facilities or services of any nature whatsoever which do not directly serve or relate to the Blue Area shall be accommodated in or pass through any part of the Blue Area unless with the prior written agreement by the Government Representatives.
9. Related Facilities and Services All services and related facilities necessary for the operation of the POS passing through areas not to be assigned to Government shall obtain the prior written agreement of the Government Representatives. All services outside the boundary of the POS stated in Clause 2(a) shall be maintained by the Purchaser.

All plant rooms and ancillary facilities to be assigned to Government shall be directly accessible from the POS unless otherwise agreed in writing by the Government Representatives.

Wherever possible, all facilities and services, which solely serve the Building Works, shall be designed as independent systems.

The Purchaser identifies all existing, planned or proposed utilities, facilities, services and installations which, will be affected/being affected by, or will be installed in conjunction with construction of the Blue Area and recommend any plans for installation / diversion and any provisions for accommodating these utilities, facilities, services and installations in conjunction with construction of the Blue Area.

The Purchaser endeavours not to affect these utility services in performing this services and provides justifications if any diversion/relocation of any utilities is needed. The Purchaser liaises with the utility undertakers and relevant departments to resolve any conflicts matters between the utilities and construction of the Blue Area and confirm which existing utilities need to be accommodated in the Blue Area.

The Purchaser consults the relevant Government departments and utility undertakers and consolidates the user requirements and demands for different utility services including but not limited to power supply, water supply, gas mains, telecommunication, public road lights for the Blue Area.

The Purchaser shall liaise and coordinate with relevant utility undertakers, interface parties and relevant Government departments/parties regarding their proposed laying of new services, in advance of, or in conjunction with the Blue Area for meeting the completion.

The Purchaser shall consult, liaise and coordinate with relevant utility undertakers, interface parties and relevant Government departments/parties to drive for advance and timely planning, laying and connection of all required utilities/services to tie-in with the timely commissioning of the Blue Area.

The Purchaser shall consult, liaise and coordinate with other Government departments, interface parties, utilities undertakings and other authorities, bodies, consultants, developers or persons on matters related to the Blue Area and obtain their requirements, comments, agreements and approvals where necessary. The Purchaser is responsible for coordination of all works in respect of utilities and other services rendered necessary for the Blue Area.

10. Materials and Workmanship

The Blue Area shall be designed and constructed by the Purchaser in accordance with good practice generally and to the particular requirements of this Technical Schedule in such a way that future

maintenance costs and energy costs are minimized and to a standard at least as high as that achieved in comparable government-built facilities.

Materials and workmanship for all external finishes and features that form an integral part of the Blue Area shall be maintenance free, environmentally friendly, in compliance with all standards indicated herein or as may be required by the Government Representatives, and shall be compatible with the finishes and features of other integral or adjacent accommodation within the lot erected by the Purchaser in accordance with the C/S. Particular attention should be given to appropriate specifications and detailing due to heavy-duty use and potential vandalism to which public open spaces are liable.

The Purchaser shall comply with all latest versions of statutory Ordinances, Regulations, standards, specifications and Codes of Practice relevant to public works contracts in Hong Kong Special Administrative Region (“Hong Kong”), and in particular the specifications and standards listed in the Annexes of this Technical Schedule.

11. Obligations

The Purchaser shall employ a Registered Architect and a Registered Structural Engineer (“RSE”) (who are currently registered under the respective Lists of Authorised Persons and Registered Structural Engineers kept by the Building Authority) together with Building Services Consultants, Landscape Consultants and other qualified Consultants deemed necessary to carry out the design and supervision of the construction of the Blue Area and Registered Contractor(s) to carry out the construction thereof.

The Purchaser shall engage a specialist contractor for soft landscape works and competent site supervisory staff with horticultural knowledge to oversee tree works on site.

The Purchaser shall warrant that all professional skill and care shall be exercised in the preparation of the design of the Blue Area and in the preparation of all details and calculations relating thereto.

12. Responsibilities

The Purchaser is entirely responsible for the design, supervision and construction of the Blue Area irrespective of any vetting, checking or inspections/comments that may be carried out or given by the Government Representatives.

The submission of design proposals to or the inspection of the construction works by, or any agreements/acceptances by the Government Representatives shall not relieve the Purchaser from his responsibility for satisfactory compliance with the above stipulations and requirements under this Technical Schedule.

The Purchaser shall install, manage and maintain, as part of the Development, a complete water proofing and drainage system and all

other ancillary measures incorporated into structural slab below the POS to prevent water seepage to the accommodation below, if any. Agreement from the DLCS or the Government management/maintenance agent of the POS shall be sought if access to the structural slabs including waterproofing system, drainage system and any other ancillary measures (as part of the development of the lot) from POS is found necessary. Subsequently, the re-instatement works of the POS should be completed to the satisfaction of the DLCS and the Government maintenance agent with the incurred costs borne by the Purchaser.

The Purchaser shall not consider the Blue Area be substantially completed without the prior agreement from the Government Representatives.

13. Submissions (a) The Purchaser shall submit his design proposals for the Government Representatives' agreement at master plan, for all stages, including master layout plan, landscape master plan, general building plans, sketch plans, and other design stages and project stages. The relevant District Council and stakeholders should be consulted and agreed on the project scope and design of the POS before implementation.

The Landscape Master Plan shall be at a scale of 1:200 or larger and shall contain information on the landscaping proposals, including a survey and treatment of existing trees, site layout and formation levels, conceptual form and soft landscaping areas and such other information as LCSD may require.

Submission shall comply with requirements in the relevant practice notes issued by Lands Department and Buildings Department.

- (b) The Purchaser shall submit a set of Layout Plans with comparison table showing the required NOFA of the Blue Area as stated in Annex V of the Technical Schedule and the NOFA provision in the Layout Plans with area difference and percentage difference as described in Annex V Part (A) to (B) of this Technical Schedule – “Schedule of Accommodation”.

The extent, boundary, location and the term of “Blue Area” shall be clearly demarcated in all submissions, including general building plan to demonstrate the design and disposition are in compliance with lease conditions.

- (c) Samples of all proposed finishing materials and major building services installations and soil (with samples if on request by the Government Representatives) shall be submitted for the Government Representatives' agreement prior to the placement of orders.
- (d) The Purchaser shall prepare presentation papers and drawings and make presentations to the concerned District Council and the LCSD as and when requested by the Government Representatives.

- (e) For submissions of the General Building Plans and Building Services Schematic drawings and layouts, only pages in relation to the Blue Area shall be in both hardcopy and electronic format (both AutoCAD drawing format and Adobe Portable Document Format) which are signed by the respective Authorized Person (“AP”)/ RSE to signify that the said submissions are prepared under his supervision, together with a written confirmation stating that the proposed design under this submission is fully in compliance with all related Ordinances/ Regulations and requirement(s) of this Technical Schedule, and also clearly stating its submission function/ stages.

Unless otherwise requested by the Government Representatives, twelve copies of each document will be required with all the drawings shall be folded into A4 size. Scales for drawings are to be 1:100 for general layouts and 1:10 for details or as appropriate or otherwise agreed.

- (f) Apart from those submissions as described in Clause 13(e) of this Technical Schedule, all other submissions shall be in electronic format (both editable version/ AutoCAD drawing format and Adobe Portable Document Format) saved in two sets of CD/DVD-ROM computer disk which are signed by the respective AP/ RSE to signify that the said submissions are prepared under his supervision, together with a written confirmation stating that the proposed design under this submission is fully in compliance with all related Ordinances/ Regulations and requirement(s) of this Technical Schedule, and also clearly stating its submission function/ stages.
- (g) Other than those submissions required by the Buildings Department, when structural design submission to the Government Representative is required, for each submission of structural engineering works, the Purchaser is obliged to furnish the Government Representative with a copy of respective structural engineering checking report (“the Checking Report”), detailing out the scope and findings of the checking exercise on the structural design submission. The Checking Report shall be prepared by an independent Checking Engineer (“ICE”), who shall be a RSE and not from the same company as the structural designer (“Designer”). The Purchaser shall submit a copy of the appointment letter of the ICE and provide the RSE registration number of the ICE and Designer to the Government Representative for record.
- (h) All the structural submission including the Checking Report and the structural statutory compliance certificate (submitted before handover) shall be endorsed by the Designer and ICE. Structural statutory compliance checking totally relies on the ICE (employed by the Purchaser).

- (i) The Purchaser shall submit a set of interior layout plans, interior sections / elevations, reflected ceiling layouts, showing the exact locations, arrangement and quantities of the fitting-out provisions, including finishes, fittings, environmental and building services installation provisions as described in Annex V Part (C) of this Technical Schedule, with sufficient information to demonstrate the requirements described in Annex V Part (C) of this Technical Schedule are fully met. Submissions of details shall not be necessary unless upon request by the Government Representatives.

All exposed building services installation shall be shown in the drawings with coordinated levels and dimensions.

Scales for drawings are to be 1:50 for interior layouts, sections, elevations, reflected ceiling layouts and 1:10 for details or as appropriate or otherwise agreed.

- (j) For building services submission, the first submission shall be in one complete package to include all the following items:
 - (i) A table showing the building services provisions (to be provided by the Purchaser) with comparison to the requirement stipulated in the Technical Schedule;
 - (ii) A set of building services layout plans;
 - (iii) A set of building services schematic drawings.

Boundary and the maintenance responsibilities of the Blue Area shall be clearly demarcated in the submissions as required in Clause 13(j) of this Technical Schedule.

All subsequent submission shall be supplemented with response to comments previously issued by the Government Representatives, if any.

Relevant design calculations for building services installations shall be submitted to the Government Representatives.

- (k) The Purchaser shall allow sufficient lead-time, at least 30 calendar days shall be allowed after receiving the submissions, for the Government Representatives to comment on the submissions.
- (l) The Purchaser shall submit as-built Building Information Modelling (“BIM”) models of the the POS facilities where the future maintenance will be by Government Works Department(s). The BIM models shall follow the requirements according to the BIM Harmonization Guidelines and asset information requirements (AIR) of the respective Government Works Department(s).

14. Approvals/ agreements
- All references to approval/agreement in this Technical Schedule shall be deemed to be approval/agreement in writing by the specified approving/agreeing parties and all submissions for approval/agreement shall be made at an early date.
- The Purchaser shall allow sufficient lead-time for the Government Representatives to comment on design/materials submissions.
- Programme of submission shall also be submitted in advance to the Government Representatives to facilitate the checking process in master layout stage and also during various design stages and project stages.
- Agreement of the submissions shall be limited to standards of provision, general safety and general principles of design. The Purchaser shall be responsible for the detailed design and shall ensure that such design complies fully with the requirements of this Technical Schedule and the specifications referred to herein, as well as all currently enforced Ordinances, Regulations, Code of Practices, Circulars, etc.
- The Purchaser is entirely responsible for the design, supervision and construction of the Blue Area, irrespective of any approval/agreement, vetting, checking or inspections/comments that may be carried out or given by the Government Representatives. Any pertaining approval/agreement/acceptance from the Government Representatives shall not relieve the Purchaser from his responsibilities for satisfactory compliance with the stipulations.
- The Purchaser shall not consider the Blue Area be substantially completed without the prior agreement from the Government Representatives.
15. Inspections and Induction
- The Purchaser shall conduct/arrange site inspections/ meetings as and when required by the Government Representatives, including but not limited to the followings:
- before substantial completion;
 - upon substantial completion;
 - prior to handover;
 - for handover;
 - at the end of the Defects Liability and Plant Establishment Period as defined in Special Condition No. (5)(1)(i)(II) of the C/S;
 - for briefing(s) on specified electrical/mechanical and/or other installations; and

- at any times as may be required by the Government Representatives.

to be attended by the Government staff and/or their agents, and as required by the Government Representatives.

On completion of the project, the Purchaser shall conduct/arrange briefing and training sessions, on all aspects of the electrical/mechanical or other installations related to the Blue Area, to be attended by the Government staff and/or their agents, to the satisfaction of the Government Representatives.

Regarding inspection for building services, a written request specifying the description of works to be inspected shall be provided along with the as-fitted schematic drawing and layout plan in formats agreed by the Government Representative at least **five (5)** working days, excluding the date of inspection, before the inspection.

16. Record Drawings and Documents to be Provided

The Purchaser shall provide within 8 weeks from the respective dates of delivery of possession of the Blue Area, **three (3)** complete sets, or otherwise specified, of the following documents in relation to the Blue Area to the Government Representatives:

- (a) As-built/installed, scaled and dimensioned record architectural drawings (including details) and installed building services drawings (including all wiring circuit diagrams down to component level), structural and geotechnical drawings (including layout plans, framing and details drawings), landscape drawings, in the agreed format;
- (b) Paper prints for all drawings as (a) above;
- (c) Computer disk for all the as-built/installed drawings as (a) above and the digital files consolidating all approved General Building Plans revisions. The drawings shall conform to the latest version of the CAD Standard of Works Projects (“CSWP”) as posted in the Development Bureau’s (“DEVB’s”) web site [i.e. https://www.devb.gov.hk/en/construction_sector_matters/electronic_services/cad_standard/computer_aided_drafting/index.html] and in accordance with the latest version of CAD Manual for Projects of Architectural Services Department (“ArchSD”);

Each computer disk shall be in CD-ROM/ DVD-ROM, labelled, with cross reference to a printed list of files detailing the contents and purpose of each files and supplied in the sturdy plastic container;

The draft as-built drawings shall be submitted to the DArchS for comment one month before the completion of construction on the Blue Area;

- (d) Schedules of all proprietary materials including roofing system, waterproofing system etc., fixtures, fittings and appliances along with

the names and contact telephone numbers of their respective suppliers or agents in Hong Kong and all **guarantees/warranties** for the listed items in the submitted schedules which shall be transferred to the Government in writing from the date of expiry of the Defects Liability and Plant Establishment Period (as defined in Special Condition No. (5)(I)(i)(II) of the C/S);

- (e) Fire Service Installation Certificate and Dangerous Goods Store License (if applicable);
- (f) Certificate of Permanent Water Supply Connection;
- (g) Permanent drainage system connection completion letter/memo from the Drainage Services Department (“DSD”);
- (h) Occupation Permit;
- (i) Operation, maintenance manuals and test reports for all systems, plant, equipment and other items as appropriate which shall be bound in separate volumes for different systems;
- (j) Any other essential drawings, information, details and certificates relating to the Blue Area as may be required by the Government Representatives;
- (k) Surveyor's Load Test Certificates for all lifting appliances with validity beyond the date of expiry of the Defects Liability and Plant Establishment Period (as defined in Special Condition No. (5)(I)(i)(II) of the C/S);
- (l) Works Completion Certificate for Electrical Installation (“WR1”) as required by the Electricity Ordinance;
- (m) Certificate of Completion for Gas Installation, if any;
- (n) Air balancing report, noise level measurement report, illuminance level measurement report and other report/record as stipulated in this Technical Schedule;
- (o) Relevant design calculations for building services capacities/spare capacities;
- (p) Building Maintenance Manual for the General and Specific Basic Provisions to be handed over to the DLCS covering list of items of works and installations requiring routine maintenance, the recommended frequency of routine maintenance inspection and the recommended maintenance cycle of works and installations;
- (q) Structural statutory compliance certificate and Checking Report (when structural design submission to the Government Representatives is required);

- (r) Cleansing, disinfection and flushing reports of hot, cold water systems and other water using systems/apparatus;
- (s) Schedule of keys;
- (t) Copies of all Declaration Forms together with all the required enclosures submitted to the EMSD and the Certificate of Compliance issued by EMSD as required under the Building Energy Efficiency Ordinance (Cap 610);
- (u) Final approved drawings showing types and quantities of fire service installation/appliances approved by the Director of Fire Services;
- (v) For record drawings and documents submission related to BIM, please refers to the advisory requirement under Clause 13(l) of this Technical Schedule; and
- (w) Any other essential information, details and certificates relating to the Blue Area as may be requested by the Government Representatives.

Items (e), (f), (g), (h), (k), (l), (m), (n), (o), (q), (r), (s), (t), (u) and a draft of the Building Maintenance Manual (as referred to in (p) above) shall be submitted before the handover.

17. Spare Parts and Materials

The Purchaser shall provide within 8 weeks from the date of delivery of vacant possession of the Blue Area, the following spare materials and parts to the Government Representatives:

- (a) 5% of each different type, colour and pattern of wall and floor tiles, paving slabs etc., unless with written agreement by the Government Representatives;
- (b) Spares and special tools for 2-year operation and maintenance of all the E&M plant and equipment, a list of which shall have been agreed by the Government Representatives before the commencement of the Defects Liability and Plant Establishment Period (as defined in Special Condition No. (5)(l)(i)(II) of the C/S);
- (c) 10% lighting fittings complete with control gear and lamps, and 1 no. miniature circuit breaker for each rating;
- (d) Other materials which in the opinion of the Government Representatives are not readily available in the market or require long delivery period, with quantities to be determined by the Government Representatives. Spare parts lists shall be submitted to the Government Representatives for comment and agreement; and
- (e) All related building and building services provisions shall be provided to the satisfaction of the Government Representatives.

18. Defects Liability and Maintenance
- The Purchaser shall at his own expense provide free maintenance for all building and fitting-out works, landscape works (including planting work's 365 calendar days establishment period) and building services installations within the Defects Liability and Plant Establishment Period (as defined in Special Condition No. (5)(l)(i)(II) of the C/S). The free maintenance shall include routine maintenance of all plant and equipment, emergency repairs and fault attendance. The free maintenance works shall accord with the specifications, standards and requirements listed in the Annexes of this Technical Schedule. Maintenance of building services systems shall be in accordance with the requirements as stipulated in the sub-section 1.3.3 of General Specification for Building Services Installation in Government Buildings of the Hong Kong issued by ArchSD.
- The 365 calendar days Establishment Period for soft landscape works, during which, the Purchaser shall be responsible for all routine horticultural and arboricultural operations for proper establishment and maintenance of soft landscape works; and replacement planting for failed plants due to inferior material / workmanship.
- In the event that due to any Trees' Health Problems which may exist at the date(s) of re-delivery of possession by the Purchaser of the Blue Area or any part or parts thereof, any trees, shrubs or other plants within the Blue Area have not grown or developed within the Defects Liability and Plant Establishment Period to a state and condition to the satisfaction of the DLCS, the Purchaser shall, if so required by the D LCS, at the Purchaser's own expense and within such time and to such standard and in such manner as may be specified by the DLCS, carry out replanting, landscaping works, tree maintenance measures or any other measures in all respects to the satisfaction of the D LCS.
- A maintenance schedule shall be submitted to the Government Representatives for agreement prior to the handover of the Blue Area.
- All relevant Certificates for compliance with statutory requirements if expired before the end of the Defects Liability and Plant Establishment Period (as defined in Special Condition No. (5)(l)(i)(II) of the C/S) shall be renewed.
19. Determination of NOFA
- For the purpose of this Technical Schedule, the NOFA shall, unless otherwise stated, be referred to Clause 2(b) of this Technical Schedule.
20. Building/
Landscaping
Requirements
- The Blue Area shall be designed and constructed to the satisfaction of the Government Representatives to incorporate, inter alia, the following building requirements wherever applicable:
- Accommodation and Fittings (a)
- Accommodation finishes and fittings shall be provided in accordance with the requirements listed in the Annexes of this Technical Schedule or as may be required by the Government Representatives.

- (b) The POS design shall also take into account safety aspects; slippery surfaces, entrapment, sharp edges and corners shall be avoided. Railings, structures and inclined surfaces that encourage climbing and misuse as play equipment shall be avoided. Handrails to steps and anti-slip surface/foot-grip strips to treads of steps and gradient floor shall be provided.
 - (c) The boundaries of the POS shall be demarcated as appropriate in accordance with Annex III of this Technical Schedule and/or as agreed with the DLCS and the DArchS.
- Pest Control
- (d) Appropriate pest control measures to be provided to the POS in general during construction as well as in operation where deemed necessary by the Government Representatives and as follows:-
 - (i) Door louvers etc. shall be screened on the inside with expanded metal (6 mm mesh) or galvanized steel woven wire cloth (0.711 mm x 3.5 mm mesh);
 - (ii) Clearances beneath doors shall be a maximum of 6 mm;
 - (iii) All enclosed voids shall be sealed;
 - (iv) All pipe penetrations shall be sealed with mild steel flanges.
 - (v) No cable troughs/boxes shall have any gaps larger than 6mm.
 - (e) The Purchaser shall comply with all latest versions of statutory Ordinances, Regulations, standards, specifications and Codes of Practice relevant to public works contracts in Hong Kong, and in particular the specifications and standards listed in the Annexes of this Technical Schedule.
- Partitions
- (f) For internal builder's works, the following shall be adopted:
 - (i) Reinforced Concrete Walls
Generally to be minimum 150 mm reinforced concrete walls except for:
 - (1) load bearing / shear walls;
 - (2) walls around staircases, lift cores and mechanical rooms;
 - and
 - (3) external wall
 - (ii) Dense Concrete Block Walls
Generally to be 100 mm dense concrete block walls except for the following areas where reinforced concrete walls to be provided:
 - (1) load bearing / shear walls;
 - (2) walls around staircases, lift cores and mechanical rooms;
 - and
 - (3) external wall.

Natural Lighting and Ventilation (g) Maximum provision of natural lighting and ventilation shall be designed for the public toilets, changing rooms and showers.

Sanitaryware (h) Sanitaryware, plumbing and drainage fittings shall be provided in accordance with Annex III and Annex V of this Technical Schedule or as may be agreed by the Government Representatives.

All pipework shall be concealed wherever possible within service ducts which are adequately sized and readily accessible for future maintenance.

Easily accessible service corridor / pipe duct housing flushing cisterns and associated pipework shall be provided.

Valve-type flushing system (Flushometers) shall be used for water closet (WC) and Urinals. The flushing valves shall be a model and type approved by Water Supplies Department. Flushing system shall be pressurized within the range of working pressures specified by the manufacturer. Flushing valve shall be operated by contactless sensor equipped with an overriding manual button. WC bowl shall be wash down type match compatible with the flushing system. Easily accessible service corridor / pipe duct for maintenance of associated pipeworks and fitting shall be provided.

Where the installation of pressurized valve-type flushing system (Flushometers) is not feasible or inappropriate, with written agreement by Government Representatives, water cisterns with flushing valve and contactless sensor shall be used. Water cisterns and associated piping/accessories shall be concealed in service corridor / pipe duct.

Power points in lieu of batteries shall be provided to all sensors to be operated by the public.

Manhole within the Blue Area shall be avoided as far as possible. Internal manhole if cannot be avoided shall be provided at locations as agreed by the Government Representatives, provided with double seal manhole covers and the finished top cover shall be of matching types finished to match adjacent floor/ground finishes.

Doors and Ironmongery (i) Doors and ironmongery shall be provided in accordance with Annexes IV and V of this Technical Schedule or as may be agreed by the Government Representatives.

Ceiling Height (j) The finished ceiling (i.e. the finished ceiling structure and associated building services installation underneath, or suspended false ceiling) of every room must be situated at a height not less than 2.5m measuring vertically from the finished floor or not less than 2.3m measuring vertically from the finished floor to the underside of any finished structural beam or building services installation. Appropriate structural openings for services to pass through structural beams shall be provided in order to achieve the above ceiling height.

Subject to the prior agreement of LCSD, if services pipes/ducts/trunkings are provided, the underside of the same shall be not less than 2.3m measuring vertically from the finished floor.

Suspended ceilings (k) All suspended ceiling installations shall be provided with integrated lighting and ventilation system, and shall allow adequate access for maintenance and inspection of all building services installations within the void between suspended ceilings and the underside of structural slabs/beams over.

Service Ducts (l) Concealed but readily accessible ducts with kerb for building services shall be provided throughout and such ducts shall be of adequate size to allow the maintenance or replacement of one service without adversely affecting the others. No services other than those directly serving the Blue Area shall be located within these service ducts.

Floor drain shall be provided inside service passage/duct/corridor with wet services piping.

Openings and Space for Air-conditioning (m) Where air-conditioning or split type units are to be installed, sufficient outdoor spaces / air-conditioner platforms adjoining the external wall of the Blue Area shall be provided unless feasible alternative provisions are accepted by the Government Representative with written confirmation.

The design of air-conditioner platforms shall comply with the latest edition and subsequent addendum/ corrigendum/ amendments of the Code of Practice on Access for External Maintenance 2021, issued by the Buildings Department. The platform shall be designed by RSE to ensure the load bearing is sufficient for the equipment installed and the trade workers to carry out maintenance on the platform.

If air-conditioning is not installed during the construction period, glazed removable panels shall be installed to cover up the wall openings.

The air-conditioner or the screen shall not obstruct the windows nor gas flue (if any) of the Blue Area, if any.

Structural openings shall be allowed for future installation of refrigerant pipe and condensate drain, if applicable.

Design for The Elderly and Disabled (n) All of the space in the POS shall be capable of easy access by the public including children, the elderly, the visually impaired and people with disabilities, and shall be designed and constructed in accordance with the latest edition and subsequent addendum/ corrigendum/ amendments of the Design Manual: Barrier Free Access 2008, Buildings Department, and the following principles of the practices and guidelines published by ArchSD:

(i) “Universal Accessibility Best Practices and Guidelines”

<https://www.archsd.gov.hk/en/ua/index.html>)

- (ii) “Universal Accessibility for External Areas, Open Spaces and Green Spaces”

<https://www.archsd.gov.hk/en/ua2/index.html>)

- (iii) “ArchSD Standard on Universal Accessibility (UA) Provisions”

https://www.archsd.gov.hk/media/reports/practices-and-guidelines/archsd_standard_on_ua_provisions_rev.1_mar_2018_.pdf)

- (iv) “Elderly-friendly Design Guidelines”

https://www.archsd.gov.hk/media/reports/practices-and-guidelines/20190326_5501_Elderly-friendly%20Design%20Guidelines_FINAL.pdf)

Windows

- (o) Windows shall be of anodized aluminum or powder coated/PVF2 colour matching with the development.

The design of windows shall allow easy maintenance and cleaning of window glass from inside of the premises. The windows shall be easily operable by users and the window sill levels shall be positioned to suit the normal activities of users for the respective room use.

Security

- (p) The Blue Area shall be made individually secure against unauthorized entry.

Lockable device is required for all entrance doors at different floors in addition to the main entrance. Panic bolts with local alarm are to be provided at rear exits wherever applicable.

Painted galvanized mild steel or stainless steel (grade 316) door shall be provided to rear entrance opening to external or public area.

The security proposals for the Blue Area shall be submitted to the DLCS for agreement.

Weather Protection

- (q) Adequate weather protection shall be provided to all external entrances and openings.

Waterproofing

- (r) All wet area floors shall be provided with waterproof slab and/or waterproof membrane and/or waterproof screed to the satisfaction of the Government Representatives. 10-year warranties for materials and workmanship are required for all the waterproofing works. Reports of flooding test, infra-red scanning to the waterproofing system(s) shall be provided.

For premises located on ground floor, adequate waterproofing shall be provided prior to finishes being applied.

Roofing	(s)	In the case where a roofing system is provided exclusively for the Blue Area, the Purchaser shall provide an executed guarantee to the Government against defects of materials and workmanship arising from such roofing system, for a period of not less than 10 years, beginning at the dates of possession delivery of the Blue Area. The warranty shall cover the roofing system in its entirety.
Tactile Guide Path	(t)	Tactile guide path shall be provided for the Blue Area in accordance with the Design Manual: Barrier Free Access 2008 or the latest version and ArchSD Standards on Universal Accessibility Provisions. The finish of tactile guide path shall have minimum slip-resistance valuation group R11 (or R10 V4) according to anti-slip properties test (ZH 1/571 and DIN 51130).
Green Government Building	(u)	The requirements of the 'Green Government Building' as outlined under the Joint DEVB Technical Circular No. 2/2015 & Environment Bureau ("ENB") Technical Circular Memorandum No. 3/2015 on 'Green Government Buildings' (Joint Circular) and Joint memo further issued by DEVB and ENB/ Environment and Ecology Bureau ("EEB") on 19 May 2017, 10 April 2019 and 9 March 2023 on amendment of the Joint Circular on 'Green Government Buildings' (Joint Memo) shall be complied with as far as practicable.
21. Environmental and Building Services Requirements		The Blue Area shall be designed, constructed and fitted out to the satisfaction of Government Representatives.
	(a)	Environmental and building services installations shall be provided in accordance with the requirements listed in Annexes to this Technical Schedule or as may be agreed by the Government Representatives.
	(b)	<p>(i) No services, such as drainage pipes, sewage pipes, fire services pipes, chilled water pipes etc. other than those which pertain directly to the Blue Area shall be located within the area designated for the Blue Area nor shall any access to them be gained via private premises without the prior written agreement of the Government Representatives. Services requiring Government operation and maintenance shall not be run in private premises without the prior written agreement of the Government Representatives.</p> <p>(ii) All building services plants, equipment and accessories including ductwork and trunking, meters, MCB boards etc. shall be housed in dedicated plant rooms, not located within functional rooms, storage rooms or circulation areas/corridors; and shall be clearly labeled and located within the Blue Area.</p> <p>(iii) The plant rooms, pipe ducts, etc., for the Blue Area shall be located within the Blue Area. All equipment shall be easily accessible and not obstructive. Moreover, adequate space shall be provided for equipment servicing and replacement.</p>

- (iv) All pipes and services connections shall be provided up to and within the Blue Area in such a way that connection can be carried out entirely within the Blue Area in accordance with the submissions agreed by the Government Representatives.
- (v) All exposed pipework/ conduits/ trunking shall be painted.
- (vi) All environmental and building services installations shall be provided in the manner of energy efficient, environmental friendly, user friendly, safe and maintainable without affecting the normal operation of the Building Works.
- (vii) Energy efficient features and renewable energy technologies such as using energy efficient LED type lighting fittings and lighting control by occupancy sensors/ daylight sensors, LED type exit signs, high efficiency motors, demand control of fresh air supply with carbon dioxide sensors, building energy management system, photovoltaic and solar hot water systems etc., where applicable shall be incorporated into the design.
- (viii) All controls for ventilation, lighting, water temperature etc. must not be accessible by the public unless intended for such purpose.
- (ix) These plant/meter etc. rooms shall wherever possible be located directly alongside/together with the Building Works.
- (x) The selection of material and equipment shall take into account the saline and humid environment. Plant room and equipment location shall consider vulnerability to storm and flooding. Proper maintenance access with due regard to occupational health and safety shall be provided for all E&M equipment/installation. The access shall be provided with sufficient clear space for all required maintenance works, emergency escape and transportation of heavy or bulky equipment, such as pumps, motors, fans etc. The electrical equipment in the plant room shall be installed at minimum 800mm above ground floor level supported by reinforced concrete/ galvanized mild steel with structural design, if applicable, and served with effective drainage system.
- (xi) Unless with the prior written agreement by the Government Representatives, all building services and the associated plant rooms shall be designed and installed according to Annex VII of this Technical Schedule.

Electrical
Installation

- (c) The electrical installation shall be carried out in concealed PVC conduit except in areas with cover such as inside false ceiling void, pipeduct, under raised floor void, meter/switch room and in outdoor areas where it shall be carried out in exposed G.I. conduits. The electrical installation shall comply with the latest edition and subsequent addendum/ corrigendum/ amendments of IEC 60364,

Code of Practice For the Electricity (Wiring) Regulations issued by EMSD, and to the satisfaction of the Government Representatives and the local power supply company.

Electricity
Supply and
Metering

- (d) Electricity supply to the each facilities of the Blue Area shall be independently metered at 380 volt, 3-phase, 4 wires and 50 Hz. All plants and equipment shall be designed for 220V/380V. The electricity supply to each facilities of the Blue Area shall be independently metered to the satisfaction of the Government Representatives and the requirements of local power supply company.

In order to cater for the energy and greenhouse gas emissions monitoring/ audit purpose, metering facilities at various points of the electricity supply and distribution circuits shall be provided. Detail provisions and requirements of these metering facilities shall be in full accordance with the latest edition and subsequent addendum/ corrigendum/ amendments of the guidelines as stipulated in ArchSD's Building Services Branch ("BSB") Circular No. 9 of 2018.

The Purchaser shall employ a competent consultant with experiences in electrical load calculations and design of building services systems/installations to carry out a detail electrical load calculations based on the information/requirements as listed in this Technical Schedule and submit all the relevant electrical load design calculations for each premises of the Blue Area to the Government Representatives for agreement prior to the commencement of all the required detail design works. The electricity supply shall not be less than the minimum requirement as stipulated in the Basic Provision requirements in the Annexes of this Technical Schedule.

Provision shall be allowed in the design of the electricity system for bulk tariff metering in case the power consumption so warrants.

All equipment shall be easily accessible and not obstructive. Switchgears shall be installed inside switch/meter room and adequate space shall be provided within the meter room, or other location agreed by the Government Representatives, for servicing and replacing equipment.

Lighting

- (e) Artificial illumination shall be provided to levels not less than the recommendations in the latest Society of Light and Lighting ("SLL") Code for Lighting and the Chartered Institution of Building Services Engineers ("CIBSE")/SLL Lighting Guides. Recessed type luminaries shall be provided in areas with suspended ceiling or where required by the Government Representatives.

The lighting installation shall also comply with the latest version of Code of Practice for Energy Efficiency of Building Services Installation. LED lighting controlled by occupancy sensors and/or daylight sensors with manual override switch shall be used.

Light fittings shall be installed in a manner to facilitate easy maintenance and cleaning. LED lamp shall be detachable from the lighting fittings.

Lighting switches/circuits shall be so arranged as to reduce energy consumption and suit operational needs. Segregated switches for outdoor ball courts and passive amenities are required.

All lights shall be non-glare. Lighting intensity of other rooms shall meet the latest standards of various activities.

In order to minimize light nuisance and energy wastage of external lighting, the design, installation and operation of all external lighting shall comply with the Guidelines on Industry Best Practices for External Lighting Installations issued by EPD.

Illuminance level calculation report with the aid of the lighting simulation/ software, the lighting layout plans and the lighting circuitry shall be submitted to demonstrate the compliance and shall be submitted to the Government Representatives for comment/ agreement prior to and after installation.

Glare impact assessment of floodlights shall be submitted for assessing any influence to the surrounding environment. Glare control louvres/ guard shall be equipped to reduce possible glare to the neighborhoods if required. Light nuisance, interference with adjacent transport routes and the effect of light spillage on surrounding properties shall be considered and avoided.

Solar-powered lighting in floodlight for outdoor facilities shall be proposed to the Government Representatives for comment/ agreement prior to and after installation.

Lighting with occupancy sensors and manual override switch shall be provided to all service corridors/ducts. In case the service corridors/ducts contain water services piping, lighting luminaires and lighting switches shall be waterproof type.

Waterproof type lighting luminaires and lighting switches shall be provided in open areas, semi-enclosed areas and semi-enclosed corridors/ balconies/ lobbies.

Emergency
Lighting and Exit
Sign

(f)

Emergency lighting and exit sign shall be designed and provided in accordance with the current editions of the 'Code of Practice for Minimum Fire Service Installations and Equipment' issued by the Fire

Services Department (“FSD”) and to the satisfaction of the Government Representatives.

Emergency lighting shall be backed up by emergency power supply. If the building is not equipped with an emergency generator, self-contained and maintained type emergency lighting with secondary type batteries shall be provided to the satisfaction of the Director of Fire Services and the Government Representatives. Emergency lighting for switch rooms and plant rooms shall be backed up by self-contained and maintained type secondary batteries and, if available, emergency power supply.

LED exit sign shall be adopted. The use of self-luminous exit/directional signs with radioactive substance shall be prohibited.

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| Call Bell System | (g) | A complete call bell system including call bells, indicator lights, reset buttons, indicator panels, power connections and its associated accessories shall be provided as indicated in the Annexes of this Technical Schedule or as required by the Government Representatives. Call bell push button shall be provided inside shower rooms and water closet cubicles of toilet according to the requirements stipulated in the latest edition and subsequent addendum/ corrigendum/ amendments of the Design Manual: Barrier Free Access 2008, Buildings Department and shall comply with Health Technical Memorandum 08-03 – Bedhead Services. |
| Falling Detection System in accessible toilet | (h) | Falling Detection System shall be provided to each cubicle in accessible toilet. There are mainly four functions of the system including: reminding user of the alert for long stays (逗留), falls (跌倒), stay still (靜止) and "Ask for Help" (求救) function. |
| Power Points and Control Switches | (i) | Power points shall be provided to rooms as indicated in the Annexes of this Technical Schedule and where required by the Government Representatives. For public-accessible areas, all switches for operation of building services or safety devices such as lighting switches shall be located at levels stipulated in the latest edition and subsequent addendum/ corrigendum/ amendments of the Design Manual: Barrier Free Access 2008, Buildings Department. Otherwise, the mounting levels specified in the Annexes of this Technical Schedule shall be applicable. The locations of the power sockets shall be submitted to the Government Representatives for comment/agreement. |

Weatherproof sockets/switches shall be provided in all open areas, service corridors/ducts with water piping, semi-enclosed areas and semi-enclosed corridors/ balconies/ lobbies and areas where the risk of water leakage might occur, to the satisfaction of the Government Representatives. Waterproof, minimum with IP 65, power sockets and electrical components shall be provided in the storeroom, toilets, outdoor area, semi-enclosed areas and areas with wet services piping.

The locations of various control points for the air-conditioning, ventilation, lighting, power, E&M equipment, public address, emergency call bell, security and building management systems (where applicable) shall be agreed with the Government Representatives.

Lightning Protection (j) A complete lightning protection system shall be provided if the risk assessment is considered necessary in accordance with IEC 62305 or if required by the Government Representatives. The installation shall also comply with IEC 62305 or other international standards which are agreed by the Government Representatives.

Air-conditioning (k) Builder's works and building services provisions for all future installation of room coolers or one to one split type air-conditioning outdoor units shall be provided.

Multi-zone control Variable Refrigerant Volume (VRV)/Variable Refrigerant Flow (VRF) system or Central Air-conditioning system are not preferred (from operational point of view) unless with prior agreement with the Government Representatives. If central water-cooled chiller system is proposed for the Blue Area, prior agreement with the Government Representatives on demarcation of works, operation and maintenance matters etc. shall be sought before the proposal can be considered.

The design of the air-conditioning system shall be capable of meeting summer cooling and winter heating demands based on the following design criteria for areas with air-conditioning provisions.

	Summer design <u>condition</u>	Winter design <u>condition</u>
Outside	34.1 °C db 27.7 °C wb	10°C db
Inside	25.5°C db 55% RH	20°C db

Minimum fresh air supply of 0.01 m³ per second for each person shall be provided. All fresh air shall be pretreated before entering air-conditioned areas unless with written agreement obtained from the Government Representatives.

15% resilience capacity for the air-conditioning system shall be allowed in the notional design.

Where available, District Cooling may be proposed subject to acceptance of the Government Representatives. Technical requirements of District Cooling System for Blue Area shall refer to Annex V (A)(i) of this Technical Schedule.

Mechanical Ventilation	(l)	<p>Whereas all rooms of the Blue Area shall be designed to incorporate maximum natural ventilation, additional mechanical ventilation shall be provided to fulfill the requirements of Buildings Department.</p> <p>Where it is not possible to achieve adequate natural ventilation, the rates of mechanical ventilation for stores shall be 10 air changes per hour. Air change rates shall comply with the requirements of Buildings Department, FSD and relevant statutory requirements.</p> <p>For toilets areas, an odour source oriented mechanical ventilation system shall be installed, designed to provide an air exchange rate of minimum 15 air changes per hour. The mechanical ventilation system shall comprise duct work, supply fans and extract fans. Fresh air shall be supplied at high level and the air extraction shall be at low level through the extract grilles inside water closet compartments, and also grilles on top of urinals. Extract grilles in water closet compartments shall be minimum 0.04m² in area.</p> <p>Location of fresh air intake shall be properly allocated to ensure that the fresh air shall be directly taken from an adequate outdoor environment. Exhaust air shall be properly dispersed to cause minimum odor nuisance to the surrounding recipients. The location of exhaust louver shall be agreed in writing by the Government Representatives.</p> <p>Blower fans, one for one to two wash hand basins, shall be installed to circulate air through louvre below the wash hand basin counter to keep the floor in the vicinity of the counter dry.</p> <p>The operation of mechanical ventilation system in various plant rooms shall be automatically controlled by room thermostat with adjustable settings and manual override.</p> <p>Mechanical ventilation shall be provided to areas as specified in the Annexes of this Technical Schedule.</p>
Fire Service Installations	(m)	<p>The design of the fire service (“FS”) installations shall be in compliance with statutory requirements, relevant specifications and codes of practice issued by the FSD, as well as meeting the licensing requirements, if any of the Blue Area.</p> <p>Portable hand-operated approved appliance shall be provided as required by FSD. Subject to the approval of FSD, all portable fire equipment hand-operated approved appliance in public areas shall be housed inside FSD approved glass-fronted lockable cabinets.</p>
Security System	(n)	<p>All security systems for the Blue Area shall be submitted to the Government Representatives for agreement. If the security system is an independent one to be maintained by the operator, it shall be installed by a contractor in the List of Approved Suppliers of Materials</p>

and Specialist Contractors for Public Works under the category of “Burglar Alarm and Security Installation”.

The security control and indication panel serving exclusively the Blue Area shall be installed at location to be advised by the Government Representatives.

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| Closed Circuit Television (“CCTV”) System | <p>(o) (i) The Purchaser shall provide a separate CCTV system as below for serving building security or safety-related uses:</p> <ul style="list-style-type: none"> (1) one CCTV system at the entrance of male toilet cum changing room - for monitoring all access from common area (2) one CCTV system at the entrance of female toilet cum changing room. - for monitoring all access from common area <p>(ii) Local data storage shall be provided within the Building Works and the location of local data storage shall be subject to agreement with Government Representatives.</p> <p>(iii) Exact location for CCTV system (including cameras and monitor stations) shall be subject to agreement with Government Representatives.</p> <p>(iv) Two-hour uninterruptible power supply shall be provided together with following functions:</p> <ul style="list-style-type: none"> 1. CCTV colour cameras in dome shape at strategic positions and ensuring coverage; 2. Simultaneous recording on a time-lapse digital harddisk for all CCTV cameras with a storage capacity for at least 1 month; 3. Split-screen display on monitors with manual selection of camera images; 4. Automatic relevant camera image displayed on monitors when alarm zone is activated; 5. Auto-iris, pan, tilt and zoom functions on CCTV cameras with remote control capabilities; and 6. Infra-red night time mode <p>(v) The provisions and equipment specifications of the CCTV system provided by the Purchaser shall not be inferior to the requirement stipulated in General Technical Specification for Monochrome and Colour CCTV Systems issued by EMSD.</p> |
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	(vi)	The end user may supply and install additional CCTV other than those mentioned above in this Clause. The Purchaser shall provide the building services provisions, builder's work and structural supports as necessary to facilitate the end user's future installation and usage of those CCTV. The location where end user would install additional CCTV shall be provided by DLCS.
Provision of Access Facilities for Providing Public Wi-Fi Services	(p)	Provision of Access Facilities for future installation of Public Wifi Services by public services providers in accordance with "Guidelines for Provision of Access Facilities in New Government Development and Renovation of Government Venues for Providing Public Wi-Fi Services" shall be allowed.
Broadcast Reception Installation ("BRI")	(q)	A complete BRI including aerials and aerial transformer amplifiers, power supply units, equalizers, trunk, branch, spur feeders, feeders, tap-off units and outlet units including isolator for safety shall be provided in areas as agreed with the Government Representatives and as indicated in the Annexes of this Technical Schedule.
Public Address System	(r)	The public address system shall be provided for outdoor ball courts. All the power supply points and conduits for the connection of all the associated equipment of the public address systems shall be provided as agreed with the Government Representatives.
Gas (if gas supply is available)	(s)	<p>Gas supply is required for cooking and hot water supply. Independent gas supply including gas meter cabinet for each premises of the Blue Area shall be provided for the exclusive use of the Blue Area. The supply shall meet the requirements of the gas company and EMSD.</p> <p>The calculations on the estimated gas loading required for showers, pantries, kitchens, laundries etc. shall be submitted to the Government Representatives for agreement prior to commencing detail design works.</p> <p>Where electrical appliance is proposed in lieu of gas appliance, additional power provision shall be allowed on top of the minimum main electricity supply stated in the Annexes of this Technical Schedule.</p>
Telephone and Computer Data Points	(t)	Facilities for telephone/internet network connections shall be provided for the Blue Area.
Operation And Maintenance Facilities	(u)	Adequate facilities for operation and maintenance of all Blue Area plant, equipment and installations shall be provided, and proposals for which must be submitted for comment prior to installation on site. These include, inter alia, lifting beams or hooks for heavy equipment, proper access panels/ doors for air-conditioner platforms, concealed equipment or components requiring operation, adjustment, inspection or routine service, maintenance platforms for high level machines, equipment or components, hydraulic trucks for handling Air Circuit

Breakers, portable earthing set and rubber mats for cubicle switchboards and motor control cubicles etc., and any other facilities as required by the Government Representatives.

