LANDSCAPE & TREES

Old Course Hole #1

LANDSCAPE & TREES

1. Introduction.
2. Incompetent Landscape Impact Assessment
3. Loss of Irreplaceable Cultural Heritage Landscape
4. Potential Old and Valuable Trees preclude development
5. Proposed Tree Retention is Impossible
6. Severe Shading Impacts caused by development
7. CONCLUSION

EIA Approval does NOT resolve the environmental issues:

- **EIA Report should never have been approved because it failed to undertake competent baseline surveys, failed to follow proper methodologies (as laid down the Brief, TM and Guidance Notes) and failed to properly identify huge adverse environmental impacts and their significance**
- **EIA Approval conditions are so vague ("*…as far as practicable..*") no one will be able to judge when they are satisfied.**
- **EIA Approval conditions effectively pass all environmental control to the project proponent**
- **EIA Approval conditions are unenforceable because there is NO ENVIRONMENTAL PERMIT.**
- **Consequently, no legal recourse for the public in the event of breached promises. Anything goes.**

- First ACE was misled, and now TPB are being misled by information in the TPB Paper 10902 that is factually incorrect to a very high degree.
- Objective factual errors that were reported to Government in May 2022 and May 2023 and that could be easily checked by Government and their consultants have been ignored and the same seriously inaccurate information continued to be presented to ACE last month and is included again in the TPB Paper No. 10902 presented by Government at this hearing.
- It is also worth noting that ACE Paper 8/2023 ignored some comments made by TPB Members at meetings held on 17th and 22nd June 2022.

The TPB decision must be based on the ACTUAL FACTS, and we are here to advise you of the many INCONVENIENT TRUTHS about the PHD proposals.

LANDSCAPE & TREES

1. Introduction.
2. Incompetent Landscape Impact Assessment
3. Loss of Irreplaceable Cultural Heritage Landscape
4. Potential Old and Valuable Trees preclude development
5. Proposed Tree Retention is Impossible
6. Severe Shading Impacts caused by development
7. CONCLUSION

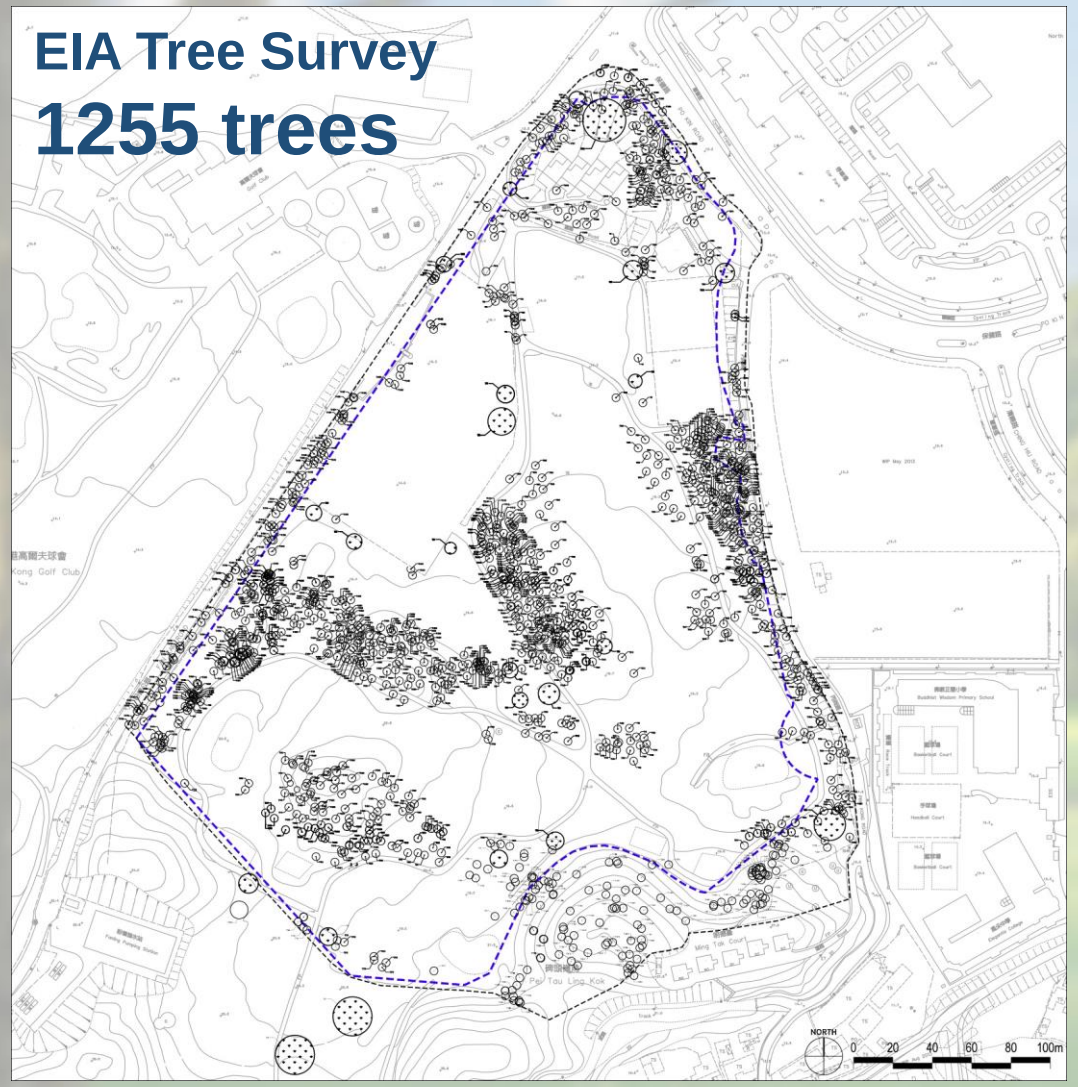
Incompetent Landscape Impact Assessment

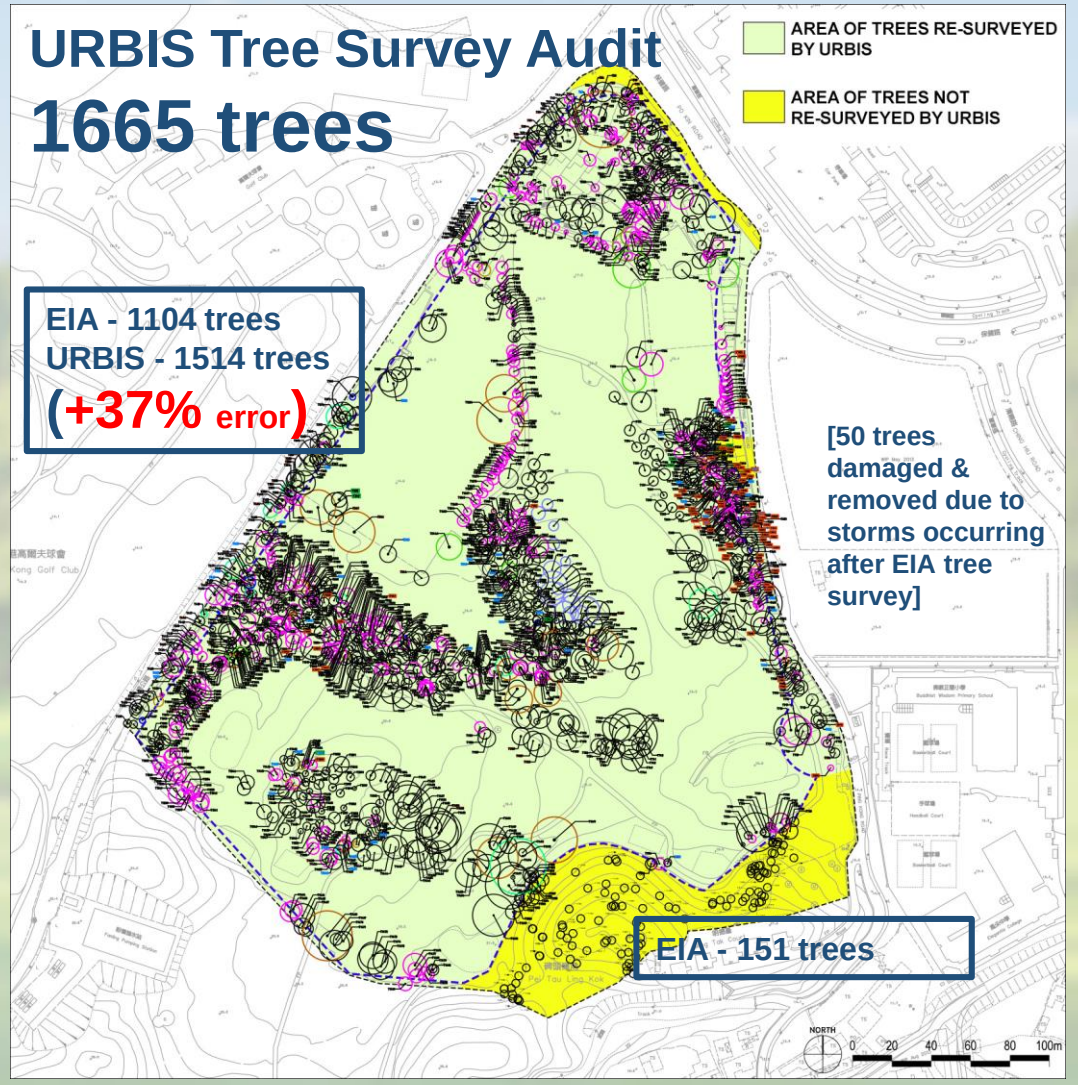
Importance of Baseline Surveys

- The baseline surveys of existing conditions conducted by each EIA discipline are the essential foundations upon which an entire EIA is built.
- Logic dictates that inadequacy and inaccuracy in baseline surveys undermines all subsequent assessment to a degree consistent with the degree of inadequacy and inaccuracy in the baseline surveys.
- The Baseline Survey of the Landscape Impact Assessment (LIA) is riddled to a very high degree with so many significant omissions, huge errors and inadequacies, with consequential high degree of adverse effect on the results of the impact assessment, that it fails to comply with the requirements of the EIAO TM in two main respects, namely:
  - failure to survey several landscape resources required to be surveyed in accordance with the EIAO TM; and
  - failure to achieve an acceptable quality of survey of those landscape resources and landscape character areas that have been surveyed.
- HKGC pointed out these errors in June 2022, yet none were addressed in ACE Paper 8/2023, nor are they in TPB paper 10902.

Incompetent Landscape Impact Assessment

460 Trees Missing from EIA Tree Survey!





Incompetent Landscape Impact Assessment

Gross Mis-measurement of Tree Dimensions

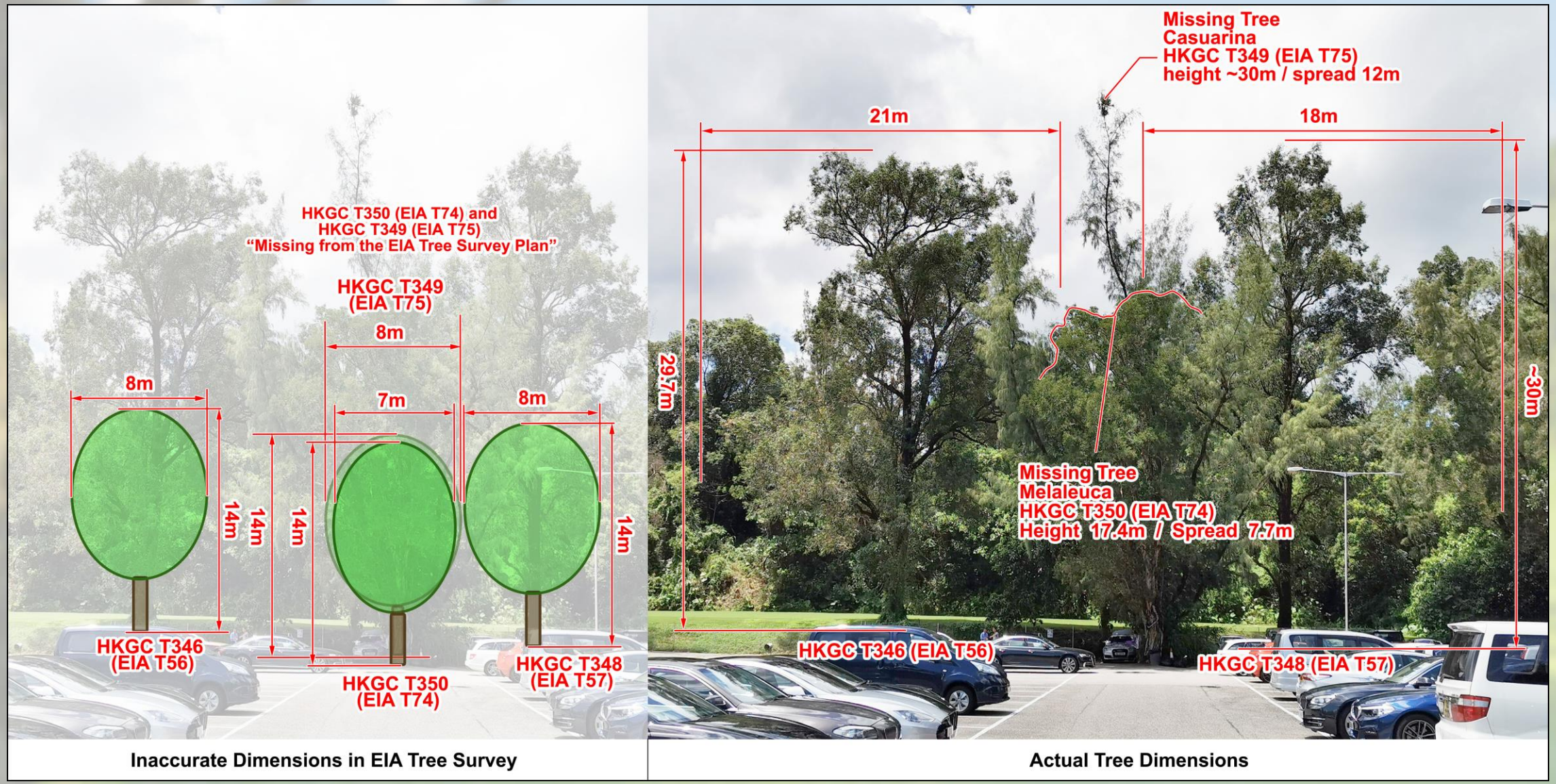
- Tree diameter at breast height (DBH) is under-measured by average 86% and to as low as 23% of DBH
- Tree height is under-measured by average 76% and to as low as 29% of actual height
- Tree canopy spread is under-measured by average 60% and to as low as 25% of actual canopy spread in open areas and by average 66% and to as low as 11% of actual canopy spread in woodland areas
- All the above errors have substantive impact on identification of large Trees of Particular Interest (TPIs) and also the dimensions of their Tree Protection Zones (TPZs).

EIA identified 24 Large TPIs in Sub Area 1 whereas the correct number is **33 Large TPIs** (+37% error)

These highly significant errors have been pointed out to Government (June 2022 (draft review) & May 2023 (detailed review)) but ignored, and continue to be ignored in TPB Paper 10902 as if it doesn't matter.

Incompetent Landscape Impact Assessment

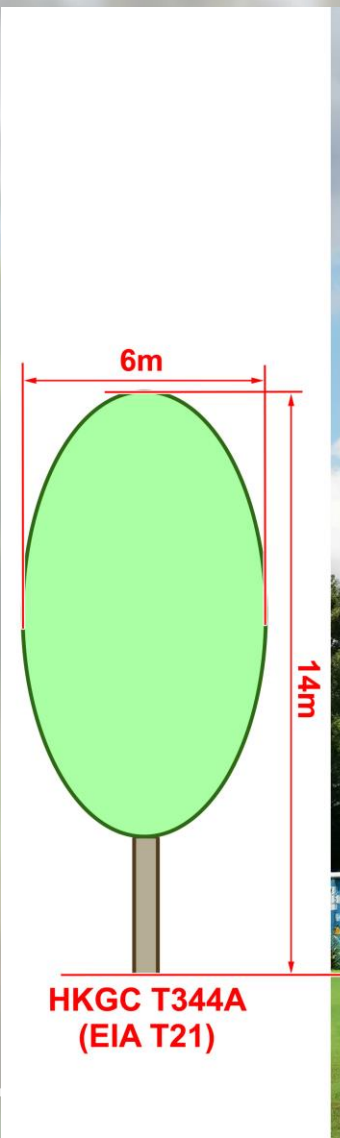
Gross Mis-measurement of Tree Dimensions

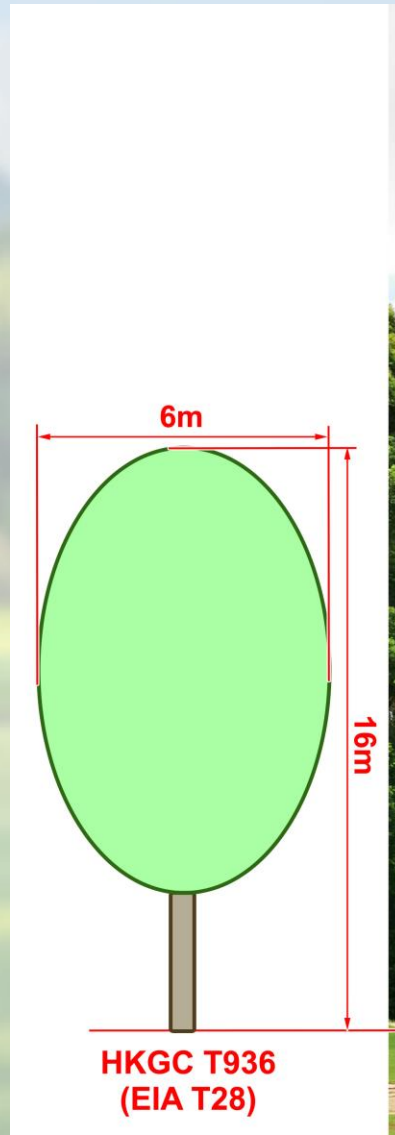


Inaccurate Dimensions in EIA Tree Survey | Actual Tree Dimensions

Incompetent Landscape Impact Assessment

Gross Mis-measurement of Tree Dimensions





Incompetent Landscape Impact Assessment

Gross Under-assessment of Tree Amenity Value

Appendix C(1)

Tree Assessment Schedule[1]

Project Title: _____

Date of Tree Survey: _____ Surveyed by: _____

Tree No.[2]	Species[3]		Measurements			Amenity value[5]	Form	Health condition	Structural condition	Suitability for transplanting[6]		Conservation status[8]	Recommendation	Maintenance department to provide comments on TPRP[9]		Additional Remarks[10]
	Scientific name	Chinese name	height (m)	DBH[4] (mm)	crown spread (m)	(high(H)/ medium(M) /low(L))	(good G)/average (A)/ poor (P))			(high(H)/ medium(M)/ low(L))	Remarks[7]		(retain/transplant/ remove)	Before	After	

1 For large-scale infrastructure works projects, such as site formation works and advance infrastructure works for new town development, tree group survey can be adopted subject to the justification(s) provided.
2 Tree(s) in the Register of Old and Valuable Trees should be highlighted with their registration numbers.
3 Guidance on proper use of scientific name of plants is given in the Agriculture, Fisheries and Conservation Department's Nature Conservation Practice Note No. 3, which can be viewed at AFCD's web page *http://www.afcd.gov.hk/english/conservation/con_tech/files/common/NCPC_No.03_The_use_of_plant_names_rev_2008_2.pdf*).
4 DBH of a tree refers to its diameter at breast height (i.e. measured at 1.3 m above ground level). Guidance on DBH measurement is given in the Agriculture, Fisheries and Conservation Department's Nature Conservation Practice Note No. 2, which can be viewed at AFCD's web page *http://www.afcd.gov.hk/english/conservation/con_tech/files/common/NCPN_No.02_measurement_of_DBH_ver.2006.pdf*).
5 Amenity value of a tree should be assessed by its functional values for shade, seasonal interest, screening, reduction of pollution and noise and also its fung shui significance, and classified into the following categories.
High (H): important trees which should be retained by adjusting the design layout accordingly.
Medium (M): trees that are desirable to be retained in order to create a pleasant environment, which includes healthy specimens of lesser importance than "High" trees.
Low(L): trees that are dead, dying or potentially hazardous and should be removed.
6 Assessment shall take into account conditions of an individual tree at the time of survey (including health, structure, age and root conditions), site conditions (including topography and accessibility), and intrinsic characters of tree species (survival rate after transplanting).
7 Major determining factors for the rating on suitability for transplanting should be included if necessary.
8 State the rarity and protection status of the species.
9 Refer to paragraphs 35 and 36 of the Circular.
10 Any additional information deemed necessary for consideration of the proposed management recommendation.

DEVB TC(W) No. 4/2020 *Appendix C(1)* *Page C(1)1 of 1*

Unlike the objective measurement of physical tree dimensions which is either correct or incorrect, the assessment of Amenity Value is subjective, based on qualities described in the Technical Circular DEVB TC(W) 4/2020 'Tree Preservation' Appendix C(1)

5 Amenity value of a tree should be assessed by its functional values for shade, seasonal interest, screening, reduction of pollution and noise and also its fung shui significance, and classified into the following categories.
High (H)
Medium (M):
Low(L):

Incompetent Landscape Impact Assessment

Gross Under-assessment of Tree Amenity Value

Old Course
Hole #1

Landscape & Trees

O.N.E. living heritage

HONG KONG GOLF CLUB

Incompetent Landscape Impact Assessment

Gross Under-assessment of Tree Amenity Value

Old Course
Hole #3

Landscape & Trees

Incompetent Landscape Impact Assessment

Gross Under-assessment of Tree Amenity Value

Old Course
Hole #3

Landscape & Trees

Incompetent Landscape Impact Assessment

Gross Under-assessment of Tree Amenity Value

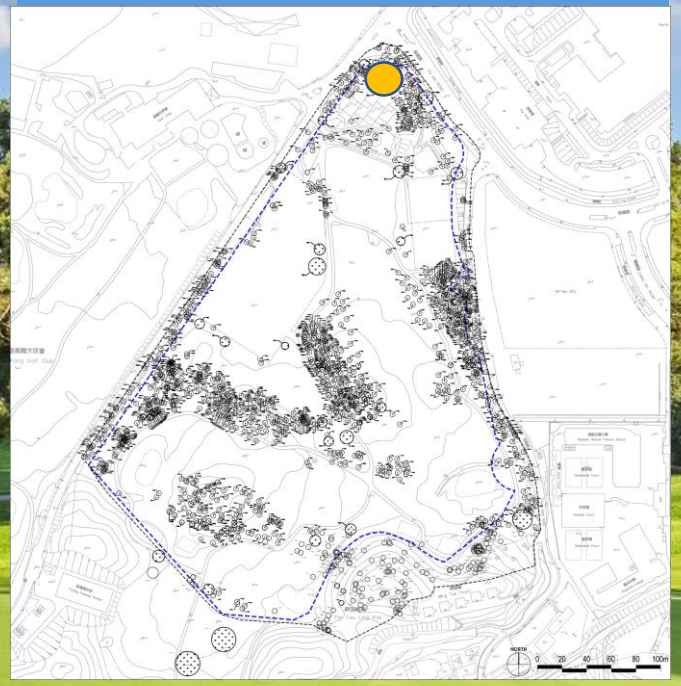
Old Course
Hole #1

Landscape & Trees

Incompetent Landscape Impact Assessment

Gross Under-assessment of Tree Amenity Value

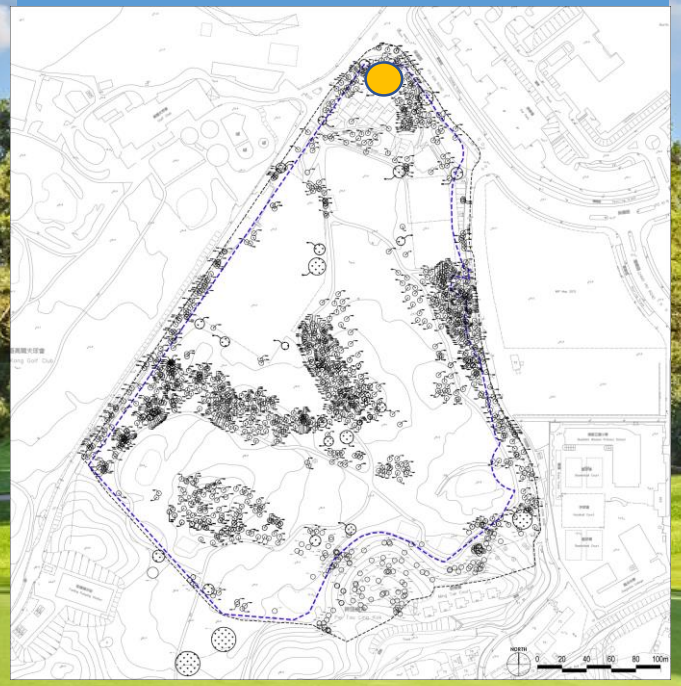
Only 1 tree assessed as High Amenity Value!



Incompetent Landscape Impact Assessment

Gross Under-assessment of Tree Amenity Value

Only 1 tree assessed as High Amenity Value!



5 Amenity value of a tree should be assessed by its functional values for shade, seasonal interest, screening, reduction of pollution and noise and also its fung shui significance, and classified into the following categories.

High (H): important trees which should be retained by adjusting the design layout accordingly.

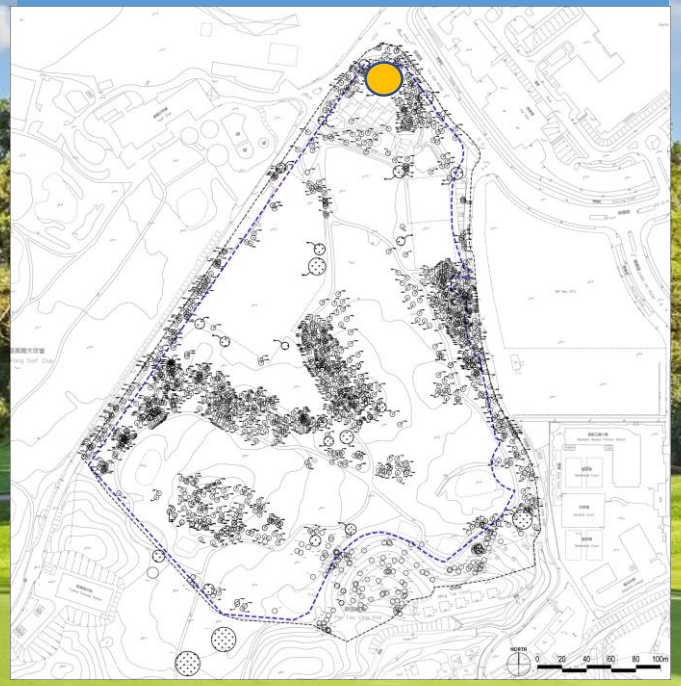
Medium (M): trees that are desirable to be retained in order to create a pleasant environment, which includes healthy specimens of lesser importance than "High" trees.

Low(L): trees that are dead, dying or potentially hazardous and should be removed.

Incompetent Landscape Impact Assessment

Gross Under-assessment of Tree Amenity Value

Only 1 tree assessed as High Amenity Value!



- It is accepted that assessment of Amenity Value is subjective and that different professionals may evaluate the same trees slightly differently. The URBIS Tree Survey Audit identified 143 trees of High Amenity value in the 1514 trees surveyed (9.45%)
- However, the assessment is based on easily understood criteria in DEVB TC(W) 4/2020 which should enable a general consensus, and the identification of only one tree of "High" Amenity Value in the EIA Tree Survey is indefensible by rational standards of assessment, and also inconsistent with the identification of 70 TPIs in the EIA Tree Survey (notwithstanding that correct number of TPIs should be 88).
- Identifying only one tree of "High" Amenity Value is also highly self-serving because it means that only one tree falls into the category of "*important trees which should be retained by adjusting the design layout accordingly*" (DEVB TC(W) 4/2020) thereby removing the proponent's requirement to design the scheme to retain trees with high amenity value.

