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Issue Date: 26 April 2025 Project No.: P525672

# **Landscape and Visual Mitigation Plan**

for

Contract No. DC/2022/02

Drainage Improvement Works at Yuen Long – Stage 2

Environmental Permit No. EP-596/2021

Prepared by:

**Aurecon Hong Kong Limited** 

**COMMERCIAL-IN-CONFIDENCE** 

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Certified by:

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## 1 Introduction

## 1.1 Background

Under the Environmental Impact Assessment (EIA) Ordinance, the EIA Report (Register No.: AEIAR-229/2021) prepared for the "Drainage Improvement Works Near Four Villages in Yuen Long - Sung Shan New Village, Tai Wo, Lin Fa Tei and Ha Che" (the Project) have been approved by the Environmental Protection Department (EPD) on 03 June 2021. As stipulated in Condition 2.7 of the Environmental Permit No. EP-596/2021, the Permit Holder shall, no later than one month before the commencement of construction of the Project or otherwise approved by the Director, submit to the Director 4 hard copies for approval and 1 electronic copy of a Landscape and Visual Mitigation Plan (LVMP). The LVMP shall incorporate the design of green channel and wildlife corridor with landscape planting along the channel edges with a view to enhancing habitat connectivity and revitalizing the channels with visual and landscape benefits for public enjoyment. The LVMP shall include recommendations of landscape and visual mitigation measures, implementation programme, maintenance and management schedules, and drawings on the scale of 1:1,000 or other appropriate scale, as agreed with the Director, of the landscape and visual mitigation measures. The LVMP shall include an implementation schedule in table form to clearly list out the mitigation measures to be implemented, and the implementation party, location, timing and environmental performance required for implementation of the mitigation measures.

Before submission to the Director, the Plan shall be certified by the Registered Landscape Architect, qualified ecologist(s), the ET Leader and verified by the IEC as conforming to the information and recommendations contained in the approved EIA report.

Wing Tat Civil Engineering Co. Limited (WTCECL) has been commissioned by the Drainage Service Department to undertake the drainage improvement works; Aurecon Hong Kong Limited has been commissioned by WTCECL to prepare and submit the LVMP to meet Condition 2.7 of the EP.

## 1.2 Project Scope and Location

To enhance the drainage capacity of the existing drainage systems to lower the flood risks, the construction works of the Project comprises –

- (a) construction of drainage channels in Tai Wo, Ha Che, Sung Shan New Village and Lin Fa Tei;
- (b) construction of stormwater drains in Ha Che and Lin Fa Tei;
- (c) carrying out ancillary works.

The drainage improvement works locate in Sung Shan New Village, Tai Wo, Lin Fa Tei and Ha Che. The project location plan is shown in **Appendix A.** 

# 2 Landscape and Visual Mitigation Measures

## 2.1 Recommended Landscape and Visual Mitigation Measures

In section 9 of the approved EIA report, Landscape Resources (LRs), Landscape Character Areas (LCAs) and Visual Sensitive Receivers (VSRs) affected by this Project have been identified and assessed. To alleviate the landscape and visual impacts, a series of mitigation measures are recommended to be implemented during construction phase and operation phase, details of each mitigation measures are summarized in Table 2.1 and Table 2.2. Location of the mitigation measures in construction and operation phase are shown in **Appendix C, D, E and F**.

## 2.2 Implementation Programme, Maintenance and Management

### **Schedules**

The parties to implement, maintain and manage the mitigation measures during construction phase and operation phase are identified and are summarized in Table 2.3 and Table 2.4. An implementation schedule of landscape and visual mitigation measures are shown in **Appendix G**. A fully qualified Landscape Resident Site Staff will be responsible for supervising the implementation of landscape construction works and subsequent maintenance operations during the 12-month establishment period.

**Table 2.1 – Mitigation Measures in Construction Phase** 

ID No.	Mitigation Measure	Details	Environmental Performance /						
			Reference						
CM01	Tree Protection and Preservation	According to the approved Final Tree Preservation and Removal Proposal for Drainage Improvement Works in Yuen Long (Batch 2) (Rev.1) issued in September 2022, (hereafter referred as TPRP Rev.1), a total 277 nos. existing tree are surveyed in Tai Wo, Lin Fa Tei, Sung Shan New Village, and Ha Che, among the surveyed trees, 53 nos. of them will be retained and carefully protected.  Apart from 277 nos. surveyed trees, 26 nos. trees in Sung Shan New Village and 2 nos. trees in Ha Che	EIAO-TM, DEVB TCW No. 4/2020 – Tree Preservation and latest Guidelines on Tree Preservation during construction period issued by GLTM Section of DEVB						
		are inaccessible/located in private land. A tree survey was conducted after the land was reclaimed. An TPRP amendment submission issued in May 2024 has obtained approval on the tree treatment of the aforementioned 28 nos. tree within private/inaccessible land. 27 nos. of them are proposed to be fell due to the direct conflict of the proposed drainage works and the remaining 1 no. tree will be retained.							
		Thus, a total of 54 (53+1) nos. trees will be retained and protected carefully according to DEVB TC(W) No. 4/2020 - Tree Preservation. Location of retain trees is shown in <b>Appendix C</b> . The details of the protective fencing and approved excavation work within the TPZ(s) are referenced to the General Specification for Civil Engineering Works (2020 edition) Section 26 - Preservation and Protection of Trees. A summary table of tree treatment of the Project is presented in Table 3.1.							
CM02	Offsite Compensatory Tree Planting	Among 305 (277+28) nos. existing trees, 251 (305-54) nos. trees are proposed to be fell, including 16 nos. trees of undesirable species and 18 nos. dead trees. Location of trees proposed to be fell and tree assessment schedule are shown in <b>Appendix B</b> . According to Appendix C of DEVB TC(W) No. 4/2020, dead trees are included in the implementation of compensatory tree planting while trees of undesirable species are excluded. Hence, 235 (251-16) nos. compensatory tree are proposed to be planted along the sides of the existing/proposed water course. No offsite compensatory tree planting is needed. The proposed compensatory planting is shown in <b>Appendix D</b> .	Tree Preservation and GEO Publication No. 1/2011						
CM03	Work Area and Temporary Works Area (Good Site Practice)	The construction sequence and construction programme shall be optimized in order to minimize the duration of impact. Construction site controls shall be enforced including the storage of materials, and the location and appearance of site accommodation and site storage. The site office or temporary above-ground structures shall be sited in locations which are not visually prominent.  Construction and demolition waste will be removed as soon as possible to avoid stockpiling onsite, whereas the excavated natural bedding materials will be properly stored with covering for reuse in the	EIAO-TM						
CM04	Advance Implementation of Mitigation Planting	Project. Construction materials and equipment will be properly stored after use.  Temporary loss of trees and vegetation will be compensated upon the completion of the construction activities. 235 nos. compensatory trees, as well as shrubs, and groundcovers will be replanted along the sides of the existing/proposed water course, native species will be adopted in the vegetation compensation. Location and planting schedule of mitigation plantation are shown in <b>Appendix D</b> .							

ID No.	Mitigation Measure	Details	Environmental Performance /
			Reference
CM05	Coordination with Concurrent Projects	A coordinated implementation programme with concurrent projects to minimise impacts and where possible reduce the period of disturbance.	EIAO-TM
		Construction works have been planned and programmed to minimise impacts and reduce the period of disturbance. For example, the project is scheduled to avoid concurrent construction works with HAD's project which involves the construction of a bridge near the Village Office of Shui Tsan Tin Tsuen, downstream of Lin Fa Tei, such that the extent of construction impact is minimised. Besides, site works and material delivery are well-coordinated and planned to enhance works efficiency to avoid programme delays such that period of disturbance can be reduced.	
CM06	Decorative Screen Hoarding	Decorative screen hoarding will be erected along areas of the construction works site boundary where the works site borders publicly accessible routes and/or is close to visually sensitive receivers (VSRs) to screen undesirable views of the works site. It is proposed that the screening be compatible with the surrounding environment and where possible, non-reflective, recessive colours be used.  Decorated screen hoardings shall be provided for the site offices area and site hoarding designs and location are shown in <b>Appendix E.</b>	EIAO-TM
CM07	Light Control	Construction and nighttime lighting glare will be controlled to minimize glare impact to adjacent VSRs during the construction stage. This is considered a general measure for good practice.  Lighting fixtures with anti-glare design will be used at site office for security purpose, refer to <b>Appendix E</b> for the lighting specification. No lighting will be provided at night-time at the construction sites.	EIAO-TM
CM08	Topsoil Reuse	Excavated topsoil shall be stored at the designated storage area for future re-use by the Project.	EIAO-TM
CM09	Channel Bed Translocation	Excavated natural stream bedding should be conserved for re-use by the Project. This is considered a general measure for promoting sustainability and ecological continuity.	EIAO-TM;
		Natural rocks, gravel, stone, sand and soil from the excavation natural bedding materials will be conserved and reused in formation of channel bed, refer to OM07 for further details.	

**Table 2.2 – Mitigation Measures in Operation Phase** 

ID No.	Mitigation Measure	Details	Environmental Performance / Reference
OM01	Detailed Design Considerations	The alignment of the channel has been designed with minimal landscape and visual impact. For example, rectangular channel design, which has lesser footprint than trapezoidal channel design is considered in the drainage improvement works. The alignment of the channel has enabled the preservation of 54 nos. existing trees, which demonstrate the considerations of minimal landscape impact in the design. Also, the excavated natural bedding material will be re-used to pave the channel to maintain its natural conditions. Design details are shown in <b>Appendix F</b> .	EIAO-TM
OM02	Aesthetically Pleasing Design	Retaining walls will be finished with a layer of stone facing finishing which is made of maximum 75mm thick in-situ concrete to create a rough texture mimicking natural stones, this design helps to harmoniously connect the structure with nature and allow climbers planting, design details are shown in <b>Appendix F</b> .	
OM03	Responsive Design of Channel alignments	The design of the channel improvement has considered minimizing the impact on existing trees, 54 nos. existing trees, including trees of large size can be preserved. Furthermore, standard size trees are proposed for tree compensation along the sides of the channel. These provide pleasing landscape along the channels.	EIAO-TM
OM04	Design of Engineering Structures	The reinstatement of improved urban features such as footpaths and bridges associated with the drainage proposals has considered integrating these engineering structures into the existing landscape to help mitigate any slight losses in physical area due to channel realignment and enlargement within the urban area.	EIAO-TM
OM05	Design of Retaining Walls and Channel Embankments	Retaining walls and vertical-wall embankments shall be finished with a layer of stone facing finishing which is made of in-situ concrete as shown in <b>Appendix F</b> . Different types of shrubs mix planting are proposed along suitable locations of the channel embankments as shown in <b>Appendix D</b> .	
OM06	Compensatory Planting Proposals at Channel edges	235 nos. compensatory tree planting is proposed, all proposed tree plantings are standard size trees. They all have a 2m crown spread and are at minimal 3m spacing as shown in the <b>Appendix D.</b> The trees will be planted in random pattern along the sides of the existing/proposed water course to resemble the village setting and enhance the existing eco-system along the existing water course. All proposed compensatory trees are native trees species of Hong Kong and are commonly found either in the vicinity of surveyed area or in village areas.  Moreover, the river channels edges, channel bed riparian area, channel slope embankment shall be planted with naturalistic shady shrub mix and ornamental shady shrub mix, which are in the combination of various native species of shrubs and groundcovers to give channel structure a more natural appearance blending into the local rural landscape. The location and planting schedule of the	EIAO-TM; ETWB TCW No. 10/2013 Tree Preservation

ID No.	Mitigation Measure	Details	Environmental Performance /
			Reference
		naturalistic shady shrub mix and ornamental shady shrub mix are shown in Appendix D.	
OM07	Channel Bed and Embankment	Excavated natural bedding materials will be reused for the formation of channel bed, various types of	EIAO-TM; DSD Practice Note No.
	Toe Greening	aquatic plant will be planted on the channel bed in 4 planting patterns. The planting schedule and	1/2015 Guidelines on Environmental
		general arrangement of the planting patterns are shown in Appendix F.	and Ecological Considerations for River
			Channel Design.
80MO	Channel Edge, Vertical and	Apart from the compensatory tree planting along the proposed channel, groundcover and shrub planting	EIAO-TM
	trailing Greening	are proposed to beautify the proposed works and help the channel to blend into the surrounding	
		environment. Planting schedule of the shrub mix and groundcover mix and planting arrangement in	
		different landscape area settings are shown in Appendix D. Climbing plants species Ficus pumila are	
		used to provide vertical greening at the channel wall. Greening designs of channel and planting	
		schedule are shown in <b>Appendix F</b> .	
OM09	Green Paving	The pedestrian/vehicular crossing and footpath area will be reinstated with hard surfacing to provide	EIAO-TM
		adequate access for local commuting use, with a portion of the area subject to less traffic loading to be	
		green paved in form of hydroseeding in lieu of grass-crete/ grass-grid. Location of green paving is	
		shown in <b>Appendix D</b> . All available spaces for permanent planting have been maximized.	

Table 2.3 Implementation, Maintenance and Management Schedule for CMs

EIA Ref.	EM&A	Recommended Environmental Protection Measures/	Location/ Timing of	Implementation agent	Maintenance and Management
	Ref.	Mitigation Measures	implementation of Measures		agent
Construction	n Phase - C	onstruction site control			
S9.12.1.1	S.9.2	CM01 - Tree Protection and Preservation	Work Sites /	Contractor	Contractor
		Trees / woodland	Q1 2024 - Q3 2026		
S9.12.1.1	S.9.2	CM02 – Compensatory Tree Planting	Work Sites /	Contractor	Contractor
			Q1 2024 - Q3 2026		
S9.12.1.1	S.9.2	CM03 - Works Area and Temporary Works Areas (Good Site	Work Sites /	Contractor	Contractor
		Practice)	Q1 2024 - Q3 2026		
S9.12.1.1	S.9.2	CM04 - Advance Implementation of Mitigation Planting	Work Sites /	Contractor	Contractor
			Q1 2024 - Q3 2026		
S9.12.1.1	S.9.2	CM05 - Coordination with Concurrent Projects	Work Sites /	Contractor	Contractor
			Q1 2024 - Q3 2026		
S9.12.1.1	S.9.2	CM06 - Decorative Screen Hoard	Work Sites /	Contractor	Contractor
			Q1 2024 - Q3 2026		
S9.12.1.1	S.9.2	CM07 – Light Control	Work Sites /	Contractor	Contractor
			Q1 2024 - Q3 2026		

EIA Ref.	EM&A	Recommended Environmental Protection Measures/	Location/ Timing of	Implementation agent	Maintenance and Management		
	Ref.	Mitigation Measures	implementation of Measures		agent		
Construction	Phase - Co	nstruction site control					
S9.12.1.1	S.9.2	CM08 – Topsoil reuse	Work Sites /	Contractor	Contractor		
			Q1 2024 - Q3 2026				
S9.12.1.1	S.9.2	CM09 - Channel Bed Translocation	Work Sites /	Contractor	Contractor		
			Q1 2024 - Q3 2026				

Table 2.4 Implementation, Maintenance and Management Schedule for OMs

EIA Ref.	EM&A	Recommended Environmental	Location/ Timing of	Implementation agent	Maintenance and Management agent
	Ref.	Protection Measures/ Mitigation	implementation of		
		Measures	Measures		
Operational Pha	se - Design and C	construction of the Works, including Hard wo	ork and Soft work	·	
S.9.12.1.2	S.9.2	OM01 – Detailed Design Considerations	Work Sites /	Design Consultant /	-
			Q1 2024 - Q3 2026	Contractor	
			Operation phase	-	DSD /its management and maintenance agents
S.9.12.1.2	S.9.2	OM02 – Aesthetically Pleasing Design	Work Sites /	Design Consultant /	-
			Q1 2024 - Q3 2026	Contractor	
			Operation phase	-	DSD /its management and maintenance agents
S.9.12.1.2	S.9.2	OM03 – Responsive Design of Channel	Work Sites /	Design Consultant /	
		alignments	Q1 2024 - Q3 2026	Contractor	
			Operation phase		DSD /its management and maintenance agents
S.9.12.1.2	S.9.2	OM04 – Design of Engineering	Work Sites /	Design Consultant /	-
		Structures	Q1 2024 - Q3 2026	Contractor	
			Operation phase	-	DSD /its management and maintenance agents
S.9.12.1.2	S.9.2	OM05 – Design of Retaining Walls and	`Work Sites /	Design Consultant /	
		Channel Embankments	Q1 2024 - Q3 2026	Contractor	-
			Operation phase	-	DSD /its management and maintenance agents
S.9.12.1.2	S.9.2	OM6 – Compensatory Planting	Work Sites /	Design Consultant /	-
		Proposals at Channel edges	Q1 2024 - Q3 2026	Contractor	
			Operation phase	-	DSD /its management and maintenance agents
					/DLO / LCSD
S.9.12.1.2	S.9.2	OM7 – Channel Bed and Embankment	Work Sites /	Design Consultant /	-
		Toe Greening	Q1 2024 - Q3 2026	Contractor	
			Operation phase	-	DSD /its management and maintenance agents
S.9.12.1.2	S.9.2	OM08 – Vertical and trailing Greening	Work Sites /	Design Consultant /	-
			Q1 2024 - Q3 2026	Contractor	
			Operation phase		DSD /its management and maintenance agents
S.9.12.1.2	S.9.2	OM09 – Green Paving	Work Sites /	Design Consultant /	-
			Q1 2024 - Q3 2026	Contractor	
			Operation phase	-	DSD /its management and maintenance agents

# **3 Summary of Tree Recommendation and Compensation**

## 3.1 Impact of Proposed Works on Existing Trees

According to the tree survey result in the TPRP (rev.1) issued in September 2022, a total of 305 nos. of tree found in the proposed works areas in Tai Wo, Lin Fa Tei, Sung Shan New Villages and Ha Che, 251 nos. trees are proposed to be fell and had obtained formal approval. An TPRP amendment submission issued in May 2024 has obtained approval for the proposed tree treatment for 28 nos. tree located within private lots/ inaccessible area. Of these, 27 nos. trees are proposed to be felled, and 1 no. tree is proposed to be retained. As a result, a total of 251 nos. trees were to be fell and 54 nos. trees were to be retained. No tree transplanting is recommended due to the low suitability for transplanting. The tree treatment plan and their individual assessment schedule are shown in **Appendix B**.

With reference to the results of the above-mentioned TPRP submissions, the proposed drainage improvement works in Tai Wo will result in felling of 18 nos. trees including 9 nos. trees of undesirable species and 1 no. dead tree. The proposed drainage improvement

works in Lin Fa Tei will result in felling of 42 nos. of trees including 1 no. tree of undesirable species and 5 nos. dead tree. The proposed drainage improvement works in Sung Shan New Village will result in felling of 70 nos. of tree including 3 nos. tree of undesirable species, 3 nos. dead tree and 25 nos. tree in private land/inaccessible area. The proposed drainage improvement works in Ha Che will result in felling of 121 nos. of trees including 3 no. trees of undesirable species, 9 nos. dead tree and 2 nos. tree in private land/inaccessible area. The trees proposed to be fell are directly affected by the permanent works.

# 3.2 Summary of Tree Compensation

As mentioned in the above sections and Table 2.1, among 251 trees to be removed, 16 trees are undesirable species that does not require compensation. Therefore, a total of 235 trees planting for compensation is proposed, trees are proposed to be planted along the sides of proposed channel/water course. The location plan of compensatory planting and planting schedule are shown in **Appendix D.** The proposed compensatory tree planting is of a ratio not less than 1:1 in terms of number and has fulfilled the requirement as stipulated in Development Bureau Technical Circular (Works) No. 4/2020 – Tree Preservation.

**Table 3.1 Summary of Tree Treatment** 

		Retain Tree						No. of Compensatory		
Site	Accessible Area	Private land / Inaccessible area	Total (c)	Not undesirable species	Dead tree in surveyed area	Undesirable species in surveyed area	Private land / Inaccessible area*	Total (h)	Existing Tree (i)	Tree (excluding undesirable species)
	(a)	(b)	(a) + (b)	(d)	(e)	(f)	(g)	(d) + (e) + (f) + (g)	(c) + (h)	(d) + (e) + (g)
Tai Wo	1	0	1	8	8 1 9		0	18	19	9
Lin Fa Tei	12	0	12	36	5	1	0	42	54	41
Sung Shan New Village	20	1	21	39	3	3	25	70	91	67
Ha Che	20	0	20	107	9	3	2	121	141	118
Sub-total	53	1	<u>54</u>	190	18	16	<u>27*</u>	251	<u>305</u>	<u>235**</u>

<sup>\*</sup>Remark: An TPRP amendment submission issued in May 2024 has obtained approval for felling 27 nos. trees in private land/in inaccessible area.

<sup>\*\*</sup>Remark: The number includes the compensation for trees to be felled in surveyed areas, private land and inaccessible areas (i.e. 190 + 18 + 27 = 235).

#### 4 Green Channel and Wildlife Corridor

#### 4.1 Green Channel and Wildlife Corridor

The proposed design of the river channels incorporates green channels and wildlife corridors to allow flora and fauna to establish or colonize within the development, and allow the potential passage across or exit the channel for those terrestrial or amphibious animal, to limit the potential habitat fragmentation or obstruction of wildlife movement from crossing or exiting the watercourse habitat. The river channels edges, channel bed riparian area, channel slope embankment shall be planted with naturalistic shady shrub mix and ornamental shady shrub mix, which are in the combination of various native species of shrubs and groundcovers to give channel structure a more natural appearance blending into the local rural landscape. The location and planting schedule of the naturalistic shady shrub mix and ornamental shady shrub mix are shown in **Appendix D**.

#### 4.2 Habitat Restoration for Freshwater Crab

According to Chapter 5 Ecology Section 5.9.18 of the approved EIA report, "in order to restore the habitat for the freshwater crab *Cryptopotamon anacoluthon* which prefer shallow water accumulated with dense leaf-litter, opportunity for tree planting within the embankment by planting bay should be explored, and inclusion of deciduous tree species in the greening design along the channel side, especially in the upstream section at Ha Che where the animal was recorded, should also be included to ensure adequate leaf litter input would be presented for the use of this species."

The proposed tree planting design incorporates seven trees from three deciduous native tree species (*Sterculia lanceolata*, *Ilex rotunda* var. *microcarpa* and *Cleistocalyx operculatus*) along the upper section of Ha Che where the freshwater crab *Cryptopotamon anacoluthon* were recorded during the EIA Stage. This freshwater crab species does not have a specific preference on the tree species but prefer shallow water accumulated with dense leaf-litter as described in the approved EIA report. In addition, climbing plant species *Ficus pumila* will be planted at the top of the channel wall and the landscape planting with shrub mix along the channel embankment can also produce adequate leaf litter to the channel.

Moreover, the upper section of the green channel will still be ecological and hydrological linked to the untouched upper stream, and leaf litter from this upper stream can still be carried through water current and accumulated at the upper section of the reinstated channel. The location and planting schedule of the proposed tree planting are shown in **Appendix D**.

# **5 Landscape Maintenance and Management**

# **5.1 Maintenance Responsibility for Landscape Works**

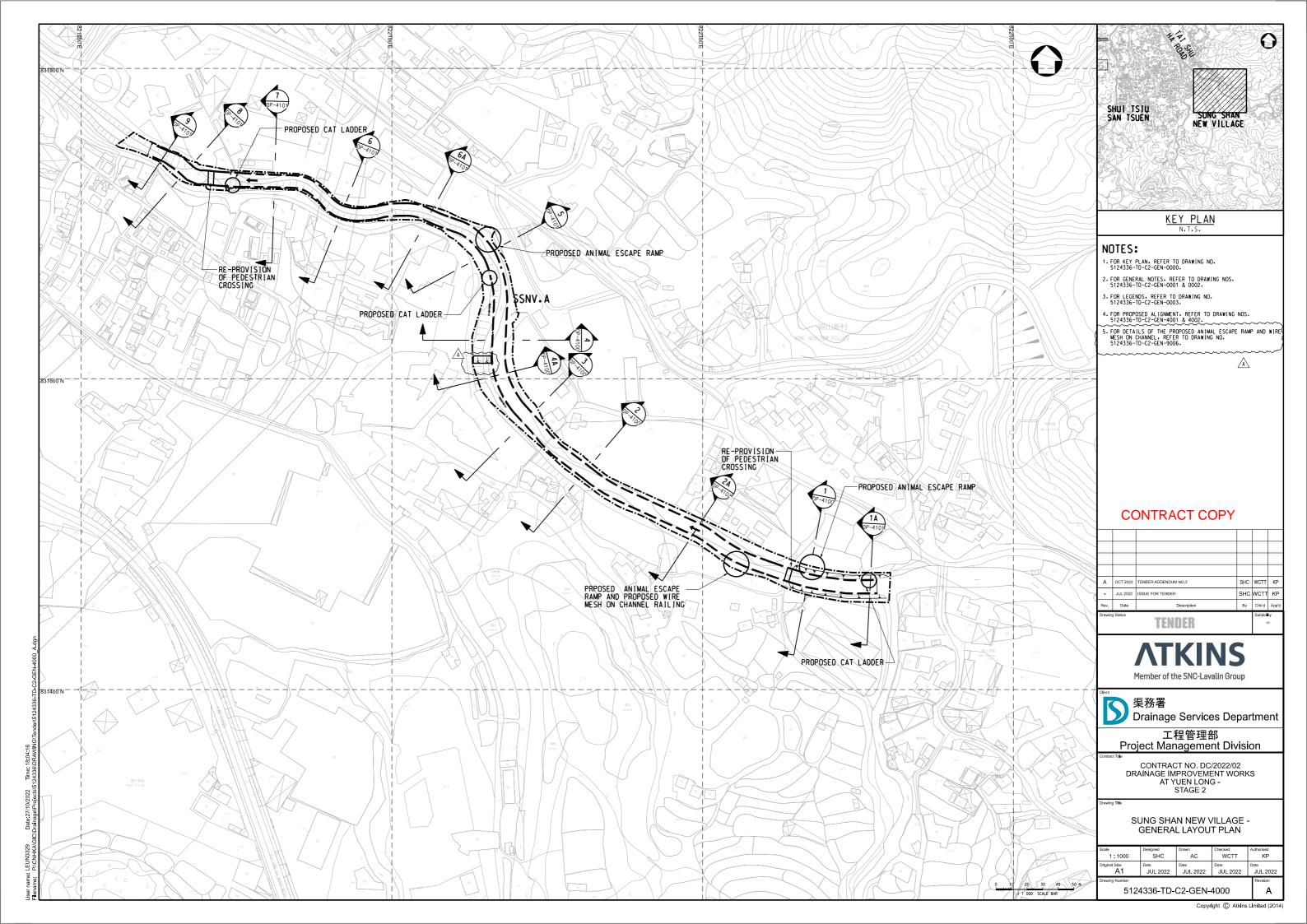
The implementation of landscape construction works and subsequent maintenance operations during the 12-month establishment period must be supervised by fully qualified

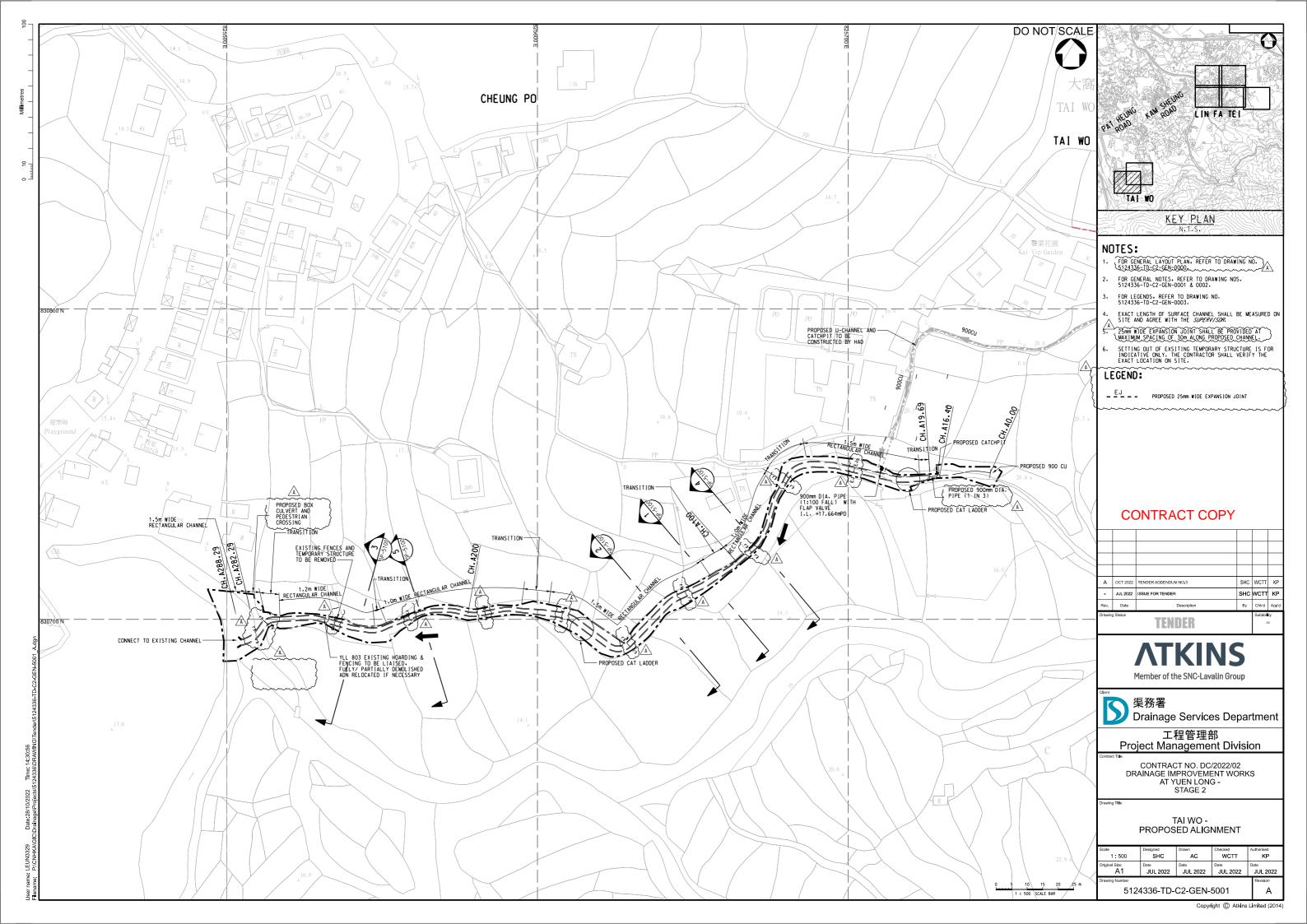
Landscape Resident Site Staff (Registered Landscape Architect or Professional Member of the Hong Kong Institute of landscape Architects). According to the updated Environmental Monitoring and Audit Manual, after completion of the construction works, the Contractor shall provide maintenance for planting works during the 12-month establishment period. Environmental Team shall monitor and prepare report for the planting works in every 3 months during the 12-month establishment period. The monitoring report shall be countersigned by IEC. After the establishment period, the maintenance responsibility will be taken up individually by District Lands Office (DLO) and Leisure and Cultural Services Department (LCSD).