Sufficient access, without modification/ relocation of existing plant/ systems/equipment, for future maintenance and inspection of plant/systems/equipment shall be allowed to the satisfaction of the Government Representatives.

Water Supply
Requirements

- (v) The fresh and flushing water supply to the Blue Area shall be independently metered. The fresh and flushing water pipes and fittings shall be of appropriate materials as specified in the Annexes of this Technical Schedule and in compliance with the latest WSD's requirements.

Separate fresh and flushing water supplies shall be provided in accordance with the requirements of the Director of Water Supplies. Water connections and supply shall be subject to the formal approval of the Director of Water Supplies and as stipulated in Annex II and III Part 2 of this Technical Schedule.

The water supply shall include potable (fresh) water, flushing water, irrigation water, cleansing water and fire services water supplies as necessary. The meters shall be easily accessed but shall not be exposed conspicuously.

The water supply pipes and fittings shall comply with the Hong Kong Waterworks Regulations and Hong Kong Waterworks Standard Requirements.

The hot and cold potable water supply system shall use copper/stainless steel pipes at the Building Works in accordance with the General Specification for Plumbing Installation issued by ArchSD.

A water storage tank of sufficient size and flow rate for refilling shall be provided for storage of flushing water.

Water tanks, and associated ancillary equipment pipe work shall be accessible at all times to government maintenance staff; and lockable stand pipes and waterproof power points shall be provided in common areas to facilitate the use of specified cleansing equipment by cleansing contractor.

Supply pipes shall be copper for potable use and plastic for flushing and general cleansing purposes.

Design,
Cleansing and
Disinfection for
Hot, Cold Water
Systems and

- (w) The design, installation, operation and maintenance of all the hot, cold water systems and other water using systems/apparatus shall comply with the design, operation and maintenance precautions requirements as stipulated in the current edition of the Code of Practice for Prevention of Legionnaires' Disease, Hong Kong.

Other Water Using Systems / Apparatus	<p>All new piping systems and associated water tanks shall be flushed clean to remove dust, sludge and sediment and disinfected upon commissioning in accordance with the prevailing Water Supplies Department (WSD)'s guidelines as well as all relevant WSD circular letters including:</p> <ul style="list-style-type: none"> (i) Guide to Application for Water Supply; and (ii) Guidelines for Cleansing of Fresh Water Storage Tanks. <p>System materials and sampling tests at fresh water system shall be strictly conforming to WSD guidelines and standard requirements (Latest Edition) and the requirement as set out in the "Code of Practice for Prevention of Legionnaires" Disease".</p> <p>Where a system is not handed over immediately after commissioning, it shall also be disinfected again before handover of the Blue Area for use. Upon handover of the Blue Area, the following water sampling tests shall be conducted and the test reports shall be submitted to the Government Representatives:</p> <ul style="list-style-type: none"> (i) Water sample tests for testing parameters in full accordance with those required by WSD shall be carried out within 7 days before the handover date of the Blue Area; and (ii) Water sample tests for testing parameters in full accordance with those required by the current edition of the "Code of Practice for Prevention of Legionnaires' Disease" shall be carried out within 14 days before the handover date of the Blue Area. <p>All the water samples for the water sampling tests shall be tested by an accredited laboratory before handover.</p>
Drainage	<p>(x) Drainage pipes and fittings shall be of appropriate material as specified in the Annexes of this Technical Schedule.</p> <p>Drainage outlets/receptors shall be provided adjacent to all water using appliances and equipment. Floor drains with grating are necessary and shall be provided inside pantry, kitchen, toilet, laundry, service corridor, service pipe duct, hose reel cabinet, and E&M plant room with wet/water services piping.</p> <p>Independent two pipe system for the soil and waste system shall be provided for the Building Works.</p>
Electric Vehicle (EV) Charging- enabling Facilities	<p>(y) The Purchaser shall provide and install charging-enabling facilities for electric vehicles at the uncovered parking space for ambulance and the two uncovered parking spaces for heavy vehicles.</p> <p>The EV charging-enabling facilities including but not limited to all fixed electrical installations from the main/ sub-main switchboards, switchgears, distribution boards, associated power cables and trunking/ conduit installation, electricity meter boards, and power isolators</p>

terminated at the parking space of Government Accommodation vehicles shall be provided to Government Representatives' satisfaction for future installation of EV chargers by the operator. Installation of final circuits with independent main power supply switch of 3-phase, 380V, 200A rating shall be provided and terminated at all the parking space provided. Sufficient space shall also be reserved for installation of quick chargers.

The power supply to EV charging-enabling facilities shall be combined to the development's electrical system and branched off from the development's main system with independent electricity meter.

The Purchaser shall reserve sufficient electrical loading capacity for the future EV charging facilities. The design and provision of EV charging-enabling facilities shall be agreed by the Government Representatives. The provision for future installation of load management system by the operator shall be provided.

Suitable electrical load management system of the EV charging facilities can be considered on electrical loading estimation of electric vehicles.

The EV charging-enabling facilities shall comply with all the latest statutory requirements as stated in Annex II of this Technical Schedule, where applicable.

22. Waste
Management
Requirements

The Purchaser shall control contractor and construction works sites on proper Construction and Demolition Material ("C&DM") management and disposal by preparing and implementing a plan setting out the waste management measures. The plan shall include appropriate mitigation means to avoid, reduce, reuse and recycle inert construction waste including proper control measures or steps be taken during day-to-day operation. The Purchaser shall provide the following measures into the works contract for implementation at the construction stage so as to reduce generation and disposal of C&DM:

- (a) separation of non-inert and inert portions of C&DM for disposal;
- (b) re-use of suitable excavated materials as general filling material on-site to minimize off-site disposal of C&DM;
- (c) use of prefabricated formwork for temporary works on site to minimize generation of C&DM; and
- (d) control the disposal of C&DM to the designated public filling facility and landfill by a trip-ticket system.

23. Greening,
Landscape and
Tree
Management

Landscaping shall be maximised as appropriate and practicable. All the relevant tree planting and management works shall be done in line with the specifications/guidelines as highlighted under the 'Proper

Planting Practice' to Cyber Manual for Greening (latest version) and DEVB's Greening Website (internet).

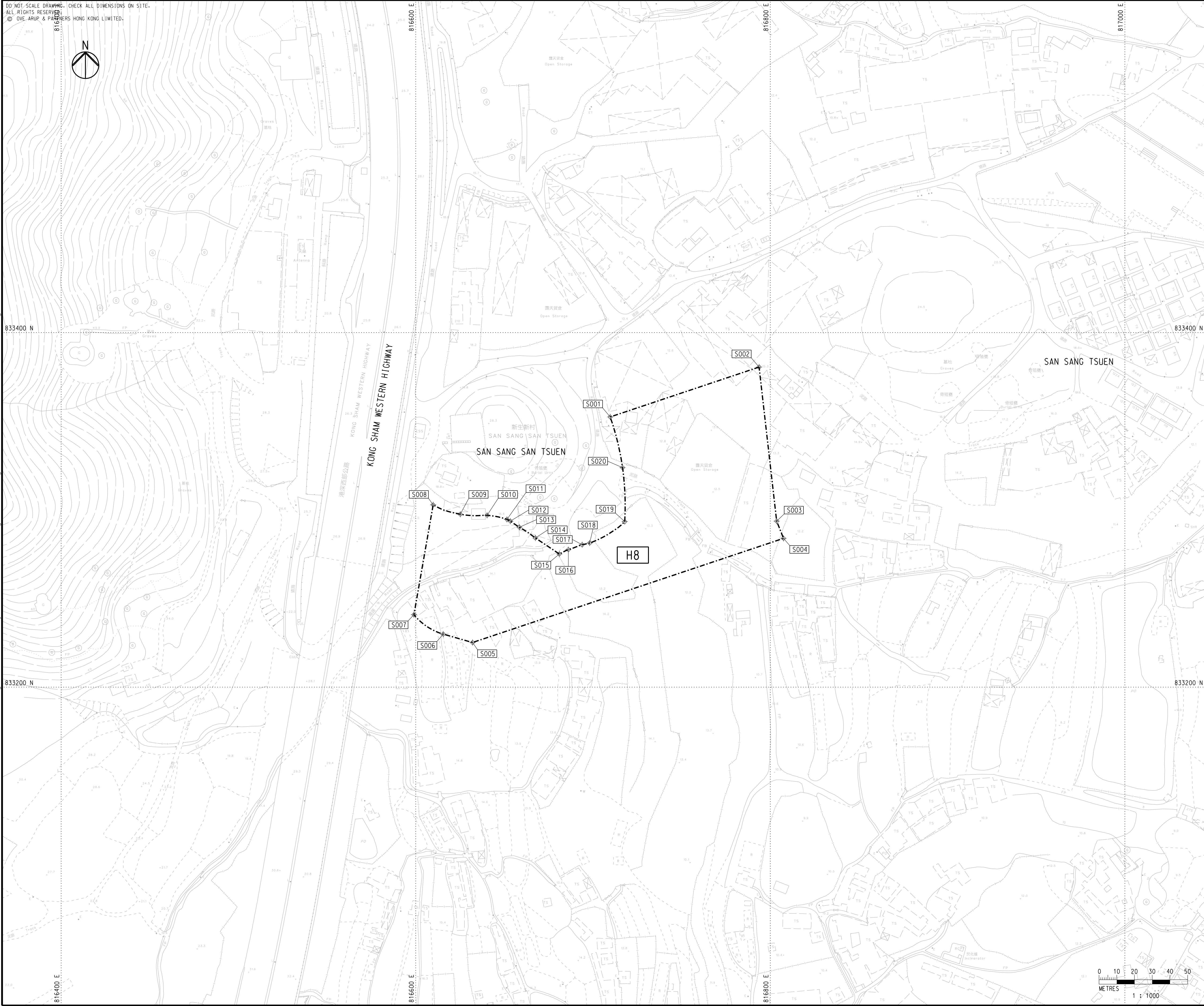
24. Signage

External signage including directional signage, composite notices boards, illuminated signs, name plaques, logos, location maps, markings and plant labels etc. in both Chinese and English shall be provided as where deemed necessary by the DLCS. Details of placement, locations and design including materials, lettering and graphics shall be submitted for the Government Representatives' agreement.

List of Annexes

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Annex V	<ul style="list-style-type: none"> - Part (A) <ul style="list-style-type: none"> (i) Schedule of Accommodation (ii) Accommodation Requirement Brief - Part (B) Schedule of Requirements, Finishes & Fittings - Part (C) Environmental and Building Services Installation Requirements
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LEGEND

PART OF SITE (H8)

S001

SETTING OUT POINT

SETTING OUT POINT	EASTING	NORTHING
S001	816709.686	833352.393
S002	816793.680	833380.515
S003	816803.597	833293.610
S004	816807.446	833283.915
S005	816632.046	833225.175
S006	816615.523	833229.893
S007	816598.974	833240.871
S008	816609.822	833302.815
S009	816625.121	833297.515
S010	816640.259	833296.933
S011	816651.446	833294.606
S012	816653.341	833293.623
S013	816658.454	833290.198
S014	816667.493	833284.126
S015	816680.999	833275.099
S016	816686.081	833277.541
S017	816693.882	833280.305
S018	816698.102	833281.286
S019	816717.887	833293.363
S020	816716.634	833323.810

CURVE CENTER	EASTING	NORTHING	RADIUS
S006-S007	816624.847	833261.910	33.347
S008-S009	816631.541	833340.785	43.700
S009-S010	816633.805	833344.367	47.700
S010-S011	816634.954	833239.431	57.700
S018-S019	816678.686	833335.339	57.400
S019-S020	816665.508	833302.343	152.600
S020-S001	816668.928	833303.227	149.100

Rev	Description	By	Date
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Consultant

ARUP

Project Title

Agreement No. CE 71/2020 (CE)
Hung Shui Kiu / Ha Tsuen
New Development Area Package B
Works for Second Phase Development
– Design and Construction

Drawing title

PART OF SITE (H8)
SETTING OUT PLAN

Drawing no.		Rev.	
282748/POS/SK/H8		B	
Drawn RY	Date 07/25	Checked EH	Approved KKC
Scale 1:1000 @ A1		Status PRELIMINARY	

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Annex II

Specifications and Standards for Building Works, Environmental and Building Services Works

- Documents
1. The Purchaser shall comply with the latest edition and subsequent addendum/corrigendum/amendments of the following documents :-
 - (a) General Specification for Building, ArchSD.
 - (b) Design Manual: Barrier Free Access 2008, Buildings Department.
 - (c) ArchSD Standard Drawings and Guidance Drawings as appropriate.
 - (d) General Specification for Building Services Installation in Government Buildings of the Hong Kong, 2022 Edition, ArchSD.
 - (e) Testing and Commissioning Procedures for respective Building Services Installation, ArchSD.
 - (f) Code of Practice for Energy Efficiency of Building Services Installation, EMSD.
 - (g) General Specification for Public Address Systems (Specification No. ESG11), EMSD.
 - (h) Code of Practice for Building Energy Audit, EMSD.
 - (i) Buildings Energy Efficiency Ordinance (Cap 610).
 - (j) All current Technical Circulars related to Buildings Energy Efficiency Ordinance (Cap 610), EMSD.
 - (k) Code of Practice for the Electricity (Wiring) Regulations, EMSD.
 - (l) Technical Guidelines on Code of Practice for Energy Efficiency of Building Services Installation, EMSD.
 - (m) Code of Practice for Minimum Fire Services Installations and Equipment and Inspection, Testing and Maintenance of Installations and Equipment, FSD.
 - (n) FSD Circular Letters, latest edition and subsequent amendments / addendum / corrigendum, FSD.
 - (o) WSD Circular Letters and Guidelines.
 - (p) Guide to Application for Water Supply, WSD.
 - (q) Guidelines for Cleansing of Fresh Water Tanks, WSD.

- (r) Code of Practice for Prevention of Legionnaires' Disease, published by the Government of Hong Kong.
- (s) Plumbing Engineering Services Design Guide by the Institute of Plumbing.
- (t) Guidance Notes for the Management of Indoor Air Quality in Offices and Public Places issued by the Government Indoor Air Quality Management Group.
- (u) Joint DEVB Technical Circular No. 2/2015 & ENB Circular Memorandum No. 3/2015 on 'Green Government Buildings' (Joint Circular) and Joint memo further issued by DEVB and ENB/ EEB on 19 May 2017, 10 April 2019 and 9 March 2023 on amendment of the Joint Circular on 'Green Government Buildings' (Joint Memo).
- (v) ArchSD, BSB Instructions, BSB Circulars and BSB Circular Memorandum and BSB Design Guides as appropriate.
- (w) Technical Guidelines on Grid Connection of Renewable Energy Power Systems, EMSD.
- (x) CIBSE Lighting Design Guide and the SLL Code for Lighting.
- (y) IES Lighting Handbook.
- (z) Other relevant technical circulars issued by the DEVB and the 'Environment, Transport and Works Bureau', and other circular memorandums issued by the ENB/ EEB.
- (aa) Universal Accessibility-Best Practices and Guidelines, ArchSD.
- (bb) ArchSD Standards on Universal Accessibility Provisions (Advisory requirements).
- (cc) Universal Accessibility for External Areas, Open Spaces and Green Spaces.
- (dd) ETWB TCW No. 15/2003 and 19/2005 on proper C&DM material management and disposal.
- (ee) Guidelines on Industry Best Practices for External Lighting Installations, ENB.
- (ff) American Society of Heating, Refrigerating and Air-conditioning Engineers (ASHRAE) Handbooks, Guidelines and Standards.
- (gg) Code of Practice for Fire Safety in Buildings, Buildings Department.
- (hh) DEVB's BIM Harmonization Guidelines for Works Departments published by the Government of Hong Kong.

- (ii) BIM Guide for Facilities Upkeep issued by ArchSD.
 - (jj) BIM-Asset Management Standards and Guidelines issued by EMSD
2. Most documents listed above can be obtained from on-line Government Bookstore. Documents above which are not available from the on-line Government Bookstore may be obtained from the relevant Government Representatives for reading upon request.
 3. Whereas documents relating to Hong Kong statutory instruments are not included in the above list, the need for strict compliance with those instruments remains mandatory.

Annex III – Part 1

Particular Specifications and Requirements for Sanitaryware, Plumbing and Drainage Fittings

General requirements	1.	<p>All plumbing works shall be in compliance with the Water Authority's Requirements and Waterworks Regulations.</p> <p>The current edition of General Specification for Building, General Specification for Building Services Installation in Government Buildings of the Hong Kong published by Architectural Services Department shall be complied with.</p> <p>The general requirements of male and female toilets, universal toilets and changing facilities shall be in accordance with the requirements as stipulated in the Annex V- Part (A)(ii).</p>
Water Closets (WCs) and cisterns	2.	<p>Flushing valve (flushometer) shall be used as far as practicable. WC bowl shall be wash down type and complete with plastic seats, covers. Flushing valve shall be operated by contactless sensor complete with manual override.</p> <p>Where installation of flushing valve is found infeasible or inappropriate, with written agreement of the Government Representatives, flushing cistern shall be used. Flushing cisterns shall be of minimum 7.5 litres capacity, operated with low level vitreous china lever handle, and be concealed behind accessible panels. WC bowl shall be compatible with the flushing system recommended by the manufacturer.</p>
Sanitizers	3.	<p>WC disinfecting sanitizers in chromium plated brass or stainless steel (Grade 316) shall be connected directly to the flush pipe of each water closet's cistern and shall contain a proprietary bactericide/ detergent mixture.</p>
Toilet seat	4.	<p>The seats for the male and accessible toilets shall be open fronted. The accessible toilet seats shall be 400 - 450 mm high. The WCs shall be of light colour.</p>
Urinals	5.	<p>Urinals shall be provided with automatic flushing cisterns to BS 1876 producing complete and effective flushing at minimum 10-15 minute.</p> <p>Ceramic urinal bowls (about 580mm to 620mm above finished floor level) with modesty boards should be provided.</p> <p>Urinals shall be provided with vent pipe concealed with accessible pipe duct.</p> <p>Accessible maintenance space behind urinal with vent pipe installation shall be provided.</p>

Wash basins	6.	<p>Wash basins of a light colour shall be provided as follows :-</p> <ul style="list-style-type: none"> (a) bench unit type of glazed vitreous china to BS 1188 not less than 560mm x 410mm in size set into an impervious top fixed at 850mm above floor level, and the whole shall be completed with overflow waste fittings, plug and chain, bottle trap, tap stopper and 1 no. tap. (b) shallow shelf model at 750 mm height for the accessible unisex toilet and changing room supported on proprietary brackets. (c) unless otherwise specified, wash basins shall be fixed at 850 mm above floor level. (d) glazed stoppers shall be provided to tap holes without a hot water provision. (e) end wall with matching wall finishes of full ceiling height shall be provided at the side edge of wash basin counter top.
Sealant	7.	All fittings shall be painted with white silicone sealant to BS 5889, Type B, with fungicide.
Wastes	8.	<ul style="list-style-type: none"> (a) Pop-up wastes shall be provided to the wash basins which are designed exclusively for the accessible unisex toilet and changing room. (b) All wastes, overflows, chains and strays, flush pipes, spreaders, etc. shall be of chromium plated brass to BS 5412 or grade 316 stainless steel. (c) Waste traps shall be plastic of good quality proprietary brand or to BS 3493.
Water supply fittings	9.	<p>Water supply fittings shall be provided as follows :</p> <ul style="list-style-type: none"> (a) 15 mm infrared sensor type taps shall be power operated and with adjustable of a flow of water for 10 to 15 seconds after actuation to each wash basins in the Building Works. (b) 22 mm lockable screw down bib taps with threaded end for general cleansing in the cleaner's compartment of each of the male toilet cum changing room, female toilet cum changing room, accessible unisex toilet and changing room, universal toilet cum changing and shower facilities and cleaner's storage space. (c) 22 mm screw down bib tap with threaded end for the cleaner's storage space. (d) A central pump shall be provided for high pressure water cleaner of potable-type water-jet to serve both male and female sections.

Lockable Castings	10.	A tap connected to the mains water supply, one in each of the male toilet cum changing room and female toilet cum changing room, shall be provided for hosing down purposes. Lockable castings shall be provided to the water points as specified.
Water tanks	11.	Water tanks with covers shall be of glass reinforced plastic or similar approved maintenance free material and shall be fitted with locks if located in a common area.
Floor drains	12.	<p>All floors shall be laid to minimum falls of 1 in 80 with minimum 1 no. 100mm diameter drain being provided to every 25m² of floor area.</p> <p>Grade 316 stainless steel, slotted or perforated floor drain outlets at regular intervals in the common areas and circulation space to facilitate easy cleansing.</p> <p>Floor drains shall be provided inside service corridor and pipe duct with wet services piping.</p>
Surface Channels	13.	<p>Surface channels shall readily fall to domed gratings with cover channel gratings of stainless steel (Grade 316) or high impact resistant plastic with maximum 12 mm slots.</p> <p>All surface channels and dished channels shall be provided with movable tile covers matching the floor tiles or metal covers and of non-slip surface, subject to the satisfaction of the Government Representatives.</p>
Epoxy-coated pipes	14.	Epoxy coated centrifugal cast iron socketless pipes and fitting shall be fully complied with International Standards ISO 6594 (BS EN877). The whole piping system shall be of one single proprietary product. It shall not be used below ground. Pipe bend fittings shall be provided with cleaning eyes for ease of maintenance.
Back Inlet Gully Trap ("B.I.G.T.")	15.	Integrated B.I.G.T. shall be adequately ventilated. Inlet/ outlet of fresh air shall not be from semi-covered or sheltered area to avoid odors due to inadequate air flow.
Pipe Ducts	16.	Accessible pipe ducts shall be provided to water closets, showers, urinals, etc., to allow ease of maintenance. Pipe duct shall be provided with lighting fitting for maintenance.
Sensors	17.	All sensors shall be contactless type. Power points shall be provided for sensors in lieu of individual batteries.
Anti-bacterial products	18.	Consideration shall be given to using materials with properties that can retard the growth of bacterial or materials with similar performance to the satisfaction of DLCS (e.g. materials of low water absorption properties) for the wall and floor tiles, WC pans, wash hand basins, etc. Where wall/floor tiles and sanitary fittings are required of anti-bacterial materials, they shall be of proprietary products.

Annex III – Part 2

Plumbing and Drainage Requirements

I. PLUMBING SYSTEM

1. General

- 1.1 All plumbing works, sanitary fixtures and fittings (including traps for waste fitments) shall comply with Buildings Ordinance (Cap 123) and its subsidiary legislations, codes of practices and all applicable laws of Hong Kong, as well as conform to the British Standards and requirements as stated in the latest edition of General Specification for Building and General Specification for Building Services Installation issued by ArchSD and the requirements stated in this Technical Schedule. When there is conflict between the General Specification for Building Services Installation and this Technical Schedule, the latter shall prevail.

- Water supply 1.2 Water shall be supplied as follows:
- (a) Salt water – to all toilets for flushing purposes;
 - (b) Fresh water – via one meter for potable water supply for future connection to toilets and to water filling type dispenser at pantry and/or office; and
 - (c) Cleansing water– if required, shall be approved by WSD and provided with cleansing water tank and individual water meter.

- Fresh water points 1.3 Fresh water points shall be provided as follows:
- (a) minimum 22 mm diameter to wash hand basins and water dispensers;
- 1.4 All lockable water points for hosing down in each toilet, located convenient to use and either against a projection of column or beside/ underneath the vanity top of the wash hand basin, but in any event the water point must not project into the doorway or circulation areas.

Maintenance Access	1.5	<p>Plumbing system shall be a concealed system with provision of proper maintenance access. No exposed pipeworks of the plumbing system shall be permitted throughout the building. All main and branch pipeworks shall either be concealed inside dedicated pipe ducts or within the false ceiling, ledges or furring with adequate access panels or hatches in appropriate dimensions for inspection and routine maintenance. Proper and sufficient maintenance access shall also be provided for the flushing system of urinals. The pipe ducts dedicated for pipeworks of plumbing and drainage installation shall not accommodate cables, busbars and conduits or pipeworks of other installations. All pipe duct doors shall be fire resistant in accordance with the Part C of Code of Practice of Fire Safety in Buildings 2011 and self-closing with latch lock.</p> <p>Adequate switchable internal waterproof lighting fittings with lighting switch to achieve 200 lux level shall be provided within the pipe ducts to enable maintenance work to be carried out conveniently. Sizes of all pipe duct doors shall not be less than 800 mm by 2,000 mm in order to ensure easy entry into pipe ducts.</p> <p>Unless otherwise agreed with the Government Representatives, all pipe duct doors shall only be accessible from the common corridors or within toilet areas, and access of pipe duct shall not be allowed within all functional spaces or rooms of the Blue Area that required special interior design and fitting-out works. Adequate floor drain shall be provided inside all pipe ducts. Warning pipes or water detection system to indicate pipe leakage shall also be installed for the enclosed cavities with pipework.</p> <p>No plumbing pipeworks shall be casted into concrete structures or block walls without the prior consent of the Government Representatives and the provision of properly designed opening with sufficient space allowed for pipe replacement at both ends of the concrete structures or block walls.</p>
Routing	1.6	<p>No water supply pipes shall be allowed to be installed above/ adjacent to water-sensitive devices or pass through electrical plant rooms, server rooms, computer rooms, FS control rooms, security room, lift machine room, building services and E&M pipe ducts, administration areas and staff areas and offices of the Blue Area.</p>
Approved Products	1.7	<p>All cocks, valves, taps, fittings and accessories shall be of the type approved by the Water Authority and shall be fully compatible with the type of sanitary fixtures proposed to ensure proper functioning.</p>

Twin-tank system for the Building Works	1.8	To avoid interruption to the service during routine cleansing and maintenance of the water storage tanks, a twin-tank system shall be adopted for all flushing, potable and non-potable plumbing system of the Building Works. Each compartment of the twin-tank shall be equipped with separate sets of inlet with isolation valve, outlet, associated overflow and drain-off pipeworks with an automatic pump control switch at the downstream side of each sump pump of each compartment to protect the up-feed system particularly when the stop valve for the tank compartment is closed for cleaning or maintenance. Each storage compartment of the twin-tank system shall be provided with top access lockable cover in SAE grade 316 stainless steel for routine maintenance and cleaning, and vertical side access shall not be acceptable. Proper maintenance access to the tanks with working platform shall also be provided.
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2. Flushing Water Supply System

General	2.1	The whole flushing water system for the building shall be designed to cater for use of salt water for flushing application (no matter fresh water or salt water is supplied by WSD).
Materials	2.2	<p>(a) Aboveground flushing water pipe:</p> <p>(i) For nominal size up to and including 65 mm diameter, all down-feed flushing water supply pipes shall be uPVC pipes to BS 3505 class E or higher as required, and fittings to BS 4346(b).</p> <p>(ii) For nominal size above 65 mm diameter, all up-feed and down-feed flushing water supply pipes shall be ductile iron pipes with internal cement lining and fittings to BS EN 545: Class K12, and externally metallic zinc coated to ISO8179.</p> <p>(iii) All screw flange joints shall conform to BS EN 1092 PN16 or PN25 to suit the actual pressure rating of the system.</p> <p>(b) Underground for mains supply and up feed riser:</p> <p>Ductile iron to BS EN 545 with internal cement lining.</p>
	2.3	All valves and fittings for flushing water and soil/ waste fittings shall be suitable for use in chlorinated seawater operation and all valves and fittings shall be designed for working pressure of up to 16 bar and fixed with stainless steel brackets and screws. Stainless steel shielded plastic pipe or brass fittings such as angle valves shall not be used in flushing water supply systems.
	2.4	The automatic self-cleaning water filter/ strainer system shall provide efficient reliable filtration while reducing the amount of backwash water required. Size of the inlet and outlet shall be from 1-1/2 to 4 inches and be able to handle flow rate up to 350 gpm.

	2.5	High performance fine screens provide double screen area for special application shall be available in all sizes for all filters for the Government Representatives' selection and shall be capable to perform under the following circumstances:
		<ul style="list-style-type: none"> (a) Minimum pressure : 15 psig (b) Maximum pressure : 150 psig (std.) (c) Maximum temperature : 150 degree F (std.) (d) Clean pressure drop : 2 psi
	2.6	Y type strainer with fusion bonded epoxy coated internally and externally body with SAE Grade 316 stainless steel straining device shall be installed at every flushing water branch pipe on each floor.
Gate Valves	2.7	Gate valves for flushing water application: <ul style="list-style-type: none"> (a) For nominal size up to and including 50 mm diameter use PVC type ball valves. (b) For nominal size above 50 mm diameter: <ul style="list-style-type: none"> (i) Gate valve to BS 5163 (ii) Bonnet and body: cast iron to BS EN 1561 coated with epoxy internally and externally (iii) Disc: SAE grade 316 stainless steel (iv) Seat: SAE grade 316 stainless steel (v) Disc seat ring: SAE grade 316 stainless steel (vi) Steam: stainless steel to SAE grade 316 stainless steel or BS EN 10088-3 (vii) Wedge: Ductile iron, core fully encapsulated with EPDM rubber with integral wedge nut of dezincification resistant brass
Automatic Sensor Flushing Valves	2.8	Automatic sensor flushing valves shall be of concealed automatic type with vandal resistant chrome-plated metal face plate and actuated by infra-red sensor with manual overriding mechanism. The actuating device shall be equipped with an adjustable time delay function such that the flushing action shall not be started immediately after the user has left until confirmation of the detection by the sensor after certain period of time (about 6 seconds approximately). It shall also be equipped with programmable timer such that the system can be automatically flushed at a regular interval of time when the valve is not actuated for a certain period of time. The flushing valve and the associated pipeworks shall be corrosion resistant and suitable for use with both salt and chlorinated water supply. The flushing valves shall also be able to work under the actual water pressures, with tolerance to cater for the fluctuating water pressures.

	2.9	The flushing valves shall be equipped with built-in removable filter or strainer to screen out the impurities in the water supply to prevent the flushing valves from being jammed, and the filter cartridge and other valve components shall be easily dismantled and removed from the main unit of the flushing valve for cleaning, inspection and replacement.
	2.10	The performance of the flushing valves shall comply with those standards as stipulated under the Waterworks Regulations and other relevant standards. The flushing volume shall suit the design of the toilet bowl so that wastes can be cleared effectively with a single flush and operated within the working pressures recommended by the manufacturer.
Exposed feeder pipes	2.11	Exposed flushing water feeder pipes to sanitary fittings shall be stainless steel tubes, SAE grade 316.
Valves and fittings	2.12	Individual control valve for feeding pipe shall be provided to each cistern and urinal. Independent control valves to the flushing water supply systems shall be provided inside each pipe duct at easily accessible location.

3. Potable Water Supply System

General	3.1	The plumbing installation and the pipeworks distribution system shall be designed to prevent the growth of legionella bacteria and other water-borne organisms. The length of “dead leg” in the water distribution pipeworks shall be minimized to prevent proliferation of legionella or other bacteria in stagnated water. All cold water distribution pipeworks shall be located away from any possible heat source, and the temperature of cold water within the distribution pipeworks and the storage tanks shall not be higher than 20 degree Celsius. For hot water, the minimum flow temperature of water leaving the calorifier/ water heater shall be 60 degree Celsius at all times, and 55 degree Celsius at the supply to the furthestmost draw-off point in the circulation system. The minimum water temperature of all return legs to the calorifier/ water heater shall be 50 degree Celsius.
Materials	3.2	<p>(a) Aboveground cold potable water down-feed supply pipes shall be copper pipes to BS EN 1057 encapsulated with factory applied moisture resistant polyethylene sheath. For pipe sizes with nominal diameter equal to or below 22 mm, half hard temper copper tubes to BS EN 1057 is acceptable.</p> <p>(b) Water supply pipes and water pumps of drinking water point(s) shall be stainless steel.</p> <p>(c) Underground cold water supply mains and up feed riser shall be ductile iron to BS 545 with internal cement lining.</p>
Gate Valves	3.3	All valves shall have a working pressure of not less than 16 bar.

Gate valves cold water application:

- (a) For nominal size up to and including 65 mm diameter:
 - (i) Gate valve to BS 5154
 - (ii) Bonnet, body and disc: Bronze to BS EN 1254
 - (iii) Stem: High tensile brass to BS 2874
- (b) For nominal size above 65 mm diameter:
 - (i) Gate valve to BS 5163
 - (ii) Bonnet and body: cast iron to BS EN 1561
 - (iii) Disc: Solid bronze to BS EN 1254
 - (iv) Seat: bronze trimmed as disc seat ring.
 - (v) Disc seat ring: bronze to BS 1254
 - (vi) Stem: stainless steel to SAE grade 410, 416 or BS EN 10088-3:2005 – 1.4006, 1.4005 or 1.4021

Water Pressure	3.4	A minimum of 3 bar water pressure shall be provided at each of the mixing taps, water taps, spouts, shower heads and all other water draw-off points. If the water tank level cannot provide the required water pressure to the water draw-off points, booster pump with pneumatic vessel shall be installed to maintain the required water pressure.
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Hot Water Supply Pipes	3.5	All hot water supply pipes shall be pre-insulated copper pipes with polyethylene sheathing suitable for hot water application to minimize heat loss to the environment. The covering shall be white in color and is Low Smoke Halogen Free (“LSHF”). All fittings for hot and cold copper pipes shall comply with BS EN 1254.
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	3.6	To enhance the system balancing and even distribution of hot water temperature in various stacks and branches, the return pipeworks of the hot water distribution system shall be in reverse-return arrangement.
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Shower Controls	3.7	Shower head and thermostatic mixing valves for shower or bath/shower control shall be proprietary products complying with the following requirements and to be approved by the Government Representatives and shall be installed at locations as appropriate or otherwise instructed by the Government Representatives.
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Thermostatic shower control shall:

- (a) be able to automatic shutdown to seepage in 2 seconds shall the cold water supply fails.
- (b) have shutdown to seepage effected only if hot supply is a minimum of 12 degree Celsius above the blended temperature.
- (c) have independent spray force and temperature selection controls.

- (d) allow flow and temperature adjusted independently by 2 concentric knobs.
- (e) inner control knob for temperature selection and outer knob for flow control.
- (f) no form of additional flow controller shall be fitted to the outlet pipework.
- (g) the low pressure setting is achieved with inlet water supply temperatures of 15 degree Celsius cold and 65 degree Celsius hot, nominally equal inlet supply pressure.
- (h) thermostatic temperature control in the range of 30 to 50 degree Celsius, max. 85 degree Celsius.
- (i) have blended water temperature maintained within 2 degree Celsius change in hot or cold supply and have over-ridable max. temperature stop (may be disabled).
- (j) have blended water maintained within 1.5 degree Celsius range when the pressure between the inlet and outlet is halved (a pressure loss ratio of 2:1) on either the hot or cold side.
- (k) have wax capsule temperature control system.
- (l) sealed for life plug-in cartridge for ease of servicing.
- (m) ceramic plate flow control mechanism to resist scale formation.
- (n) design to comply with BS1415 Part 2.
- (o) have valve body made from corrosion resistant copper alloys.
- (p) have engineering plastic, polished stainless steel (Grade 316) and chrome plated as surface finishes.
- (q) have accessories with optional lever controls for user to operate by restricted hand use.
- (r) fix securely/ directly to a vertical wall/ panel surface and with plastic build-in shroud as option.
- (s) have an isolating valve conveniently fitted in the supply pipework for easy maintenance.
- (t) have an aerator which is removable for cleaning purpose.

Valves and fittings	3.8	All valves and fittings shall be designed for working pressure of up to 16 bar and fixed with stainless steel brackets and screws. Individual control valve for feeding pipe shall be provided to the cold water and hot water supply systems inside each pipe duct.
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II. DRAINAGE SYSTEM

General

- 1.1 All drainage installation shall comply with the Buildings Ordinance (Cap 123) and its subsidiary legislations, codes of practices, and all applicable laws of Hong Kong, as well as conform to the British Standards and requirements as stated in the latest edition of General Specifications for Building and General Specification for Building Services Installation issued by ArchSD and the requirements stated in this Technical Schedule. When there is conflict between the General Specification for Building Services Installation and this Technical Schedule, the latter shall prevail.
- 1.2 The layout of the horizontal branch pipes and the vertical stacks shall be as direct as possible and any bend and change in directions shall be avoided to eliminate the risks of blockage. Easy bends with radius not less than 600 mm and equipped with cleaning eyes at not less than 150 mm above the finished floor level shall be installed at all junctions between the vertical stacks and the horizontal drains to allow swept entry of flow into the drainpipes. No horizontal soil pipes shall run more than 20 m nor connected with more than 3 WC. Adequate separate vertical stacks (preferable from roof level down to ground level directly without horizontal run at the intermediate floors) shall be provided and no pipes shall get into sensitive areas such as clinic (if any), IT equipment rooms (if any) and electrical room. The velocity of the drainage pipe shall be at least 0.75 m/s and preferable not larger than 1.8 m/s in limiting noise and vibration. The proportional depth of the drainage pipe shall not be more than 1/4 for vertical stack and 1/2 for horizontal pipe.

Maintenance Access	1.3	No exposed pipeworks of the drainage system shall be permitted throughout the building. All main and branch pipeworks shall either be concealed inside dedicated pipe ducts/ service corridor or within the false ceiling, ledges or furring with adequate access panels or hatches in appropriate dimensions and locations for inspection and routine maintenance.
	1.4	The pipe ducts dedicated for pipeworks of plumbing and drainage installation shall not accommodate conduits or pipeworks of other installations.
	1.5	All water closet compartments/urinals of the Building Works should have service corridors provided to house the pipeworks, water cisterns and associated services. For the service corridor with single loaded service i.e. with only services on one side of the internal wall,

minimum 900mm unobstructed space shall be provided in front of the water cisterns inside the service corridor. For service corridor with double loaded service i.e. with services on 2 opposite sides of the internal walls, minimum 1000mm unobstructed space shall be provided in front of the water cisterns inside the service corridor. Proper and sufficient maintenance access shall also be provided for the drainage system of urinals.

Urinals shall be provided with vent pipe concealed within accessible pipe duct.

- 1.6 All pipe duct/service corridor doors shall be fire resistant in accordance with the latest edition and subsequent addendum/ corrigendum/ amendments of the Code of Practice for Fire Safety in Buildings 2011 and self-closing with latch lock. Adequate switchable internal waterproof lighting fittings with waterproof lighting switch to IP65 and to achieve 200 lux level shall be provided within the pipe ducts / service corridors to enable maintenance work to be carried out conveniently. Sizes of all pipe duct doors shall not be less than 800mm by 2000mm in order to ensure easy entry into pipe ducts. An unobstructed working space, of not less than 700 mm in front of the pipes shall be provided for maintenance and repair of the pipeworks.

Unless otherwise agreed with the Government Representatives, all pipe duct doors shall only be accessible solely from the common corridors or within toilet areas, and access of pipe duct shall not be allowed within all functional spaces or rooms of the Building Works that required special interior design & fitting out works. Adequate floor drain shall be provided inside all pipe ducts/ service corridors.

Warning pipes or water detection system to indicate pipe leakage shall also be installed for the enclosed cavities with pipework. No drainage pipeworks shall be casted into concrete structures or block walls without the prior consent of the Government Representatives and the provision of properly designed opening with sufficient space allowed for pipe replacement at both ends of the concrete structures or block walls.

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| Sunken Slab | 1.7 | All drainage pipeworks of the Building Works, if not within Building Works, shall run in common area of the building and accessible from the common parts of the building in accordance with PNAP APP-93. If the Building Works with facilities situated immediately above private premises of the development and / or the fitting pipeworks shall unavoidably protrude into the private premises at the floor below, sunken slab for accommodating drainage pipeworks (for both vertical and horizontal pipes) with proper maintenance access for these wet floor facilities shall be adopted. |
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Floor level of the floor slab of services passage or walk-in services ducts shall be coordinated with leveling of sanitary fittings drainage outlets to permit sufficient fall of drainage pipes.

Separate System for Waste and Soil pipes	1.8	The drainage system must be of a two-pipe system consisting of separated waste pipe system and soil pipe system with individual vent pipes. Waste pipes must not be connected to the soil pipe system and vice versa. Drainage system shall be a concealed system with all vertical drainage pipes running inside pipe ducts and horizontal drainage pipes running with sufficient gradient inside ceiling voids, proprietary back panel systems or vanity cabinets. Drainage manholes shall not be located inside any of the Blue Area unless otherwise approved by the Government Representatives.
	1.9	The soil and waste drainage system including all associated vertical stacks for the Blue Area of the building must be designed and installed in such a manner that they are totally segregated and independent from the soil and waste drainage system of other non-Blue Area in the development.
Routing	1.10	No drainage pipes shall be allowed to be installed above/ adjacent to water-sensitive devices or pass through electrical plant rooms, server rooms, computer rooms, FS control rooms, security control room, lift machine rooms, building services and E&M pipe ducts, room required high hygienic standard (e.g. medical room, drug store, etc.), administration areas and staff areas and offices of the Blue Area.
Cleaning eye	1.11	Easy bend with cleaning eye must be provided to the drain pipe when there is a change in direction including turning in position and drop in level. The bend shall have an obtuse angle and the radius of curvature of the bend shall not be less than two times of the internal diameter of the pipe. Unless it is not suitable to provide such a bend, two numbers of 45 degree bends are allowed in lieu.
	1.12	Cleaning eyes shall be provided at all bends and intersection of drain pipes including all locations where there are changes of direction. Each cleaning eye shall be not less than the internal diameter of the pipe and be fitted with a cover in order to make the cleaning eye airtight and watertight. Use of coupling joint or other similar fittings in lieu of cleaning eye for cleaning, inspection and maintenance purposes shall not be permitted.
Surface channels And B.I.G.T. covers	1.13	Surface channels shall be provided along the pedestrian and vehicular ingress and egress points. For uncovered ramps/ driveways, surface channels shall be provided at the top, mid-level and bottom of all ramps/ driveways. Heavy duty cast iron channel gratings shall be provided to cater for the anticipated vehicular loading of the roads, ramps, carparking spaces, and loading and unloading areas.
	1.14	For the surface channels and B.I.G.T. covers within toilet of buildings, movable tile covers matching the floor tiles shall be provided.
Vent pipe for B.I.G.T.	1.15	Fresh air intake for the vent pipe of B.I.G.T. shall be properly located to avoid foul smell in toilets.

Sump Pump System for Below Ground	1.16	<p>An isolated sump pump system totally segregated from the main building must be provided for the soil, wastewater, rainwater or surface run-off generated and collected from the sanitary fitments, gullies or channels located in the floor(s) below ground level. The outlet pipe of the sump pump system shall be directly discharged to the last manhole dedicated for Building Works at ground level for relieve of pressure from the pumping main before connecting to the government public drainage system. An ejector basin of the sump pump system must be of airtight construction to prevent escape of foul odours and must be properly vented at not less than 2500mm above ground level. The sump pump system shall be equipped with a duty and standby pumps, the capacity of each of the pump shall be sufficient to allow the sump pump to operate not more than 10 cycles per hour. The pump shall be electrically driven and be provided with essential power supply to cater for an operating period of not less than 24 hours after main power failure. The capacity of the sump pit shall be sufficient to contain the total inflow for a 24 hour period in case of failure of essential power supply.</p> <p>Proper maintenance access and facilities shall be provided for inspection and maintenance of the sump pump system.</p>
Materials	1.17 (a)	<p>Aboveground pipes (including rainwater, soil, waste and ventilation pipes) shall be epoxy coated centrifugal cast iron socketless pipes complete with all necessary fittings from the same manufacturer to meet the requirement of the International Standard ISO 6594 or the European Standard EN877, and installed according to manufacturer's instruction.</p> <p>(b) Underground drainage pipes for both storm and foul water drainage system shall be ductile iron pipes and fittings to BS EN598, metallic zinc coated. All underground drain pipes underneath suspended ground slabs if applicable shall be fixed to the underside of the structural floor with SAE grade 316 stainless steel pipe brackets.</p>
	1.18	<p>Epoxy coated centrifugal cast iron socketless pipes and fittings shall conform the requirements of the International Standard ISO 6594 (BS EN877) and other requirements as stipulated below:</p> <p>(a) The whole piping system shall be from one single proprietary product with a minimum product guaranty for 10 years from the manufacturer.</p> <p>(b) Epoxy internal coating shall have a resistance to exposure of salt spray test to ISO 7253 for a minimum of 1,000 hours if sea water is to be used in the flushing water system.</p> <p>(c) All couplings shall be of a piece design, constructed of SAE grade 316 stainless steel with an EPDM collar insert for sealing.</p>

- (d) Pipes shall be cut to the required length with the suitable tools in accordance with the manufacturer's recommendations. All cut ends and areas where epoxy coating is damaged shall be touched up with epoxy resin as recommended by the manufacturer prior to installation. All works in contravention with this clause shall be rejected.