5 Amenity value of a tree should be assessed by its functional values for shade, seasonal interest, screening, reduction of pollution and noise and also its fung shui significance, and classified into the following categories.

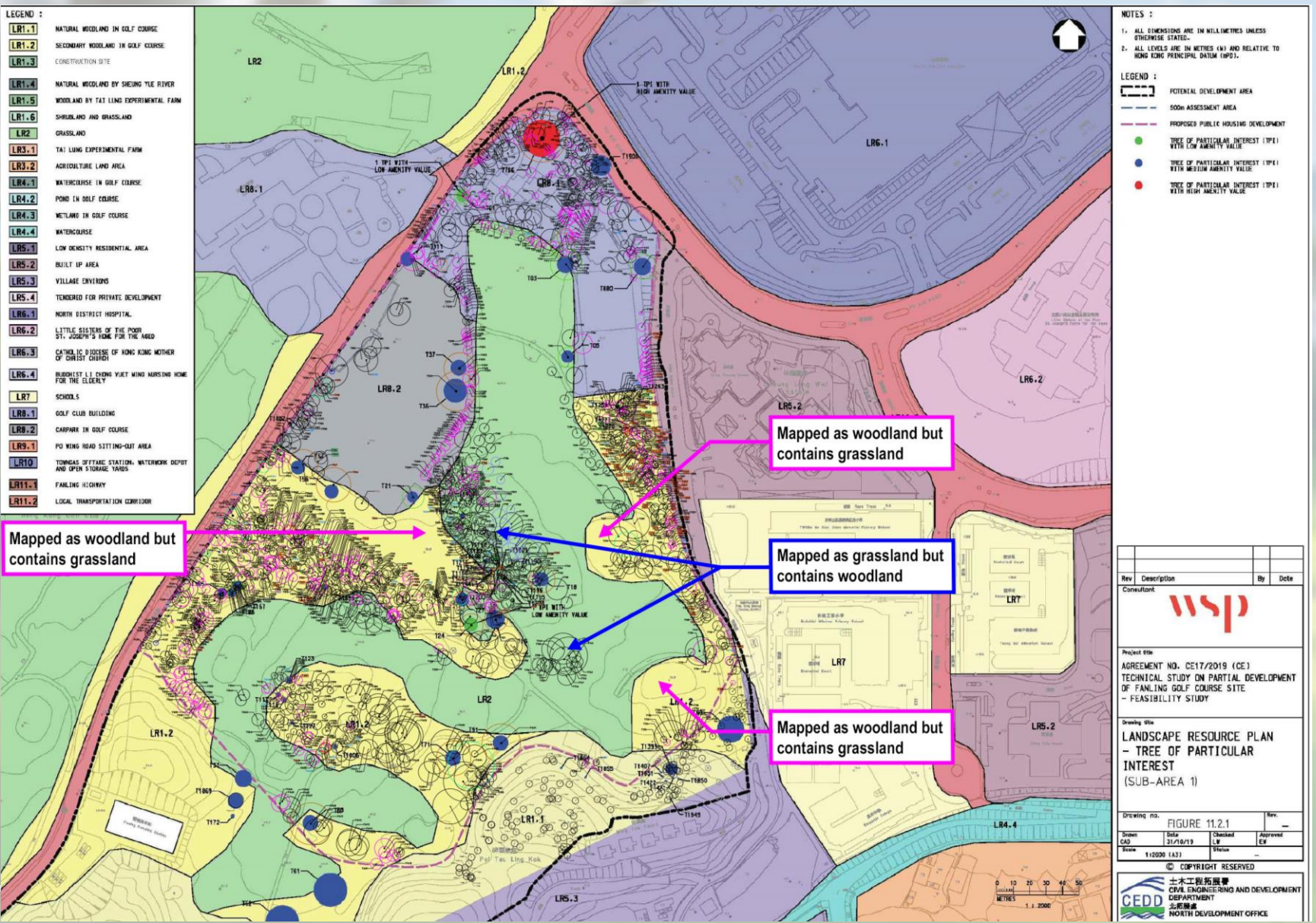
High (H): important trees which should be retained by adjusting the design layout accordingly.

Medium (M): trees that are desirable to be retained in order to create a pleasant environment, which includes healthy specimens of lesser importance than "High" trees.

Low(L): trees that are dead, dying or potentially hazardous and should be removed.

Incompetent Landscape Impact Assessment

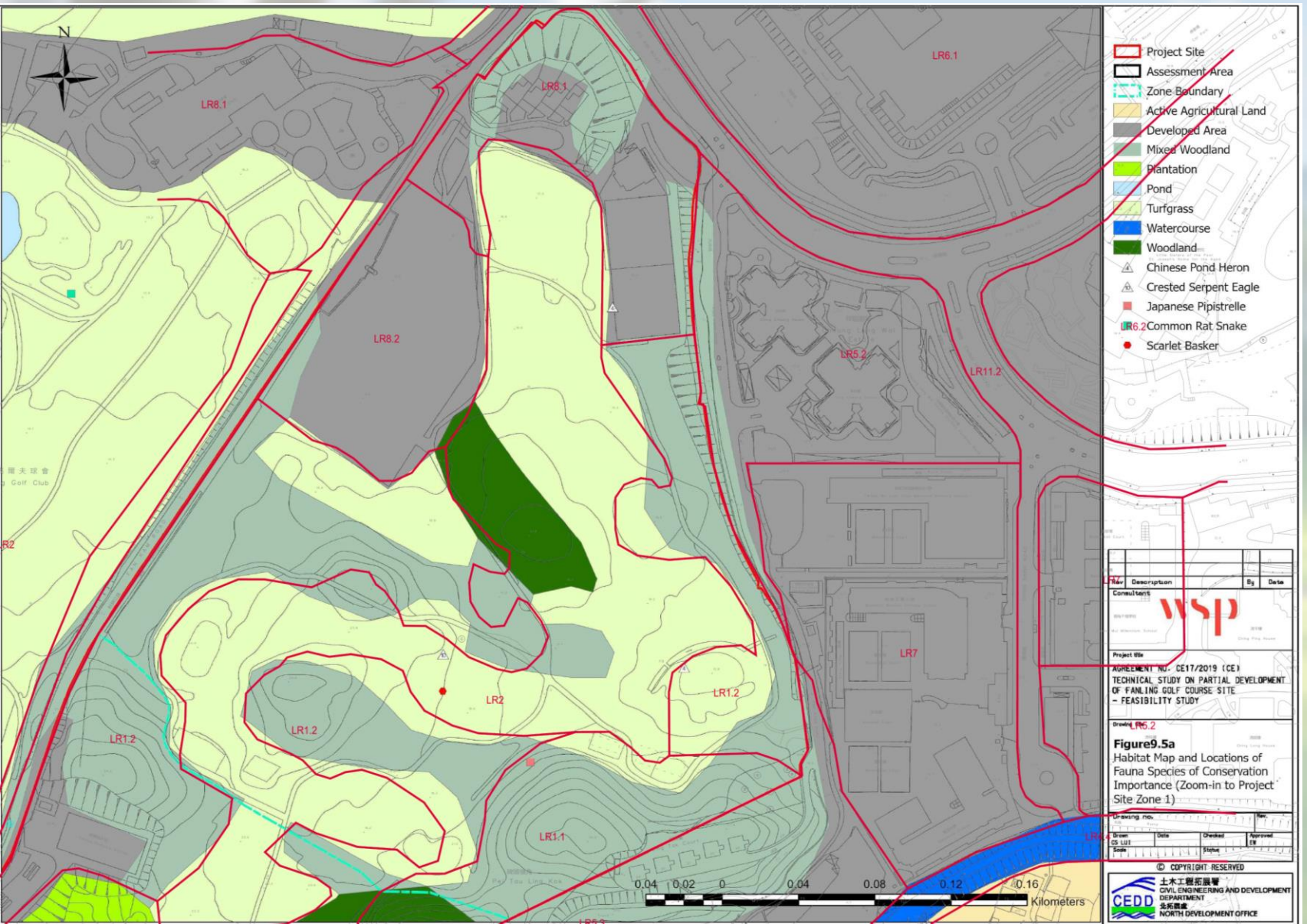
Inaccurate Mapping of Landscape Resources



- This diagram shows an overlay of the EIA Tree Survey on the LVIA Plan mapping the landscape resources, colour coded green for Grassland and yellow for Woodland.
- However, the overlay reveals that large areas mapped as grassland are actually woodland, and large areas mapped as woodland are actually grassland!
- Landscape Resources are poorly mapped leading to inaccurate measurement of affected areas of woodland and grassland leading to subsequent inaccurate evaluation of impacts.
- **The assessment cannot be trusted.**

Incompetent Landscape Impact Assessment

Inaccurate Mapping of Landscape Resources



- This diagram shows the Landscape Resource mapping boundaries (red lines) from the plan I just showed you, overlain onto the map of the Ecology Resources in the Ecological Impact Assessment.
- Not only are the boundaries different between the Landscape & Ecological assessments, but so are the descriptions.
- The LVIA identifies ‘Natural Woodland” and ‘Secondary Woodland’ and the EcoIA identifies ‘Woodland” and “Mixed Woodland” - and with totally different geographical distributions that do not correlate.
- **The assessment cannot be trusted.**

Incompetent Landscape Impact Assessment

How can they miss 460 trees – 37% error?

How can they measure trees at less than half their actual size?

How can you trust them to undertake a complex Landscape Impact Assessment if they cannot even count the trees and measure their sizes correctly?

You cannot! The LVIA impact assessment methodologies are riddled with the same high degree of omissions and errors as found in the baseline survey.

Garbage IN - Garbage OUT

The findings of the LVIA cannot be trusted

Incompetent Landscape Impact Assessment

Table 2 - Summary of Tree Treatment

Proposed Treatment	Location	Tree Types	No. of Tree (s)	Sub-total
Retain	Sub-area 1	TPIs (mature trees with DBH>=1000mm)	11	267
		TPIs (rare/protected species with DBH>=95mm)	5	
		TPIs (rare/protected species with DBH<95mm)	9	
		Trees other than TPIs	242	
	Sub-area 2 - 4	TPIs (mature trees with DBH>=1000mm)	41	3090
		TPIs (rare/protected species with DBH>=95mm)	80	
		TPIs (rare/protected species with DBH<95mm)	274	
		Other trees (in tree groups)	2695	
	Adjacent area	TPIs (mature trees with DBH>=1000mm)	1	24
		Trees other than TPIs	23	
		Sub-total	**3381**	
Transplant	Sub-area 1	TPIs (mature trees with DBH>=1000mm)	2	34
		TPIs (rare/protected species with DBH>=95mm)	10	
		TPIs (rare/protected species with DBH<95mm)	22	
		Sub-total	**34**	
Remove	Sub-area 1	TPIs (mature trees with DBH>=1000mm)	11	954
		TPIs (rare/protected species with DBH>95mm)	0	
		Trees other than TPIs (excluding *Leucaena leucocephala*)	880	
		Leucaena leucocephala	63	
	Adjacent area	Trees other than TPIs	35	42
		Leucaena leucocephala	7	
		Sub-total	**996**	
		Total	**4411**	

- **The hugely inaccurate baseline survey has led to hugely inaccurate impact assessments leading to wrong conclusions on both the significance and acceptability of the landscape impacts.**
- **Plan H-2d in TPB Paper 10902, showing the 'Summary of Tree Treatment' repeats the same hugely inaccurate information presented in the EIA, ignoring all the corrections provided by HKGC in May 2022 and May 2023 and ignoring TPB Members comments in June 2022.**
- **The actual number of trees to be felled is not 996 but at least 1500.**
- **The actual number of large TPIs (pOVTs) that would need to be felled is not 11 but at least 27.**

Incompetent Landscape Impact Assessment

Highly Impractical Transplanting Proposal

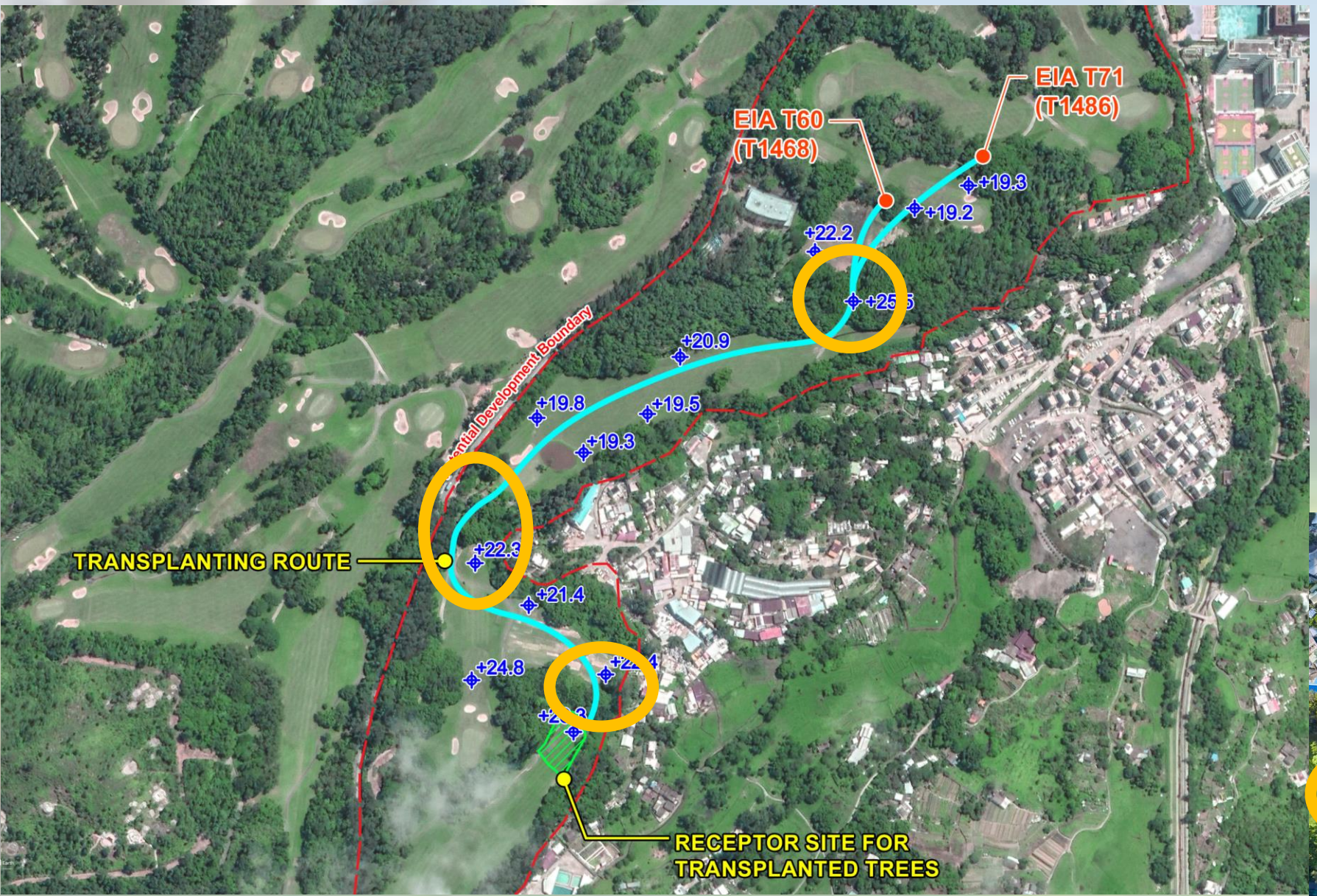
EIA T60 - Adenanthera microsperma

EIA T71 – Ficus microcarpa

- EIA proposes to transplant a number of trees including 2 large TPIs (pOVTs).
- Transplanting of these large trees is not impossible, although it is a major engineering exercise, involving the creation of very large and deep rootballs.
- However, transplanting of OVTs goes against the recommendations in DEVB TC(W) 5/2020

Incompetent Landscape Impact Assessment

Highly Impractical Transplanting Proposal that requires more tree felling



- EIA proposes to transplant 2 TPIs / pOVTs over 700m, up hill and down dale.
- This nonsensical proposal would involve felling of many other trees (at orange ovals) to make a path-way wide enough for the very heavy machinery required to drag the tree over such a long distance and large level difference.
- **The assessment cannot be trusted**

Incompetent Landscape Impact Assessment

"Mitigation Measures" that make impacts worse!

Table 11.11 - Significance Threshold for LR & LCA

LR/LCA ID^	LR/LCA Name^	Sensitivity of LR/LCA (High / Medium / Low)	Magnitude of Change (Large / Intermediate / Small / Negligible)		Significance Threshold of Potential Landscape Impact* (before mitigation) (Substantial, Moderate, Slight, Insubstantial)		Proposed Mitigation Measures	Significance Threshold of Potential Landscape Impact* (after mitigation) (Substantial, Moderate, Slight, Insubstantial)		
			Construction	Operation	Construction	Operation		Construction	Operation (Day 1)	Operation (Year 10)
LR1.1	Natural Woodland in Golf Course	High	Small	Small	Moderate	Moderate	CM1-CM4, OM1-OM4	Moderate	Slight	Slight
LR1.2	Secondary Woodland in Golf Course	High	Large	Large	Substantial	Substantial	CM1-CM4, OM1-OM5	Moderate	Slight	Slight
LR2	Grassland	Low	Intermediate	Intermediate	Slight	Slight	CM1-CM4, OM1-OM4	Slight	Slight	Slight
LR8.1	Golf Club Building	High	Intermediate	Intermediate	Moderate	Moderate	CM1-CM4, OM2-OM3, OM5	Moderate	Slight	Slight
LR8.2	Carpark in Golf Course	Medium	Large	Large	Moderate	Moderate	CM1-CM4, OM2-OM3. OM5	Moderate	Slight	Slight
LCA1	Golf Course Landscape	Medium	Large	Large	Substantial	Substantial	CM1-CM4, OM1-OM4	Substantial	Moderate	Moderate

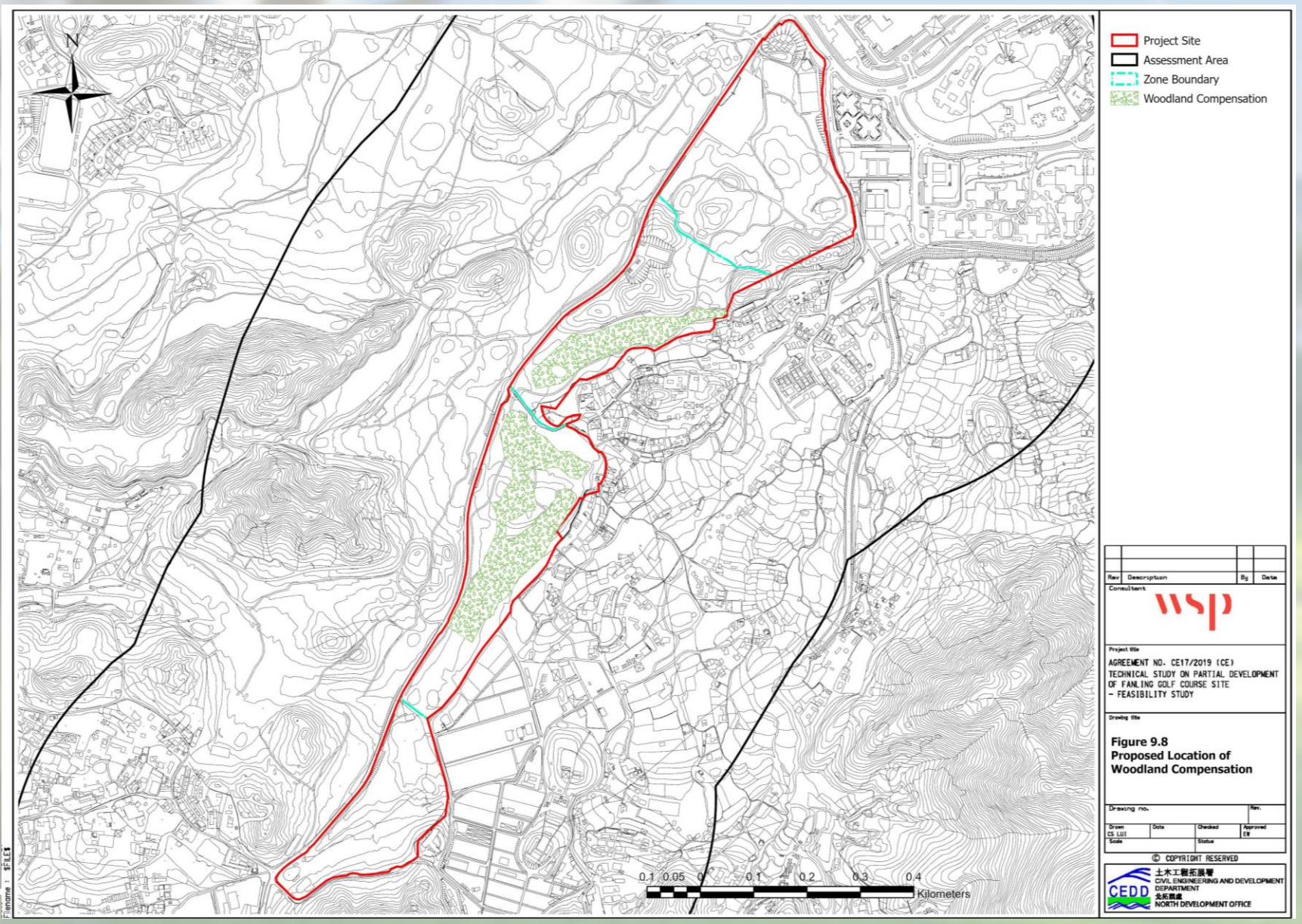
Notes: ^All other LRs / LCAs will not be affected by the proposed public housing development hence will not require assessment.

** Unless otherwise indicated, all impacts are adverse.*

- **EIA Table 11.10 lists the Mitigation Measures that supposedly will reduce the degree of impact on landscape resources and landscape character areas to acceptable levels.**
- **None of the MMs listed to mitigate impacts on Grassland have any relevance.**
- **"*OM4 - Compensatory Tree Planting*" will actually destroy more Grassland in Sub Areas 2&3, more than trebling the adverse impacts on Grassland!**
- **The assessment cannot be trusted.**

Incompetent Landscape Impact Assessment

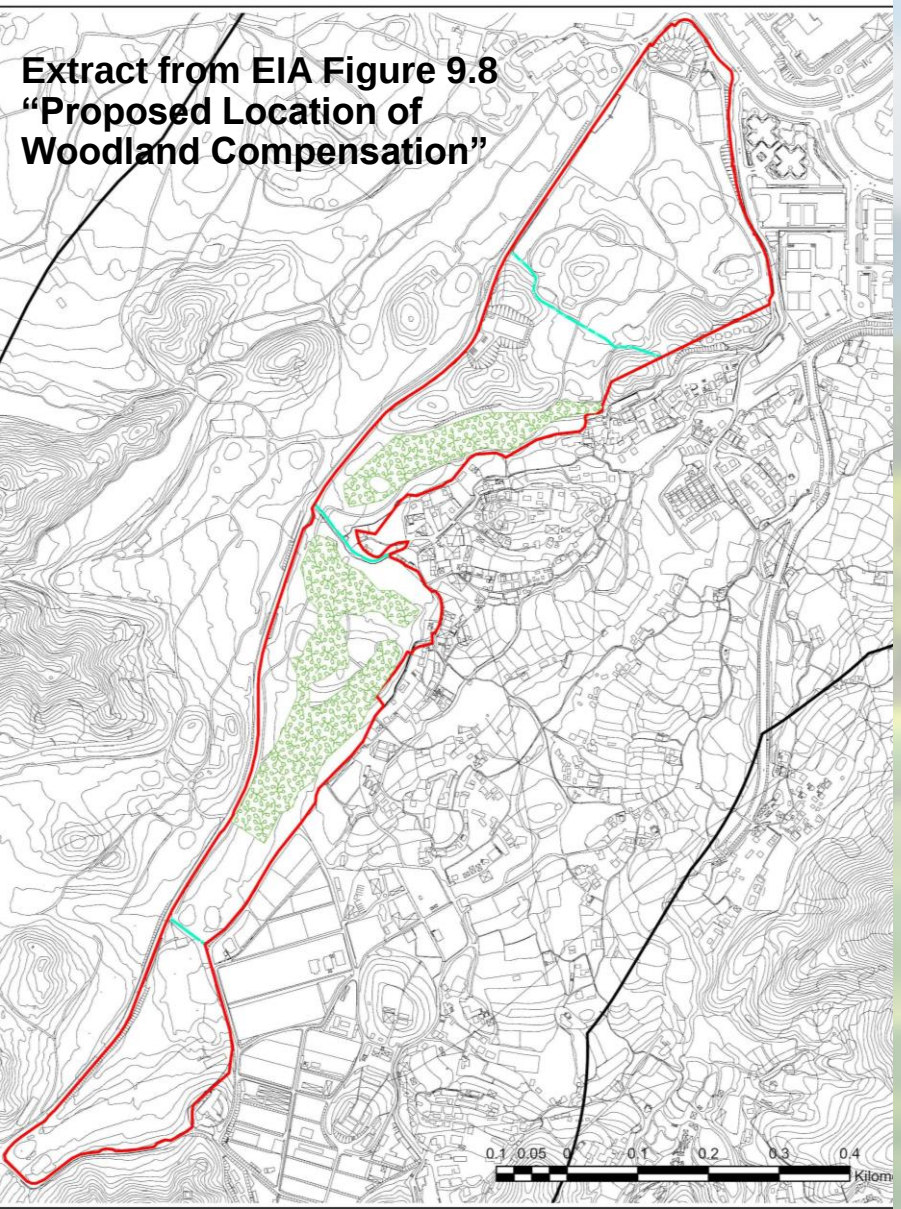
“Mitigation Measures” that make impacts worse!