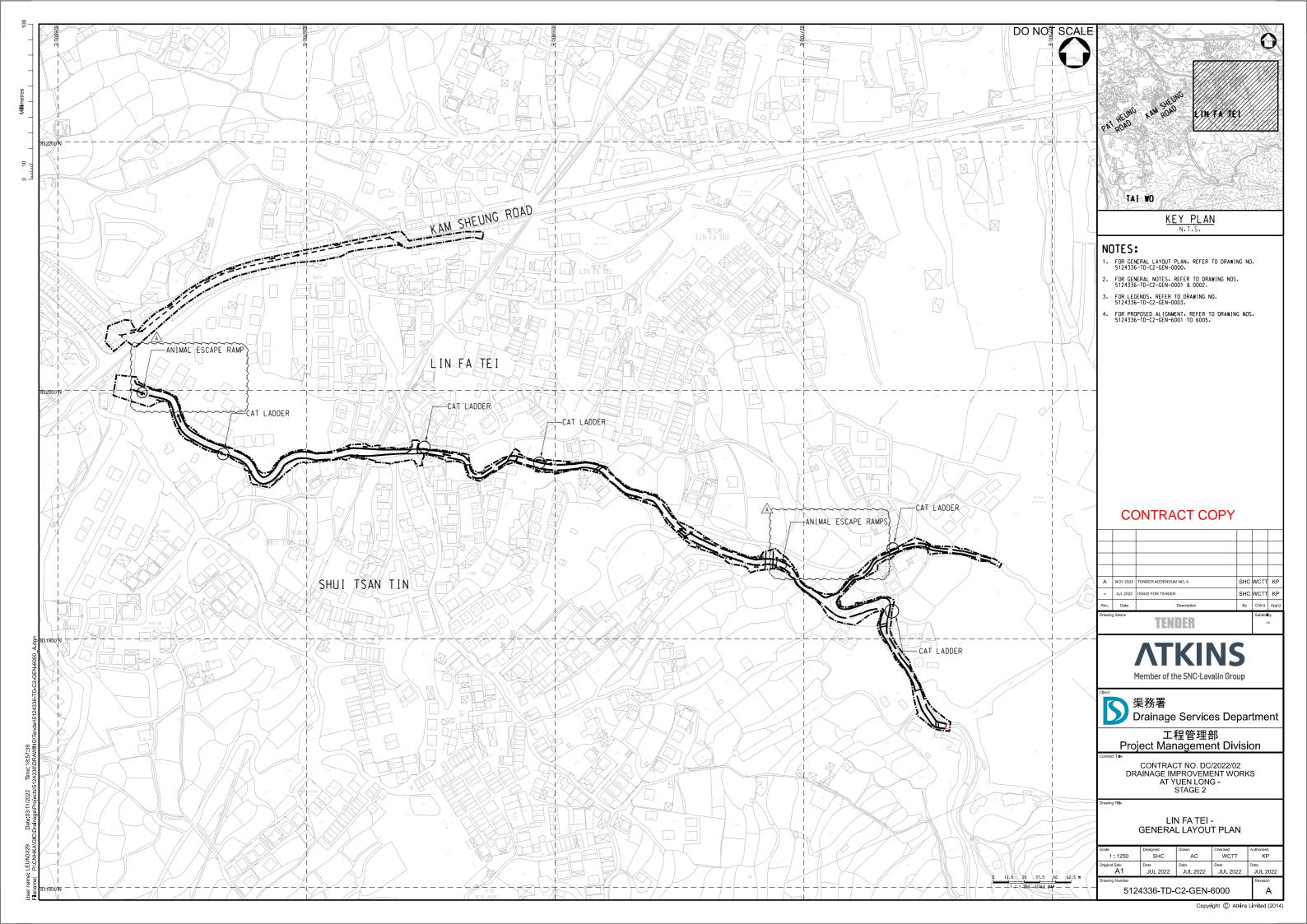
## **6 Conclusion**

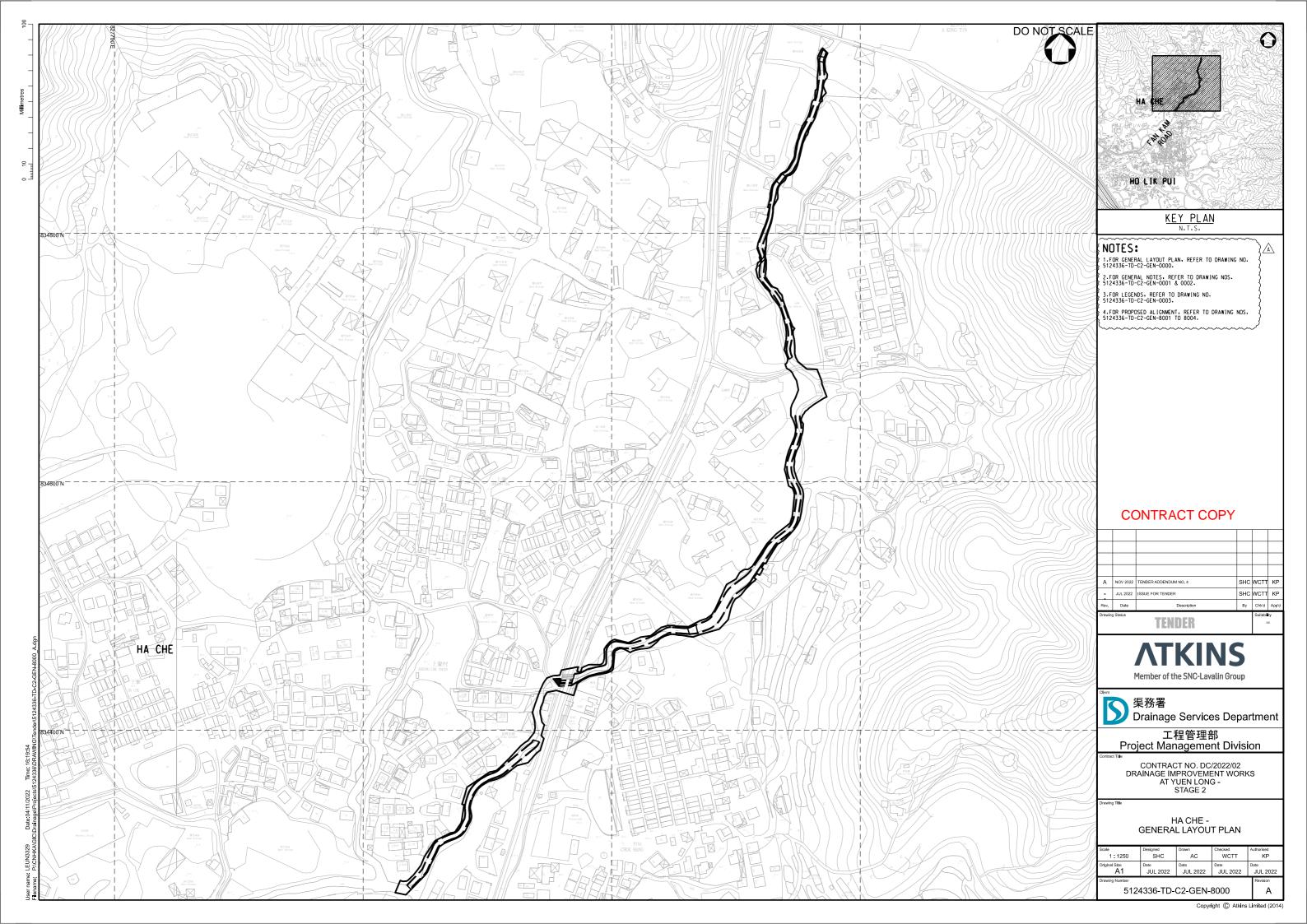
This LVMP submission is prepared to fulfill Condition 2.7 of EP No. EP-596/2021. This LVMP submission demonstrates the design objectives of the Project, and the proposed tree compensation proposal has fulfilled the compensation ratio of 1:1 in terms of number those 235 trees to be removed (excluding undesirable species) are compensated by 235 standard size trees. All landscape and visual mitigation measures during the construction and operation phase as stated in the approved EIA Report (Register No.: AEIAR-229/2021) have been considered and adopted into the Project as appropriate.

Appendix A – Project Location Plan









Appendix B – Tree Assessment Schedule and Tree Treatment Plan

Tree Assessment Schedule in the TPRP Rev.1 Issued in September 2022

Project Title: <u>CE22/2013(DS) Drainage Improvement Works in Yuen Long</u>, <u>Stage 1</u>

Date of Tree Survey: <u>5/12/2019</u>, <u>6/12/2019</u>, <u>10/12/2019</u>, <u>11/12/2019</u>, <u>13/12/2019</u>, <u>16/12/2019</u>
Revisited date of Tree Survey: <u>18/8/2022</u>, <u>26/8/2022</u>, <u>29/8/2022</u>, <u>5/9/2022</u>

Surveyed by: Oriental Landscape Limited

	Species <sup>3</sup>		N	<b>1</b> easuremen	ts								Recommendation ***					
Tree No. <sup>2</sup>	Botanical name	Chinesename	Chinesename Height (m) DB (m		Crown spread (m)	Amenity Value <sup>5</sup>	Form	Health Condition	Structural condition	Suitable for transplanting <sup>6</sup>		Conservation status <sup>8</sup> **	(Retain (R) / Transplant (T) / Fell (F))	Maintance Department to Provide Comments on TPRP <sup>9</sup> t				ıarks <sup>10</sup>
						(High (H) /Medium (M) /Low (L))	(Good	(G)/ Average (A	A)/ Poor (P)	(High (H) /Medium (M) /Low (L))	Remarks 7 *			Before	After	Tree on Slope? (Y/N)	OVT? (Y/N)	Defects*
							Sur	ng Shan N	ew Village	•								
Т3	Acacia auriculiformis	耳果相思	8	200	4	M	A	A	A	L	e, g	A,B	R	DLO	DLO	N	N	
T4	Acacia auriculiformis	耳果相思	7	220	4	M	A	A	A	L	e, g	A,B	F	DLO	-	Y	N	
Т6	Psidium guajava	番石榴	5	150	4	M	P	A	A	L	e, g	A,B	F	DLO	-	Y	N	
T8	Ficus microcarpa	細葉榕	6	280	4	M	A	A	A	L	g	A,B	R	DLO	DLO	Y	N	
Т9	Macaranga tanarius var. tomentosa	血桐	5	180	5	L	P	P	A	L	a, e, c	A,B	F	DLO	-	Y	N	
T10	Macaranga tanarius var. tomentosa	血桐	6	100	3	M	A	A	A	L	e	A,B	F	DLO	-	Y	N	
T11	Macaranga tanarius var. tomentosa	血桐	7	155	4	M	A	A	A	L	e	A,B	F	DLO	-	Y	N	
T12	Leucaena leucocephala	銀合歡	9	240	4	L	A	A	A	L	e	A,B	F	DLO	-	Y	N	IX
T13	Ficus hispida	對葉榕	5	300	6	L	P	P	P	L	a	A,B	F	DLO	-	Y	N	
T14	Ficus hispida	對葉榕	5	135	3	L	P	P	A	L	a, e, g	A,B	F	Lot	-	Y	N	
T15	Ficus hispida	對葉榕	7	245	5	L	P	P	A	L	a, e, g	A,B	F	Lot	-	Y	N	
T16	Macaranga tanarius var. tomentosa	血桐	4	270	3	L	P	P	A	L	a, e, g	A,B	F	Lot	-	Y	N	
T17	Macaranga tanarius var. tomentosa	血桐	6	305	6	L	P	P	A	L	a, e, g	A,B	F	Lot	-	Y	N	
T18	Macaranga tanarius var. tomentosa	血桐	5	120	3	L	P	P	A	L	a, e, g	A,B	F	Lot	-	Y	N	
T19	Ficus hispida	對葉榕	5	120	4	L	P	P	A	L	a, e, g	A,B	F	Lot	-	Y	N	
T20	Ficus hispida	對葉榕	8	270	4	L	P	P	A	L	a, e, g	A,B	F	Lot	-	Y	N	
T21	Macaranga tanarius var. tomentosa	血桐	9	240	4	M	A	A	A	L	e, g	A,B	F	Lot	-	Y	N	
T22	Ficus hispida	對葉榕	10	230	6	L	P P	P	A P	L	a, e, g	A,B	F	Lot	-	Y	N	
T23	Ficus hispida	對葉榕	7	220	5	L I.	P	P	1	L	a, e, g	A,B	F	Lot	-	Y	N	
T24 T25	Macaranga tanarius var. tomentosa  Celtis sinensis	<u>血桐</u> 	13	980	10	H		A	A	L	a, e, g	A,B A,B	F	Lot Lot	-	Y	N N	XIII
T26	Ficus hispida		5	155	4	n I	A P	A P	A A	T.	c, g	A,B	R	Lot	- DSD	Y	N	AIII
T27	Macaranga tanarius var. tomentosa		6	230	3	M	P	A	A	I	a, g a, e, g	A,B	F	Lot	DSD	Y	N	
T28	Ficus hispida	對葉榕	6	155	4	M	P	A	A	L	a, c, g	A,B	F	Lot	-	Y	N	
T29	Macaranga tanarius var. tomentosa	血桐	9	240	5	M	A	A	A	L	e, g	A,B	F	Lot	-	Y	N	
T32	Macaranga tanarius var. tomentosa	血桐	6	160	3	L	P	P	P	L	a, e, g	A,B	F	Lot	-	Y	N	IX
T33	Macaranga tanarius var. tomentosa	血桐	5	120	3	L	P	P	P	L	a, e, g	A,B	F	Lot	-	Y	N	IX
T34	Macaranga tanarius var. tomentosa	 血桐	7	120	3	L	P	P	A	L	a, e, g	A,B	F	Lot	-	Y	N	
T35	Macaranga tanarius var. tomentosa	 血桐	6	120	3	M	A	A	A	L	e, g	A,B	F	Lot	-	Y	N	
T44	Erythrina speciosa		7	250	5	М	A	A	A	L	c	A,B	F	DLO	-	N	N	
T45	Celtis sinensis	朴樹	9	250	6	M	A	A	A	L	g	A,B	F	Lot	-	Y	N	
T46	Macaranga tanarius var. tomentosa	血桐	8	335	6	M	A	A	A	L	g	A,B	F	Lot	-	Y	N	
T47	Ficus microcarpa	細葉榕	7	275	5	Н	A	A	A	L	g	A,B	F	Lot	-	Y	N	
T56	Ficus microcarpa	細葉榕	15	340	11	Н	G	A	A	L	g	A,B	R	Lot	DSD	Y	N	

Remarks:

These trees were included in the approved Tree Preservation and Removal Proposal (TPRP) issued in May 2024 after completion of land resumption.

### $\underline{\text{Tree Assessment Schedule}} \text{ - Tree Survey at Sung Shan New Village \& Ha Che}$

Project Title:  $\underline{CE22/2013(DS)\ Drainage\ Improvement\ Works\ in\ Yuen\ Long\ ,\ Stage\ 1}$ 

Date of Tree Survey: <u>5/12/2019</u>, <u>6/12/2019</u>, <u>10/12/2019</u>, <u>11/12/2019</u>, <u>13/12/2019</u>, <u>16/12/2019</u>
Revisited date of Tree Survey: <u>18/8/2022</u>, <u>26/8/2022</u>, <u>29/8/2022</u>, <u>5/9/2022</u>

Revisited	Species <sup>3</sup>			Measurements									Recommendation ***				-	
Tree No. <sup>2</sup>	Botanical name	Chinesename	Height (m)	DBH <sup>4</sup> (mm)	Crown spread (m)	Amenity Value <sup>5</sup>	Form	Health Condition	Structural condition	Suitable for trai	nsplanting <sup>6</sup>	Conservation status 8	(Retain (R) / Transplant (T) / Fell (F))	Maintance D Provide Comm	-	9 Addi	tional Rem	ıarks <sup>10</sup>
						(High (H) /Medium (M) /Low (L))	(Good	I (G)/ Average (A	A)/ Poor (P)	(High (H) /Medium (M) /Low (L))				Before	After	Tree on Slope? (Y/N)	OVT? (Y/N)	Defects*
T63	Celtis sinensis	朴樹	5	105	4	L	P	A	P	L	a, g	A,B	F	DLO	-	Y	N	
T65	Ficus hispida	對葉榕	4	110	4	L	P	P	A	L	a, g	A,B	F	DLO	-	Y	N	
T95	Macaranga tanarius var. tomentosa	血桐	5	330	5	M	A	A	A	L	g	A,B	F	DLO	-	Y	N	
T139	Artocarpus heterophyllus	菠蘿蜜	6	135	4	M	A	A	A	L	g	A,B	R	DLO	DLO	N	N	
T140	Dimocarpus longan	龍眼	6	470	7	M	A	A	A	L	c, e	A,B	F	DLO	-	N	N	XIII
T141	Clausena lansium	黃皮	6	240	4	Н	G	A	A	L	с	A,B	R	DLO	DLO	N	N	III
T142	Clausena lansium	黃皮	3	190	3	M	A	A	A	L	с	A,B	R	DLO	DLO	N	N	
T143	Clausena lansium	黃皮	4	200	4	M	A	A	A	L	c	A,B	R	DLO	DLO	N	N	
T144	Clausena lansium	黄皮	4	120	4	M	P	A	A	L	с	A,B	R	DLO	DLO	N	N	
T145	Clausena lansium	黄皮	4	220	4	M	A	A	A	L	с	A,B	R	DLO	DLO	N	N	
T146	Clausena lansium	黄皮	4	165	4	M	A	A	A	L	с	A,B	F	DLO	-	N	N	
T147	Clausena lansium	黄皮	4	205	5	M	A	A	A	L	с	A,B	F	DLO	-	N	N	
T148	Psidium guajava	番石榴	2	145	2	L	P	P	P	L	a, e	A,B	F	DLO	-	N	N	
T149	Artocarpus heterophyllus	菠蘿蜜	8	205	4	M	A	G	A	L	с	A,B	F	DLO	-	N	N	III
T150	Litchi chinensis	荔枝	7	255	5	M	A	G	A	L	e	A,B	F	DLO	-	N	N	III
T151	Clausena lansium	黄皮	4	170	4	M	A	A	A	L	с	A,B	F	DLO	-	N	N	
T152	Clausena lansium	黄皮	4	135	3	M	A	A	A	L	c, f	A,B	F	DLO	-	N	N	
T153	Clausena lansium	黄皮	4	190	4	M	A	A	A	L	с	A,B	F	DLO	-	N	N	
T154	Citrus maxima	柚	5	275	5	M	A	A	A	L	с	A,B	F	DLO	-	N	N	
T155	Ficus hispida	對葉榕	7	290	5	M	A	A	A	L	h	A,B	F	DLO	-	N	N	
T156	Ceiba pentandra	爪哇木棉	7	140	4	M	A	A	A	M		A,B	R	DLO	DLO	N	N	
T157	Acacia auriculiformis	耳果相思	8	155	4	M	A	A	A	L	e	A,B	R	DLO	DLO	N	N	
T158	Leucaena leucocephala	銀合歡	6	140	5	L	P	A	P	L	e	A,B	F	DLO	-	N	N	
T159	Dead 7		-	-	-	-	-	-	-	-	-	-	-	DLO	-	-	-	
T160	Dead 7		-	-	-	-	-	-	-	-	-	-	-	DLO	-	-	-	
T161	Macaranga tanarius var. tomentosa	血桐	4	115	3	M	A	A	A	L	e, g	A,B	R	DLO	DLO	Y	N	
T162	Bauhinia purpurea	紅花羊蹄甲	5	165	5	M	P	A	A	L	a, e, g	A,B	R	DLO	DLO	Y	N	
T163	Macaranga tanarius var. tomentosa	血桐	5	125	3	M	P	A	A	L	a, e, g	A,B	R	DLO	DLO	Y	N	
T164	Macaranga tanarius var. tomentosa	血桐	3	140	2	M	A	A	A	L	e, g	A,B	R	DLO	DLO	Y	N	
T165	Macaranga tanarius var. tomentosa	血桐	6	190	6	M	A	A	A	L	e, g	A,B	R	DLO	DLO	Y	N	
T166	Acacia auriculiformis	耳果相思	10	340	6	M	A	A	A	L	e, g	A,B	R	DLO	DLO	Y	N	+
T167	Ceiba pentandra	爪哇木棉	4	100	3	M	P	A	A	L	e, g	A,B	R	DLO	DLO	Y	N	+
T168	Macaranga tanarius var. tomentosa	血桐	5	205	4	M	A	A	A	L	e, g	A,B	R	DLO	DLO	Y	N	+
T169	Acacia auriculiformis	耳果相思 49.##%	10	155	5	M	A	A	A	L	e, g	A,B	R F	DLO	DLO	Y	N	_
T184	Ficus microcarpa	細葉榕	10	500	9	M	A	A	A	L	С	A,B	F	DLO	-	N	N	+
T185	Ficus microcarpa  Dead 7	細葉榕	12	325	9	M	A	A	A	L	С	A,B	<del> </del>	DLO	-	N	N	+
T186	Dead	1100	-		_	-	-	-		-	-	-	-	DLO		-	-	

Project Title:  $\underline{CE22/2013(DS)\ Drainage\ Improvement\ Works\ in\ Yuen\ Long\ ,\ Stage\ 1}$ 

Date of Tree Survey: <u>5/12/2019</u>, <u>6/12/2019</u>, <u>10/12/2019</u>, <u>11/12/2019</u>, <u>13/12/2019</u>, <u>16/12/2019</u>
Revisited date of Tree Survey: <u>18/8/2022</u>, <u>26/8/2022</u>, <u>29/8/2022</u>, <u>5/9/2022</u>

Surveyed by: Oriental Landscape Limited

	Speci		_	<b>Aeasureme</b>	nts								Recommendation ***					
Tree No. <sup>2</sup>	Botanical name	Chinesename	Height (m)	DBH <sup>4</sup> (mm)	Crown spread (m)	Amenity Value <sup>5</sup>	Form	Health Condition	Structural condition	Suitable for tran	nsplanting <sup>6</sup>	Conservation status 8	(Retain (R) / Transplant (T) / Fell (F))	Maintance D Provide Comm	-	o Addit	tional Rema	rks <sup>10</sup>
						(High (H) /Medium (M) /Low (L))	(Good	d (G)/ Average (A	A)/ Poor (P)	(High (H) /Medium (M) /Low (L))	Remarks 7 *			Before	After	Tree on Slope? (Y/N)	OVT? (Y/N)	Defects*
T187	Ficus microcarpa	細葉榕	8	240	8	M	A	A	A	L	b	A,B	F	DLO	-	N	N	
T188	Acacia confusa	台灣相思	9	280	6	L	P	A	A	L	e	A,B	F	DLO	1	N	N	
T189	Ficus benjamina	垂葉榕	8	140	6	M	P	A	A	L	a	A,B	F	DLO	-	N	N	
T190	Acacia confusa	台灣相思	8	220	10	M	A	A	A	L	e	A,B	F	DLO	-	N	N	
T191	Ficus benjamina	垂葉榕	12	340	8	M	A	A	A	L	c	A,B	F	DLO	-	N	N	
T192	Ficus microcarpa	細葉榕	11	280	10	M	A	A	A	L	с	A,B	F	DLO	-	N	N	
T193	Ficus microcarpa	細葉榕	11	240	7	M	A	A	A	L	с	A,B	F	DLO	-	N	N	
T194	Acacia confusa	台灣相思	10	340	10	M	A	A	A	L	e	A,B	F	DLO	-	N	N	
T195	Ficus benjamina	垂葉榕	8	120	6	M	A	A	A	L	с	A,B	F	DLO	-	N	N	
T196	Ficus microcarpa	細葉榕	12	340	10	M	A	A	A	L	с	A,B	F	DLO	-	N	N	
T214	Artocarpus heterophyllus	菠蘿蜜	12	260	8	M	A	G	A	L	g	A,B	F	DLO	-	Y	N	III
T228	Leucaena leucocephala	銀合歡	7	180	6	L	A	A	A	L	e, g	A,B	F	DLO	-	Y	N	IX
T229	Ficus hispida	對葉榕	4	280	5	M	A	A	A	L	e, g	A,B	F	DLO	-	Y	N	
T230	Ficus hispida	對葉榕	3	105	3	M	A	A	A	L	e, g	A,B	R	DLO	DLO	Y	N	
T231	Macaranga tanarius var. tomentosa	血桐	3	135	4	L	P	P	A	L	a, e, g	A,B	R	DLO	DLO	Y	N	
T232	Ficus hispida	對葉榕	5	235	5	L	P	P	A	L	a, g	A,B	F	DLO	-	Y	N	
T233	Macaranga tanarius var. tomentosa	血桐	5	250	4	L	P	P	A	L	a, e, g	A,B	F	DLO	-	Y	N	
T234	Ficus hispida	對葉榕	3	160	4	L	P	P	A	L	a, g	A,B	F	DLO	-	Y	N	
T252	Ficus hispida	對葉榕	7	295	7	M	A	A	A	L	g	A,B	F	DLO	-	Y	N	
T253	Macaranga tanarius var. tomentosa	血桐	8	200	6	M	A	A	A	L	e, g	A,B	F	DLO	-	Y	N	

Additional tree photos were included in the approved Tree Preservation and Removal Proposal (TPRP) issued in May 2024 for further approval.