The entire socketless epoxy coated cast iron drainage system shall be properly supported and restrained in full accordance with the manufacturer's recommendations.

Grip collars shall be installed in areas where the potential accidental water pressure can cause pushing effort and a subsequent dismantling of the network.

Pipe size and Connection	1.19	The internal diameter of all underground soil pipes shall not be less than 150mm.
	1.20	The internal diameter of horizontal branch soil pipes connecting to water closet or slop sink shall not be less than 100 mm, and the vertical stack of the soil pipe shall not be less than 150 mm.
	1.21	Each horizontal branch soil pipe of toilet shall not connect with more than 3 numbers of water closets or similar soil fitments, and the horizontal running distance of such branch soil pipe before joining with the vertical stack shall be as short as possible to avoid blockage of pipe.
	1.22	The horizontal branch soil pipes shall be sized and designed to achieve the following:
	(a)	No residual inside pipework – it shall be achieved under normal condition by means of adjusting the pipe velocity to not less than the self-cleansing velocity (i.e. 1 metre per second for 225 mm pipe diameter or below, or 0.75 metre per second for pipe diameter over 225 mm).
	(b)	No overflowing – the pipe capacity shall cater for the design effluent discharge rate at a suitable cleansing velocity that no cause of overflow during normal condition.
	(c)	Minimizing pressure fluctuation – pressure fluctuation inside a drainage piping system shall vary the steady of pressure at different fitments and cause loss of water seal and overflowing. Proper ventilation by means of ventilation pipe or ventilating device for the system shall be provided.
Shower cubicles	1.23	All shower cubicles shall be installed with top access resealing gully trap set into the floor to enable cleaning of the trap within the room. The top access resealing gully trap shall be proprietary products complying with the following requirements and to be approved by the Government Representatives:

- (a) Situate and secure the gully body on top of the basic waterproofing surface of concrete slab;
- (b) Solvent weld the waste pipe to the gully body and protect the gully's opening with a cover prior to the pouring of light concrete into the concrete slab;
- (c) Fix the additional waterproofing and it shall flush with the gully's flange;
- (d) Remove the protective cover and adjust the hopper's height by cutting the clamping unit to a pre-determined level and direction. Then, solvent weld the unit onto the hopper body;
- (e) Construct the screed with an appropriate thickness;
- (f) Properly lay the floor tiles;
- (g) Install the resealing tube, strainer and the grating one by one into the hopper body; and
- (h) Easy to take out and refix the grating from the top of the gully/ trap for cleaning and maintenance purpose.

Vent pipes	1.24	All B.I.G.T. shall be provided with vent pipes and the ventilation openings of which shall be concealed inconspicuously and located at uncovered areas that shall not be easily accessible by public or near the fresh air intake of any air-conditioning system.
Floor drains	1.25	All floor drains of internal areas shall be specially designed so that the water in the seal trap will be replenished from time to time automatically without routine filling by the occupants in accordance with PNAP ADV-24 issued by Buildings Department.
Floor falls	1.26	<p>All internal and external floors shall be laid to minimum falls of 1 in 80 to dish channels, surface channels and floor drains to the following spaces:</p> <ul style="list-style-type: none"> (a) Passageways; (b) Toilets; (c) Water Closet compartment; (d) Attendant's Rooms; (e) Service Corridor; and (f) Plant Rooms and Water Tanks Rooms.
Manholes	1.27	Manholes shall not be located within Water Closet compartment, along the passageway, nor at the main entrance to the toilets. Manhole cover shall be finished with tiles matching with those of the floor.
Fixing	1.28	All structural fixing requirements as recommended by the manufacturer, particularly for concrete block walls mounted fixtures

shall be followed. All hangers for fixing drain pipes in horizontal run shall be able to withstand the “Pendulum Effect”, especially for drain pipes carrying storm water in nominal size above 250 mm. Pipe bends above 250 mm in diameter shall have independent pipe brackets to support their self-weight and withstand the momentum of water flow.

	1.29	Noggings, bearers, etc. required to support sanitary appliances and fittings are accurately positioned and securely fixed.
	1.30	Assemble and fix appliances and accessories so that surfaces designed to falls, drain as intended.
	1.31	Use nonferrous or stainless steel fastenings. Stainless steel shall be 16 SWG SAE Grade 316 generally.
	1.32	Provide anti-vibration pads to sink bottoms.
Rain Water Outlets	1.33	All rainwater outlets at flat roofs, terraces or balconies shall have an outlet not less than 100 mm diameter, and all surface channels shall be laid to fall in two opposite directions and provided with individual drainage outlets. Drainage outlets in form of vertical grating shall not be permitted.
Planting Areas	1.34	All planters, flower beds or planting areas shall be provided with proprietary drainage composite consisting of engineered anti-clogging filter fabric factory-bonded on a 3-dimensional high impact resistant polymeric core. Weep holes shall not be an acceptable means of drainage for planters or flower beds.
Plant Rooms and areas subject to wet weather conditions	1.35	All AHU plant rooms, pump rooms, air-conditioned plant rooms, FS plant rooms, pipe ducts for drainage and plumbing system, water meters cabinets/ chambers, hose reel cabinets, lift and escalator pits and any other plant rooms containing water supply or drainage pipes as well as balconies, open corridor and other areas subject to wet weather conditions shall be provided with sufficient number of floor drains. Each outlet of floor drains must not be less than 100 mm in diameter. These rooms shall also be provided with 200 mm high concrete curbs at each access door location to avoid water flooding in or out of the rooms. If conventional floor drains by gravity cannot be provided due to location constraints (e.g. basement), sump pits with automatically operated duty and standby sump pump system and equipment shall be provided. All the equipment/ installations used in the sump pump system shall be waterproof type to IP68. Warning pipe or water detection system shall be installed for early detection of water leakage.
Traps of Sanitary Fitments	1.36	All traps of sanitary fitments (except those with integral traps such as water closet) must be located in pipe ducts and the total length of pipe between the outlet of the sanitary fitment to its corresponding trap housed in the pipe duct shall not exceed 750 mm, and a non-standard application for exemption to the relevant Building Regulations shall be

submitted to the Government Representatives for approval prior to material ordering and installation.

Water Detection System 1.37

Suitable drainage system complete with water detection system shall be provided to all areas where the existence of water will have adverse effect to the essential operation of the building, e.g. lift pits, computer and server rooms, etc.

Water filling type dispenser for drinking water 1.38

Water filling type dispenser in general shall be connected directly to fresh water supply with a drain point to the drainage discharge.

The provision of water filling type dispenser for drinking water in pantry and/or office shall be subject to the operational/ service needs of the end-user department.

Annex IV

Particular Specifications and Requirements for Doors and Ironmongery

General requirements	1.	<p>The Blue Area shall contain basic provisions which are essential for the issuance of Occupation Permit and enable the premises to be fitted out by the future user(s).</p> <p>All items shall be supplied and installed to the satisfaction of the DLCS. The current edition of General Specification for Building, ArchSD shall be complied with. Particular attention is drawn to the following sections: Section 13 –Carpentry and Joinery; Section 14 – Ironmongery; Section 17 – Metal Work; Section 18 – Finishes; Section 21 – Painting; and Section 22 – Internal Fittings and Fixtures.</p>
Style and finish in general	2.	<p>Ironmongery shall as far as possible be provided “en suite” from one manufacturer and all items in any room shall have matching finishes. All stainless steel finish shall be not less than 1 mm in thickness of AISI 316 Type or other specified.</p>
Doors	3.	<p>Main entrance doors to the premises facing to streets or to internal lift lobby shall be of aluminum alloy or stainless steel with clear wired glass panels. Main entrance doors shall be robust and appropriate to serving anti-burglar purpose.</p>
Door widths	4.	<p>All doors shall be wide enough for wheel chair access. Minimum door clear opening widths shall be :</p> <p>(a) 1 700 mm for main entrance doors; (b) 900 mm for rear exits; and (c) 850 mm for rooms in general.</p>
Viewing panels	5.	<p>Provide glazed viewing panels to room doors as specified in Annex V of this Technical Schedule.</p>
Door finish	6.	<p>All timber doors shall be covered with selected hardwood veneer or laminated plastic sheet on both sides. Door frame shall be made of good quality hard wood with polyurethane paint finish. All plastic laminate finish shall not be less than be 1.3 mm in thickness according to BS 438 with colour and pattern as agreed by the Government Representatives.</p>
Security	7.	<p>Panic bolts with door alarm are to be provided at rear exits.</p>

Hinges	8.	Hinges shall be provided as follows: <ul style="list-style-type: none"> (a) Heavy duty to main doors and solid core doors; (b) Standard duty to all other internal doors; and (c) Light duty to all cabinets/lockers.
Floor springs	9.	Floor springs shall certified as tested to the requirements in the current edition of General Specification for Building, ArchSD.
Door closers	10.	Door closers shall certified as tested to the requirements in the current edition of General Specification for Building, ArchSD.
Locks and latch fittings	11.	Locks and latch fittings shall meet the performance specifications in the current edition of General Specification for Building, ArchSD. Lever handles shall be used throughout.
Cabinet fittings	12.	Cabinet fittings to be of stainless steel (Grade 316).
Panic bolts and latches	13.	Panic bolts and panic latches shall be certified by the manufacturer as suitable for the use on fire doors, and satin finished stainless steel (Grade 316).
General lock functions	14.	Lock functions shall generally be provided as follows unless otherwise specified <ul style="list-style-type: none"> (a) Locksets to all general room doors; (b) Dead locks to main doors, toilet, service, store, plant/meter and roller shutter doors; (c) Master keyed to each premises of the Blue Area; and (d) High security padlock to metal grille gates.
Toilet/Shower bolts	15.	Doors shall be fitted with an indicator bolt which can be released from the outside by key/coin.
Push plates/pull handles	16.	Provide push plates and pull handles to all doors with dead lock functions only.
Kickplates	17.	Kickplates 150 mm high generally and of stainless steel (Grade 316) shall be provided to both sides of all wet area doors and 400 mm high to disabled persons toilet doors.
Door stops	18.	Door stops shall be provided to all doors.
Toilet accessories	19.	Toilet roll holders, towel rails, shower rail, handgrips, guard rails, coat hooks and liquid soap dispensers shall be provided in heavy duty, stainless steel (Grade 316) unless otherwise specified or agreed by the Government Representatives.
Towel rails	20.	Towel rails shall be minimum 25 mm diameter x 600 mm long fixed at 1 200 mm above floor level.

Litter bins	21.	0.9 mm thick 150 mm x 120 mm x 300 mm (h) stainless steel (Grade 316) litter bins with hinged lids shall be wall fixed and provided to each female WC compartment and disabled persons toilet.
Mirrors	22.	Mirrors shall be minimum 400 mm wide x 600 mm high, 4 mm thick with aluminum or plastic cover bead all round fixed to the wall 350 mm above each wash basin.
Coat hooks	23.	Coat hooks shall be double pronged and provided to all staff rooms with 1 coat hook provided for each toilet cubicle.
Security/exit door fire alarm push bar	24.	All exits to be provided with locking device with security alarm push bars with integrated alarm and by switch by-pass/reset facilities.
Mail box	25.	Stainless steel (Grade 316) mail boxes shall be provided outside the main entrance of each premises of the Blue Area.
White boards	26.	White boards shall be steel based and of agreed proprietary manufacture.
Folding Partition (if any)	27.	Folding partition shall be finished with laminated plastic or Hessian fabric and of approved lightweight proprietary manufacture.

Annex V - Part (A)(i)

Schedule of Accommodation

** Please refer to Annex V - Part (A)(ii) for the requirement of outdoor sports facilities and other passive amenities.

(A)	(B)		(C)	(D)	(E) = (C) (D)		(F)
Item No.	Description (Ranking of Staff / Description of Ancillary Area) (Please indicate new posts with '*')		Quantity (no. of rooms / persons / items)	Unit Area Requested (m ²)	Area Requested for Item No. (m ²)		Remarks / Special Requirement
					Cellular Room	Open Plan	
Part I : Staff							
1	Amenities Assistant II	with single-use computer and printer unit	1	5.3		5.3	The following furnitures & equipment are required to accommodate in the Management Office: (a) Lockable door with installation of non-glaring, tempered glass window with Venetian blinds should be provided for the whole management office. (b) The whole management office to be located near the supporting services, i.e. First Aid Room; Baby-care Room etc. to enhance communication between staff. (c) Telephone lines and broadband internet services should be provided. (d) Network Photocopier / Printer (A3)@1.44 sq.m. (e) Network Colour Printer (A3)@1.44 sq.m. (f) Paper Shredder@0.6 sq.m. (g) 5 x Roller Shutter Cabinet@0.46 sq.m. = 2.3 sq.m. (h) 5 x Steel Filing Cabinet@0.28 sq.m. = 1.4 sq.m. (i) Public Address workstation & CCTV workstation = 1.2 sq.m. (i) Signal controls connecting the emergency alarm bells to be provided. (j) CCTV panels to be located inside. (k) With one unisex toilet for staff.
2	Amenities Assistant III	with single-use computer and printer unit	1	5.3		5.3	-ditto-

			Sub-total (Staff)	2		0.0	10.6	
			Circulation allowance for cellular offices in staff area					
Part II : Ancillary Area								
3	Management Office							(a) A management office serves 7 staff (including two Amenities Assistants and five contractors' staff), space for ancillary facilities such as main switch and control equipment for CCTV System, Public Address system, lighting system etc.
	File and General Storage Area	AA01-01 Provision for existing staff and newly created posts	2	1.5			3	(b) Non-glare tempered / reinforced glass windows with venetian blinds are to be provided.
	Supporting Facility Area	Server rack	1	1.0			1.0	(c) The office should be provided with adequate lighting, power sockets and inlets to cater for computer appliances, telephones, fax-line and broadband lines.
								(d) Burglar and vandal proof door and window are required for security purpose.
								(e) Provision of notice boards at appropriate locations are required in the management office.
								(f) Panic alarm system and fire system etc. should be installed in the management office.
								(g) Adequate space for server cabinet is required.
								(h) Adequate space for installation of 2 sets of PC computer and filing cabinets is required.
								(i) Conduits for Office Automation are required.
								(j) Plan a location to install a server rack (27U, size 600mm (W) x 600mm (D)) for storage all network equipment such as router and switch and install 2 power sockets near the rack. Cable containment provision from server rack to telecommunication room shall be allowed.
								(k) Provide 3 numbers of power sockets for each PC location (for PC, monitor and printer), 25mm conduit for LAN port installation between server rack to network devices (e.g. PC, photocopier).

	General Office Furniture and Equipment Area	Meter room	1	NA	As appropriate		<p>(l) A space of 1 m² for water dispenser is required.</p> <p>(m) General lighting is required.</p> <p>(n) Lockable door is required.</p> <p>(o) Sufficient power sockets (13 Amp) for general use are required.</p> <p>(p) Provision of Automated External Defibrillator (AED) with cabinet at the prominent location outside management office.</p> <p>(q) Toilets cum changing room with shower facilities (male and female) for staff which meets the latest statutory standard and requirement.</p>
4	Staff related Area	Roll-call Point (for at least of 7 venue staff including contracting staff)	1	10	10		<p>(a) In principle, 1 m² per staff.</p> <p>(b) Lockers to be provided for staff. If space allows, bigger locker compartments comprising two parts with lower part for storage of shoes and upper part for storage of personal belongings are preferable.</p>
5	Public Service Area	Babycare Room	1	NA	As appropriate		<p>(a) The design should meet the requirements in the latest version of “Guidance Notes for Provision of Babycare Facilities in LCSD Leisure Venues” at Appendix VI.</p> <p>(b) The area of the babycare room is subject to the design by works agent(s) while it should be no less than 5.0 m² for serving a single user or no less than 12.0 m² for serving multiple users.</p>
6	Public Service Area	Public Toilet (Male)	1	NA	As appropriate		<p>(a) Toilet cum changing rooms for male and female; one accessible toilet with shower and two universal toilets with changing and shower facilities should be provided at strategic locations of the site and are preferably grouped together in a toilet block.</p> <p>(b) Baby rest together with proper indicative sign should be installed in at least one</p>

					<p>female cubicle if site conditions permit. If there is enough space, provision of baby rests in universal toilets may be considered.</p> <p>(c) A baby changing counter together with proper indicative sign should be provided in male toilet and female toilet respectively, unless site conditions do not permit. Provision of baby changing counters in the universal toilets may be considered subject to site condition, space availability, usage pattern and operational need.</p> <p>(d) Two lockable water-proof power sockets (13 Amp) for general use of each type of toilets mentioned above.</p> <p>(e) A vandal proof lockable water point is required for type of toilets.</p> <p>(f) All toilets should be well ventilated. Ventilation by means of exhaust fans, wall or ceiling-mounted fans is to be provided at a near ground level to keep the floor dry. With cross-flow ventilation at near-floor level to help keep the floor dry.</p> <p>(g) Adequate ceiling height and lighting.</p> <p>(h) All stainless steel materials should be firmly secured against theft case.</p> <p>(i) Lockable gate / door to separate the toilet compartment and changing compartment is required.</p> <p>(j) The design and provision of toilet facilities can make reference to the latest version of “Handbook on Standard Features for Public Toilets” issue by Food and Environmental Hygiene Department.</p> <p>(k) All provisions should conform to the latest standard and requirements of LCSD and ArchSD. All requirements of LCSD’s latest guidelines for provision of toilet at <u>Appendix VII</u>.</p> <p>(l) The design of accessible toilet should meet the requirements in the latest version of “Design Manual</p>
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						<p>Barrier Free Access” issued by the Buildings Department.</p> <p>(m) The design of universal toilet should meet the requirements in the latest version of “Design Guidelines for Universal Toilets in ArchSD Projects” issued by the ArchSD.</p> <p><u>Male Toilet</u></p> <p>(a) Male toilets with pedestal and / or squat type cubicles and urinals including larger elderly friendly cubicles (Type B design of Design Guidelines for Universal Toilets in ArchSD Projects) and urinal bowls with handrail for people with mobility impairments and children are required. Toilet cubicle for elderly requires locating near to entrance.</p> <p>(b) Provision of at least 12 toilet cubicles (8 pedestal and / 4 squat type cubicles) and 12 urinal bowls are required.</p> <p>(c) Pedestal water closet, urinal and low wash hand basin for children should be provided.</p> <p>(d) Toilet paper holder is required for each W.C. cubicle.</p> <p>(e) 6 wash hand basins should be provided with mirrors, liquid soap dispensers for adult and children.</p> <p>(f) Smooth textured but non-slip and non-marking floors should be provided with effective fall and floor drain.</p> <p>(g) 2 electric hand dryers (1 for children) should be provided as a more users friendly approach, if space available.</p> <p>(h) A cleaner's storage space of 5m² equipped with storage racks for cleansing gear is required inside the male toilet."</p>
7	Public Service Area	Public Toilet (Female)	1	NA	As appropriate	<p>(a) Refer provision as in Male Toilet except that urinal bowls be deleted and replaced by pedestals for adult and children.</p> <p>(b) Provision of at least 12 toilet cubicles are required.</p>
8	Public Service Area	Changing rooms with shower facilities (Male)	1	NA	As appropriate	<p>(a) Shower facilities with 20 individual shower cubicles for male. Each individual shower cubicle should provide individual drain hole, wet and</p>

						<p>dry area for changing with bench; hot water supply for showers, hangers for clothing, holder for shampoo plus shower gel in each cubicle and effective drainage system.</p> <p>(b) Mirrors should be provided.</p> <p>(c) Sufficient spacing is required in changing area.</p> <p>(d) Smooth textured but non-slip and non-marking floors should be provided with effective fall and floor drain.</p> <p>(e) At least 2 nos. of electric telescopic hair dryer should be provided.</p> <p>(f) Provision of coin-operated lockers with padlock devices are required in each changing room. LCSD should be consulted on the number and design of lockers.</p> <p>(g) All provisions should conform to the latest standard and requirements of LCSD and ArchSD.</p>
9	Public Service Area	Changing rooms with shower facilities (Female)	1	NA	As appropriate	<p>(a) Same as the above items for male.</p> <p>(b) Toilet paper holder and a napkin disposal bin with cover are required for each W.C. cubicle.</p>
10	Public Service Area	Accessible toilet and changing room with shower facilities	1	NA	As appropriate	<p>a) The design of accessible toilet should meet the requirements in the latest version of "Design Manual Barrier Free Access" issued by the Buildings Department.</p> <p>(b) One pedestal type W.C. is provided in the accessible toilet.</p> <p>(c) Wash hand basin, liquid soap dispenser and toilet paper holder should be provided in the accessible toilet.</p> <p>(d) With floor cambered to aid drainage, smooth textured but non-slip and non-marking floor tiles, lockable water point and adequate ventilation and lighting.</p> <p>(e) Lockable and vandal proof door should be provided (manual door preferred).</p> <p>(f) Emergency bell with sounding and light device should be provided.</p> <p>(g) Shower with hot and cold controlled water supply, recessed soap holder, hand</p>

						grips, shower rack, clothes hooks and overhead curtain rail with curtain. (h) Electric hand / hair dryer should be provided. (i) Smart devices such as but not limited to fall detection system are required.
11	Public Service Area	Universal Toilets	1	NA	As appropriate	<p>(a) The design of universal toilet should meet the requirements in the latest version of “Design Guidelines for Universal Toilets in ArchSD Projects” issued by the ArchSD. Please make reference to Type E of ArchSD’s Guidelines for the toilet with provision of changing and shower facilities.</p> <p>(b) One pedestal type W.C. with horizontal grab rail is provided in the universal toilet</p> <p>(c) One children pedestal type W.C. is required.</p> <p>(d) Flap-type baby safety seat, diaper changing station and small wash hand basin for wheelchair user with horizontal grab rail should be provided in the universal toilet.</p> <p>(e) With floor cambered to aid drainage, smooth textured but non-slip and non-marking floor tiles, lockable water point, liquid soap dispenser, adequate ventilation and lighting.</p> <p>(f) Lockable and vandal proof door should be provided.</p> <p>(g) Emergency bell with sounding and light device should be provided. The control panel should be provided at remote and local location.</p> <p>(h) Shower with hot and cold controlled water supply, recessed soap holder, hand grips, shower rack, clothes hooks and overhead curtain rail with curtain.</p> <p>(i) Electric hand / hair dryer should be provided.</p> <p>(j) Toilet paper holder and a napkin disposal bin with cover are required.</p> <p>(k) All provisions should conform to the latest standard and requirements of LCSD and ArchSD.</p>

						(l) Smart devices such as but not limited to fall detection system are required.
12	Public Service Area	First aid room	1	15.0	15	<p>(a) The location should be close to the management office and easily accessible by ambulance / emergency vehicles.</p> <p>(b) Double swing doors with no less than 1.8 m width and translucent glass panels on upper half are required.</p> <p>(c) One wash-hand basin and one mirror are required.</p> <p>(d) Hot and cold water supply is required. A floor drain is required near the water supply.</p> <p>(e) Sufficient space for stretcher, trolley, refrigerator, hospital bed, ambulance type with Cardiopulmonary Resuscitation mattress is required.</p> <p>(f) Racks and cabinets for storage of first-aid equipment are required.</p> <p>(g) Cable containment for direct telephone is required.</p> <p>(h) General lighting is required.</p> <p>(i) Air-conditioning system is required.</p> <p>(j) Four power sockets (13 Amp) are required.</p>
13	Supporting Facility Area	Storeroom for horticultural maintenance equipment	1	15.0	15	<p>a) One general storeroom with good ventilation, fans, lightings, racks, power sockets for horticultural maintenance equipment and machineries.</p> <p>(b) Wall mounted racks and shelves should be provided.</p> <p>(c) Good lighting and ventilation should be provided.</p> <p>(d) Adequate power sockets should be provided.</p> <p>(e) Windows and door should be burglar resistant.</p> <p>(f) The width of entrance should be at least 2m with a ramp at the entrance for easy transportation.</p> <p>(g) Appropriate provision of firefighting equipment.</p> <p>(h) Washing basin should be provided for cleansing of horticultural equipment.</p> <p>(i) Vandal-proof door with locks should be provided.</p> <p>(j) High and low level louvers on door should be provided for good ventilation.</p>

14	Supporting Facility Area	Storeroom for sports equipment for operational use	1	15.0	15		(a) One general storeroom with good ventilation, fans, lightings, racks, power sockets for portable PA system, sports equipment for training programmes and competition etc. (b) Wall mounted racks and shelves should be provided. (c) Good lighting and ventilation should be provided. (d) Adequate power sockets should be provided. (e) Windows and door should be burglar resistant; (f) The width of entrance should be at least 2m with a ramp at the entrance for easy transportation.
		Sub-total (Ancillary)			55	4	
		Circulation allowance for cellular rooms in ancillary area				As appropriate	
		Total Area (Cellular room Open plan)			55	14.6	
		Grand Total			69.6		

Please note:

1. Area is in Net Operational Floor Area (NOFA).
2. The area provided for any individual accommodation items shall not vary by more than 10% from the NOFA and the total NOFA provided shall not vary from the required total by more than 5%.

Annex V - Part (A)(ii)

Accommodation Requirement Brief

G: General Accommodation

Item No.	Description	Area Required
G.1	<p>A Service Block as follows:</p> <ul style="list-style-type: none"> (a) a park office (air-conditioned) for about 6 venue staff (including 1 AAII, 1 AAIII and some part-time instructor; organizer & officials for organizing Sports Programme) of two shifts located at convenient location; (b) direct telephone lines, separate fax line, data line for network system and e-mail line with at least 15 power sockets for computers and printers, etc. (approximate 3 - 4 each for the working tables for Amenities Assistants.); (c) adequate areas for the accommodation of general office furniture and equipment as well as files and general storage for keeping books and records related to operation and administration such as booking files. (d) central control of CCTV with monitors, lighting and Public Address System inside office block. (e) one Baby-care Room (air-conditioned) should conform to the LCSD's guidelines at <u>Appendix I</u>; (f) one First Aid Room (air-conditioned) with hot water supply and easily access by ambulance; <ul style="list-style-type: none"> • The configuration of the room should be capable of accommodating one hospital bed and one stretcher at the same time; racks and cupboards for first-aid equipment should be provided. First-aid box with resuscitation equipment and first-aid bed are required. With double-leaf door; with a hydraulic retractable stretcher (with CPR mattress.). • Double-swing doors with obscure glass panels on their upper half. The doorway not less than 1.8m wide; • Non-slippery flooring. • Adequate power points should be provided. (g) two store rooms (for horticultural machineries, sports equipment and general stores respectively); and. (h) one meter room with good ventilation and adequate lighting to house all electricity meters and switch controls for the whole venue is required. (i) a roll call space for at least 10 contractors' staff working in two shifts (estimated at 4 cleansing staff, 4 security guards and 2 horticultural staff). 	As appropriate
G.2	<p>A set of Toilets cum Changing Rooms with hot-water showering facilities (ventilated) as follows:</p> <ul style="list-style-type: none"> (a) one male toilet and changing room with 4 toilet cubicles (including 	As appropriate

Item No.	Description	Area Required
	<p>1 for children and 1 for elderly) and 3 urinals (1 for children) and 5 nos. of shower cum changing cubicles, curtain to separate the shower and changing areas; bench and clothes pegs in the changing area; hot and cold water supply and shelves for holding soap/ shampoo in the shower area should be provided.</p> <p>(b) one female toilet and changing room with 8 toilet cubicles (including 1 for children and 1 for elderly) and 5 nos. of shower cum changing cubicles, curtain to separate the shower and changing areas; bench and clothes pegs in the changing area; hot and cold water supply and shelves for holding soap/ shampoo in the shower area should be provided.</p> <p>(c) one accessible toilet and changing room with shower facilities for persons with disabilities with “Smart Accident Detection System”; and</p> <p>(d) two universal toilets and changing room with shower facilities and “Smart Accident Detection System”.</p> <p>The provision of toilets and changing facilities should conform to the LCSD’s guidelines at Appendix II & Appendix III.</p>	

S: Specialist Accommodation

Item No.	Description	Area Required
S.1	<p>One Futsal Pitch (cum Handball Courts) as follows:</p> <p>(a) ideally be 40m (L) x 20m (W) for cum use with Handball, or measured up to the latest FIFA standards for non-international matches (i.e. length: 25m (min) - 42m (max) and width: 16m (min) – 25m (max));</p> <p>(b) safety margin: 5m (most ideal) or 3m (with padding around the pitch);</p> <p>(c) in north-south orientation;</p> <p>(d) 7m high surrounding fence (preferable)/ backstops at both end of the pitch;</p> <p>(e) adequate circulation area and perimeter fencing, relevant NSA’s advice on the standard circulation area of the pitch for non-international matches might be required.;</p> <p>(f) floodlight of 200 lux and glare nuisance caused by the floodlights should be avoided and safety padding for floodlight posts is required.</p> <p>(g) a separate entrance for the futsal pitch with lockable gate is preferred;</p> <p>(h) lockable storage cages be provided outside the safety margin for use by players; and</p> <p>(i) space for demountable spectator stands with seating capacity of 100 - 150 people.</p> <p>(j) Good drainage at periphery should be provided to prevent flooding. The surface should be levelled with a slight fall towards surface drains on 4 sides.</p>	As appropriate

Item No.	Description	Area Required
S.2	<p>Jogging track (equipped with fitness stations with smart features) as follows:</p> <p>(a) The design should meet the requirements in the latest version of “Design Considerations for Outdoor Jogging Tracks in LCSD Leisure Venues” at <u>Appendix IV</u>.</p> <p>(b) The jogging trail should preferably be 3m wide with some wider sections as appropriate for fitness stations. Lawn and flowering trees should be planted alongside suitable sections of the trail for better environment and providing some shading.</p> <p>(c) The jogging trail should be provided with non-slippery, colour-coated resilient and shock absorbing surface and with clear attractive directional markings / jogging direction advising the public on the proper use of the trail.</p> <p>(d) Fitness station with smart features for people of different age groups with safety matting should be provided along the track with some stations also suitable for persons with disabilities. Cover should be provided for fitness stations (as far as possible) and seating adjacent to the fitness stations is preferred to allow for rest after exercise.</p> <p>(e) The design should meet the requirements in the latest version of “Design Consideration for Fitness Corners in Outdoor Leisure Venues” at <u>Appendix V</u>.</p>	As appropriate
S.3	<p>An Adventurous/Innovative Inclusive Playground with shelter area as follows:</p> <p>(a) colourful and durable multi-play and interesting play equipment for toddlers and children (including disabled and visually impaired children).</p> <p>(b) part(s) of the play equipment should be accessible to children with disabilities.</p> <p>(c) play equipment integrated with the landscape and tailor-made play equipment are preferred.</p> <p>(d) all play equipment must conform to recognised international safety standards.</p> <p>(e) safety matting of an approved type should cover underneath the play equipment.</p> <p>(f) colourful seating with shelter and a wash-hand basin should be provided adjacent to the play area.</p> <p>(g) bilingual signs with user instructions are required. Potential suppliers should produce documentary evidence to confirm their safety standards.</p> <p>(h) enhanced lighting levels are required for this area and lights should be provided with an auto-time switch.</p> <p>(i) parental supervision areas with covered seating should be provided.</p> <p>(j) Recommended illuminance for children play area is 50 lux.</p> <p>LCSD should be consulted on the choice of play equipment, safety matting, layout plan and safety margin etc.; and all requirements should follow the latest guidelines of LCSD at <u>Appendix VI</u>.</p>	As appropriate

Item No.	Description	Area Required
S.4	<p>Landscaped Sitting-out Area as follows:</p> <ul style="list-style-type: none"> (a) Design should be blended into the surrounding environment and provide as much softscape as possible. (b) Kerb planters should preferably be adopted in landscape design to create a sense of openness within the open space. Raised planters might be used in landscape design where there is a functional need to do so, such as retaining purpose forming terraced planters to cope with level different of landform; holding sufficient soil depth for trees / shrub planting etc. Please take reference to relevant guidelines and technical circulars on soil volume & soil improvement issued by Greening, Landscape & Tree Management Section of Development Bureau to provide sufficient planting space and good quality of soil materials for the landscaped area. (c) Arbours / pergolas / rain-shelter with seating underneath to be provided. Wire-mesh with resilient vinyl coating to be provided adjacent to the supports and top of the climbers for climbing plants. All shelters / covers should be provided with gutter and rain water pipes connecting to surface channel so as to avoid splashing to the venue users. (d) Extensive planting of heavy standard flowering trees and shrubs with different colour foilage & flowering periods should be provided to create the seasonal change effect in the open space enhancing the public enjoyment to the landscaped environment. (e) Plantings should be provided to soften the hard structures, i.e. building blocks etc. (f) Provision of bilingual plant labels / brief introduction to plant species. (g) Amenity lawn area with natural turf might be incorporated into the overall landscape design of the open space. Separated automatic irrigation system should be provided for the lawn area and stand-alone water point is not preferred within the lawn area. 	As appropriate
S.5	<p>Water Feature with Filtration Plant System as follows:</p> <ul style="list-style-type: none"> (a) Design of water features should be made it a harmonious existence and blended into the surrounding environment of the open space. (b) Physical barrier / ornamental railing meeting the safety standard might consider incorporated into the design to enhance the public safety. (c) The filtration plant system should be easily operated with timer control and also met the overall requirements of EMSD. (d) The filtered water should meet the hygienic requirements for hygiene test and safe for leisure use. 	As appropriate
S.6	<p>Service Yard (to be located in connection with the management office) as follows:</p> <ul style="list-style-type: none"> (a) A service yard with an entrance wide enough for the emergency vehicle or refuse collection vehicle is required with sliding lockable gate for demarcation purpose. (b) Conveniently located access for maintenance and refuse collection 	As appropriate

Item No.	Description	Area Required
	<p>vehicles, and a suitable space for loading and unloading.</p> <p>(c) Appropriate number of parking spaces should be provided for the services / emergency vehicles and the management office use.</p> <p>(d) A fenced off area should be included to serve as temporary refuse collection point.</p> <p>(e) A lockable waterpoint is required for cleaning purposes.</p> <p>(f) Adequate lighting and appropriate number of lockable water-proof power sockets should be provided.</p> <p>(g) Effective fall and drainage are required. Surface drainage channel with covers should preferably be located along the edges for easy cleaning.</p> <p>(h) The yard area should be fenced off.</p>	
S.7	A security guard booth at the entrance of the park with provision of electricity.	As appropriate

A: Specific Ancillary Requirements / Functions

Item No	Description
	Passive Amenity
A.1	Extensive soft landscaping and minimal concrete structures by planting of flowering trees and shrubs with different flowering periods.
A.2	Plant labels for all trees and plants of special interest. Botanical name, English common name and Chinese name are required. Design to be approved by LCSD.
A.3	An auto-irrigation system should be provided for lawn areas. Lockable water points at suitable locations to cover all planting areas for irrigation and near water features for cleaning purpose.
	Access
A.4	Access and facilities should be provided for people with disabilities. Design of all facilities should conform to the latest “Design Manual – Barrier Free Access”.
A.5	Emergency vehicular access and exits in connection with public roads which should be complied with the prevailing Ordinances and Regulations.
A.6	An entry point for vehicular access and suitable space for loading and unloading which should be agreed with Transport Department, or other Departments as appropriate.
	Lighting
A.7	Emergency lighting at all accesses to the Park, the office and changing rooms-cum-toilets.

Item No	Description
A.8	Lighting with sectional switches and automatic timing devices to suit needs of different activities and to save energy. Floodlights and park light should be designed to avoid glare or obstruction of view to nearby park offices, residents and traffic.
	Toilet and Changing Room
A.9	All toilets should be well ventilated with ventilation to be provided at a near-ground level to keep the floor dry. A thematic design is preferable.
A.10	The toilet and changing room should be provided with lockable segregation gates so that the changing room could be locked up when not being used.
	Others
A.11	High resolution CCTV at appropriate locations to enhance the security.
A.12	Waterproof poster boxes with lighting, directional signs, various signages, park layout maps and name plate at strategic locations. Design to be approved by LCSD.
A.13	Waterproof power points at suitable locations for installation of vending machines.
A.14	Electricity draw-off points with separate meters at ball courts.
A.15	Water dispenser with bottle filler (a power socket is required) should be provided in suitable locations, i.e. futsal pitch, jogging track, playground and away and toilet block. Design of water dispenser should be heated proof and able to cater for the special needs of people with disabilities (including wheelchair users and visually impaired people). The design and specifications should be complied with required standards of Water Supplies Department, Electrical Mechanical Services Department, ArchSD and LCSD.
A.16	Well-covered 4-in-1 recycle bins.
A.17	Digital clock at appropriate location(s) as agreed with LCSD.
A.18	Accessible facilities for provision of “Free public Wi-Fi” services which should be provided covering the whole site. Cable containment facilities and power points for Wi-Fi system shall be provided according to the requirement of GovWi-Fi Programme Office.
A.19	Public address system cover the whole site with sectional control, particularly futsal pitch, jogging track and playground.
A.20	A garden waste chamber and refuse collection chamber (conveniently located and easily accessible by refuse collection vehicles) with water point.
A.21	Master key system except management office.
A.22	Low maintenance design and materials should be adopted as far as possible,

Item No	Description
A.23	Rough and sharp edges should be avoided for all venue facilities, fixtures, equipment and furniture.

Guidance Notes for Provision of Babycare Facilities in LCSD Leisure Venues

Babycare facilities should be provided in new planning projects or existing facilities when they are due for upgrading / renovation subject to availability of space and there is no other site constraint.

The facilities serve two functions:

- (i) Baby feeding (breastfeeding and bottlefeeding); and
- (ii) nappy changing

General

- (a) The Babycare Room should be universally accessible. The spatial provision should satisfy Barrier Free Access requirements. Sufficient maneuvering space in the Room should be allowed for access by persons with disabilities.
- (b) It should be preferably be located on the ground floor with level access, otherwise convenient lift access should be provided.
- (c) If children's play room / children's playground is provided in the venue, the Babycare Room should be located close to it as far as practicable.
- (d) The Room should afford easy pram access, visually contrasted and with unambiguously sign posted.
- (e) Babycare Room should not be part of the toilet or a room within it. If it is located close to toilets, proper care should be taken to avoid transmission of any foul air to the Room.
- (f) The recommended symbol for "Babycare Room - 育嬰間" at Annex I and the suggested layout plans for the facilities are attached at Annexes II and III for reference.
- (g) For the privacy of breastfeeding mothers, a signage "For Women Only- 餵哺範圍，女士專用" should be provided. In the case of Babycare Room with a breastfeeding cubicle, the sign should be posted at the door of cubicle inside the Babycare Room. For the case of Babycare Room without a breastfeeding cubicle, the sign should be posted outside the Babycare Room.

The Babycare Room and Facilities

The above two elements could be separately accommodated, or be co-located, if space is limited. The proposed requirements for the provision of Babycare facilities are-

- (a) When space allows, the minimum size of a Babycare Room should be about 7.5 m² (3.4m x 2.2m) for a room with a breastfeeding cubicle so that it is separated from the nappy changing area. This would allow privacy for the breastfeeding mother while the other user utilises the nappy changing facilities outside the cubicle inside the Babycare Room (Plan A at Annex II).
- (b) If space is limited, a Babycare Room of about 5 m² (2.2m x 2.2m) could be provided (Plan B at Annex III).

- (c) The room should be provided in a comfortable and warm environment with good ventilation and soft lighting (spot lights should be avoided). Air-conditioning is preferred. If mechanical ventilation is provided, a minimum performance of 10 air changes per hour should be adopted. A thematic design is preferable.
- (d) The door to the breastfeeding room should be lockable, but the door lock should be capable of being opened from the outside in case of an emergency. An “engaged” indicator could be incorporated into the locking mechanism; and
- (e) The Babycare Room should be welcoming, family-friendly and safe for young children. It should be in a hygienic setting of easily cleaned finishes and non-slip floor surfaces.
- (f) The following supporting provisions should be included:
 - (i) comfortable chair(s)/ bench(es) for feeding;
 - (ii) nappy changing table(s) with raised edge and wipeable soft mat(s); a sink with lever tap(s) and soap dispenser(s) (sensor type preferred);
 - (iii) hand drying facility, such as paper towel dispenser or hand dryer (a power socket is required);
 - (iv) foot-operated dust bin(s) with cover;
 - (v) water dispenser with hot and cold water for bottlefeeding (a power socket is required); and
 - (vi) safety mirror.
- (g) Optional facilities:
 - (i) disinfectant for the nappy changing mat(s), such as alcohol dispenser(s) with sensor;
 - (ii) clothing hooks beside the chair(s)/ bench(es) for feeding;
 - (iii) small side table (for nursing mother’s belongings or for breastmilk expression equipment (pump));
 - (iv) electrical outlet (for breastmilk expression equipment (pump)); and nursing bottle warmer.