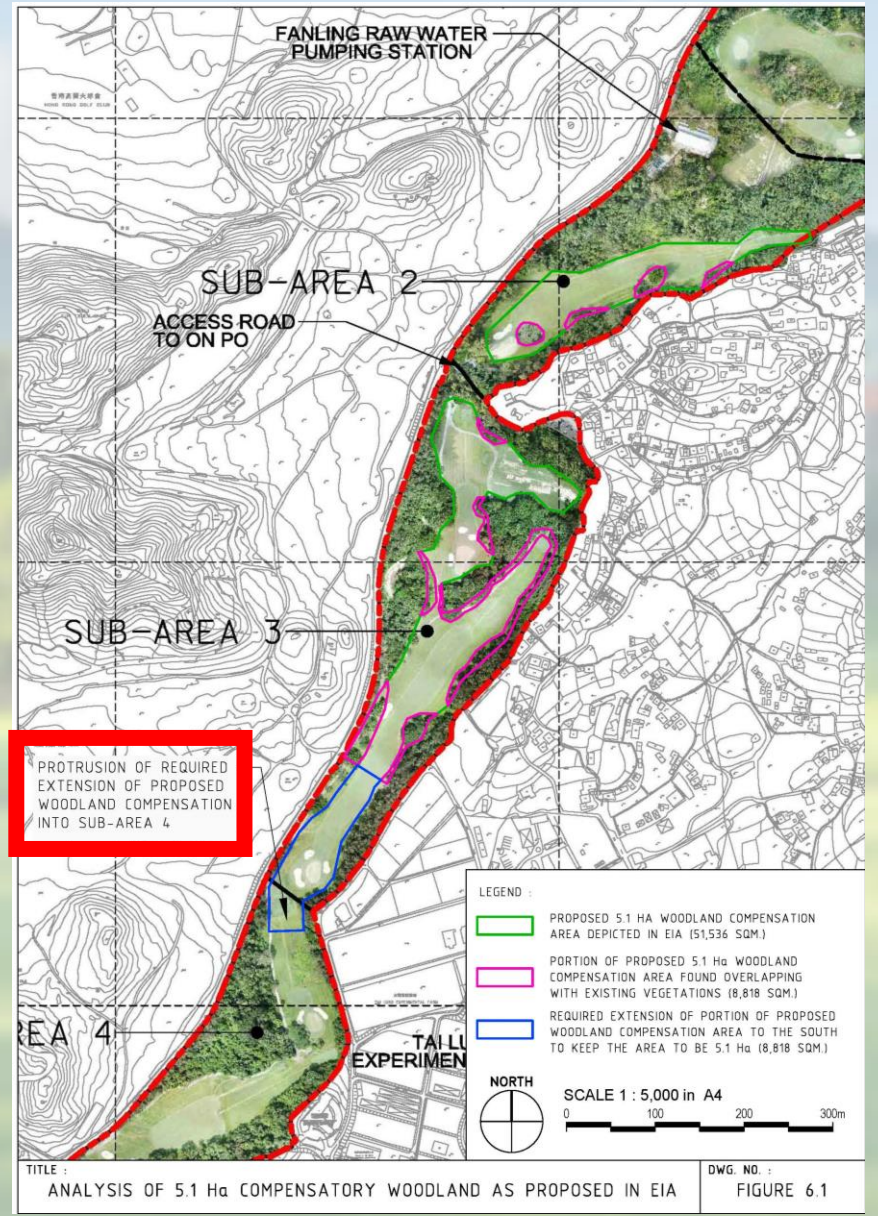


- **The ecological mitigation measure proposing 5.1ha of Woodland Compensation planting in Sub-Areas 2 and 3 (part of the proposed ‘CA’ Zone) would actually make things worse as it would increase the destruction of the mosaic of grassland and woodland currently present in those areas, thereby destroying the beautiful landscape character and reducing the variety of ecological habitats, which is compounding, not mitigating, the destruction of the landscape and ecological habitats in Sub-Area 1.**
- **The assessment cannot be trusted.**

Incompetent Landscape Impact Assessment

"Mitigation Measures" that make impacts worse!





- The proposed 5.1ha Woodland Compensation shown in EIA Figure 9.8 (on far left) is wrongly plotted and overlaps with existing woodland areas.
- When correctly plotted (plan on near left) to avoid the existing woodland, 5.1ha of Woodland Compensation would extend into Sub-Area 4, thus threatening the ground hydrology at the site of the critically endangered Chinese Swamp Cypress.
- **The assessment cannot be trusted.**

Incompetent Landscape Impact Assessment

80+ Errors, Omissions & Deficiencies → lower assessed Impact Significance

Table 11.1- Relationship between Sensitivity and Magnitude of Change in Assessing Impact Significance

Magnitude of Change	Sensitivity to Change: Low	Medium	High
Large	Moderate	Moderate / Substantial	Substantial
Intermediate	Moderate / Slight	Moderate	Moderate / Substantial
Small	Slight	Slight / Moderate	Moderate
Negligible	Insubstantial	Insubstantial	Insubstantial

Note: All impact significance will be adverse unless otherwise stated. Thresholds are defined below.

Substantial *– The proposed public housing development will cause significant adverse deterioration/ beneficial improvement to the existing landscape.*
Moderate *– The proposed public housing development will cause a noticeable adverse deterioration/ beneficial improvement to the existing landscape.*
Slight *– The proposed public housing development will cause a slight adverse deterioration/ beneficial improvement to the existing landscape.*
Insubstantial *– The proposed public housing development will cause no discernible change to the existing landscape.*

- EIA Table 11.2 provides the assessment matrix showing the relationship between sensitivity and magnitude of changes in assessing impact significance.
- Underestimation of either sensitivity or magnitude of change, or both, lowers the overall impact significance from substantial adverse, at top right, to either moderate or slight, in the middle, seriously misleading the reader, especially the decision makers such as DEP and TPB who will look only at the conclusions, not the detailed analysis.
- **The assessment cannot be trusted.**

Incompetent Landscape Impact Assessment

Failure to Identify Irreversible Substantial Adverse Impacts

- The consequence of these 80+ errors, omissions and deficiencies is the failure to identify **five permanent and irreversible substantial adverse impacts to landscape resources and landscape character** that cannot be practically mitigated.
- This in turn means that the landscape impacts should have been classed as '**Unacceptable**' in strict accordance with Annex 10 of the EIAO TM.

LANDSCAPE & TREES

1. Introduction.
2. Incompetent Landscape Impact Assessment
3. Loss of Irreplaceable Cultural Heritage Landscape
4. Potential Old and Valuable Trees preclude development
5. Proposed Tree Retention is Impossible
6. Severe Shading Impacts caused by development
7. CONCLUSION

Loss of Irreplaceable Cultural Heritage Landscape

Failure to identify historic Fanling Old Course as a standalone Landscape Recreational Resource and Cultural Heritage Landscape

- The resumption of 8 holes will mean that the historic 112-year-old Old Course can no longer function as an 18-hole golf course and will cease to exist.
- Nowhere in the EIA is there any identification, description, or holistic assessment of the impacts upon the historic Old Course as a coherent standalone landscape recreational resource and cultural heritage landscape.

Loss of Irreplaceable Cultural Heritage Landscape

Old Course is the ‘Mona Lisa’ of HK’s Cultural Heritage Landscape

Historical value : Outstanding

Old Course
Hole #1

Landscape & Trees

Loss of Irreplaceable Cultural Heritage Landscape

Old Course is the ‘Mona Lisa’ of HK’s Cultural Heritage Landscape

Historical value : Outstanding
Course Design value : Outstanding

Old Course
Hole #3

Landscape & Trees

O.N.E. living heritage

Loss of Irreplaceable Cultural Heritage Landscape

Old Course is the ‘Mona Lisa’ of HK’s Cultural Heritage Landscape

Historical value : Outstanding
Course Design value : Outstanding
Scenic value : High

Old Course
Hole #4

Landscape & Trees

Loss of Irreplaceable Cultural Heritage Landscape

Old Course is the ‘Mona Lisa’ of HK’s Cultural Heritage Landscape

Historical value : Outstanding
Course Design value : Outstanding
Scenic value : High
Nature Conservation value : Outstanding

Old Course
Hole #4

Landscape & Trees

O.N.E. living heritage

香港高爾夫球會
1889
HONG KONG GOLF CLUB

Loss of Irreplaceable Cultural Heritage Landscape

Old Course is the ‘Mona Lisa’ of HK’s Cultural Heritage Landscape

Historical value : Outstanding
Course Design value : Outstanding
Scenic value : High
Nature Conservation value : Outstanding
Sustainability value : Outstanding

Old Course
Hole #5

Landscape & Trees

O.N.E. living heritage

Loss of Irreplaceable Cultural Heritage Landscape

Old Course is the ‘Mona Lisa’ of HK’s Cultural Heritage Landscape

Historical value : Outstanding
Course Design value : Outstanding
Scenic value : High
Nature Conservation value : Outstanding
Sustainability value : Outstanding
Architectural Value : Outstanding

Old Course
Hole #6

Landscape & Trees

Loss of Irreplaceable Cultural Heritage Landscape

Old Course is the 'Mona Lisa' of HK's Cultural Heritage Landscape

Historical value : Outstanding
Course Design value : Outstanding
Scenic value : High
Nature Conservation value : Outstanding
Sustainability value : Outstanding
Architectural Value : Outstanding
Local Value : High

Old Course
Hole #7

Landscape & Trees

O.N.E. living heritage

Loss of Irreplaceable Cultural Heritage Landscape

Historical value : Outstanding
Course Design value : Outstanding
Scenic value : High
Nature Conservation value : Outstanding
Sustainability value : Outstanding
Architectural Value : Outstanding
Local Value : High
Socio-cultural value : High

Old Course
Hole #7

Landscape & Trees

O.N.E. living heritage

Incompetent Landscape Impact Assessment

No assessment of Old Course as coherent Cultural Heritage Landscape

Table 11.11 - Significance Threshold for LR & LCA

LR/LCA ID^	LR/LCA Name^	Sensitivity of LR/LCA (High / Medium / Low)	Magnitude of Change (Large / Intermediate / Small / Negligible)		Significance Threshold of Potential Landscape Impact* (before mitigation) (Substantial, Moderate, Slight, Insubstantial)		Proposed Mitigation Measures	Significance Threshold of Potential Landscape Impact* (after mitigation) (Substantial, Moderate, Slight, Insubstantial)		
			Construction	Operation	Construction	Operation		Construction	Operation (Day 1)	Operation (Year 10)
LR1.1	Natural Woodland in Golf Course	High	Small	Small	Moderate	Moderate	CM1-CM4, OM1-OM4	Moderate	Slight	Slight
LR1.2	Secondary Woodland in Golf Course	High	Large	Large	Substantial	Substantial	CM1-CM4, OM1-OM5	Moderate	Slight	Slight
LR2	Grassland	Low	Intermediate	Intermediate	Slight	Slight	CM1-CM4, OM1-OM4	Slight	Slight	Slight
LR8.1	Golf Club Building	High	Intermediate	Intermediate	Moderate	Moderate	CM1-CM4, OM2-OM3, OM5	Moderate	Slight	Slight
LR8.2	Carpark in Golf Course	Medium	Large	Large	Moderate	Moderate	CM1-CM4, OM2-OM3, OM5	Moderate	Slight	Slight
LCA1	Golf Course Landscape	Medium	Large	Large	Substantial	Substantial	CM1-CM4, OM1-OM4	Substantial	Moderate	Moderate

Notes: ^All other LRs / LCAs will not be affected by the proposed public housing development hence will not require assessment.

** Unless otherwise indicated, all impacts are adverse.*

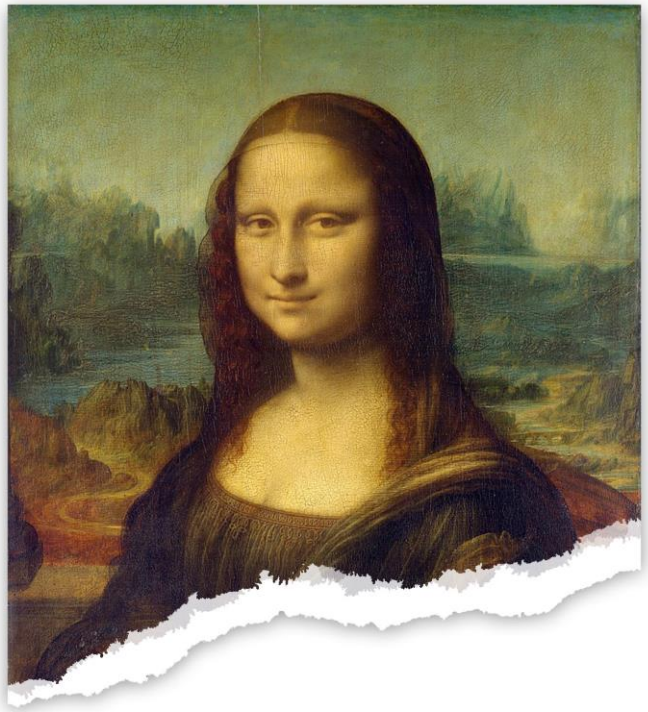
- **LVIA fails to assess Old Course as a standalone recreational resource (as required under EIAO TM and Guidance Notes)**
- **LVIA fails to assess Old Course as a Cultural Heritage Landscape (as required by EIAO TM and Guidance notes)**
- **LVIA assesses Old Course only in terms of its landscape resource components of woodland and grassland and as a landscape character area.**
- **By compartmentalising the resources, looking only at the component parts, not the whole, it downplays the adverse landscape impacts.**

Incompetent Landscape Impact Assessment

Old Course is the ‘Mona Lisa’ of HK’s Cultural Heritage Landscape

BEFORE

AFTER



- **EIA considers this impact “Acceptable”!**

LANDSCAPE & TREES

1. Introduction.
2. Incompetent Landscape Impact Assessment
3. Loss of Irreplaceable Cultural Heritage Landscape
4. Potential Old and Valuable Trees preclude development
5. Proposed Tree Retention is Impossible
6. Severe Shading Impacts caused by development
7. CONCLUSION

Incompetent Landscape Impact Assessment

Large TPIs = Potential Old & Valuable Trees (pOVTs)

- **EIA statement that there are "no OVTs" is highly misleading and disingenuous and confused ACE Members.**
- **ACE Membership does not include a Registered Landscape Architect able to advise, explain and interrogate LVIA matters at a professional level of detail.**
- **ACE were unaware that the criteria for identifying large TPIs and OVTs is the same (*at least 1m diameter at breast height (DBH), or at least 25m canopy height or spread or over 100y.o.*) but, by definition, only Government unleased land can have OVTs. (i.e. trees in FGC are not currently eligible to be registered because FGC is on leased land)**
- **All large TPIs at FGC are thus potential OVTs if Government takes back the land on 1st September and trees nominated for registration as OVTs must go through the assessment process described in DEVB TC 5/2020 'Registration of Old and Valuable Trees' which requires tree surveys to identify potentially registrable OVTs and submit details to GLTMS for assessment.**
- **Removal of living OVTs is prohibited under DEVB TC(W) 5/2020.**

Incompetent Landscape Impact Assessment

Large TPIs = Potential Old & Valuable Trees (pOVTs)

Tree removal

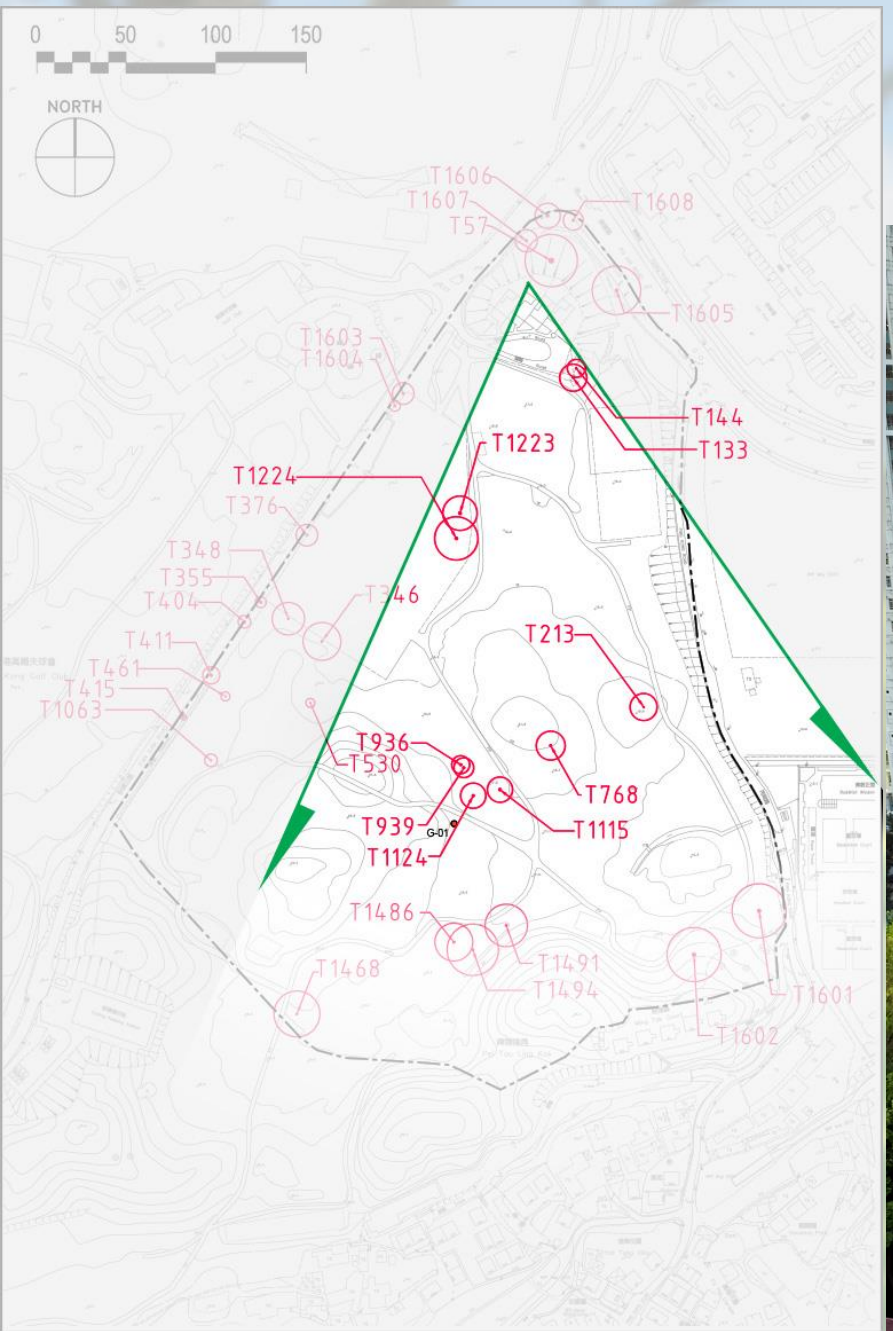
20. In the event that an OVT has died, the responsible tree maintenance department (which is also the project department where the tree has died within the construction site of a public works project) or its agent shall report promptly to GLTMS and provide the details for investigation. The OVT can only be removed with GLTMS's written consent unless the tree poses an imminent danger to the public as stipulated in paragraph 24. The responsible tree maintenance department shall include a remark in the Register to record the cause of death. If replacement planting at the affected site is deemed necessary by GLTMS, the planting should be carried out or arranged by the responsible tree maintenance department.

21. Except under the situation as stated in paragraph 20 above, removal of OVTs is prohibited. If retaining an OVT at its existing location is not practicable, transplanting of the tree should be considered first and the transplanting and compensatory planting proposals shall be prepared and processed according to the control procedures set out in DEVB TC(W) No. 4/2020 or its latest version. If removal of an OVT is unavoidable, the responsible tree maintenance department concerned should demonstrate that removal of the tree is the best available and only practicable option.

- **Removal of living OVTs is "prohibited" under DEVB TC(W) 5/2020, clause 21.**
- **CEDD have not attempted to demonstrate that removal of the pOVTs is '*unavoidable*' nor that removal is the '*best available and only practicable option*"**
- **This critical issue has been totally ignored in the EIA, the EIA Additional Information and the EIA Approval Conditions.**

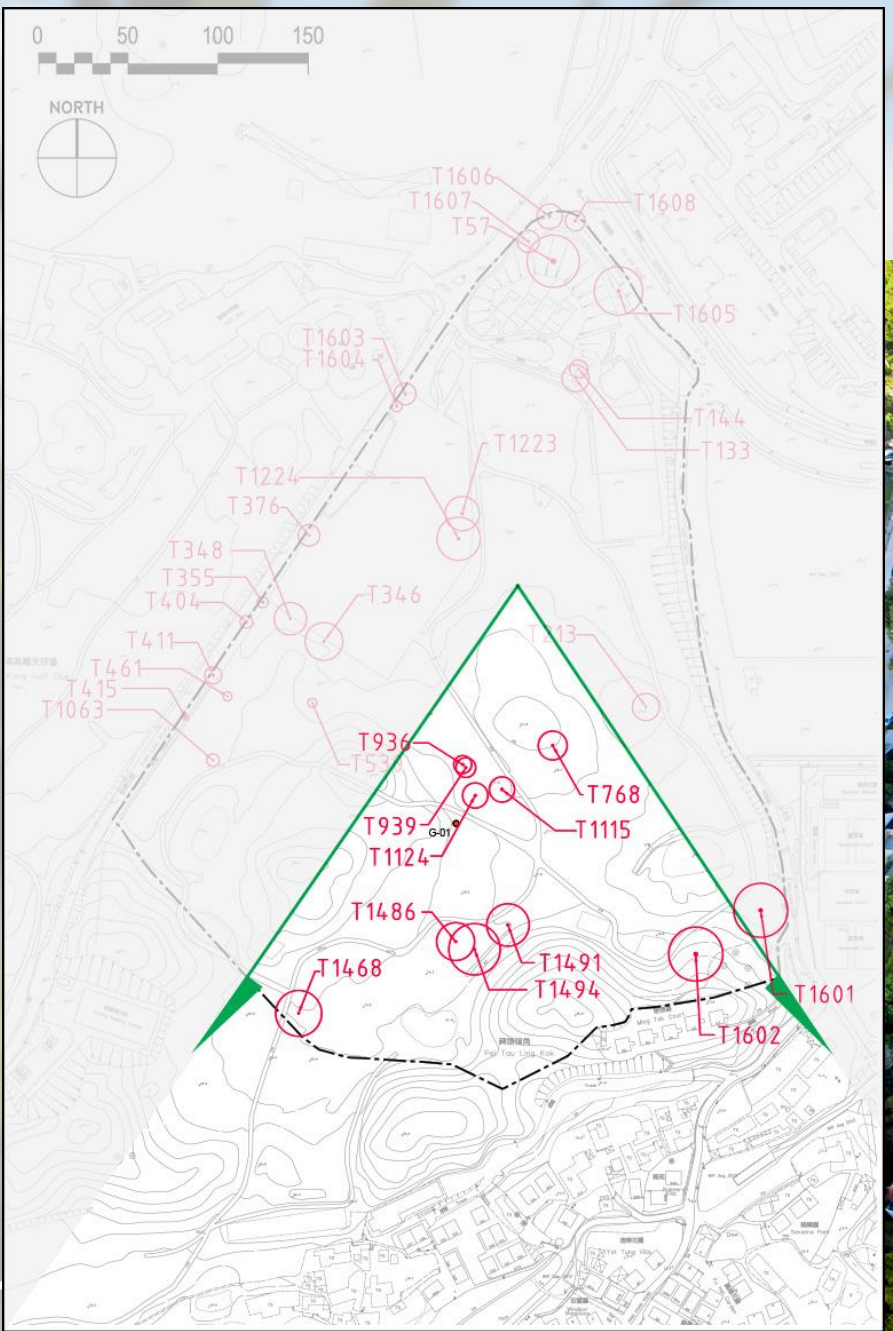
Potential Old and Valuable Trees preclude development

33 pOVTs are scattered throughout Sub Area 1



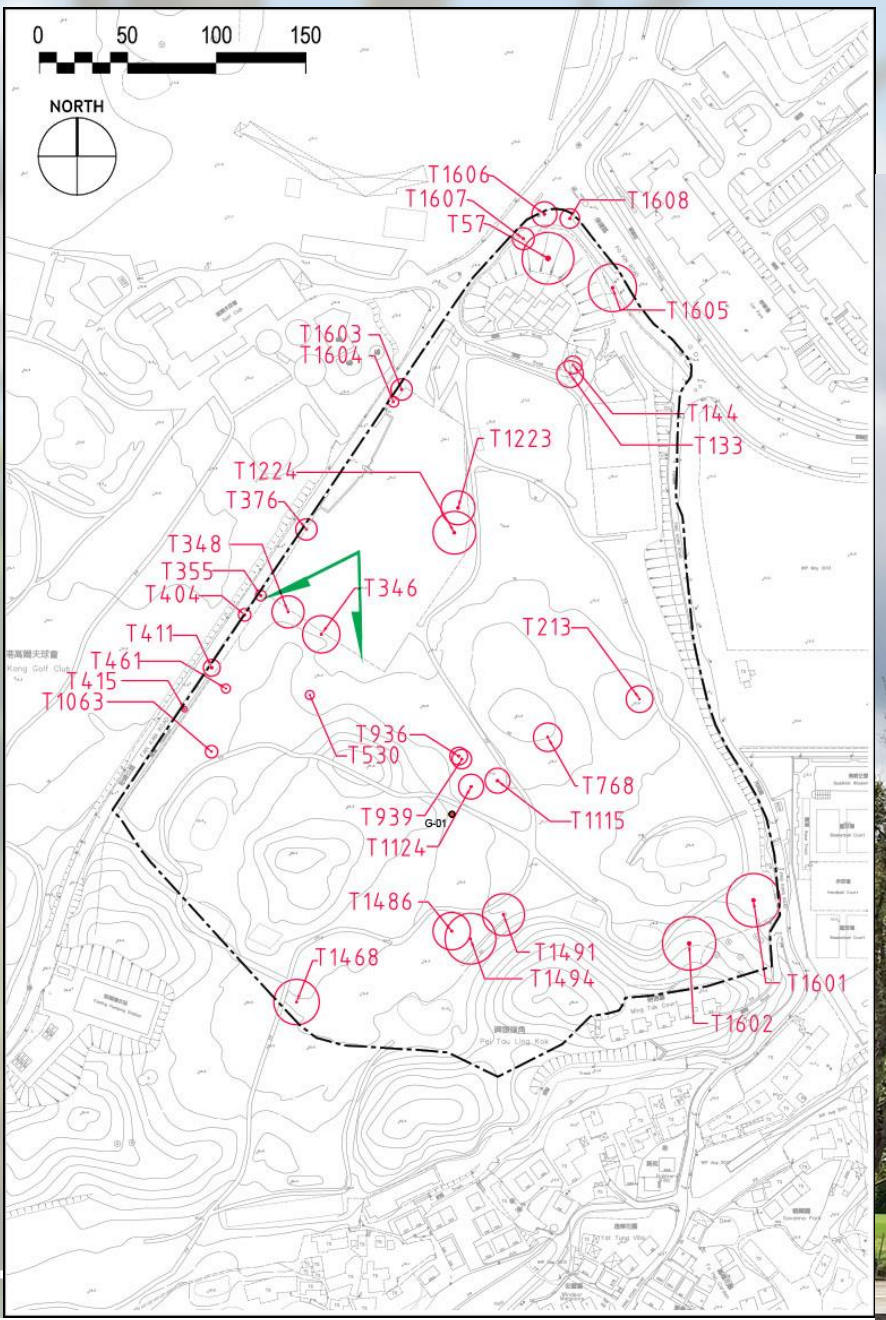
Potential Old and Valuable Trees preclude development