Project Title: <u>CE22/2013(DS) Drainage Improvement Works in Yuen Long</u>, <u>Stage 1</u>

Date of Tree Survey: <u>5/12/2019</u>, <u>6/12/2019</u>, <u>10/12/2019</u>, <u>11/12/2019</u>, <u>13/12/2019</u>, <u>16/12/2019</u> Revisited date of Tree Survey: <u>18/8/2022</u>, <u>26/8/2022</u>, <u>29/8/2022</u>, <u>5/9/2022</u>

	Specie	s <sup>3</sup>	N	Aeasuremen	nts								Recommendation ***					
Tree No. <sup>2</sup>	Botanical name	Chinesename	Height (m)	DBH <sup>4</sup> (mm)	Crown spread (m)	Amenity Value <sup>5</sup>	Form	Health Condition	Structural condition	Suitable for trai	nsplanting <sup>6</sup>	Conservation status 8	(Retain (R) / Transplant (T) / Fell (F))	Maintance D Provide Comm	-	,9 Addi	itional Rem	ıarks <sup>10</sup>
						(High (H) /Medium (M) /Low (L))	(Good	l (G)/ Average (A	A)/ Poor (P)	(High (H) /Medium (M) /Low (L))	Remarks 7 *			Before	After	Tree on Slope? (Y/N)	OVT? (Y/N)	Defects*
								На С	Che									
T462	Celtis sinensis		8	100	4	M	P	A	A	L	g	A,B	F	DLO	-	Y	N	$\overline{}$
T463	Celtis sinensis	朴樹	9	235	5	M	A	A	A	L	e, g	A,B	F	DLO	-	Y	N	
T464	Ficus hispida	對葉榕	7	500	5	L	P	A	A	L	g	A,B	F	DLO	-	Y	N	
T465	Ficus subpisocarpa	筆管榕	6	185	6	M	A	A	A	L	g	A,B	F	DLO	-	Y	N	
T466	Dead T	ree	-	-	-	-	-	-	-	-	-	-	-	DLO	-	-	-	
T467	Cleistocalyx nervosum	水翁	9	235	8	M	A	A	A	L	b, g	A,B	F	DLO	-	Y	N	
T470	Macaranga tanarius var. tomentosa	血桐	6	220	6	M	P	A	A	L	e, g	A,B	F	DLO	-	Y	N	
T1125	Cleistocalyx nervosum	水翁	10	355	8	L	A	P	P	L	a, b, g	A,B	F	DLO	-	Y	N	
T1126	Cinnamomum camphora	樟	10	540	12	M	A	A	A	L	c, g	A,B	F	DLO	-	Y	N	XIII
T1132	Ficus tinctoria	斜葉榕	4	175	4	M	A	A	A	L	b, g	A,B	R	DLO	DLO	Y	N	
T1149	Cinnamomum camphora	樟	7	120	4	M	A	A	A	L	g	A,B	F	DLO	-	Y	N	
T1157	Macaranga tanarius var. tomentosa	血桐	6	120	4	L	P	P	A	L	a, e, g	A,B	F	DLO	-	Y	N	
T1170	Macaranga tanarius var. tomentosa	血桐	12	230	8	M	A	A	A	L	e, g	A,B	F	DLO	-	Y	N	
T1171	Macaranga tanarius var. tomentosa	血桐	8	180	5	M	A	A	A	L	e, g	A,B	F	DLO	-	Y	N	
T1173	Dimocarpus longan	龍眼	8	270	3	M	A	A	A	L	e, g	A,B	F	DLO	-	Y	N	
T1177	Cinnamomum camphora	樟	15	610	12	Н	A	A	A	L	c, g	A,B	F	DLO	-	Y	N	XIII
T1178	Melaleuca cajuputi	白千層	15	800	9	Н	A	A	A	L	c, g	A,B	R	DLO	DLO	Y	N	XIII
T1179	Bauhinia variegata	宮粉羊蹄甲	10	300	4	M	A	A	A	L	g	A,B	R	DLO	DLO	Y	N	
T1180	Ficus hispida	對葉榕	7	160	3	M	A	A	A	L	g	A,B	R	DLO	DLO	Y	N	
T1181	Cleistocalyx nervosum	水翁	8	170	5	M	A	A	A	L	b, g	A,B	F	DLO	-	Y	N	
T1182	Celtis sinensis	朴樹	12	480	6	M	A	A	A	L	c, g	A,B	F	DLO	-	Y	N	
T1183	Ficus hispida	對葉榕	3	200	2	L	P	A	P	L	a, g	A,B	F	DLO	-	Y	N	II
T1184	Celtis sinensis	朴樹	5	110	3	M	A	A	A	L	g	A,B	F	DLO	-	Y	N	
T1185	Ficus subpisocarpa	筆管榕	6	350	4	L	P	P	A	L	a, g	A,B	F	DLO	-	Y	N	
T1186	Ficus subpisocarpa	筆管榕	6	260	6	L	P	P	A	L	a, g	A,B	F	DLO	-	Y	N	
T1187	Lagerstroemia speciosa	大花紫薇	7	150	4	M	A	A	A	L	c, g	В	R	DLO	DLO	N	N	
T1188	Michelia alba	白蘭	7	190	3	M	A	A	A	L	c	В	R	DLO	DLO	N	N	
T1189	Michelia alba	白蘭	7	150	3	L	P	P	A	L	a	В	R	DLO	DLO	N	N	
T1190	Ficus hispida	對葉榕	5	95	3	M	A	A	A	L	g	A,B	F	DLO	-	Y	N	
T1214	Celtis sinensis	朴樹	7	295	5	M	A	A	A	L	e	A,B	R	DLO	DLO	N	N	XIII
T1218	Dimocarpus longan	龍眼	6	200	5	M	A	A	A	L	e	A,B	R	LCSD	LCSD	N	N	
T1247	Dead T	ree	-	-	-	-	-	-	-	-	-	-	-	LCSD	-	-	-	
T1248	Cinnamomum camphora	樟	12	1300	10	M	A	A	A	L	c, g	A,B	R	LCSD	LCSD	Y	N	XIII
T1249	Ficus hispida	對葉榕	8	170	4	L	P	P	P	L	a, g	A,B	F	LCSD	-	Y	N	$\bot$
T1250	Dead T	ree	-	-	-	-	-	-	-	-	-	-	-	LCSD	-	-	-	
T1266	Bauhinia blakeana	洋紫荊	12	270	10	M	A	A	A	L	g	A,B	R	LCSD	LCSD	Y	N	
T1267	Ficus subpisocarpa	筆管榕	10	170	6	M	P	A	A	L	g	A,B	R	LCSD	LCSD	Y	N	

Project Title: <u>CE22/2013(DS) Drainage Improvement Works in Yuen Long</u>, <u>Stage 1</u>

Date of Tree Survey: 5/12/2019, 6/12/2019, 10/12/2019, 11/12/2019, 13/12/2019, 16/12/2019
Revisited date of Tree Survey: 18/8/2022, 26/8/2022, 29/8/2022, 5/9/2022

110 / 151004	Spec			<b>Aeasuremer</b>	ıts								Recommendation ***					
Tree No. <sup>2</sup>	Botanical name	Chinesename	Height (m)	DBH <sup>4</sup> Crown spread (m) (Hig	Amenity Value <sup>5</sup>	Form	Health Condition	Structural condition	Suitable for tran	splanting <sup>6</sup>	Conservation status <sup>8</sup> **	(Retain (R) / Transplant (T) / Fell (F))	Maintance D Provide Comn	Department to nents on TPRP <sup>9</sup>	Addit	ional Rema	rks <sup>10</sup>	
						(High (H) /Medium (M) /Low (L))	(Good	(G)/ Average (A	A)/ Poor (P)	(High (H) /Medium (M) /Low (L))	Remarks <sup>7</sup> *			Before	After	Tree on Slope? (Y/N)	OVT? (Y/N)	Defects*
T1297	Ficus subpisocarpa	筆管榕	5	160	4	M	A	A	A	L	b	A,B	R	LCSD	LCSD	N	N	
T1298	Dimocarpus longan	龍眼	5	145	4	M	A	A	A	L	e	A,B	R	LCSD	LCSD	N	N	
T1299	Sterculia lanceolata	假蘋婆	6	270	5	M	A	A	A	L	с	A,B	R	DLO	DLO	N	N	
T1309	Cleistocalyx nervosum	水翁	12	595	8	M	A	A	A	L	c, e, g	A,B	F	DLO	-	Y	N	XIII
T1310	Celtis sinensis	朴樹	14	660	16	M	A	A	A	L	c, g	A,B	F	DLO	-	Y	N	XIII
T1321	Macaranga tanarius var. tomentosa	血桐	8	170	8	L	P	P	A	L	a, e, g	A.B	F	DLO	-	Y	N	
T1322	Ficus hispida	對葉榕	5	190	4	L	P	A	A	L	g	A.B	F	DLO	-	Y	N	$\perp$
T1325	Macaranga tanarius var. tomentosa	血桐	10	290	10	M	A	A	A	L	e, g	A,B	F	DLO	-	Y	N	
T1326	Macaranga tanarius var. tomentosa	血桐	8	170	8	M	A	A	A	L	e, g	A,B	F	DLO	-	Y	N	
T1330	Celtis sinensis	朴樹	6	295	5	M	A	G	A P	L	c, g	A,B	F	DLO	-	Y	N	III
T1333	Leucaena leucocephala	銀合歡	9	230 270	7	L	P P	A	•	L	a, e, g	A,B	F F	DLO DLO	-	N Y	N	III
T1334	Ficus subpisocarpa Morus alba	<b>筆管榕</b> 桑	7 12	190	8	L L	P	A	A	L L	g	A,B A,B	F	DLO	-	Y	N N	+
T1336	Macaranga tanarius var. tomentosa		9	255	8	L	P	A P	A A	L	g	A,B	F	DLO	-	Y	N N	+
T1337	Litchi chinensis	荔枝	7	120	3	L	P	p	A	L	a, e, g a, e, g	A,B	F	DLO	-	Y	N	+
T1338	Ficus hispida	数葉榕	6	230	3	L	P	P	A	L	a, c, g	A,B	F	DLO	_	Y	N	
T1339	Ficus hispida	對葉榕	8	210	8	L	A	A	P	L	g	A,B	F	DLO	-	Y	N	
T1340	Macaranga tanarius var. tomentosa	血桐	7	160	5	L	P	P	P	L	a, e	A,B	F	DLO	-	Y	N	+
T1341	Cleistocalyx nervosum	水翁	9	160	7	M	A	A	P	L	g	A,B	F	DLO	-	Y	N	
T1342	Cleistocalyx nervosum	水翁	10	500	12	Н	A	A	A	L	c, g	A,B	F	DLO	-	Y	N	XIII
T1343	Psidium guajava	番石榴	5	130	4	M	A	A	A	L	e, g	A,B	R	DLO	DLO	Y	N	
T1344	Macaranga tanarius var. tomentosa	血桐	9	130	10	L	P	P	A	L	a, e, g	A,B	F	DLO	-	Y	N	
T1345	Sterculia lanceolata	假蘋婆	10	110	7	L	P	A	A	L	g	A,B	F	DLO	-	Y	N	
T1346	Macaranga tanarius var. tomentosa	血桐	6	100	4	L	P	A	A	L	e, g	A,B	F	DLO	-	Y	N	
T1347	Cleistocalyx nervosum	水翁	6	100	6	M	A	A	A	L	g	A,B	F	DLO	-	Y	N	
T1348	Macaranga tanarius var. tomentosa	血桐	4	160	7	L	P	P	A	L	a, e, g	A,B	F	DLO	-	Y	N	
T1349	Ficus hispida	對葉榕	8	170	8	L	P	P	A	L	a, g	A,B	F	DLO	-	Y	N	
T1352	Ficus hispida	對葉榕	7	110	6	L	P	P	P	L	a, g	A,B	F	DLO	-	Y	N	
T1353	Macaranga tanarius var. tomentosa	血桐	9	180	11	M	A	A	A	L	e, g	A,B	F	DLO	-	Y	N	
T1354		Tree	-	-	-	-	-	-	-	-	-	-	-	DLO	-	-	-	
T1355	Dimocarpus longan	龍眼	14	550	16	M	A	A	A	L	c, e, g	A,B	F	DLO	-	Y	N	
T1356	Cleistocalyx nervosum	水翁	14	490	16	M	A	A	A	L	c, g	A,B	F	DLO	-	Y	N	
T1357	Ficus hispida	對葉榕	10	330	12	L	P	A	A	L	g	A,B	F	DLO	-	Y	N	
T1358	Dimocarpus longan	龍眼	7	205	5	M	A	A	A	L	e, g	A,B	F	DLO	-	N	N	
T1359	Citrus maxima	柚	7	100	5	M	A	A	A	L	e	A,B	F	DLO	-	N	N	
T1360	Ficus variegata	青果榕	9	235	7	M	A	A	A	L	g	A,B	F	DLO	-	Y	N	
T1361	Ficus hispida	對葉榕	5	110	4	L	P	A	A	L	h	A,B	F	DLO	-	N	N	VIII
T1362	Artocarpus heterophyllus	菠蘿蜜	10	350	8	M	A	A	A	L	С	A,B	F	DLO	<u> </u>	N	N	XIII

Project Title: <u>CE22/2013(DS) Drainage Improvement Works in Yuen Long</u>, <u>Stage 1</u>

Date of Tree Survey: <u>5/12/2019</u>, <u>6/12/2019</u>, <u>10/12/2019</u>, <u>11/12/2019</u>, <u>13/12/2019</u>, <u>16/12/2019</u> Revisited date of Tree Survey: <u>18/8/2022</u>, <u>26/8/2022</u>, <u>29/8/2022</u>, <u>5/9/2022</u>

	Specie	es <sup>3</sup>	N	<b>Ieasuremer</b>	nts								Recommendation ***	1				
Tree No. <sup>2</sup>	: Botanical name	Chinesename	Height (m)	DBH <sup>4</sup> (mm)	Crown spread (m)	Amenity Value <sup>5</sup>	Form	Health Condition	Structural condition	Suitable for tra	nsplanting <sup>6</sup>	Conservation status 8 **	(Retain (R) / Transplant (T) / Fell (F))	Maintance D Provide Comm	-	. \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	itional Ren	narks <sup>10</sup>
						(High (H) /Medium (M) /Low (L))	(Good	l (G)/ Average (A	A)/ Poor (P)	(High (H) /Medium (M) /Low (L))	Remarks 7 *			Before	After	Tree on Slope? (Y/N)	OVT? (Y/N)	Defects*
T1363	Dimocarpus longan	龍眼	7	130	4	M	A	A	A	L	e	A,B	F	DLO	-	N	N	
T1366	Dimocarpus longan	龍眼	7	150	4	M	A	A	A	L	e	A,B	F	DLO	-	N	N	
T1367	Ficus hispida	對葉榕	8	250	4	L	P	A	A	L	g	A,B	F	DLO	-	Y	N	
T1369	Ficus variegata	青果榕	14	560	12	M	A	A	A	L	c, g	A,B	F	DLO	DLO	Y	N	XIII
T1375	Cleistocalyx nervosum	水翁	14	420	10	M	A	A	A	L	c, g	A,B	F	DLO	DLO	Y	N	XIII
T1377	Dead 7	Ггее	-	-	-	-	-	-	-	-	-	-	-	DLO	-	-	-	
T1381	Cleistocalyx nervosum	水翁	14	220	9	M	A	A	A	L	g	A.B	F	DLO	-	Y	N	
T1384	Macaranga tanarius var. tomentosa	血桐	10	150	7	M	A	A	A	L	e, g	A,B	F	DLO	-	Y	N	
T1389	Dead 7	Ггее	-	-	-	-	-	-	-	-	-	-	-	DLO	-	-	-	
T1390	Carica papaya	番木瓜	4	140	3	M	A	A	A	L	e, g	A,B	R	DLO	DLO	Y	N	
T1391	Cleistocalyx nervosum	水翁	6	280	5	L	P	P	P	L	a, g	A,B	R	DLO	DLO	Y	N	
T1394	Ficus hispida	對葉榕	5	100	5	L	P	P	A	L	a, g	A,B	F	DLO	-	Y	N	
T1398	Cleistocalyx nervosum	水翁	11	165	6	L	P	A	A	L	g	A,B	F	DLO	-	Y	N	
T1409	Cleistocalyx nervosum	水翁	7	200	8	L	P	P	A	L	a, g	A,B	F	DLO	-	Y	N	
T1411	Cinnamomum camphora	樟	5	110	0	M	P	A	A	L	g	A,B	F	DLO	-	Y	N	
T1412	Cleistocalyx nervosum	水翁	14	380	12	L	P	P	A	L	a, c, g	A,B	F	DLO	-	Y	N	
T1413	Sterculia lanceolata	假蘋婆	7	130	7	L	P	P	A	L	a, g	A,B	F	DLO	-	Y	N	
T1419	Macaranga tanarius var. tomentosa	血桐	12	405	8	M	A	A	A	L	e, g	A,B	F	DLO	-	Y	N	
T1420	Macaranga tanarius var. tomentosa	血桐	16	470	10	M	A	A	A	L	e, g	A,B	F	DLO	-	Y	N	
T1449	Celtis sinensis	朴樹	14	600	10	M	A	A	A	L	c, g	A,B	F	DLO	-	Y	N	XIII

Project Title: <u>CE22/2013(DS) Drainage Improvement Works in Yuen Long</u>, <u>Stage 1</u>

Date of Tree Survey: <u>5/12/2019</u>, <u>6/12/2019</u>, <u>10/12/2019</u>, <u>11/12/2019</u>, <u>13/12/2019</u>, <u>16/12/2019</u>
Revisited date of Tree Survey: <u>18/8/2022</u>, <u>26/8/2022</u>, <u>29/8/2022</u>, <u>5/9/2022</u>

Surveyed by: Oriental Landscape Limited

	Speci		N	Ieasuremen	nts								Recommendation ***					
Tree No. <sup>2</sup>	Botanical name	Chinesename	Height (m)	DBH <sup>4</sup> (mm)	Crown spread (m)	Amenity Value <sup>5</sup>	Form	Health Condition	Structural condition	Suitable for tra	nsplanting <sup>6</sup>	Conservation status 8	(Retain (R) / Transplant (T) / Fell (F))	Maintance D Provide Comm	-	al Addi	itional Rema	arks <sup>10</sup>
						(High (H) /Medium (M) /Low (L))	(Good	d (G)/ Average (A	A)/ Poor (P)	(High (H) /Medium (M) /Low (L))	Remarks 7 *			Before	After	Tree on Slope? (Y/N)	OVT? (Y/N)	Defects*
T1450	Dead	Tree	-	-	-	-	-	-	-	-	-	-	-	DLO	-	-	-	
T1467	Sterculia lanceolata	假蘋婆	9	120	4	M	P	A	A	L	g	A,B	R	HAD	DSD	Y	N	
T1501	Ficus hispida	對葉榕	6	240	8	L	P	P	A	L	a	A,B	F	DLO	-	N	N	
T1503	Ficus hispida	對葉榕	8	130	8	L	A	A	P	L		A,B	F	DLO	-	N	N	
T1505	Ficus hispida	對葉榕	8	155	9	M	A	A	A	L	h	A,B	F	DLO	-	N	N	
T1544	Macaranga tanarius var. tomentosa	血桐	8	365	8	M	A	A	A	L	e, g	A,B	F	DLO	-	Y	N	
T1545	Ficus variegata	青果榕	12	415	10	M	P	A	A	L	c, g	A,B	F	DLO	-	Y	N	XIII
T1547	Ficus hispida	對葉榕	9	160	7	L	P	A	A	L	g	A,B	F	DLO	-	Y	N	
T1549	Macaranga tanarius var. tomentosa	血桐	7	160	8	L	P	A	A	L	e, g	A,B	F	DLO	-	Y	N	
T1551	Ficus hispida	對葉榕	7	190	5	L	P	A	A	L	e, g	A,B	F	DLO	-	Y	N	
T1552	Cleistocalyx nervosum	水翁	14	665	10	M	A	A	A	L	c, e, g	A,B	F	DLO	-	Y	N	XIII
T1555	Macaranga tanarius var. tomentosa	血桐	8	270	5	M	A	A	A	L	e, g	A,B	F	DLO	-	Y	N	
T1561	Macaranga tanarius var. tomentosa	血桐	6	170	4	L	P	A	A	L	e, g	A,B	F	DLO	-	Y	N	
T1565	Bauhinia blakeana	洋紫荊	10	210	6	M	P	A	A	L	b	A,B	F	DLO	-	N	N	
T1566	Spathodea campanulata	火焰木	12	615	8	M	P	A	A	L	с	A,B	F	DLO	-	N	N	
T1567	Macaranga tanarius var. tomentosa	血桐	12	260	8	M	A	A	A	L	e, g	A,B	F	DLO	-	Y	N	
T1568	Ficus hispida	對葉榕	6	160	6	L	P	P	P	L	a, g	A,B	F	DLO	-	Y	N	
T1569	Bauhinia blakeana	洋紫荊	8	210	8	M	A	A	A	L	g	A,B	F	DLO	-	N	N	
T1570	Spathodea campanulata	火焰木	12	485	8	M	A	A	A	L	c, g	A,B	F	DLO	-	Y	N	
T1571	Celtis sinensis	朴樹	8	280	8	Н	A	A	A	L	f	A,B	F	DLO	-	N	N	
T1572	Leucaena leucocephala	銀合歡	8	190	6	L	P	P	P	L	a, e	A,B	F	DLO	-	N	N	
T1573	Eucalyptus urophylla	尾葉桉	10	160	5	M	A	A	A	L	e, g	A,B	F	DLO	-	Y	N	
T1574	Eucalyptus urophylla	尾葉桉	12	300	6	M	A	A	A	L	e, g	A,B	F	DLO	-	Y	N	
T1575	Eucalyptus urophylla	尾葉桉	10	400	5	M	A	A	A	L	e, g	A,B	F	DLO	-	Y	N	
T1576	Eucalyptus urophylla	尾葉桉	13	300	5	M	A	A	A	L	e, g	A,B	F	DLO	-	Y	N	
T1577	Eucalyptus urophylla	尾葉桉	12	450	6	M	A	A	A	L	e, g	A,B	F	DLO	-	Y	N	
T1578	Leucaena leucocephala	銀合歡	6	145	4	L	A	A	P	L	e, g	A,B	F	DLO	-	Y	N	
T1579	Dead	Tree	-	-	-	-	-	-	-	-	-	-	-	DLO	-	-	N	
T1580	Eucalyptus urophylla	尾葉桉	5	130	2	M	A	A	A	L	e, g	A,B	R	DLO	DLO	Y	N	

Additional tree photos were included in the approved Tree Preservation and Removal Proposal (TPRP) issued in May 2024 for further approval.

Project Title: <u>CE22/2013(DS)</u> <u>Drainage Improvement Works in Yuen Long</u>, <u>Stage 1</u>

Date of Tree Survey: 5/12/2019, 6/12/2019, 10/12/2019, 11/12/2019, 13/12/2019, 16/12/2019

Revisited date of Tree Survey: <u>18/8/2022</u>, <u>26/8/2022</u>, <u>29/8/2022</u>, <u>5/9/2022</u>

**Surveyed by: Oriental Landscape Limited** 

	Spe	cies 3	N	<b>Aeasureme</b>	nts								Recommendation ***					
Tree No. <sup>2</sup>	Botanical name	Chinesename	Height (m)	DBH <sup>4</sup> (mm)	Crown spread (m)	Amenity Value <sup>5</sup>	Form	Health Condition	Structural condition	Suitable for trai	nsplanting <sup>6</sup>	Conservation status 8	(Retain (R) / Transplant (T) / Fell (F))	Maintance D Provide Comm	-	Addi	tional Rema	ırks <sup>10</sup>
						(High (H) /Medium (M) /Low (L))	(Good	(G)/ Average (A	A)/ Poor (P)	(High (H) /Medium (M) /Low (L))	Remarks <sup>7</sup> *			Before	After	Tree on Slope? (Y/N)	OVT? (Y/N)	Defects*
T1581	Dead	d Tree	-	-	-	-	-	-	-	-	-	-	-	DLO	-	-	N	
T1582	Eucalyptus urophylla	尾葉桉	10	400	8	M	P	A	A	L	e, g	A,B	F	DLO	-	Y	N	
T1583	Eucalyptus urophylla	尾葉桉	7	180	3	M	A	A	A	L	e, g	A,B	F	DLO	-	Y	N	
T1584	Eucalyptus urophylla	尾葉桉	13	250	6	M	A	A	A	L	e, g	A,B	F	DLO	-	Y	N	
T1585	Eucalyptus urophylla	尾葉桉	12	220	6	M	A	A	A	L	e, g	A,B	F	DLO	-	Y	N	
T1586	Eucalyptus urophylla	尾葉桉	8	260	6	M	A	A	A	L	e, g	A,B	F	DLO	-	Y	N	
T1588	Eucalyptus urophylla	尾葉桉	10	220	5	M	A	A	A	L	e, g	A,B	F	DLO	-	Y	N	
T1589	Eucalyptus urophylla	尾葉桉	10	260	5	M	A	A	A	L	e, g	A,B	F	DLO	-	Y	N	
T1590	Eucalyptus urophylla	尾葉桉	8	180	6	M	A	A	A	L	e, g	A,B	F	DLO	-	Y	N	
T1591	Eucalyptus urophylla	尾葉桉	8	260	8	M	A	A	A	L	e, g	A,B	F	DLO	-	Y	N	
T1592	Eucalyptus urophylla	尾葉桉	10	180	6	M	A	A	A	L	e, g	A,B	F	DLO	-	Y	N	
T1593	Eucalyptus urophylla	尾葉桉	10	180	4	M	A	A	A	L	e, g	A,B	F	DLO	-	Y	N	
T1594	Eucalyptus urophylla	尾葉桉	9	190	6	M	A	A	A	L	e, g	A,B	F	DLO	-	Y	N	
T1596	Eucalyptus urophylla	尾葉桉	11	230	7	M	A	A	A	L	e, g	A,B	F	DLO	-	Y	N	
T1597	Eucalyptus urophylla	尾葉桉	8	180	4	M	A	A	A	L	e, g	A,B	F	DLO	-	Y	N	
T1599	Eucalyptus urophylla	尾葉桉	6	100	3	M	A	A	A	L	e, g	A,B	F	DLO	-	Y	N	
T1642	Eucalyptus urophylla	尾葉桉	10	110	7	M	A	A	A	L	e, g	A,B	F	DLO	-	Y	N	

<sup>&</sup>lt;sup>1</sup> 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.

 $\label{lem:http://www.afcd.gov.hk/english/conservation/con_tech/files/common/NCPC\_No.03\_The\_use\_of\_plant\_names\_rev\_2008\_2.pdf).$ 

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.

#### #NOTES

- \* Major determining factors for the rating on suitability for transplanting should be included if necessary.
- a. poor health; b. unbalanced structure; c. mature tree; d. unable to prepare a balanced root ball;
- e. species of poor survival rate after transplantation; f. inaccessible by proper machanics; g. inclined root ball
- \*\* State the rarity and protection status of the species.
- A. Not a protected species under Forestry Regulations;
- B. Not a rare and endanger species;
- \*\*\* Recommendation
- R- Retain where applicable
- $\boldsymbol{F}$  Fell due to very poor condition  $\boldsymbol{OR}$  weed tree which conflict with proposed work.
- \*\*\*\*Any additional information deemed necessary for consideration of the proposed management recommendation.
- I. heavy vine growth; II. poor condition; III. good condition; IV. poor growing condition
- V. large pruning wounds; VI. large broken wounds; VII. cavity; VIII. fungal fruiting body; IX. weed tree;
- X. heavy leaning; XI. conflict with adjoining structure; XII. exposed rootball; XIII very large tree

<sup>&</sup>lt;sup>2</sup> Tree(s) in the Register of Old and Valuable Trees should be highlighted with their registration numbers.

<sup>&</sup>lt;sup>3</sup> 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

<sup>&</sup>lt;sup>4</sup> 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 <a href="http://www.afcd.gov.hk/english/conservation/con\_tech/files/common/NCPN\_No.02\_measurement\_of\_DBH\_ver.2006.pdf">http://www.afcd.gov.hk/english/conservation/con\_tech/files/common/NCPN\_No.02\_measurement\_of\_DBH\_ver.2006.pdf</a>).

<sup>&</sup>lt;sup>5</sup> 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.

<sup>&</sup>lt;sup>6</sup> 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).

<sup>&</sup>lt;sup>7</sup> Major determining factors for the rating on suitability for transplanting should be included if necessary.

<sup>&</sup>lt;sup>8</sup> State the rarity and protection status of the species.

<sup>&</sup>lt;sup>9</sup> Refer to paragraphs 35 and 36 of the Circular.

<sup>&</sup>lt;sup>10</sup> Any additional information deemed necessary for consideration of the proposed management recommendation.