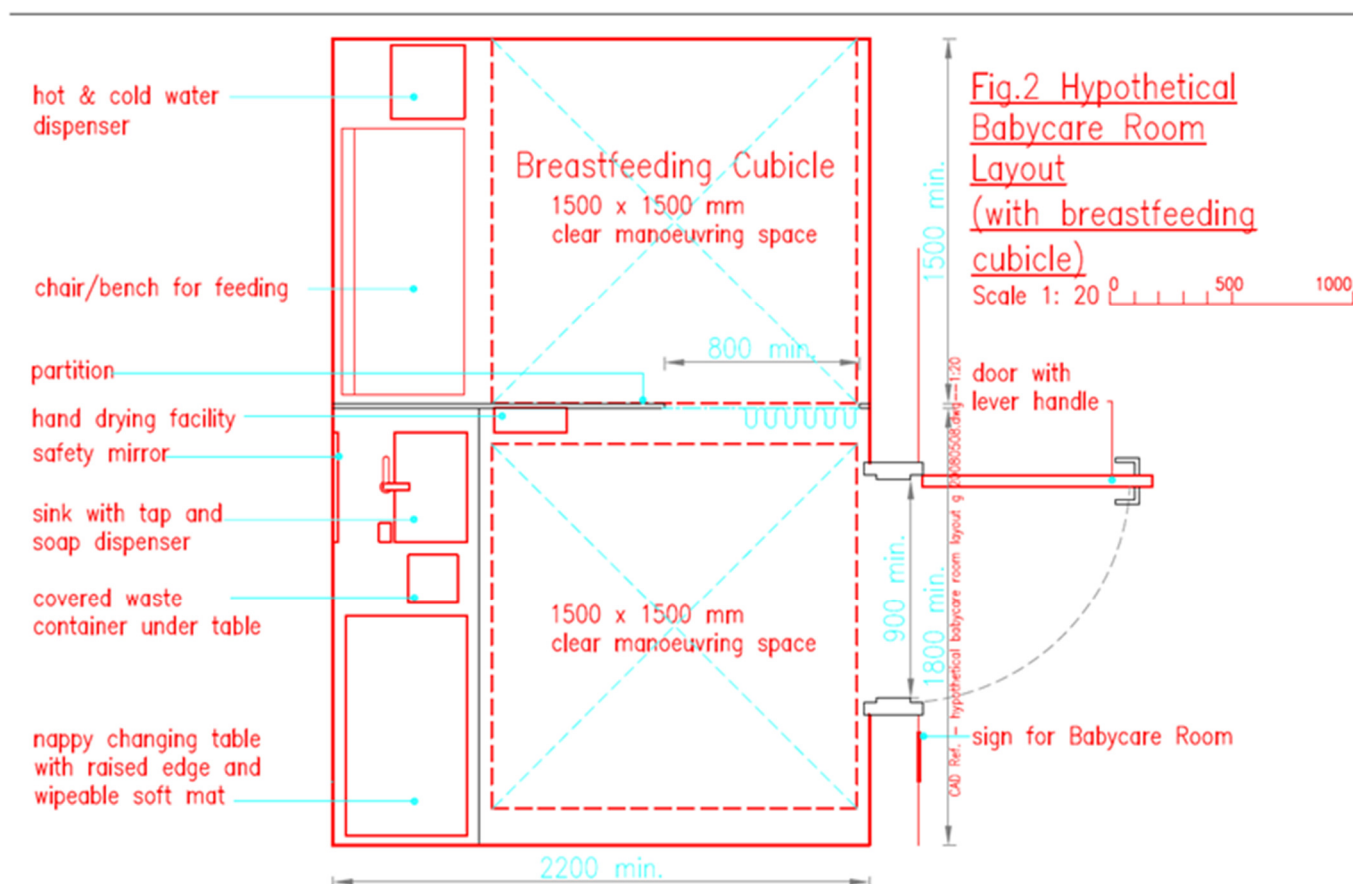
Reference

- (a) *Advisory Guidelines on Babycare Facilities issued by the Labour and Welfare Bureau*
(http://www.lwb.gov.hk/Gender_Mainstreaming/eng/casec4.html)
- (b) *Practice Note for Authorized Persons and Registered Structural Engineers issued by Building Department – Provision of Babycare Rooms in Commercial Buildings*
(<http://www.bd.gov.hk/english/documents/pnap/ADV/ADV032.pdf>)
- (c) *Universal Accessibility - Best Practices and Guidelines issued by Architectural Services Department (Paragraph 6.11.7 – Baby caring facilities)*
(<http://www.archsd.gov.hk/archsd/html/ua/index.html>)
- (d) *Babycare Room in Tsing Yi Southwest Sports Centre (Photos at Annex IV)*

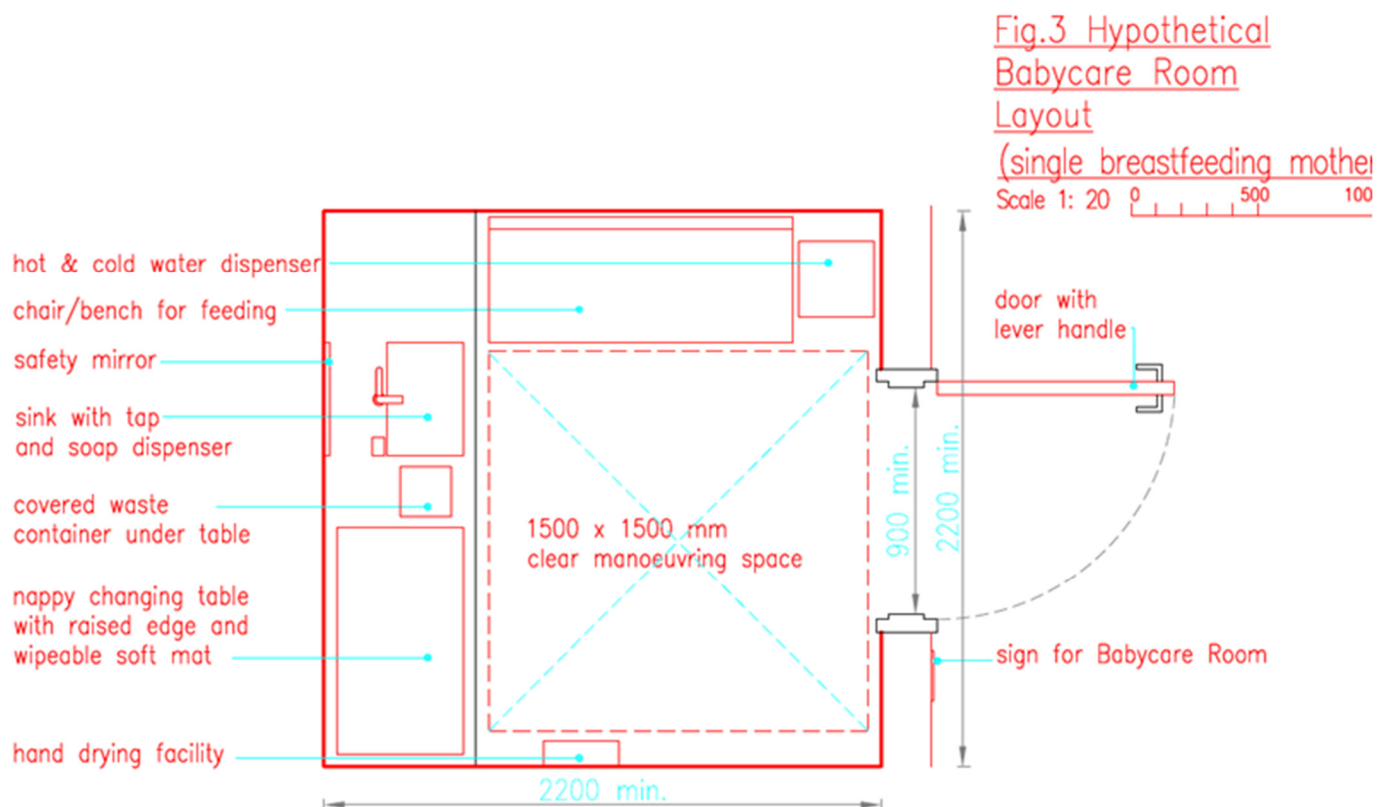
Signage for Babycare Room



Plan A - Babycare Room with breastfeeding cubicle

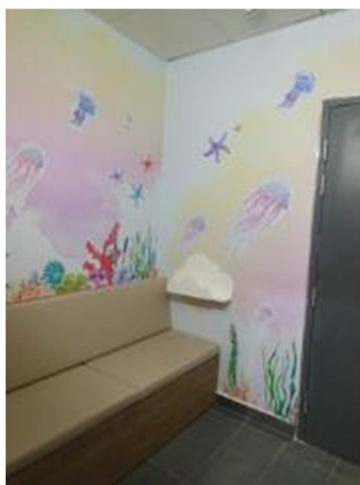


Plan B - Babycare Room without breastfeeding cubicle



Annex IV of Appendix I

Photos of Babycare Room in Tsing Yi Southwest Sports Centre



General Requirements for All Types of Leisure Venues

1. The number of female toilet compartment should be 2 times or above that of male compartment.
2. Accessible toilet must be provided in compliance with the requirements in the prevailing “Design Manual: Barrier Free Access”.
3. Provide attendant room to improve the working environment on condition that (i) the worker responsible for cleaning the toilet is required to station at the toilet; and (ii) there is no resting place provided in the venue in which the toilet is located; or in nearby venue. Specifications of Attendant Room are provided in “Handbook on Standard Features for public Toilets, FEHD”.

Toilet Compartment in Male and Female Toilets

4. Provide low pedestal water closet (WC) for children in both male and female toilets (a) when there are sufficient number of WC for adults; or (b) if the toilets are located adjacent to children’s playroom/ children’s playground.
5. At least one low pedestal WC should be provided in male and female toilet in swimming pool.
6. As the WCs for use by children are normally not fit for use by adults, they should not be counted as part of the prescribed requirements of B(SSFPDW&L)R.
7. Baby rest should be installed in at least one female cubicle if site conditions permit. If there is enough space, provision of a baby rest in one male WC cubicle and the accessible toilet may be considered. The actual provision should depend on site condition, space availability, usage pattern and operational need. Sign to indicate provision of baby rest should be displayed on the door of such cubicle.
8. At least one larger toilet compartment for priority use by elderly people should be provided in new/refurbished male and female toilets subject to site condition and space availability. The larger compartment is better to be located close to the entrance of the toilet. Type B larger toilet compartment in the “Design Guidelines for Universal Toilets in ArchSD Projects” is preferred.
9. Both pedestal and squatting types WC should be provided if feasible. The ratio of pedestal type WC to squatting type WC should base on local demand. Consideration should be given to providing more pedestal type WC near tourist spots to cater for the needs of overseas tourists.
10. The colour of hand-grip rails should contrast against the background finishes and be provided on both sides of squatting type and pedestal type WC to assist the elderly and health impaired persons.
11. Sensor type flushing system, equipped with an overriding manual button for use in case of malfunctioning of sensor, should be installed.
12. Small fittings provided in toilet compartment include-

- (a) door stopper;
- (b) coat hook;
- (c) toilet paper holder (optional);
- (d) wall-mounted sanitary napkin disposal bin/ small litter bin with cover lid (for female toilet compartment only); and
- (e) 2-in-1 seat cover for adult and children, as appropriate.

Urinals in Male Toilets

- 13. Ceramic urinal bowls (about 580mm to 620mm above finished floor level) with modesty boards should be provided.
- 14. One accessible urinal in compliance with the requirements of the prevailing “Design Manual: Barrier Free Access” should be provided for use by persons with ambulant disabilities, when more than one urinal is provided.
- 15. Other than the provision of accessible urinal, provision of one children-height (with a front rim not higher than 400mm) or one elderly (with hand-grip railing installed) urinal may be considered on a case-by-case basis depending on site condition, space availability, usage pattern and operational need.
- 16. The colour of the vertical grab rail for the accessible urinal and hand-grip railing for elderly urinal should contrast against the background finishes similar to those in WC compartments.
- 17. Sensor type flushing system, equipped with an overriding manual button for use in case of malfunctioning of sensor, should be installed. If it is not feasible to provide sensor type flushing system, auto-flushing system to flush the urinal at regular intervals should be adopted.

Universal Toilet (通用洗手間)

- 18. At least one universal toilet should be provided in all new/refurbished toilet in LCSD leisure venues, subject to site condition and space availability.
- 19. Universal toilets, though not a statutory requirement, should be provided in all new/refurbished toilet in LCSD leisure venues, subject to site condition and space availability. The universal toilets are gender neutral, serving wider target groups and catering for people having difficulty in using the male or female toilets. Home Affairs Bureau has offered policy support in 2017 on provision of universal toilet in all newly-built and refurbished toilet in LCSD leisure venues, subject to site condition and space availability, without sacrificing the general provision of traditional and accessible toilet facilities.
- 20. Although the universal toilets comply with the requirement of accessible toilet, accessible toilet must not be substituted by universal toilet.
- 21. Two universal toilets with footbaths should be provided on the pool deck of swimming pool complex of considerable scale which provides different pool facilities with leisure / teaching / training / toddlers' pools. The universal toilets should be provided at locations convenient to users.
- 22. Type E universal toilet in the “Design Guidelines for Universal Toilets in ArchSD Projects” is

preferred.

23. For venues with active facilities and changing facilities, two universal toilets **with shower facilities** should be provided.

Internal Design of Communal Area in Toilet

24. Normally, wash hand basins should be installed at about 850mm from finished floor level at the maximum.
25. If more than two wash hand basins are provided, one of them should be at children-height level, i.e. around 615mm to 635mm from finished floor level. The water tap and the soap dispenser should be suitably positioned at the side of the wash hand basin within easy reach of children.
26. Wash hand basins made of solid surfacing material (e.g. “Corian”, “Surrell” or other similar materials same as vanity bench top) should be incorporated in vanity benches, fabricated as a single unit.
27. Cabinet Wash Hand Basin System, i.e. one stop provision of wash hand basin, soap dispenser and hand dryer, be provided if feasible to alleviate wet floor problem.
28. Auto-sensor water taps should be installed. Venue management may also consider providing one to two press release water taps for use in case of malfunctioning of sensor.
29. Mirror with lighting, litter bins, alcohol-based handrub dispensers, mosquito killer lamps and wall-mounted box for keeping toilet inspection record.
30. Baby changing counter should be provided in male toilet and female toilet respectively, unless site conditions do not permit. Provision of a baby changing counter in the accessible toilet may be considered subject to site condition, space availability, usage pattern and operational need. Folding baby changing counter should be provided as far as practicable.
31. Lockable jumbo roll toilet paper holder (optional).
32. Air freshener (optional).

Other Considerations

33. High headroom and cross-ventilation window to enhance ventilation. Ventilation openings at low and high levels on each side of the structure and roof ventilators to encourage cross-floor and natural upward venting. Mechanical fresh air in-take system be installed underneath the wash-hand basin counter.
34. Service corridors shall be provided at the back of water closet cubicles to accommodate pipes, drains, concealed cisterns and automatic flushing cisterns of urinals for ease of maintenance.
35. Bright/ light colour scheme should be used to create a pleasant environment. Attractively-coloured glazed ceramic tiles from ceiling to floor with cove.
36. Non-slip floor tiles should be used.

37. Light reflection panels should be introduced to bring in natural lighting. However, skylights, often suffering from water seepage problems, should not be adopted as part of the roof. Energy efficient lighting installations should be adopted.
38. Cleaner's store inside both male and female toilet, with sufficient space to provide a mop sink and for storage of cleansing gears and stores.
39. Lockable hose point for hosing down and cleaning of floor and lockable waterproof power sockets should be provided.
40. Doorless design should be adopted. Adequate screening to prevent peeping from outside.
41. Lockable entrance gate should be provided.
42. Prominent signage with illumination and graphic as appropriate.
43. New technologies and products to raise hygiene standard should be adopted.

Basic Design of Changing Facilities for Land-based Venues

- (1) Changing areas generally be divided into 2 sections, i.e. an open area for changing clothes, and an area with individual shower cubicles for taking shower;
- (2) Shower cubicles to be partitioned with laminated resin material and door for easy maintenance. Shelves for holding soap / shampoo and clothes hooks / pegs are required. To enhance safety, grab rails should be installed on the side walls of shower cubicles. Moreover, if space allows, shower cum changing cubicles should be provided in the form of compartments. Each compartment is divided into two parts – inner part for shower with curtain and outer part for changing. Racks should be provided near to the changing area for storage of personal belongings;
- (3) If space allows, changing cubicles with lockable door and clothes hooks / pegs should be provided;
- (4) Rust proof coin-return lockers which can be opened by master key with holder (e.g. 櫃門掛鎖鎖扣 / 鎖耳) for padlock on concrete plinth should be installed. Different coloured lockers should be provided for different zones for easy identification. The number of lockers varies depending on the number of users. If space allows, bigger locker compartments comprising two parts with lower part for storage of shoes and upper part for personal belongings is preferred; (Optional)
- (5) Changing benches and hooks / pegs for hanging clothes should be provided in the open changing area;
- (6) All indoor showers should be provided with hot water supply. Vandal proof shower heads with water temperature regulated by users within the range of temperature pre-set by the venue management should be installed. The time-delay press buttons should be installed and regulate the supply of water to the showers for at least 30 seconds;
- (7) The optimum water temperature should be maintained when all showers are in use at the same time. Adequate water pressure should be provided for the supply of water to the showers for the comfort of users;
- (8) Adequate drain holes with removable stainless steel cover should be provided in each shower cubicle to facilitate effective drainage and a suitable fall be maintained for easy drainage. Service drains should also be provided along the edge of the shower cubicles for drainage of water when cleaning is carried out;
- (9) Adequate natural and mechanical ventilation system backed up by wall mounted / ceiling fans. Ventilation should be provided at a low level to speed up the drying of the floors after wet cleaning;
- (10) Adequate lighting should be provided;
- (11) Hair dryers of various height / with height adjustment function and mirrors should be provided;
- (12) Hand dryers should be provided;
- (13) Attractively-coloured glazed ceramic tiles from ceiling to floor with cove;

- (14) Smooth textured but non-slip floors should be provided;
- (15) Water proof sockets should be provided to facilitate the use of electrically operated cleansing equipment;
- (16) A separate cleaners' store for keeping cleansing equipment should be provided;
- (17) Adequate lockable hose points should be provided for wet cleaning of the changing areas;
- (18) Adequate screening to prevent peeping from outside and cold air from blowing into the changing room;
- (19) Prominent signage with illumination and graphic as appropriate;
- (20) Lockable entrance gate should be provided;
- (21) Facilities for persons with disabilities or those with special needs in accordance with the obligatory requirements in the latest manual on "Barrier free Access" for wheelchair users and visually impaired such as handrails, ramps, tactile guide path, Braille map, Braille signage, specially designed pedestal type W.C. pans and taps operated by lever arm or sensor;
- (22) If space allows, when existing venues with active facilities and changing facilities (with active facilities i.e. basketball court, volleyball court, football pitch, tennis court and skatepark) are due for refurbishment, **two individual universal toilets with shower facilities** (i.e. should not be provided within the male / female changing facilities) should be provided for serving wider target groups like the elderly, children and babies with accompanying helper(s), persons with disabilities, persons with different sexual orientations, family with children, and wheelchair users;
- (23) If space allows, for new venues with active facilities and changing facilities, **two individual universal toilets with shower facilities** (i.e. should not be provided within the male / female changing facilities) should be provided for serving wider target groups as mentioned in paragraph (22); and
- (24) Alcohol-based handrub dispensers might be provided.

**Design Considerations for Outdoor
Jogging Track in LCSD Leisure Venues**

1. Introduction

- (i) Jogging is a form of running at a slow or leisurely pace or a steady speed for longer periods of time. The main intention is to increase physical fitness with less stress on the body than from faster running but more than walking.
- (ii) According to the advice from Hong Kong Association of Athletics Affiliates, there is no known international standard for jogging track. The design considerations provided in this document for outdoor jogging tracks in LCSD leisure venues should be applied in new projects. Reference could also be drawn when arranging refurbishment works in existing venues, subject to site condition and space availability.

2. Uses

- (i) The outdoor jogging track is primarily for recreation uses for all ages. It is intended neither for formal training nor competition purpose.

3. Design Considerations

3.1 General

- (i) The jogging track should be well separated from pedestrian walkway and cycling track by physical or soft barrier, e.g. planting beds, shrubs in planters so as to avoid joggers crashing with pedestrians or cyclists;
- (ii) The jogging track is preferably in one direction and in a loop circuit;
- (iii) Bends/ turns should be minimized;
- (iv) Pedestrian crossing should be avoided or minimized;
- (v) Turnabouts should be round and smooth. The adjacent edges or kerb along the track, if any, should be smoothened;
- (vi) The whole course of the jogging track should be obstruction free;
- (vii) The track should be provided with good drainage;
- (viii) Trees with large crown at suitable locations on both sides of the track can for shade and better environment. Tree species with hard fruits such as *Aleurites moluccana* and *Cassia fistula* along jogging tracks should be avoided. In addition, tree species with buttress or vigorous root system such as *Delonix regia* or *Ficus* spp. and deciduous trees with small leaves are not preferred. Necessary measures should be taken at construction stage to protect the ground surface from future root heave and damage. Soil corridor in the form of suspended pavement system could be

considered. A continuous planting strip which allows the provision of more available soil volume for sharing amongst trees is recommended as opposed to planting tree in a single tree pit;

- (ix) Warm-up and cool down area with sheltered seating are preferably be located near the starting point of loop circuit jogging track or at two ends of the jogging track.

3.2 Width

At least 2m for loop circuit and 3m for track running in opposite directions. The jogging track can be wider if space allow.

3.3 Length

The track should be at least 400 m long, subject to site constraint.

3.4 Surface

- (i) even surface without protrusion or depressions;
- (ii) avoid objects such as covers of manholes and surface channels on the track;
- (iii) able to withstand loading of maintenance and/or emergency vehicles;
- (iv) allow local patch up repairs;
- (v) all-weather shock-absorbing and seamless synthetic surface. The synthetic surface should be non-slippery and resilient. The material and performance of the synthetic surface shall comply with the latest standard as advised by ArchSD;
- (vi) with clear directional signs for regulating the flow of joggers and distance markers at suitable intervals marked on the surface of the track; and
- (vii) boardwalk, which cannot withstand wear and tear by jogging, must not be used to pave the surface of outdoor jogging track.

3.5 Illumination

There is no particular standard for the outdoor jogging track located in leisure venue for leisure use. The illumination level is required to be harmonized with the general lighting environment of the outdoor leisure venue ranging from 10 to 20 lux subject to the advice from ArchSD/EMSD and no light nuisance to the nearby residents.

3.6 Ancillary Facilities

- (i) Fitness corners may be provided near the designated starting point of loop circuit jogging track or at two ends of the jogging track to let the joggers do exercises that would promote the ability of long distance running, subject to site constraint. Reference should be made to the “Design Considerations of Fitness Corners in LCSD Outdoor Leisure Venues”¹.

- (ii) Lockers may be provided near the jogging track, if services block/management office are provided, at the discretion of venue management. CCTV serving the purpose of surveillance may be required if lockers are provided for public use.
- (iii) Water dispenser(s) should be provided nearby in accordance with the “Guidance Notes on Provision of Water dispensers in LCSD Leisure Venues” 2. Water dispenser with both bottle filler and bubbler is preferable to be provided in considering the genuine need from joggers. If water dispenser(s) is/are not available, water vending machine(s) is/are advised to be provided.
- (iv) Automated External Defibrillator should be provided nearby in accordance with the “Guidelines for Use of Automated External Defibrillator (AEDs)”³.

Design Considerations for Fitness Corners in Outdoor Leisure Venues

A. General

1. The fitness corner in outdoor leisure venues should be located in open area away from source of noise and air pollution, such as road traffic nearby and smoking areas.
2. A large area is preferred to separated patches.
3. The desirable area of a fitness corner is 300 m² or above and the minimum area should be not less than 100 m², subject to site constraint.
4. The flooring should be colourful and with contrast to the fitness equipment.
5. Partial shade should be provided to extend the hour of use, subject to site constraint.
6. Ancillary facilities such as arbour, seating and drinking fountain should be provided nearby.
7. If provided near jogging track / promenade, fitness corners are preferably be located at two ends or near the starting point of loop-form jogging track.
8. Connected / close to emergency vehicle access.

B. Fitness Equipment

9. The fitness equipment should not only be elderly focus and should be attractive, novel, simple to use, suitable for users of different abilities and age groups and does not require training. Equipment with resistance adjustable by users themselves should not be provided since untrained users may sustain injuries due to misuse.
10. More varieties of fitness equipment from the four major types of equipment (namely calisthenics single station, calisthenics multi-stations, cardio station and resistance training station) and fitness floor marking subject to site constraint. Examples of these equipment are shown in **Annex I**.
11. Multi-stations and equipment in cluster should be considered to accommodate users of different abilities and to save space.
12. Equipment model which can serve its basic function and also suitable for attachment of pull rope for doing Total Resistance Training Exercise should be considered.
13. At least one set of the equipment shall be accessible to wheel-chair user.
14. User Guide with graphic instruction for proper use of the fitness equipment, in English and Chinese, should be provided at each fitness station. Training objectives and precautions should be addressed. Brief exercise prescription guidelines (e.g., repetitions, sets, and rest interval) for general health purpose should be included. Large character should be used in the guide to meet the need of elderly. Sample user guide is at **Annex II**.

15. Safety margin should be provided for each fitness station to allow sufficient space for circulation and movement by people. Precaution markings should be put around the station, especially for equipment with movable parts.
16. Elderly Fitness Equipment and Pebble Walking Trail (if needed) –
 - (a) Fitness equipment/stations specifically for elderly should be approved by the Director of Health or accredited by relevant recognised professional organisation.
 - (b) For provision of pebble walking trail, please refer to the “Guidelines on the Provision of Pebble Walking Trail in LCSD Leisure Venues” available in the Corporate Information System (<https://cis02.lcsd.hksarg/cis/en/document/detail.xhtml?id=14636>). It is stated in the guidelines that since there are already quite a large number of pebble walking trails in the territory, this provision in new projects or existing venues should only be considered when similar facilities are not available in venues in the vicinity and there is an explicit demand/request from the local community.

C. Ground Surface

17. The entire fitness corner should be equipped with approved impact absorbing safety matting to ensure safety.
18. The impact absorbing safety matting should comply with the latest European Standard, EN 1177 in all aspects including safety margin, critical fall heights, or equivalent. ^{Note 1}
19. The impact absorbing safety matting should flush with the adjacent ground surface.

D. Ancillary Facilities

20. Arbours and seatings are to be provided nearby for taking rest after exercising. A reasonable distance should be allowed between the ancillary facilities and the fitness corners as safety buffer for circulation and movement of people.
21. Drinking fountains should be provided near the fitness corner as far as feasible.
22. Notice for reminding avoidance of prolonged occupancy should be posted as necessary.

E. Lighting

23. Park lighting with lux level at 30lux – 50lux should be provided for the fitness corner. ^{Note 2}

F. Vetting of Fitness Corner Proposals

24. When the layout and proposed fitness equipment for the fitness areas in new or refurbishment projects are available, it is required to seek the comments of the Physical Fitness Association of Hong Kong, China (HKPFA) on the proposal.

25. While Technical Section will seek the comments of the HKPFA on refurbishment projects under their purview, DLSO should seek the comments of the HKPFA on the proposed installation of fitness equipment in new projects.
26. Officers of Planning Section should remind DLSO to seek comments from HKPFA on the proposed installation of fitness equipment in new projects when they forward the proposal to district colleagues for comments.
27. Planning Section should also pass the proposed fitness equipment of new projects to HAB for comment so that their views can be incorporated before the proposal is finalized.

Note 1 –

EN1177 is a test method to determine the impact attenuation properties of a surface that is a general requirement for the safety matting of LCSD projects.


Note 2 –

The proposed lux level is based on the BSB Circular No.16 of 2010 General Guide on Park Lighting Design issued by ArchSD dated 5 July 2010.



Examples of the Four Major Types of Outdoor Fitness Equipment and Fitness Floor Marking

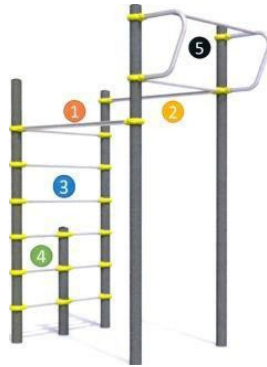



A) Calisthenics Single Station

Equipment Name	Reference Photo
1. Pull-up Bar /Chin-up	
2. Overhead Ladder	 
3. Parallel Bars	 




Equipment Name	Reference Photo
4. Climbing Ladder	

B) Calisthenics Multi-stations





Equipment Name	Reference Photo
1. Pull-up Bar /Chin-up	
2. Rig	


Equipment Name	Reference Photo
<p>3. Cluster Fitness (Chin-up Bar, Pull-up Bar, Vertical Ladder, Leg Raise, Pull Up Handles)</p>	 <p>A 3D rendering of a cluster fitness station. It features a vertical ladder with yellow rungs, a pull-up bar, and a leg raise bar. Numbered callouts indicate specific components: 1 (orange) points to the pull-up bar, 2 (yellow) points to the leg raise bar, 3 (blue) points to the vertical ladder, 4 (green) points to the pull-up handles, and 5 (black) points to the top of the vertical ladder.</p>
<p>4. Cluster Fitness (Incline Bench, Push Up Bar, Decline Press, Vertical Ladder, Pull Up Bar)</p>	 <p>A 3D rendering of a cluster fitness station. It includes an incline bench, a push-up bar, a decline press, a vertical ladder, and a pull-up bar. The station is constructed with wooden posts and metal bars.</p>
<p>5. Cluster Fitness (Incline Bench, Parallel Bars, Push Up Bar, Decline Press, Swedish Ladder, Pull Up Bar)</p>	 <p>A 3D rendering of a cluster fitness station. It features an incline bench, parallel bars, a push-up bar, a decline press, a Swedish ladder, and a pull-up bar. The station is constructed with wooden posts and metal bars.</p>
<p>6. Cluster Fitness (Chin-up Bar, Push Up Bar, Parallel Bar, Vertical Ladder, Inclined Bench, Inclined Horizontal Ladder)</p>	 <p>A 3D rendering of a cluster fitness station. It includes a chin-up bar, a push-up bar, a parallel bar, a vertical ladder, an inclined bench, and an inclined horizontal ladder. The station is constructed with wooden posts and metal bars. People are shown using the equipment: one person is on the inclined bench, one is on the vertical ladder, one is on the parallel bar, and one is on the inclined horizontal ladder. A person in a wheelchair is also shown using the equipment.</p>

C) Cardio Station


Equipment Name	Reference Photo
1. Spinning Bicycle / Upright Cycle	
2. Recumbent Cycle	
3. Cross Country	



D) Resistance Training Station

Equipment Name	Reference Photo
1. Vertical Bench	
2. Chair Weight	
3. Pull Weight	
4. Leg Extension	

Equipment Name	Reference Photo
5. Leg Press	
6. Body Sit Up & Back Extension	

E) Fitness Floor Markings

Equipment Name	Reference Photo
1. Patterns Drawn on the Mat (Squares)	

2. Pattern Drawn on the Mat (Circles)	
Equipment Name	Reference Photo
3. Pattern Drawn on the Mat (Lines)	
4. Pattern Drawn on the Mat (Combined)	

User Guide with Graphic Instruction in English and Chinese are required
Large characters should be used to meet the need of elderly



Schedule of Accommodation for Play Space

Universal Play Concept

- (a) The “Universal Play Concept” is recommended to be deployed in play space for promoting social inclusion of people with all ages and disabilities by hosting activities that bring together persons with and without a disability and also involve their families and members of the surrounding community. Universal design considers young and old, right- and left-handed, people with children, and the elderly.

Location and Accessibility

- (b) The play spaces should be segregated from the thoroughfare and not be located in air-pollution prone locations or in close proximity to busy vehicular routes or under flyovers.
- (c) Play space and play equipment should be accessible to persons with disabilities.
- (d) Entrances of play areas should not open directly to streets or roads.
- (e) Physical barrier in the form of peripheral planting or perimeter fencing/ railing to enclose the playground should be provided to physically demarcate the boundary of the site.
- (f) In view of the demographic changes in the society, the elderly fitness areas as well as outdoor fitness equipment areas should be located closer to children's play areas so that family members can communicate with or take care of each other during their exercises.

Play Space

- (g) The play space should have the following elements of quality play space-
- Wide range and diversified play experiences
 - Challenge and adventurous
 - Bespoke experiences
 - Integration of natural environment / material with built environment
 - Non-prescriptive play
 - Play for All
 - Comfort
 - Safe
 - Supporting amenity facilities

- Adequate signage
- Adequately drained

Community Engagement / Site Survey / Audit of Existing Provision

- (h) Community engagement, site survey and auditing and mapping of existing provision should be conducted to identify the sort of play opportunities needed and the background of target users before designing the play space.

Playscape (Play Environment) and Play Equipment

- (i) Children's play areas should be provided with a theme, innovative, durable and interesting play elements for toddlers, children and children with a disability as well as visually impaired children.
- (j) Play equipment integrated with the landscape and tailor-made play equipment are preferred.
- (k) Besides providing sufficient safety zone, provide extra space for users to play, rest, mingle, run around and explore.
- (l) Take advantage of existing site topography to create interesting playscape and to consider introducing man-made intervention to create changing level.
- (m) High play value to be the main consideration in the design and choice of play equipment, in addition to the emphasis on safety, ease of maintenance and accessibility.
- (n) Popular play components, swings, slides of different heights, climbing equipment and sand ponds are preferred.
- (o) Install less common play equipment such as embankment slide, tunnel slide, multiple axis swing, multi-occupancy swing, 3-D climbing structure, etc.
- (p) Consider installing tall slides and larger sand ponds if space allows.
- (q) Use more heat-resistant materials for play equipment as far as practicable.
- (r) Inclusive play equipment suitable for children with a disability and the visually impaired, etc. should be provided.
- (s) Bilingual signs with self-explanatory pictures describing the use of the equipment by toddlers and children are required.
- (t) All equipment should comply with international recognised safety standard (such as ASTM Standards or BS EN Standards).
- (u) For bespoke play equipment, a qualified person, e.g. Certified Playground Safety inspector, should be engaged to inspect the play equipment to ensure that it has been designed and

installed appropriately according to the standards. A copy of the inspection report should be submitted to LCSD.

Safety Matting

- (v) All safety matting provided for the equipment shall comply with the latest European standard or equivalent including safety margins, critical fall heights, etc. and as advised by ArchSD.
- (w) The safety matting should be flushed with ground surface and provided with good drainage to avoid water trapping underneath. Testing should be conducted in the presence of the Leisure and Cultural Services Department's (LCSD's) staff.
- (x) All permanent drawpits/ catchpits, manhole covers and surface channels should be located outside the safety margins of the play area.

Ancillary Facilities

- (y) Adequate sheltered areas with family friendly design seating should be provided along the periphery for adult's supervision and other users. The height of some bench seats should meet the needs of children and the elderly. Space should be reserved under rain shelters for wheel-chair users.
- (z) Design of drinking fountain with ambient temperature should be able to cater for the special needs of persons with disabilities (including wheelchair users and visually impaired persons) together with one drinking fountain for children. The drinking fountain should be equipped with parts for filling of water bottles/ cups. The design and specifications should be up to Water Supplies Department/ Electrical and Mechanical Services Department/ ArchSD's required standard.
- (aa) Consideration should be given to provide a water point and a metal wash-hand basin with time release press button for cleaning and hand washing respectively by children after play.
- (bb) Provide partial shade to individual play equipment / part of the playground to maximize the time of play. The shade should be attractive, of low maintenance, durable and of permanent nature.

General Requirements

- (cc) LCSD should be consulted on the type of play equipment and safety matting, its layout plan and safety margins, etc. during the planning and design stage.
- (dd) Sufficient energy-saving type lighting for play area with auto-time switch should be provided. Lamp posts should be suitably located to avoid posing hazard to children. The illuminance level should be 30 – 50 lux.
- (ee) Design for park furniture, such as directional signs, litter bins, lamp posts, etc. should tie in

with the theme of the play area and shall be eye-catching and innovative.

(ff) Attractive paving with non-slippery surface up to safety standard is required.

(gg) Sharp angles and edges must be avoided in the play area.

Handing Over

(hh) The maintenance kits, related drawings and maintenance manuals should be provided upon handover.

(ii) The manufacturer's certificates for the play equipment and safety matting are to be provided as well as the warranty which is generally required to be for five years from the date of handing over to LCSD.

Appendix VII

Standard Provision of Toilet Facilities in LCSD Leisure Venues

1. The venue management should consider the types of facilities provided in the venue, estimated number of users, space availability, operational need, toilet provisions in similar leisure facilities; and public toilet provided by FEHD and in shopping malls nearby to provide sufficient toilet facilities in new and refurbished toilets.

For Leisure Venues of which Sanitary Fitments Provisions are set out by Building Ordinances/Regulations

2. Government premises, including LCSD leisure venues, are exempted from the Building Ordinances/Regulations. Despite the exemption, the provision of sanitary fitments in LCSD's leisure venues should comply with the standard established under Buildings Ordinances/Building Regulations and other relevant regulations.
3. The Building (Standard of Sanitary Fitments, Plumbing, Drainage Works and Latrines) Regulations (Cap123I) (B(SSFPDW&L)R) and practice notes, PNAP ADV-28 set out the numbers of toilet compartments, urinals and wash hand basin inside the toilets of some specific types of buildings/places. Leisure venues with the intended uses of **Place of Public Entertainment (PPE)**, **Sports Stadium (SS)**, **Workplaces and Restaurants** as defined by B(SSFPDW&L)R should comply with the requirements under respective regulation.
4. LCSD sports ground, sports centre, stadium, football pitches in parks and playgrounds with spectator stand, etc. may be regarded as PPE and/or SS. Venue management shall inform the Project Manager responsible for the new /refurbishment project of the uses of such venues so as to decide whether it is a PPE and/or SS.
5. For **Swimming Pools**, the sanitary fitments to be provided should comply with the requirements specified under the Swimming Pool Regulations (Cap 132CA).
6. The sanitary fitments provision in the facilities mentioned in paragraphs 3 to 5 above must be not less than the requirements specified in respective regulations, i.e. the statutory requirements. ArchSD will check and ensure that the provisions comply with the statutory requirements.

For Leisure Venues of which Sanitary Fitments Provisions are NOT set out by Building Ordinances/Regulations

7. For leisure venues of which toilet facilities provision are **not set out by legislation**, the venue management should consider the factors in paragraph 1 above to decide the provision of toilet facilities.

Descriptions of Toilet Facilities in Schedule of Accommodation

8. Sample descriptions of toilet facilities in the Schedule of Accommodation of Swimming Pool, Sports Centre, Parks and Playgrounds (with Active Facilities, i.e. Basketball Court, Volleyball Court, Football Pitch, Tennis Court and Skatepark) and Parks and Playgrounds (without Active Facility) are at **Annex I**.

General Requirements for All Types of Leisure Venues

9. The number of female toilet compartment should be 2 times or above that of male compartment.
10. For **parks and playgrounds without active facilities**, the ratio of male toilet compartment + urinal : female toilet compartment should be 1:1.6 as far as possible. Accessible toilet and universal toilet should be counted as female toilet compartment for calculation of this ratio¹. This ratio is not applicable to parks and playgrounds **with active facilities** since the percentage of male user in such venues is higher.
11. Accessible toilet must be provided in compliance with the requirements in the prevailing “Design Manual: Barrier Free Access”. The standard name plate and signage of Toilet for Persons with Disabilities and Toilet & Changing Room for Persons with Disabilities are at **Annex II**.
12. Provide attendant room to improve the working environment **on condition** that (i) the worker responsible for cleaning the toilet is required to station at the toilet; **and** (ii) there is no resting place provided in the venue in which the toilet is located; or in nearby venue. Specifications of Attendant Room are provided in “Handbook on Standard Features for public Toilets, FEHD”.

Toilet Compartment in Male and Female Toilets

13. Provide low pedestal water closet (WC) for children in both male and female toilets (a) when there are sufficient number of WC for adults; or (b) if the toilets are located adjacent to children’s playroom/ children’s playground.
14. At least one low pedestal WC should be provided in male and female toilet in swimming pool.
15. As the WCs for use by children are normally not fit for use by adults, they should not be counted as part of the prescribed requirements of B(SSFPDW&L)R.
16. Baby rest should be installed in at least one female cubicle if site conditions permit. If there is enough space, provision of a baby rest in one male WC cubicle and the accessible toilet may be considered. The actual provision should depend on site condition, space availability, usage pattern and operational need. Sign to indicate provision of baby rest should be displayed on the door of such cubicle.
17. At least one larger toilet compartment for priority use by elderly people should be provided in new/refurbished male and female toilets subject to site condition and space availability. The larger compartment is better to be located close to the entrance of the toilet. Type B larger toilet compartment in the “Design Guidelines for Universal Toilets in ArchSD Projects” is preferred.
18. Both pedestal and squatting types WC should be provided if feasible. The ratio of pedestal type WC to squatting type WC should base on local demand. Consideration should be given to providing more pedestal type WC near tourist spots to cater for the needs of overseas tourists.
19. The colour of hand-grip rails should contrast against the background finishes and be provided on both sides of squatting type and pedestal type WC to assist the elderly and health impaired persons.
20. Sensor type flushing system, equipped with an overriding manual button for use in case of

¹ According to paragraph 46 of Division 11 of Design Manual : Barrier Free Access 2008, accessible toilet can be either counted as male or female toilet compartment.

malfunctioning of sensor, should be installed.

21. Small fittings provided in toilet compartment include-

- (a) door stopper;
- (b) coat hook;
- (c) toilet paper holder (optional);
- (d) wall-mounted sanitary napkin disposal bin/ small litter bin with cover lid (for female toilet compartment only); and
- (e) 2-in-1 seat cover for adult and children, as appropriate.

Urinals in Male Toilets

- 22. Ceramic urinal bowls (about 580mm to 620mm above finished floor level) with modesty boards should be provided.
- 23. One accessible urinal in compliance with the requirements of the prevailing “Design Manual: Barrier Free Access” should be provided for use by persons with ambulant disabilities, when more than one urinal is provided.
- 24. Other than the provision of accessible urinal, provision of one children-height (with a front rim not higher than 400mm) or one elderly (with hand-grip railing installed) urinal may be considered on a case-by-case basis depending on site condition, space availability, usage pattern and operational need.
- 25. The colour of the vertical grab rail for the accessible urinal and hand-grip railing for elderly urinal should contrast against the background finishes similar to those in WC compartments.
- 26. Sensor type flushing system, equipped with an overriding manual button for use in case of malfunctioning of sensor, should be installed. If it is not feasible to provide sensor type flushing system, auto-flushing system to flush the urinal at regular intervals should be adopted.

Universal Toilet (通用洗手間)

- 27. At least one universal toilet should be provided in all new/refurbished toilet in LCSD leisure venues, subject to site condition and space availability.
- 28. Universal toilets, though not a statutory requirement, should be provided in all new/refurbished toilet in LCSD leisure venues, subject to site condition and space availability. The universal toilets are gender neutral, serving wider target groups and catering for people having difficulty in using the male or female toilets. Home Affairs Bureau has offered policy support in 2017 on provision of universal toilet in all newly-built and refurbished toilet in LCSD leisure venues, subject to site condition and space availability, without sacrificing the general provision of traditional and accessible toilet facilities.
- 29. Although the universal toilets comply with the requirement of accessible toilet, accessible toilet must not be substituted by universal toilet.
- 30. Two universal toilets with footbaths should be provided on the pool deck of swimming pool complex of considerable scale which provides different pool facilities with leisure / teaching / training / toddlers' pools. The universal toilets should be provided at locations convenient to users.

31. Type E universal toilet in the “Design Guidelines for Universal Toilets in ArchSD Projects” is preferred.
32. For venues with active facilities and changing facilities, two universal toilets **with shower facilities** should be provided.

Internal Design of Communal Area in Toilet

33. Normally, wash hand basins should be installed at about 850mm from finished floor level at the maximum.
34. If more than two wash hand basins are provided, one of them should be at children-height level, i.e. around 615mm to 635mm from finished floor level. The water tap and the soap dispenser should be suitably positioned at the side of the wash hand basin within easy reach of children.
35. Wash hand basins made of solid surfacing material (e.g. “Corian”, “Surrell” or other similar materials same as vanity bench top) should be incorporated in vanity benches, fabricated as a single unit.
36. Cabinet Wash Hand Basin System, i.e. one stop provision of wash hand basin, soap dispenser and hand dryer, be provided if feasible to alleviate wet floor problem.
37. Auto-sensor water taps should be installed. Venue management may also consider providing one to two press release water taps for use in case of malfunctioning of sensor.
38. Mirror with lighting, litter bins, alcohol-based handrub dispensers, mosquito killer lamps and wall-mounted box for keeping toilet inspection record.
39. Baby changing counter should be provided in male toilet and female toilet respectively, unless site conditions do not permit. Provision of a baby changing counter in the accessible toilet may be considered subject to site condition, space availability, usage pattern and operational need. Folding baby changing counter should be provided as far as practicable.
40. Lockable jumbo roll toilet paper holder (optional).
41. Air freshener (optional).

Other Considerations

42. High headroom and cross-ventilation window to enhance ventilation. Ventilation openings at low and high levels on each side of the structure and roof ventilators to encourage cross-floor and natural upward venting. Mechanical fresh air in-take system be installed underneath the wash-hand basin counter.
43. Service corridors shall be provided at the back of water closet cubicles to accommodate pipes, drains, concealed cisterns and automatic flushing cisterns of urinals for ease of maintenance.
44. Bright/ light colour scheme should be used to create a pleasant environment. Attractively-coloured glazed ceramic tiles from ceiling to floor with cove.

45. Non-slip floor tiles should be used.
46. Light reflection panels should be introduced to bring in natural lighting. However, skylights, often suffering from water seepage problems, should not be adopted as part of the roof. Energy efficient lighting installations should be adopted.
47. Cleaner's store inside both male and female toilet, with sufficient space to provide a mop sink and for storage of cleansing gears and stores.
48. Lockable hose point for hosing down and cleaning of floor and lockable waterproof power sockets should be provided.
49. Doorless design should be adopted. Adequate screening to prevent peeping from outside.
50. Lockable entrance gate should be provided.
51. Prominent signage with illumination and graphic as appropriate.
52. Reference should also be made to the "relevant Legislation Setting out Provision of Sanitary Fitments in LCSD Leisure Venues", "Handbook on Standard Features for Public Toilets, FEHD", "Design Guidelines for Universal Toilets in ArchSD Projects" and "Practice Note for Authorized Persons, Registered Structural Engineers and Registered Geotechnical Engineers, Buildings Department (PNAP ADV-28)" in **Annex III** for the detailed design requirements of toilet facilities.
53. New technologies and products to raise hygiene standard should be adopted.
54. For re-provisioning or refurbishment projects, there should be no reduction in toilet facilities provision even the reduced provision could meet the statutory requirement; and the above requirements and standards should be adopted as far as feasible.