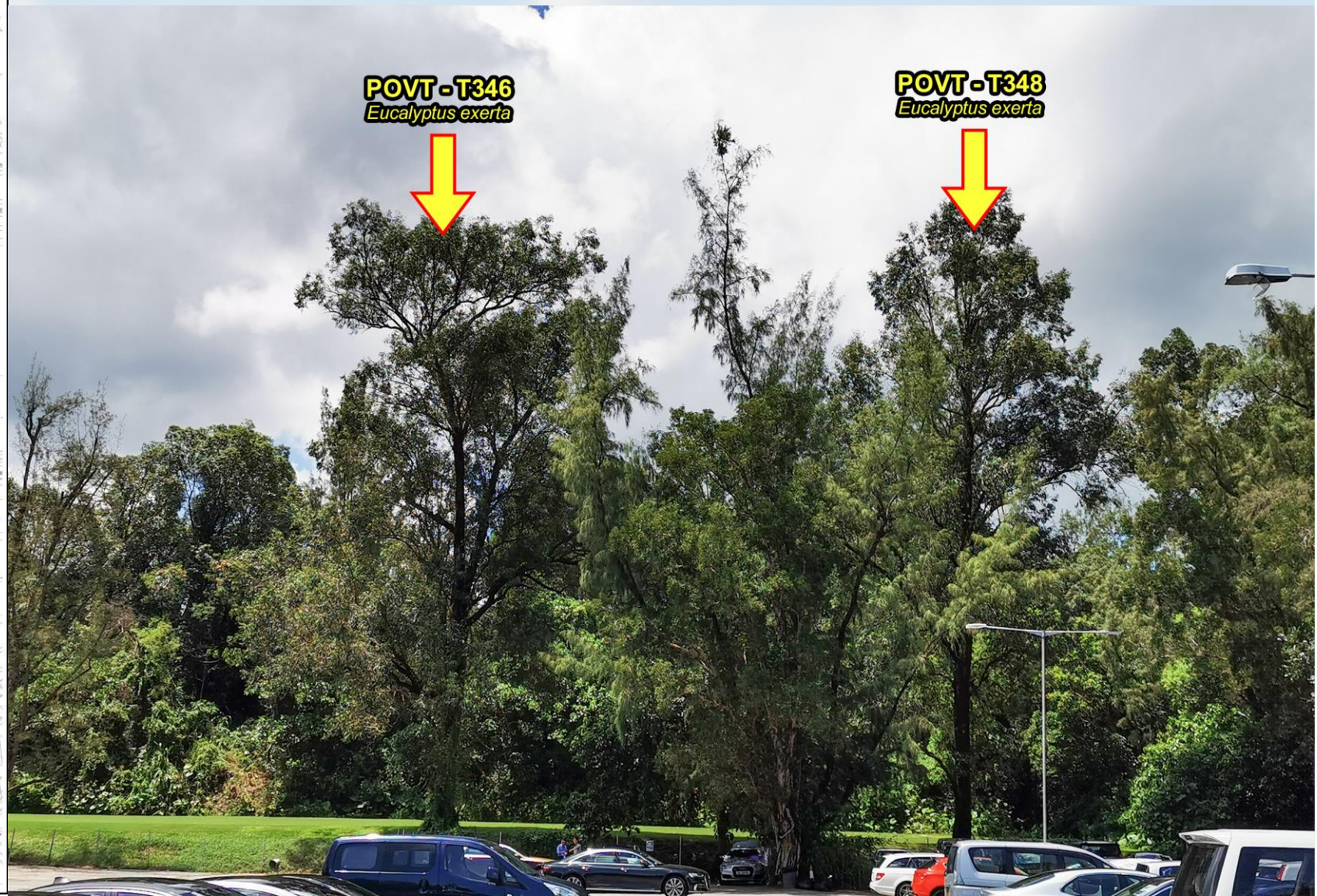
33 pOVTs are scattered throughout Sub Area 1



Potential Old and Valuable Trees preclude development

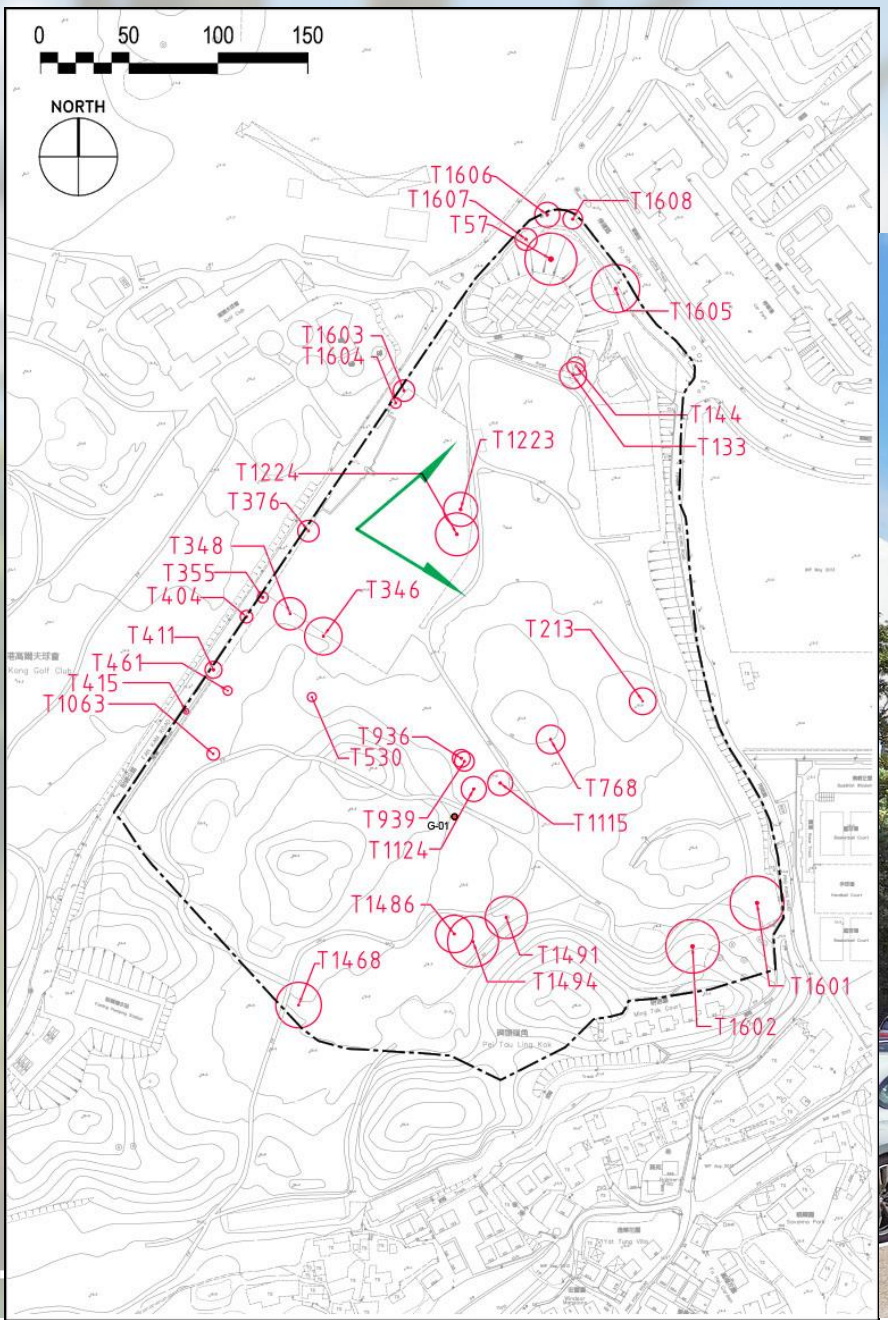
33 pOVTs are scattered throughout Sub Area 1





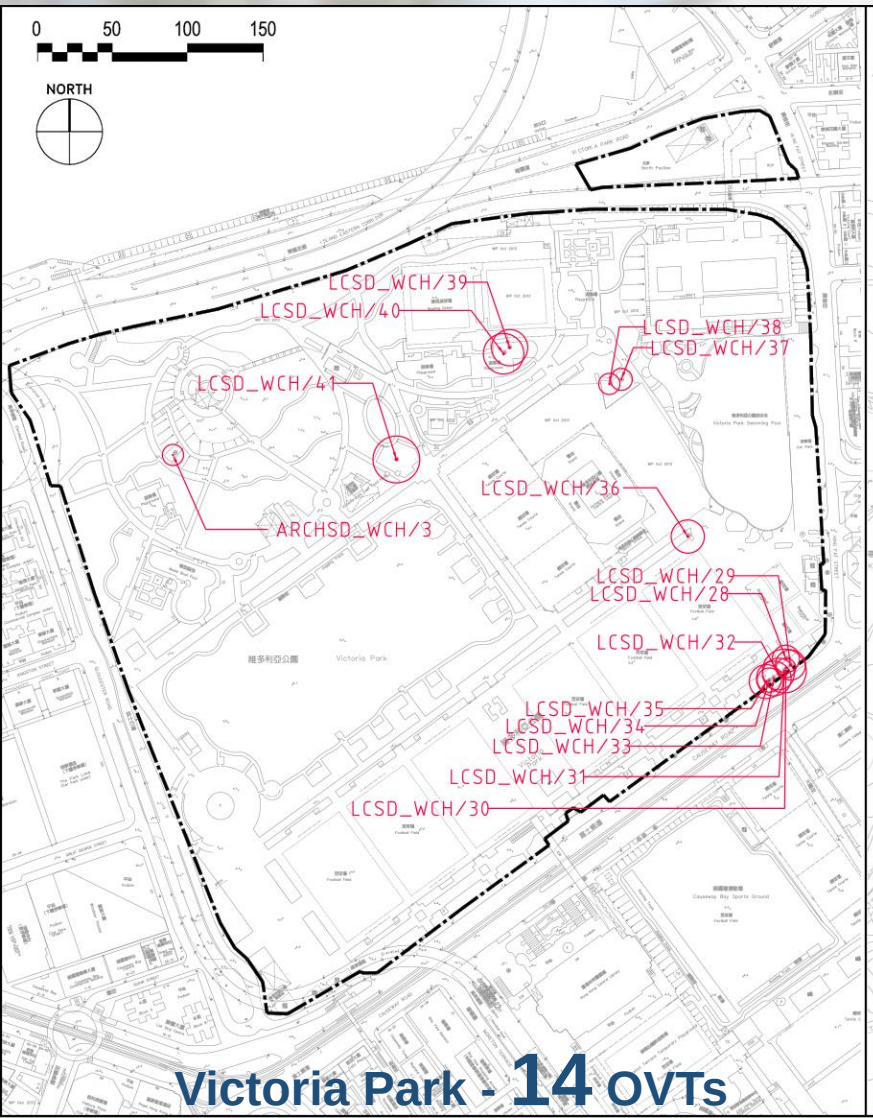
Potential Old and Valuable Trees preclude development

33 pOVTs are scattered throughout Sub Area 1

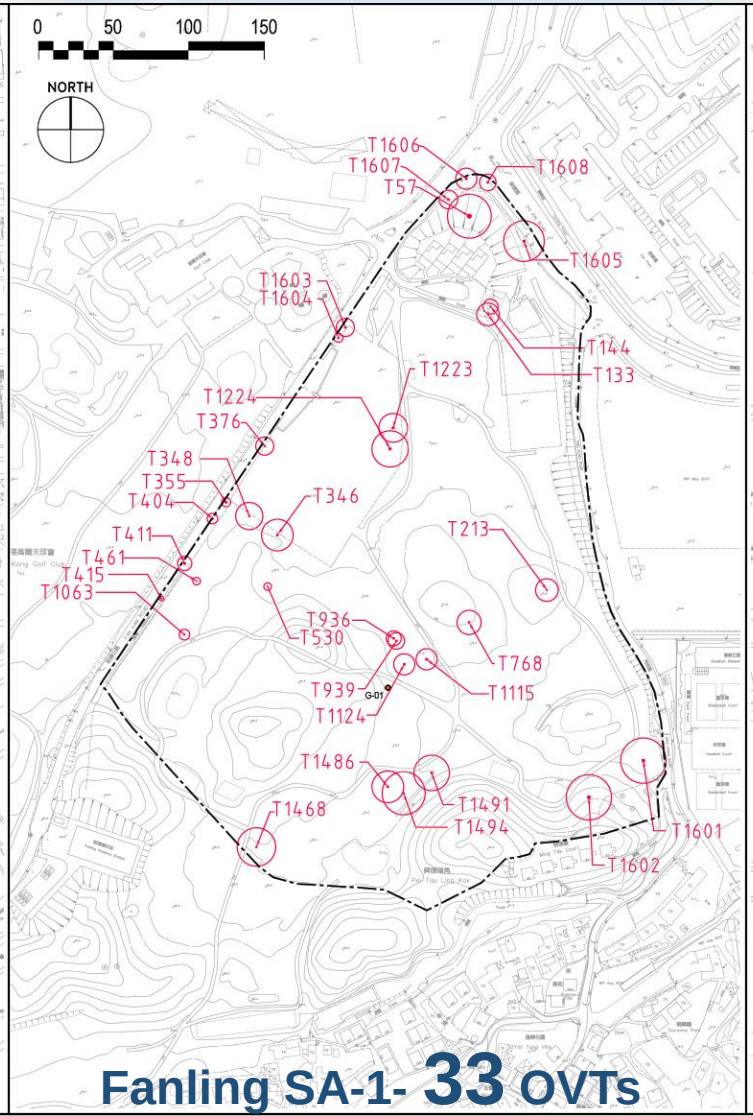


Potential Old and Valuable Trees preclude development

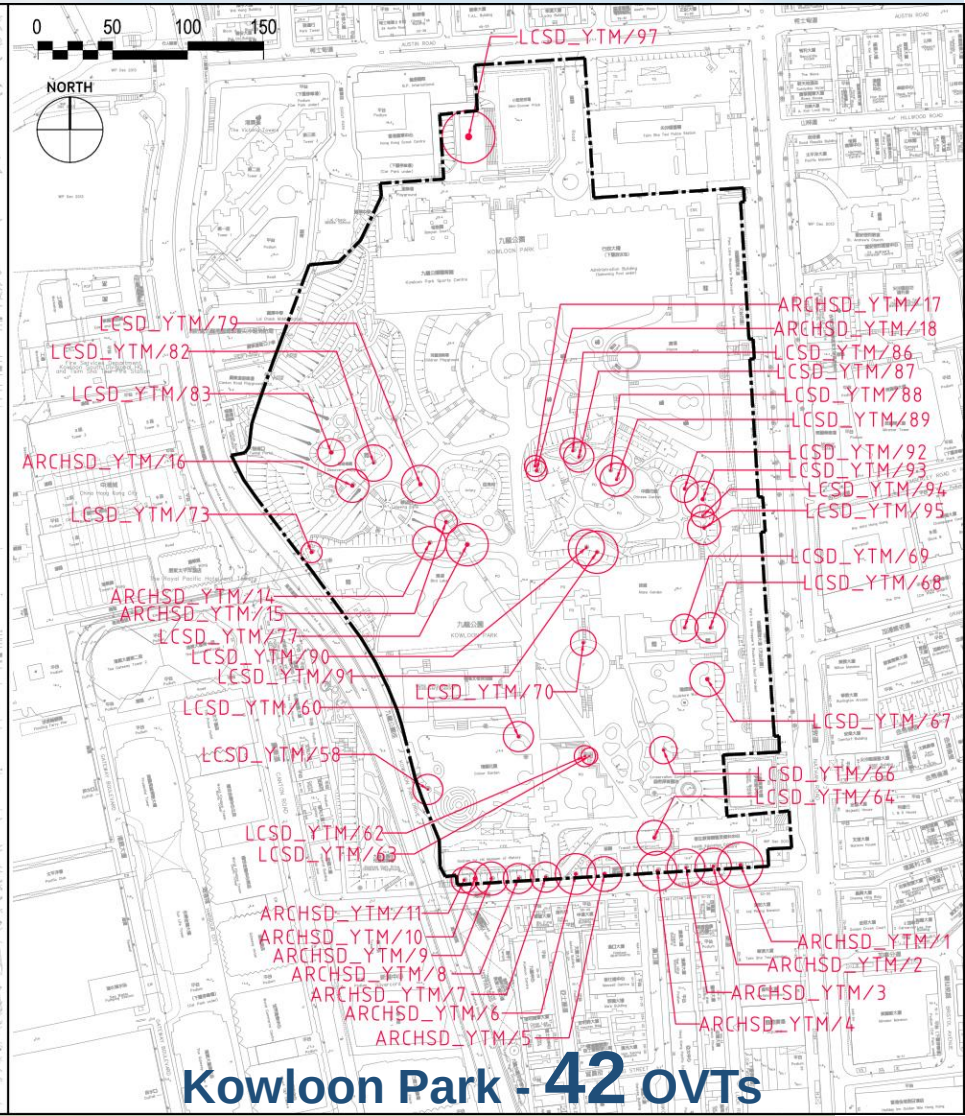
The only other open spaces with a comparable number of OVTs are Kowloon Park (42 OVTs) and Victoria Park (14 OVTs), which places Fanling Sub-Area 1 a close second to Kowloon Park in HK



Victoria Park - **14** OVTs

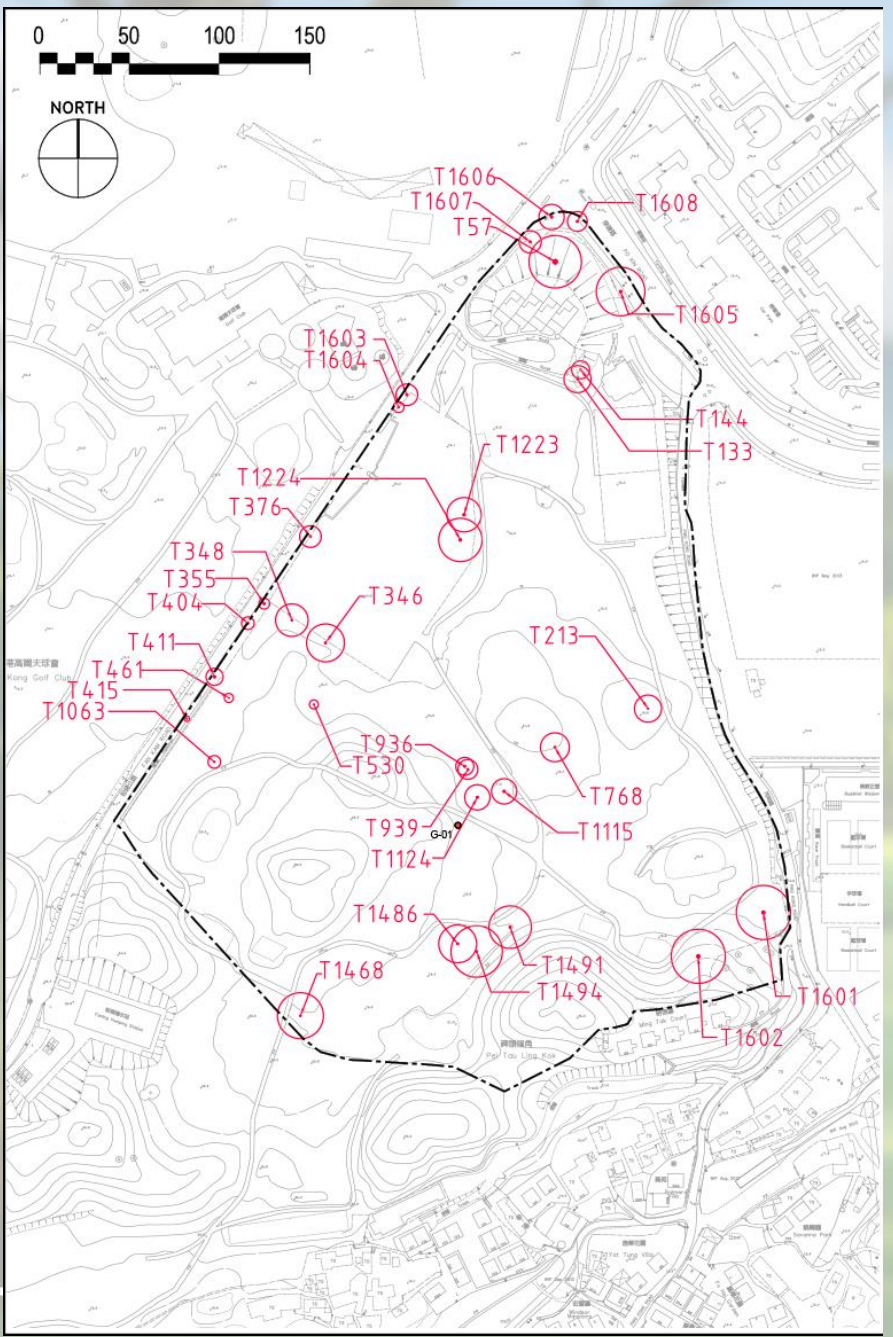


Fanling SA-1- **33** OVTs



Kowloon Park - **42** OVTs

Potential Old and Valuable Trees preclude development



- **In the RNTPC Meeting held on 17.6.2022 (Minutes item 85) PlanD CEDD and their consultant advised TPB members that "***Considering that Sub Area 1 was quite large with area of about 9ha, only 70 TPIs were identified in the survey and such proportion was considered relatively low***".**
- **This statement is factually incorrect and blatantly misleading.**
- **Firstly, the correct number of TPIs in Sub Area 1 (including rare & protected species) should be 88, not 70.**
- **Secondly, as explained, Sub Area 1 is second only to Kowloon Park in terms of numbers of pOVTs / OVTs. How can the proportion of TPIs be termed "relatively low"?**
- **TPB members are being misled**

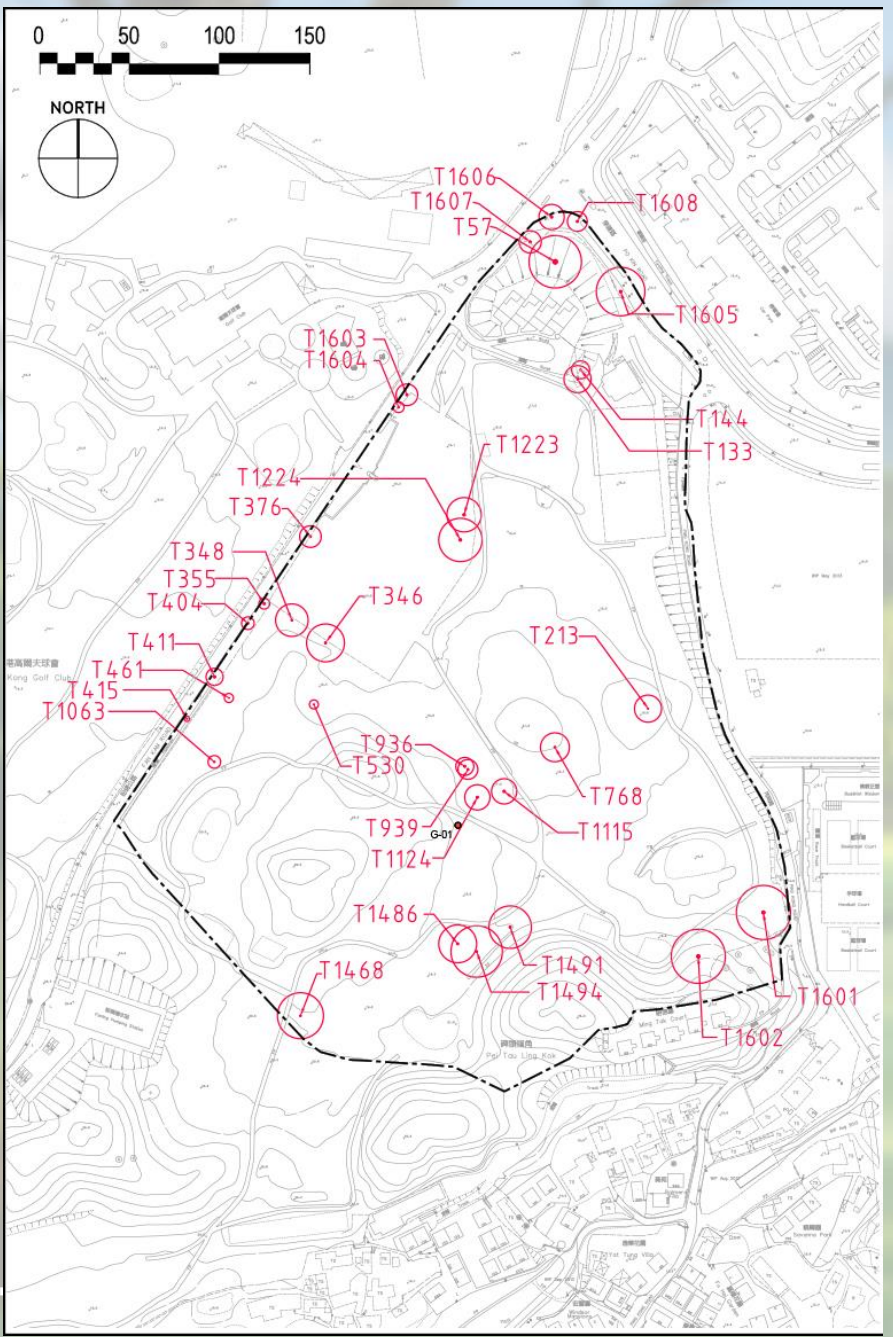
Potential Old and Valuable Trees preclude development

An objective like-for-like comparison of the physical dimensions of the 33 pOVTS in Sub-Area 1 and OVTs of the same species already on the Register reveals that 27 of the 33 pOVTs are likely or highly likely to be registered.

Tree No. of TPIs surveyed by URBIS	Species		No. of this species currently on the HK Tree Register - Range of Sizes (DBH)	No. of TPIs likely to be registerable as OVTs
	Scientific name	Chinese name		
T1468 (833mmDBH, 25.5mS)	*Adenanthera microsperma*	海紅豆	0 registered as OVTs on Tree Register	1
T415, T461, T530 (445-570mmDBH, 26.7-30.4mH)	*Casuarina equisetifolia*	木麻黃	4 registered as OVTs (1040-1460mmDBH, 15-28.4mH)	0
T1491, T1494, T1601, T1602 (900-1815mmDBH, 23.5-30.0mS)	*Cinnamomum camphora*	樟	44 registered as OVTs (700-3007mmDBH, 13-35mS)	4
T1605 (1354mmDBH)	*Corymbia citriodora* (syn. *Eucalyptus citriodora*)	檸檬桉	2 registered as OVTs (1015-1095mmDBH)	1
T133, T144, T213 (540-760mmDBH, 25.9-26.7mH)	*Eucalyptus camaldulensis*	赤桉	0 registered as OVTs on Tree Register	3
T346, T348 (850-1040mmDBH, 26.3-29.7mH)	*Eucalyptus exserta*	窿緣桉	0 registered as OVTs on Tree Register	2
T1486 (1050mmDBH)	*Ficus microcarpa*	細葉榕	191 registered as OVTs (703-7710mmDBH) + 30 registered as O&S (730-3000mmDBH)	0
T57 (2458mmDBH)	*Ficus virens*	大葉榕	28 registered as OVTs (989-2700mmDBH) + 2 registered as O&S (1066-1102mmDBH)	1
T355, T376, T404, T411, T768, T936, T939, T1063, T1115, T1124, T1603, T1604, T1606, T1607, T1608 (724-1256mmDBH, 10.1-25.2mH)	*Melaleuca cajuputi* subsp. *cumingiana*	白千層	12 registered as OVTs (700-1565mmDBH, 9-21mH)	13
T1223, T1224 (1275-1340mmDBH)	*Pterocarpus indicus*	紫檀	4 registered as OVTs (1100-1420mmDBH)	2
33 TPIs of Large Size Surveyed by URBIS			**Total TPIs likely to be registerable as OVTs: 27**	

Note: Green = proposed to be retained in EIA. Blue = proposed to be transplanted in EIA. Red = proposed to be felled in EIA, Grey = not surveyed in EIA

Potential Old and Valuable Trees preclude development



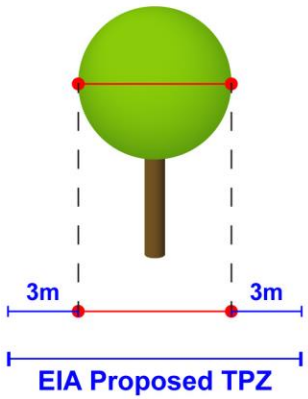
- The presence of 33 pOVTs of which 27 are likely to be registered on a like-for-like basis demonstrates clearly that the site is highly unsuitable for high density PHD.
- The TFLS would surely have discounted the site as a viable option for PHD if they had known of the presence of so many pOVTs that, if registered as OVTs, would have their removal prohibited.
- Furthermore, each preserved tree or group of trees must have a Tree Protection Zone around it to protect it during construction.

Potential Old and Valuable Trees preclude development

Tree Protection Zones (TPZs) are required to protect retained trees during construction in accordance with DEVB GLTMS Tree Management Practice Note 1: Tree Preservation during Construction [Sept 2019]

There are 3 methods to adopt as appropriate to the circumstance. Method 1 is the most commonly adopted for 'average' trees, however Methods 2 and 3 are designed specifically to be adopted to give sufficient protection to older trees with very tall canopies or thick trunks, such as some of the large TPIs in Sub Area 1.