Project Title: CE22/2013(DS) Drainage Improvement Works in Yuen Long , Stage 1  $\,$ 

Date of Tree Survey: 21/11/2019, 22/11/2019, 25/11/2019, 26/11/2019, 28/11/2019 Revisited date of Tree Survey: 18/8/2022, 26/8/2022, 29/8/2022, 5/9/2022

Surveyed by: Oriental Landscape Limited

	Species <sup>3</sup>		N	<b>1</b> easuremer	nt								Recommendation***					
Tree No. <sup>2</sup>	Scientific name	Chinese name	Height (m)	DBH <sup>4</sup> (mm)	Crown spread (m)	Amenity Value⁵	Form	Health Condition	Structural condition	Suitable for tran	splanting <sup>6</sup>	Conservation status 8 **	(Retain (R) / Transplant (T) / Fell (F))	Maintenance provide comm	department to ents on TPRP <sup>9</sup>	Ado	litional Rema	ırks <sup>10</sup>
						(High (H) /Medium (M) /Low (L))	(Good	d (G)/ Average (A	A)/ Poor (P)	(High (H) /Medium (M) /Low (L))	Remarks 7 *			Before	After	Tree on Slope? (Y/N)	OVT? (Y/N)	Defects****
								Lin Fa T	Геі									
T1990	Macaranga tanarius var. tomentosa	 血桐	7	230	5	M	A	A	A	L	e, g	A,B	R	LCSD	LCSD	Y	N	
T1992	Sapium sebiferum	烏桕	8	300	7	M	P	A	A	L	e, g	A,B	R	LCSD	LCSD	Y	N	
T1993	Ligustrum sinense	山指甲	6	170	6	L	P	A	P	L	h, g	A,B	R	LCSD	LCSD	Y	N	
T1994	Leucaena leucocephala	銀合歡	7	130	5	L	P	P	P	L	a, e, g	A,B	F	LCSD	-	Y	N	IX
T1995	Macaranga tanarius var. tomentosa	血桐	6	200	5	M	A	A	A	L	e, g	A,B	R	LCSD	LCSD	Y	N	
T2185	Celtis sinensis	朴樹	8	900	12	M	A	A	A	L	c, g	A,B	F	LCSD	-	Y	N	X, XIII
T2229	Macaranga tanarius var. tomentosa	血桐	7	160	5	L	P	P	P	L	a, e, g	A,B	R	LCSD	LCSD	Y	N	
T2231	Dead Tree		-	-	-	-	-	-	-	-	-	-	-	LCSD	-	-	-	
T2233	Macaranga tanarius var. tomentosa	血桐	8	140	6	M	A	P	A	L	a, e, g	A,B	R	LCSD	LCSD	Y	N	
T2234	Macaranga tanarius var. tomentosa	血桐	9	140	7	M	A	P	A	L	a, e, g	A,B	R	LCSD	LCSD	Y	N	
T2236	Ficus hispida	對葉榕	5	160	5	L	P	P	P	L	a, g	A,B	R	DLO	DLO	Y	N	
T2369	Macaranga tanarius var. tomentosa	血桐	5	130	5	L	P	A	A	L	e, g	A,B	F	DLO	-	Y	N	1
T2370	Ficus hispida	對葉榕	8	415	8	L	P	P	A	L	a, g	A,B	F	DLO	-	Y	N	1
T2371	Ficus hispida	對葉榕	6	350	8	L	P	A	A	L	g	A,B	F	DLO	-	Y	N	1
T2385	Ficus hispida	對葉榕	7	240	6	L	P	P	P	L	a, h	A,B	R	DLO	DLO	N	N	
T2386	Bridelia tomentosa	土蜜樹	6	220	5	L	P	A	A	L	a	A,B	F	DLO	-	N	N	1
T2389	Morus alba	桑	6	250	5	L	P	A	A	L	a	A,B	F	DLO	-	N	N	
T2391	Ficus hispida	對葉榕	6	275	6	L	P	A	A	L	g	A,B	F	DLO	-	Y	N	
T2401	Ficus hispida	對葉榕	4	150	6	L	P	P	A	L	a	A,B	F	DLO	-	N	N	i
T2407	Dead Tree		-	1	-	-	-	-	-	-	-	-	-	DLO	-	-	-	1
T2408	Ficus hispida	對葉榕	5	185	5	L	P	P	A	L	a	A,B	F	DLO	-	N	N	i
T2425	Bischofia javanica	秋楓	11	150	7	M	A	P	A	L	a, g	A,B	F	DLO	-	Y	N	1
T2505	Dead Tree		-	-	-	-	-	-	-	-	-	-	-	DLO	-	-	-	1
T2513	Celtis sinensis	朴樹	7	120	4	L	P	A	A	L	b	A,B	R	DLO	DLO	N	N	<u> </u>
T2545	Aleurites moluccana	石栗	10	500	9	M	A	A	A	L	c, e, g	A,B	F	DLO	-	Y	N	<u> </u>
T2558	Ficus hispida	對葉榕	4	180	4	L	P	P	A	L	a, g	A,B	F	DLO	-	Y	N	
T2559	Clausena lansium	黄皮	5	150	4	M	A	A	A	L	e	A,B	F	DLO	-	N	N	
T2560	Dimocarpus longan	龍眼	7	510	10	M	A	A	A	L	c, e	A,B	F	DLO	-	N	N	
T2561	Clausena lansium	黄皮	6	155	4	M	A	A	A	L	с	A,B	F	DLO	-	N	N	
T2562	Clausena lansium	黄皮	6	225	4	M	A	A	A	L	с	A,B	F	DLO	-	N	N	
T2563	Clausena lansium	黄皮	6	200	5	M	A	A	A	L	с	A,B	F	DLO	-	N	N	
T2564	Dimocarpus longan	龍眼	6	325	6	M	A	A	A	L	c, e	A,B	R	DLO	-	N	N	
T2570	Macaranga tanarius var. tomentosa	血桐	7	200	8	M	A	A	A	L	e, g	A,B	F	DLO	-	Y	N	

Appendix C

Project Title: CE22/2013(DS) Drainage Improvement Works in Yuen Long, Stage 1
Date of Tree Survey: 21/11/2019, 22/11/2019, 25/11/2019, 26/11/2019, 28/11/2019, 2/12/2019
Revisited date of Tree Survey: 18/8/2022, 26/8/2022, 29/8/2022, 5/9/2022

Surveyed by: Oriental Landscape Limited

	Species <sup>3</sup>		1	Measureme	nt								Recommendation***					
Tree No. <sup>2</sup>	Scientific name	Chinese name	Height (m)	DBH <sup>4</sup> (mm)	Crown spread (m)	Amenity Value <sup>5</sup>	Form	Health Condition	Structural condition	Suitable for tran	splanting <sup>6</sup>	Conservation status <sup>8</sup> **	(Retain (R) / Transplant (T) / Fell (F))	Maintenance of provide commo		Add	ditional Rem	ıarks <sup>10</sup>
						(High (H) /Medium (M) /Low (L))	(Good	d (G)/ Average (A	A)/ Poor (P)	(High (H) /Medium (M) /Low (L))	Remarks 7*	]		Before	After	Tree on Slope? (Y/N)	OVT? (Y/N)	Defects****
T2578	Clausena lansium	黄皮	6	120	4	M	A	A	A	L	g	A,B	F	DLO	-	Y	N	
T2582	Macaranga tanarius var. tomentosa	血桐	3	120	2	M	A	A	A	L	e, g	A,B	F	DLO	-	Y	N	
T2589	Archontophoenix alexandrae	假檳榔	4	100	2	M	A	A	A	L	g	A,B	F	DLO	-	Y	N	
T2591	Ficus microcarpa	細葉榕	9	750	5	M	A	A	A	L	g	A,B	F	DLO	-	Y	N	
T2592	Dimocarpus longan	龍眼	9	670	5	M	A	A	A	L	c, e, g	A,B	F	DLO	-	Y	N	
T2593	Dimocarpus longan	龍眼	10	630	9	M	A	A	A	L	c, e, g	A,B	F	DLO	-	Y	N	XIII
T2594	Dimocarpus longan	龍眼	7	325	6	M	A	A	A	L	c, e, g	A,B	F	DLO		Y	N	XIII
T2598	Melia azedarach	苦楝	8	350	5	M	P	A	A	L	c, g	A,B	F	DLO	-	Y	N	
T2599	Ficus microcarpa	細葉榕	5	220	2	M	A	A	A	L	g	A,B	F	DLO	-	Y	N	
T2600	Melia azedarach	苦楝	8	110	3	L	P	P	A	L	a, c	A,B	F	DLO	-	N	N	
T2603	Dead Tree		-	-	-	-	-	-	-	-	-	-	-	DLO	-	-	-	
T2611	Archontophoenix alexandrae	假檳榔	6	110	3	M	A	A	A	L	g	A,B	F	DLO	-	Y	N	
T2664	Dead Tree		-	-	-	-	-	-	-	-	-	-	-	DLO	-	-	-	
T2673	Ficus hispida	對葉榕	4	175	5	L	P	P	A	L	a, g	A,B	F	DLO	-	Y	N	
T2675	Ficus hispida	對葉榕	5	140	2	L	P	P	A	L	a, g	A,B	F	DLO	-	Y	N	
T2676	Ficus hispida	對葉榕	6	250	6	M	P	A	A	L	g	A,B	F	DLO	-	Y	N	
T2677	Celtis sinensis	朴樹	6	210	6	M	A	A	A	L	с	A,B	F	DLO	-	N	N	
T2678	Macaranga tanarius var. tomentosa	血桐	6	105	4	M	A	A	A	L	e	A,B	F	DLO	-	N	N	
T2683	Ficus hispida	對葉榕	7	270	6	L	P	P	A	L	a	A,B	F	DLO	-	N	N	
T2684	Macaranga tanarius var. tomentosa	血桐	6	185	6	L	P	P	A	L	a, e	A,B	R	DLO	DLO	N	N	XIII
T2687	Dimocarpus longan	龍眼	13	495	12	Н	A	A	A	L	c, e	A,B	F	DLO	-	N	N	

Appendix C

Project Title: CE22/2013(DS) Drainage Improvement Works in Yuen Long, Stage 1

Date of Tree Survey: 21/11/2019, 22/11/2019, 25/11/2019, 26/11/2019, 28/11/2019, 2/12/2019 Survey

Revisited date of Tree Survey: <u>18/8/2022</u>, <u>26/8/2022</u>, <u>29/8/2022</u>, <u>5/9/2022</u>

Surveyed by: Oriental Landscape Limited

	Species <sup>3</sup>		N	Aeasuremei	nt								Recommendation***					
Tree No. <sup>2</sup>	Scientific name	Chinese name	Height (m)	DBH <sup>4</sup> (mm)	Crown spread (m)	Amenity Value <sup>5</sup>	Form	Health Condition	Structural condition	Suitable for tran	splanting <sup>6</sup>	Conservation status <sup>8</sup> **	(Retain (R) / Transplant (T) / Fell (F))	Maintenance o	-	1 1 1 1 1 1	itional Rem	arks <sup>10</sup>
						(High (H) /Medium (M) /Low (L))	(Goo	d (G)/ Average (A	A)/ Poor (P)	(High (H) /Medium (M) /Low (L))	Remarks 7 *	1		Before	After	Tree on Slope? (Y/N)	OVT? (Y/N)	Defects****
								Tai W	0									
T2034	Leucaena leucocephala	銀合歡	7	140	4	L	P	P	P	L	a, g	A,B	F	DSD	-	Y	N	
T2067	Ficus microcarpa	細葉榕	6	220	6	M	A	A	A	L	g	A,B	R	DSD	DSD	Y	N	
T2077	Dead Tree		-	-	-	-	-	-	-	-	-	-	-	DLO	-	-	-	
T2080	Celtis sinensis	朴樹	10	270	7	L	P	P	A	L	a, c	A,B	F	DLO	-	N	N	
T2082	Artocarpus heterophyllus	菠蘿蜜	12	425	8	M	P	P	L	L	a, c	A,B	F	DLO	-	N	N	
T2086	Leucaena leucocephala	銀合歡	9	170	5	L	P	P	P	L	a, g	A,B	F	DLO	-	Y	N	IX
T2105	Ficus hispida	對葉榕	6	210	6	L	P	P	A	L	a, h, g	A,B	F	DLO	-	Y	N	
T2107	Ficus hispida	對葉榕	7	175	6	L	P	P	A	L	a, h, g	A,B	F	DLO	1	Y	N	
T2108	Ficus hispida	對葉榕	6	235	5	L	P	P	A	L	a, h, g	A,B	F	DLO	1	Y	N	
T2113	Leucaena leucocephala	銀合歡	14	500	7	L	P	P	P	L	a, g	A,B	F	DLO	-	Y	N	IX
T2114	Leucaena leucocephala	銀合歡	10	300	7	L	P	P	P	L	a, g	A,B	F	DLO	1	Y	N	IX
T2115	Macaranga tanarius var. tomentosa	血桐	10	305	10	M	A	A	A	L	g	A,B	F	DLO	1	Y	N	
T2116	Leucaena leucocephala	銀合歡	9	120	5	L	P	P	P	L	a, g	A,B	F	DLO	1	Y	N	IX
T2118	Leucaena leucocephala	銀合歡	8	110	7	L	P	P	P	L	a, e	A,B	F	DLO	1	N	N	IX
T2119	Leucaena leucocephala	銀合歡	9	150	7	L	P	P	P	L	a, e	A,B	F	DLO	-	N	N	IX
T2122	Morus alba	桑	8	305	6	L	P	P	P	L	a, e	A,B	F	DLO	-	N	N	IX
T2124	Leucaena leucocephala	銀合歡	6	130	5	L	P	P	P	L	a, e	A,B	F	DLO	-	N	N	IX
T2125	Leucaena leucocephala	銀合歡	7	200	7	L	P	P	P	L	a, e	A,B	F	DLO	-	N	N	IX
T2143	Dimocarpus longan	龍眼	11	430	7	M	A	A	A	L	c, e, g	A,B	F	DLO	-	Y	N	XIII

<sup>&</sup>lt;sup>1</sup> 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.

http://www.afcd.gov.hk/english/conservation/con\_tech/files/common/NCPC\_No.03\_The\_use\_of\_plant\_names\_rev\_2008\_2.pdf ).

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.

#### #NOTES

Appendix C

#### h. multi-trunk

<sup>&</sup>lt;sup>2</sup> Tree(s) in the Register of Old and Valuable Trees should be highlighted with their registration numbers.

<sup>&</sup>lt;sup>3</sup> 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

<sup>&</sup>lt;sup>4</sup> 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 <a href="http://www.afcd.gov.hk/english/conservation/con\_tech/files/common/NCPN\_No.02\_measurement\_of\_DBH\_ver.2006.pdf">http://www.afcd.gov.hk/english/conservation/con\_tech/files/common/NCPN\_No.02\_measurement\_of\_DBH\_ver.2006.pdf</a>).

<sup>&</sup>lt;sup>5</sup> 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.

<sup>&</sup>lt;sup>6</sup> 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).

<sup>&</sup>lt;sup>7</sup> Major determining factors for the rating on suitability for transplanting should be included if necessary.

<sup>&</sup>lt;sup>8</sup> State the rarity and protection status of the species.

<sup>&</sup>lt;sup>9</sup> Refer to paragraphs 35 and 36 of the Circular.

<sup>&</sup>lt;sup>10</sup> Any additional information deemed necessary for consideration of the proposed management recommendation.

<sup>\*</sup> Major determining factors for the rating on suitability for transplanting should be included if necessary.

a. poor health; b. unbalanced structure; c. mature tree; d. unable to prepare a balanced root ball;

e. species of poor survival rate after transplantation; f. inaccessible by proper machanics; g. inclined root ball

<sup>\*\*</sup> State the rarity and protection status of the species.

A. Not a protected species under Forestry Regulations;

B. Not a rare and endanger species;

<sup>\*\*\*</sup> Recommendation

R- Retain where applicable

F - Fell due to very poor condition OR weed tree which conflict with proposed work.

<sup>\*\*\*\*</sup>Any additional information deemed necessary for consideration of the proposed management recommendation.

I. heavy vine growth; II. poor condition; III. good condition; IV. poor growing condition

V. large pruning wounds; VI. large broken wounds; VII. cavity; VIII. fungal fruiting body; IX. weed tree;

X. heavy leaning; XI. conflict with adjoining structure; XII. exposed rootball; XIII very large tree

# Tree Assessment Schedule in the TPRP Amendment Submission Issued in May 2024

#### **Tree Assessment Schedule**

#### Project Title: Contract No. DC/2022/02 Drainage Improvement Works at Yuen Long, Stage 2

Date of Tree Survey: 19/2/2024

#### Surveyed by: LAU SIU YEUNG (UKAA PR5206)

Tree No.	Species		3	<b>d</b> easureme	nts	Amenity Value	Form	Health Condition	Structural Condition		oility for olanting	Conservation Status	Recommendation (Previous Approved TPRP Ref. (00X5AJ) in DSD DP 7/11/51/22	Recommendation (in this Submission)	Maintenance depa comments	artment to provide s on TPRP	Additional Remarks
	Scientifc Name	Chinese Name	DBH (mm)	Height (m)	Crown Spread (m)	(High/ Medium/ Low)	(Good/ Average/ Poor)	(Good/ Average/ Poor)	(Good/ Average/ Poor)	(High/ Medium/ Low)	Remarks #	Status	(Retain / Transplant / Remove)	(Retain / Transplant / Remove/ Removed/ Tree Not Found)	Before	After	
										Shung Sh	an New Village	2					
T14	Ficus hispida	對葉榕	180	8	4	Low	Poor	Poor	Average	Low	a, e, g	A,B	Remove	Remove	DSD	-	leaning, climbers, no leader shoot, epicormics
T15	Ficus hispida	對葉格	245	5	5	Low	Poor	Poor	Average	Low	a, e, g	A,B	Remove	Remove	DSD	-	leaning, climbers, stub, cross branch
T16	Macaranga tanarius var. tomentosa	血桐	290	9	6	Low	Poor	Poor	Average	Low	a, e, g	A,B	Remove	Remove	DSD	-	leaning, abnormal bark crack on branch, animal scratching on branch, wound on branch, wilted foliage
T17	Macaranga tanarius var. tomentosa	血桐	305	7	6	Low	Poor	Average	Average	Low	a, e, g	A,B	Remove	Remove	DSD	-	wound on trunk, epicormics
T18	Macaranga tanarius var. tomentosa	血桐	120	5	5	Low	Poor	Average	Average	Low	a, e, g	A,B	Remove	Remove	DSD	-	leaning, climbers, codominant trunk
T19	Ficus hispida	對菜格	130	7	4	Low	Poor	Average	Average	Low	a, e, g	A,B	Remove	Remove	DSD	-	-
T20	Ficus hispida	對葉榕	348	8	6	Low	Poor	Average	Average	Low	a, e, g	A,B	Remove	Remove	DSD	-	leaning, triple trunks, broken branch
T21	Macaranga tanarius var. tomentosa	血桐	332	9	8	Low	Poor	Average	Average	Low	e, g	A,B	Remove	Remove	DSD	-	leaning, codominant trunk, wound, epicormics
T22	Ficus hispida	對葉榕	230	10	5	Low	Poor	Average	Average	Low	a, e, g	A,B	Remove	Remove	DSD	÷	leaning, wounds on trunk
T23	Ficus hispida	對菜格	220	5	3	Low	Poor	Average	Average	Low	a, e, g	A,B	Remove	Remove	DSD	-	leaning, wounds on trunk
T24	Macaranga tanarius var. tomentosa	út.桐	250	8	6	Low	Poor	Average	Average	Low	a, e, g	A,B	Remove	Remove	DSD	-	leaning, climbers, stub
T25	Celtis sinensis	朴樹	980	13	18	Medium	Poor	Average	Average	Low	c, g	A,B	Remove	Remove	DSD	-	codominant stem, included bark, crook branch, climbers, decaying wound on branch, wound on branch
T26	Ficus hispida	對葉榕	164	5	4	Low	Poor	Poor	Poor	Low	a, d, g, j	A,B	Retain	Remove	DSD	÷	absence of leader shoot, broken branch, climbsers and heavily vined, growth in steep slope, Conflict with proposed works
T27	Macaranga tanarius var. tomentosa	血桐	280	8	6	Low	Poor	Average	Average	Low	a, e, g	A,B	Remove	Remove	DSD	÷	leaning, wound on branch, imbalanced form
T28	Ficus hispida	對葉榕	155	6	3	Low	Poor	Poor	Average	Low	a, g	A,B	Remove	Remove	DSD	÷	leaning, shaded by other trees
T29	Macaranga tanarius var. tomentosa	út.桐	340	9	9	Low	Poor	Average	Average	Low	e, g	A,B	Remove	Remove	DSD	-	leaning, codominant branch
T32	Macaranga tanarius var. tomentosa	血桐	190	8	7	Low	Average	Average	Average	Low	a, e, g	A,B	Remove	Remove	DSD	÷	codominant branch
T33	Macaranga tanarius var. tomentosa	út.桐	120	3	2	Low	Poor	Poor	Poor	Low	a, e, g	A,B	Remove	Remove	DSD	-	dead branch, epicormics
T34	Macaranga tanarius var. tomentosa	血桐	130	8	6	Low	Poor	Average	Average	Low	a, e, g	A,B	Remove	Remove	DSD	÷	wilted foliage
T35	Macaranga tanarius var. tomentosa	út.桐	130	6	3	Low	Poor	Poor	Poor	Low	e, g	A,B	Remove	Remove	DSD	-	severe leaning, wilted foliage
T45	Celtis sinensis	朴樹	370	11	9	Medium	Average	Average	Average	Low	g	A,B	Remove	Remove	DSD	-	codominant branch
T46	Macaranga tanarius var. tomentosa	血桐	335	9	6	Low	Average	Average	Poor	Low	g	A,B	Remove	Remove	DSD	-	leaning, epicormics, wounds, exposed roots
T47	Ficus microcarpa	細葉榕	424	9	8	Medium	Average	Average	Average	Low	g	A,B	Remove	Remove	DSD	-	wall tree, cross branch, wound on branch
T56	Ficus microcarpa	細葉榕	340	15	17	Medium	Average	Average	Average	Low	g	A,B	Retain	Retain	DSD	DSD	wall tree, epicormics
T229	Ficus hispida	對葉榕	280	4	5	Low	Poor	Average	Average	Low	e, g	A,B	Remove	Remove	DSD	-	crook trunk, codominant trunk
T230	Ficus hispida	對葉榕	105	3	3	Low	Poor	Poor	Poor	Low	a, b, d, e, g, j	A,B	Retain	Remove	DSD	-	poor health condition, sparse foliage density, climbsers and heavily vined, growth in steep slope, Conflict with proposed works
										I	a Che						
T1326	Macaranga tanarius var. tomentosa	血桐	250	8	5	Low	Poor	Average	Average	Low	e, g	A,B	Remove	Remove	DLO	-	leaning
T1555	Macaranga tanarius var. tomentosa	血桐	270	5	4	Low	Poor	Average	Average	Low	e, g	A,B	Remove	Remove	DLO	-	leaning, wound on trunk

#### # Remarks for Suitability for Transplanting

(a) Poor health;

(b) unbalanced structure;

(c) mature tree;

(d) unable to prepare a balanced root ball;

(e) species of poor survival rate after transplantation;

(f) inaccessible by proper mechanics;

(g) tree growth under poor conditions which have limited the formation of proper root ball necessary

(h) multi-trunk;

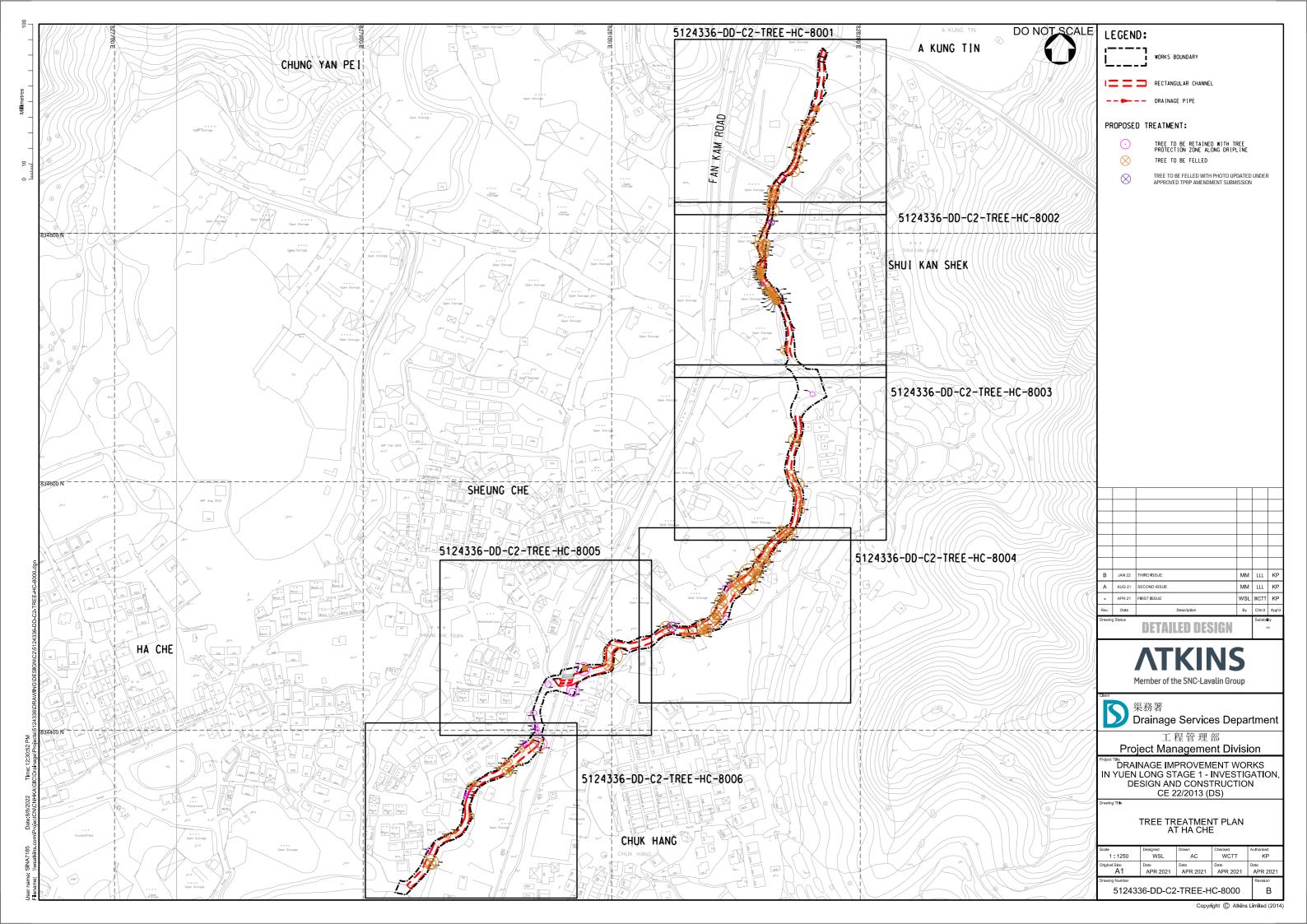
(i) weed species not suitable for transplanting; or

(j) poor tree form

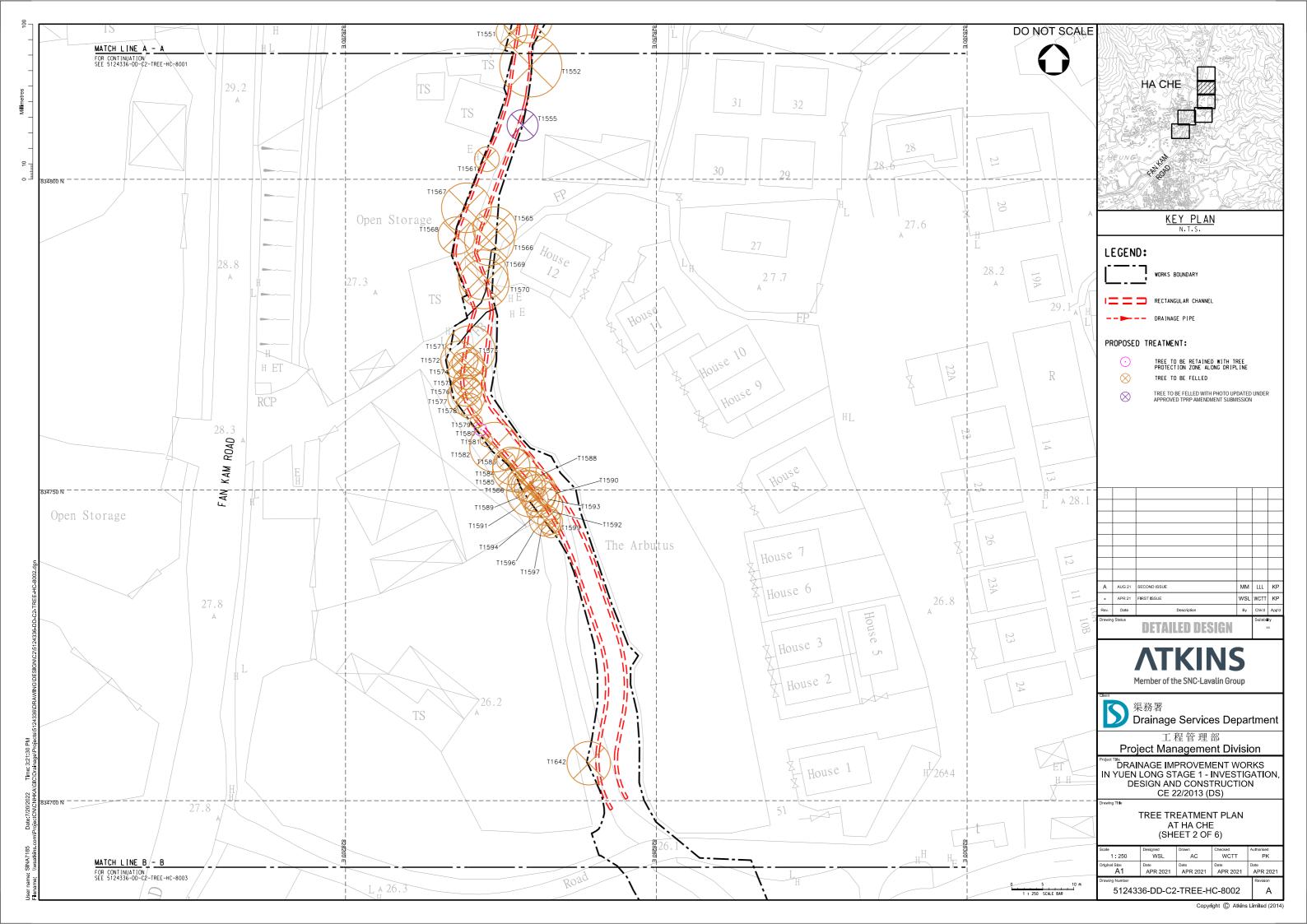
#### Conservation status

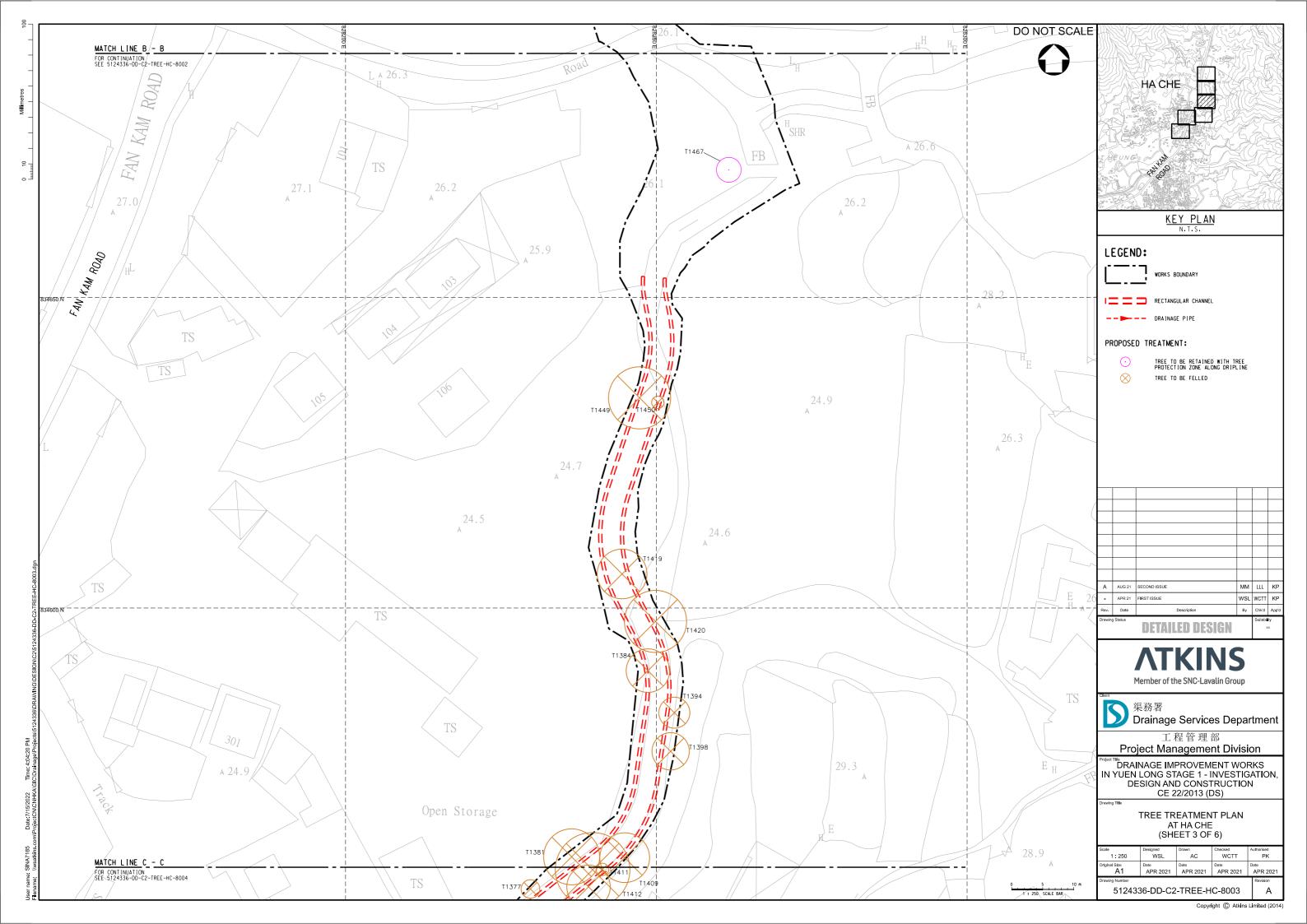
(A) Not a protected species under Forestry Regulations