I. Descriptions of Toilet Facilities in the SoA of Sports Centre

Item	Description	No. of Unit	Area Req. (m ²)	A/C Req.	Remarks
x	Toilet cum Changing Room	As appropriate	As appropriate	Ventilate	<p>(a) Toilet cum changing rooms for men and women; accessible toilet & changing room for persons with disabilities; and universal toilets with shower facilities should be provided.</p> <p>(b) The latest guidelines of LCSD on “Standard Provision of Toilet Facilities in LCSD Leisure Venues” and “Basic Design of Changing Facilities for Land Based Venues” in <u>Annex x & x</u> respectively should be followed.</p> <p>(c) Venue management should discuss with the project architect to confirm whether the Regulation setting out the provision of toilet facilities for “Place of Public Entertainment” and/or the one for “Sports Stadium” should be adopted. The no. of male and female toilet cubicles; and other sanitary fitments provisions must be not less than the statutory requirements.</p> <p>(d) If the activity areas are located on different floors, male, female and accessible toilet and changing rooms should be provided on respective floors.</p> <p>(e) High headroom, cross-ventilation window and mechanical fresh air in-take system underneath the wash-hand basin counter to enhance ventilation and to keep the floor dry.</p> <p>(f) At least one larger toilet compartment for priority use by elderly should be provided in male and female toilets. The larger toilet compartment should preferably be located near the entrance. Type B: Elderly Friendly Toilet Compartment in the “Design Guidelines for Universal Toilets in ArchSD Projects” is preferred.</p> <p>(g) Appropriate number of wash hand basins and a cleaner’s store with storage racks for cleansing gear and general storage in male and female toilets.</p>

Item	Description	No. of Unit	Area Req. (m ²)	A/C Req.	Remarks
x.1	Male Toilet cum Changing Rooms (Well-ventilated)	As appropriate	As appropriate	Ventilate	<p><u>Changing Room</u></p> <p>The communal changing area should be large enough to accommodate about xxx users at one time, with sufficient circulation area, benches and clothes pegs.</p> <p><u>Shower cum changing cubicles</u></p> <p>(a) A total of xx nos. of shower cum changing cubicles with lockable doors.</p> <p>(b) Provide curtain to separate the shower and changing areas; bench and clothes pegs in the changing area; hot and cold water supply and shelves for holding soap/shampoo in the shower area.</p> <p><u>Lockers</u></p> <p>(a) A total of xxx nos. (should be big enough to accommodate racket) coin-return lockers with padlock devices.</p> <p>(b) The lockers should be located at highly visible area and not too close to walls and column so that activities near the lockers can easily be seen by staff. To provide anti-burglar type reflective mirror at vantage points to cover concealed corners so as to facilitate surveillance by staff.</p> <p><u>Toilets</u></p> <p>A total of xx nos. of toilet cubicles and xx nos. of urinals.</p>
x.2	Female Toilet cum Changing Rooms (Well-ventilated)	As appropriate	As appropriate	Ventilate	<p>Same provision as in the male toilet cum changing room but with a different colour scheme.</p> <p><u>Changing Room</u></p> <p>The communal changing area should be large enough to accommodate about xxx users at one time, with sufficient circulation area, benches and clothes pegs.</p> <p><u>Shower cum changing cubicles</u></p> <p>A total of xx nos. of shower cum changing cubicles with lockable doors.</p>

Item	Description	No. of Unit	Area Req. (m ²)	A/C Req.	Remarks
x.3	Accessible Toilet & Changing Rooms (Well-ventilated)	As appropriate	As appropriate	Ventilated	<p><u>Lockers</u></p> <p>A total of xxx nos. (should be big enough to accommodate racket) coin-return lockers with padlock devices.</p> <p><u>Toilets</u></p> <p>A total of xx nos. of toilet cubicles.</p> <p>(a) The no. of accessible toilet & changing rooms for persons with disabilities must be not less than the latest statutory requirement.</p> <p>(b) To provide an alarm bell connected to the Management Office for users to call for assistance.</p> <p>(c) The design must comply with the latest Design Manual - Barrier Free Access.</p>
x.4	Universal Toilets with Shower Facilities (Well-ventilated)	2	As appropriate	Ventilated	<p>Universal toilet with shower facilities should be provided subject to site condition and space availability. Type E: Accessible Elderly and Family Friendly Toilet in the latest version of “Design Guidelines for Universal Toilets in ArchSD Projects” is preferred.</p>

II. Descriptions of Toilet Facilities in the SoA of Swimming Pool

Item	Description	No. of Unit	Area Req. (m ²)	A/C Req.	Remarks
x	Toilet cum Changing Room	As appropriate	As appropriate	Ventilate	<p>(a) Toilet cum changing rooms for men and women; family/accessible changing room for families and persons with disabilities; and universal toilets with shower facilities should be provided.</p> <p>(b) The latest guidelines of LCSD on “Standard Provision of Toilet Facilities in LCSD Leisure Venues” and “Basic Design of Changing Facilities for Swimming Pools” in Annex x & x respectively should be followed.</p> <p>(c) The no. of male and female toilet cubicles; and other sanitary fitments provisions must be not less than the statutory requirements.</p> <p>(d) High headroom, cross-ventilation window and mechanical fresh air in-take system underneath the wash-hand basin counter to enhance ventilation and to keep the floor dry.</p> <p>(e) At least one larger toilet compartment for priority use by elderly should be provided in male and female toilets. The larger toilet compartment should preferably be located near the entrance. Type B: Elderly Friendly Toilet Compartment in the “Design Guidelines for Universal Toilets in ArchSD Projects” is preferred.</p> <p>(f) Appropriate number of wash hand basins and a cleaner’s store with storage racks for cleansing gear and general storage in male and female toilets.</p>
x.1	Male Toilet cum Changing Rooms (Well-ventilated)	As appropriate	As appropriate	Ventilate	<p><u>Changing Room</u></p> <p>(a) The communal changing area should be large enough to accommodate about xxx users at one time.</p> <p>(b) The changing room should be provided with folding partitions to divide the room into two smaller rooms with separate access from the crush hall and exit to the pool deck.</p>

Item	Description	No. of Unit	Area Req. (m ²)	A/C Req.	Remarks
x.2	Female Toilet cum Changing Rooms (Well-ventilated)	As appropriate	As appropriate	Ventilated	<p><u>Changing cubicles</u></p> <p>A total of xx nos. of changing cubicles with lockable doors, benches and heavy duty clothing pegs.</p> <p><u>Shower cum changing cubicles</u></p> <p>(a) A total of xx nos. of shower cum changing cubicles with lockable doors.</p> <p>(b) Provide curtain to separate the shower and changing areas; bench and clothes pegs in the changing area; and hot and cold water and shelves for holding soap/ shampoo in the shower area.</p> <p><u>Lockers</u></p> <p>(a) A total of xxx nos. (in normal and large sizes with shoe compartment) coin-return lockers with padlock devices.</p> <p>(b) The lockers should be located at highly visible area and not too close to walls and column so that activities near the lockers can easily be seen by the pool staff. To provide anti-burglar type reflective mirror at vantage points to cover concealed corners so as to facilitate surveillance by pool staff.</p> <p><u>Toilets</u></p> <p>A total of xx nos. of toilet cubicles and xx nos. of urinals. At least one low pedestal water closet for children should be provided.</p> <p><u>Exit</u></p> <p>To provide a direct exit to the pools via a “Pre-cleanse Area”.</p> <p>Same provision as in the male toilet cum changing room but with a different colour scheme.</p> <p><u>Changing Room</u></p> <p>(a) The communal changing area should be large enough to accommodate about xxx users at one time.</p> <p>(b) The changing room should be provided with folding partitions to divide the room into two smaller rooms with separate access from the</p>

Item	Description	No. of Unit	Area Req. (m ²)	A/C Req.	Remarks
					<p>crush hall and exit to the pool deck.</p> <p><u>Changing cubicles</u></p> <p>A total of xx nos. of changing cubicles with lockable doors, benches and heavy duty clothing pegs.</p> <p><u>Shower cum changing cubicles</u></p> <p>A total of xx nos. of shower cum changing cubicles with lockable doors.</p> <p><u>Lockers</u></p> <p>A total of xxx nos. (in normal and large sizes with shoe compartment) coin-return lockers with padlock devices.</p> <p><u>Toilets</u></p> <p>A total of xx nos. of toilet cubicles. At least one low pedestal water closet for children should be provided.</p> <p><u>Exit</u></p> <p>To provide a direct exit to the pools via a “Pre-cleanse Area”.</p>
x.3	Universal Toilets with Shower Facilities (Well-ventilated)	2	As appropriate	Ventilate	<p>(a) Universal toilets with shower facilities subject to site condition and space availability. Type E: Accessible Elderly and Family Friendly Toilet in the latest version of “Design Guidelines for Universal Toilets in ArchSD Projects” is preferred.</p> <p>(b) To provide a direct exit to the pools via a “Pre-cleanse Area”.</p>
x.4	Family / Accessible Changing Rooms (Well-ventilated)	x	As appropriate	Ventilate	<p>(a) A total of x nos. family / accessible changing rooms for families and persons with disabilities.</p> <p>(b) Wall mounted flap-type diaper-changing facilities for adults to be provided in one of the family changing rooms to cater for seriously handicapped swimmers.</p> <p>(c) To provide an alarm bell connected to the Management Office for users to call for assistance.</p> <p>(d) To provide a direct exit to the pools via a</p>

Item	Description	No. of Unit	Area Req. (m ²)	A/C Req.	Remarks
					<p>“Pre-cleanse Area”.</p> <p>(e) The design must comply with the latest Design Manual - Barrier Free Access.</p> <p>(f) To provide a total of xx nos. extra large coin-return lockers with padlock in the common area near all Family cum Accessible Changing Rooms / Showers/ Toilets.</p>
	<p>Universal Toilets (UT) on Pool Deck</p> <p>(Note: UTs on pool deck are required in new swimming pool complex of considerable scale which provides different pool facilities with leisure / teaching / training / toddlers' pools.)</p>	2	As appropriate	Ventilate	<p>Universal toilets with footbaths at convenient locations on pool deck subject to site condition and space availability. Type E: Accessible Elderly and Family Friendly Toilet in the latest version of “Design Guidelines for Universal Toilets in ArchSD Projects” is preferred.</p>
	Toilet for Spectator	As appropriate	As appropriate	Ventilate	<p>Venue management should discuss with the project architect to confirm whether any Regulation setting out the provision of sanitary fitments has to be adopted.</p>

III. Description of Toilet & Changing Facilities in the SoA of Parks & Playgrounds (with Active Facilities, i.e. Basketball Court, Volleyball Court, Football Pitch, Tennis Court and Skatepark)

Item	Description	No. of Unit	Area Req. (m ²)	A/C Req.	Remarks
x	Toilets cum Changing Room (Well-ventilated)	As appropriate	As appropriate	Ventilated	<p>(a) Toilet cum changing rooms for men and women; accessible toilet & changing room for persons with disabilities; and universal toilet with shower facilities should be provided near the active facilities such as football pitches, basketball courts, tennis courts to cater for the need of users.</p> <p>(b) These facilities are preferably be grouped together in a service building / toilet block. The changing rooms should be connected with toilets.</p> <p>(c) The latest guidelines of LCSD on “Standard Provision of Toilet Facilities in LCSD Leisure Venues” and “Basic Design of Changing Facilities for Land based Venues” in <u>Annex x & x</u> respectively should be followed.</p> <p>(d) Venue management should discuss with the project architect to confirm whether any Regulation setting out the provision of sanitary fitments has to be adopted. If yes, the provision of sanitary fitment should be not less than the latest statutory requirements.</p> <p>(e) High headroom, cross-ventilation window and mechanical fresh air intake system underneath the wash-hand basin counter to enhance ventilation and to keep the floor dry.</p> <p>(f) The ratio of male to female toilet cubicles 1:2.</p> <p>(g) The ratio of male (toilet cubicle + urinal) to female toilet cubicles at 1:1.6 for P&P without active facilities <u>is not applicable here</u> as P&P with active facilities have a higher</p>

Item	Description	No. of Unit	Area Req. (m ²)	A/C Req.	Remarks
x.1	Male Toilet cum Changing Room (Well-ventilated)	As appropriate	As appropriate	Ventilated	<p>percentage of male users.</p> <p>(h) At least one larger toilet compartment for priority use by elderly should be provided in male and female toilets. The larger toilet compartment should preferably be located near the entrance. Type B: Elderly Friendly Toilet Compartment in the “Design Guidelines for Universal Toilets in ArchSD Projects” is preferred.</p> <p>(i) Appropriate number of wash hand basins and a cleaner’s store with storage racks for cleansing gear and general storage in male and female toilets.</p> <p>(j) Lockable gates are required at the main entrances of the male & female toilet cum changing rooms.</p> <p><u>Toilet</u> A total of <u>x</u> no. of toilet cubicles; <u>x</u> no. of urinals</p> <p><u>Changing Room</u> (a) A total of x no. of shower cum changing cubicles with lockable doors. (b) Provide curtain in the shower cum changing cubicle to separate the two areas; bench and clothes pegs in the changing area; and hot and cold water supply and shelves for holding soap/shampoo in the shower area. (c) A total of x no. of lockers. (d) Communal changing area with sufficient circulation area, benches and clothes pegs to accommodate about xx users at the same time.</p>
x.2	Female Toilet cum Changing Room (Well-ventilated)	As appropriate	As appropriate	Ventilated	<p>(a) A total of x no. of toilet cubicles, x no. of shower cum changing cubicles, x no. of changing cubicles and x no. of lockers.</p> <p>(b) Same provision as in male section</p>

Item	Description	No. of Unit	Area Req. (m ²)	A/C Req.	Remarks
x.3	Accessible Toilet & Changing Room for persons with disabilities (Well-ventilated)	As appropriate	As appropriate	Ventilated	<p>except urinal.</p> <p>(c) Napkin disposal bin with cover in all toilet cubicles.</p> <p><u>Toilet</u></p> <p>Design of the accessible toilet must comply with the latest Design Manual – Barrier Free Access.</p> <p><u>Shower</u></p> <p>Same provision as in male / female toilet cum changing room. The design must comply with the latest Design Manual – Barrier Free Access.</p>
x.4	Universal Toilet (UT) with Shower Facilities (Well-ventilated)	2	As appropriate	Ventilated	<p><u>Toilet</u></p> <p>UT with shower facilities should be provided subject to site condition and space availability. Type E: Accessible Elderly and Family Friendly Toilet in the latest version of “Design Guidelines for Universal Toilets in ArchSD Projects” is preferred.</p> <p><u>Shower</u></p> <p>Same provision as in male / female toilet cum changing room.</p>

IV. Description of Toilet Facilities in the SoA of Parks & Playgrounds (without Active Facilities, i.e. Basketball Court, Volleyball Court, Football Pitch, Tennis Court and Skatepark)

Item	Description	No. of Unit	Area Req. (m ²)	A/C Req.	Remarks
x	Toilets	As appropriate	As appropriate	Ventilated	<p>(a) Toilet for men, women, accessible toilet for persons with disabilities and universal toilet should be provided at strategic location of the Park/Playground and preferably be grouped together in a service building / toilet block.</p> <p>(b) To follow the latest guidelines of LCSD on “Standard Provision of Toilet Facilities in LCSD Leisure Venues” as detailed in <u>Annex X</u>.</p> <p>(c) Venue management should discuss with the project architect to confirm whether any Regulation setting out the provision of sanitary fitments has to be adopted. If yes, the provision of sanitary fitment should be not less than the latest statutory requirements.</p> <p>(d) High headroom, cross-ventilation window and mechanical fresh air in-take system underneath the wash-hand basin counter to enhance ventilation and to keep the floor dry.</p> <p>(e) Lockable gates are required at the entrances of the male & female toilet.</p> <p>(f) Appropriate number of wash hand basins and a cleaner’s store with storage racks for cleansing gear and general storage in male and female toilets.</p> <p>(g) At least one larger toilet compartment for priority use by elderly should be provided in male and female toilets. The larger toilet compartment should preferably be located near the entrance. Type B: Elderly Friendly Toilet Compartment in the “Design Guidelines for Universal Toilets in ArchSD Projects” is preferred.</p> <p>Male to Female Toilet Ratio</p> <p>(h) The ratio of male to female toilet cubicles 1:2.</p> <p>(i) The ratio of male (toilet cubicle + urinal) to female toilet cubicles at least at 1:1.6. The accessible toilet and universal toilet can be counted as female toilet cubicle for the purpose of calculating this ratio.</p>

Item	Description	No. of Unit	Area Req. (m ²)	A/C Req.	Remarks
x.1		As appropriate	As appropriate		Male Toilet A total of <u>x</u> toilet cubicles and <u>x</u> urinals.
x.2		As appropriate	As appropriate		Female Toilet A total of <u>x</u> toilet cubicles.
x.3		As appropriate	As appropriate		Accessible Toilet The design of accessible toilet must comply with the latest Design Manual - Barrier Free Access.
x.4		1	As appropriate		Universal Toilet (UT) UT should be provided subject to site condition and space availability. Type E: Accessible Elderly and Family Friendly Toilet in the latest version of “Design Guidelines for Universal Toilets in ArchSD Projects” is preferred.



Standard Names and Signs of Toilet and Changing Room for Person with Disabilities


I. Standard Name & Sign of Toilets for Persons with Disabilities (PWD)

The name and signs of the three main types of Toilets for PWD, including those for use by (i) both sexes, (ii) single sex and (iii) cubicle for use by persons with disabilities inside male/female toilet are as below.

For illuminated sign box, only the International Symbol of Disability, i.e. the wheelchair sign, is required.

There is no specific layout, font type or size for the name plate. Venue management may adopt the design of other signage in the venue.

Types of toilet for persons with disabilities	Name Plate	Sign
(i) For use by <u>both sexes</u>	Accessible Toilet (暢通易達洗手間)	With the sign below 
(ii) For use by <u>single sex</u>	Accessible Toilet (暢通易達洗手間)	With graphic of male/female, and the sign below 
(iii) Toilet <u>cubicle</u> for	Not required	This sign should be posted on

Types of toilet for persons with disabilities	Name Plate	Sign
persons with disabilities <u>inside</u> male/female toilet		cubicle door 

II. Standard Name and Sign of Toilet & Changing Room for PWD

The name of Toilet & Changing Room for PWD is "**Accessible Toilet & Changing Room (暢通易達洗手間及更衣室)**". The name and International Symbol of Accessibility below should also be posted on the door.



References

(The references may be updated from time to time and the latest versions should be referred to.)

A. Legislation Setting out Provision of Sanitary Fitments in Leisure Venues

B. Handbook on Standard Features for Public Toilets, FEHD

Link: https://www.legco.gov.hk/yr19-20/english/pac/reports/73/app_14.pdf

C. Design Guidelines for Universal Toilets in ArchSD Projects

D. Practice Note for Authorized Persons, Registered Structural Engineers and Registered Geotechnical Engineers, Buildings Department (PNAP ADV-28)

Link: <https://www.bd.gov.hk/doc/en/resources/codes-and-references/practice-notes-and-circular-letters/pnap/ADV/ADV028.pdf>

Reference A. Legislation Setting out Provision of Sanitary Fitments in Leisure Venues

I. Legislation setting out provision of sanitary fitments in leisure venues

- A. For the purpose of providing sanitary fitments, the interpretation of Place of Public Entertainment should be referred to Part II in B(SSFPDW&L)R3 (Cap 123I).

Part II in B(SSFPDW&L)R3 (Cap 123I) - place of public entertainment (公眾娛樂場所)—

- (a) *has the meaning given by section 2 of the Places of Public Entertainment Ordinance (Cap. 172); but*
- (b) *does not include a sports stadium or cinema;*

Section 2, Cap 172 (Place of Public Entertainment Ordinance)

“Place of public entertainment” means-

- (a) *so much of any place, building, erection or structure, whether temporary or permanent, capable of accommodating the public; and*
- (b) *any vessel,*
in or on which a public entertainment is presented or carried on whether on one occasion or more;

“public entertainment” means any entertainment within the meaning of this Ordinance to which the general public is admitted with or without payment.

Schedule 1, Cap 172 (Place of Public Entertainment Ordinance)

A. *The events, activities and other things referred to in the definition of “entertainment” in section 2 of this Ordinance are the following or any part of any of them-*

- (a) *a concert, opera, ballet, stage performance or other musical, dramatic or theatrical entertainment;*
- (b) *a cinematograph or laser projection display;*
- (c) *a circus;*
- (d) *lecture or story-telling;*
- (e) *an exhibition of any 1 or more of the following, namely, pictures, photographs, books, manuscripts or other documents or other things;*
- (f) *a sporting exhibition or contest;*
- (g) *a bazaar;*
- (h) *(Repealed L.N. 120 of 2002)*
- (i) *an amusement ride within the meaning of the Amusement Rides (Safety) Ordinance (Cap 449) or any mechanical device (other than such an amusement ride) which is designed for amusement;*
- (j) *a dance party.*

- B. ***Regulation 3, Cap 123I (Building (Standards of Sanitary Fitments, Plumbing, Drainage Works and Latrines Regulations)***

“sports stadium” means a building or part of a building which is designed for sporting activities

Note:

Where there are multiple functions or uses in a building, sanitary fitments shall be provided in accordance with those required for that particular function or use. For instance, when a venue is to be used for sporting activities, exhibition or contest, (i.e. sport stadium) as well as musical,

dramatic or theatrical entertainment to which the general public is admitted (i.e. place of public entertainment) under B(SSFPDW&L)R, the provision of sanitary fitments shall satisfy both the minimum requirements specified for Sports Stadia under B(SSFPDW&L)R 6A and Places of Public Entertainment under B(SSFPDW&L)R 6.

II. Individual Regulation Setting out the Provision of Toilet Facilities

The contents of Regulation 5 (Workplaces), Regulations 6 (Places of public entertainment), Regulation 6A (Sports stadia) and Regulation 8 (Restaurants) of B(SSFPDW&L)R; Regulation 6 of the Swimming Pools Regulation are provided below. These regulations are updated from time to time and the latest versions should be referred to.

A. Calculation of Provision of Male and Female Sanitary Fitments in Workplaces

{Abstract from Regulation 5 (Workplaces) of Cap 123I}

- (1) Save as provided in paragraph (3), in every workplace- (L.N. 191 of 2015)
 - (a) the number of watercloset fitments and urinals provided for male persons must be not less than the number specified in Table 5;
 - (b) the number of watercloset fitments provided for female persons must be not less than the number specified in Table 6; and
 - (c) the number of lavatory basins provided for- (L.N. 191 of 2015)
 - (i) male persons must be not less than the number specified in Part 1 of Table 7; and
 - (ii) female persons must be not less than the number specified in Part 2 of Table 7. (L.N. 191 of 2015)

Table 5

Number of Watercloset Fitments and Urinals Provided for Male Persons in Workplace

Column 1	Column 2	Column 3
Number of male persons in workplace	Number of watercloset fitments	Number of urinals
1. Not more than 10	1	Nil
2. 11 – 100	1 for every 25 male persons or part of those persons	1 for every 50 male persons or part of those persons
3. More than 100	4 plus 1 for every 50 male persons, or part of those persons, over 100	2 plus 1 for every 50 male persons, or part of those persons, over 100

(L.N. 191 of 2015)

Table 6

Number of Watercloset Fitments Provided for Female Persons in Workplace

Column 1	Column 2
Number of female persons in workplace	Number of watercloset fitments
1. Not more than 10	1
2. 11 – 25	2
3. More than 25	2 plus 1 for every 25 female persons, or part of those persons, over 25

(L.N. 191 of 2015)

Table 7

Number of Lavatory Basins Provided in Workplace

Part 1

Number of Lavatory Basins Provided for Male Persons in Workplace

Column 1	Column 2
Number of male persons in workplace	Number of lavatory basins
1. Not more than 100	1 for every 25 male persons or part of those persons
2. More than 100	4 plus 1 for every 50 male persons, or part of those persons, over 100

Part 2

Number of Lavatory Basins Provided for Female Persons in Workplace

Column 1	Column 2
Number of female persons in workplace	Number of lavatory basins
1. Not more than 100	1 for every 25 female persons or part of those persons
2. More than 100	4 plus 1 for every 50 female persons, or part of those persons, over 100

(L.N. 191 of 2015)

(2) (Repealed L.N. 191 of 2015)

(3) Where, in any workplace, the number of persons (whether male persons or female persons, or both) does not exceed 10, there must be provided not less than one watercloset fitment and one lavatory basin.

(4) In every workplace, the watercloset fitments, urinals and lavatory basins for male persons and the watercloset fitments and lavatory basins for female persons shall be provided in separate rooms exclusively for the use of male persons and female persons respectively.

(5) For the purposes of this regulation—

(a) the number of persons in a workplace is to be determined—

- (i) for an office—at the rate of 1 person for every 9 m² of the usable floor area of the office;
- (ii) for an industrial undertaking that is a flatted factory—at the rate of 1 person for every 4.5 m² of the usable floor area of the factory;
- (iii) for an industrial undertaking that is a warehouse, godown or storage area—at the rate of 1 person for every 30 m² of the usable floor area of the warehouse, godown or storage area, as the case may be;
- (iv) for a shop that is neither within a shopping arcade nor within a department store—at the rate of 1 person for every 15 m² of the usable floor area of the shop; or
- (v) for a food room of a restaurant, where the number of persons in the restaurant (determined in accordance with regulation 8(2)(a)) is more than 300—at the rate of 1 person for every 4.5 m² of the usable floor area of the food room; (L.N. 191 of 2015)

(b) the number of persons in an industrial undertaking (other than a flatted factory, warehouse, godown or storage area) is to be determined by the Commissioner for Labour; and

(c) the proportion of male persons to female persons in a workplace is—

- (i) for an industrial undertaking (other than a flatted factory, warehouse, godown or storage area), determined by the Commissioner for Labour; and
- (ii) for any other workplace, deemed to be 1:1. (L.N. 191 of 2015)

(L.N. 191 of 2015)

B. Calculation of Provision of Male and Female Sanitary Fitments in Place of Public Entertainment^(Footnote 1)

{Abstract from Regulation 6 (Places of public entertainment) of Cap 123I}

- (1) In every place of public entertainment— (L.N. 191 of 2015)
 - (a) the number of watercloset fitments and urinals provided for male persons must be not less than the number specified in Table 8;
 - (b) the number of watercloset fitments provided for female persons must be not less than the number specified in Table 9; and
 - (c) the number of lavatory basins provided for—
 - (i) male persons must be not less than the number specified in item 1 of Table 10; and
 - (ii) female persons must be not less than the number specified in item 2 of Table 10. (L.N. 191 of 2015)

Table 8

Number of Watercloset Fitments and Urinals Provided for Male Persons in Place of Public Entertainment

Column 1	Column 2	Column 3
Number of male persons in place of public entertainment	Number of watercloset fitments	Number of urinals
1. Not more than 400	1 for every 100 male persons or part of those persons	1 for every 50 male persons or part of those persons
2. More than 400	4 plus 1 for every 250 male persons, or part of those persons, over 400	1 for every 50 male persons or part of those persons

(L.N. 191 of 2015)

Table 9

Number of Watercloset Fitments Provided for Female Persons in Place of Public Entertainment

Column 1	Column 2
Number of female persons in place of public entertainment	Number of watercloset fitments
1. Not more than 250	2 for every 50 female persons or part of those persons
2. More than 250	10 plus 1 for every 40 female persons, or part of those persons, over 250

(L.N. 191 of 2015)

Table 10

Number of Lavatory Basins Provided in Place of Public Entertainment

Column 1	Column 2
Persons in place of public entertainment	Number of lavatory basins
1. Male persons	1 for every 100 male persons or part of those persons
2. Female persons	1 for every 100 female persons or part of those persons

(L.N. 191 of 2015)

(2) In every place of public entertainment, the watercloset fitments, urinals and lavatory basins for male persons and the watercloset fitments and lavatory basins for female persons shall be provided in separate rooms exclusively for the use of male persons and female persons respectively.

(3) For the purposes of this regulation-

(a) the number of persons in a place of public entertainment is to be determined—

- (i) for a museum or exhibition hall—at the rate of 1 person for every 2 m² of the usable floor area of the museum or exhibition hall, as the case may be;
- (ii) for a venue for a dance party—at the rate of 1 person for every 0.75 m² of the usable floor area of the dancing area in the venue;
- (iii) for an assembly area or auditorium without seating or with movable seating—at the rate of 1 person for every 0.5 m² of the usable floor area of the area intended for use by the spectators or visitors in the assembly area or auditorium, as the case may be; or
- (iv) for an assembly area or auditorium with non-movable seating—at the rate of 1 person for every seat in the assembly area or auditorium, as the case may be; and (L.N. 191 of 2015)

(b) the proportion of male persons to female persons in a place of public entertainment is deemed to be 1:1.5.

(L.N. 196 of 1996; L.N. 191 of 2015)

C. Calculation of Provision of Male and Female Sanitary Fitments in Sports Stadia

{Abstract from Regulation 6A (Sports Stadia) of Cap 123I}

(1) In every sports stadium—

- (a) the number of watercloset fitments and urinals provided for male persons must be not less than the number specified in Table 11;
- (b) the number of watercloset fitments provided for female persons must be not less than the number specified in Table 12; and
- (c) the number of lavatory basins provided for—
 - (i) male persons must be not less than the number specified in item 1 of Table 13; and
 - (ii) female persons must be not less than the number specified in item 2 of Table 13.

Table 11

Number of Watercloset Fitments and Urinals Provided for Male Persons in Sports Stadium

Column 1	Column 2
Number of watercloset fitments	Number of urinals
1. 1 for every 100 male persons or part of those persons	1 for every 100 male persons or part of those persons

Table 12

Number of Watercloset Fitments Provided for Female Persons in Sports Stadium

1. 1 for every 50 female persons or part of those persons

Table 13

Number of Lavatory Basins Provided in Sports Stadium

Column 1	Column 2
Persons in sports stadium	Number of lavatory basins
1. Male persons	1 for every 100 male persons or part of those persons
2. Female persons	1 for every 100 female persons or part of those persons

- (2) In every sports stadium, the watercloset fitments, urinals and lavatory basins for male persons and the watercloset fitments and lavatory basins for female persons must be provided in separate rooms exclusively for the use of male persons and female persons respectively.
- (3) For the purposes of this regulation—
 - (a) the number of persons in a sports stadium is to be determined—
 - (i) for a sports stadium without seating or with movable seating—at the rate of 1 person for every 0.5 m² of the usable floor area of the area intended for use by the spectators in the stadium; or
 - (ii) for a sports stadium with non-movable seating—at the rate of 1 person for every seat in the stadium; and
 - (b) the proportion of male persons to female persons in a sports stadium is deemed to be 1:1.

(L.N. 191 of 2015)

D. Calculation of Provision of Male and Female Sanitary Fitments in Restaurant
{Abstract from Regulation 8 (Restaurants) of Cap 123I}

- (1) Subject to paragraph (1A), in every restaurant—
- (a) the number of watercloset fitments and urinals provided for male persons must be not less than the number specified in Table 26;
 - (b) the number of watercloset fitments provided for female persons must be not less than the number specified in Table 27; and
 - (c) the number of lavatory basins provided for—
 - (i) male persons must be not less than the number specified in Part 1 of Table 28; and
 - (ii) female persons must be not less than the number specified in Part 2 of Table 28.

Table 26

Number of Watercloset Fitments and Urinals Provided for Male Persons in Restaurant

Column 1	Column 2	Column 3
Number of male persons in restaurant	Number of watercloset fitments	Number of urinals
1. Not more than 40	1	1
2. 41 – 80	1	2
3. 81 – 150	2	3
4. 151 – 200	2	4
5. 201 – 300	3	4 plus 1 for every 50 male persons, or part of those persons, over 200
6. 301 – 400	4	6 plus 1 for every 50 male persons, or part of those persons, over 300
7. 401 – 650	5	8 plus 1 for every 50 male persons, or part of those persons, over 400
8. More than 650	5 plus 1 for every 250 male persons, or part of those persons, over 650	13 plus 1 for every 50 male persons, or part of those persons, over 650

Table 27

Number of Watercloset Fitments Provided for Female Persons in Restaurant

Column 1	Column 2
Number of female persons in restaurant	Number of watercloset fitments
1. Not more than 60	1
2. 61 – 120	2
3. 121 – 180	3
4. 181 – 200	4
5. More than 200	4 plus 1 for every 100 female persons, or part of those persons, over 200

Table 28

Number of Lavatory Basins Provided in Restaurant

Part 1

Number of Lavatory Basins Provided for Male Persons in Restaurant

Column 1	Column 2
Number of male persons in restaurant	Number of lavatory basins
1. Not more than 80	1
2. 81 – 120	2
3. 121 – 150	3
4. More than 150	3 plus 1 for every 100 male persons, or part of those persons, over 150

Part 2

Number of Lavatory Basins Provided for Female Persons in Restaurant

Column 1	Column 2
Number of female persons in restaurant	Number of lavatory basins
1. Not more than 120	1
2. 121 – 180	2
3. 181 – 250	4
4. More than 250	4 plus 1 for every 100 female persons, or part of those persons, over 250

(L.N. 191 of 2015)

- (1A) For a restaurant in which the number of persons (determined in accordance with paragraph (2)(a)) is less than 25, the requirements set out in paragraph (1) are regarded as having been complied with if, in the restaurant—
 - (a) 1 watercloset fitment and 1 lavatory basin are provided for both male persons and female persons; and
 - (b) 1 urinal is provided for male persons. (L.N. 191 of 2015)
- (1B) Where, in a restaurant in which the number of persons (determined in accordance with paragraph (2)(a)) is less than 25, only—
 - (a) 1 watercloset fitment and 1 lavatory basin are provided for both male persons and female persons; and
 - (b) 1 urinal is provided for male persons,
 the watercloset fitment and the urinal must be provided in separate rooms. (L.N. 191 of 2015)
- (1C) In every restaurant (except a restaurant to which paragraph (1B) applies), the watercloset fitments, urinals and lavatory basins for male persons and the watercloset fitments and lavatory basins for female persons must be provided in separate rooms exclusively for the use of male persons and female persons respectively. (L.N. 191 of 2015)
 - (2) For the purposes of this regulation-
 - (a) the number of persons in a restaurant is to be determined at the rate of 1 person for every 1.5 m² of the usable floor area of the restaurant (excluding the food room of the restaurant); and (L.N. 191 of 2015)
 - (b) the proportion of male persons to female persons in a restaurant is deemed to be 1:1.5. (L.N. 191 of 2015)

E. Calculation of Provision of Sanitary Fitments in Swimming Pool

Regulation 6(1)(h), Cap 132 CA – Conditions for issue of licence

Section:	6	Conditions for issue of licence	L.N. 320 of 1999	01/01/2000
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(1) No such licence shall be granted unless the Director is satisfied in relation to the swimming pool in respect of which the application for such licence was made, and in relation to the premises pertaining to such swimming pool, that-

- (h) not less than one watercloset is provided for every 25 persons who may be accommodated in the pool and not less than one urinal, fitted with a splash plate, is provided for every 50 such persons:

Provided that, where the Director is satisfied that sufficient water for flushing purposes is not available or cannot reasonably be obtained, the Director may accept equivalent dry latrine accommodation, such as aqua-prives and chemical closets, approved by the Director;

Pool Capacity

The capacity of standard pool should be calculated according to LCSD's guidelines, instead of Regulation 6(2) of Cap 132CA¹, at the rate of one person for every 1.5 m² of water surface of the pool. For leisure pool² and pool complex with **both** standard pool and leisure pool, the rate is one person for every 3.0 m² of water surface of the pool³.

¹ **Regulation 6(2)**

(2) For the purposes of subsection (1)(h), the number of persons who may be accommodated in any swimming pool shall be based on the maximum capacity of the pool and determined at the rate of one person for every 3 m² of the water surface of the pool.

² Leisure pools are free-form pools with a large percentage of shallow water and water play equipment (Paragraph 2.3.4 of the Recreation and Amenities Manual (Version 1998) refers).

³ The area of water surface per person for standard pool and leisure pool are based on paragraph 5 of Part A of the internal Guidelines on Management of Swimming Pools (Version May 2018).

ArchSD Knowledge Management



ARCHSD KNOWLEDGE PAPER

Design Guidelines for Universal Toilets in ArchSD Projects

EXECUTIVE SUMMARY

In response to Policy Address 2016 for providing larger toilet compartments in newly-built public toilets for priority use by elderly and to address Legco members' concern over the provision of unisex toilets on top of the statutory requirements, this Design Guidelines is prepared for reference by the Project Teams in liaison with the client departments on the requirements of universal toilets.

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Key Words : Knowledge Expertise, Architectural, Universal Accessibility

Deposition in KM Portal : AB Hub, Universal Accessibility

Design Guidelines for Universal Toilets in ArchSD Projects

1.0 Background

This Design Guidelines is for reference by the Project Teams in liaison with client departments on the requirements of universal toilets in response to the following:

- (a) 2016 Policy Address announced (under Responding to Population Ageing) that consideration be given to “providing larger toilet compartments in newly-built public toilets for priority use by elderly”.
- (b) Legco members’ concern over the provision of unisex toilets on top of the statutory requirements when the two Amendment Building Regulations regarding enhancement of the standards of toilet provisions gazetted in October 2015.

2.0 Design Considerations

Project Teams are to liaise with client departments at early stage of building projects, for both new and existing buildings, to establish the requirements of universal toilets.

2.1 Target Toilet Users

Client departments are required to state clearly in the design brief the toilet facilities to be provided for serving the target users which include:

- (a) Elderly or frail elderly with or without assistance
- (b) Persons with ambulant disabilities
- (c) Wheelchair users
- (d) Family
 - Baby needs diaper change (including by wheelchair users)
 - Children accompanied by father or mother
 - Father and/or mother taking care of children/babies
- (e) Persons with different sexual orientations (including LGBT, i.e. Lesbian, Gay, Bisexual and Transgender)

2.2 Layout Design Considerations

- (a) Larger compartment to provide space on either side or both sides of the water closet for (Photo 1 and 2):
 - assistant(s) to help the elderly or disabled into place
 - placement of walking aids
 - guide dog for the visually impaired
 - parking of baby strollers
- (b) Larger toilet compartments inside male or female toilet to be located nearest to the entrance for priority use by target users;
- (c) Locations of toilet to be easily identifiable and to avoid proximity to or obstruction by fire exit doors to the staircase;
- (d) Separate universal toilet should be accessible directly from a public area that does not necessitate traversing an area reserved for one sex only, access should be from a corridor so that it can be used by either sex with assistance from members of opposite sex, if necessary;
- (e) If two or more accessible toilet facilities are provided, at least one to be of opposite handed layout to the other(s);
- (f) Doors preferably to be double-swing or sliding and power-operated (Photo 3);
- (g) Water closet for children and wash hand basin with lower height enable children to use the facilities with minimum guardian assistance (Photo 4 and 5);
- (h) Diaper changing station (fixed or flap-type depends on the availability of space). For wheelchair user, leg space of minimum 400mm deep and height of station to be lower to suit (Photo 6);
- (i) Baby safety seats (fixed or flap-type depends on the availability of space) for securing the baby when the guardian is using the toilet (Photo 7 and 8);
- (j) Bench for resting and placement of shopping bags and/or heavy objects; and
- (k) Bed for people requiring diaper change on lying down position. (Photo 9).

Examples of the layouts for larger toilet compartment and individual toilet are shown in **Annex 1**. Please note that the layouts are not exhaustive in the catering for different combinations of toilet users. For the avoidance of doubt, alternative solutions making reference to the basic elements shown may equally suit the purpose.

2.3 Details Design Considerations

- (a) Grab bars
 - securely mounted on wall to sustain the full weight of an adult;
 - folding bar to provide additional support for standing up and transferring

- after using the closet, it should be durable and easy to operate;
- grab bars arranged in L-shaped to provide support and arm rest for elderly/adults when changing diapers.
- grab bars for wheelchair users should comply with Design Manual - Barrier Free Access 2008 (DMBFA).

(b) Doors

- doors design to allow internal and external (eg. standalone toilets) doors to be opened with horizontal forces of not more than 22N and 30N respectively;
- cubicle locks to be easy to operate with reasonable finger force; (Photo 10, 11 and 12)
- doors to be in luminous/ colour contrast with the walls and floors.
- doors for wheelchair users should comply with DMBFA.

(c) Avoidance of obstruction

- waste pipe, disposal bins and other fittings within the toilet, including those under the wash hand basin, be located to avoid any obstruction or creating a tripping hazard.

(d) Luminous/ colour contrast

- through the careful choice of colour and materials, luminous/ colour contrast to be maintained between the sanitary fittings against the background finishes. (Note 1) (Photo 13 and 14)

(e) Wash basins

- flat surface or ledge for placing hand-held objects to be provided;
- basin counter edges to be provided with notches on two sides for holding walking sticks, umbrellas and alike; (Note 2) (Photo 15)
- for cubicles provided with individual wash basins, the basins to be located reasonably close to the water closet to enable cleaning of hands before tidying up of clothes.

(f) Water closets

- back supports to be provided to closets such as in the form of a seat lid or an independent fixed cushion; (Note 3) (Photo 16)
- height of children W.C. may vary to suit different age range.
- height of WC for wheelchair users should comply with DMBFA.
- normal height should be adopted for WC for other adult users.

(g) Call bells

¹ Paragraph A(g), Page 66 and paragraph B(h), Page 68, Division 11 of Design Manual - Barrier Free Access 2008

² Section 5.8.2, Universal Accessibility: Best Practices and Guidelines

³ Section 6.11.3, Universal Accessibility: Best Practices and Guidelines

- locations to be within reach when user is sitting on the water closet and is lying on the floor (i.e. more than one call bell button) (Photo 17);
- actuation by push buttons or by pull cords fixed to the ceiling to suit the layout and operation of client/user departments.

(h) Full length safety mirror

- a full length safety mirror set at maximum 300mm above floor level caters the needs for users of all heights. (Note 4)

(i) Lighting

- lighting to be even throughout with no spotlight;
- design to avoid casting of shadows and forming dark corners. (Note 5)

(j) Signages

- Large size symbols with luminous contrast enables easy wayfinding; (Note 6) (Photo 18)
- Tactile signages to be provided for the visually impaired.

2.4 The above design considerations only cover design standards such as types of fittings and dimensional and space requirements. The standards of provisions such as the numbers of universal toilets and types of prospective users, eg. wheelchair users, the elderly, children and/or family and people with different sexual orientations, including LGBT etc., shall be determined by the client departments. The provision of family changing room shall also be agreed with the client departments.

2.5 The above are for reference of the basic standards and provisions in the design of universal toilets. Project Team may adopt, modify, supplement or amend the design considerations to meet the needs and constraints of individual venues.

3.0 **Statutory Considerations**

3.1 **Unisex toilet and Accessible unisex toilet**

3.1.1 OBLIGATORY REQUIREMENTS for accessible unisex toilet are prescribed under Division 11 of Schedule 3 of Building (Planning) Regulation which states:
Where toilet is provided on a floor, at least one shall be designed as an accessible unisex sanitary facility for use by persons of both sexes and access to which does not necessitate traversing an area reserved for one sex only. It shall be designed for general use and include adequate circulation space for wheelchair users.

⁴ Section 6.11.2, Universal Accessibility: Best Practices and Guidelines

⁵ Section 6.11.7, Universal Accessibility: Best Practices and Guidelines

⁶ Paragraph B(l), Page 68, Division 11 of Design Manual - Barrier Free Access 2008

- 3.1.2 Under BEST PRACTICE SECTION in the Design Manual: Barrier Free Access 2008, there is the following paragraph concerning accessible unisex toilet:
Accessible unisex toilet facilities can serve both sexes, those with or without assistance, and accommodate a great number of users. It is more easily identified than a facility in a separate-sex toilet and more likely to be available when required, particularly as the elderly and some persons with a disability need to use toilets more frequently than others. In addition, a unisex facility enables assistants of either sex to assist the user.

3.2 **Number of Soil Fitments**

- 3.2.1 Universal toilets and accessible unisex toilets shall be deemed to be included in the number of soil fitments required under the Building (Standards of Sanitary Fitments, Plumbing, Drainage Works and Latrines) Regulations. (the Regulations). (Note 7)
- 3.2.2 As the water closets for use by children are normally not fit for use by adults, they shall not be counted as part of the prescribed requirements under section 4 to 8 of the Regulations. (Note 8)
- 3.2.3 Universal toilets complying with the requirements in Design Manual: Barrier Free Access 2008 shall be accountable for calculation of accessible toilet provisions under the statutes.

3.3 **Power Operated Doors for Accessible Toilets**

- 3.3.1 The provision of power operated sliding door to accessible toilet has been accepted by ArchSD's Internal Building Committee as a standard modification in January 2016. (Note 9)

4.0 **Recommendation**

- 4.1 For all newly-built public toilets, larger toilet compartment for the priority use of elderly people will be provided inside the male and female toilet where practicable. Client departments should be consulted whether to adopt Type A or Type B elderly friendly toilet compartment;
- 4.2 In case client departments decided to provide universal toilet on top of the unisex accessible toilet required under DMBFA, Type C elderly and family friendly toilet

⁷ Paragraph 46, Page 60, Division 11 of Design Manual - Barrier Free Access 2008

⁸ PNAP ADV-28

⁹ Refer to "List of Standard Modifications / Exemptions "

http://asdiis/cmbiis/cmbiis_a/circulars/SCCU_Corner/SCCU_Corner.htm

would generally serve the purposes for most projects.

- 4.3 If client departments have project specific requirements, project teams may make reference to other options or variations of the options in these guidelines to agree the design with the client/user departments.