Method 1 : Dripline



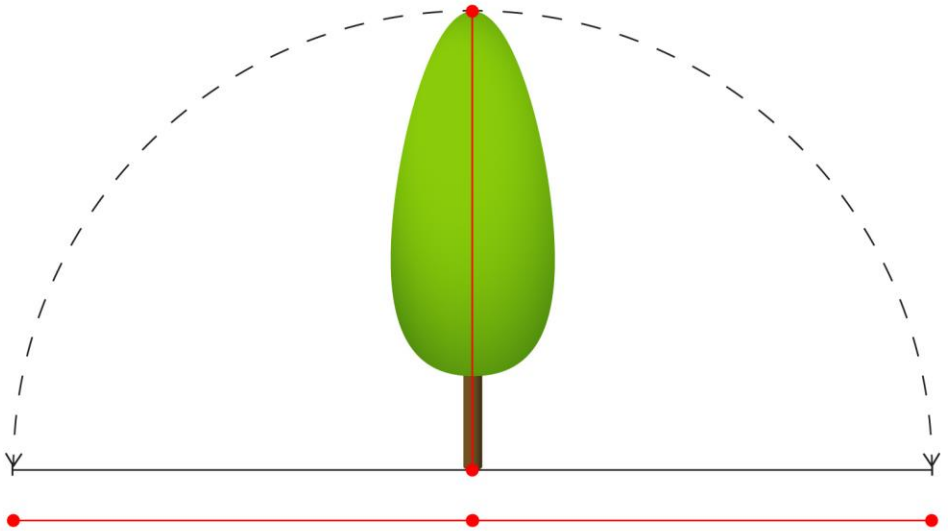
TPZ Diameter = ●——●

TPZ Diameter = Tree Crown Spread

Example:
Tree no.: T1458
Crown spread : 10m
TPZ Diameter = **10m**

EIA Proposed TPZ
based Method 1 plus 6m

Method 2 : Tree Height

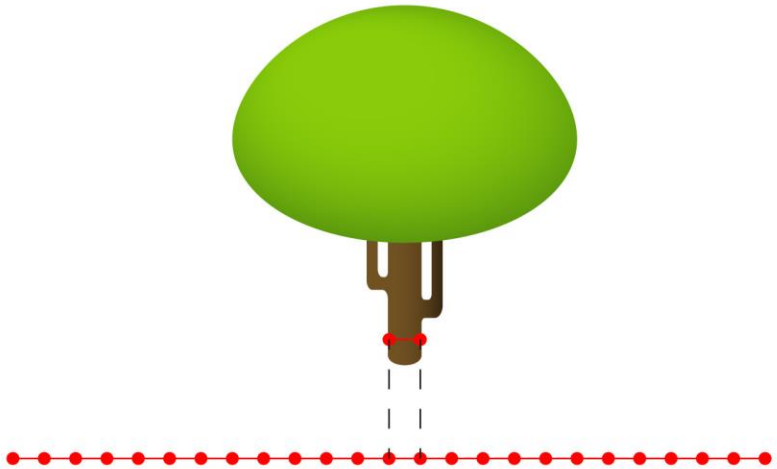


TPZ Diameter = ●——————● x 2

TPZ Diameter = 2 x Tree Height

Example:
Tree no.: T346
Tree Height : 29.7m
TPZ Diameter = 29.7m x 2 = **59.4m**

Method 3 : Trunk Diameter



TPZ Diameter = (●—● x 12) x 2

TPZ Diameter = (DBH x 12) x 2, i.e. DBH x 24

Example:
Tree no.: T1603
Trunk diameter : 1075mm
TPZ Diameter = (1.075m x 2) x 12 = **25.8m**

Potential Old and Valuable Trees preclude development

LEGEND :

SUB-AREA 1 BOUDNARY

POTENTIAL DEVELOPMENT AREA (PDA) WITHIN SUB-AREA 1

T03 — TREES OF PARTICULAR INTEREST (TPIs) WITHIN SUB-AREA 1 BASED ON DBH ≥1,000MM, HEIGHT AND/OR SPREAD ≥25M

AMENITY STRIP TO BE AFFECTED BY THE PROPOSED FAN KAM ROAD WIDENING

HK STANDARD - TREE PROTECTION ZONE (TPZ)
GREENING, LANDSCAPE AND TREE MANAGEMENT SECTION, DEVELOPMENT BUREAU - TREE MANAGEMENT PRACTICE NOTE 1: TREE PRESERVATION DURING CONSTRUCTION (SEPTEMBER 2019)

NOTE: TPZs WOULD NOT EXTEND INTO PUBLIC ROADS OR ADJACENT LOTS.

METHOD 1 : DRIPLINE METHOD

T1494 — TPZ - ASSESSED AND CALCULATED VIA THE 'DRIPLINE METHOD' (DM)

ADDITIONAL 2.0M SPACE ALLOWANCE FOR CONSTRUCTION OF RETAINING STRUCTURE AND OTHER PERMANENT PROTECTION MEASURES IF THERE WILL BE MORE THAN 1M LEVEL DIFFERENCE BETWEEN THE EXISTING LEVEL AND THE PROPOSED FORMATION LEVEL

METHOD 2 : TREE HEIGHT METHOD

T1124 — TPZ - ASSESSED AND CALCULATED VIA THE 'TREE HEIGHT METHOD' (THM)

ADDITIONAL 2.0M SPACE ALLOWANCE FOR CONSTRUCTION OF RETAINING STRUCTURE AND OTHER PERMANENT PROTECTION MEASURES IF THERE WILL BE MORE THAN 1M LEVEL DIFFERENCE BETWEEN THE EXISTING LEVEL AND THE PROPOSED FORMATION LEVEL

METHOD 3 : TRUNK DIAMETER METHOD

T90 — TPZ - ASSESSED AND CALCULATED VIA THE 'TRUNK DIAMTER METHOD' (TDM)

ADDITIONAL 2.0M SPACE ALLOWANCE FOR CONSTRUCTION OF RETAINING STRUCTURE AND OTHER PERMANENT PROTECTION MEASURES IF THERE WILL BE MORE THAN 1M LEVEL DIFFERENCE BETWEEN THE EXISTING LEVEL AND THE PROPOSED FORMATION LEVEL

REMAINING DEVELOPABLE AREA = APPROX. 6.35 HA

PDA AREA (89,219.31 SQM) LESS TPZ AREA (25,703.34 SQM) = 63,515.97 SQM (APPROX. 6.35 HA)

NORTH

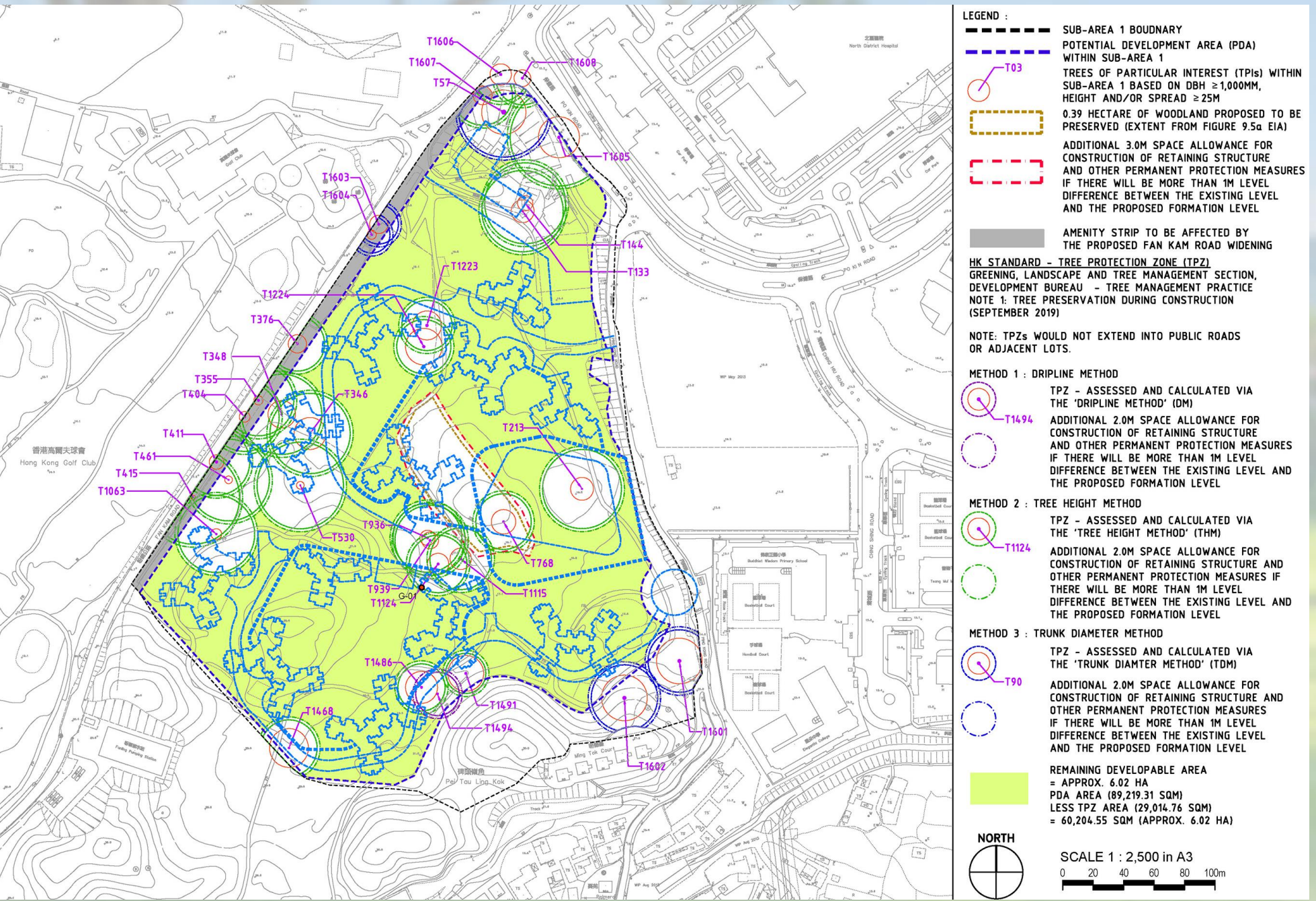
SCALE 1 : 2,500 in A3

0 20 40 60 80 100m

- This Plan shows the Tree Protection Zones (TPZs) required around each pOVT to preserve them during construction.
- TPZs are calculated in accordance with the DEVB's Greening, Landscape and Tree Management Section (GLTMS) Guidelines as appropriate to size and shape of each large pOVT
- Remaining developable area outside the TPZs (shaded yellow) is only 6.35ha and a very impractical shape to develop

香港高爾夫球會 1889 HONG KONG GOLF CLUB

Potential Old and Valuable Trees preclude development



LEGEND :

- SUB-AREA 1 BOUDNARY
- POTENTIAL DEVELOPMENT AREA (PDA) WITHIN SUB-AREA 1
- T03 — TREES OF PARTICULAR INTEREST (TPIs) WITHIN SUB-AREA 1 BASED ON DBH ≥1,000MM, HEIGHT AND/OR SPREAD ≥25M
- 0.39 HECTARE OF WOODLAND PROPOSED TO BE PRESERVED (EXTENT FROM FIGURE 9.5a EIA)
- ADDITIONAL 3.0M SPACE ALLOWANCE FOR CONSTRUCTION OF RETAINING STRUCTURE AND OTHER PERMANENT PROTECTION MEASURES IF THERE WILL BE MORE THAN 1M LEVEL DIFFERENCE BETWEEN THE EXISTING LEVEL AND THE PROPOSED FORMATION LEVEL
- AMENITY STRIP TO BE AFFECTED BY THE PROPOSED FAN KAM ROAD WIDENING

HK STANDARD – TREE PROTECTION ZONE (TPZ)
GREENING, LANDSCAPE AND TREE MANAGEMENT SECTION, DEVELOPMENT BUREAU – TREE MANAGEMENT PRACTICE NOTE 1: TREE PRESERVATION DURING CONSTRUCTION (SEPTEMBER 2019)

NOTE: TPZs WOULD NOT EXTEND INTO PUBLIC ROADS OR ADJACENT LOTS.

METHOD 1 : DRIPLINE METHOD

- TPZ – ASSESSED AND CALCULATED VIA THE 'DRIPLINE METHOD' (DM)
- T1494 — ADDITIONAL 2.0M SPACE ALLOWANCE FOR CONSTRUCTION OF RETAINING STRUCTURE AND OTHER PERMANENT PROTECTION MEASURES IF THERE WILL BE MORE THAN 1M LEVEL DIFFERENCE BETWEEN THE EXISTING LEVEL AND THE PROPOSED FORMATION LEVEL

METHOD 2 : TREE HEIGHT METHOD

- TPZ – ASSESSED AND CALCULATED VIA THE 'TREE HEIGHT METHOD' (THM)
- T1124 — ADDITIONAL 2.0M SPACE ALLOWANCE FOR CONSTRUCTION OF RETAINING STRUCTURE AND OTHER PERMANENT PROTECTION MEASURES IF THERE WILL BE MORE THAN 1M LEVEL DIFFERENCE BETWEEN THE EXISTING LEVEL AND THE PROPOSED FORMATION LEVEL

METHOD 3 : TRUNK DIAMETER METHOD

- TPZ – ASSESSED AND CALCULATED VIA THE 'TRUNK DIAMTER METHOD' (TDM)
- T90 — ADDITIONAL 2.0M SPACE ALLOWANCE FOR CONSTRUCTION OF RETAINING STRUCTURE AND OTHER PERMANENT PROTECTION MEASURES IF THERE WILL BE MORE THAN 1M LEVEL DIFFERENCE BETWEEN THE EXISTING LEVEL AND THE PROPOSED FORMATION LEVEL

REMAINING DEVELOPABLE AREA
= APPROX. 6.02 HA
PDA AREA (89,219.31 SQM)
LESS TPZ AREA (29,014.76 SQM)
= 60,204.55 SQM (APPROX. 6.02 HA)

NORTH

SCALE 1 : 2,500 in A3
0 20 40 60 80 100m

- **EIA Approval Conditions stipulate retention of a 0.39ha Woodland in the centre of the site**
- **Continuing the oversight in the EIA, the EIA Approval Conditions fail to mention the presence of the pOVTs**
- **Combining retention of the 33 pOVTs with protection of the 0.39ha preserved Woodland further reduces the remaining developable area to only 6.05ha and an even more impractical shape to develop**

香港高爾夫球會 HONG KONG GOLF CLUB

Potential Old and Valuable Trees preclude development

- **It will be evident to TPB Members that preserving the pOVTs and 0.39 ha woodland renders it impossible to build a high-density public HD on Sub Area 1.**
- **Sub Area 1 is an Arboretum of very beautiful Old and Valuable Trees and the idea of building a public HD in Sub Area 1 should be abandoned.**

Potential Old and Valuable Trees preclude development

- **SUB-AREA 1 AREA: Approx. 107,798.43sqm**
- **A. Approx. 9,738.75sqm -** % OF CARPARK AREA of SUB-AREA 1: Approx. **9.03%**
- **B. Approx. 2,432.57sqm -** % OF TENNIS COURTS AREA of SUB-AREA 1: Approx. **2.26%**
- **C. Approx. 751.83sqm -** % OF STAFF ACCOMODATION AREA of SUB-AREA 1: Approx. **0.70%**
- **D. Approx. 295.22sqm -** % OF CADDY FACILITIES of SUB-AREA 1: Approx. **0.27%**
- **A+B+C+D = Approx. 13,218.37sqm Existing Developed Area**

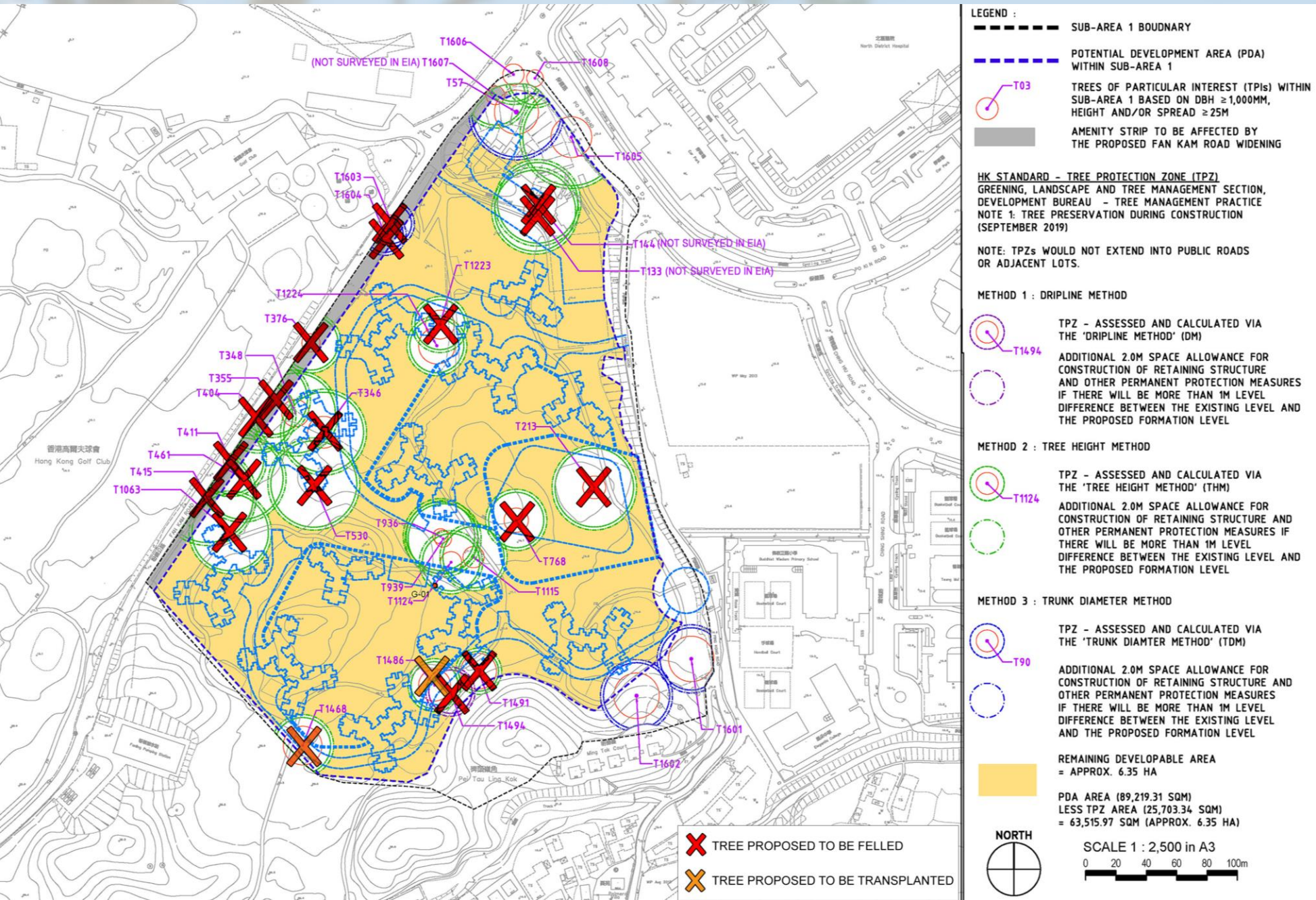
% OF EXISTING DEVELOPED AREA of SUB-AREA 1: Approx. **12.26%**

The existence of the developed areas in a small fraction of Sub-Area 1 is not a valid reason to destroy the unique landscape character and valuable ecological habitats in the remaining areas.

LANDSCAPE & TREES

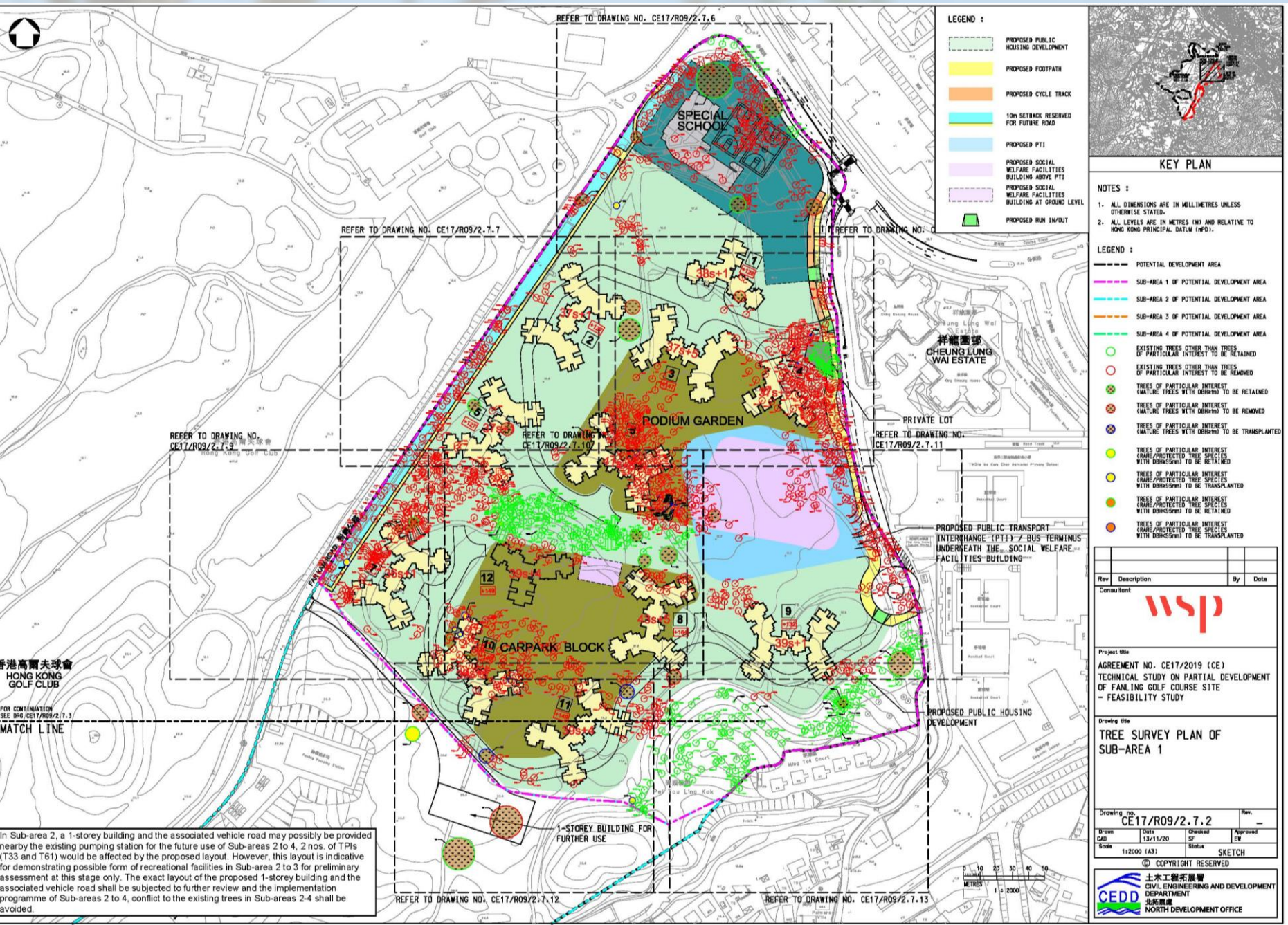
1. Introduction.
2. Incompetent Landscape Impact Assessment
3. Loss of Irreplaceable Cultural Heritage Landscape
4. Potential Old and Valuable Trees preclude development
5. Proposed Tree Retention is Impossible
6. Severe Shading Impacts caused by development
7. CONCLUSION

Proposed Tree Retention is Impossible



- EIA proposes to retain 11, transplant 2 and fell 11 of the 24 large TPIs identified in the EIA Tree Survey
- However there are actually 33 pOVTs in SA-1 and, based on the assumptions in the EIA, the PHD requires felling at least 18 of the 33 pOVTs as shown on this plan
- No matter whether it is 11 or 18 to be felled, any felling of OVTs contravenes DEVB TC(W) 5/2020 which prohibits removal of living OVTs.