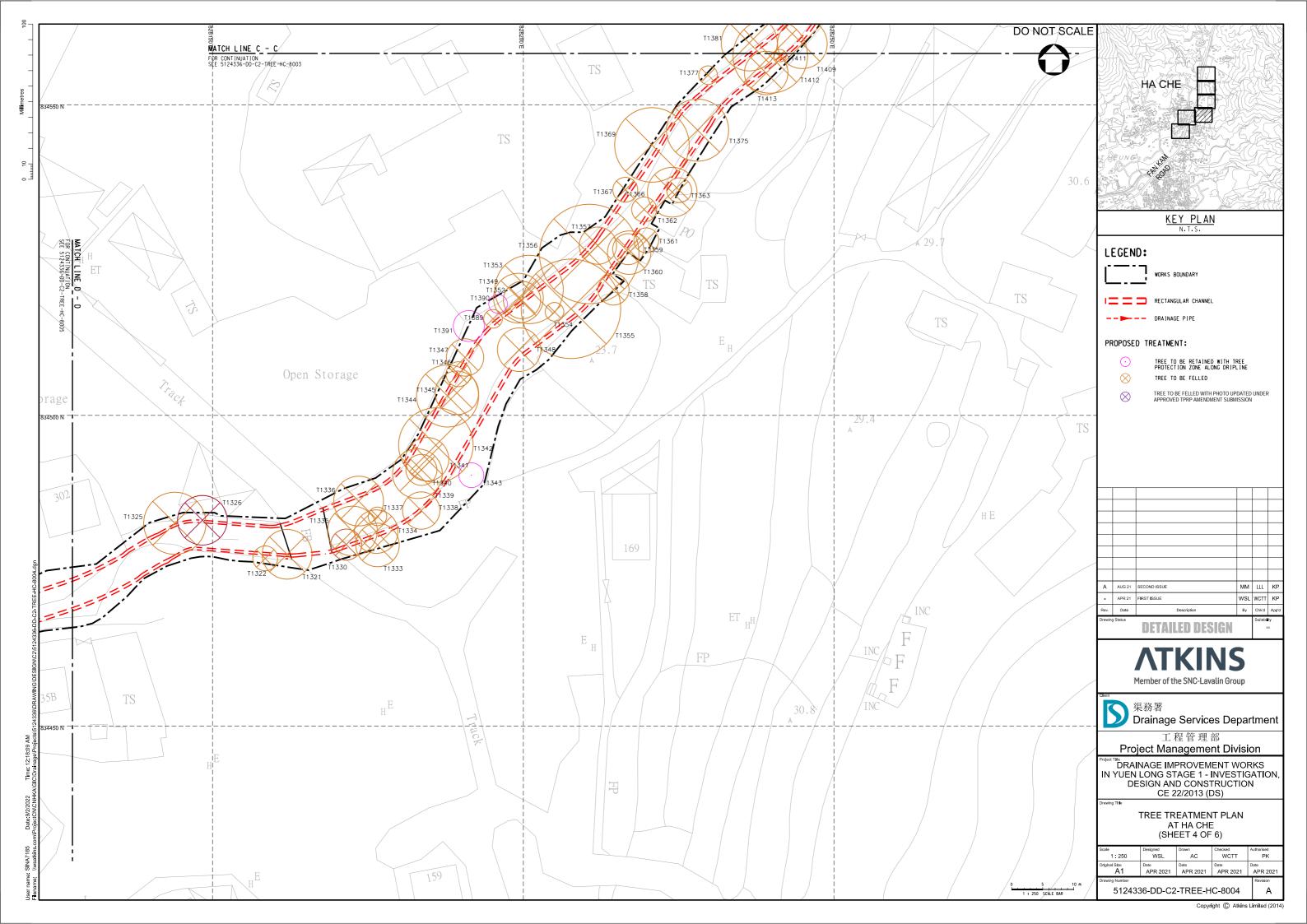
(B) Not a rare and endanager species

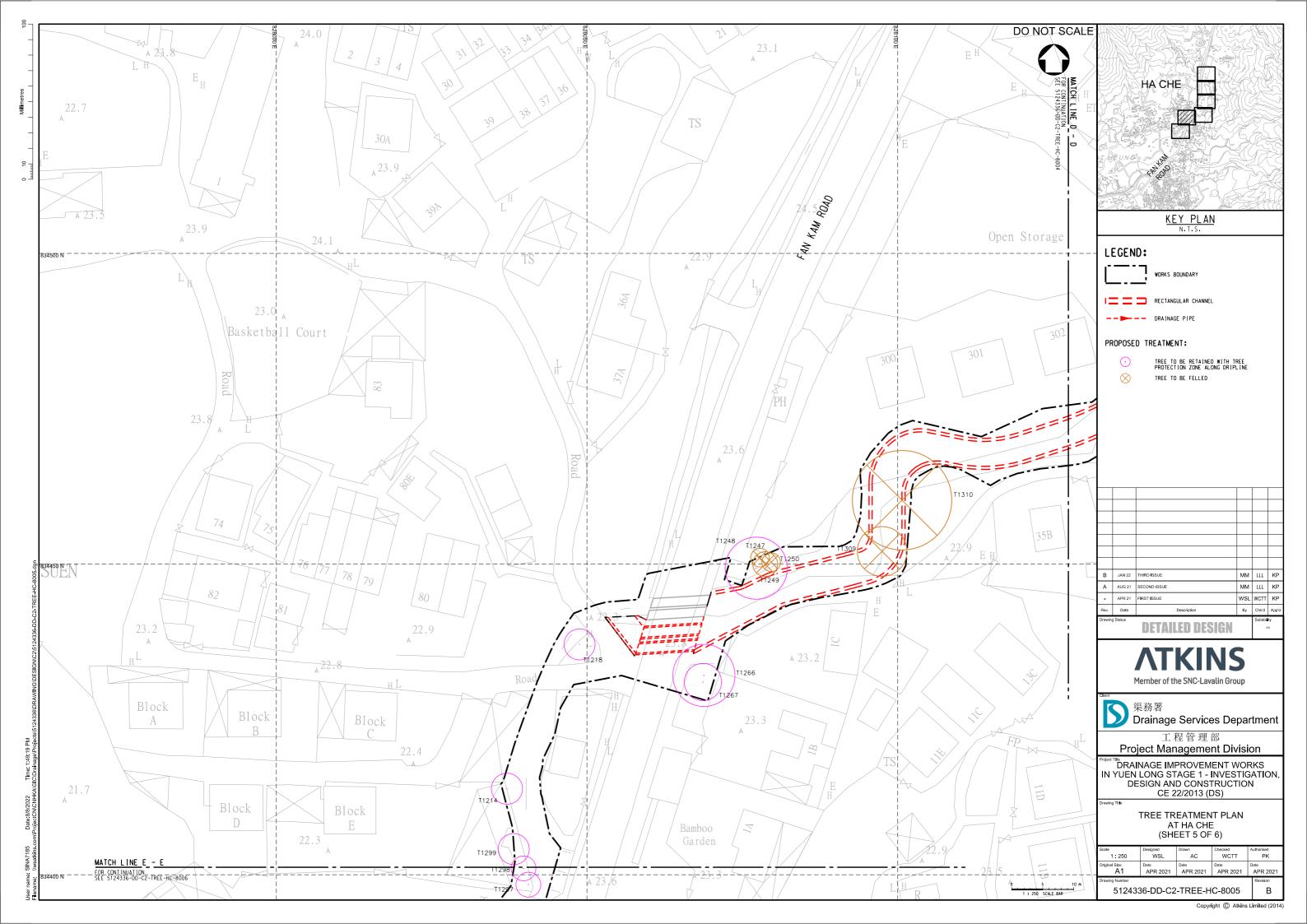


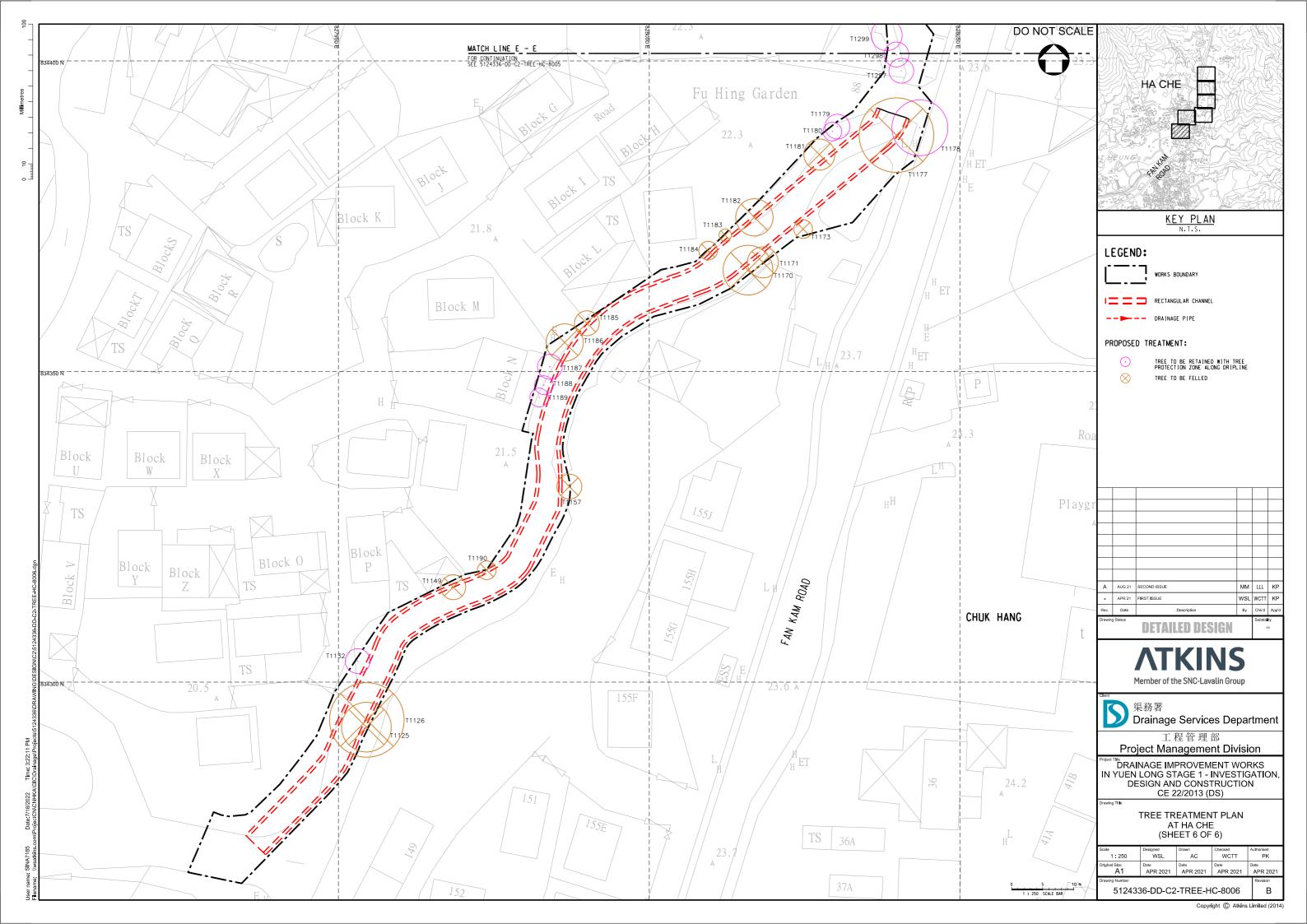


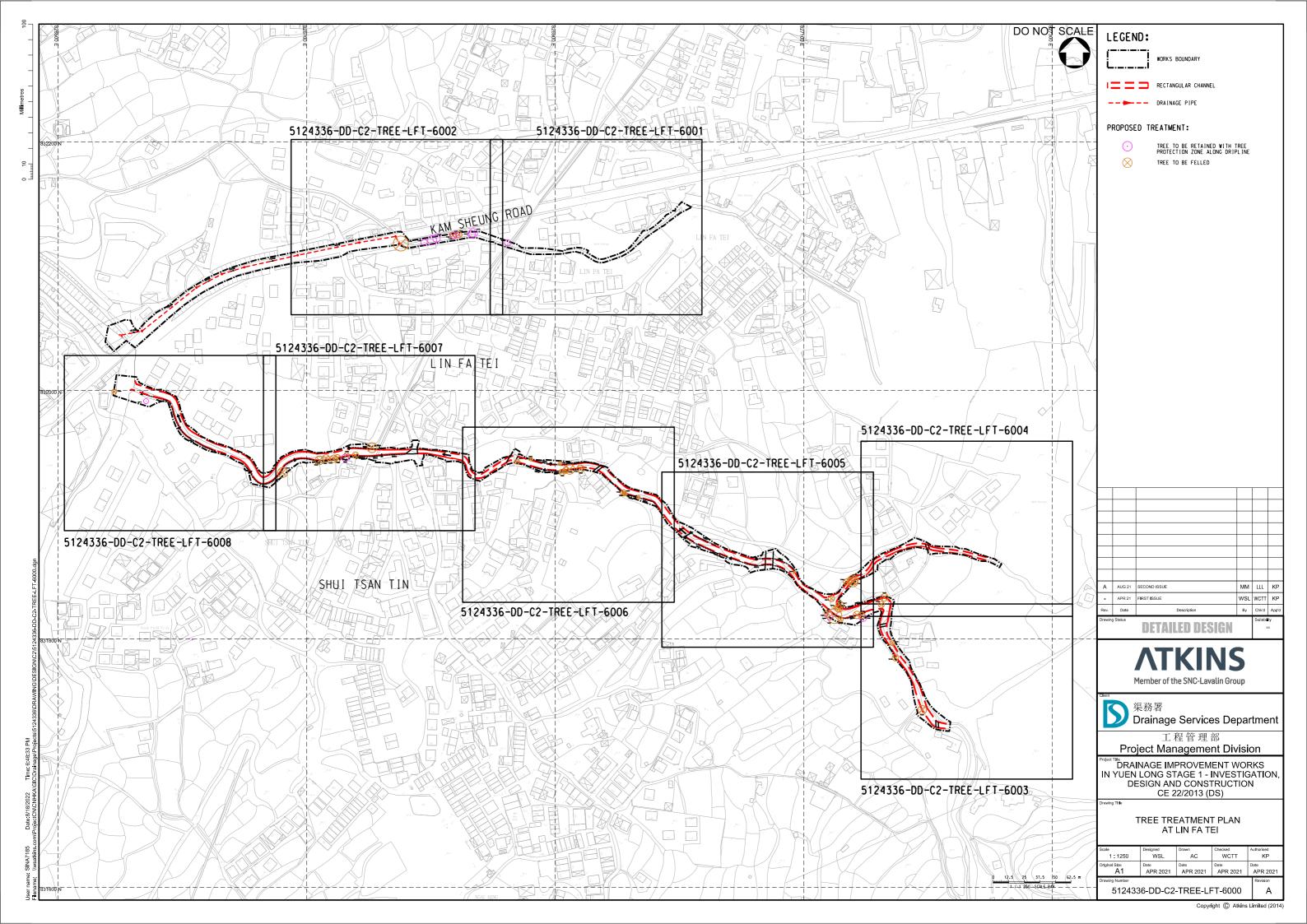


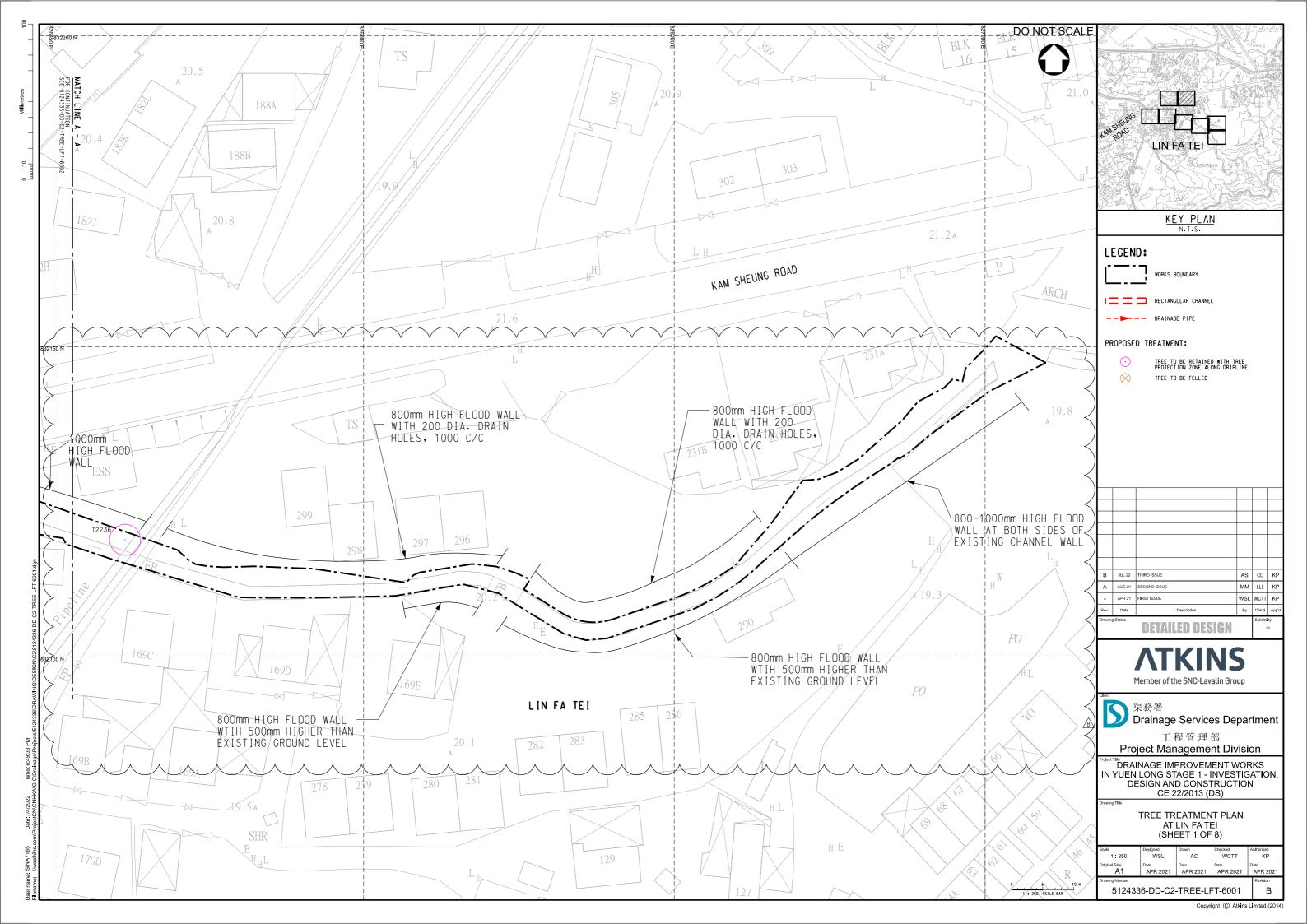


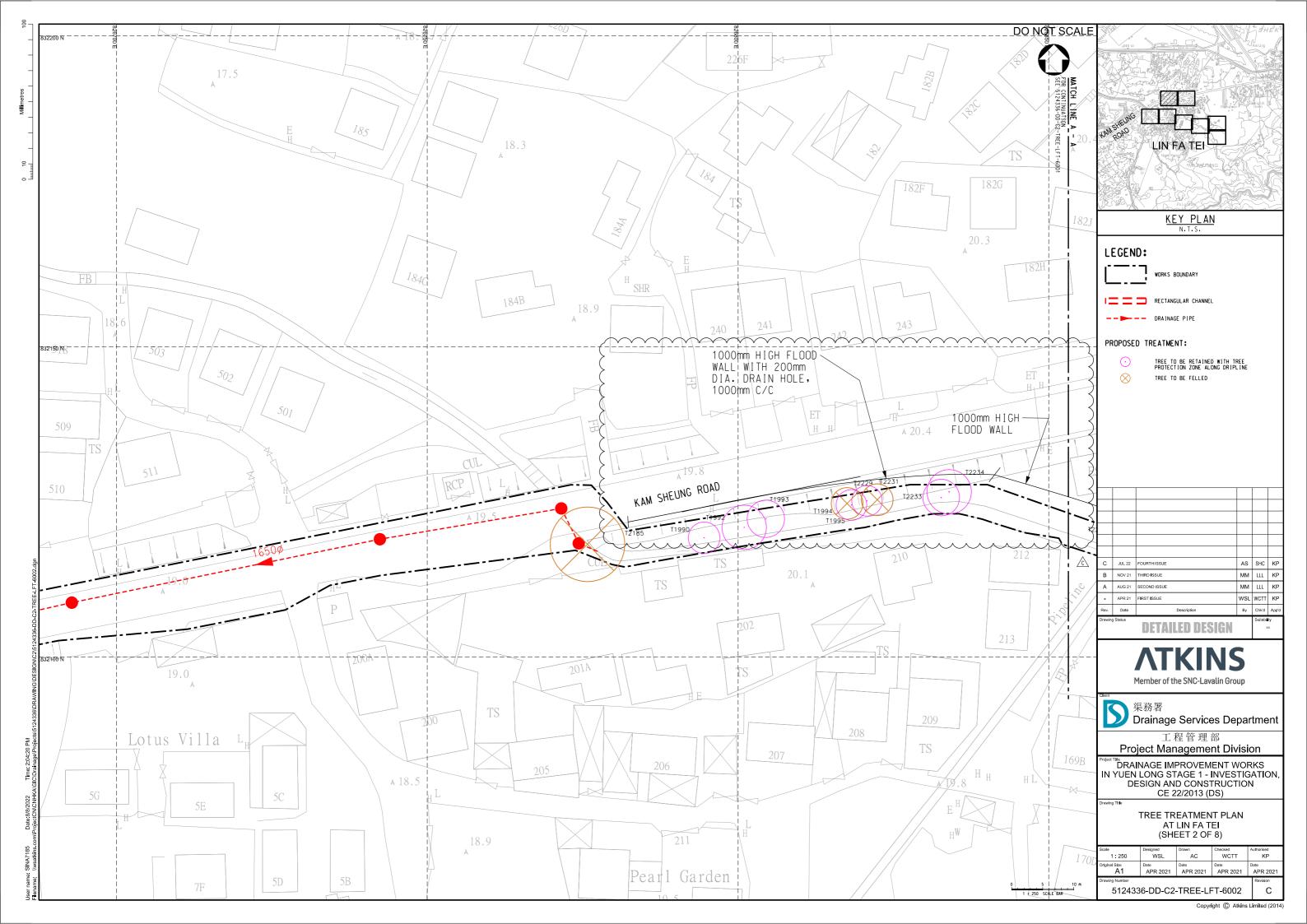


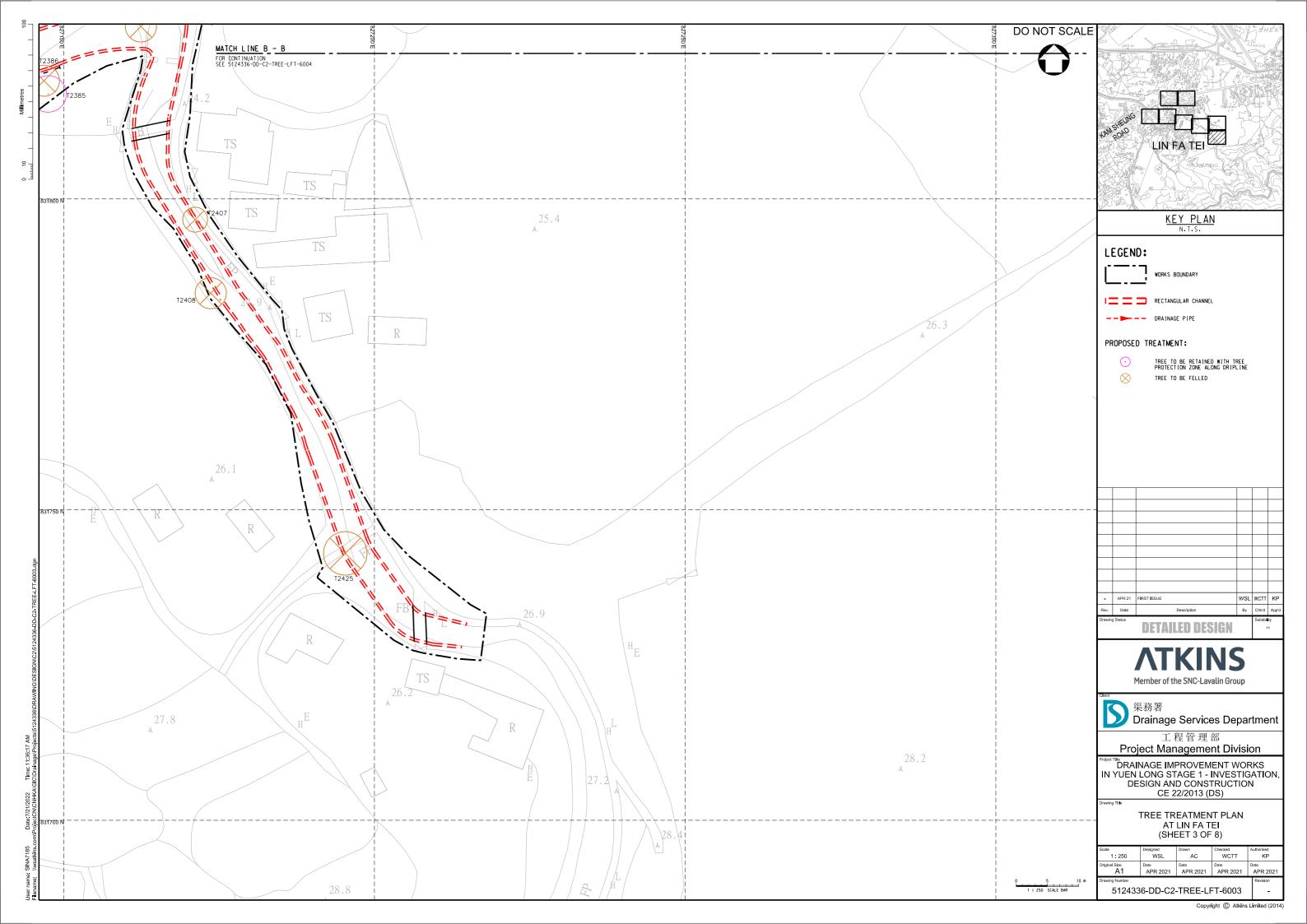