5.0 **Reference**

- 5.1 Design Manual - Barrier Free Access 2008, Buildings Department
- 5.2 Universal Accessibility: Best Practices and Guidelines, Architectural Services Department
- 5.3 The Building Regulations 2010, Part M – Access to and Use of Buildings, UK
- 5.4 Code on Accessibility in the Build Environment 2013, Building and Construction Authority, Singapore

5.0 Photo Reference



Photo 1. Larger toilet compartment



Photo 2. Larger toilet accommodates urinal and bed (Example in Japan)



Photo 3. Power-operated sliding door



Photo 4. Wash basin with lower height



Photo 5. Children W.C. inside toilet compartment (Note 10)



Photo 6. Diaper changing station

¹⁰ <http://www.vaughanpl.info/building/>



Photo 7. Larger toilet compartment to accommodate baby safety seat.



Photo 8. Baby safety seat



Photo 9. Larger toilet compartment accommodates chair and bed for adult diaper changing.



Photo 10. Easy to operate cubicle lock



Photo 11. Easy to operate cubicle lock for sliding door



Photo 12. Easy to operate cubicle lock for sliding door



Photo 13. Grab rails in colour contrast against the background finishes



Photo 14. Sanitary fittings in colour contrast against the adjoining finishes



Photo 15. Basin counter edge with a notch



Photo 16. Back supports to water closets



Photo 17. Call bells within reach at different locations



Photo 18. Large size symbols







- COMPARTMENT WITH SPACE PROVIDED NEXT TO THE WATER CLOSET (WC) FOR PLACEMENT OF WALKING AIDS.
- FOR USE BY THE ELDERLY WITH OR WITHOUT ACCOMPANYING HELPER(S).



- COMPARTMENT WITH SPACE PROVIDED ON BOTH SIDES OF THE WC, THE ELDERLY CAN BE ASSISTED ON EITHER SIDE OR BOTH SIDES OF THE WC.
- FOR USE BY THE ELDERLY WITH OR WITHOUT ACCOMPANYING HELPER(S).



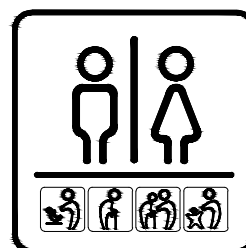
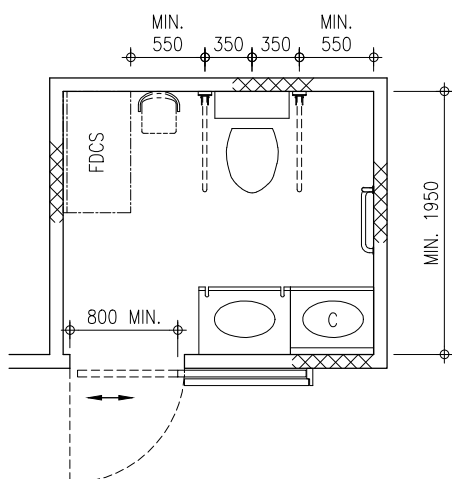
LEGEND ALL DIMENSIONS ARE IN mm.

- | | | |
|---|--|---|
|  | <ul style="list-style-type: none"> - POWER OPERATED SLIDING DOOR IS PREFERRED OVER SWING DOOR - FOR SWING DOORS, OUT-SWINGING DOOR IS PREFERRED OVER IN-SWINGING DOOR - IF IN-SWINGING DOOR IS REQUIRED DUE TO SITE CONSTRAINTS, DOOR HARDWARE (INCLUDING LOCKS AND HINGE) SHOULD ALLOW READILY REMOVAL/ OUT-SWINGING OF THE DOOR IN CASE OF EMERGENCY. |  <p>HORIZONTAL GRAB RAIL,
DIA. 32-40
AT 725-750 H.</p> |
|  | |  <p>FOLDABLE GRAB RAIL,
725-750 H.</p> |
|  | |  <p>VERTICAL GRAB RAIL,
DIA.32-40 & L≥600</p> |

SEPARATE UNIVERSAL TOILET

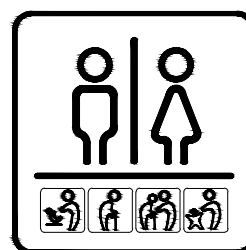
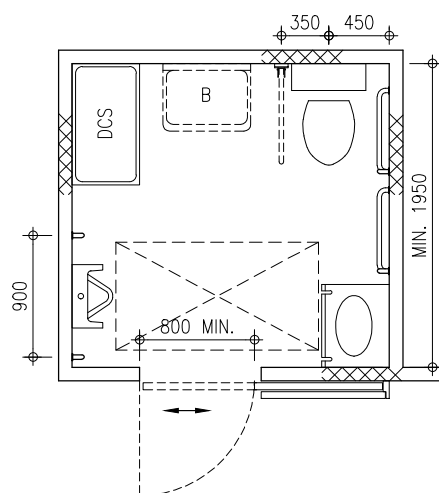
TYPE C: ELDERLY AND FAMILY FRIENDLY TOILET-1

- TOILET WITH BABY SAFETY SEAT, FLAP-TYPE DIAPER CHANGING STATION, CHILDREN FRIENDLY WASH BASIN AND SPACE PROVIDED ON BOTH SIDES OF THE WC. THE ELDERLY CAN BE ASSISTED ON EITHER SIDE OR BOTH SIDES OF THE WC.
- FOR USE BY THE ELDERLY WITH OR WITHOUT ACCOMPANYING HELPER(S), PERSONS WITH DIFFERENT SEXUAL ORIENTATIONS, FAMILY, CHILDREN AND BABYCAR.



TYPE D: ELDERLY AND FAMILY FRIENDLY TOILET-2

- TOILET WITH DIAPER CHANGING STATION, BENCH FOR RESTING AND URINAL FOR PERSONS WITH AMBULANT DISABILITIES.
- FOR USE BY THE ELDERLY WITH OR WITHOUT ACCOMPANYING HELPER(S), PERSONS WITH AMBULANT DISABILITIES, PERSONS WITH DIFFERENT SEXUAL ORIENTATIONS, FAMILY AND BABYCAR.



NOTE: LAYOUT AND SIGNAGE DESIGN FOR REFERENCE ONLY

LEGEND

ALL DIMENSIONS ARE IN mm.

- POWER OPERATED SLIDING DOOR IS PREFERRED OVER SWING DOOR
- SWING DOOR SHOULD BE OPENABLE OUTWARD



URINAL FOR PERSONS WITH AMBULANT DISABILITIES



VERTICAL GRAB RAIL, DIA. 32-40 & L ≥ 600



FOLDABLE GRAB RAIL, 725-750 H.



HORIZONTAL GRAB RAIL, DIA. 32-40 AT 725-750 H.



DIAPER CHANGING STATION MIN. 900x500 AT 680-750 FROM F.F.L.



FLAP-TYPE DIAPER CHANGING STATION MIN. 900x500



CLEAR LEVELLED SPACE 800x1500 IN FRONT OF URINAL



WASH BASIN WITH NOTCHES AT BASIN COUNTER EDGE



CHILDREN FRIENDLY WASH BASIN



FLAP-TYPE BENCH

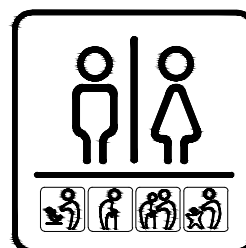
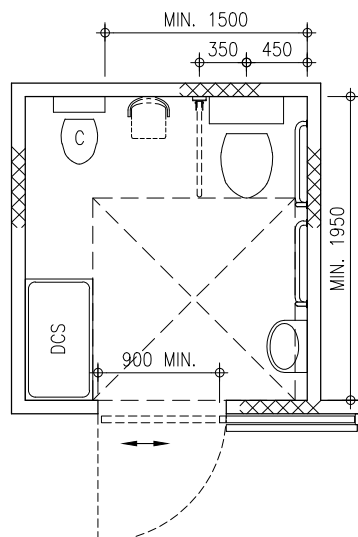


FLAP-TYPE BABY SAFETY SEAT

SEPARATE UNIVERSAL TOILET (Cont'd)

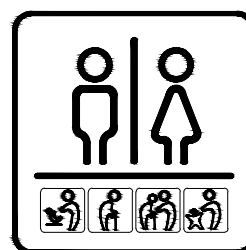
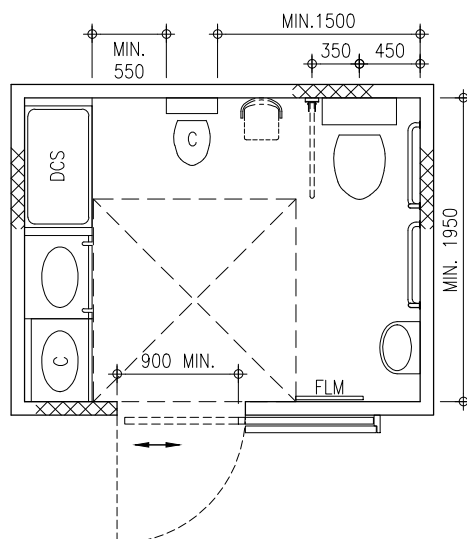
TYPE E: ACCESSIBLE ELDERLY AND FAMILY FRIENDLY TOILET-1

- ACCESSIBLE TOILET WITH DIAPER CHANGING STATION, BABY SAFETY SEAT AND CHILDREN WC.
- FOR USE BY THE ELDERLY WITH OR WITHOUT ACCOMPANYING HELPER(S), PERSONS WITH A DISABILITY, PERSONS WITH DIFFERENT SEXUAL ORIENTATIONS, FAMILY, CHILDREN, BABYCARER AND WHEELCHAIR USERS WHO NEED TO TAKE CARE OF BABIES OR CHILDREN.



TYPE F: ACCESSIBLE ELDERLY AND FAMILY FRIENDLY TOILET-2

- ACCESSIBLE TOILET WITH DIAPER CHANGING STATION, BABY SAFETY SEAT, CHILDREN FRIENDLY WASH BASIN AND CHILDREN WC.
- FOR USE BY THE ELDERLY WITH OR WITHOUT ACCOMPANYING HELPER(S), PERSONS WITH A DISABILITY, PERSONS WITH DIFFERENT SEXUAL ORIENTATIONS, FAMILY, CHILDREN AND WHEELCHAIR USERS WHO NEED TO TAKE CARE OF BABIES OR CHILDREN.



NOTE: LAYOUT AND SIGNAGE DESIGN FOR REFERENCE ONLY

LEGEND ALL DIMENSIONS ARE IN mm.

- POWER OPERATED SLIDING DOOR IS PREFERRED OVER SWING DOOR
 - SWING DOOR SHOULD BE OPENABLE OUTWARD

VERTICAL GRAB RAIL, DIA. 32-40 & L ≥ 600

HORIZONTAL GRAB RAIL, DIA. 32-40 AT 725-750 H.

FLAP-TYPE BABY SAFETY SEAT

FOLDABLE GRAB RAIL, 725-750 H.

DIAPER CHANGING STATION MIN. 900x500 AT 680-750 FROM F.F.L.

WASH BASIN WITH NOTCHES AT BASIN COUNTER EDGE

CHILDREN FRIENDLY WASH BASIN

1500 X 1500 WHEELCHAIR MANOEUVRING SPACE

CHILDREN WC

SMALL WASH BASIN FOR WHEELCHAIR USER

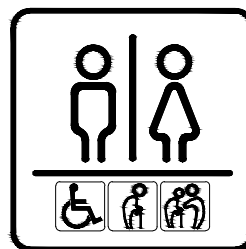
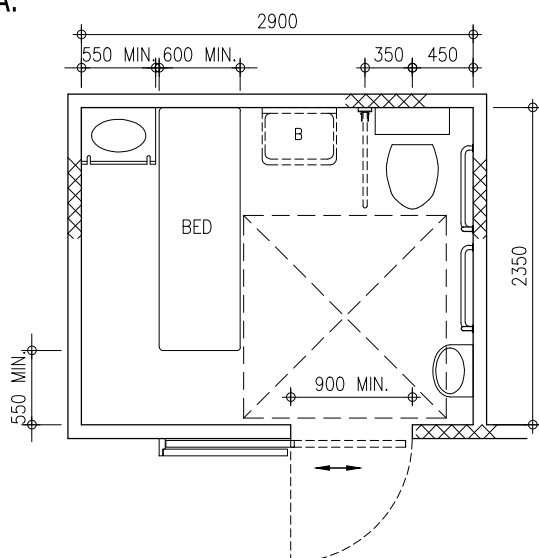
FULL LENGTH MIRROR

SEPARATE UNIVERSAL TOILET (Cont'd)

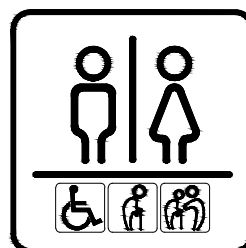
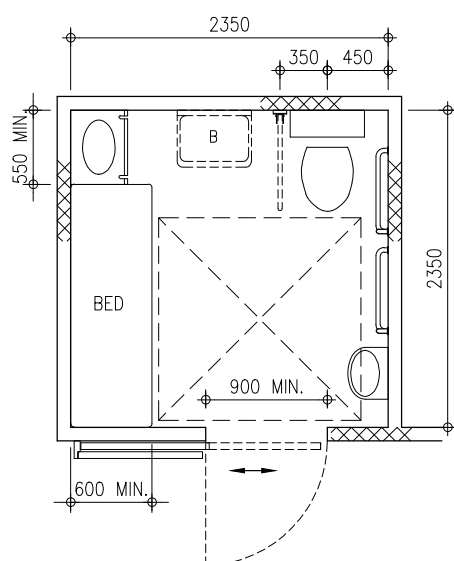
TYPE G: ACCESSIBLE ELDERLY AND FAMILY FRIENDLY TOILET-3

- ACCESSIBLE TOILET WITH BED FOR ADULT DIAPER CHANGING AND BENCH FOR RESTING.
- FOR USE BY THE ELDERLY WITH OR WITHOUT ACCOMPANYING HELPER(S), PERSONS WITH A DISABILITY, PERSONS WITH DIFFERENT SEXUAL ORIENTATIONS, FAMILY AND WHEELCHAIR USERS.

OPTION A:



OPTION B:



NOTE: LAYOUT AND SIGNAGE DESIGN FOR REFERENCE ONLY

LEGEND ALL DIMENSIONS ARE IN mm.

- POWER OPERATED SLIDING DOOR IS PREFERRED OVER SWING DOOR
- SWING DOOR SHOULD BE OPENABLE OUTWARD

VERTICAL GRAB RAIL,
DIA. 32-40 & L ≥ 600

HORIZONTAL GRAB RAIL,
DIA. 32-40 AT 725-750 H.



WASH BASIN WITH
NOTCHES AT BASIN
COUNTER EDGE



1500 X 1500
WHEELCHAIR
MANOEUVRING SPACE

BED

FOLDABLE GRAB RAIL,
725-750 H.



SMALL WASH BASIN
FOR WHEELCHAIR USER



FLAP-TYPE BENCH

Annex V - Part (B)

Schedule of Requirements, Finishes & Fittings

Accommodation	Requirements
1. Public Open Space	<p>(A) General Requirements</p> <p>(a) Existing trees:</p> <ul style="list-style-type: none">- Existing trees (if any) on site or adjoining site boundary are to be retained and protected as an integral part of the external works design; and marked on the proposal with tree pruning/transplanting/felling requiring approval.- Works to protect existing trees (if any) during construction and as permanent measures must be shown in particular where level changes are proposed within the crown spread of the trees. <p>(b) Site formation:</p> <ul style="list-style-type: none">- Retaining structures/massive walls of the adjoining development (if any) are to receive a suitable surface finish and vertical greening with screening or climbing species to mitigate visual impact. <p>(c) Structural slabs:</p> <ul style="list-style-type: none">- Where the POS located above structural slabs, they shall be structurally designed for the superimposed loading effect for the function of the POS, in particular of wet soil (a minimum soil depth measured 1.2 m for continuous planting strip and 1.5 m for confined tree pits), drainage and mass planting including trees at maturity, wind load and any other loading requirements- The structural slabs for which the POS located above should be a standalone design that is with water-proofing, drainage system and any ancillary measures to prevent water seepage from the POS to the accommodation below.

(d) Demarcation of boundaries :

- All site boundaries shall be clearly demarcated. Clear demarcation of the POS from other public and private spaces by changes in paving pattern/material or insert a narrow metal strip on paving is required as appropriate. Physical boundary will only be required upon request from the DLCS.
- The landscaped areas with mass planting should demarcate the POS boundary and provide a continuous green buffer with not less than 3 m clear width planters to screen off hard structure of the development as appropriate.

(e) Circulation and connectivity:

- Sufficient space for the pedestrian circulation in the POS and to the planned open spaces, shall be allowed.
- Entrances to be located off main thoroughfares at various points around the site, designed to be obvious, welcoming and attractive.
- The main entrance and all public access points shall be accessible to people with disabilities, including ramps for wheelchairs.
- Entrances are preferably with physical barrier to deter bicycles and hawking activities.
- Physical barriers and removable lockable stainless steel bollards to be provided at the vehicular access separated from the pedestrian entrance.
- Other paths within the open space may be of an informal type, meandering through planted areas, and with width in humane scale.

(f) Surveillance and legibility:

- Visual clutter of fences and posts including light post and signage post should be minimized.
- Visual profiles of slender and light weight hard landscape elements are preferred.
- Minimal concrete structure to impart a sense of openness in the POS.
- Use of fencings and railings for physical separation/barriers should be kept minimal. Barrier designs should be visually unobtrusive, look light and open.

- Use of kerb edge planters is preferred over raised planters.

(g) Soft and hard landscape area ratio :

- Not less than 20% of the Public Open Space Area shall be planted with trees, shrubs or other plants as far as practicable. The decision of the DLCS on which landscaping works proposed by the Purchaser constitute the 20% referred to in this sub-clause (g) shall be final and binding on the Purchaser, The DLCS at his sole discretion may accept other non-planting features proposed by the Purchaser as an alternative to planting trees, shrubs or other plants. For the avoidance of doubt, the landscaping works provided under this paragraph (g) shall not form part of the Greenery Area referred to in Special Condition No. (10)(g)(i) hereof.
- Greening opportunities shall be maximized as such if both soft and hard landscape treatments can serve the same functions, the soft landscape options should be a priority (e.g. green hedges in lieu of railings and green surface in lieu of hard surface where appropriate).
- Tree planting in priority together with other intensive greening means shall be designed to create a luxurious greening environment. Vertical greening to further maximize greening mass should be designed as appropriate.

(h) Universal Accessibility/Barrier-free Design :

- The external space design shall make reference to ArchSD's 'Universal Accessibility- Best Practices and Guidelines' and study on 'Universal Accessibility for External Areas, Open Spaces and Green Spaces'.
- The layout and design shall allow for safe and comfortable use by the public including children, the elderly and people with disabilities.
- Clutter of fences and posts including light posts and signage posts should be minimized and free from main passage to the facility.
- Use of fencings and railings for physical separation/barriers should be kept minimal. Barrier designs should be carefully designed which should not be obtrusive but will visually alert the visually impaired persons.
- Rough and sharp edges are to be eliminated for all structures, planters, equipment and furniture.

- Railings, structures and inclined surfaces that encourage climbing or potential misuse as play equipment shall be avoided.
- Removable lockable bollards to be provided at the vehicular access separated from the pedestrian flow.
- Passages and paths connected to the facility shall be sufficiently wide to accommodate wheelchairs users.

(i) Color scheme :

- The color scheme of all finishes and materials of the POS should be harmonious, appealing and in a co-ordinated design. Choice of colour shall help to generate an overall theme and enhance site legibility. It should visually harmonise the landscape/streetscape of the area.

(j) Plans :

- Detailed plans and sections are required, normally at 1:200 (or more detailed) to show the extent and location of the hard and soft landscape works, covering the finishes for all hardworks elements, landscaping/external lighting layout, character of planting and species list, soil depth, drainage design, irrigation layout and maintenance intentions.

(k) Horticultural Maintenance Operation Manuel :

- Submission of horticultural maintenance operation manual of the designed softworks for the DLCS's approval is required.

(B) Hard Landscaping

(a) Planter :

(i) Planter location/layout

- Planters should be free of any manholes, inspection chambers, draw pits and the like. If unavoidable, service pits in planters shall be so constructed that covers are well above soil level.
- The planting areas shall be maximized and integrated with the building design.
- Planters beds should preferably be continuous and open-bottom, and under direct sunlight. It should be provided with good drainage designs. For closed-bottom planters, subsoil drains should be provided.

- Planters should only be provided in locations where plants can be accessible for maintenance. Planters which are in an inaccessible location will be difficult or impossible to plant and maintain.
- Planters shall be provided for perimeter planting to demarcate the POS and the property development that may include tree planting at peripheral shall be considered.
- The pedestrian routes should be duly considered in planter layout to avoid pedestrian cutting corners over planters

(ii) Planter height

- For planters on grade, use of kerb edge planters is preferred over raised planters in general. Raised planters if any only for functional need such as retaining, soil retention and cope with gradient change purposes and for wheelchair users, to be in open bottom/perforated subsoil drainage pipes wrapped with filter membrane.
- Raised planter walls from paving levels shall in general be at maximum 750 mm.
- Where planters are located at areas with demand of seating facilities but lack of space, top of planters can be profiled and dimensioned for informal seating but with inoffensive deterrents for sleeping/lying.

(iii) Planter width and depth

- The minimum internal width of planter beds should be 1 500mm for trees; and 600mm for shrubs and ground covers. The minimum soil depth for trees is 1 200mm, 600mm for shrubs, and 300mm for ground covers; specifically minimum 3 m clear planting width in continuous planting strip at periphery for demarcating the POS and the development is required,
- Raised planter shall be minimum 1.2 m clear soil depth for continuous planting strip and 1.5 m soil depth for confined planting pits and width; 3 m wide planter is preferred and 1 m clear width at minimum for tree planting.

(iv) Planter base and drainage

- Bases of planters at grade shall be left free draining.

- The use of planters with base (portable planters) shall only be allowed as the last resort where no other means to provide greening,.
- The base of all planters over structure shall be waterproofed to prevent leakage to lower levels; and areas which are not free-draining shall be laid with adequate sub-soil drains.
- No weep holes on raised planters. Planters shall be drained by internal drainage system which will collect water in the planter and dispose of it through the base of the planter. Falls should be laid to the drain outlets in the base of the planter.
- Root control barriers must be added below soil where tree roots may cause potential problems to underground services and waterproofing membrane.
- The drainage system should be checked and tested prior to covering up.

(v) Planter wall/finish

- Ensure that all inside faces of planters are adequately waterproofed to prevent leakage at lower levels.
- Planter walls shall not have acute angles and sharp corners and with finishes of high quality, easy to maintain, natural looking/neutral tone for external space or to match with building design.
- Anchor points (concealed) fixed to wall inside to enable guying of tree planting shall be added as appropriate.
- Provision of weep holes will not be acceptable.
- The finish to planters should be durable and maintainable.
- Planter kerbs are preferably in solid natural stone with tonal/visual contrast to the adjoining general paving that may provide cues and guidance for people with visual impairment along a route.
- Planter kerbs should be 100mm approx. in height to provide proper containment.

(b) Special Landscaping Features :

- Special features that help to create a theme/unique character of the POS should be designed and to be agreed with the DArchS and DLCS.
- Special features may include gateway structure, focal feature, water feature, lighting features, sculptural-like hard landscape elements and artwork incorporated into landscaping furniture.

(c) Landscaping Furniture :

- All the materials and finishes are to be suitable for external use of high quality, durable, environmentally friendly, maintenance free and vandal-proof.
- Sustainable timber (FSC-Certified timber products) shall be specified for timber works.
- Landscaping furniture is to be coordinated in style and colour scheme as a family and compatible in design with the planned/enhanced streetscape design adjoining.
- To minimize visual clutter and tight space, integrated design of compatible elements for combined use in furniture design is preferred. Installation of superfluous additions should be avoided.
- Placement and spatial arrangement of street furniture should be carefully considered to suit the function, activities, aesthetics, legibility and accessibility (barrier-free).

(i) Seat

- Seats with backrests and armrests as appropriate shall be provided at suitable locations set-back/recessed from the main circulation passageway. Inoffensive design of deterrents to people lying on long seats with mounting options.
- Seating design should be smart and flexible for high intensity of use. Benches (backless) integrated into top of raised planters in locations with a high turnover of users should be provided.
- Quantity and location of installation to be approved by the DLCS and DArchS.

(ii) Litter bin

- In-situ and specially designed litter bins able for easy dbook's cleansing operation functions shall be either sturdy proprietary product or specially designed covered litter bins containing an internal lightweight metal removable rust-free container with hand grips for easy lifting and drain holes.
- Quantity and location of installation to be approved by the DLCS.

(iii) Lockable water point

- Proper irrigation systems and lockable water points with storage box for water hose shall be provided for manual plant watering and general cleaning purpose and designed for a hose pipe connection and located at the rate of 1 no. where the planting area is less than 250 m² and 1 no. per 20 meter hose radius, where the planting area exceeds 250 m².
- Spacing of water points should be approximately 40 m center to center.
- Tap of water points should be of a master-key opening design.
- Placement of water points should be carefully designed as appropriate so as not to be visually intrusive and screened by planting; slender/slim visual profile and 'transparent' finishes is preferred.
- Numbering of water points is required.

(iv) Tree guard :

- Tree guards are required where necessary only and should be limited to locations where serious impact and abuse is considered likely. Tree guards shall not be used purely for support (guying & tying).
- They shall be designed without sharp points and the width between uprights shall prevent children from being accidentally stuck.
- Underground guying for trees shall be provided to minimize visual clutter wherever feasible.

- Appropriate dia. size of tree guard shall be specified for semi-mature size trees.

(v) Tree grille/surround :

- Tree grilles/surround for pavement trees should match and align with the adjoining paving design to avoid small cut pieces of paving blocks with details to prevent upheaving and foot tripping.
- Edge restraints are required to prevent displacement if for flexible pavement.
- Tree uplights to be integrated in tree grilles design for lighting effect as appropriate.
- Tree surrounds should be of pervious materials for better root aeration.
- Tree grilles with small holes should be used to prevent rubbish entrapment.

(vi) Rain shelter/arbour/pavilion

- Rain shelters/arbours/pavilions of maintenance free materials to be provided at appropriate locations, Sitting-out area and the Fitness Corners for the Elderly, with seats underneath and support for climbers shall be incorporated into the design e.g. planters at the base of the support columns and vinyl coated mesh as a support framework.

(vii) Outdoor drinking fountain cum hand-wash basin

- Outdoor drinking fountains cum hand-wash basins are to be provided at suitable locations and quantities approved by the DLCS and the DArchS.
- The design including pedestal/plinth for fixing shall be coordinated with the overall theme/style of the park/landscape furniture as a family and able to cater for children and barrier-free design for the disabled.
- Sufficient operation space shall be allowed.

(viii) Signage and Plant Label

- Signage in different functions should be coordinated in style and design.

- Signage shall be bilingual, well illuminated, vandal-proof and water-proof.
- The LCSD's logo, park maps, poster display boxes, notice boards, directional signs and composite signage boards to be provided at the main entrance and suitable locations, (preferred material is stainless steel).
- Proposed signage location and content (including graphics and lettering) to be approved by the DLCS and DArchS prior to installation.
- Plant labels should be bilingual, vandal-proof and water-proof and provided to all trees and plants of special interest; and text, graphic and fixing details to be agreed with the DLCS and the DArchS.

(d) Landscaping/External lighting

- External lighting design shall be considered holistically and coordinated with the general layout and illumination level, uniformity appropriate to the setting and function of the space with a view for nightscape enhancement.
- Entrances, passage and changes in level are to be lit.
- Lighting to create a directional sense should be provided along the main passage to the facility and where appropriate.
- Energy saving lighting fittings shall be installed.
- The luminaries shall be generally in the form of pole top lanterns, bollards and recessed wall-mounted types. Post heights and quantities shall be appropriate to setting, functions and for different mood/atmosphere. Ornamental spotlights shall be provided at features and areas of landscape interest. For locations near raised planters, recessed wall-mounted lighting is preferred. All steps shall be provided with footlights as appropriate.
- Luminaries installed at low level shall be of robust construction fitted with vandal-proof diffusers, integrated protective cage /screens supplied from the same manufacturer of the luminaries. Bollard lighting, if provided, shall be securely fixed on concrete base /block. Low-level light fittings shall be designed and installed in a manner safe to the public. No sharp edges or projection shall be accepted.

- Lighting columns creating clutter should be minimized in general except for aesthetic reasons; and to be located in hard paved areas (including cable runs) at verge of the planters and be incorporated in planter walls or kerbs, but should avoid planting beds where possible (refer Building Services requirements). Service box of external lights should be water-proof and non-obstructive to users.
- All external lights shall be controlled via automatic switches, photo sensors and timers in zonal design incorporated with manual by-pass inside the Meter Room and be serially numbered.

(e) External Paving :

- All external paved area with high quality, durable, non-slip (Slip/Skid Resistance Value (SRV 40) and increased in standard on gradient ground), low water absorption (less than 2%) for heavily trafficked areas, stain resistant, non-glaring, natural looking and maintenance-free materials, suitable for the passage of wheelchairs.
- Paving design with visual interest shall be provided for the main entrance to the facility that shall be visually compatible and clearly delineated with other adjoining street paving.
- All steps to be finished with anti-slip nosing pieces of visual/tonal contrast.
- Tactile warning paving with visual/tonal contrast shall be provided at passages connected to main entrances.

(f) Drainage

- The whole POS shall be well drained. Surface drainage channels connected to storm water drains shall be located at the base of walls, ramps and steps and as necessary throughout the paved area to collect surface water runoff, and prevent ponding and flooding.
- Drainage channel covers shall be of durable/non-slip material with a design and colour to match with the paving.
- Manhole covers at paving area shall be provided with matching cover recessed and finished flush with the adjacent paving material and pattern, provided with keyholes to allow easy removal by 2 persons. Recessed frames or double cover of manhole covers should be designed for special paving areas for keeping the paving pattern intact.

- The grating cover located in area with vehicular access shall be of class C250 to BS EN 124: 1994.
- The slots/holes width/dia. in grating cover shall not be greater than 12mm.

(C) Soft Landscaping

- All landscape soft works provisions to conform to the standards of quality, performance or both materials and workmanship and submission/certificates as stipulated in the Section 25 Architectural Services Department General Specification for Building 2007.
- All planting materials shall be of high quality, with size and spacing to create a good overall effect on completion of the planting area, allowing space to grow.

(a) Planting :

(i) Planting design

- A holistic and balanced approach for achieving both ecological/bio-diversity and amenity objectives in terms of choice of native and exotic species should be attained in the planting design.
- Perimeter planting of massive large, fast growing, spreading, shade and trees bearing conspicuous flowers with under-storey shrubs and groundcover for both colour and texture to demarcate the POS and the development shall be provided.
- Not least than heavy standard size trees shall be used and semi-mature trees should be specified at prime/visual locations as focal points, according to the species for visual interest.
- Feature/theme planting with different flowering periods to give accent and interest shall be provided.

(ii) Planting layout

- The layout shall enhance micro-climate (ventilation, sunlight/sunshade etc.) and with due consideration to public safety/surveillance in general.
- Feature/theme planting with different flowering periods shall be used to emphasize entrances or special features and to create interest.

(iii) Selection of plants

- Plants chosen shall be suited to the site-specific characteristics, conditions and location as necessary e.g. wind and salt spray tolerant along seafront and shade tolerant under structure etc.
- Plants with year round leaf falling characteristic and plants susceptible to insect attack should be avoided.
- Shade trees, scented plants and plants with visual interest/seasonal color/flowering change shall be provided adjacent to seating areas.
- Shade trees with showy flowers should be planted along pathways.
- Creepers/climbers should be planted to maximize vertical greening where appropriate. Long climbing plants should be considered for arbours/pergolas designed for climbing plants.
- Trees with special interest (spectacular flowers/seasonal change/good form) shall be planted at entrances and at terminal views to be more inviting and to create a sense of place.
- Consideration should be given when planting tall plants for maintaining sightlines to signage and preventing obstruction to light fittings.

(iv) Planting Soil

- Specifications on soiling materials shall refer to the requirements in Section 25 of General Specification for Building 2007, Arch SD as applicable.
- The soil used shall be free draining, free from stones larger than 25mm, concrete and debris.
- Soil shall comprise an organic growing medium e.g. fabricated soil comprising 1 part soil conditioner to 3 parts decomposed granite, mixed on site.
- Heavy clay soil and builders debris shall not be used as a base to fill planters.
- Infill of raised planters shall be to within 50mm of the top of the planter wall.

(b) Guying and Underground Guying :

- Guying for small tree planting.
- Underground guying is preferred if feasible; and should be allowed in the hard landscape design.

(c) Access :

- Soil and plant materials will need to be conveyed to the planters that paved areas providing access should be designed to take loading from small vehicles such as dumpers and motorized carts and that should be arranged properly as appropriate.

(d) Pest Control :

- All the soft landscape materials shall be free of pest infection.
- Precautionary measures and treatments for Red Imported Fire Ant Control are required.
- Rodent control shall be in place.
- All planters shall be well drained to prevent standing water

(e) After-care/Maintenance :

- Planting areas to be weeded as necessary throughout the 12 months Establishment Period.
- All trees to be supported with guying/tree stakes and rubber ties until properly established. Removal of staking after establishment is required before hand over.
- All planted areas to be maintained throughout the planting and Establishment Period and provided with fertiliser and mulching. Over dose of fertilizer shall be avoided.
- A 12 month maintenance schedule to be provided for agreement with the DLCS and DArchS before the commencement of Establishment Period for landscape soft work.
- Attendance in carrying out 12-month Establishment Works shall be logged in with LCSO operation staff for monitoring of the maintenance performance.

(D) A Sitting-out Area

- As part of the POS, the above (A), (B) and (C) shall be followed in the design of the Sitting-out Areas where applicable and considered appropriate as well as agreed by LCSD.
- Provision of seats under arbours and with rain shelter effect/pergolas and pavilion in low maintenance design and durable materials.
- Wire-mesh with resilient vinyl coating climbing frame or equivalent climbing wire in neutral colour should be provided as a support for climbing plants for arbours/pergolas.
- Design of seating with seat height in due consideration of the elderly with back and arm rests as a family of the landscape furniture. Width and length of seating should be carefully designed to prevent people from lying; non-visual deterrents may be added.
- No sharp angles/corners/edges in the design of the sitting out area.
- The placement of the seats should be carefully designed to provide privacy yet for socializing.
- Lighting design and mounting height of pole lights should be appropriate to the setting as to create a relaxed and intimacy mood.
- Drinking fountain(s) cum wash-hand basin(s) should be provided at suitable locations.

(E) Smart Fitness/ Workout Station

(a) General

As part of the POS, the above (A), (B) and (C) shall be followed in the design of the Fitness Corner where applicable and considered appropriate.

(b) Fitness equipment and workout stations

- . Smart stand-alone fitness equipment (e.g. with touch screen, USB charging Function, etc) suitable for use by all ages, all-in-one workout station and seats with backrests, armrests shall be provided.
- Part(s) of the equipment should be accessible to person with disabilities.

- Installation of floodlight of minimum 50 lux lighting level as the existing fitness corners of LCSD.
- Choice of the fitness/workout stations and equipment as agreed with the DLCS and the DArchS.
- Safety matting shall be laid underneath the fitness / Workout station with safety margin and circulation area allowed.
- The fitness corner should be well lit and provided with drinking fountains cum hand-wash basins.
- The location is to be easily accessible, safe and secure. The stations should be enclosed by plantings to create a peaceful and comfortable environment for users.
- Proprietary fitness equipment with shelter structure should be provided and /or covered seating/rain shelters with placement evenly distributed and be enclosed by luxurious planting that provides shading.
- Bilingual guidelines together with graphics and diagrams on how to use the equipment safely should be displayed.

(c) Impact Absorbing Surfacing Material (IASM) or Safety matting

- Any area within the safety margins, underneath and surrounding fitness equipment shall be provided with safety matting. Extent of the safety matting surfaces shall cater for adequate safety margins for individual equipment and for reasonable circulation.
- Safety matting in special theme design; thickness must suit and cater for the critical fall height (as defined in BS EN 1177:1998 as the play equipment under which it is placed). The material for safety matting shall comply with recognized international safety standard (BS EN 1177: 1998 and BS 7188:1998) or equivalent. Level flat edge shall be provided for impact absorbing surface areas.
- Adequate drainage must be provided under the safety matting.
- All underground facilities including cables, drain pipes, manholes, channels etc. shall not be located within the areas of safety matting.

(F) Service Block

- The Service Block shall be designed and constructed according to the requirements in the SoA of Service Block and equipped with building services including electricity and/or water in order to facilitate its operation.
- The following facilities shall be provided:-
 - (i) a park office (air-conditioned) for about 6 venue staff (3 in a shift) located at convenient location.
 - (ii) one small conference room.
 - (iii) one staff roll-call point room with pantry.
 - (iv) central control of CCTV with monitors and lighting located and Public Address System inside office block.
 - (v) one Baby-care Room (air-conditioned).
 - (vi) one First Aid Room (air-conditioned) with hot water supply.
 - (vii) three store rooms (for horticultural chemicals, equipment and general stores respectively).
 - (viii) one dangerous goods store for horticultural machineries.
- The construction shall include design, supply, deliver to Site and erect block walls, sanitary facilities, E&M services, windows, doors, louvers, roofings, drainage fittings, miscellaneous fittings and fixtures, E&M equipment and external/internal finishes, etc.
- All as-built records and test certificates shall be certified by the Contractor's Authorized Person (AP) / Registered Structural Engineer (RSE) / Registered Building Services Engineer as appropriate.
- Appropriate energy efficient features and renewable energy technologies shall be incorporated in the building design. Relevant technical circular and guidelines, including but not limited to ETWB TC(W) No. 16/2005 and DEVB TC No. 5/2009, shall be considered.
- The finishes shall be of high quality, durable, recycled, and requiring minimal maintenance. All structural steel shall be hot-rolled or hot-finished structural steel.

(G) Toilet cum Changing Rooms

- The Ancillary Block shall be designed and constructed according to the requirements in the SoA of Ancillary Block. The building design shall conform to the Buildings Ordinance (Cap. 123 Law of Hong Kong) and related legislations as designed in PNAP 115 (ADV-2) – Legislation and Publications Affecting the Building Industry, Code of Practice for Fire Safety in Buildings, 2011 issued by BD and Codes of Practice for Minimum Fire Service Installations and Equipment and Inspection, Testing and Maintenance of Installations and Equipment (April 2012 revision) issued by FSD.
- The following facilities (ventilated) shall be provided conforming to the latest requirements of LCSD:-
 - (i) one male toilet and changing room with 4 toilet cubicles (including 1 for children and 1 for elderly) and 3 urinals (1 for children) and 5 shower cubicles with hot-water supply.
 - (ii) one female toilet and changing room with 8 toilet cubicles (including 1 for children and 1 for elderly) and 5 shower cubicles with hot-water supply.
 - (iii) one accessible toilet and showering for persons with disabilities.
 - (iv) two universal toilets with shower facilities.
- The aesthetic design shall be forwarded to Design Advisory Panel of the ArchSD for advice as a mandatory requirement as stated in ETWB TC(W) No. 8/2005.
- The Contractor shall develop the layout in details and in close liaison with relevant government departments, in particular LCSD and ArchSD, who will be the user and maintenance party of the Ancillary Block.
- Design of the internal layout shall focus on efficiency in operation and relevant maintenance agents in carrying out inspection and maintenance duties. Access leading to the Ancillary Block must be designed to comply with its operational use.
- Water supply shall be provided for fire services installation, route maintenance of E&M equipment, cleansing, and external horticultural maintenance (if any).
- Emergency vehicular access (EVA) of not less than 7.3m wide and 5.1m high shall be provided to the Ancillary Block. Turning facilities suitable for fire appliances shall be provided at the ends of EVA as required in compliance with the Code of Practice for Fire Safety in Buildings 2011.

- All as-built records and test certificates shall be certified by the Contractor's Authorized Person (AP) / Registered Structural Engineer (RSE) / Registered Building Services Engineer as appropriate.
- Shall consider the use of renewable energy according to the requirements in the circular on green government buildings jointly promulgate by Development Bureau and Environment Bureau.
- The finishes shall be of high quality, durable, recycled, and requiring minimal maintenance. All structural steel shall be hot-rolled or hot-finished structural steel.

(G) Basketball courts

- Two basketball color-coated courts preferably in north-south orientation shall be constructed. Each basketball court should be 28m x 15m with safety margin of 2m from base to fence, from side to fence and court to court, measured up to the latest Federation Internationale de Basketball (FIBA) standards.
- Surrounding fence (preferable) of 3m – 4.5m height or backstops at both end of the courts, with adequate circulation area and perimeter fencing.
- Separate entrance for two courts with lockable gates and lockable storage cages outside the safety margin for use by players shall be provided.
- Installation of floodlight of minimum 200 lux lighting level as the existing outdoor basketball courts of LCSD.
- Benches with shelter for users as appropriate.

(H) Futsal Pitches

- Two futsal color-coated pitches preferably in north-south orientation shall be constructed. It shall be ideally be 40m (L) x 20m (W) for cum use with Handball, or measured up to the latest FIFA standards for non-international matches (i.e. length: 25m (min) - 42m (max) and width: 16m (min) – 25m (max)) and the safety margin for each court shall be 5m (most ideal) or 3m (with padding around the pitch).
- Surrounding fence (preferable) of height 7m height or backstops at both end of the pitches with adequate circulation area and perimeter fencing.
- Installation of floodlight of minimum 200 lux lighting level as the existing outdoor futsal pitches of LCSD.

- Separate entrance for two courts with lockable gates and lockable storage cages outside the safety margin for use by players shall be provided.

(I) Spectator Stand

- The spectator stand under shelter with not less than 200 (preferably up to 500 seats subject to space available) primarily served for futsal pitches shall be constructed.
- The spectator stand shall be permanently fixed at a location to facilitate both users of futsal pitches and basketball courts.

(J) Adventurous/Innovative Inclusive Playground

- The design shall be colourful and durable multi-play and interesting play equipment for toddlers and children (including disabled and visually impaired children).
- Part(s) of the play equipment should be accessible to children with disabilities for inclusive play and the play equipment integrated with the landscape and tailor-made play equipment are preferred.
- All play equipment with safety matting underneath must conform to the recognised international safety standards with documentary proof.
- Parental supervision areas with covered seating, wash-hand basins, bilingual signs with user instructions should be provided adjacent to the play area.
- Installation of floodlight of minimum 50 lux lighting level as the existing outdoor children playground of LCSD.
- Playground equipment shall rest on concrete footings and shall not be surface-mounted on the concrete base. Unless otherwise endorsed by a Registered Structural Engineer, each footing shall be a minimum of 600 mm in depth.
- The maximum critical fall height (or free height of fall) of playground equipment for children of age 2-5 shall not exceed 1.5m, while age 5-12 shall not exceed 2.0m.
- The use zone surrounding the playground equipment, which shall consist of obstacle-free surfacing that conforms to ASTM F1292 appropriate for the fall height of the installed playground equipment, shall extend for no less than 1.83m in all directions.

- The playground equipment shall meet the requirements of the US Consumer Product Safety Commission (CPSC), ASTM F1487, BS EN 1176, the Americans with Disabilities Act (ADA) and other relevant international standards.
 - Acceptable materials for equipment including:-
 - (i) Deck - perforated galvanized steel with PVC coating.
 - (ii) Post - aluminum or galvanized steel with appropriate finish coating.
 - (iii) Vertical and horizontal climbers - galvanized steel with appropriate finish coating
 - (iv) Rails - galvanized steel with appropriate finish coating.
 - (v) Play panel - high density polythene
 - (vi) Slide – Polythene
 - Each post of equipment shall be a minimum of 125mm in diameter.
- (K) Security Guard Booth
- A security guard booth at the entrance of the park with 3 nos. of power sockets for electric apparatus therein shall be provided.

Annex V - Part (C)

Environmental and Building Services Installation Requirements

Accommodation (Area m ²)			Requirements	
1. Public Open Space	(a)	External Lighting :	(i)	The POS entrances shall be illuminated by LED spot/flood lights as appropriate. Adequate illumination shall be provided at passageways, pavilions, structures and all open areas. Decorative park luminaries shall be selected to match visually with the surrounding landscape and environment as well as to highlight architectural and landscape features.
			(ii)	The luminaries shall be generally in the form of LED lamp poles, bollards and recessed wall-mounted luminaries. Ornamental spot/flood lights shall be provided at features and areas of landscape interest. For locations near raised planters, recessed wall-mounted lighting is preferred. All steps to be provided with footlights. Recessed ground lights for feature and lighting effect shall be installed as appropriate.
			(iii)	The construction of all luminaries shall be able to withstand vandalism and outdoor weather conditions to a minimum degree of protection of IP65. Luminaries installed shall be of glare control as not to cause glare nuisance and light pollution to adjacent residents, robust construction fitted with vandal-proof diffusers, integrated protective cage /screens supplied from the same manufacturer of the luminaries. Bollard lightings, if provided, shall be securely fixed on concrete base /block. Recessed ground lights shall be safe, non-slip, abrasion and impact resistant type.
			(iv)	Particularly, lighting design scheme with the choice of decorative park luminaries shall be submitted for comment on the aesthetical and vandal-proof aspects.
			(v)	A minimum illumination level of 50 lux shall be provided for walkways with good uniformity and minimum spill light achieved by pole top luminaries with high performance down light reflector and high efficiency lamps of good colour rendering.
			(vi)	All lights shall be demand-controlled type with photo sensors and timers in zonal design incorporated with manual by-pass switches inside the Meter Room, and be serially numbered. The numbers shall not be less than 50 mm high

painted in white or other contrasting colour with stencil on the largest section of the lamp poles at an appropriate level.