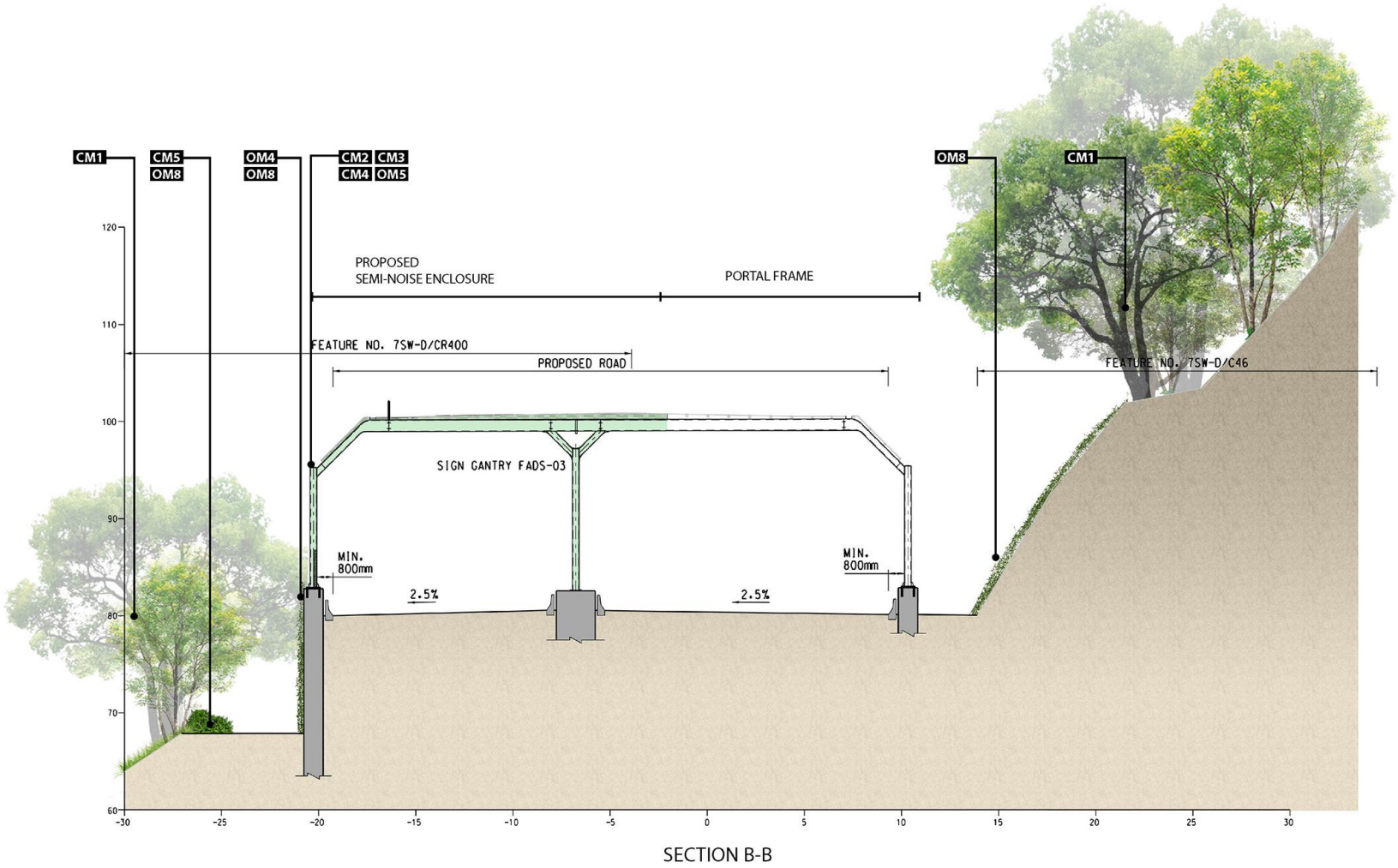
Proposed Tree Retention is Impossible



- **This EIA Plan shows trees to be retained (green) and felled (red). (*Remember – 460 trees missing from this EIA survey plan!*)**
- **EIA proposes to retain only 11 of the 24 large TPIs (*should be 33 large TPIs!*) and also a tree cluster with ~100 trees on a small knoll between blocks 5, 6 & 12.**
- **There is no supporting evidence whatsoever to explain the practicality of proposed tree retention.**

Proposed Tree Retention is Impossible

No Supporting Evidence for Tree Preservation



SECTION B-B

Extract from Approved EIA Application No. EIA-285/2022 "Improvement of Lion Rock Tunnel"

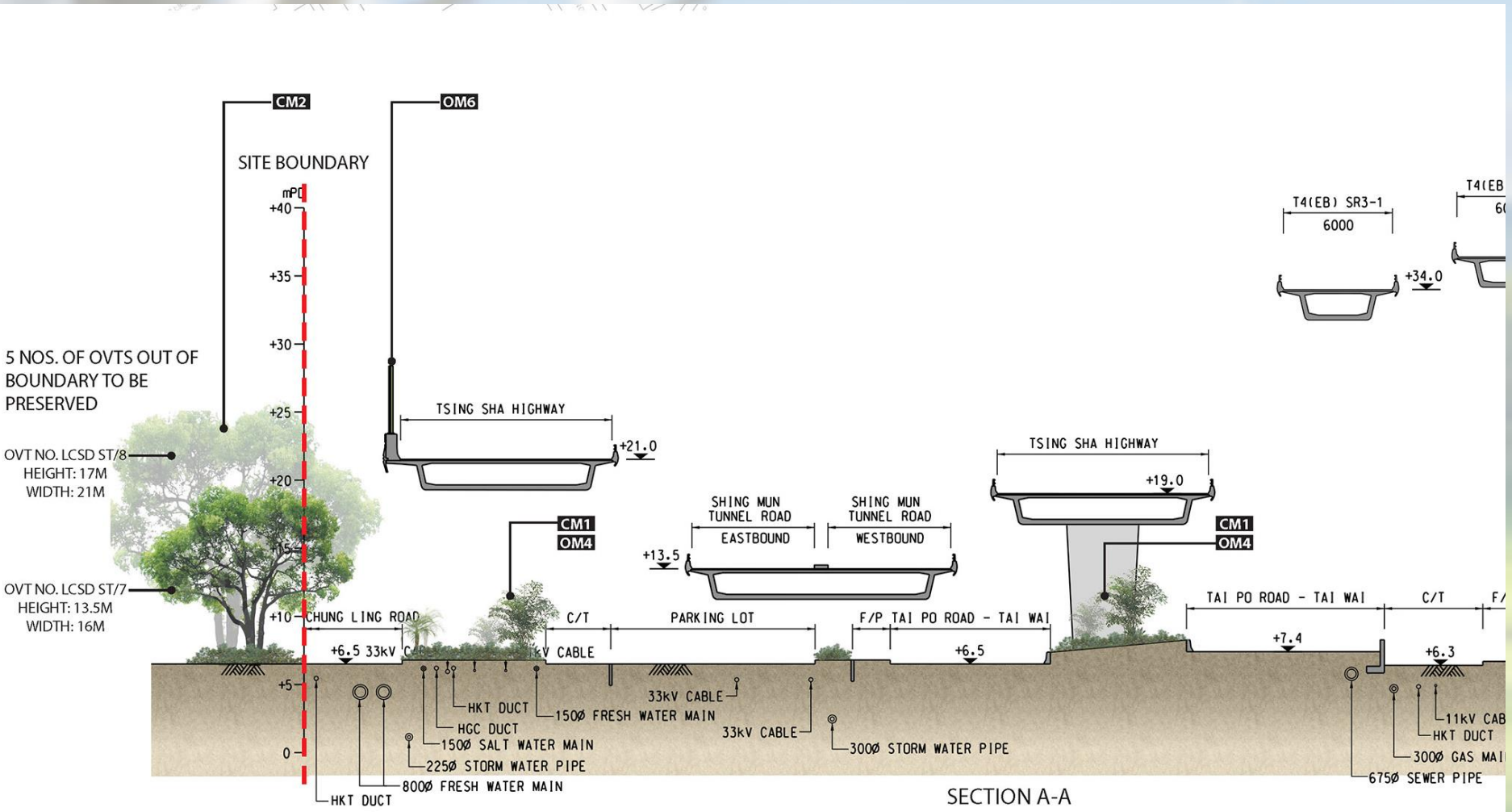
- **EIAO TM and GNs require supporting evidence to be provided to substantiate the practicality of the impact mitigation measures, such as tree preservation. Such evidence should be provided in the form of plans and sections.**

***Example from Approved EIA-285/2022"Improvement of Lion Rock Tunnel*.**

Sections demonstrate clearly how level differences are resolved with retaining walls and/or cut & fill slopes

Proposed Tree Retention is Impossible

No Supporting Evidence for Tree Preservation



Extract from Approved EIA Application No. EIA-273/2021 "Revised Trunk Road T4 in Shatin"

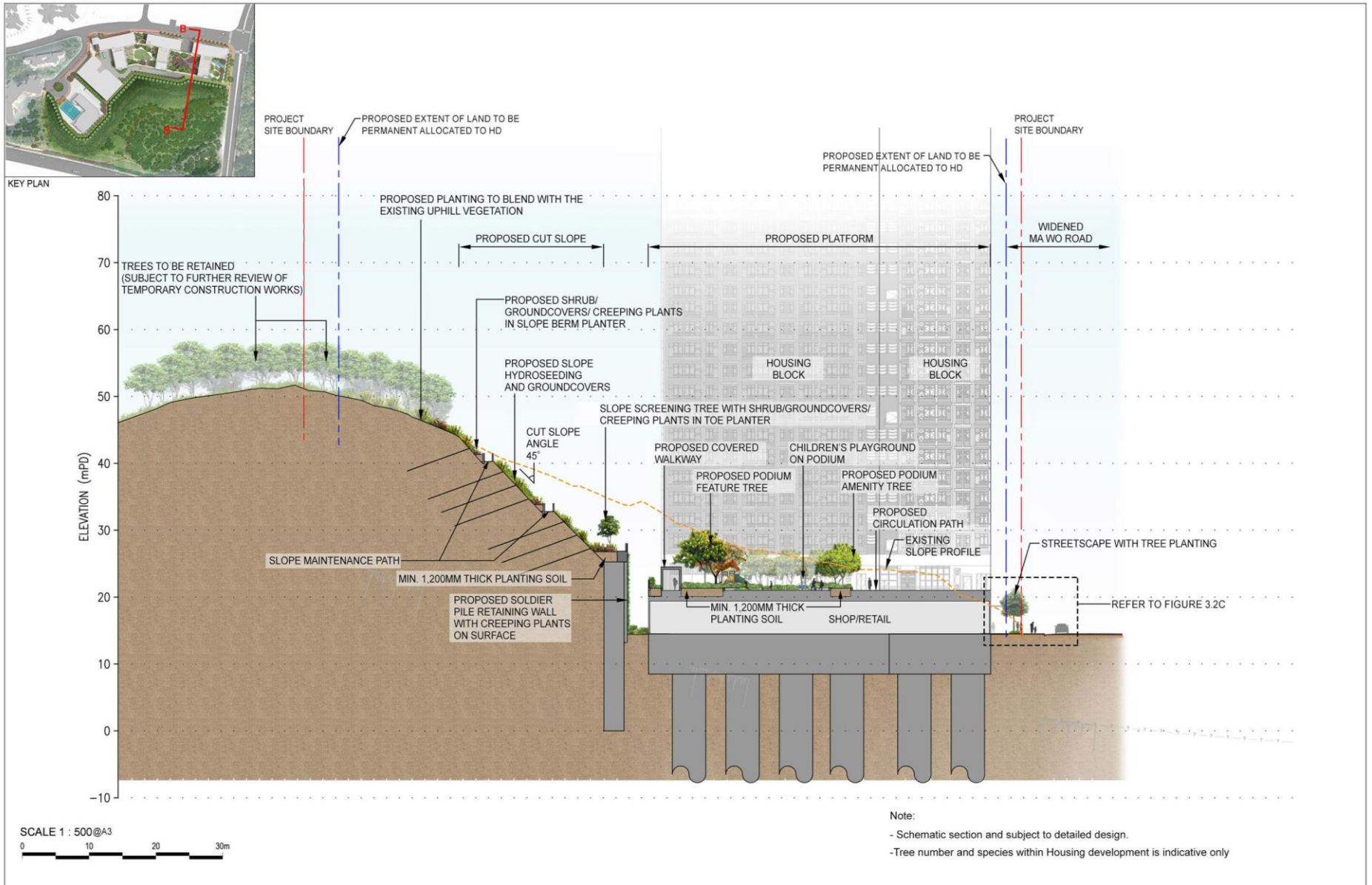
- **EIAO TM and GNs require supporting evidence to be provided to substantiate the practicality of the impact mitigation measures, such as tree preservation. Such evidence should be provided in the form of plans and sections.**

***Example from Approved EIA-273/2021"Revised Trunk Road T4 in Shatin*.**

Sections demonstrate clearly how two nearby OVTs outside the site boundary will be retained

Proposed Tree Retention is Impossible

No Supporting Evidence for Tree Preservation



- **EIAO TM and GNs require supporting evidence to be provided to substantiate the practicality of the impact mitigation measures, such as tree preservation. Such evidence should be provided in the form of plans and sections.**

Example from a Rezoning of a site at To Yuen Tung from 'GB' to R(A)10 for a Proposed Public Housing Development in Tai Po

Section demonstrates clearly how level differences are resolved with a piled retaining wall and cut slope to enable trees on top of the hill to be retained. The dashed orange line shows the original slope.

Proposed Tree Retention is Impossible

No Supporting Evidence for Tree Preservation

- This EIA Plan shows the “Conceptual Landscape And Mitigation Plan” (Fig. 11.9.2)
- Mitigation Measure “CM1 – Preservation of Existing Vegetation” is indicated on plan.
- Are sections provided to explain methods of tree retention?

Proposed Tree Retention is Impossible

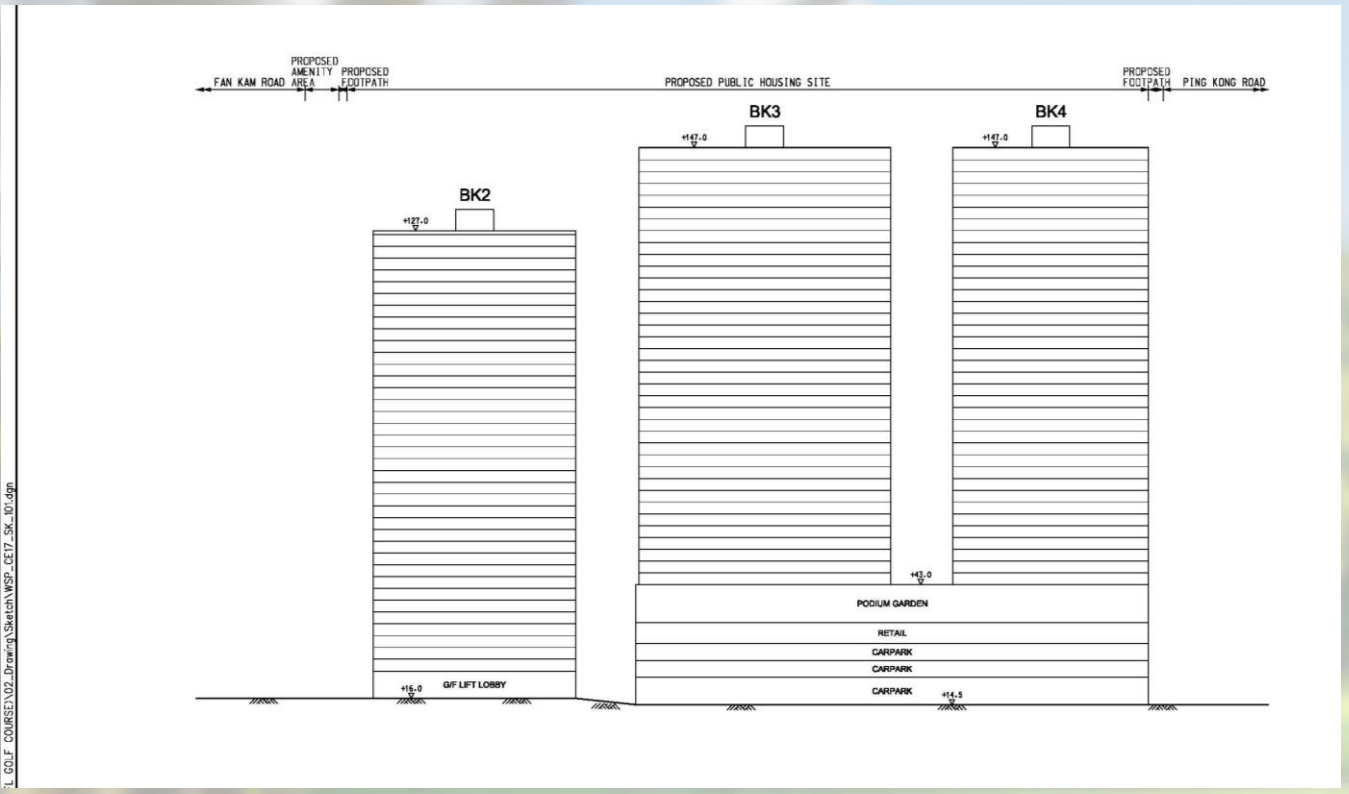
No Supporting Evidence for Tree Preservation

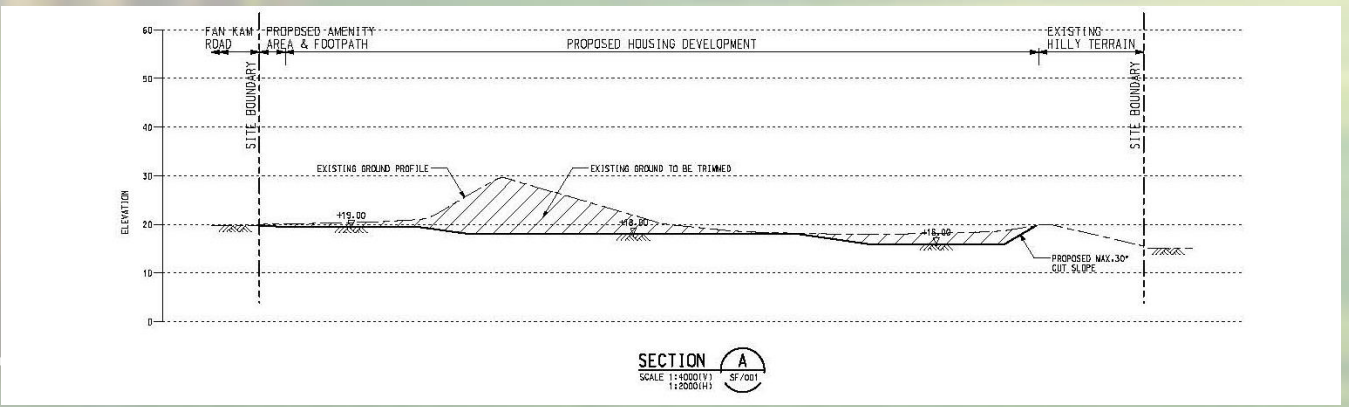
(NOTHING!)

- **There are no cross-sections provided to demonstrate the practicality of the tree retention proposals.**

Proposed Tree Retention is Impossible

No Supporting Evidence for Tree Preservation





- **This "Section Plan" (Fig. 11.14.1) (on left-top) is the only cross section of the PHD provided in the LIA.**
- **On the other hand, the Planning Study Report (June 2022) contains a section (on left-bottom) indicating the PHD platform will be flat and remove all undulating topography. So much for retaining the cluster of 100 trees on the knoll!**

I find it shocking that such a blatant lack of supporting evidence on such a key issue is acceptable to PlanD & DEP

Proposed Tree Retention is Impossible

Misleading Claim on Abundance of Preserved OVTs in Public HDs

- In the EIA Additional Information (ACE Paper 8/2023) CEDD claim in paragraph 5.4.3 that there are "*abundant cases of OVTs being maintained within the existing housing developments of HD*"
- This is **false and misleading**.
- CEDD fail to inform ACE that there are **only 3 OVTs in all of Hong Kong's many public HD's** (which are the 3 OVTs illustrated by CEDD in ACE Paper 8/2023).
- The existence of only 3 OVTs in all of HK's public HDs cannot be described as "abundant" – a more accurate adjective would be "**RARE**".
- There is a maximum of ONE OVT in any single public HD in HK. Yet CEDD expect us all to believe, <u>without providing any supporting technical evidence</u>, that the Fanling PHD, which is far more densely developed than most Public HD's in HK, is capable of retaining 11 pOVTs as well as a small knoll with ~100 trees!
- Without supporting evidence, **it is simply not believable.**
- In the following slides I explain why this is so.

Proposed Tree Retention is Impossible

Three main reasons that proposed retention of the 11 pOVTs and tree cluster is impossible:

- Tree dimensions are seriously under-measured
- No consideration of existing ground levels
- No consideration of necessary TPZ

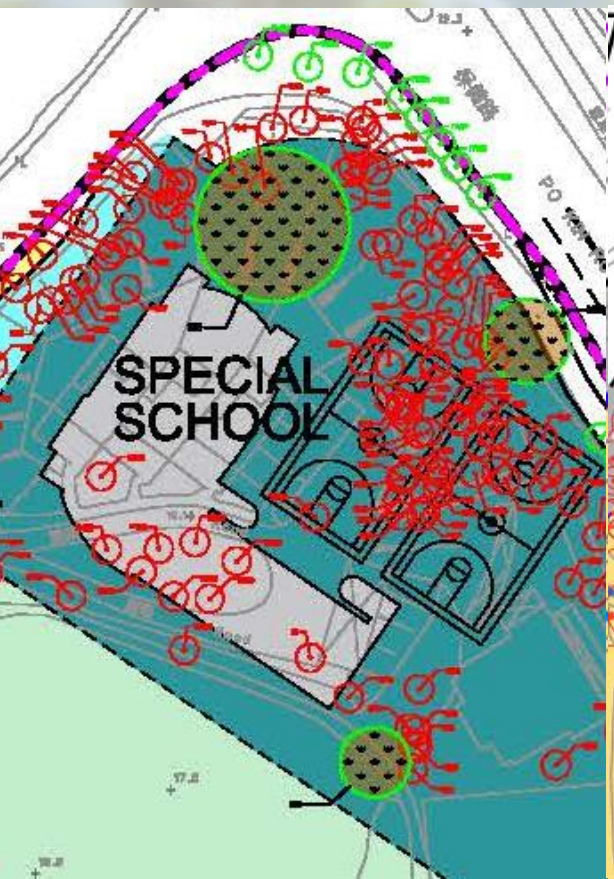
Example 1: TPI T786 [T57] [*Ficus virens*]

The plan below left is from the EIA (with wrong canopy dimension & no TPZ shown)

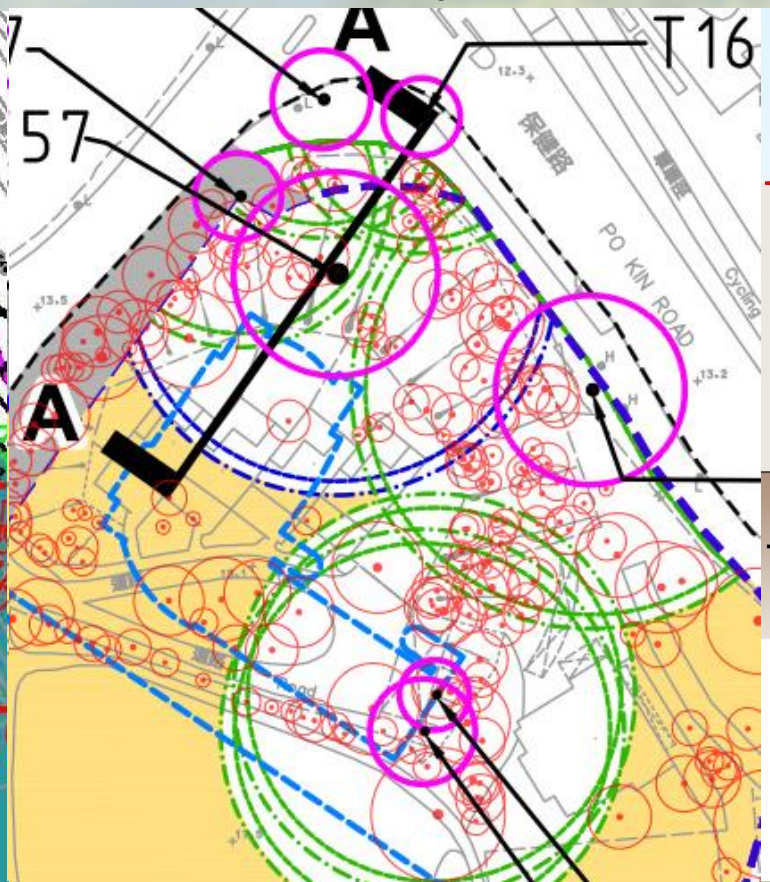
The plan below middle is from the URBIS Tree Survey Audit showing the correct tree dimensions and appropriate TPZ according to the GLTMS Guidelines. It can also be seen clearly that two other nearby pOVTs (that were wrongly omitted from the EIA Tree Survey) also clash with the special school building.

The section below right shows the big level difference between the existing and proposed ground levels, and the serious clash between TPI T786 and the proposed school building that renders it impossible to retain this pOVT.

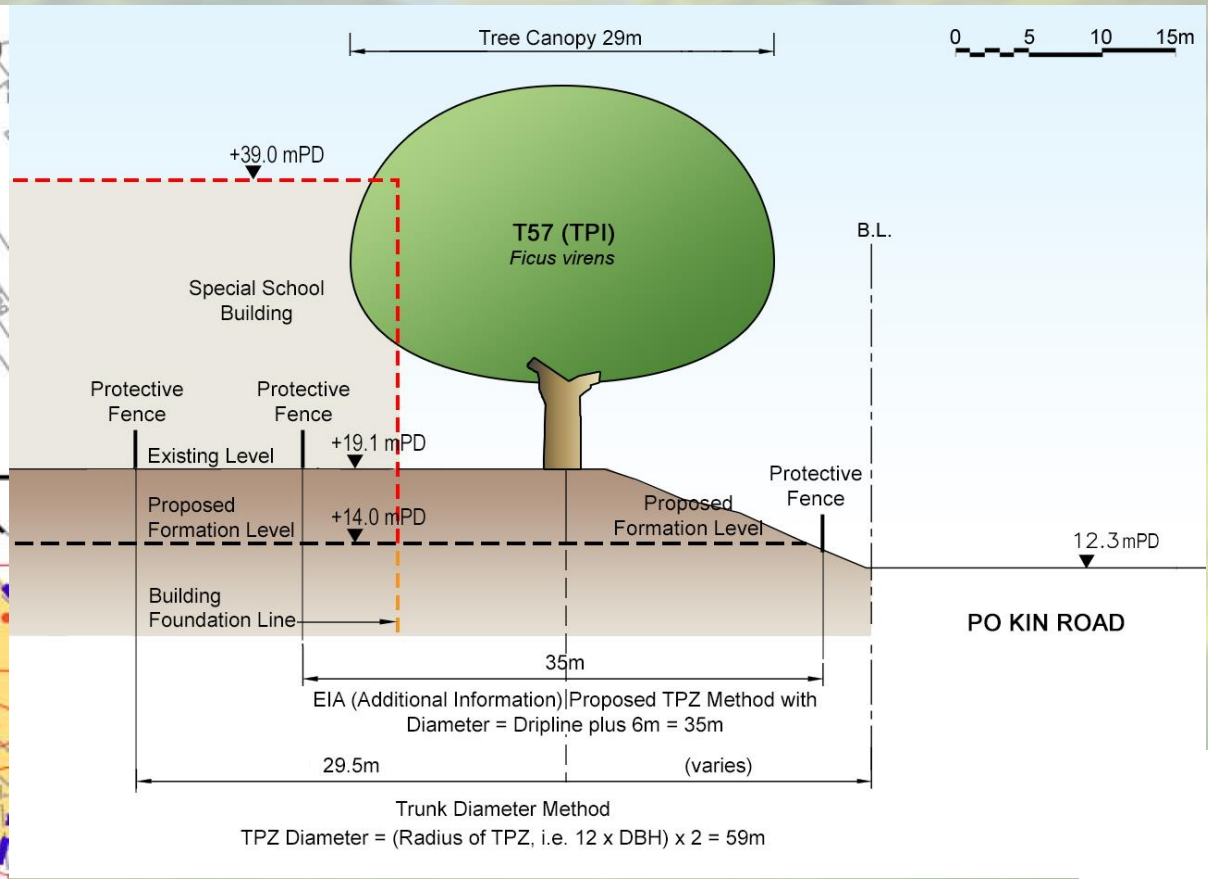
Extract from EIA Dwg CE17/R09/2.7.2



URBIS Tree Survey Audit



Special School Building clashes with TPI T57



Proposed Tree Retention is Impossible

Three main reasons that proposed retention of the 11 pOVTs and tree cluster is impossible:

- Tree dimensions are seriously under-measured
- No consideration of existing ground levels
- No consideration of necessary TPZ

Example 2: TPI T36 [URBIS T1224] [*Pterocarpus indicus*]

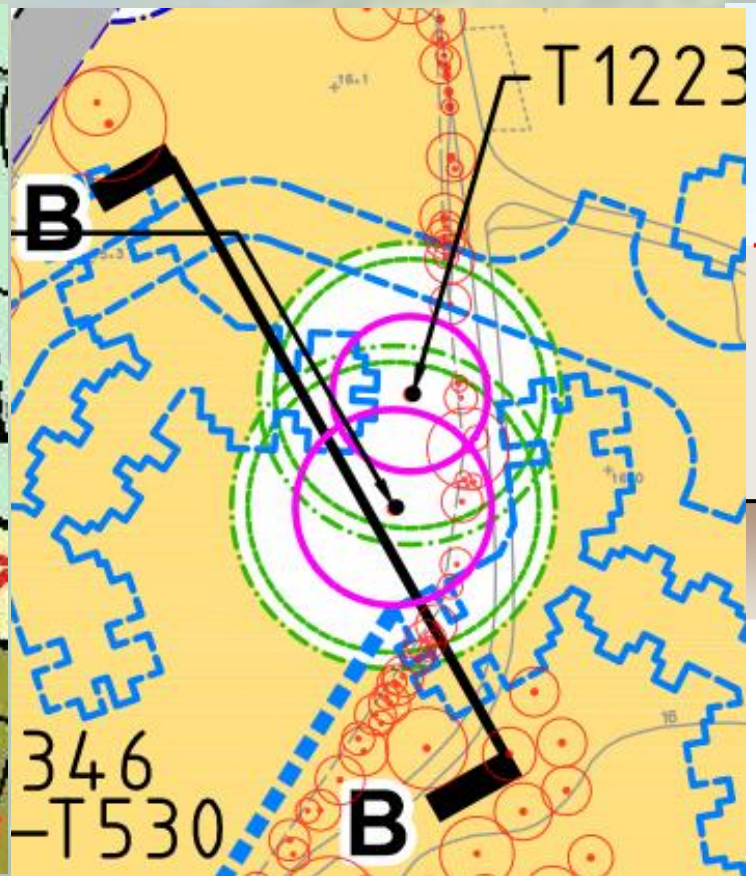
The plan below left is from the EIA (with wrong dimension & no TPZ shown) The EIA tree canopy dimensions are far too small

The plan below middle is from the URBIS Tree Survey Audit showing the correct tree dimensions and appropriate TPZ according to the GLTMS Guidelines.