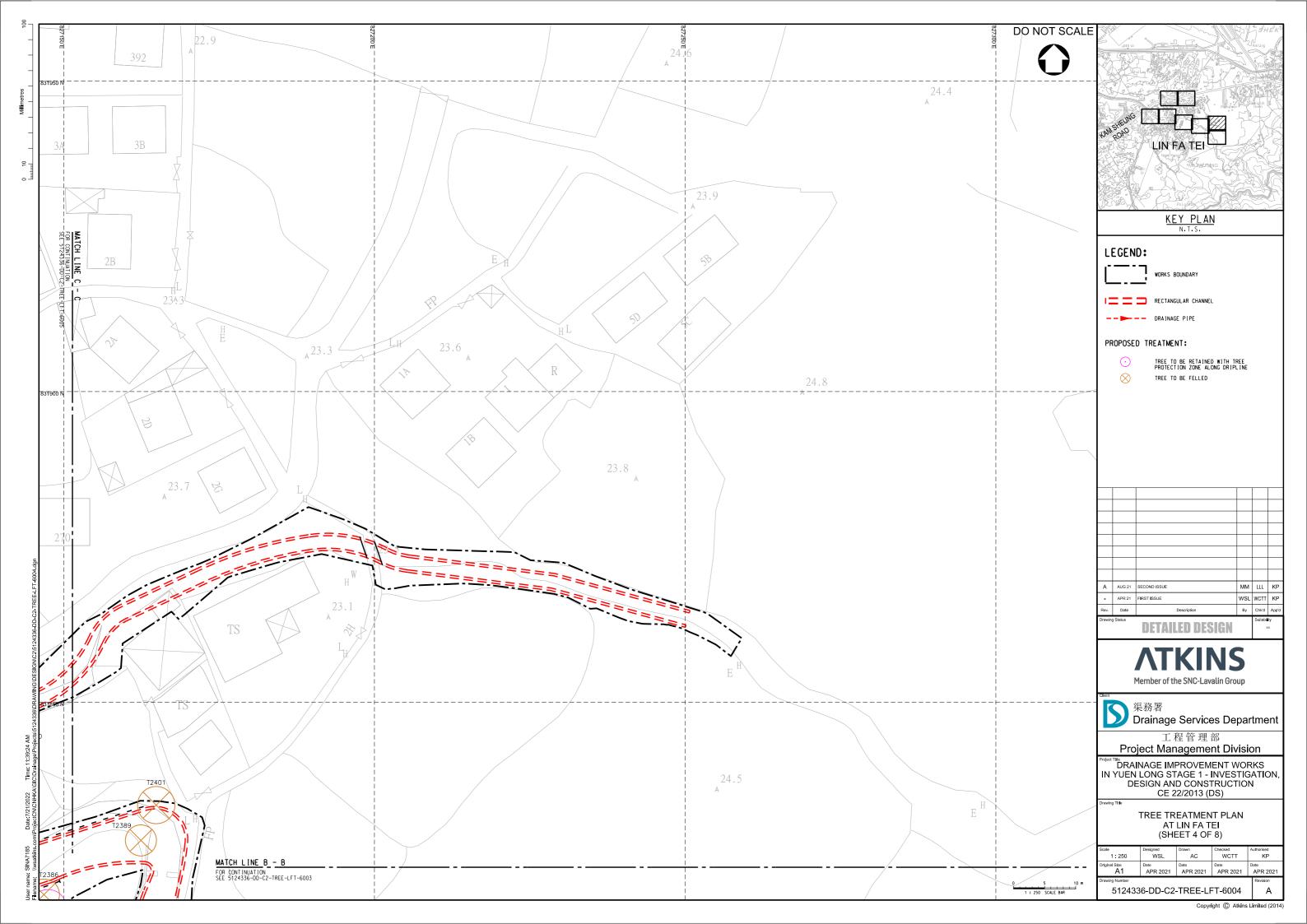


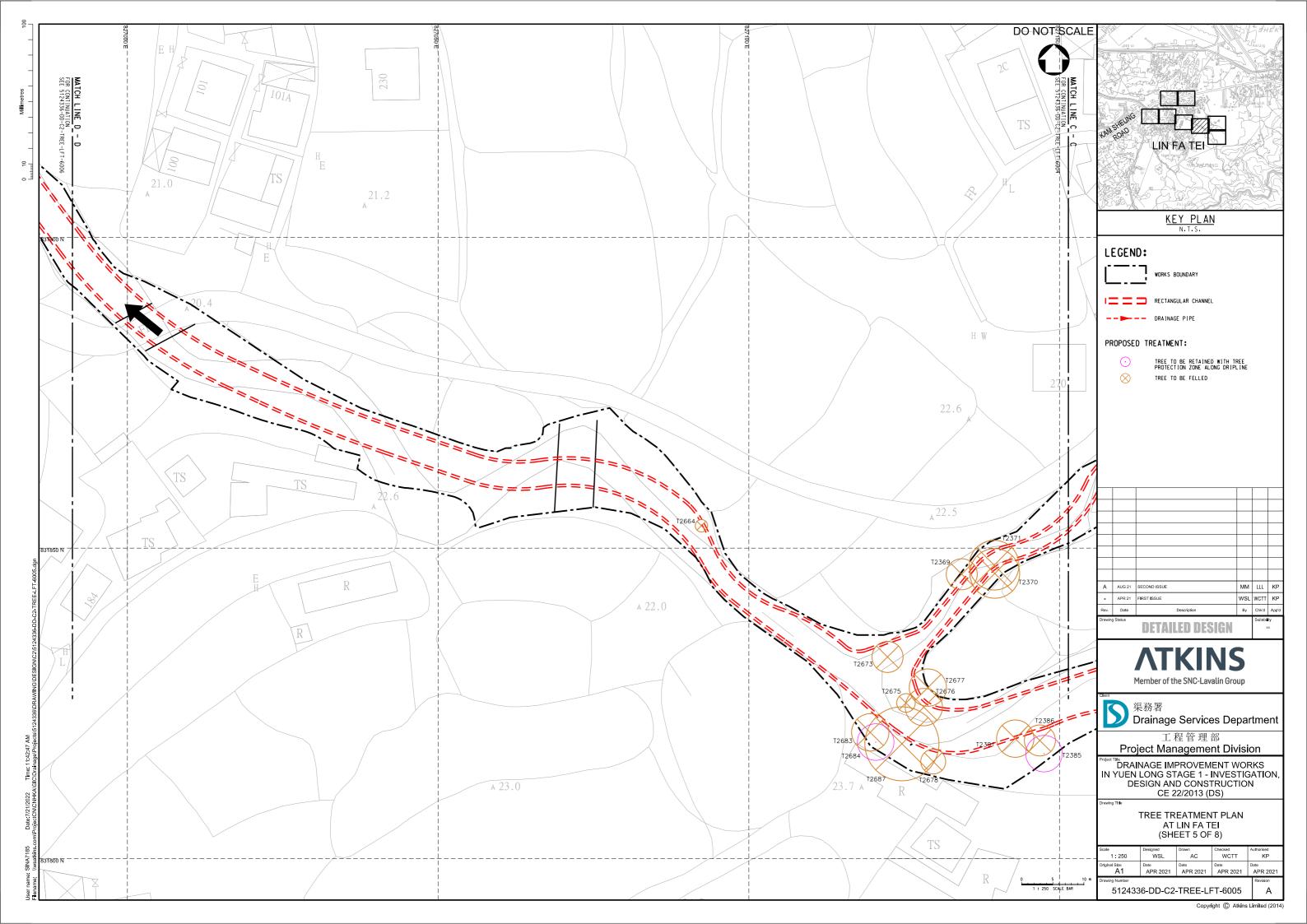




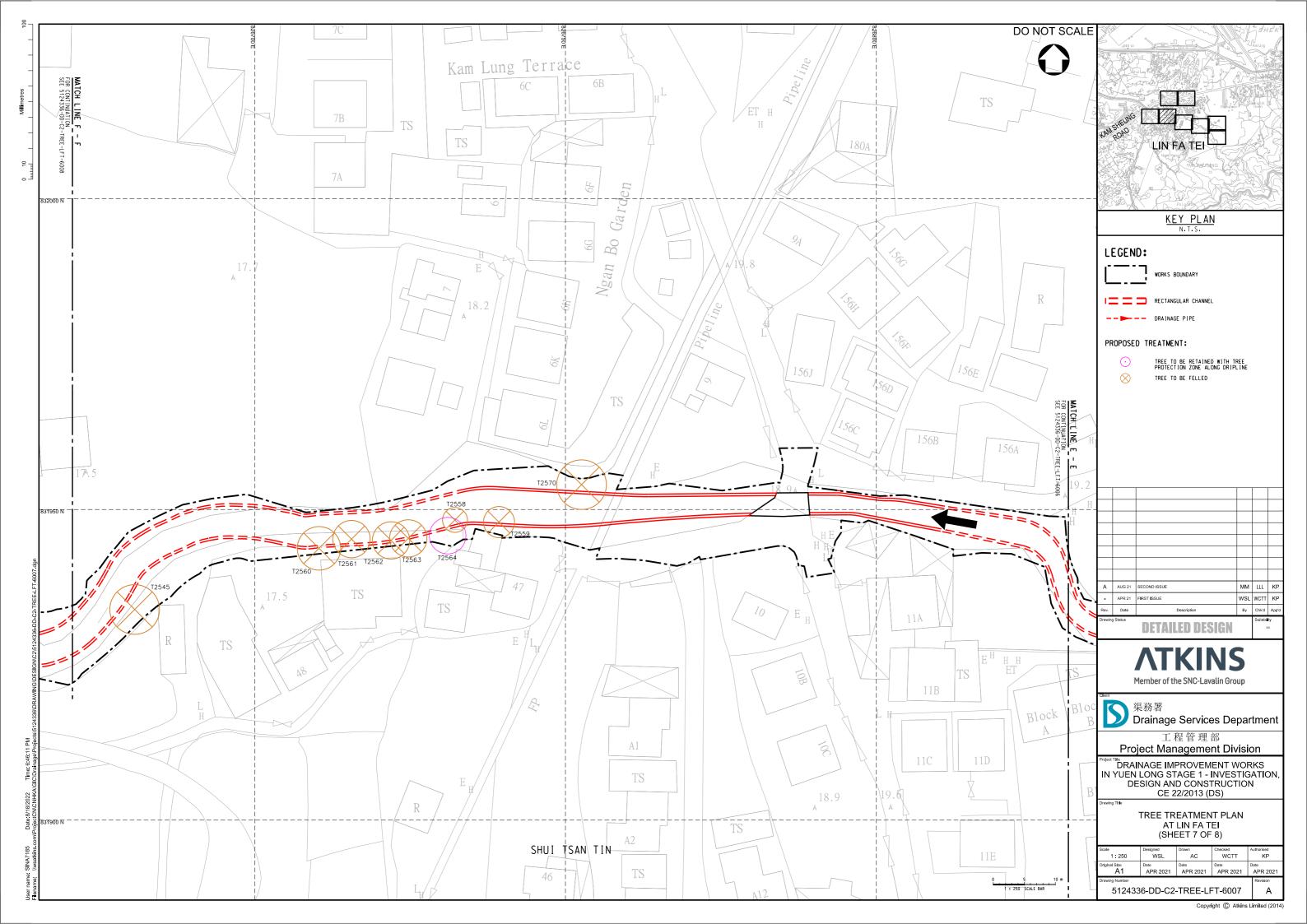


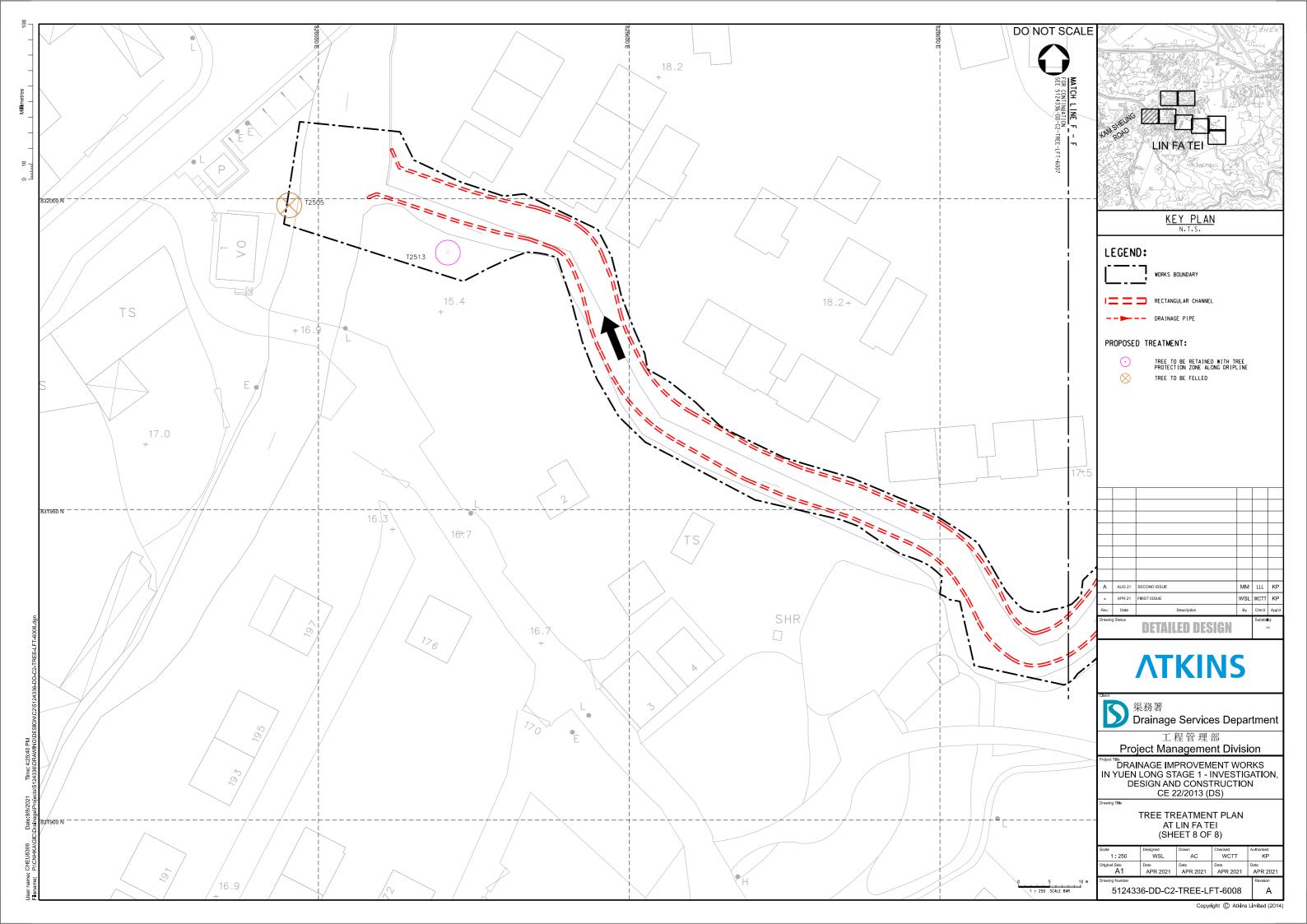


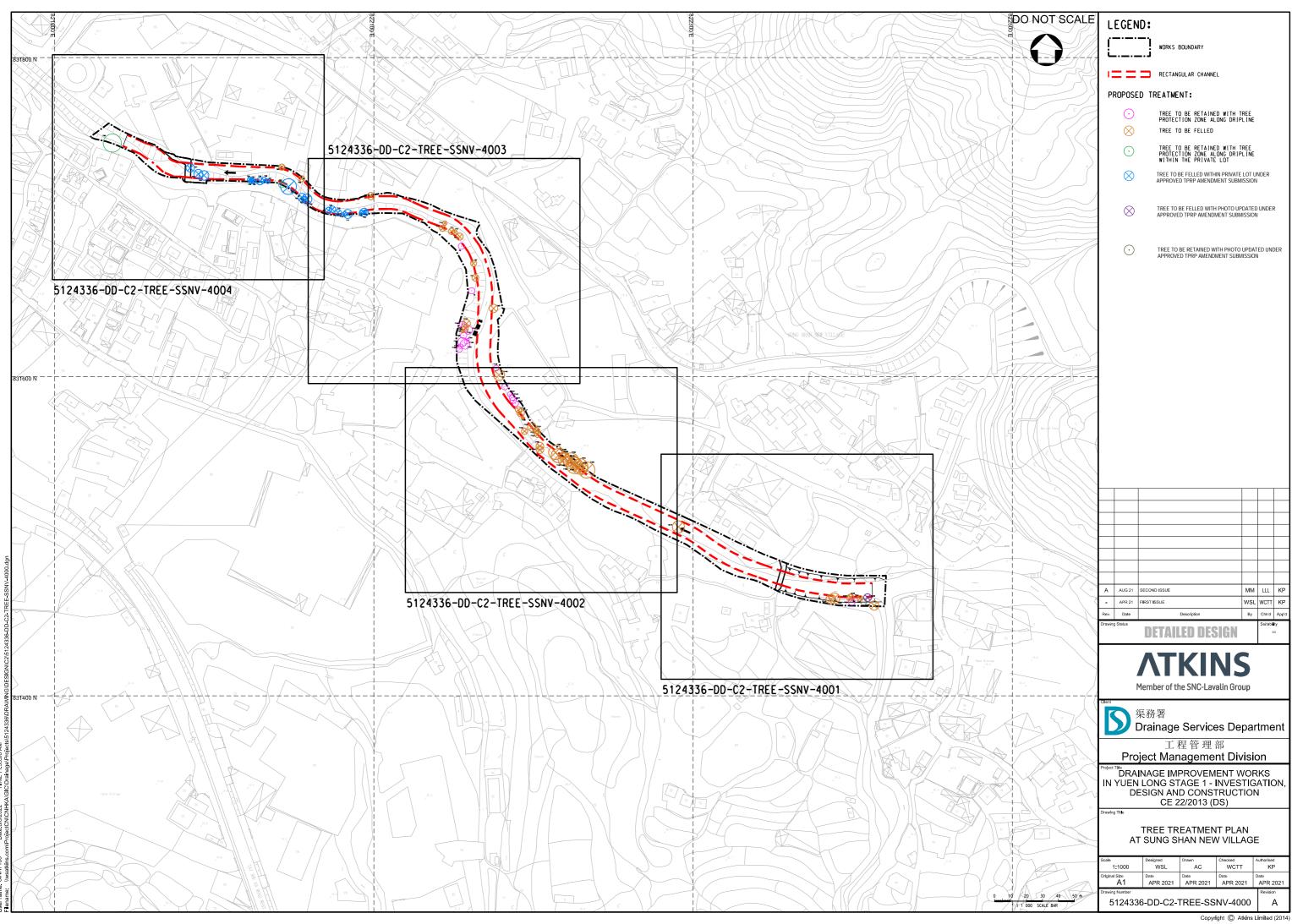


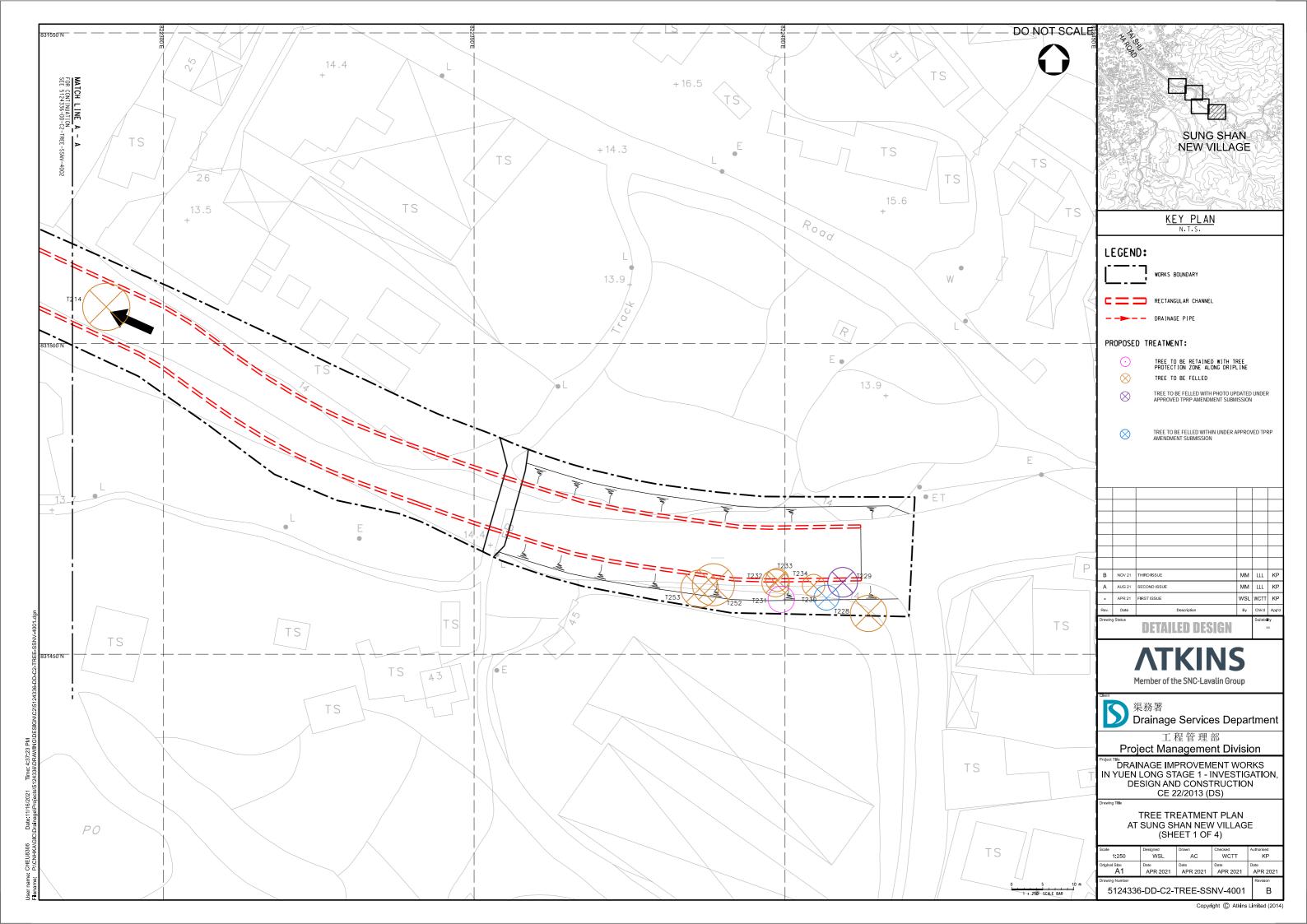


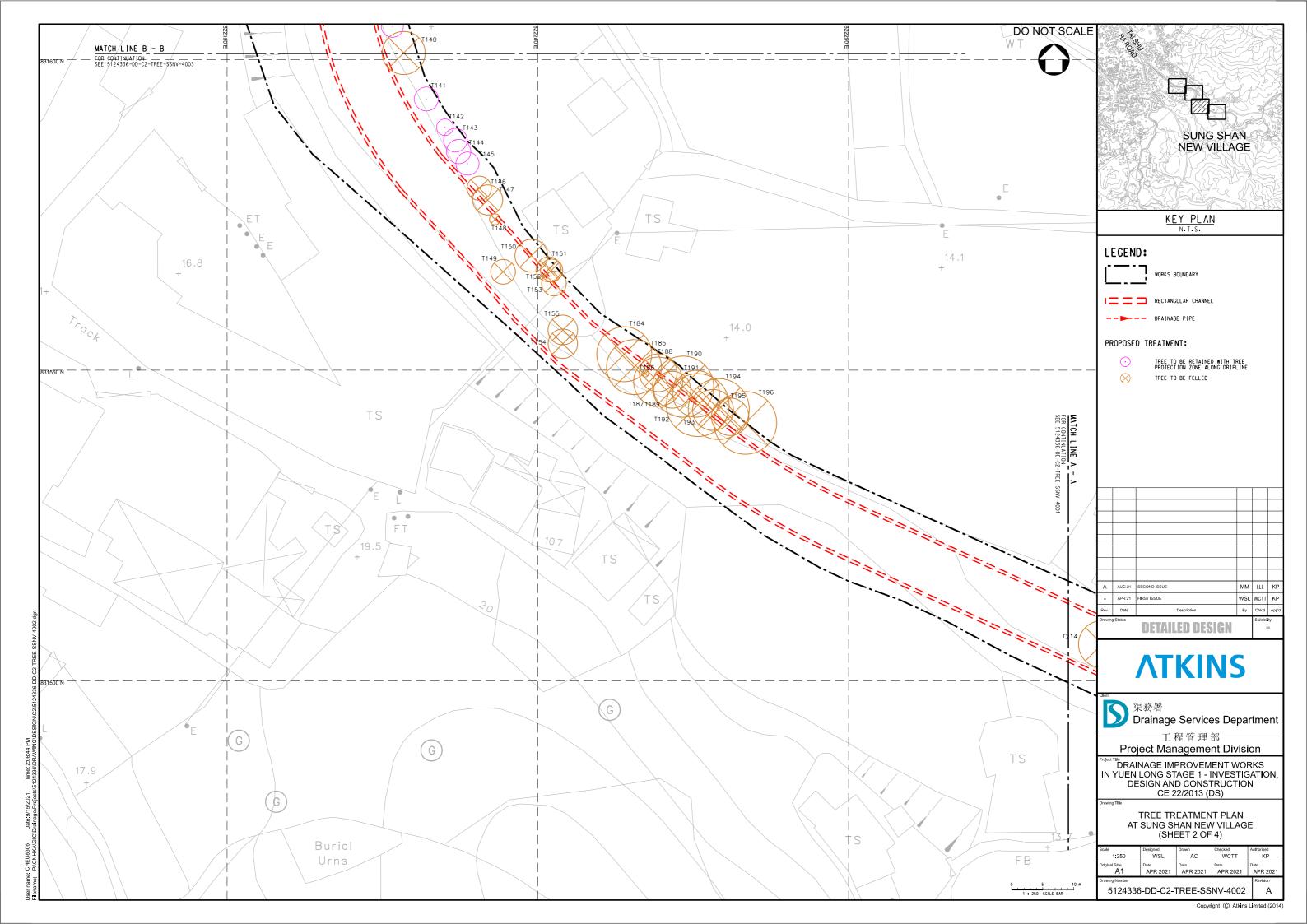


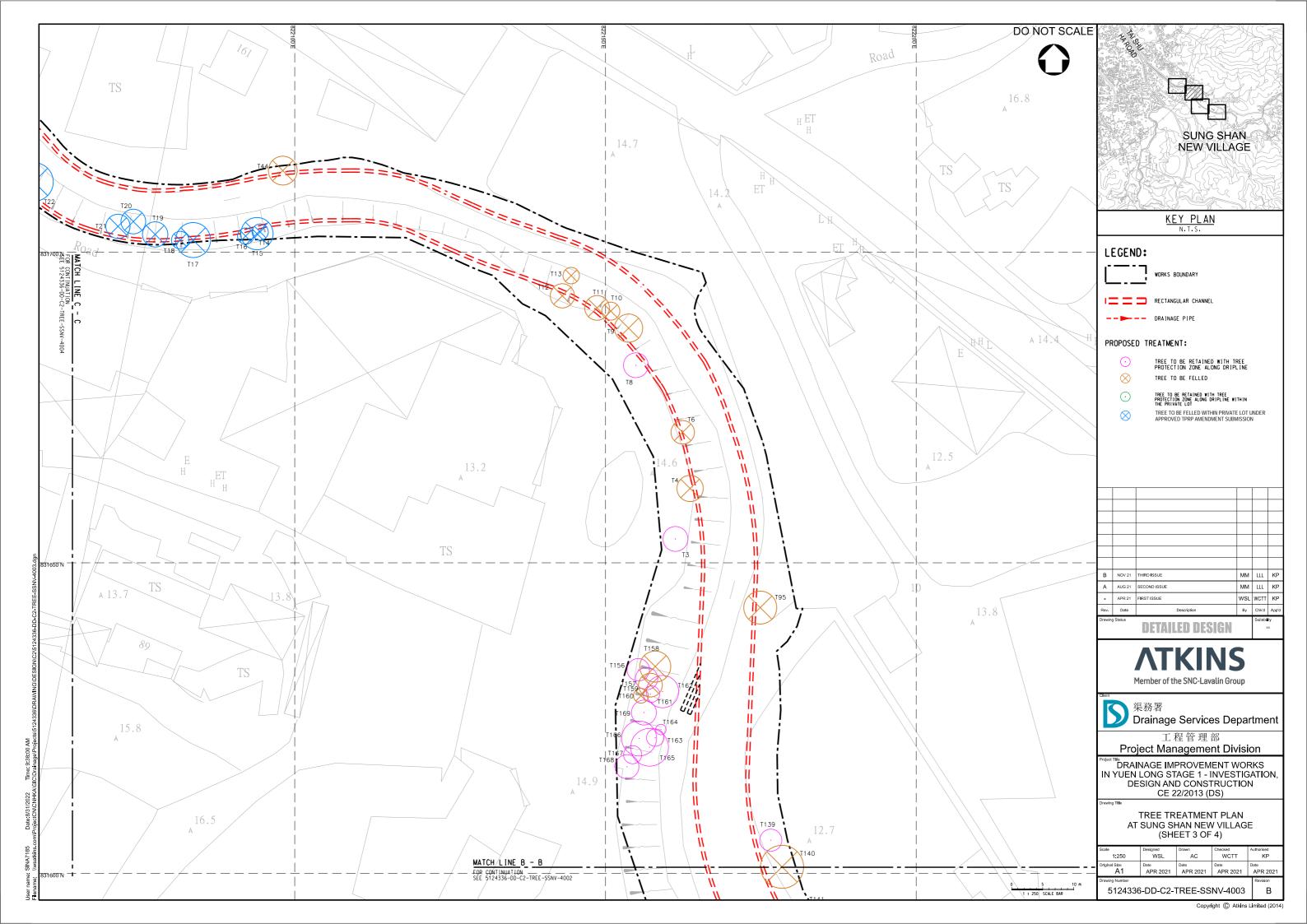