- (vii) Luminaries shall be coordinated with the general layout and illumination levels appropriate to the setting. Lighting columns (including cable runs) are to be located in hard paved areas and not in the planter beds or planting areas.
 - (viii) The planting areas should be free of underground utilities. If underground utilities running in the planter bed /soil are unavoidable that subject to approval by the Government Representatives, they shall be of sheathed and armoured type run in cable ducts along the whole length with appropriate draw pits. The cable ducts shall be laid at least 450 mm deep beneath the finished soil level.
- (b) Lockable Water Point :
- (i) 1 no. per 20 meter hose radius housed inside lockable box matching the park design.
 - (ii) The design and location of the water points should be convenient for use but not visually obtrusive and not to be placed too close to the edge of planters without planting screening off. Sufficient operation space shall be allowed for easy removal of water hoses.
- (c) Outdoor Drinking Fountain :
- (i) Outdoor drinking fountains with cover shall be designed with built-in UV water sterilizer and with piping and drainage to be constructed in accordance with government standards and fittings approved by the DWS.
- (d) Meter Room :
- (i) Lighting
 - Vandal-proof and corrosion resistant fluorescent luminaries with prismatic diffuser. Lighting switches shall be located near to the entrance door.
 - (ii) Power
 - Minimum 1 no. 13amp switched socket shall be provided.
 - Power supply for ventilation fan controlled by thermostatic switch with manual by-pass switch shall be provided accordingly.

Annex VI

ArchSD Standard on Universal Accessibility Provisions (Advisory requirements)

It is the established practice for ArchSD to comply with the prevailing Building Laws and Codes, including the Design Manual: Barrier Free Access 2008, Buildings Department in projects delivered by the department. The ArchSD Standard on UA Provisions has been drawn up to set a higher standard in achieving a barrier free environment beyond the minimum statutory requirement. Unless otherwise specified, the Standard shall only apply to areas within the site.

This Standard is the minimum requirement for UA provisions in ArchSD projects and should be followed for all projects unless with genuine difficulties. Where the situations permit, project teams are encouraged to achieve an even higher standard such as incorporating other recommended items in DM2008.

Design Aspects	ArchSD Standard on UA Provisions
1. Client's Requirements	
a) UA requirements in the design brief	<p><i>Advise client department:</i></p> <p>1) To address the requirements of UA in the context of United Nations Convention on the Rights of Persons with Disabilities in formulation of the design brief and the Project Definition Statement to achieve a standard above the statutory requirements wherever applicable and practicable.</p>
b) Accessibility to and within the sites	<p><i>Advise client department:</i></p> <p>1) To consider accessibility to and within the sites with respect to topography, travel distance from public transport and major road, etc.</p> <p>2) To adopt a "facility-based approach" in coordination with relevant departments (including TD and HyD) and parties to ensure accessible routes leading to the venues are available from public transport and roads in the vicinity.</p>
c) Specific accessibility requirements	<p><i>Advise client department:</i></p> <p>1) To engage Access Coordinator to provide input on accessibility based on future operation of the venue in accordance with the LWB's memorandum (Ref.: LWB R 9/3939/10 Pt 2) dated 13/12/2010.</p> <p>2) To consult Rehabilitation Advisory Committee via LWB for major projects on providing a barrier-free environment in government premises and facilities for persons with disabilities in accordance with LWB Circular No. 1/2011 dated 9/2/2011.</p>
d) Management and maintenance requirements	<p><i>Advise client department:</i></p> <p>1) To appoint Access Coordinator and Access Officers to conduct regular review and maintenance, where appropriate, to carry out improvement works, on access and facilities for use by persons with disabilities after occupation.</p>

2. Access Strategy	
2.1. Travel chain analysis	
a) Travel chain analysis, within each building and across the compound, from drop off point to approach/landscape areas, car park, main entrance, lift to upper floor lobbies, function rooms, toilets, return routes and exits	<p><i>Prepare UA Drawings for vetting by PQDVC/ADAP at Workstage 2 and Workstage 3 including:</i></p> <ol style="list-style-type: none"> 1) <i>Identification of continuous accessible routes throughout the development.</i> 2) <i>Locations of UA facilities such as accessible car parking spaces, etc.</i> 3) <i>Information of way finding such as tactile guide paths and signs, etc. from main entrance to major facilities including outdoors intended function.</i> 4) <i>Areas accessible by different users of the venue.</i>
2.2. Drop-off	
a) Drop-off outside the sites	<p><i>Provide advice and technical support to client department:</i></p> <ol style="list-style-type: none"> 1) <i>To coordinate with relevant departments (including HyD and TD) for the provision of drop-off on the street near the main entrance of venues.</i>
b) Drop-off inside the sites	<ol style="list-style-type: none"> 1) <i>Provide at least one drop-off in the form of either a lay-by or line markings on the vehicular access road in the vicinity of the main entrance or the lift lobby of the building.</i> 2) <i>Provide appropriate signs along the vehicular access to locate the drop-off point and to give warning against its misuse for parking.</i> 3) <i>Provide drop kerb* to the pavement adjacent to the drop-off where there is a level difference.</i> <p><i>Remark: * Refer to Division 6 of Chapter 4 of the DM2008 for standards of drop kerb.</i></p>
2.3. Accessible car parking spaces	
a) Number of accessible car parking spaces	<ol style="list-style-type: none"> 1) <i>Total no. of car parking space: 1-25, no. of accessible car parking space: 1</i> 2) <i>Total no. of car parking space: 26-50, no. of accessible car parking space: 2</i> 3) <i>Total no. of car parking space: 51-100, no. of accessible car parking space: 3</i> 4) <i>1 additional accessible car parking space for each additional increment of 100 or part thereof)</i>
b) Location of outdoor and indoor accessible car parking spaces	<i>Locate outdoor and indoor accessible car parking spaces at not more than 50m and 20m respectively on an accessible route from the major entrance or lift lobby of buildings.</i>
c) Dimensions of accessible car parking spaces	<i>Provide minimum width of 3.9m for accessible car parking spaces.</i>
d) Signage showing numbers and direction to accessible car parking spaces	<ol style="list-style-type: none"> 1) <i>Provide signage at the entrance of parking facilities in prominent locations to display the designated numbers of accessible car parking spaces reserved for persons with a disability;</i> 2) <i>Provide indication/directional signage along driveway showing the way leading to the accessible car parking spaces.</i>

2.4. Drop kerb	
a) Gradient of drop kerb inside parks and open spaces	<i>Provide gradient of not steeper than 1:12 for drop kerbs inside parks and open spaces.</i>
2.5. Internal staircases and steps	
a) Risers and treads of main circulation staircases and steps in or connected to the main entrance lobby of buildings	<p><i>Provide maximum and minimum dimension for risers and treads at 0.15m and 0.3m respectively for the main circulation staircases and steps in or connected to the main entrance lobby of buildings.</i></p> <p><i>(Remark: For the avoidance of doubt, this requirement is not applicable to the staircases required for MoE.)</i></p>
2.6. Corridors	
a) Width of corridors connecting the main entrance to facilities for the public on the major entrance floor of buildings	<p><i>Provide minimum width of 1.8m for corridors connecting the main entrance to the following facilities for the public on the major entrance floor of buildings:</i></p> <ol style="list-style-type: none"> <i>1) Information/service counter</i> <i>2) Lift lobby</i> <i>3) Major circulation staircases</i> <i>4) Accessible toilets</i> <i>5) Baby care facilities</i> <p><i>(Remark: For the avoidance of doubt, this requirement is not applicable to corridors on other floors.)</i></p>
b) Protruding objects	<i>The counters or devices installed at controlled passages and the warning guardrails provided for low headroom should be designed with round edges.</i>
2.7. Doors	
a) Door handles	<i>Provide lever-type handles or pull handles to swing doors along accessible routes.</i>
b) Opening time of automatic doors	<i>Doors to stay open for a minimum of 5 seconds each opening.</i>
2.8. Entrances	
a) Separate main entrance for the visually impaired to healthcare facilities	<p><i>Provide separate designated main entrance for the visually impaired to healthcare facilities.</i></p> <p><i>(Remark: Attempt should be made to set aside an accessible route for the visually impaired.)</i></p>
2.9. Handrails	
a) Provisions of double handrails for steps and staircases in schools and Places of Public Entertainment.	<i>Provide double handrails at a height between 850-950mm and 700-800mm for upper and lower handrails respectively for steps and staircases in schools and Places of Public Entertainment.</i>

2.10. Accessible lifts	
a) Numbers and graphic on lift control buttons	1) Provide call button panels on both sides of door openings in an accessible lift. 2) Provide tactile graphics for open-door and close-door push buttons, emergency alarm button and main entrance level for the call button panels as per Figure 41 of the DM2008.
b) Opening time for lift doors	Accessible lift doors to stay open for a minimum of 3 seconds each opening.
c) Turning space in front of lift car door for wheelchair users	Provide an unobstructed turning space of 1.5m x 1.5m in front of accessible lift car door.
2.11. Vertical lifting platform (if provided)	
a) Dimensions of vertical lifting platform	Provide minimum internal size of 1.1m (wide) x 1.5m (deep) for a vertical lifting platform.
b) Entrance of vertical lifting platform	Provide Automatic door with 1) minimum clear entrance width of 900 mm; 2) single door or 2-door design and the kinetic energy of the door should not exceed 10J.
2.12. Escalators and Passenger Conveyors (if provided)	
a) Provisions of audio indicator for escalators and passenger conveyors	Provide clear and consistent audio signal or devices to indicate going up, down or moving forward on both ends of escalators and passenger conveyors.
b) Signage showing alternative access route at entry of escalators	Provide signs near to or at the entry to the escalator to guide the persons with a disability or parents with baby prams to use alternative access routes such as ramps or accessible lifts, if available.
2.13. Auditorium and related facilities	
a) Numbers of wheelchair spaces in auditorium and related facilities	Provide minimum number of wheelchair spaces in auditorium and related facilities as follows: 1) 8 wheelchair spaces for a venue with maximum 800 fixed seats 2) 8 wheelchair spaces plus 4 for each additional 400 fixed seat for a venue with more than 800 fixed seats
b) Locations and access for wheelchair spaces in auditorium and related facilities	In auditorium and related facilities with more than 150 fixed seats, 1) Provide a conventional companion seat next to each wheelchair space; 2) Locate wheelchair spaces at different levels; 3) Provide access to at least the low and high levels of seating area. (Remark: For the avoidance of doubt, there is no need to provide wheelchair spaces and access at every row of seating.)
c) Accessible route to the stage and performing area	Provide an accessible route from the wheelchair seating locations to the stage and performing area where access is provided to the stage from within the fixed seating venue. Access to the stage should be by means of a ramp or a platform lift.

2.14. Hotels, hostels and guesthouses	
a) Dimensions of a bathroom and shower compartment in accessible guest rooms	<p><i>In accessible guest rooms in hotels, hostels and guesthouses,</i></p> <ol style="list-style-type: none"> <i>1) Provide minimum internal dimensions 2.5m x 2.7m for accessible bathrooms; or</i> <i>2) Provide minimum internal dimensions 2.5m x 2.5m for shower compartment.</i> <i>3) Provide a clear space of not less than 1.5m x 1.5m immediately in front of bathtub or shower compartment to allow maneuver ability.</i>
b) Positions of switches and controls in accessible guest rooms	<p><i>Locate switches and controls in accessible guest rooms as follows:</i></p> <ol style="list-style-type: none"> <i>1) Electric sockets between 0.45m and 1m high from finished floor level.</i> <i>2) Light switches, door bells, entry phones and other controls between 0.75 m and 1.2m from finished floor level.</i>
c) Emergency call bells in accessible bathrooms and shower compartments	<ol style="list-style-type: none"> <i>1) The emergency alarm should be installed outside the accessible bathroom/shower compartment and connected to a caretaker' office or a public information/ service counter;</i> <i>2) Emergency call bells should be equipped with a back-up power supply.</i>
2.15. Water Sports Facilities	
a) Accessibility to water facilities	<p><i>Accessibility to water facilities should be by means as follow:</i></p> <ol style="list-style-type: none"> <i>3) Ramp with 1.2m wide and provide with a slip resistant surface extending into the shallow end of the pool.</i> <i>4) A lifting device such as a disable chair lift.</i>
3.0. External Circulation & Landscaped Areas	
3.1. Access route	
a) Width of accessible routes from the site boundary to the main entrance of buildings	<i>Provide minimum width of 1.8m for accessible pedestrian paths from the site boundary to the main entrance of buildings.</i>
b) Access options to facilitate unimpeded paths and flexibility in use	<i>Explore and maximize options in route of travel to facilitate independent access including consultation with users/operators and relevant authorities.</i>
3.2. Ramps	
a) Width of ramps leading to main entrance of buildings and parks and open spaces, and to major public facilities inside parks and open spaces	<p><i>Provide minimum width of 1.5m for ramps leading to:</i></p> <ol style="list-style-type: none"> <i>1) The main entrances of buildings, parks and open spaces.</i> <i>2) Major public facilities inside parks and open spaces (major public facilities such as accessible toilets, pavilions, amphitheatre, children play areas, elderly fitness stations and other main activity centres).</i>
b) Gradient of ramps leading to main entrance of buildings and parks and open spaces, and to major public facilities inside parks and open spaces	<p><i>Provide gradient of not steeper than 1:15 for ramps leading to:</i></p> <ol style="list-style-type: none"> <i>1) The main entrances of buildings, parks and open spaces.</i> <i>2) Major public facilities inside parks and open spaces (major public facilities such as accessible toilets, pavilions, amphitheatre, children play areas, elderly fitness stations and other main activity centres).</i>

3.3. Staircases and steps	
a) Risers and treads of staircase and steps leading to main entrance of buildings and parks and open spaces, and to major public facilities inside parks and open spaces	<p><i>Provide risers of maximum 0.15m and treads of minimum 0.3 m for staircases and steps leading to:</i></p> <ol style="list-style-type: none"> <i>1) The main entrances of buildings, parks and open spaces.</i> <i>2) Major public facilities inside parks and open spaces (major public facilities such as accessible toilets, pavilions, amphitheatre, children play areas, elderly fitness stations and other main activity centres).</i>
b) Handrails for staircases and steps leading to main entrance of buildings and parks and open spaces, and to major public facilities inside parks and open spaces	<p><i>Provide handrails, in accordance with Division 8 of Chapter 4 of the DM2008 for staircases and steps leading to:</i></p> <ol style="list-style-type: none"> <i>1) The main entrances of buildings, parks and open spaces.</i> <i>2) Major public facilities inside parks and open spaces (major public facilities such as accessible toilets, pavilions, amphitheatre, children play areas, elderly fitness stations and other main activity centres).</i>
4.0. Way finding and Signage	
4.1. Accessible signage	
a) Braille and tactile floor plans	<p><i>Provide Braille and tactile floor plan for the following building types :</i></p> <ol style="list-style-type: none"> <i>1) Crematoriums</i> <i>2) Columbariums</i> <i>3) Government offices</i> <i>4) Law courts</i> <i>5) Community halls</i> <i>6) Exhibition areas</i> <i>7) Buildings for the public in parks and open spaces.</i>
b) Luminous contrast for the international symbol of accessibility	<i>Provide luminous contrast of not less than 70% to differentiate the international symbol of accessibility from the background.</i>
5.0. Sanitary Facilities	
5.1. Accessible toilets	
a) Internal dimensions of accessible toilet in healthcare facilities	<i>Provide minimum internal dimensions of 2m x 2m for accessible toilets in healthcare facilities.</i>
b) Layout of accessible toilets	<i>Provide accessible toilets with layout in line with the side approach requirements in DM2008.</i>
c) Width of door openings for accessible toilets	<i>Provide minimum clear width of 0.9m door openings for accessible toilets.</i>
d) Emergency call bells in accessible toilets	<ol style="list-style-type: none"> <i>1) The emergency alarm should be installed outside the accessible toilet and connected to a caretaker's office or a public information/service counter;</i> <i>2) Emergency call bells should be equipped with a back-up power supply.</i>

5.2. Accessible Urinal	
a) Provision of horizontal breast bars	<i>Provide a horizontal breast bar, other than vertical grab rails on both sides, at a level between 1.2m-1.5m from the finished floor level, on an accessible urinal.</i>
b) Indicating Tiles/Blocks	<p>3) <i>Two indicating tiles/blocks* on the floor to facilitate the use by persons with visual impairment should be provided in front of the urinal for use by persons with ambulant disabilities.</i></p> <p><i>Remark: *Refer to Figures 26A and 26B, item 18, App. E in PNAP APP-41 (April 2017) for illustration.</i></p> <p>4) <i>The indicating tiles/blocks should have a minimum luminous contrast of 30% with the floor finishes.</i></p>
6.0. Furniture Facilities	
6.1. Seating facilities	
a) Seating with shade in parks and open spaces	<p>1) <i>Provide seating with shade at maximum 50m intervals along main footpaths inside parks and open spaces.</i></p> <p>2) <i>Provide shelter with seating at maximum 200m intervals along main footpaths inside parks and open spaces.</i></p> <p>3) <i>Locate the seating in a recessed alcove adjacent to walkway and circulation paths on the same floor level without a plinth.</i></p> <p>4) <i>Explore resting provisions other than seating bench and at suitable intervals along routes where great effort is required such as a long flight of stair or a sloping ground, etc.</i></p>
b) Clearance space adjoining external seating for wheelchair	<i>Provide 1.5m x 1.5m clear space on at least one side of the external seating along accessible routes in parks and open spaces for parking of wheelchair and pram chair.</i>
6.2. Accessible public information/service counters	
a) Provision of public information / service counters	<p><i>Provide public information/ service counter to the following building types:</i></p> <p>1) <i>Government offices</i></p> <p>2) <i>Law courts</i></p> <p>3) <i>Community halls</i></p> <p>4) <i>Exhibition areas</i></p> <p>5) <i>Manned Public facilities (except manned toilet and changing facilities) in parks and open space.</i></p>
6.3. Drinking fountains (if provided)	
a) Height of drinking fountains	<i>Provide two spouts at different heights between 0.75m and 0.9m for drinking fountains.</i>
b) Controls of drinking fountains	<p>1) <i>Provide automatic controls or controls with handles of the lever type operable with a closed fist for drinking fountains.</i></p> <p>2) <i>Provide Braille, tactile sign or raised dot indication for detection of such control by the visually impaired users.</i></p>
c) Space in front of and below drinking fountains	<p><i>Provide proper floor drain and minimum space for drinking fountains as follows:</i></p> <p>1) <i>Clear floor space of min. 0.75m wide x 1.2m deep in front.</i></p> <p>2) <i>Knee space of min. 0.75m wide x 0.2m deep x 0.68m high below.</i></p> <p>3) <i>Toe space of min. 0.75m wide x 0.23m deep x 0.23m high below.</i></p>

6.4. Public telephones (if provided)	
a) Locations and cord length of accessible public telephones for wheelchair users	<i>Provide at least one telephone in a group of two or more public telephones for wheelchair users as follows:</i> 1) <i>To position all operable parts including the coin or credit card slot at a height not higher than 1.2m above finished floor level.</i> 2) <i>To provide a cord length of not less than 0.75m long.</i>
7.0. Safety Aspects	
7.1. Luminous contrast	
a) Luminous contrast between different surfaces:	<i>Luminous contrast should be greater than or equal to 30% between:</i> 1) <i>Staircase nosing and adjoining surfaces.</i> 2) <i>Staircase tread and adjoining wall.</i> 3) <i>Floor and wall along ramp.</i> 4) <i>Handrails and surrounding wall surfaces.</i> 5) <i>Wall, floor and door surfaces along corridor and lobby.</i> 6) <i>Door handle of manually operated doors/ control switch or button of door with powered open devices and the background finishes.</i>
b) Luminous contrast between tactile warning strips and adjoining surfaces	<i>Luminous contrast between tactile warning strips and adjoining surfaces should be greater than or equal to 70% at ramps and drop kerbs; and 50% at steps and staircases.</i>
7.2. Slip resistance	
a) Slip resistance of flooring materials for floor surfaces of both internal and external accessible routes	<i>Provide flooring materials with static coefficient of friction between 0.8 and 0.5 for floor surfaces of both internal and external accessible routes.</i>
7.3. Illumination	
a) Illumination level of accessible facilities	<i>Provide illumination level of not less than 120 lux measured at the finished floor level for the following areas, if provided:</i> 1) <i>Lift lobby of typical floors</i> 2) <i>Information/service counter</i> 3) <i>Accessible toilets</i> 4) <i>Baby care rooms</i> 5) <i>Common areas</i>
7.4. Switches and controls	
a) Positioning of electric sockets for wheelchair users	<i>Locate electric sockets, which are intended to be accessible to the wheelchair users, between 0.45m and 1m high from finished floor level.</i>
b) Positioning of controls of safety devices for wheelchair users	<i>Locate controls of safety devices including electrical switches, light switches, thermostats, intercom switches and card reading machines, which are intended to be accessible to wheelchair users, between 0.75m and 1.2m above the finished floor level.</i>

8.0. Use of Sensory Elements – tactile, auditory, olfactory and visual	
8.1. Tactile and visual elements	
a) Tactile guide path	<p><i>Provide tactile guide path* to the following building types:</i></p> <ol style="list-style-type: none"> 1) <i>Government offices</i> 2) <i>Law courts</i> 3) <i>Community halls</i> 4) <i>Exhibition areas</i> 5) <i>Indoor recreation centres</i>
<p>Remark: *Adopt flexible and sensitive approach in providing tactile guide path for the purpose of way finding and orientation within those large public venues on hilly sites or in extensive open area such as crematoriums, cemetery ground, columbariums, parks and open spaces.</p>	
b) Clearance from tactile guide path along accessible routes	<p><i>Provide minimum clearance of 0.6m between the tactile guide path and any obstructions such as walls, planter boxes, kerbs and seating, overhanging features including tree branches, etc.</i></p> <p><i>(Remark: For accessible routes provided with tactile guide path, the minimum width should be 1.5m taking into account the clearance space of 0.6m on both sides of the tactile guide path which is 0.3m wide. For width of accessible routes less than 1.5m, refer to the following for the minimum clearance.</i></p> <ol style="list-style-type: none"> 1) <i>Clear width of access route: 1.05-1.2m, min. clearance: 0.35m</i> 2) <i>Clear width of access route: 1.2-1.35m, min. clearance: 0.45m</i> 3) <i>Clear width of access route: 1.35-1.5m, min. clearance: 0.5m</i>
c) LED visual display boards	<p><i>Provide LED display boards to the following building types:</i></p> <ol style="list-style-type: none"> 1) <i>Sports complex</i> 2) <i>Swimming pool</i> 3) <i>Exhibition area</i> 4) <i>Market</i> 5) <i>Library</i>
8.2. Auditory elements	
a) Provisions of assistive listening system	<p><i>Provide assistive listening system in the seating areas of the following building types:</i></p> <ol style="list-style-type: none"> 1) <i>Sports complex</i> 2) <i>Swimming pool</i> 3) <i>Community hall</i> 4) <i>Law courts</i>
b) Provisions of receivers for assistive listening system	<ol style="list-style-type: none"> 1) <i>Provide minimum 2 receivers or similar equipment for use by the public for an assistive listening system if the system requires the use of such receivers is adopted.</i> 2) <i>The number of receivers provided shall be not less than 1 for every 50 persons.</i>

Annex VII

General Requirements on Building Services

1. Proper maintenance access with due regard to occupational health and safety shall be provided for all building service equipment/installation. The access shall be provided with sufficient clear space for all necessary maintenance works, emergency escape and transportation of heavy or bulky equipment, such as pumps, compressors, motors, fans, vessel, etc. There shall be no obstruction along emergency escape route which shall be adequate and in no case less than 600 mm in width and 2m in height. If the equipment located outside the Blue Area, the equipment and plant shall be accessible from the common parts of the development.
2. Underground plant room shall be avoided unless otherwise agreed by the user and his maintenance agent with justification in case of practical difficulty in matching site condition, architectural / structural design or other external factors. If unavoidable, adequate measures for prevention of flooding and early alarm of flooding at remote location(s) agreed with the user should be provided for underground plant room.
3. Routing for emergency escape and delivery of heavy or bulky equipment shall be clearly indicated on layout plan with width and clear height. Clearance between all equipment and any obstruction shall be also clearly indicated on layout plan and section drawing.
4. All building service plant room shall be well protected by ingress of water:-
 - a. No irrelevant water pipe work, such as rainwater pipe, shall pass through building service plant room.
 - b. Water tanks above or adjacent to building service plant room shall be avoided as far as practical. Otherwise, double slab and partition wall with sufficient drain shall be provided between water tank and building service plant room.
 - c. Opening into building service plant room including conduit connected to any external opening, especially, on roof, shall be properly sealed. Examples are conduit for external lighting and light sensor.
 - d. No pipe work or conduit shall pass roof slab without a properly sealed dog house of which bottom of opening shall be above the maximum height of water accumulation in case of blockage of floor drain on roof, e.g. height of curb of access staircase to the roof.
5. Control panel and all building service equipment shall be located at easily accessible location away from water pipes and provided with water shelter, if necessary. Clear space in front of control panel shall be sufficient for full open of the cover and in no case less than 600 mm from the cover and 2m in height.
6. Installation location of all equipment, especially control panel, meter, gauge and any monitoring device, shall be well designed to facilitate inspection, maintenance and replacement without dismantling of other equipment or builder works such as ceiling panel and avoid awkward body movements or postures, e.g. holding loads at a distance from the body, twisting, stooping and reaching upward, excessive lifting or lowering distances, etc.
7. Equipment shall be installed at floor level on a plinth of sufficient size and height to avoid water damage and the overall height of equipment would be within 1.7m above finished floor level as far as practical. Installation at high level is not recommended. If unavoidable, fixed cat ladder and sufficient service platform around the equipment with appropriate railing shall be provided to facilitate inspection, checking and maintenance works at height. As the last means of access, sufficient clear space around the equipment should be allowed for temporary scaffolding or platform. A Guide to Ladders and Elevated Working Platforms issued by the Labour Department shall be observed.
8. All service platforms shall be completed with at least two exits.
9. Equipment at roof level shall be surrounded with proper railing or parapet wall.

10. Stacking of equipment shall not be allowed unless sufficient clear space was allowed for maintenance of the equipment at lower level and permanent service platform with appropriate railing was provided for the equipment at upper level.
11. Hoisting facilities of appropriate type shall be provided for transporting bulky maintenance materials and equipment such as pumps, compressors, motors, fans, vessel, etc.
12. Doors of plant room shall be of sufficient size to facilitate equipment delivery for future replacement.
13. Adequate floor drain shall be provided removable cleaning eyes, U-traps and air break. Surface water drainage channel in the perimeter of the room covered with open type grating shall be provided, where appropriate.
14. Sharp edge and low headroom areas (less than 2m above ground) shall be avoided. If unavoidable, proper shielding with prominent warning sign in contrasting colours shall be provided.
15. Adequate illumination of 200 lux shall be provided to facilitate inspection and maintenance.
16. Safe guards, covers and warning signs for all moving parts shall be provided.
17. Emergency stop button shall be provided at accessible location within 1.5m from equipment for local isolation. The control shall be designed so that the equipment shall not be automatically re-started when the emergency stop is released.
18. Drainage pumps with standby and sump tank shall be installed if drainage by gravity cannot be provided.
19. 13A power socket(s) with appropriate IP rating to suit site environment shall be provided at appropriate locations for maintenance purpose.
20. Fresh water supply points(s) and drainage point(s) shall be provided at appropriate locations for maintenance purpose.
21. Sufficient tools for maintenance of equipment shall be provided.
22. Change in floor level within building service plant room shall be avoided as far as practical. For unavoidable level change such as pump plinth and functional opening on floor, edge of such level changes shall be painted in contrasting colours. Holes on floor shall also be properly protected with cover that could only be removed with tool.
23. Pipe works crossing maintenance access route shall be avoided as far as practical. If unavoidable, step platform over the pipe works shall be provided.
24. Clear floor marking shall be provided within all plant room, especially hazard area such as chemical storage area.
25. Drain pan of sufficient size to hold all chemical in case of leakage shall be provided under container of chemical.
26. Sufficient redundancy with standby equipment shall be provided to avoid suspension of services during maintenance or equipment breakdown.
27. Equipment accessible by the public shall be properly secured and protected against vandalism.
28. Plant rooms of related services, e.g. chiller plant and AHU rooms, should be located at vicinity of each other.
29. BS plant room shall be directly accessible from at least one of the following locations through a proper maintenance access which should not pass through any private areas or functional areas as far as practical unless otherwise agreed by the user.
 - i) street level accessible by vehicle;
 - ii) a parking space of sufficient size for crane lorry; or
 - iii) open space of sufficient size for hoisting bulky equipment from/to one of the location above

Annex VIII

Detailed Requirements For Record Drawings and Other Documentation

The detail list of record/as-built/installed drawings shall be agreed with the Government Representatives before handover.

1.0 Submission of Project Architectural Records

1.1 Submit ONE set of the project records (in softcopy saved in CD/DVD ROM computer disks) for as-built architectural works, together with a checklist, as attached in **Appendix 1A**, to ensure that all necessary project records have been collected and handed over for permanent storage in ArchSD(AB). The project records shall include, but are not limited to:-

- (i) Approved Shop Drawing
- (ii) As-built Drawings
- (iii) Approved Fire Services Installations drawings, Approved General Building Plans & relevant documents

1.2 Approved Shop Drawings & As-built Drawings

Prior to preparing the project records, the Purchaser shall coordinate with ArchSD for the record numbers. The record number and the certified date of Completion of Works shall be inserted in each drawing as stated in Section 1.3, 1.4 & 1.5 below to compile the standard form ADRU-SD in **Appendix 1C**, ADRU-FS in **Appendix 1D** & ADRU-AD in **Appendix 1E** in accordance with the Guidelines for Preparation of As-built Drawing Files saved in CD/DVD-ROM computer disk for Architectural Works (ADRU-G3e of **Appendix 1B**).

1.3 Format of approved Shop Drawings & As-built Drawings

The Purchaser shall produce all drawings in AutoCAD Format (Version 2015 or other version) or in PDF Format approved by the Government Representatives (such as “ PDF” Format) and to the satisfaction of Government Representatives. CAD drawings shall be prepared conforming with the CSWP as posted on the Development Bureau’s web site <https://www.devb.gov.hk/cswp> and in accordance with the latest version of CAD Manual for ArchSD Projects issued by ArchSD. Should any technical conflict between the CSWP and CAD Manual arise, the CSWP will take precedence.

1.4 Approved Fire Services Installations drawings, Approved General Building Plans & relevant documents in ‘TIFF’ or ‘JPEG’ Format

These drawings & relevant documents shall be converted to image files in Tag Image File Format (TIFF) or Joint Photographic Experts Group (JPEG). The TIFF image file shall be reproduced from the full size drawings with minimum resolution of 400x400 dpi in compression G4 format. The JPEG image file shall be reproduced from full size drawings with minimum resolution of 400x400 dpi.

1.5 CD/DVD-ROM computer disk

These drawings files shall be in three sets of CD/DVD-ROM computer disk. Each CD/DVD-ROM computer disk shall be labelled in accordance with Guidelines for Preparation of As-built Drawing Files saved in CD/DVD-ROM computer disk for Architectural Works as stated in standard form ADRU-G3e of Appendix 1B issued by ArchSD and supplied in sturdy plastic containers.

2.0 Submission of Project Structural / Geotechnical Records

2.1 Submit ONE set of the project records (in softcopy saved in CD/DVD ROM computer disks) for as-built structural / geotechnical works, together with a checklist, as attached in **Appendix 2A**, to ensure that all necessary project records have been collected and handed over for permanent storage in ArchSD(SEB). The project records shall include, but not limited to:-

- (i) Completion Record for Structural / Geotechnical Works using Form No. **SEB/CI.009** in **Appendix 2B**.
- (ii) As-built Drawings.
- (iii) Design Calculations.
- (iv) Technical Reports.
- (v) Operation Manuals.
- (vi) Warranties / Guarantees.

2.2 As-built Drawings

- (i) Prior to proceeding with (ii) below, fill in and submit the standard form (Form No. **SEB/DWG.004**) in **Appendix 2C** to ArchSD for request of “record numbers”. A set of serial record numbers will then be assigned and returned.
- (ii) Insert the serial record numbers obtained from (i) in each drawing in accordance with the “Guidelines for Preparation of As-built Drawing Files saved in CD/DVD-ROM computer disk for Structural Works” in **Appendix 2D**.
- (iii) Convert all approved design drawings, shop drawings and as-built drawings and records from the full size drawing to image files in TIFF format with minimum resolution of 400 x 400 dpi in compressionG4 format.
- (iv) All as-built drawings shall be copy of final approved submission drawings with the chop of BD / ICC (RSE) and signature clearly shown.

2.3 Design Calculations and other Reports / Manuals

The design calculations and other reports/manuals shall be converted to files in Adobe Portable Document Format (PDF) in full size with a minimum resolution of 300x300 dpi. The PDF files for design calculations shall be printed out from those of as-built structural and geotechnical works. The structural and geotechnical design calculations files and other reports/manuals files shall be prepared and organized in accordance the “Guidelines for Preparation of Design Calculation Files of As-built Structural / Geotechnical Works” in **Appendix 2E**.

2.4 CD/DVD-ROM computer disk

All files of approved design drawings, shop drawings, and as-built drawings and records shall be in one set of CD/DVD-ROM computer disks. Each CD/DVD-ROM computer disk shall be labeled in accordance with “Guidelines for Preparation of As-built Drawing Files saved in CD/DVD-ROM computer disk for Structural Works” in **Appendix 2D** and be supplied in sturdy plastic containers.

All files of design calculation and other reports/manuals shall be in one set of CD/DVD-ROM computer disks. Each CD/DVD-ROM computer disk shall be labeled in accordance with “Guidelines for Preparation of Design Calculation Files of As-built Structural / Geotechnical Works” in **Appendix 2E** and be supplied in sturdy plastic containers.

3.0 Submission of Building Services / E&M Records

3.1 As-built Drawings

As-built drawings required to be provided by the Purchaser for various types of BS / E&M installations shall include, but not limited to the following –

- (a) Building services layout plans such as ducting arrangement, trunking arrangement, piping arrangement, etc;
- (b) System schematic diagrams, control diagrams and wiring diagrams;
- (c) Concealed work layout plan such as concealed conduit routing, etc;
- (d) Installation details and assembly drawings such as LV cubicle switchboard layout, motor control cubicle layout, etc.; and
- (e) Plumbing and drainage diagram.

3.2 Operation and Maintenance Manuals

(a) Hard and Soft Copy

- (i) The final approved Operation and Maintenance (O&M) Manuals in both hard and softcopies shall be provided by the Purchaser. Four sets of hardcopies are required for A/C and electrical installations, and three sets for other installations, of which 1 set of the hard copy shall be the original.
- (ii) A softcopy of the complete set of O&M Manuals shall also be provided by the Purchaser. The electronic files shall be in Adobe Acrobat format. Separate electronic file shall be provided for each volume of the O&M manuals as described in item (b) below.

(b) Binding of O&M Manuals

O&M Manuals for different installations shall be bound into separate volumes as follows -

- (i) Air-conditioning installations including chillers, refrigeration plants, air handling units and all peripheral units;
- (ii) Mechanical ventilation installations including all ventilation system and hydro-vent system (if any);
- (iii) Electrical installations including main distribution, sub-main distribution and final subcircuit installations;
- (iv) LV switchboard installations;
- (v) Emergency generator installations;
- (vi) Fire service installations including sprinkler, hose reel/fire hydrant, fire detection and alarm, total flooding fire extinguishing installations and portable fire fighting equipment;
- (vii) Lifts and escalators;
- (viii) Catering Equipment;
- (ix) Medical Gases Installations;
- (x) Broadcast Reception Installations;
- (xi) Security Installations;
- (xii) Plumbing & Drainage installations; and
- (xiii) Others such as low voltage electrical installation, electrical operated roller shutters, lifting devices / appliances, etc.

(c) Structure and Contents

Each O&M manual shall include the following information under separate sections as appropriate -

(i) Project Information

The following information shall be included –

Project title, site address, contract no., contract title, contractor / sub-contractor name, address, contact persons and their telephone / fax nos., contract commencement date, substantial completion date and end date of maintenance period.

(ii) System Description

- Type(s) of system(s) and equipment installed;
- Design criteria, design data and parameter
- Locations of the system and major equipment, and what they serve;
- Description of operation and functions of the system and equipment; and
- General operating conditions, expected performance and energy and resources consumption where applicable.

(iii) List of Installed Equipment

Schedule of all items of equipment and plant stating the location, name, model no., manufacturer's serial or reference no., manufacturer's design duties and data.

(iv) Spare Parts Lists

- Spare Parts supplied by Contractors - Item descriptions, supplied quantities, model nos., manufacturer's serial or reference nos. and storage locations; and
- Recommended Spare Parts List - Manufacturers' / suppliers' recommendations for spare parts with item description, unit rate, recommended stock quantities as well as the agents for the parts.

(v) Manufacturers' Certificates / Guarantees / Warranties

- Manufacturers' certificates such as factory test certificate, laboratory test reports, guarantees and warranties and any others where required for the equipment and plants etc.
- Originals of Statutory Inspection Certificate for various installations, including the following -
 - Electrical installations (Work Completion Certificate - Form WR1);
 - Fire service installations (Fire Service Certificate - Form FS172);
 - Lifts and escalators (Certificate on Examination of Lift or Escalator and signed forms/certificates as required by the Lifts and Escalators (Safety) Ordinance); and
 - Other equipment such as surveyor's test certificates for high pressure vessel, surveyor's load certificates for electrical operated roller shutters, lifting devices/appliances, etc.

Note - Testing records and commissioning data (other than the types prescribed above), which are required under the contract such as the T&C procedures, etc. to verify the compliance of the BS / E&M system's / equipment's performance with the contract requirements, are checked and endorsed separately by Supervising Officer and do not form part of the O&M manuals.

(vi) Safety Precautions for Operation and Maintenance

State, where applicable, hazard warnings and safety precautions of which the operation and maintenance staff need to be aware.

- Mandatory requirements relating to safety;
- Known hazards against which protection measures shall be taken; and
- Known features or operational characteristics of the installed equipment or systems which may cause hazard and the related safety precautions.

(vii) Operation Instructions

Instructions for the safe and efficient operation, under both normal and emergency conditions, of the installed system which shall comprise the following -

- An outline of the operating mode;
- Control logic and data (sequence, effect, limits of capability, modes and set points);

- Procedures and sequences for start-up and shut-down;
- Interlocks between equipment / system;
- Calling on of stand-by equipment;
- Precautions necessary to overcome known hazards;
- Means by which any potentially hazardous equipment can be made safe;
- Estimation of energy consumption and energy costs;
- Forms for recording plant running hours, energy consumption and energy costs; and
- Operating data such as running current, operating pressure, operating flow rates etc.

(viii) Maintenance

- Maintenance instructions.
Manufacturers' and contractor / subcontractor's recommendations and instructions for the maintenance of the installed equipment. Clear distinction must be made between planned tasks (preventive maintenance) and fault-repair tasks (corrective maintenance). Instructions shall be given on each of the following, as appropriate -
 - Nature of deterioration, and the defects to be looked for;
 - Isolation and return to service of plant and equipment;
 - Dismantling and reassembly;
 - Replacement of components and assemblies;
 - Dealing with hazards which may arise during maintenance;
 - Adjustments, calibration and testing; and
 - Special tools, test equipment and ancillary services.
- Maintenance schedules
Proposed maintenance schedules for all preventive maintenance tasks identified above. The schedules shall be based on both manufacturers' recommendations and other authoritative sources (e.g. statutory or mandatory requirements) and shall include the following -
 - Routine servicing;
 - Inspections;
 - Tests and examinations;
 - Adjustments;
 - Calibration; and
 - Overhaul.

The frequency of each task may be expressed as specific time intervals, running hours or number of completed operations as appropriate. Collectively, the schedules shall form a complete maintenance cycle, repeated throughout the whole working life of the installation.

(ix) As-built Drawings

- A complete list of as-built drawings identified with drawing number / reference;
- A complete list of manufacturers' shop drawings with drawing number / reference, where applicable; and
- A brief description of CD-ROM for these drawings.

(x) Technical Literature

- A complete set of manufacturers' literatures for all the plant and equipment installed in the system. The contents of these literatures shall cover the following areas where applicable-
- Description of equipment with model numbers highlighted;
 - Performance-behavioural characteristics of the equipment;
 - Applications-suitability for use;
 - Factory / laboratory test reports, detailed drawings, circuit diagrams;
 - Methods of operation and control;
 - Operation instructions;
 - Cleaning and maintenance requirements;

- Plant, materials and space required for maintenance;
 - Protective measures and safety precautions for operation& maintenance; and
 - Part lists.
- (xi) Contact addresses and telephone numbers of suppliers of major equipment

Checklist for Project Architectural Records for Permanent Storage in ArchSD (AB)

Contract No. : _____

Contract Title : _____

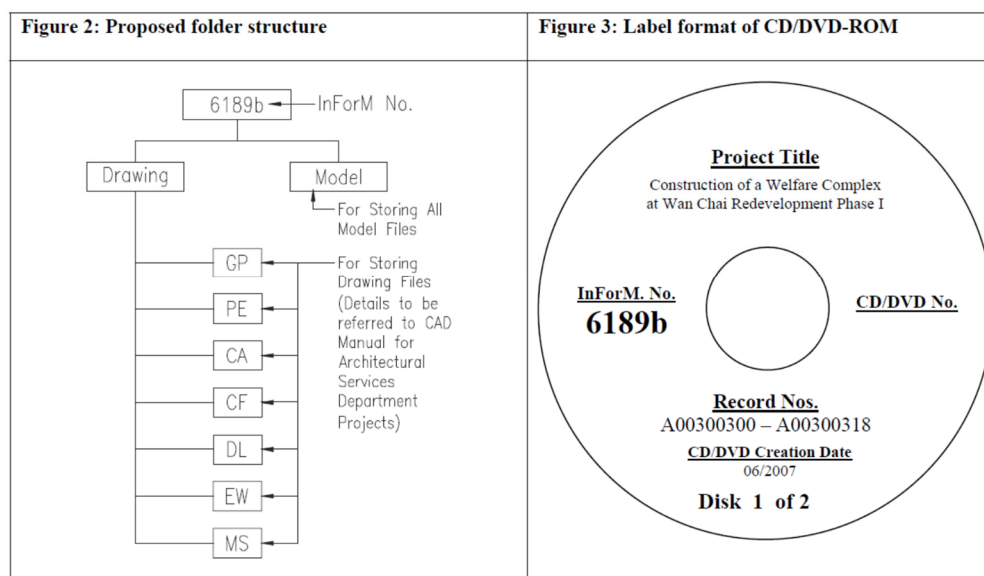
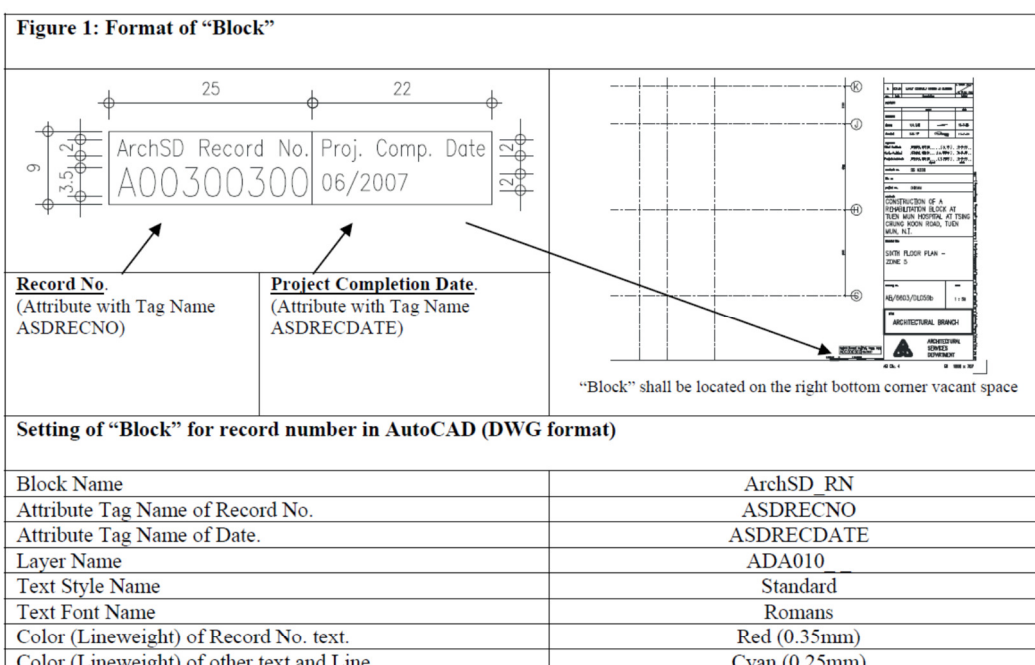
Ref.	Item of Works	Document / Information	Enclosed	Not Applicable	Remark
1	Roller shutter and doors Ironmongery Schedule and its O&M manual	Final version of approved shop drawings, and a list of approved materials used*.	<input type="checkbox"/>	<input type="checkbox"/>	
2	Propriety Suspended Ceiling System	Final version of approved shop drawings, and a list of approved materials used*.	<input type="checkbox"/>	<input type="checkbox"/>	
3	Roller Shutters and Doors	Final version of approved shop drawing, maintenance manual, and a list of approved materials used*	<input type="checkbox"/>	<input type="checkbox"/>	
4	Raised Access Flooring	Final version of approved shop drawing, and a list of approved materials used*	<input type="checkbox"/>	<input type="checkbox"/>	
5	General Building Plans, Sections, Elevations, schedules and other details	Final version of as-built drawings.	<input type="checkbox"/>	<input type="checkbox"/>	
6	Approved fire services drawings & documents including D.G. Store submission (if any)	Final version.	<input type="checkbox"/>	<input type="checkbox"/>	
7	All other details in relations to builders works		<input type="checkbox"/>	<input type="checkbox"/>	
8	Other Specialist Works or other items		<input type="checkbox"/>	<input type="checkbox"/>	
9	O&M Manuals		<input type="checkbox"/>	<input type="checkbox"/>	

Note:

* The brand names and selected colour codes should be stated, where applicable.