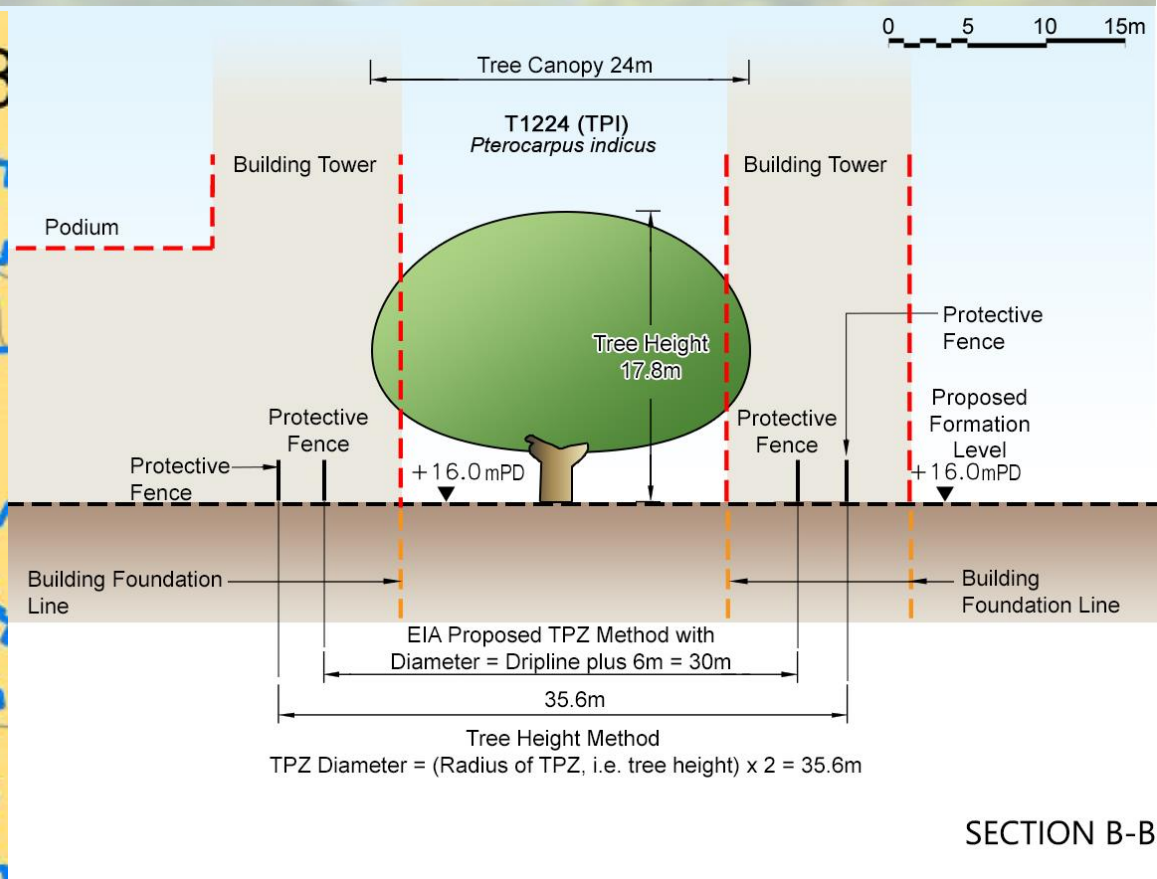
The section below right shows the serious clash between TPI T36 and the proposed residential block that renders it impossible to retain this pOVT.

Extract from EIA Dwg CE17/R09/2.7.2

URBIS Tree Survey Audit



Special School Building clashes with TPI T786

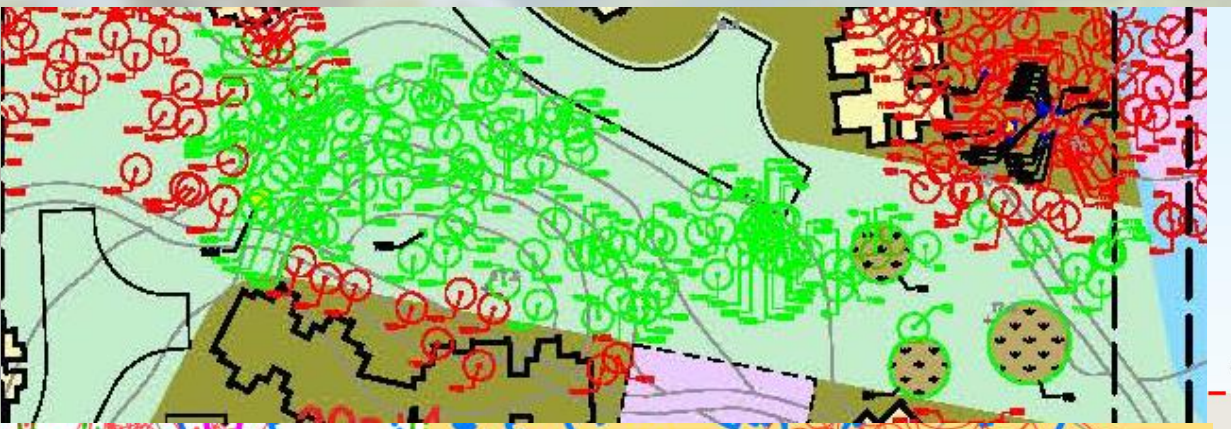


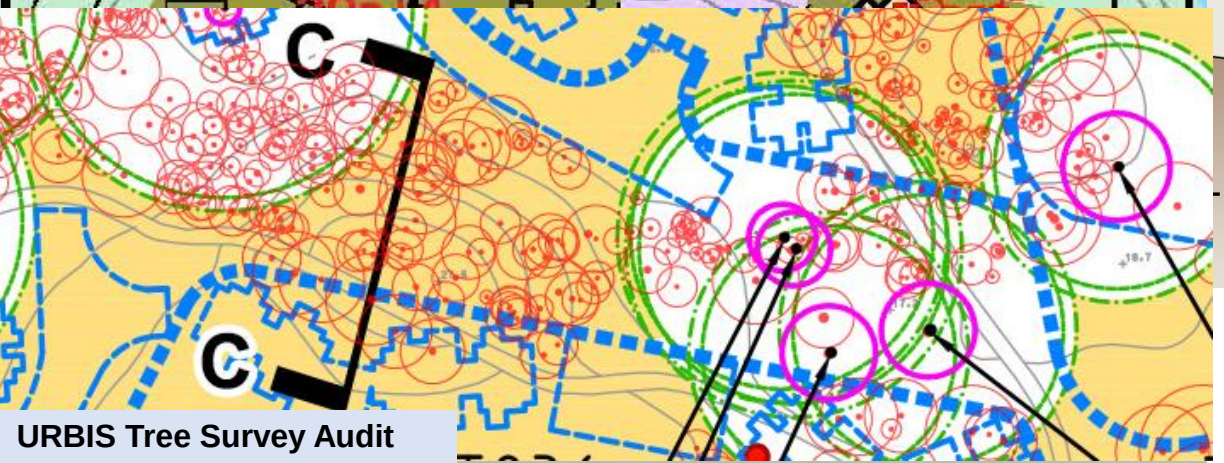
Proposed Tree Retention is Impossible

Three main reasons that proposed retention of the 11 pOVTs and tree cluster is impossible:

- Tree dimensions are seriously under-measured
- No consideration of existing ground levels
- No consideration of necessary TPZ

Extract from EIA Dwg CE17/R09/2.7.2





URBIS Tree Survey Audit

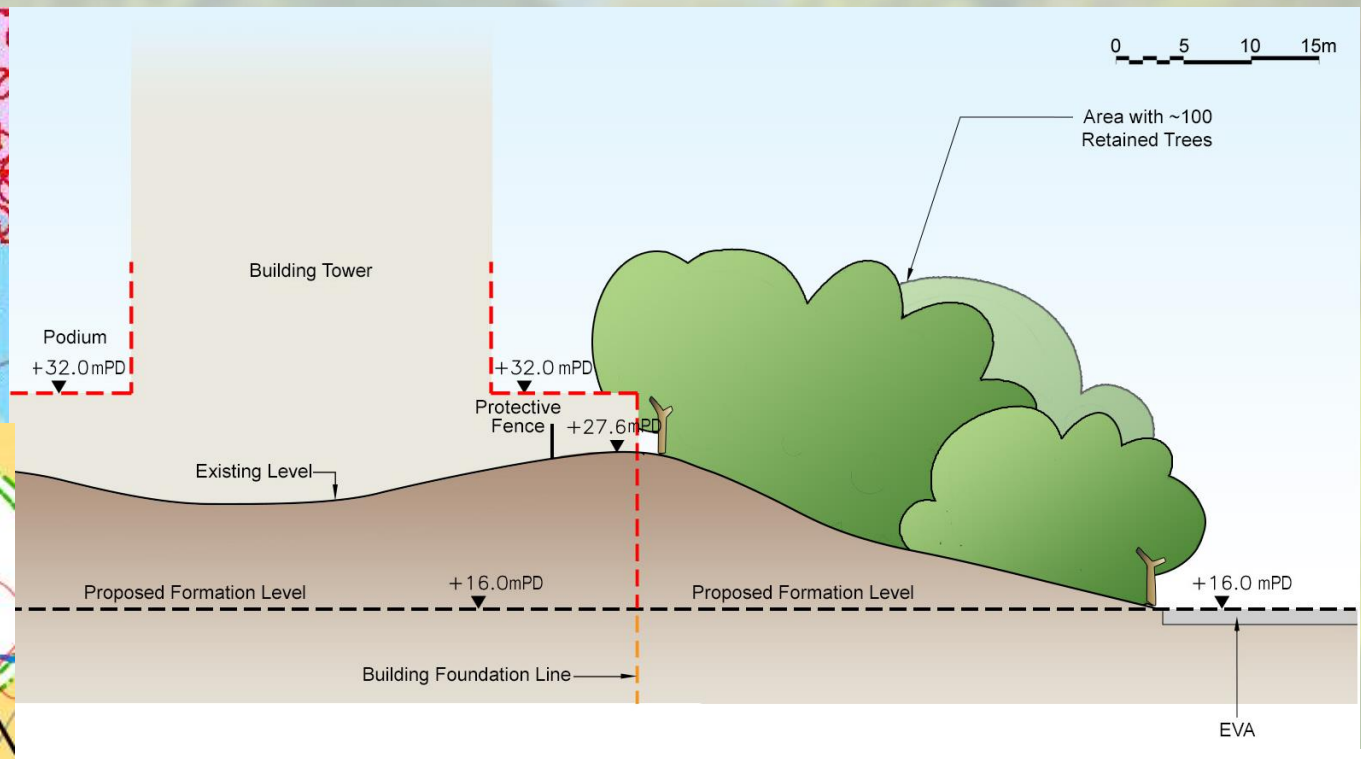
Example 3: Tree Cluster on Hill between Blocks 5, 6 & 12

The plan below left-top is from the EIA (with no retaining walls, cut slopes or TPZ shown)

The plan below left-bottom is from the URBIS Tree Survey Audit. It illustrates that the TPZs necessary for the 4 pOVTs between Buildings 6 & 12 clash with those buildings.

The section below right shows the big level difference between the existing and proposed ground levels. The proposed formation level requires removal of the entire tree cluster.

Car Park Building and Proposed Formation Platform clashes with Tree Cluster



SECTION C-C

Proposed Tree Retention is Impossible

The PHD Site Formation and Dense Building Construction will require Clear felling of all Trees

- I trust that the foregoing slides have explained why CEDD's claims that trees will be retained within the PHD layout are very false and misleading.
- The proposed PHD site formation and building construction will effectively require clear felling of all trees within the development site.
- Please also remember what I said earlier about there being NO ENVIRONMENTAL PERMIT for this project.
- Once they get the go ahead, anything goes…..including all the trees.

LANDSCAPE & TREES

1. Introduction.
2. Incompetent Landscape Impact Assessment
3. Loss of Irreplaceable Cultural Heritage Landscape
4. Potential Old and Valuable Trees preclude development
5. Proposed Tree Retention is Impossible
6. Severe Shading Impacts caused by development
7. CONCLUSION

Severe Shading Impacts caused by development

Severe shading Impacts on Preserved Trees within PHD

- **The original EIA (May 2022) correctly identifies the Operation of the PHD as a source of impact but fails to discuss or present any analysis of those impacts. Thus, even if the 11 TPIs proposed to be retained in Sub-Area 1 could survive the intensive construction activities around them, including the shock of the cutting back of their root zone, the drastic change in the environmental conditions surrounding the trees in the Operation Phase will have a continuous ongoing substantial adverse impact on their health, significantly increasing the chance of rapid demise.**
- **These drastic changes include the severe shading caused by 37-storey and 48-storey tower blocks, the increase in temperature due to urban heat island effect caused by the extremely dense development, the dramatic change in air flow caused by the tall buildings, the removal of shelter/protection that was previously afforded by adjacent trees that have been felled, the extensive excavations required to build stormwater and sewage drainage and other underground utilities, and the lowered water table due to the site formation and very deep building foundations.**
- **In EIA Additional Information (ACE Paper 8/2023) CEDD claim that "***The shading is not significant***." but their analysis is incomplete and flawed.**
- **In the following slides I explain why this is so.**

Severe Shading Impacts caused by development

Severe shading Impacts on Preserved Trees within PHD

- **Firstly, in ACE Paper 8/2023, CEDD completely fail to present the shading impacts on the 11 large pOVTs they propose (unrealistically) to retain. I am guessing this is because they realise (correctly) that the shading impacts would be very severe, so they decline to mention them.**
- **CEDD present only the shading impacts on the tree cluster between Blocks 5, 6 and 12. ACE Paper 8/2023, §8.2.5 states "***In spring equinox (春分), summer equinox (夏至), autumn equinox 秋分), the retained tree clusters would be able to receive direct sunlight, although in some time of a day, the trees may be shaded by the proposed housing development. The shading is not significant."***
- **This greatly understates the actual shading that will be caused by the buildings, and it is wrong to say the shading is not significant.**
- **The following slides contain short videos and stills at hourly intervals showing the shadow-paths from sunrise to sunset at (i) Winter Solstice and (ii) Spring & Autumn Equinoxes.**
- **They show that the tree cluster will receive less than 3 hours per day of direct sunlight for more than 6 months of the year, which certainly constitutes a very significant and serious shading effect (contrary to the claims in ACE Paper 8/2023) that will contribute, together with the other factors mentioned previously, to the trees' quick demise.**

Severe Shading Impacts caused by development

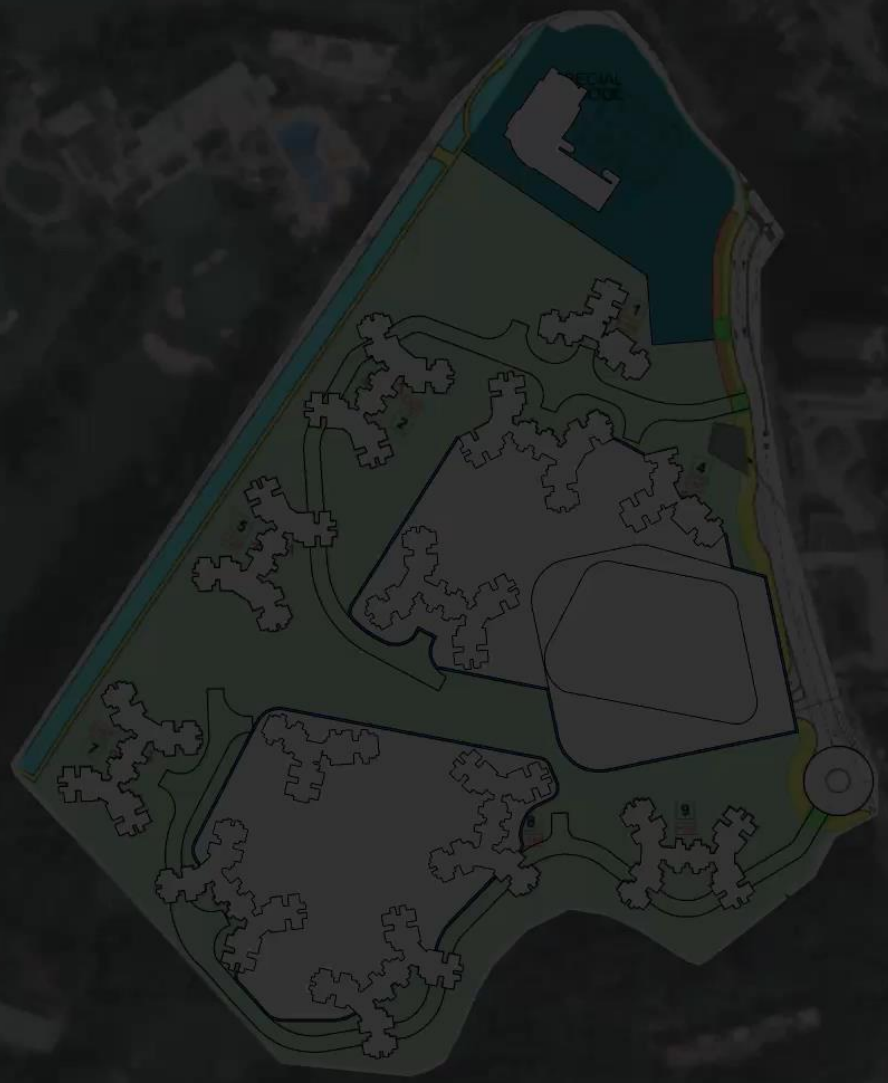
Severe shading Impacts on Preserved Trees within PHD

Winter Solstice

Video

Severe Shading Impacts caused by development

Severe shading Impacts on Preserved Trees within PHD



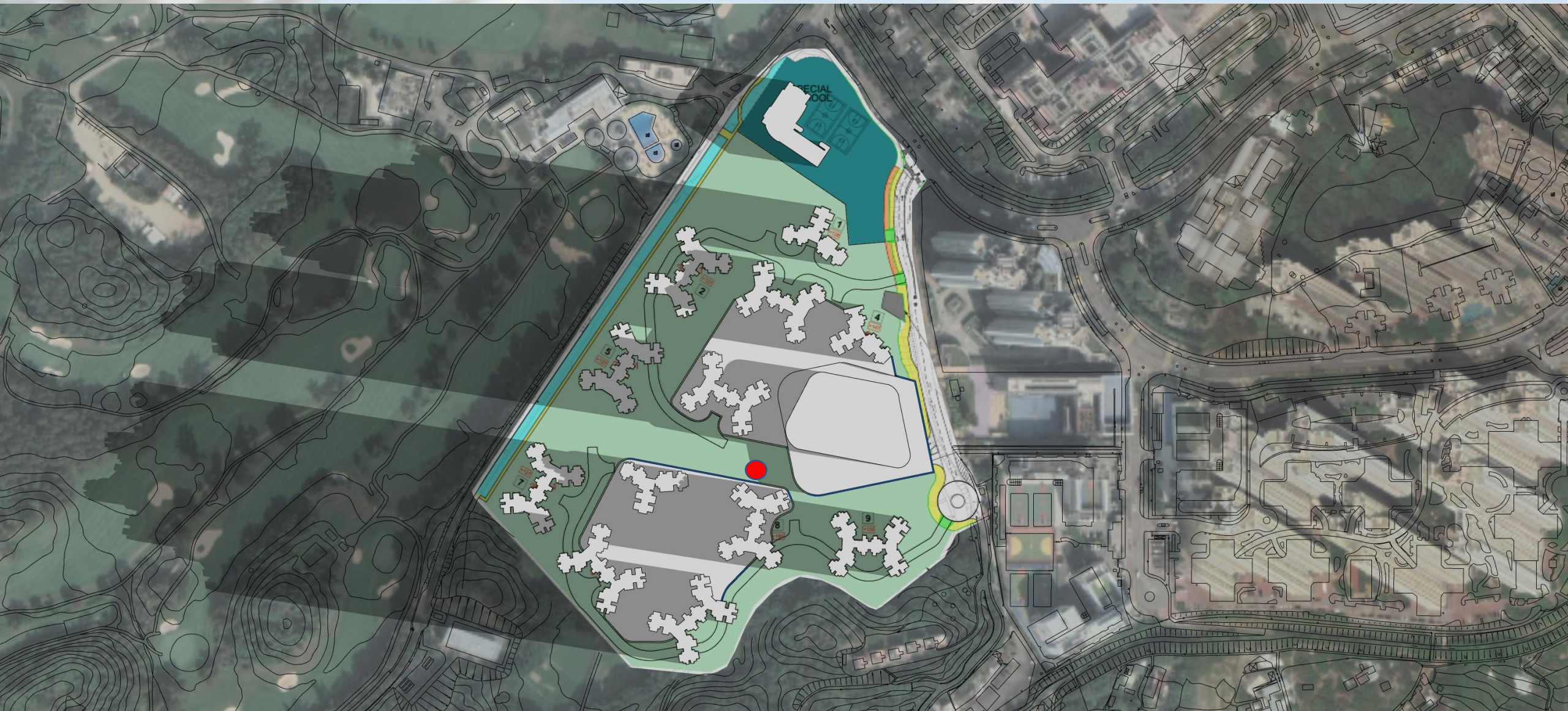
Spring & Autumn Equinoxes

Video

Severe Shading Impacts caused by development

Severe shading Impacts on Preserved Trees within PHD

Spring & Autumn Equinoxes - 8am



Severe Shading Impacts caused by development

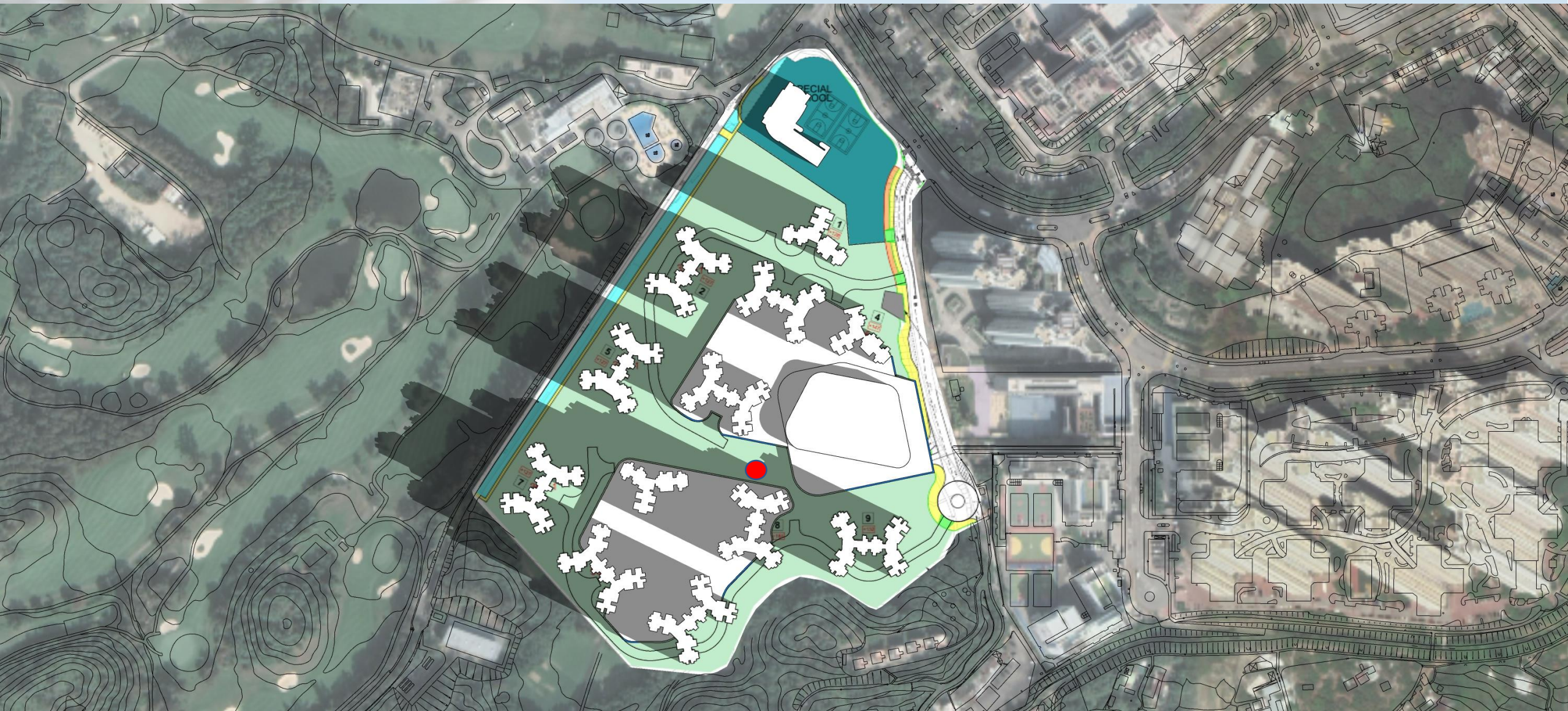
Severe shading Impacts on Preserved Trees within PHD

Spring & Autumn Equinoxes - 9am

Severe Shading Impacts caused by development

Severe shading Impacts on Preserved Trees within PHD

Spring & Autumn Equinoxes - 10am



Severe Shading Impacts caused by development

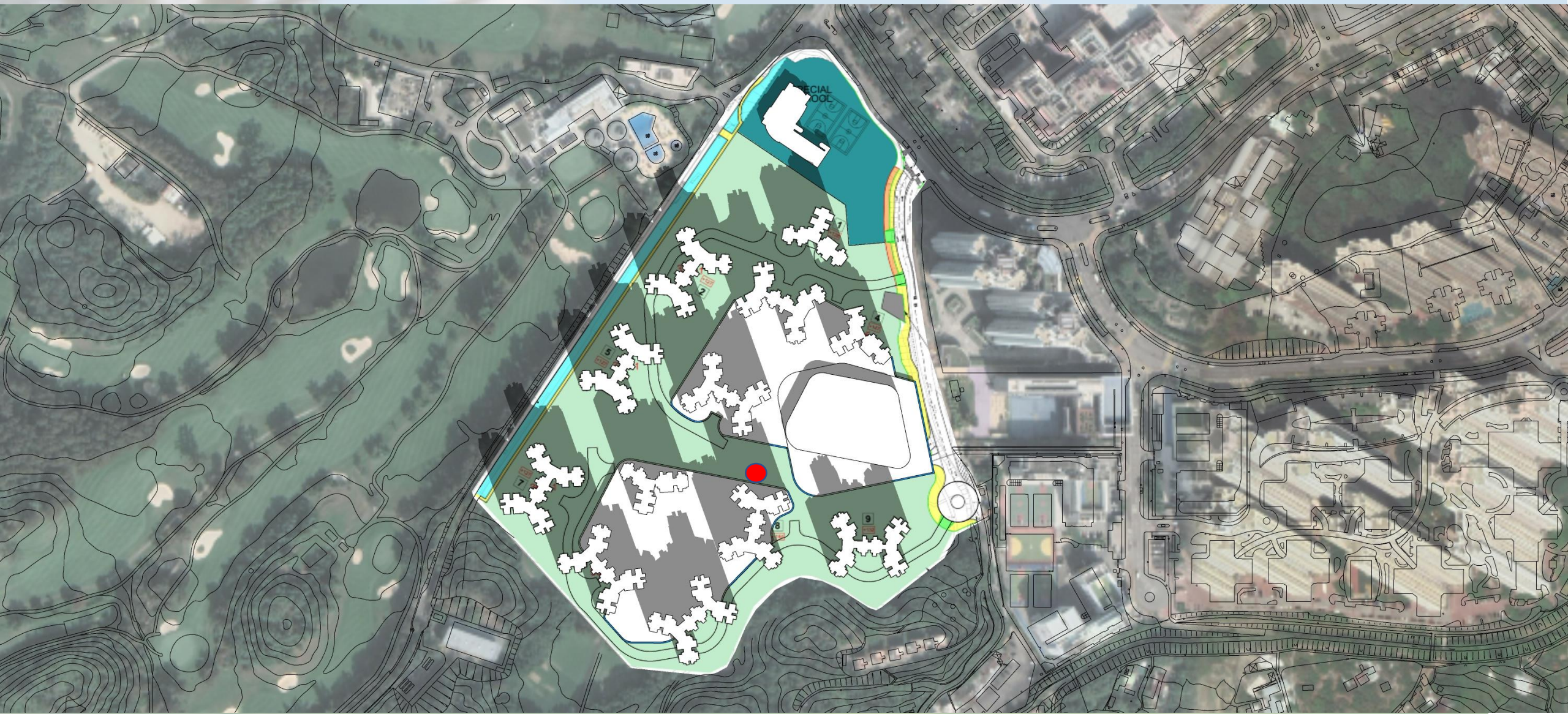
Severe shading Impacts on Preserved Trees within PHD