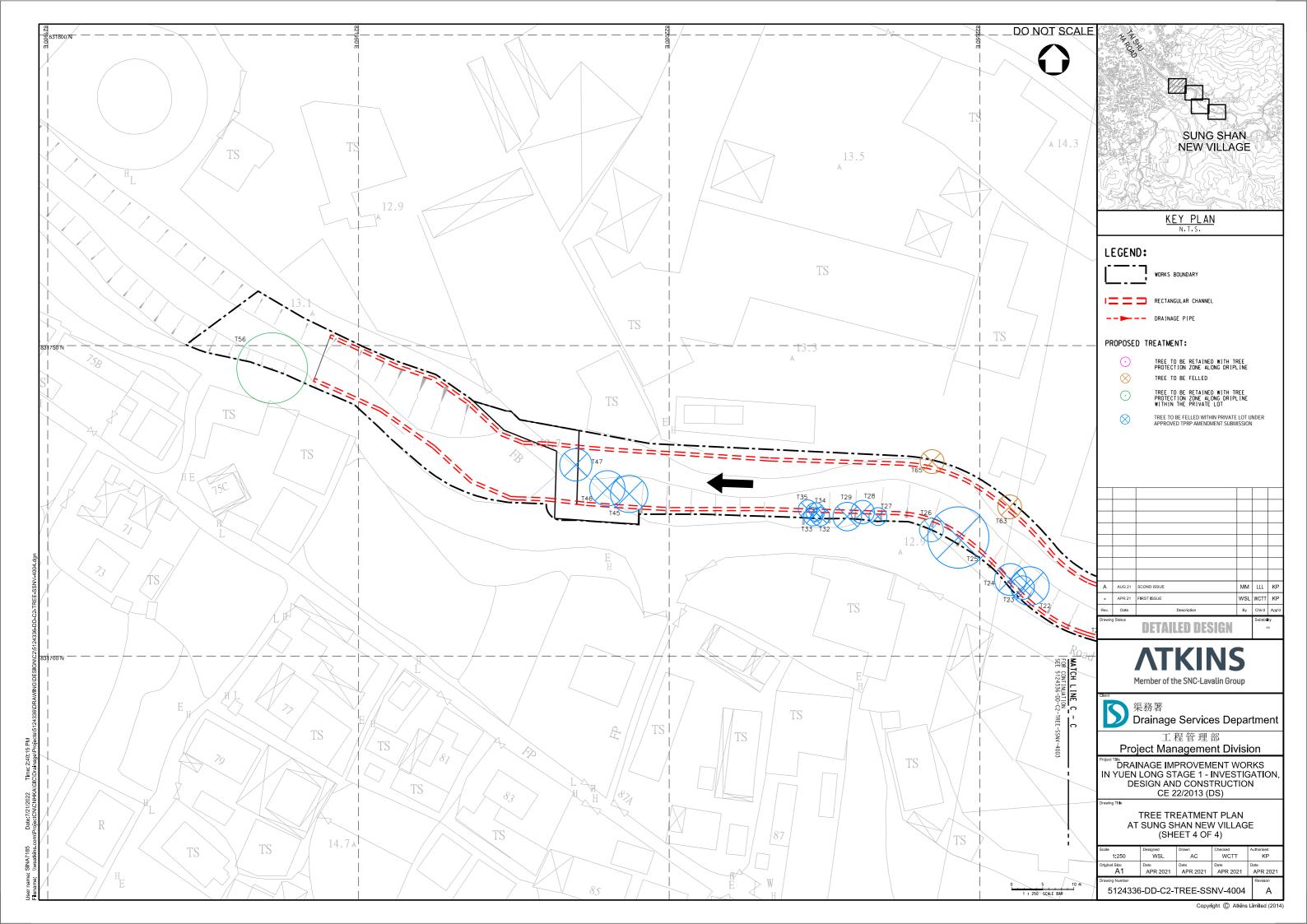


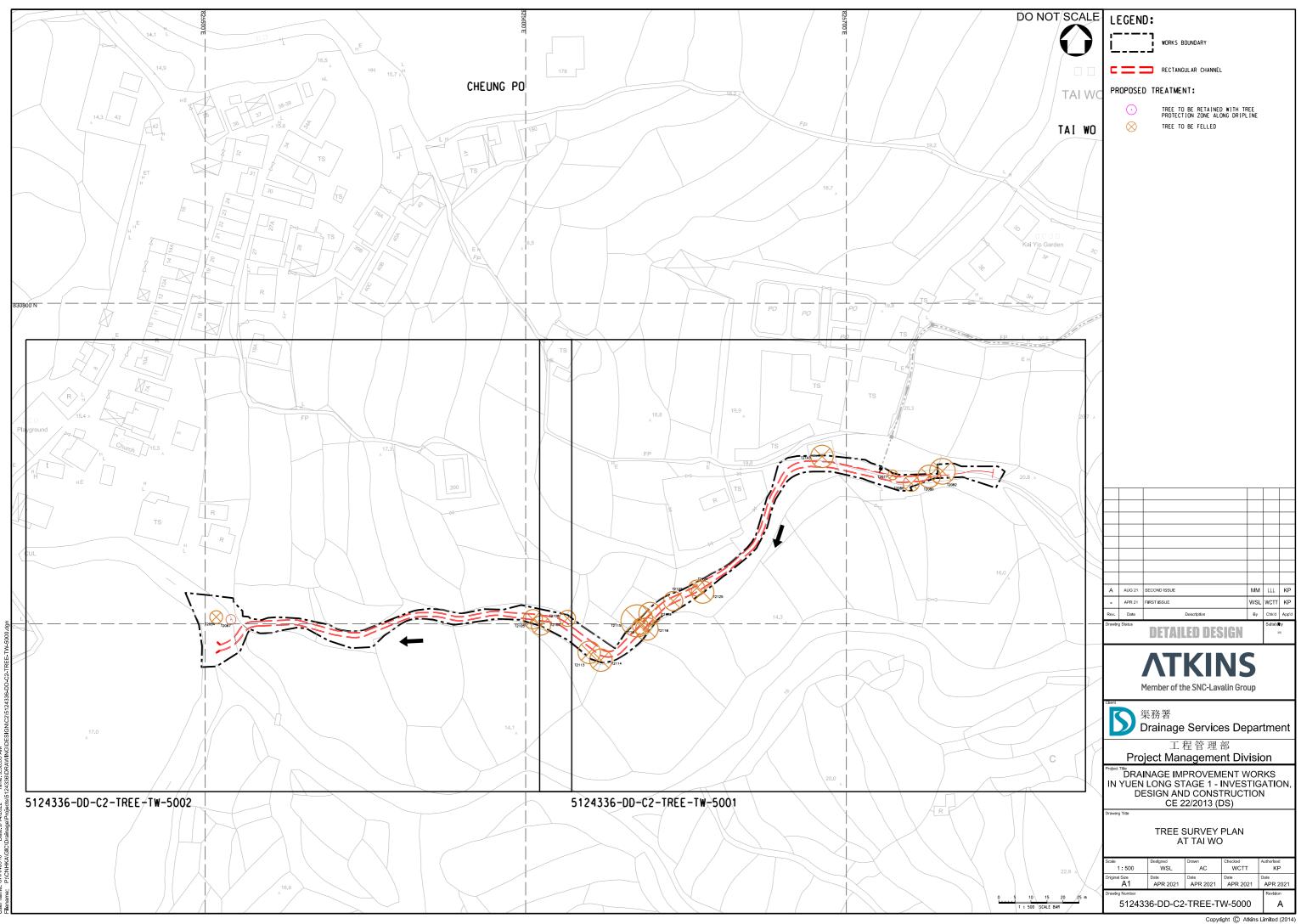


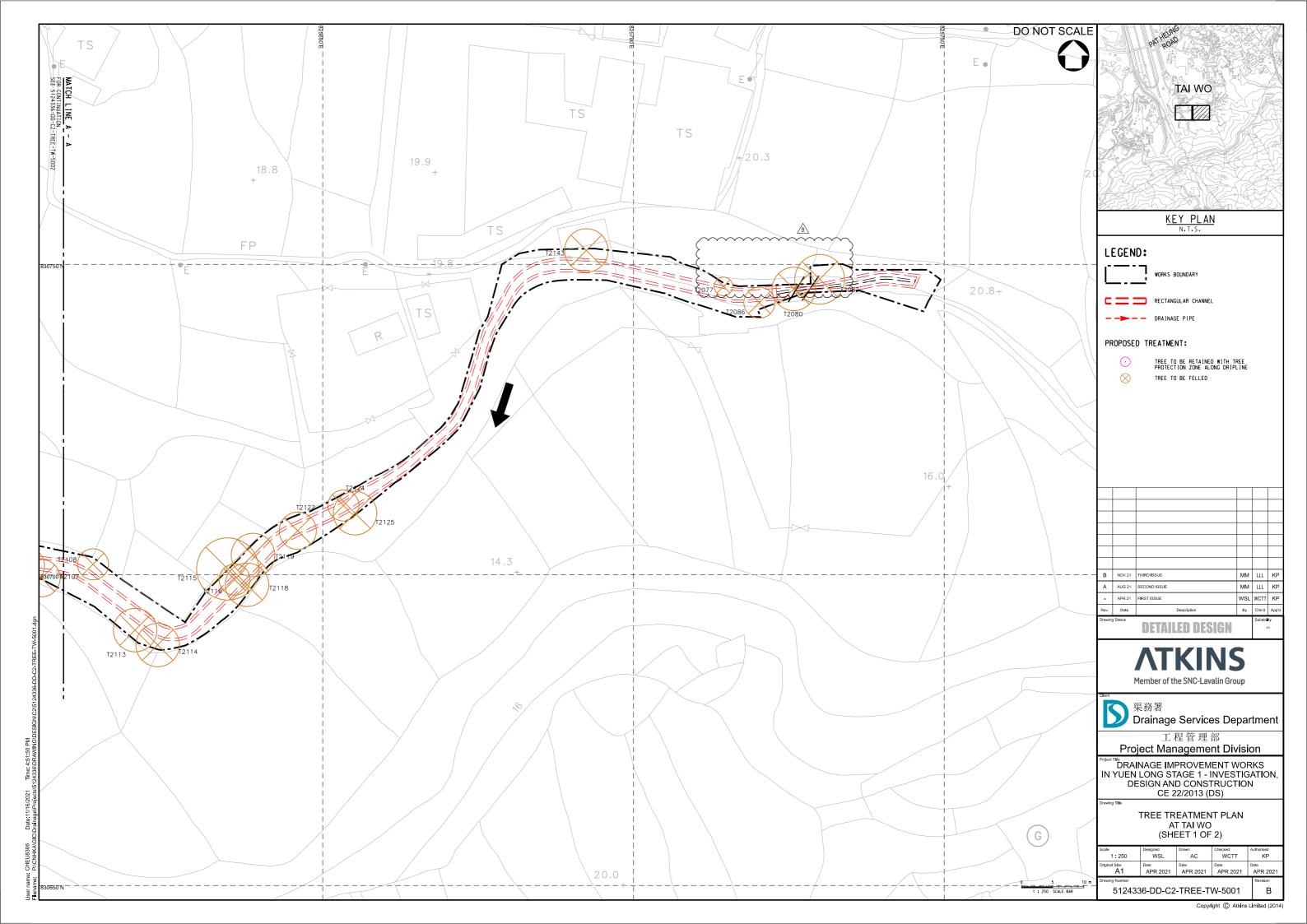


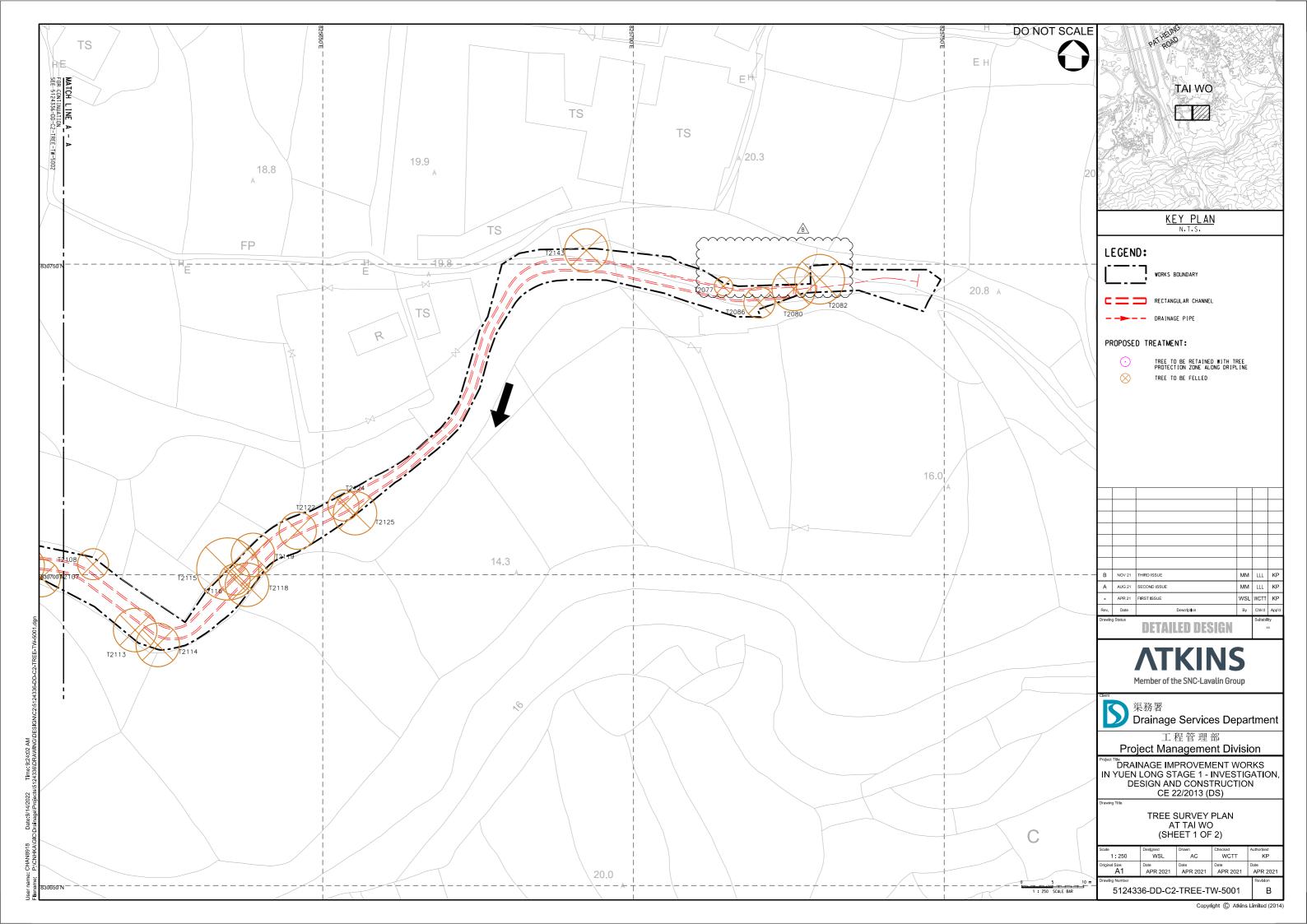


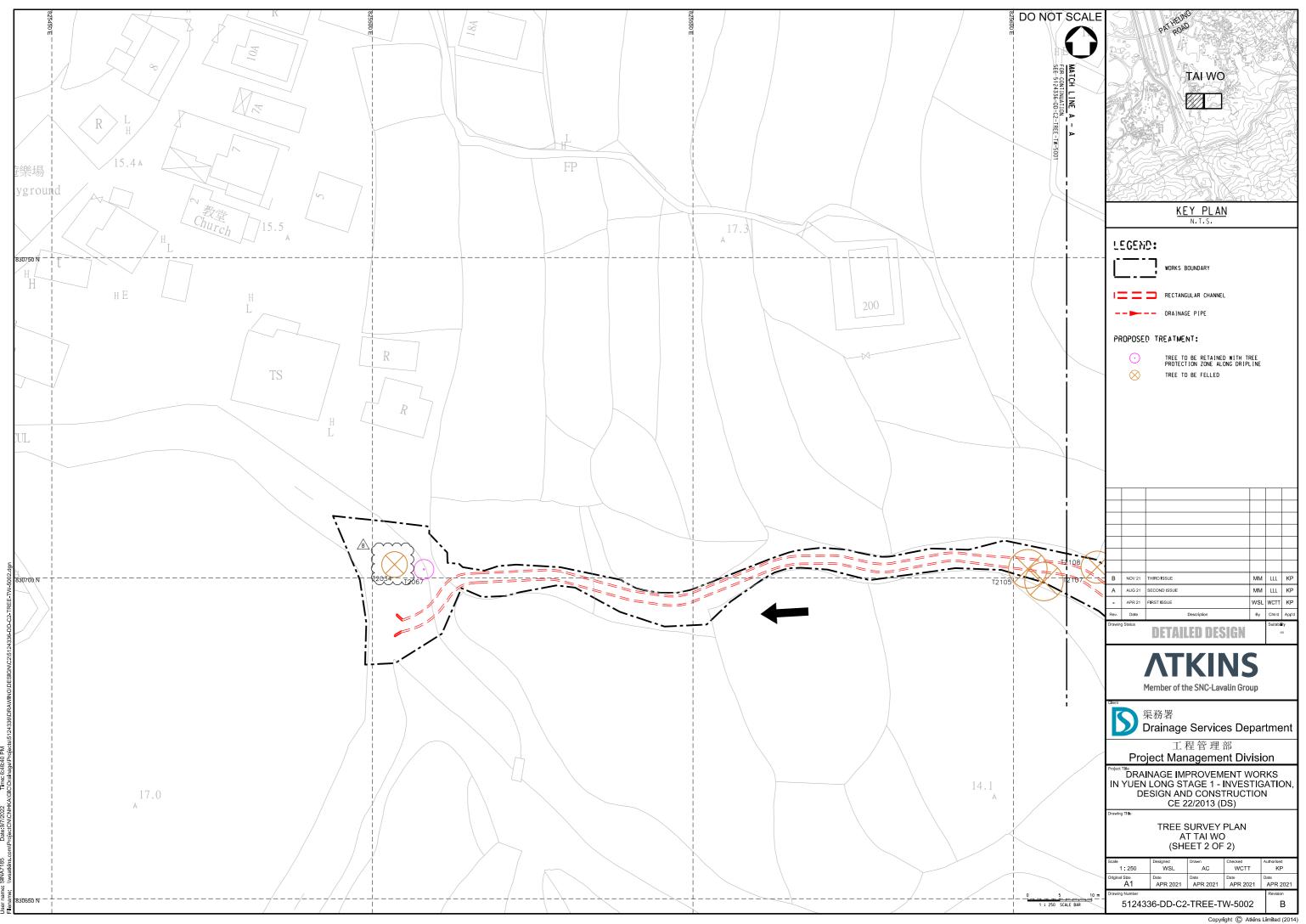




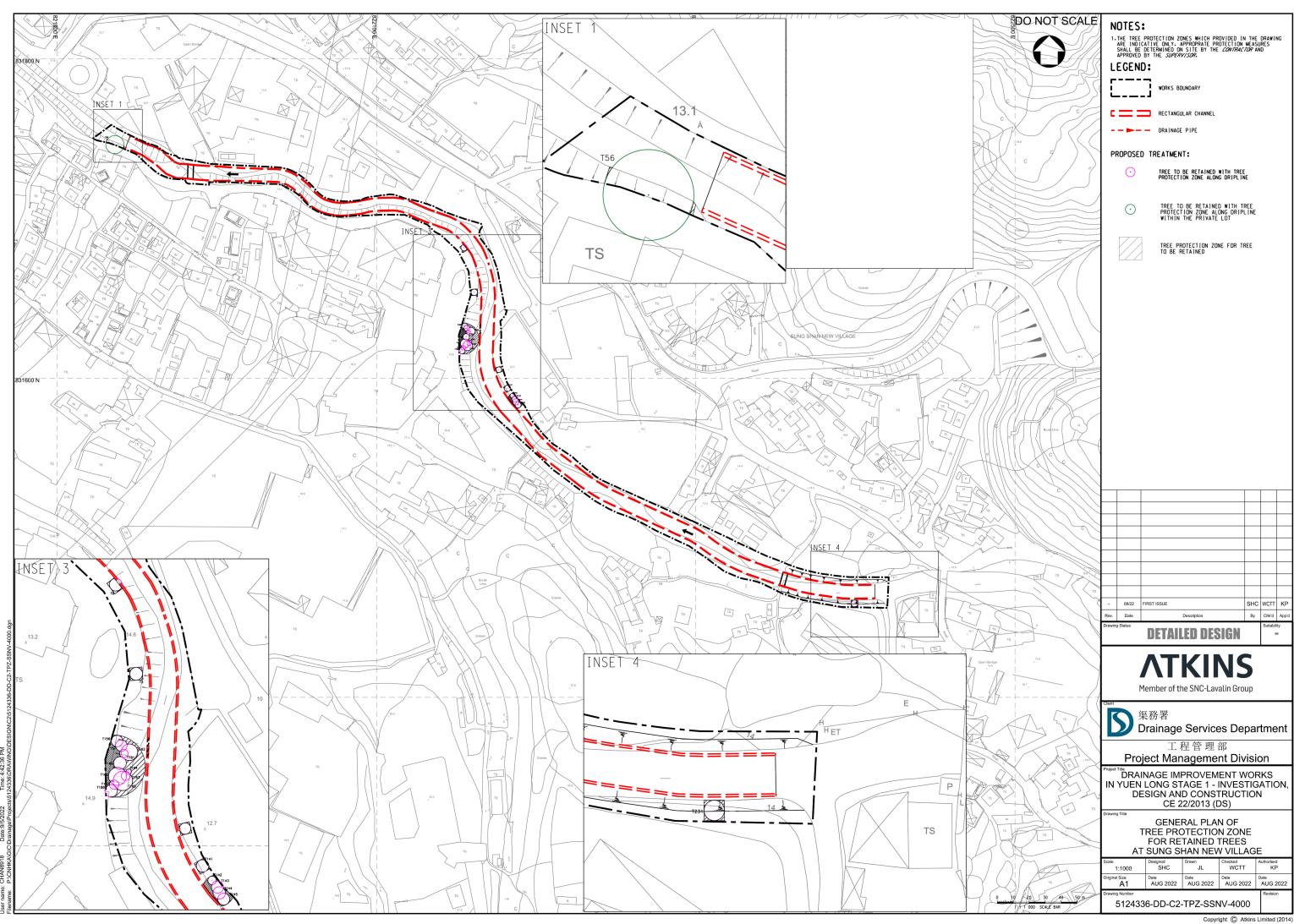


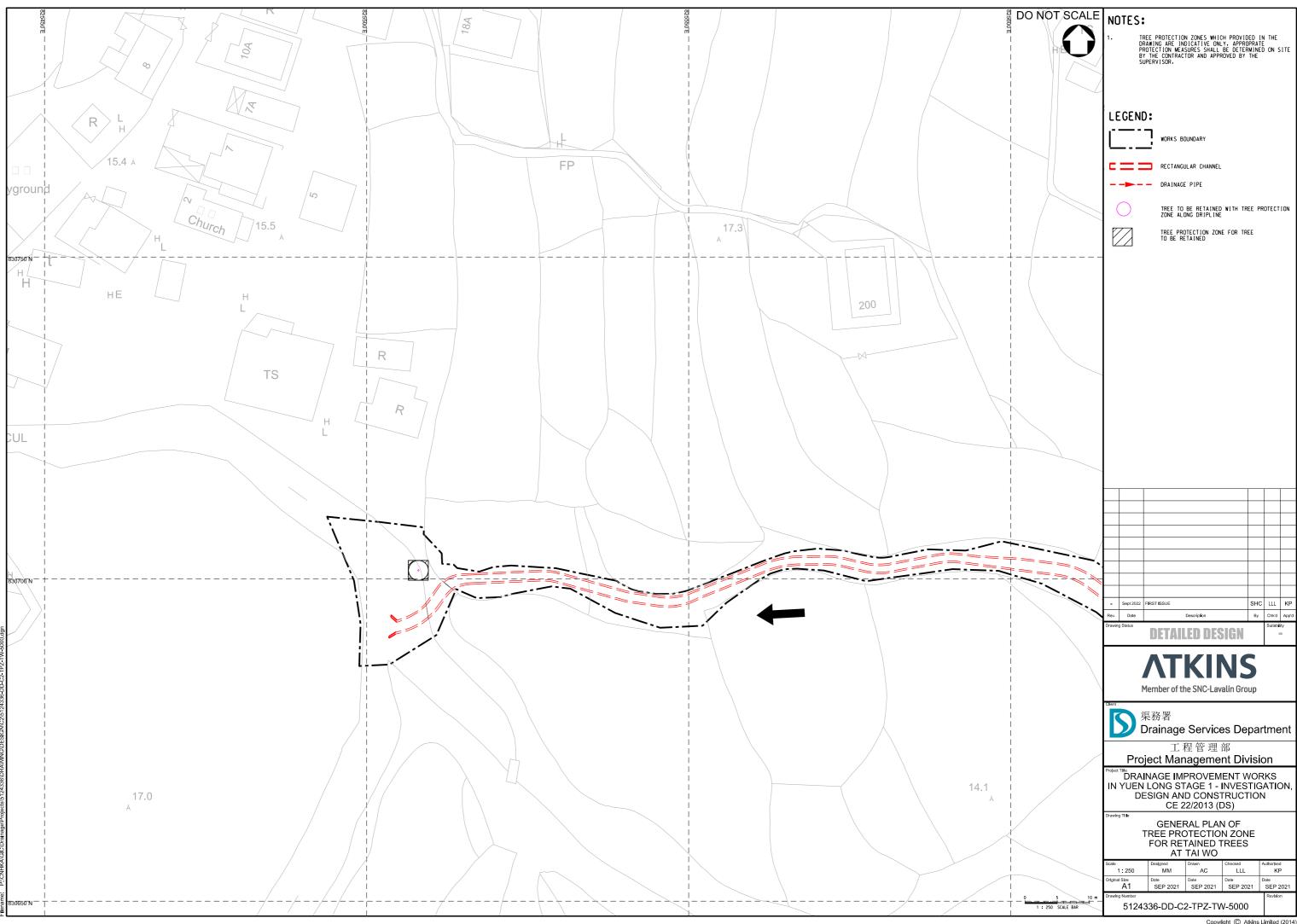


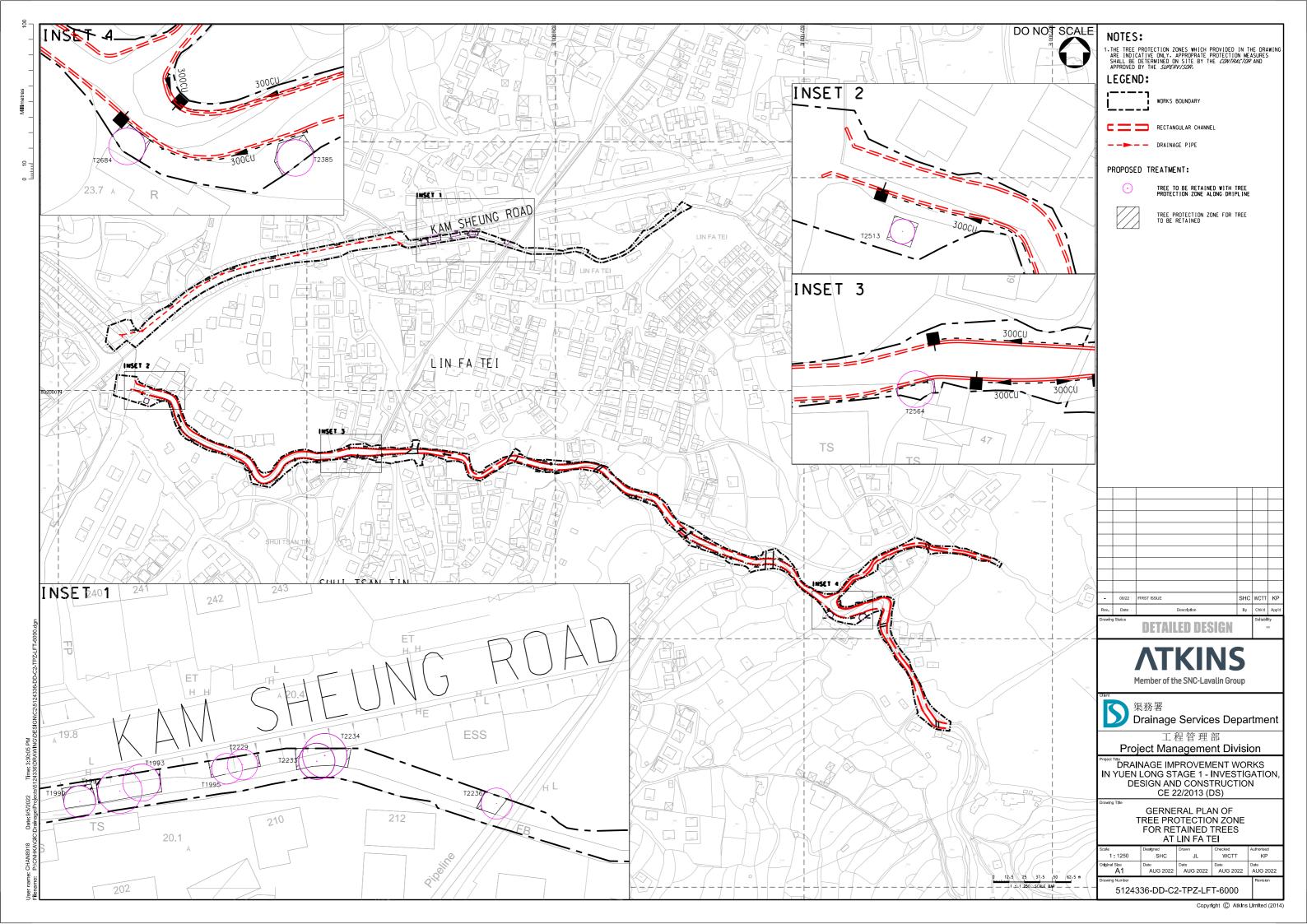


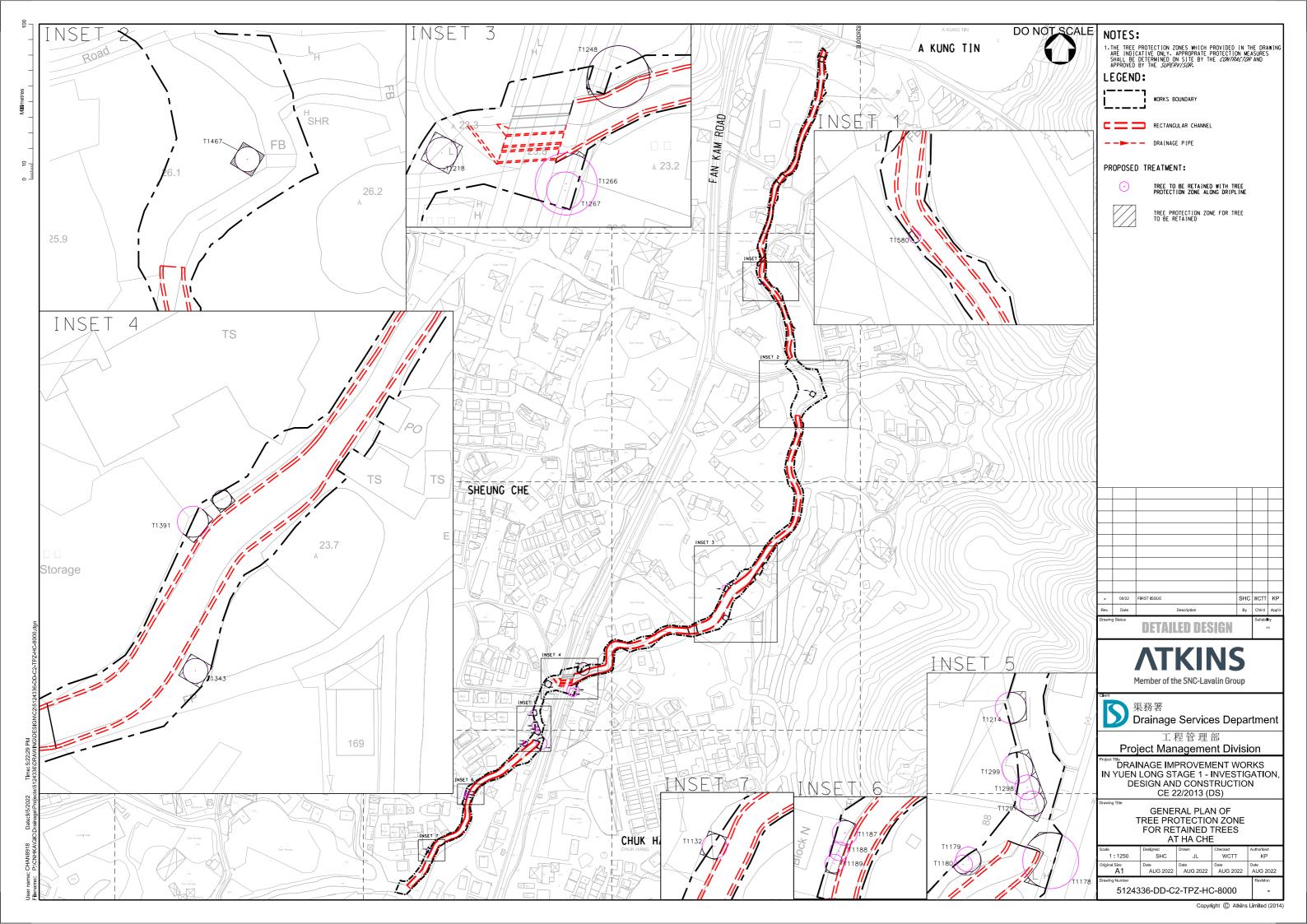