GUIDELINES FOR PREPARATION OF AS-BUILT DRAWING FILES TO BE SAVED IN CD/DVD-ROM COMPUTER DISK FOR ARCHITECTURAL WORKS

1. Procedure for producing of CD/DVD-ROM computer disk
 - 1.1 After the allocation of record number by ArchSD, a “Block” containing the record number provided by Supervising Officer and the certified date of completion of the Works must be inserted on the right bottom corner of each drawing before converting to PDF/TIFF/JPEG format. Sample as **Figure 1**.
 - 1.2 The “Block” as stated in item 1.1 must be inserted for other Raster Images (TIFF/JPEG format).
 - 1.3 If the file is a model file (X-ref) to the files for item 1.1 and 1.2, no “Block” insertion is required.
 - 1.4 Separate folder for different type of files is required in computer disk. Sample as **Figure 3**.
 - 1.5 After the insertion of “Block”, all the files are required to save into a CD/DVD-ROM computer disk which including all AutoCAD DWG/Raster Image format files, corresponding PDF format files and updated list of record drawings in excel format. Project information shall be labelled on CD/DVD- ROM computer disk. Sample as **Figure 3**.



LIST OF APPROVED SHOP DRAWINGS & AS-BUILT DRAWINGS
RECORD FILES

[illegible]

TO(A)Grade
Arch Branch

LIST OF APPROVED FS INSTALLATIONS / DG STORE DRAWING
RECORD FILES

[illegible]

TO(A)Grade
Arch Branch

LIST OF ARCHITECTURAL DRAWINGS RECORD FILES

[illegible]

TO(A)Grade
Arch Branch

Checklist for Project Structural / Geotechnical Records for Permanent Storage in ArchSD(SEB)

Contract No. : _____

Contract Title : _____

Ref.	Item of Works	Document / Information	Enclosed	Not Applicable	Remark
1	Temporary Works that remain in position after contract	As-built drawings.	<input type="checkbox"/>	<input type="checkbox"/>	
2	Piling / Diaphragm Wall / Pile Cap and associated tie beams and / or strap beams	<ul style="list-style-type: none"> - Approved Design Drawings, Design Calculations and Technical Reports, if applicable; and - As-built Drawings including record survey plans. 	<input type="checkbox"/>	<input type="checkbox"/>	
3	Foundation, Substructure and Superstructure	<ul style="list-style-type: none"> - Design Drawings, Design Calculations and Technical Reports, if applicable; - As-built Drawings; and - Maintenance Manual, if necessary. 	<input type="checkbox"/>	<input type="checkbox"/>	
4	Structural Steel Works (e.g. skylight, curtain wall, cladding, etc.)	<ul style="list-style-type: none"> - Approved Design Drawings and Design Calculations; - As-built Drawings; - Maintenance Manual, if necessary, and - Warranties / Guarantees, if applicable. 	<input type="checkbox"/>	<input type="checkbox"/>	
5	Site Formation / Geotechnical Works	<ul style="list-style-type: none"> - Design Calculations and Technical Reports, if applicable; - As-built Drawings including record survey plans; and - Maintenance Manual. 	<input type="checkbox"/>	<input type="checkbox"/>	
6	Fabric Structure including foundations, supporting structure and fabric membrane	<ul style="list-style-type: none"> - Approved Design Drawings, Design Calculations and Technical Reports, if applicable; - As-built Drawings including record survey plans on foundations, geometry and initial prestress; - Maintenance Manual, if necessary, and - Warranties / Guarantees, if applicable. 	<input type="checkbox"/>	<input type="checkbox"/>	
7	Proprietary Space Frame	<ul style="list-style-type: none"> - Approved Design Drawings, Design Calculations and Technical Reports, if applicable; - As-built Drawings; - Maintenance Manual, if necessary, and - Warranties / Guarantees, if applicable. 	<input type="checkbox"/>	<input type="checkbox"/>	
8	All	Completion Record for Structural / Geotechnical Works (Form No. SEB/CI.009).	<input type="checkbox"/>	<input type="checkbox"/>	

Completion Record for Structural / Geotechnical Works (Form No. SEB/CI.009)

Project Details

Project Title :			
New Name after Occupation (if any) :	(For venues that have another name after occupation, say schools under sponsorship, add in the new names as well.)		
Contract No. & Title :			
InForM No. :	8263	Construction Start / Completion Dates :	
PWP No. :	3071RE	Main Contractor :	
Site Address :			
Site Coordinates (if any) :	Site Coordinates of reference point as indicated on the Allocation Plan		

Type of Foundation:	* Footing / Non-percussion Cast-in-situ Concrete Piles / Steel 'H' Piles / Rock-socketed Steel H-piles / Tension Piles / Precast Prestressed Tubular Piles / Large Diameter Bored Piles / Large Diameter Bored Piles (with bell-outs) / Large Diameter Bored Piles Socketed into Bedrocks / Jacked Steel H-Piles / Mini-piles / Flotation Raft / Others: _____
Piling Contractor / Sub-contractor :	
Piling Period start / completion:	
Special Issues / difficulties encountered during piling / failed load test :	

* Delete as appropriate.

Completion Record for Structural / Geotechnical Works (Form No. SEB/CI.009)

Type of Structure (Building and external works):	* Reinforced Concrete Structure / Precast Concrete Structure / Prestressed Concrete Structure / Timber Structure / Steel Structure / Composite Structure / Bridge Structure / Tensioned Fabric Structure / Space Frame / Diaphragm Wall / Others: _____
Special Issues / difficulties encountered during construction / Areas required remedial works / failed test results :	
Other geotechnical / civil works :	* Soil Nail / Retaining Wall structure / Others: _____
Specialist Sub- contractor :	
Construction period start / completion :	
Special issues / difficulties encountered during construction / Areas required remedial works / failed test results :	

* Delete as appropriate.

Completion Record for Structural / Geotechnical Works (Form No. SEB/CI.009)

Special Features / Structural Materials used in the Project

(including but not limited to the structural components of the following items : Anchor Bolts, Structural steelwork including the Anti-corrosion Treatment and Painting System, Fire Protection System, Other Corrosion Protection System (Cathodic Protection), Structural Support Bearings, Bar coupler, Curtain Wall System, Glass Balustrade, Glass Wall, Stone Cladding, Metal Cladding, Metal Decking, Prestressed Concrete Elements, Tension Elements, Hanger Structure, Cable/tension rods, Tensioned Fabric Structure, Transfer Elements, Structural Sealant, etc.)

Special Features / Structural Materials	Brand Name (Origin) and product name and model no. of the feature and the structural components	Name of Manufacturer / Supplier / Specialist sub-Contractor	Locations incorporated	Design Life and / or Life Expectancy and expected time for 1 st structural maintenance inspection	Maintenance Manual and / or Technical Report	Photo (if available) –	Remark (i) Application / installation procedure adopted (ii) Test conducted (iii) Points to note in the structural maintenance inspection
<i>Structural Support : Pot Bearings</i>	<i>PN 4600-3000-3000</i>	<i>Alga (Far East) Limited</i>	<i>Footbridge EW1</i>	<i>15 years</i>	<i>Annex 1 (Scan copy of relevant documents)</i>		<i>Fixed bearing; Vertical load test; Combined vertical & horizontal load test;</i>
<i>Fire Protection System: Intumescent Paint</i>	<i>S605</i>	<i>Nullifire System</i>	<i>1/F steel beam</i>	<i>5 years</i>	<i>Annex 2 (Scan copy of relevant documents)</i>		<i>Fire resistance up to 1.5 hours;</i>

Completion Record for Structural / Geotechnical Works (Form No. SEB/CI.009)

Special Features / Structural Materials	Brand Name (Origin) and product name and model no. of the feature and the structural components	Name of Manufacturer / Supplier / Specialist sub-Contractor	Locations incorporated	Design Life and / or Life Expectancy and expected time for 1 st structural maintenance inspection	Maintenance Manual and / or Technical Report	Photo (if available) –	Remark (i) Application / installation procedure adopted (ii) Test conducted (iii) Points to note in the structural maintenance inspection

Endorsed by : _____

(Signature and Name of RSE)

Record Numbers for As-Built Drawings

[illegible]

GUIDELINES FOR PREPARATION OF AS-BUILT DRAWINGS FILES TO BE SAVED IN CD/DVD-ROM COMPUTER DISK FOR STRUCTURAL WORKS

1. Procedure for producing of CD/DVD-ROM computer disk
 - 1.1 After the allocation of record number by ArchSD, a “Block” containing the record number must be inserted on the lower right bottom corner of each drawing file before converting to Tiff format. Sample as **Figure 1**.
 - 1.2 Separate folders for different type of files are required in computer disk. Sample as **Figure 2**.
 - 1.3 After the insertion of “Block”, all the files are required to save into a CD/DVD-ROM computer disk which including all Tiff format files and updated list of record drawings in excel format. Project information shall be labelled on CD/DVD-ROM computer disk. Sample as **Figure 3**.

Figure 1: Format of “Block”

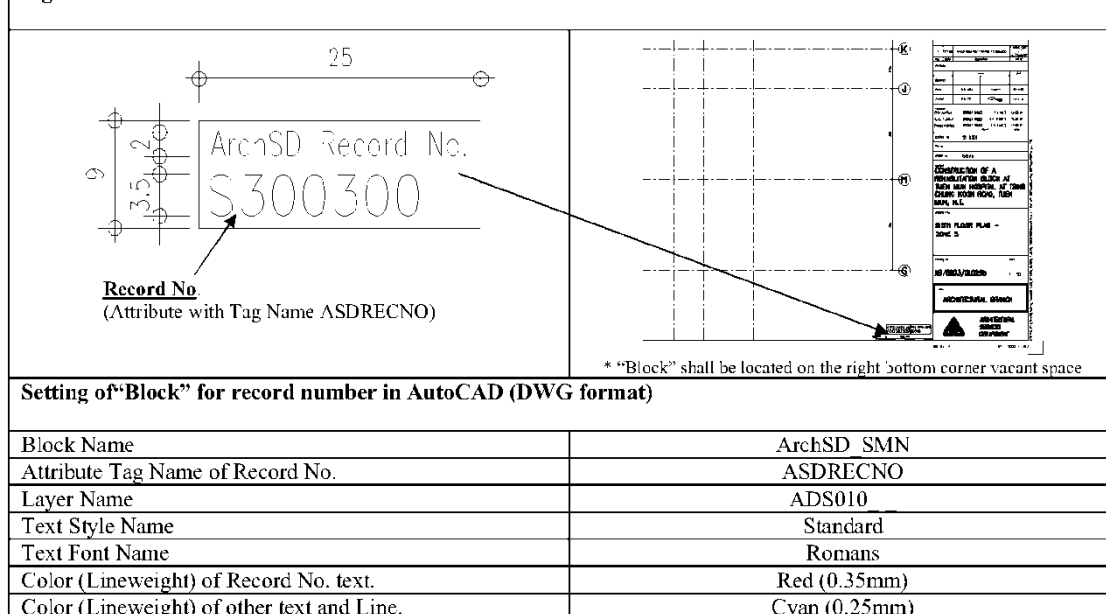


Figure 2: Proposed folder structure

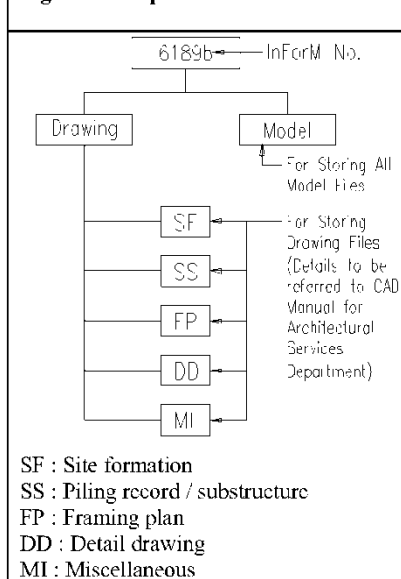
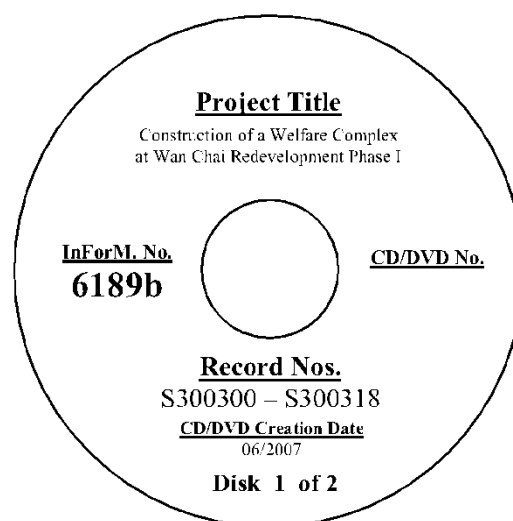


Figure 3: Label format of CD/DVD-ROM



**GUIDELINES FOR PREPARATION OF DESIGN CALCULATION FILES OF
AS-BUILT STRUCTURAL/GEOTECHNICAL WORKS**

The structural and geotechnical design calculations files shall be prepared and organized as follows:

- 1 The calculation files shall contain a title page duly signed by the RSE, table of contents and bookmarks pointing to relevant sections with similar nature. A list of bookmarks shall be displayed on the left panel when the file is opened (sample as **Figure 1**). The orientation of each page of the file shall be set according to the context. The page size of the file shall be set the same as the original size of the design calculations which are normally A4 size. Separate files shall be provided for projects with multiple building blocks or sizeable structures.
- 2 The calculation files for structural works shall be grouped under separate sections according to their natures, e.g.
 - (i) Piling;
 - (ii) Wind analysis;
 - (iii) Sub-structure;
 - (iv) Super-structure;
 - (v) Detailed design of horizontal structural elements (calculations of structural elements shall be presented in ascending order of floors levels and element numbers);
 - (vi) Detailed design of vertical structural elements and etc.
- 3 The calculation files for geotechnical works shall be grouped under separate sections for each geotechnical feature and arranged in systematic manner, e.g.
 - (i) Summary of ground investigation results;
 - (ii) Geotechnical design assumptions;
 - (iii) Stability analysis;
 - (iv) Structural design, if any;
 - (v) Drainage works and design, if any, and etc.
- 4 In general, each calculation file shall not contain more than 2000 pages of calculation (in monochrome) and file size shall not be more than 50 MB; otherwise the file shall be separated into sub-files.
- 5 Project information shall be labelled on CD/DVD-ROM computer disk. Sample as **Figure 2**.

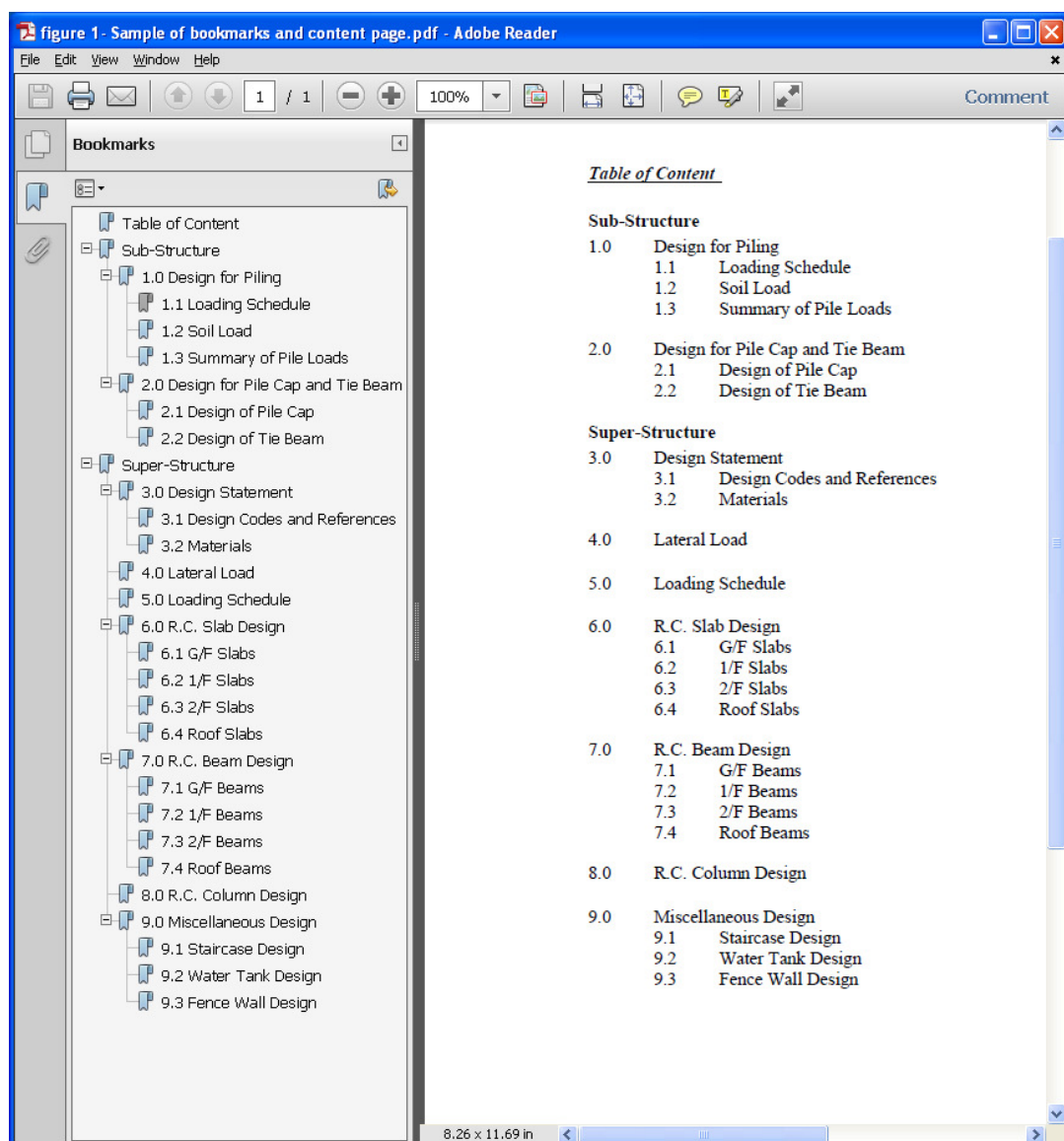
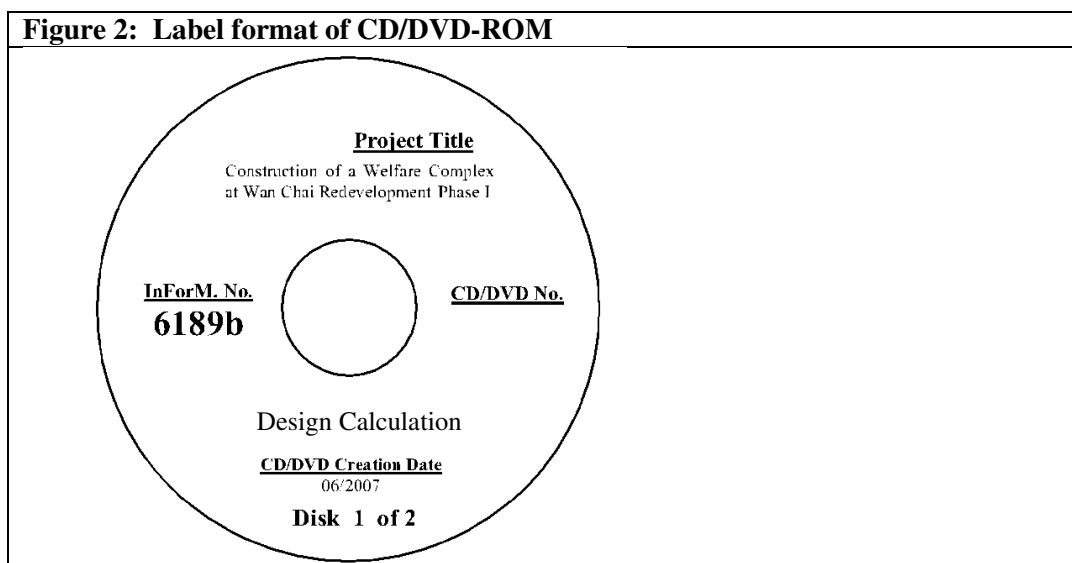


Figure 1 – Sample of Bookmarks and Content Page

Figure 2: Label format of CD/DVD-ROM



Annex IX

Maintenance Requirements for Blue Area

The following maintenance specific requirements are required to be provided and complied with by the Purchaser.

A. General

- (1) The Purchaser is required to submit the Design Proposal of the POS facilities to User Department and settle the maintenance requirements before design finalization;
- (2) The Purchaser is required to submit the Maintenance Checklist and settle the maintenance requirements before design finalization;
- (3) The Purchaser is required to seek maintenance comments from Property Services Branch of the Architectural Services Department. The Design Proposal and Maintenance Checklist shall be vetted, checked and satisfied by the Independent Checker before submission through the User Department;

B. Employment of an Independent Checker (IC)

The Purchaser is required to engage an Independent Checker (IC) to perform duties to ensure all maintenance requirements as so specified for the subject Blue Area are complied with and completed to the satisfaction of the User Department and their maintenance agents.

(1) Qualification of the Independent Checker for Building Maintenance Requirements

This IC shall be a consultant firm under the AACSB (Architectural Category or Building Surveying Category) and the consultant firm shall employ full time Registered Professional Surveyors (Building Surveying Division). The Registered Professional Surveyor shall have a minimum of 5 years' post qualification experience in building construction and has at least 2 years' experience in building maintenance field.

(2) Duties of Independent Checker for Building Maintenance Requirements

The IC shall effectively perform and discharge the following duties through liaison with the Purchaser, relevant Government Bureaus/Departments, Utilities Organizations and Authorities etc. The IC shall submit reports to the relevant User Department and their maintenance agents regularly on the comments given and actions taken:

(a) Design Stage

- i. Check for compliance of design with the User Department and their maintenance agents' maintenance requirements and standards;
- ii. The IC shall provide maintenance related comments on the design in aspects like the followings: (not an exhaustive list)
 - safe, ease and accessibility for future maintenance;
 - life cycle costing, choice of materials/finishes/detailing to minimize future maintenance inputs;
 - elimination of any design and detailing which may pose danger to user/ public , potential maintenance problems and incompatible accommodations;
 - maintenance accommodation and facilities for routine maintenance;
 - No facilities or services of any nature whatsoever which do not exclusively serve or relate to the POS facilities shall be accommodated in or pass through any part of the POS facilities;

- All services and related facilities exclusively for the Government operation and maintenance shall be self-contained within the POS facilities and discrete from the private development;
 - The POS facilities shall not form part of the means of escape for the private development;
 - The structure and waterproofing underneath the POS facilities shall not be outside the POS facilities.
- iii. Check and comment on the Purchaser's Design Proposal by scrutinizing design submissions received from the Purchaser from a maintenance perspective and advise the Purchaser for necessary improvement actions; and
 - iv. Attend design progress meetings organized by the Purchaser to discuss matters concerning future maintenance of the Blue Area.
 - v. Counter check the maintenance comments from the User Department and their maintenance agents and other relevant parties have been incorporated in the design drawings;
 - vi. Check the proposed Management and Maintenance Matrix is comprehensively prepared to cover all building elements, features and cross-boundary utilities / services in the project with clear demarcations and illustrated by drawings as necessary for agreement with all relevant parties; and
 - vii. Scrutinize / comment from the perspective of the maintenance responsibilities of the User Department and their maintenance agents on the proposed Management and Maintenance Matrix for the Blue Area as prepared by the Purchaser for the User Department and their maintenance agents' consideration.

(b) Completion and Handover Stages

- i. Carry out site checks during the pre-handover and handover inspections of the Blue Area to verify the works quality and test reports, if applicable, including but not limited to the waterproofing systems are in compliance with the maintenance requirements and forward consolidated advice to the User Department and their maintenance agents for consideration and necessary follow up actions prior to handover;
- ii. Ensure the strict compliance of the maintenance requirements stipulated in this Technical Schedule;
- iii. Recommend acceptance of the works to the User Department and their maintenance agents upon satisfactory completion;
- iv. Advise the User Department and their maintenance agents of the date from which the User Department and their maintenance agents shall take up the maintenance responsibility of the said Blue Area;
- v. Vet the Building Maintenance Manual submitted by the Purchaser to confirm that it complies with the requirements in paragraph C below.

(c) At the end of the Defects Liability Period

- i. Check with the User Department and their maintenance agents to compile a full list of all the required building maintenance works within the Defects Liability Period and carry out on-site inspections to check and report whether the maintenance works have been completed by the Purchaser up to the works quality requirements and

- satisfaction of the User Department and their maintenance agents;
- ii. Attend Defects Liability Period joint site inspections with all relevant parties to ensure the satisfactory performance of key building elements (including but not limited to the Roofing System, Waterproofing System, Plumbing and Drainage Installations, etc.) and follow up with the Project Department / the Purchaser until the required rectification works are satisfactorily completed; Recommend acceptance of defect rectification works to the User Department and their maintenance agents upon satisfactory completion;
- iii. Check and report the compliance of the maintenance requirements stipulated in this Technical Schedule;
- iv. Check and report whether all the relevant certificates for compliance with the statutory requirements have been renewed beyond the end of the Defects Liability Period; and
- v. Monitor the status of the rectification works and review the date from which the User Department and their maintenance agents shall take up the maintenance responsibility of the Blue Area.

C. Preparation and Submission of a Building Maintenance Manual (BMM)

The Purchaser is required to employ a Registered Building Professional (RBP) to lead, prepare and submit Three Sets of a Building Maintenance Manual (BMM) in both hard and soft copies for the Blue Area. The draft BMM shall be submitted before the date of the pre-handover inspection and the final BMM shall be submitted within 56 days from the date of handover.

(1) Qualification of the RBP to prepare the BMM

The RBP shall be a Registered Professional Surveyor (RPS) (Building Surveying Division) as defined in the Surveyors Registration Ordinance (Chapter 417, Laws of Hong Kong) who shall have a minimum of 5 years' post qualification experience in building construction and have at least 2 years' experience in building maintenance field.

(2) Content of the BMM

The content of the BMM shall be strictly in compliance with Guideline No. 36 for Deeds of Mutual Covenant promulgated under Legal Advisory and Conveyancing Office Circular Memorandum No. 79A issued by the Lands Department on 28 June 2021 as amended from time to time and in accordance with the latest edition of the "Guide to Prepare a Building Maintenance Manual" issued by The Hong Kong Institute of Surveyors (HKIS).

The content of the BMM, which among other information/documents, shall include but not limited to the following deliverables:

- i. System description
 - Type of systems and equipment installed
 - Location of system I major equipment, what and where they serve
 - Description of operation and function of system / equipment
 - Design criteria, design data and parameter
 - General operation conditions and expected life
 - Frequency of inspection & maintenance required
 - Name of manufacturers / sub-contractors and their contact number, and address
- ii. Approved shop drawings and as-built scaled and dimensioned architectural drawings, building services drawings, structural and geotechnical drawings,

statutory submission, etc. Drawing shall be in pdf and dwg format following DEVB CAD standard and relevant architectural drawing manual;

- iii. Schedules of all materials, fixtures, fittings and appliances along with the names and contact telephone numbers of their respective suppliers / manufacturers or agents in Hong Kong including a copy of the catalogue, literatures, technical standard, design calculation, testing certificates, maintenance requirements, O&M manuals, etc.;
- iv. Original copy of all certificates and warranties for proprietary materials, fixtures, fittings, appliances, plant and equipment which shall be provided to the relevant User Department and their maintenance agents from the date of expiry of Defects Liability Period, including Manufacturer's certificates / guarantees / warranties, statutory certificate, factory test certificate, laboratory test reports, and other statutory inspection certificates etc.;
- v. An agreed Management and Maintenance Matrix with colored drawings demarcating management and maintenance responsibilities of the Blue Area. The Purchaser shall be responsible for proposing and seeking agreement from all relevant parties and consolidate the agreed Management and Maintenance Matrix;
- vi. Maintenance Recommendations, Maintenance Schedules and Safety Precautions on operation and maintenance, description of the hazards and safety precautions of which the operation and maintenance staff need to be aware, including:
 - (a) any known feature / operational characteristics of the development (such as post-tension structure / fire engineering approach etc. (if applicable) adopted for which part of building etc.), installed equipment / systems which may produce a hazard;
 - (b) any known hazards against which protection / precaution must be provided;
 - (c) any mandatory requirements relating to safety;
 - (d) any other safety precaution which must be observed; and
 - (e) any other relevant warning;
- vii. Spare Material Lists including item description, name of manufacturer & supplier, and agent, quantity etc.;
- viii. Environmental concerns;
- ix. Photographic and video records showing the site progress and completed works;
- x. Topographic survey records, underground utilities survey record, impact assessment reports, if any;
- xi. Completion certificate certified by the Authorized Person, Registered Structural Engineer and Registered Geotechnical Engineer on the compliance with the statutory requirements and government standard; and
- xii. Approved Schedule of Accommodation

MEMORANDUM OF AGREEMENT

BETWEEN

of
(herein referred to as “the Purchaser”) of the one part and the Chief Executive on behalf of the Government of the Hong Kong Special Administrative Region of the other part, whereby it is agreed that the tender for Hung Shui Kiu Town Lot No. 21 (herein referred to as “the lot”), Hung Shui Kiu Town Lot No. 18, Hung Shui Kiu Town Lot No. 19 and Hung Shui Kiu Town Lot No. 20 (the aforesaid land (excluding the lot) are herein collectively referred to as “Other Lots”) having been accepted at the premium hereunder specified and the Purchaser as the purchaser of the lot and the Other Lots (or in the event that the Purchaser is not the purchaser of all of the Other Lots, the Purchaser as the purchaser of the lot and such Other Lots of which the Purchaser is the purchaser, jointly with the purchaser(s) of such Other Lots of which the Purchaser is not the purchaser) having paid the sum of HK\$50,000,000.00 as an initial deposit and the further deposit (if required) referred to in paragraph 13(a) of the Tender Notice annexed to the foregoing Conditions of Sale and in part payment of the premium (the receipt(s) of which are hereby acknowledged), hereby agrees to pay as the purchaser of the lot and the Other Lots (or in the event that the Purchaser is not the purchaser of all of the Other Lots, hereby agrees to pay as the purchaser of the lot and such Other Lots of which the Purchaser is the purchaser, jointly and severally with the purchaser(s) of such Other Lots of which the Purchaser is not the purchaser) the balance of the premium and to become the lessee of the lot upon and subject to the foregoing Conditions of Sale and on his part to perform and abide by the said Conditions.

Registry No.	Rent	Amount of premium at which the lot and the Other Lots are purchased
Hung Shui Kiu Town Lot No. 21	As specified in General Condition No. 4	HK\$

Dated 20 .

Witness to the signature of/execution by the Purchaser:

Signature of the Purchaser/Execution by the Purchaser in the case of a limited company:

Address

Witness to the signature of Chief Estate Surveyor/Land Supply:

For and on behalf of the Chief Executive of the Hong Kong Special Administrative Region:

Civil Servant,
Lands Department

Chief Estate Surveyor/Land Supply

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For and on behalf of the Chief Executive of the Hong Kong Special Administrative Region:

Civil Servant,
Lands Department

Chief Estate Surveyor/Land Supply

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Dated 20 .

Witness to the signature of/execution by the Purchaser:

Signature of the Purchaser/Execution by the Purchaser in the case of a limited company:

Address

Witness to the signature of Chief Estate Surveyor/Land Supply:

For and on behalf of the Chief Executive of the Hong Kong Special Administrative Region:

Civil Servant,
Lands Department

Chief Estate Surveyor/Land Supply

MEMORANDUM OF AGREEMENT

BETWEEN

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Dated 20 .

Witness to the signature of/execution by the Purchaser:

Signature of the Purchaser/Execution by Purchaser in the case of a limited company:

Address

Witness to the signature of Chief Estate Surveyor/Land Supply:

For and on behalf of the
Chief Executive of the Hong Kong
Special Administrative Region:

Civil Servant,
Lands Department

Chief Estate Surveyor/Land Supply

LOT NUMBER
LOT 21 : LOT 20
[5] [3] [6] [5]
SECTION
[2] [1]
[1] [2] [3] [4] [5] [6] [7] [8] [9] [10] [11] [12] [13] [14] [15] [16] [17] [18] [19] [20] [21] [22] [23] [24] [25] [26] [27] [28] [29] [30] [31] [32] [33] [34] [35] [36] [37] [38] [39] [40] [41] [42] [43] [44] [45] [46] [47] [48] [49] [50] [51] [52] [53] [54] [55] [56] [57] [58] [59] [60] [61] [62] [63] [64] [65] [66] [67] [68] [69] [70] [71] [72] [73] [74] [75] [76] [77] [78] [79] [80] [81] [82] [83] [84] [85] [86] [87] [88] [89] [90] [91] [92] [93] [94] [95] [96] [97] [98] [99] [100]

Point	Hong Kong 1980 Grid Coordinates	
	N (m)	E (m)
A	833181.592	816606.355
B	833184.254	816610.407
C	833184.090	816616.509
D	833179.850	816649.277
E	833175.502	816675.604
F	833168.404	816682.310
X	833077.441	816656.335
G	833100.287	816576.332
ARC CENTRE		
A-B	833179.264	816610.785
B-C	833154.285	816612.653
D-E	832800.945	816600.222
G-A	833025.877	816902.941

I, FAN Ko-kwan, **Land Surveyor/ Yuen Long*
/ an Authorized Land Surveyor registered under the Land Survey Ordinance (Cap. 473), hereby certify that this land boundary plan has been prepared from land boundary surveys that were carried out by me or under my direct supervision in conformity with the **Land Boundary Survey Regulations / *Code of Practice approved by the Land Survey Authority under the above Ordinance*, and that this plan correctly represents that survey completed on the 15th day of October, 2025.

Dated this 19th day of December, 2025.

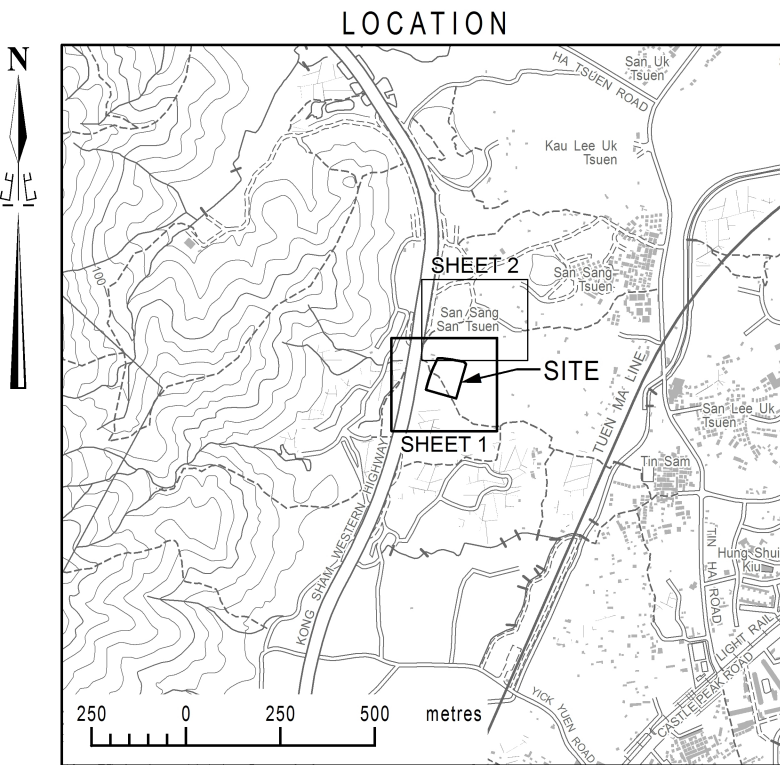
Signed

**Land Surveyor/ Yuen Long*
**Authorized Land Surveyor*

Remarks:

- (1) * - Delete as appropriate.
(2) The practice requirements laid down in the Land Boundary Survey Regulations of the Lands Department are the same as those in the Code of Practice approved by the Land Survey Authority under the Land Survey Ordinance.

	SP			
Field Book	-----			
Comp.Folder	YL19801			
Svy.Officer	Y.M.TANG			
Tech.Officer	W.Y.CHUNG			
Date	19/12/2025			
Plan No.	YL19801-SP			



SIDE	DISTANCE IN METRES	BEARING	Pt.	CORNER MARKED BY
Chord A B	4.848	56 41 48		
Chord B C	6.104	91 32 36		
C D	33.041	97 22 20		
Chord D E	26.684	99 22 41		
E F	9.765	136 37 36		
F X	94.599	195 56 13		
X G	83.201	285 56 15		
Chord G A	86.671	20 16 03		
CURVE DATA				
Arc AB =	5.061m	Radius = 5.005m	Δ = 57° 56' 34"	
Arc BC =	6.115m	Radius = 30.053m	Δ = 11° 39' 28"	
Arc DE =	26.689m	Radius = 382.067m	Δ = 4° 00' 08"	
Arc GA =	86.915m	Radius = 334.978m	Δ = 14° 51' 58"	

× 14.5 SPOT LEVEL IN METRES AS AT 28/05/2025

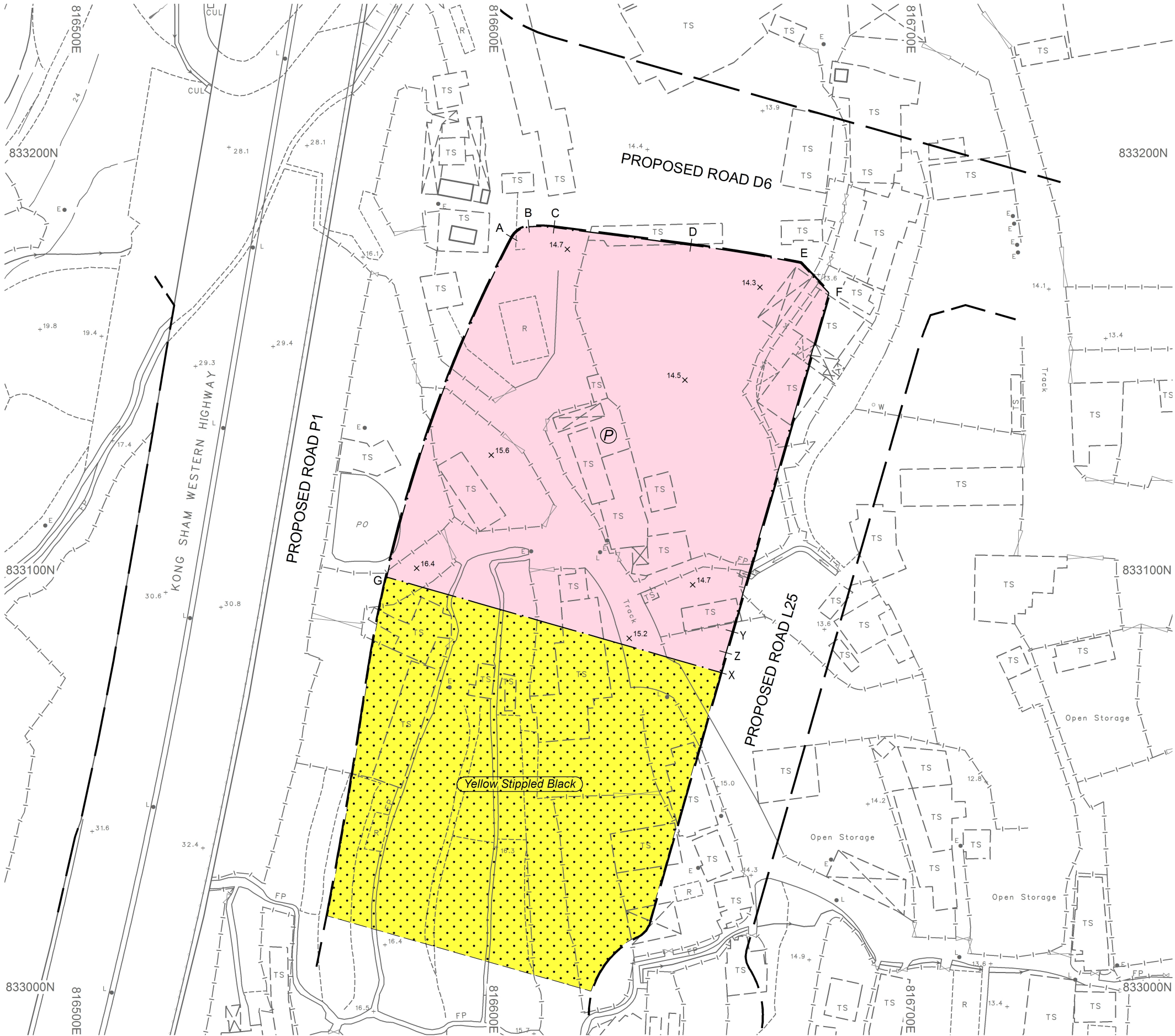
SPECIAL CONDITIONS REFER

 Yellow Stippled Black

POINTS X, Y, Z

LEGEND

 PROPOSED ROAD



COLOURED PINK AREA 7 757 SQUARE METRES (ABOUT)

metres 20 0 20 40 60 80 100 metres

 District Survey Office, Yuen Long
Lands Department
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HUNG SHUI KIU TOWN LOT No. 21

File No. LAO/LSS-DLOs-002-YL-001-HSK-21-002-001,
SMO/Regional-007-001-DSO/YL-2025-W0226

Survey Sheet No. 6-NW-12A

O.Z.P. No. S/HSK/2

PLAN No. YL19801-SP (SHEET 1 OF 2)

Date : 19/12/2025

LAND SUPPLY SECTION

LANDS DEPARTMENT



Signature of the Purchaser /
Execution by the Purchaser
in the case of a limited company

Witness to the signature of /
execution by the Purchaser

For and on behalf of the
Chief Executive of the Hong Kong
Special Administrative Region

Chief Estate Surveyor / Land Supply

Witness to the signature of
Chief Estate Surveyor / Land Supply
Civil Servant,
Lands Department

Dated this ____ day of _____ 20__

Dated20.....

AGREEMENT
AND
CONDITIONS OF SALE
OF
Hung Shui Kiu Town Lot No. 21

Purchaser :

Rent : As specified in General
Condition No. 4

Term : 50 years from the date of the
Memorandum of Agreement

Lands Department