Spring & Autumn Equinoxes - 11am

Severe Shading Impacts caused by development

Severe shading Impacts on Preserved Trees within PHD

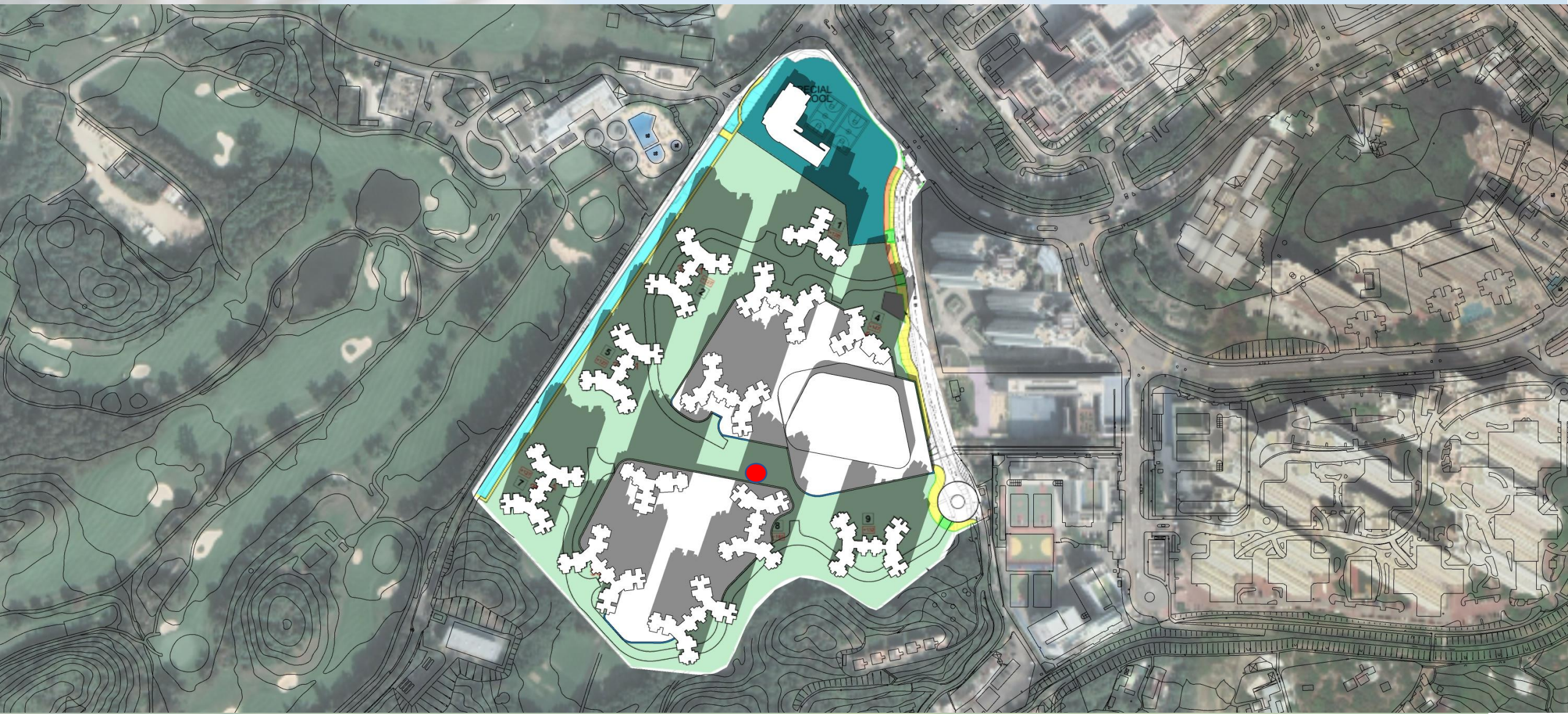
Spring & Autumn Equinoxes – 12noon



Severe Shading Impacts caused by development

Severe shading Impacts on Preserved Trees within PHD

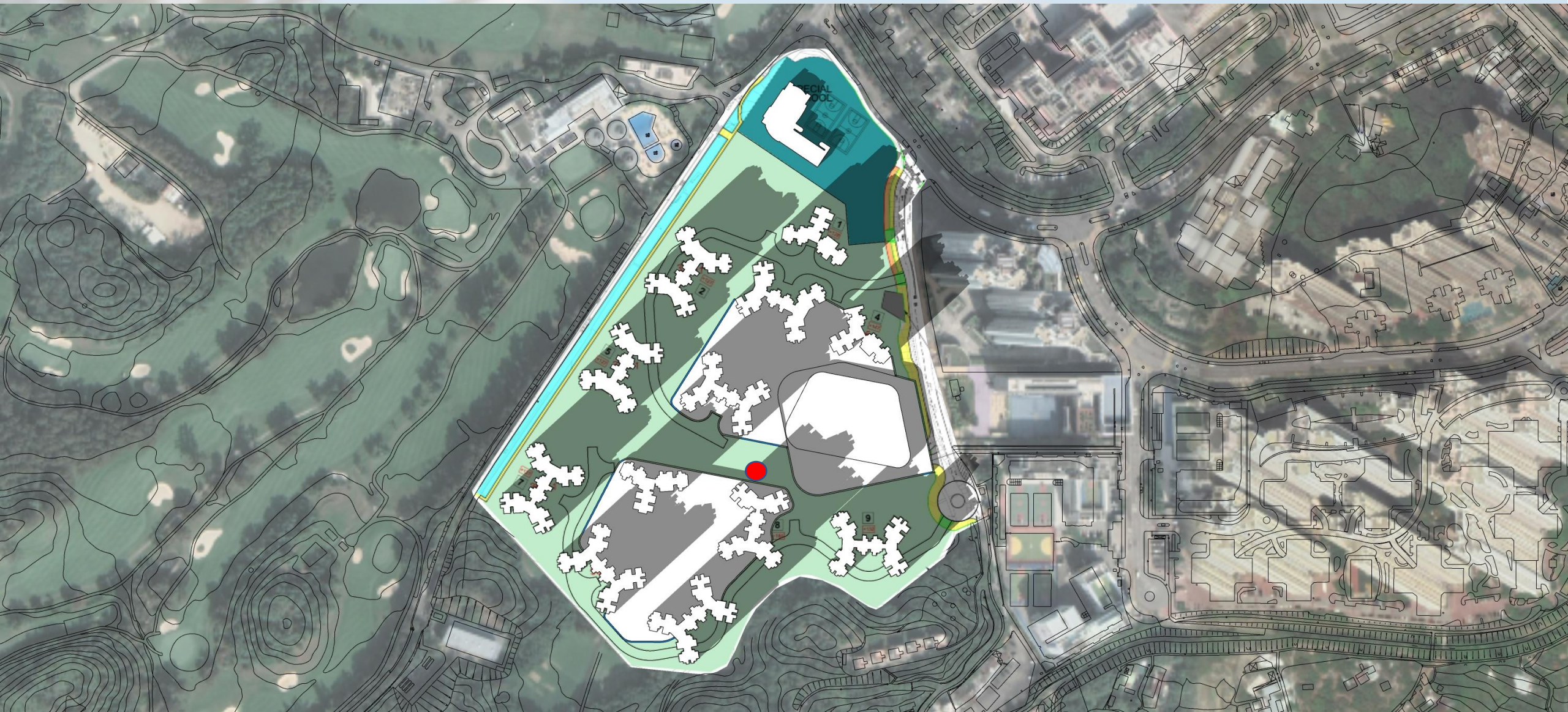
Spring & Autumn Equinoxes – 1pm



Severe Shading Impacts caused by development

Severe shading Impacts on Preserved Trees within PHD

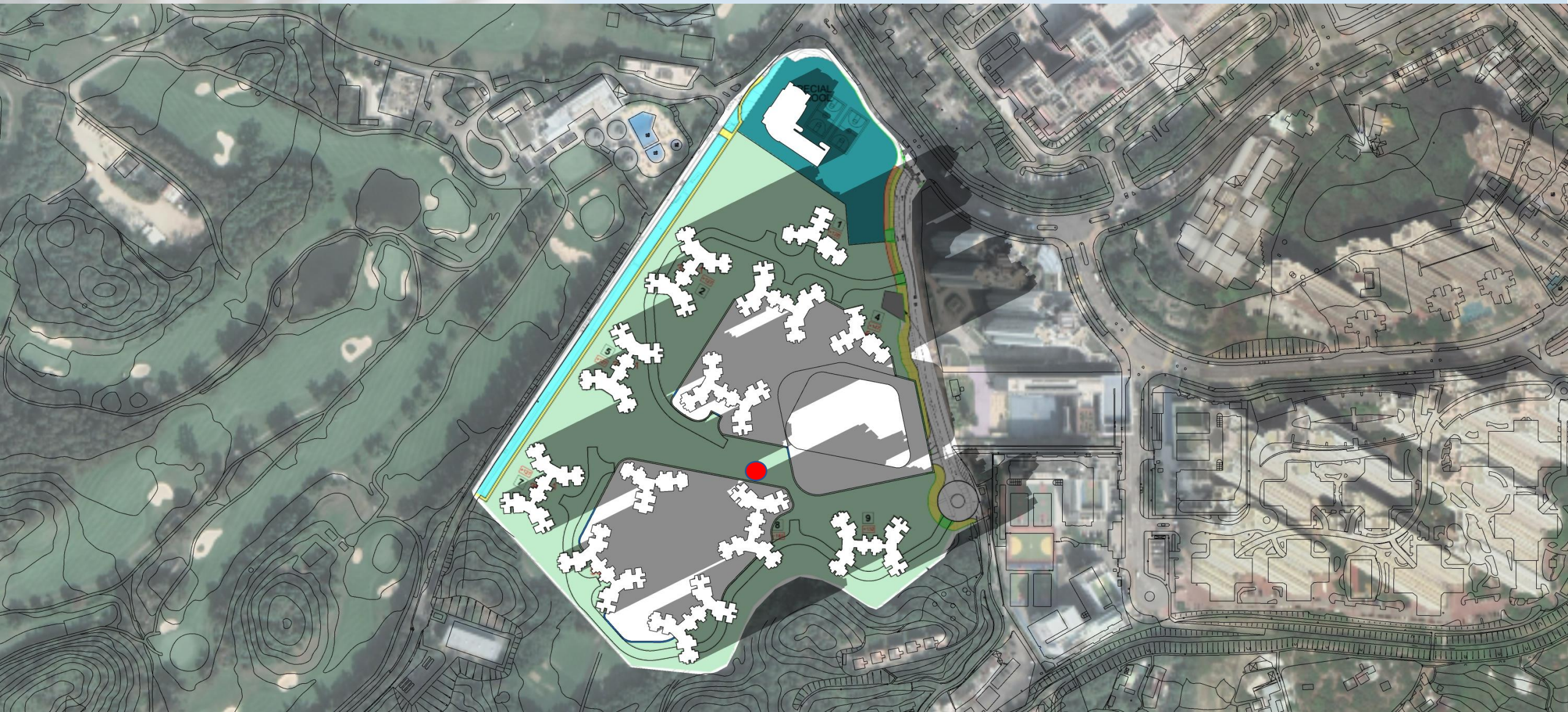
Spring & Autumn Equinoxes – 2pm



Severe Shading Impacts caused by development

Severe shading Impacts on Preserved Trees within PHD

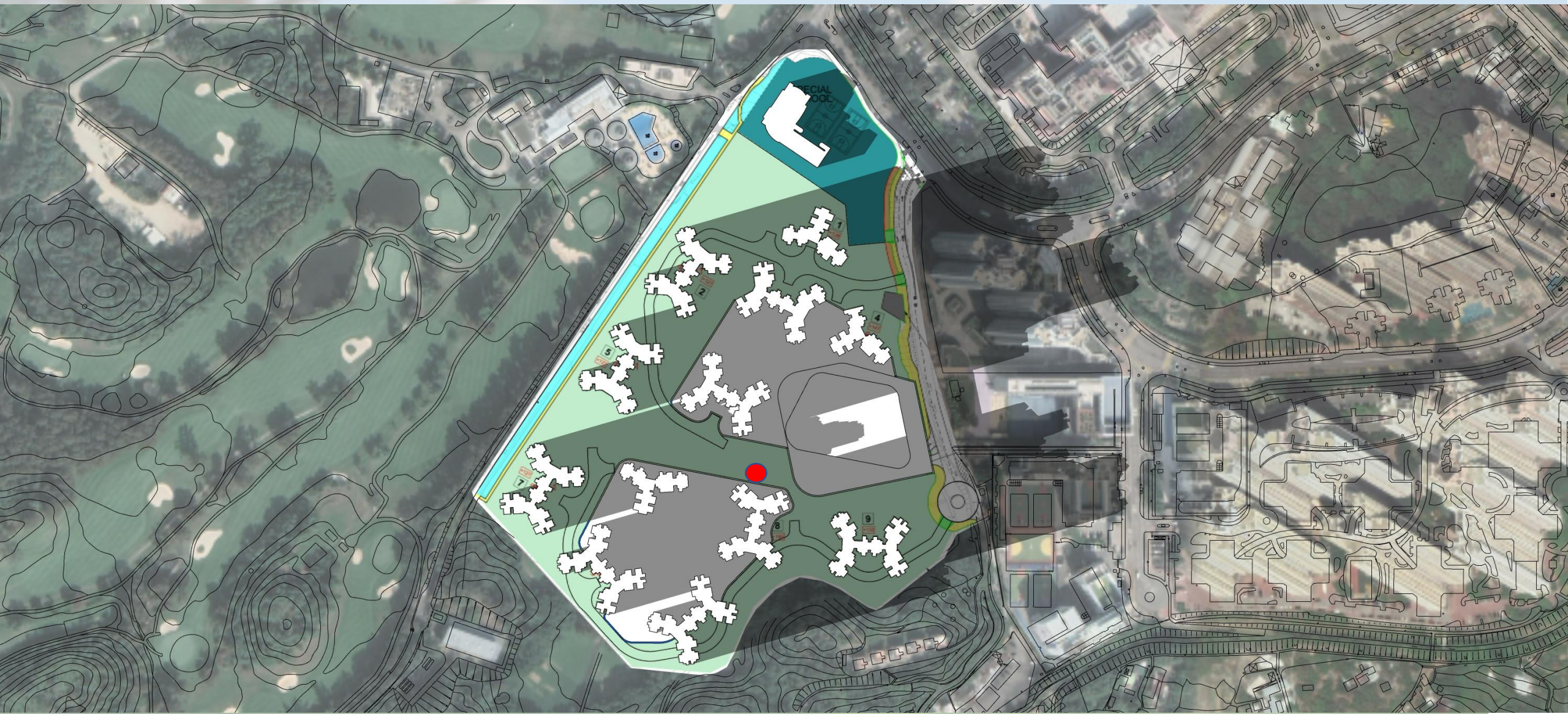
Spring & Autumn Equinoxes – 3pm



Severe Shading Impacts caused by development

Severe shading Impacts on Preserved Trees within PHD

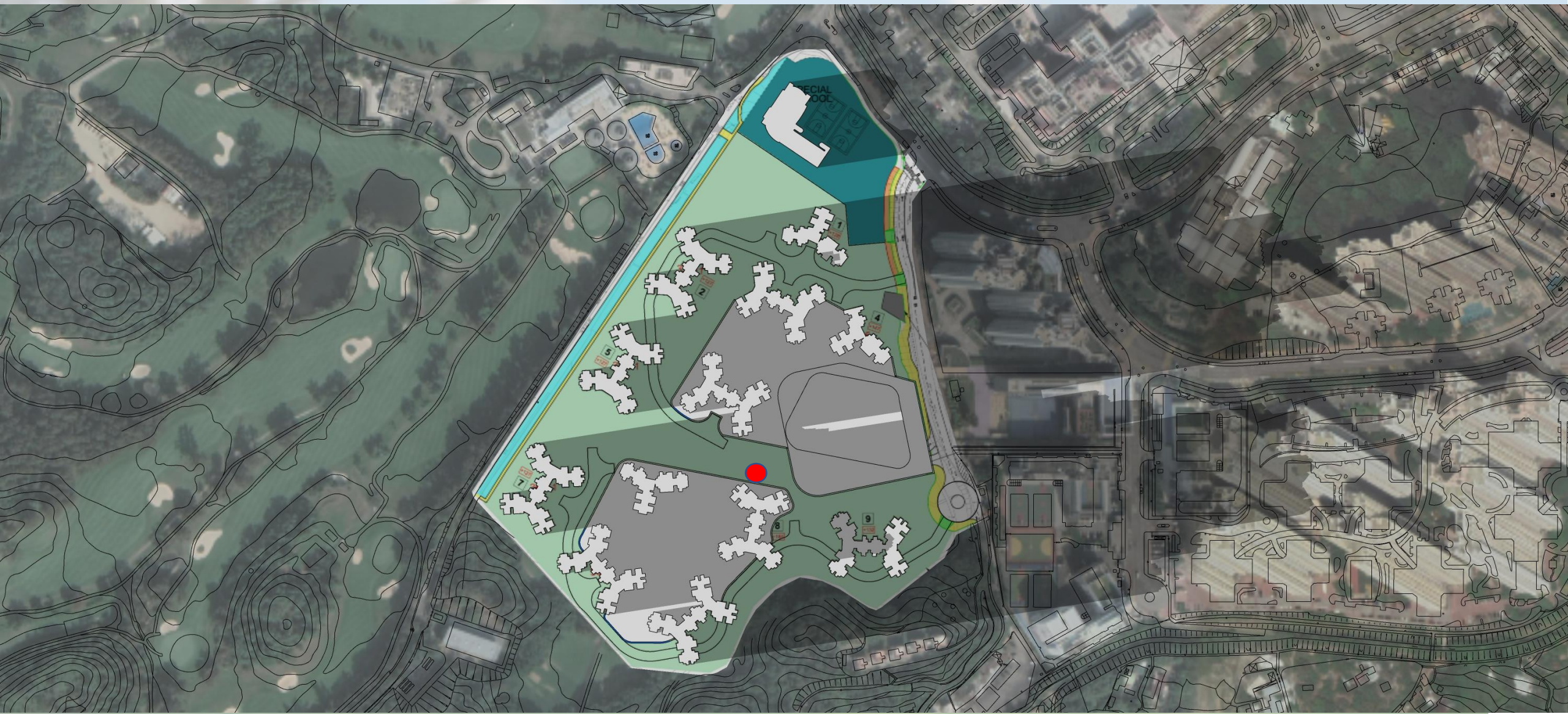
Spring & Autumn Equinoxes – 4pm



Severe Shading Impacts caused by development

Severe shading Impacts on Preserved Trees within PHD

Spring & Autumn Equinoxes – 5pm



Severe Shading Impacts on Fanling Golf Course West of Fan Kam Road

- Both the original EIA (May 2022) and the EIA Additional Information in ACE Paper 8/2023 completely fail to identify and assess the significant adverse impacts to the Fanling Golf Course located on the west side of Fan Kam Road due to the severe shading caused by the 37 and 48 storey blocks.
- Golf course turfgrass requires a large amount of direct sunlight for optimum growth and development. There is no golf turfgrass variety developed that performs well when deprived of sufficient light, and lack of sufficient light is an important stressor that weakens turf, making it more susceptible to attack by pests, traffic, and other stressors.
- The proposed PHD will cause serious adverse impact to the golf turfgrass on the west side of Fan Kam Road as the very high tower blocks will directly shade the 18th hole of the Old Course as well as portions of several holes on the New and Eden courses that are used for the Hong Kong Open (HKO).
- A quantitative analysis using computer sun-path modeling (as shown previously) has been undertaken of the shading effect, which are summarized in the following table.

Severe Shading Impacts caused by development

Severe Shading Impacts on Fanling Golf Course West of Fan Kam Road

Table 1 Number of Direct Sunlight Hours per Day

Colour code: Enough sun (>8Hrs) / Borderline (6-8Hrs) / Too little sun (<6Hrs)

LOCATION	TIME			
		Midsummer (21 June) Sunrise: 05:40 Sunset: 19:10 Sunlight Hours: ~13.5hrs	**Equinoxes** (21 March / 21 September) Sunrise: 06:26 / 06:11 Sunset: 18:34 / 18:20 Sunlight Hours: ~12hrs/~12hrs	**Midwinter** (21 December) Sunrise: 06:58 Sunset: 17:44 Sunlight Hours:~10.5hrs
	Old Course - Hole #18 (Green & fairway)	~6.5hrs (12:00-18:30)	~5hrs (13:00-18:00)	~3hrs (14:00-17:00)
	Eden Course - Hole #1 (Tee & fairway)	~8.5hrs (10:00-18:30)	~7hrs (11:00-18:00)	~5hrs (12:00-17:00)
	Eden Course - Hole #7 (Green & fairway)	Not Affected	~8hrs (10:00-18:00)	~6hrs (11:00-17:00)
	Eden Course - Hole #18 (Green)	Not Affected	~8hrs (10:00-18:00)	~6hrs (11:00-17:00)
	New Course - Hole #1 (Tee & fairway)	Not Affected	Not Affected	~6hrs (11:00-17:00)
	New Course - Hole #18 (Green)	Not Affected	Not Affected	Not Affected
	Practice Putting Green	Not Affected	~7hrs (11:00-18:00)	~5hrs (12:00-17:00)

*Last time of direct sunlight is calculated to be 30-45 minutes before actual sunset due to effect of surrounding topography & vegetation.

- **The results for Midwinter are particularly important because the Hong Kong Open (HKO) is normally held within one month either side of Midwinter (the exact timing of HKO is according to the calendar of the DP World Tour and is outside the control of HKGC).**

Severe Shading Impacts caused by development

Severe Shading Impacts on Fanling Golf Course West of Fan Kam Road

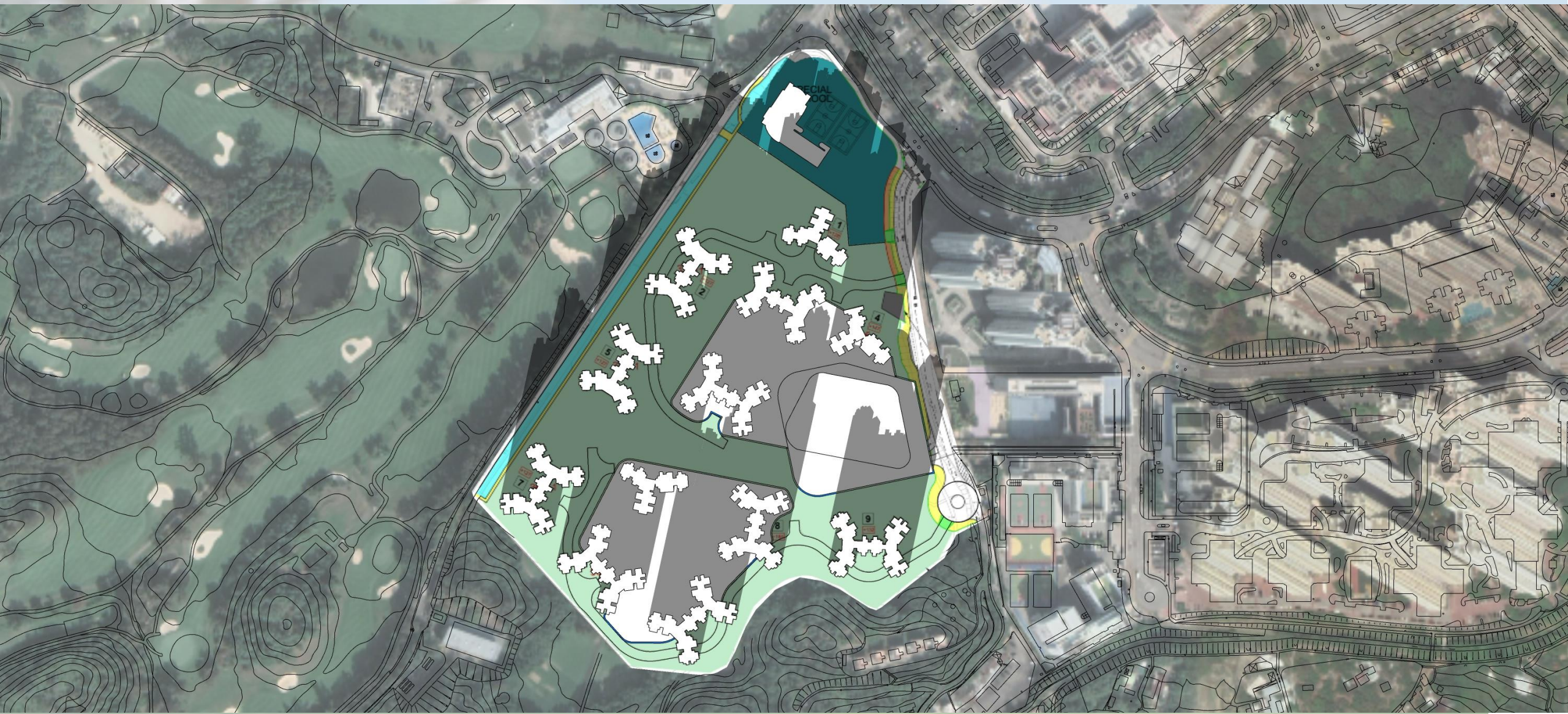
Winter Solstice

Video

Severe Shading Impacts caused by development

Severe Shading Impacts on Fanling Golf Course West of Fan Kam Road

Winter Solstice – 1pm



Severe Shading Impacts on Fanling Golf Course West of Fan Kam Road

- The PHD will cause shading that will have serious detrimental effect to the turfgrass of several golf holes, including Old Course 18th Hole which will eventually become unplayable, as well as key portions of holes on the composite course used for the Hong Kong Open, which will mean that international tournaments can no longer be held at Fanling.
- **The PHD therefore poses a major risk to the future of Hong Kong's ability to host its oldest golf tournament, the world's second oldest continuously running international golf tournament, and Hong Kong's most internationally significant golfing event, as no other golf course in Hong Kong could host such a significant international event.**
- Mr Darry Koster, HKGC Golf Course Superintendent, will elaborate further on this serious matter this afternoon.

LANDSCAPE & TREES

CONCLUSION

1. LVIA is not worth the paper it is written on and should never have been approved.
2. EIA Approval Conditions are vague and worthless, effectively devolving approval to the project proponent CEDD
3. There is NO ENVIRONMENTAL PERMIT to control impacts in the event of breached promises.
4. Presence of 33 pOVTs in Sub-Area 1 effectively precludes development for housing
5. Loss of Old Course would be a devastating loss of an unique and irreplaceable cultural heritage landscape
6. **The whole 32 Ha should be zoned OU(CR), and HKGC allowed to continue their successful stewardship over the past 112 years.**