Appendix C – Location Plan of Retain Tree

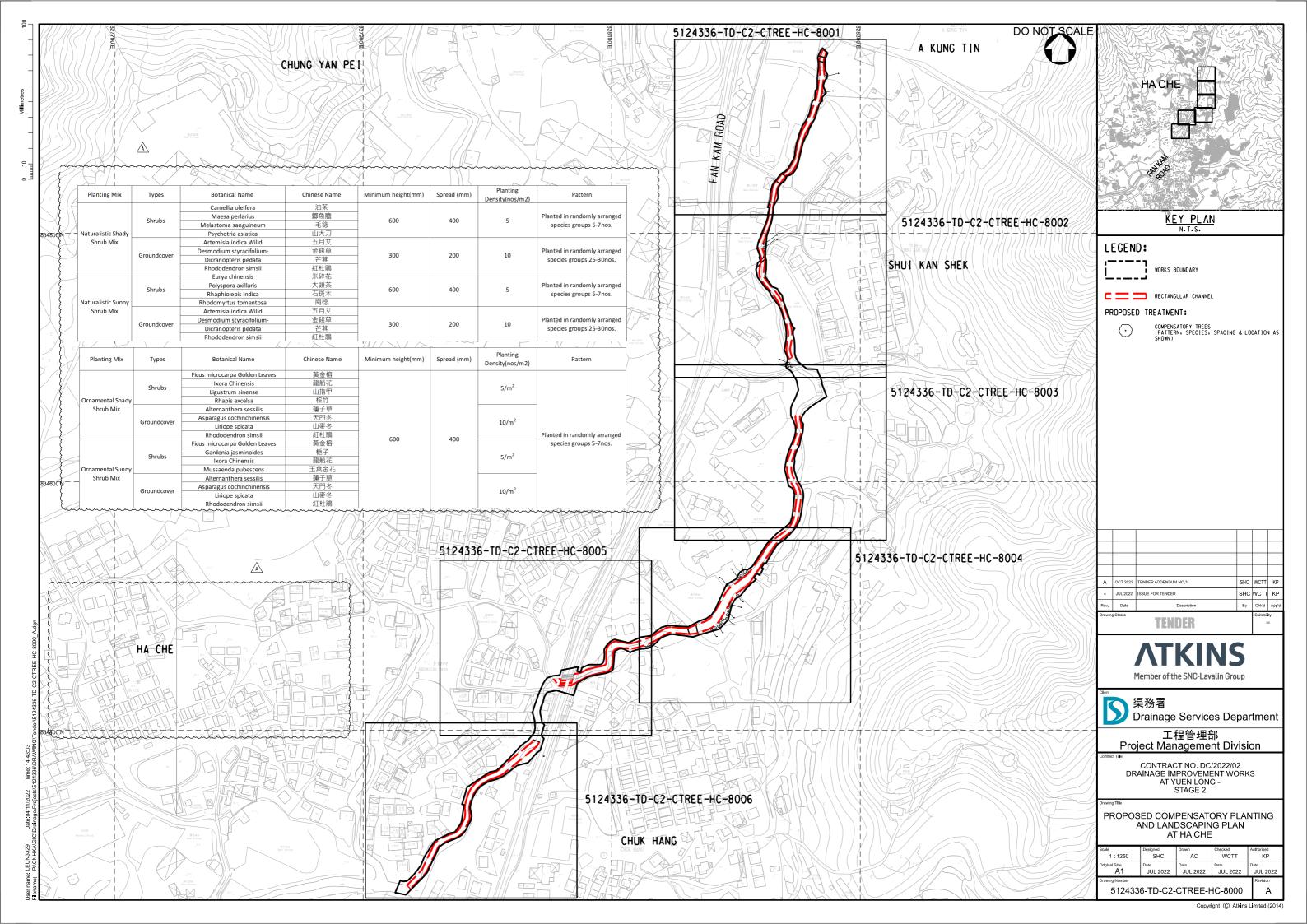


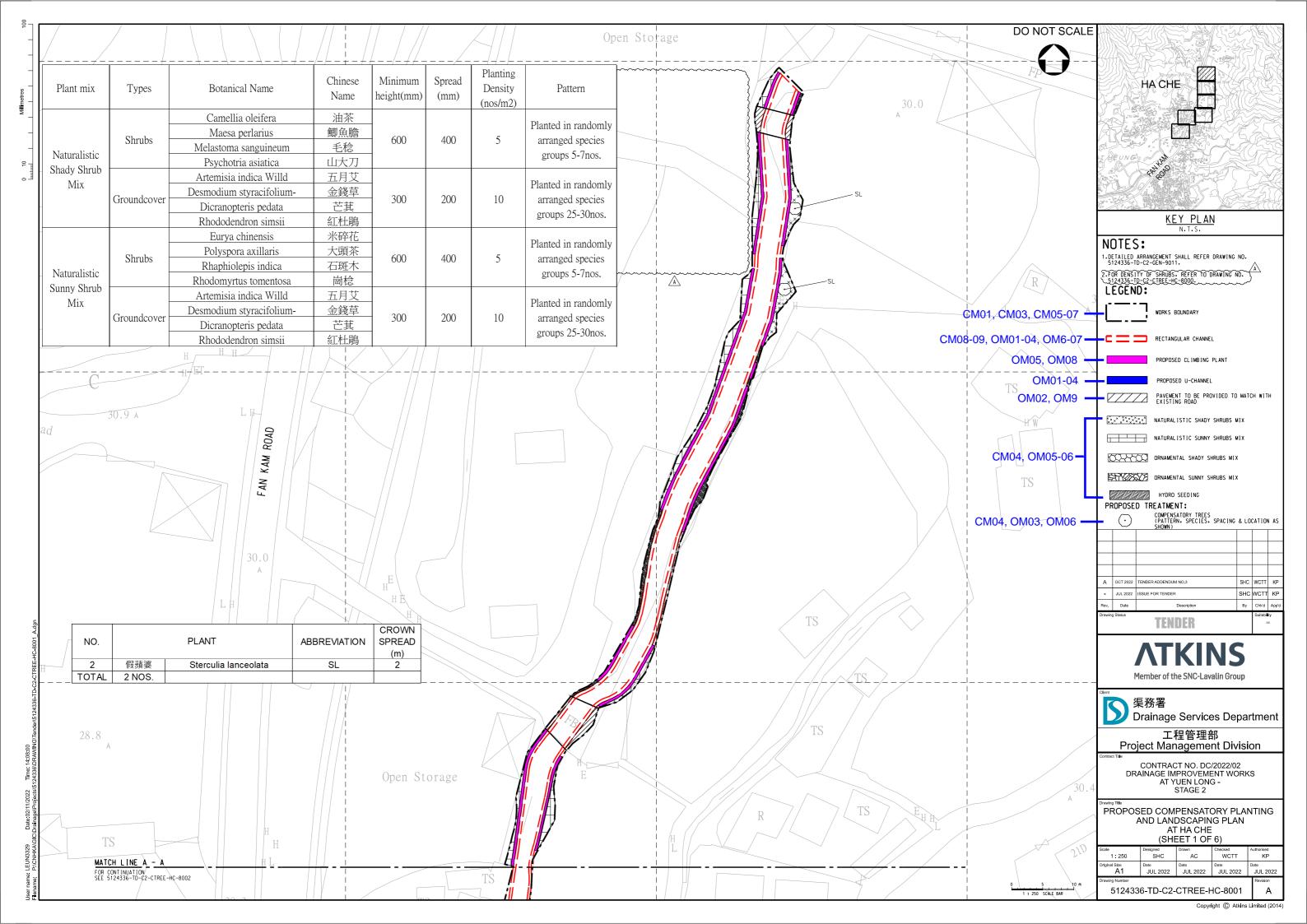


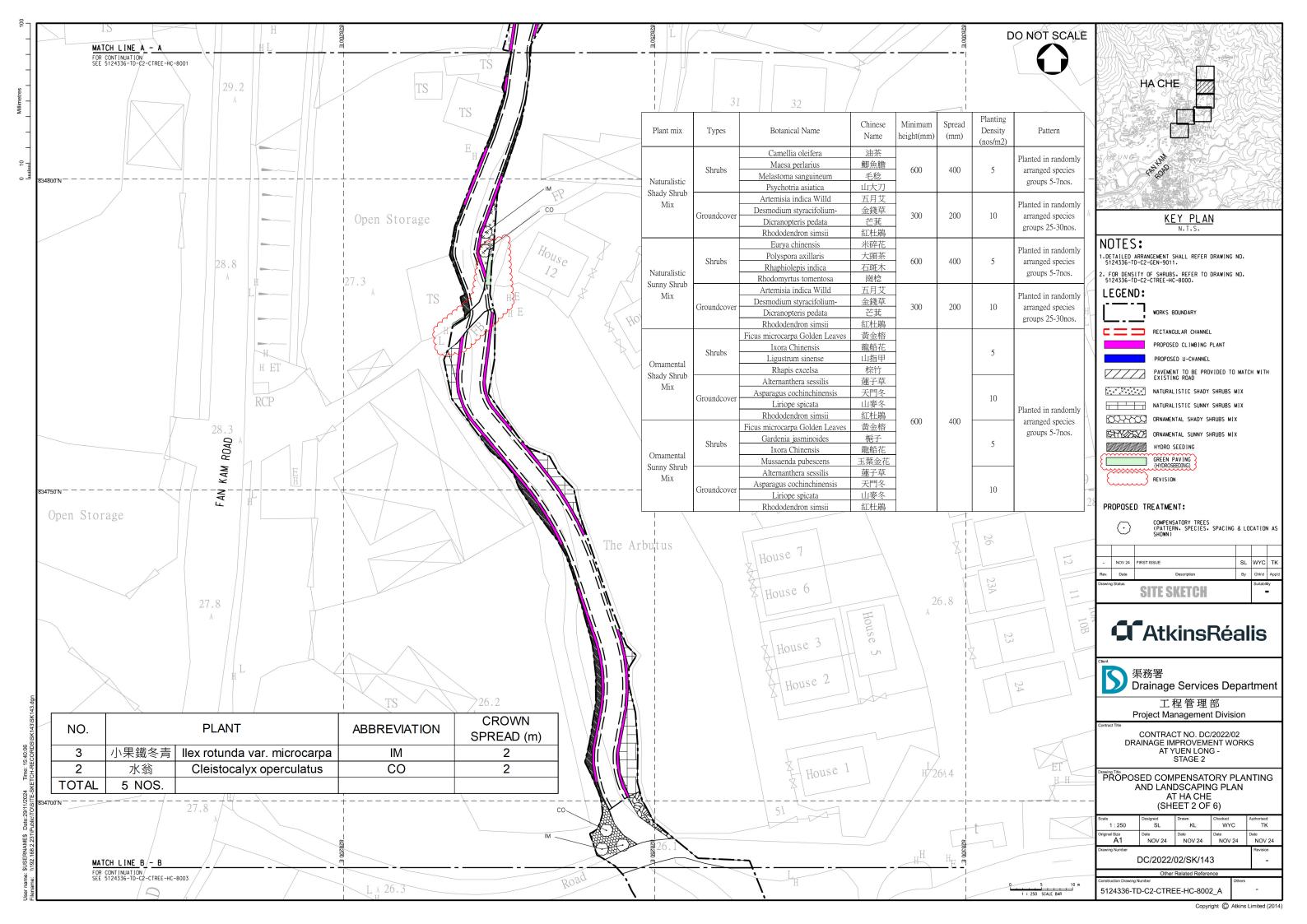


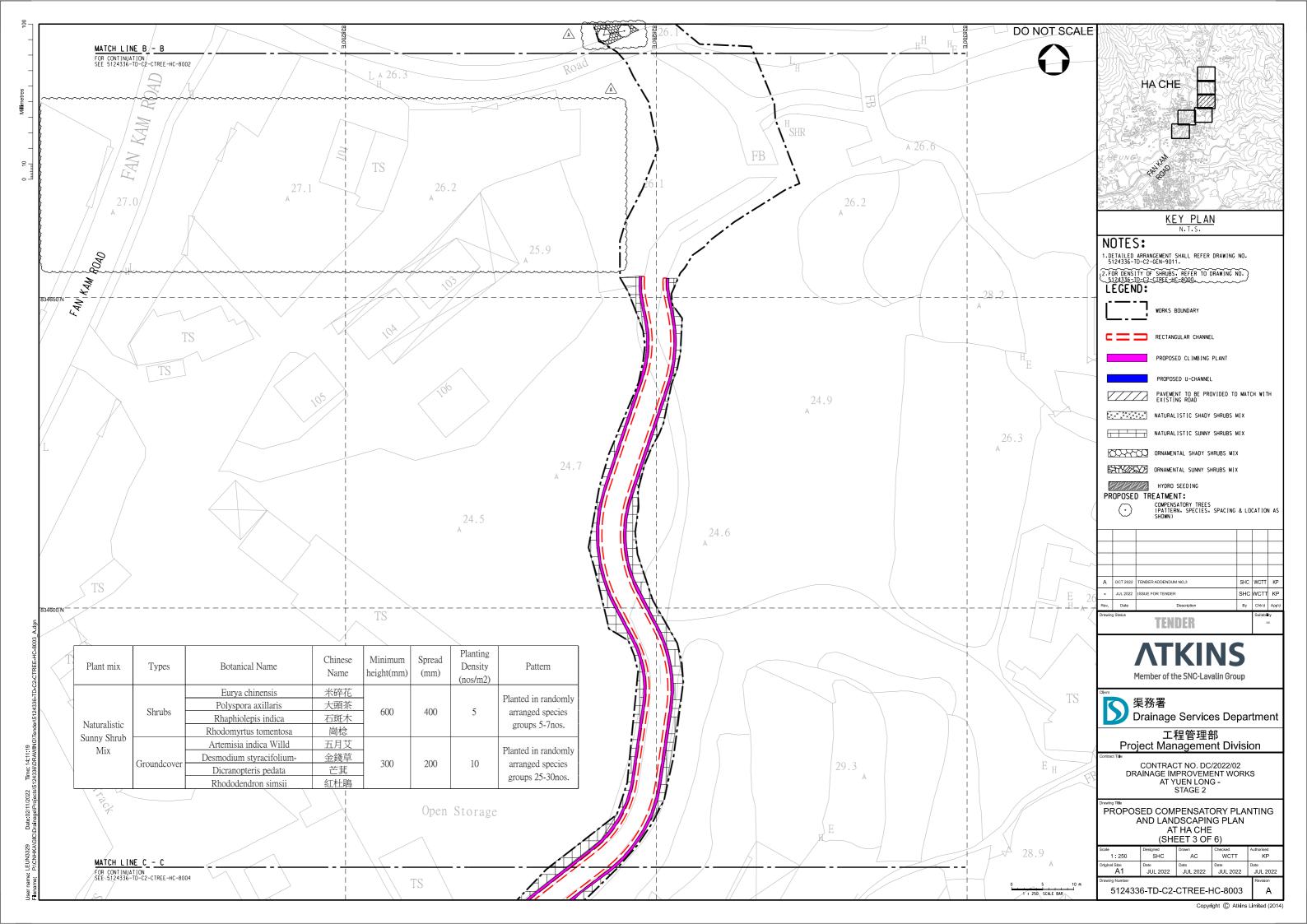


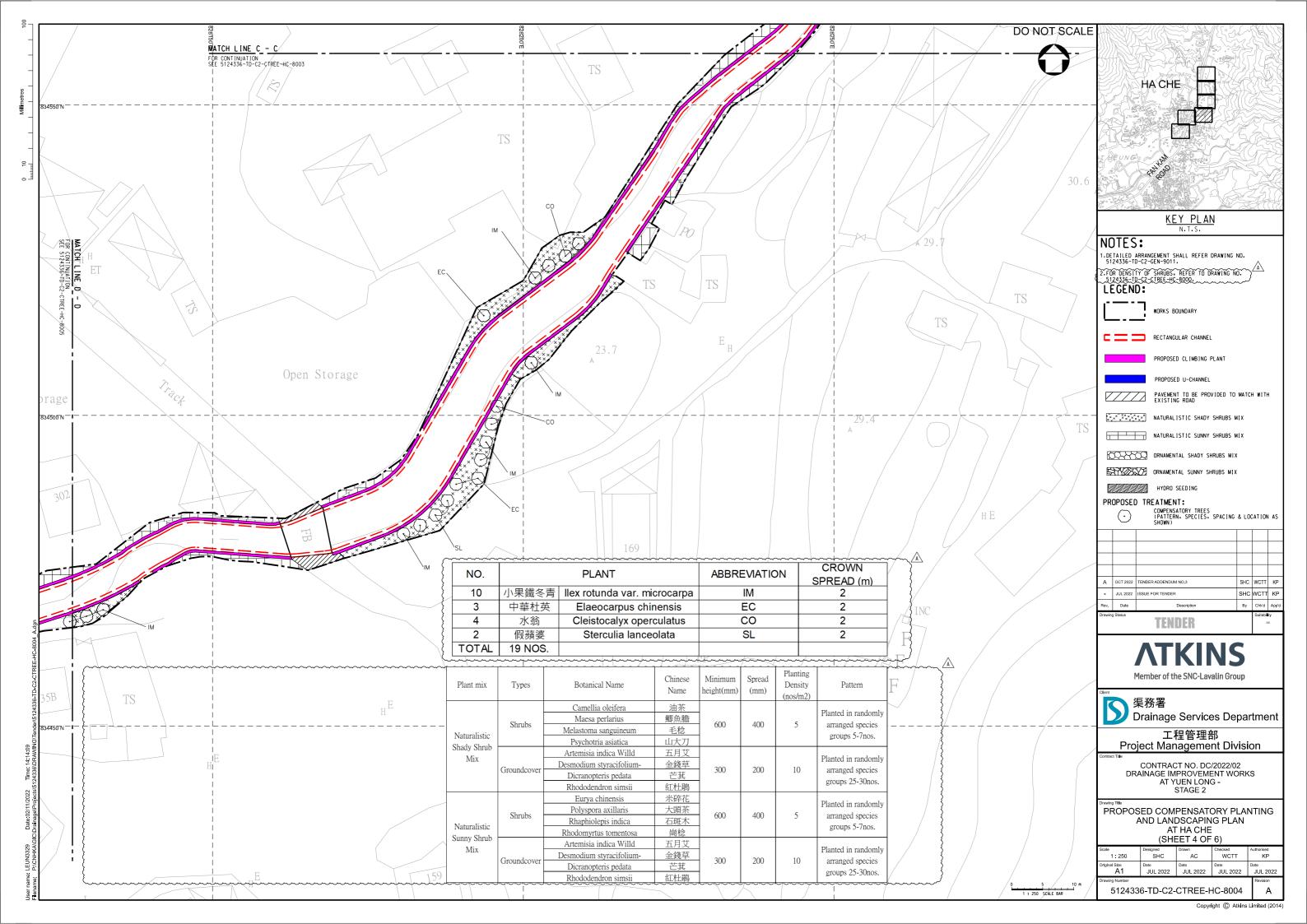
Appendix D – Compensatory Planting

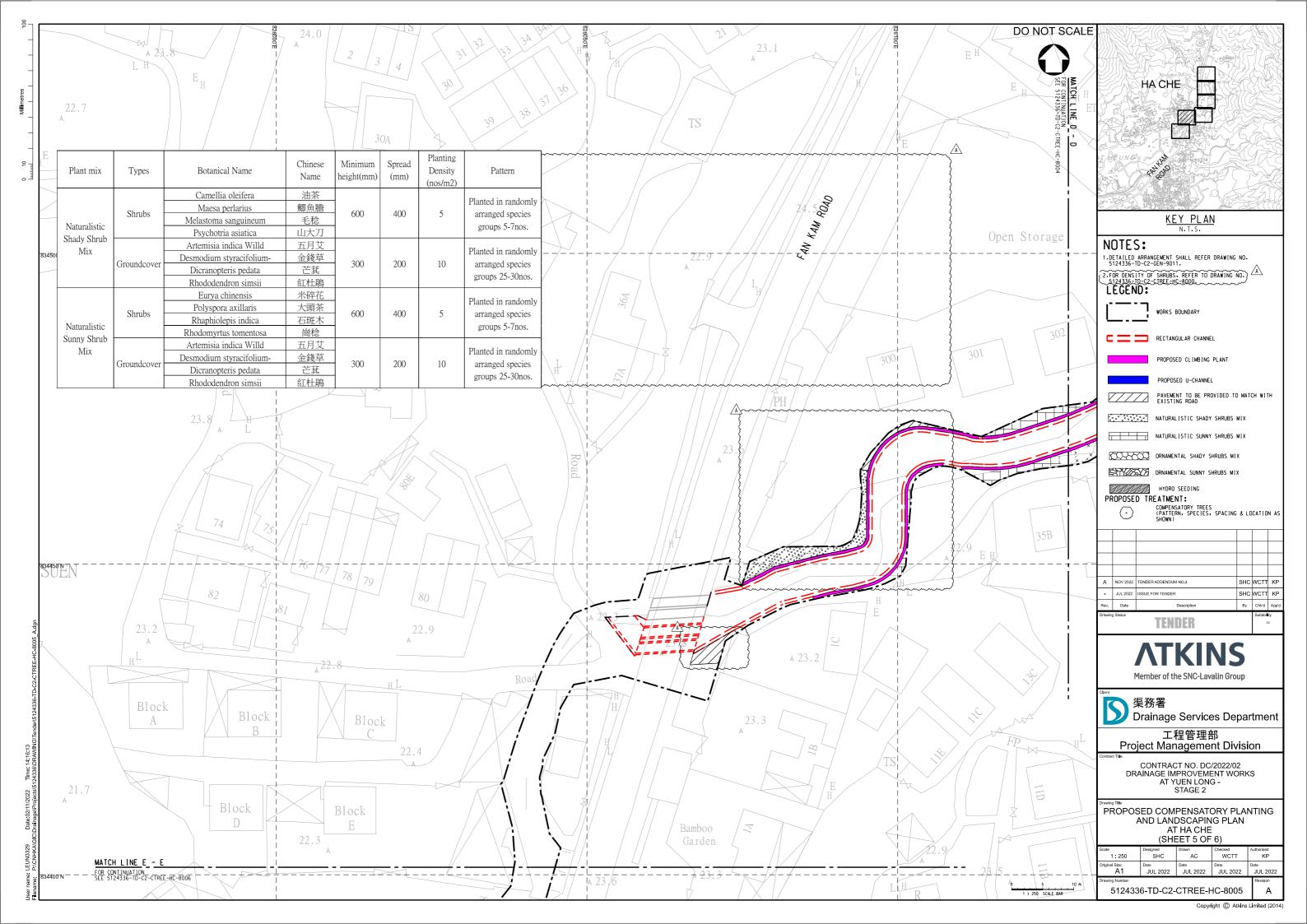


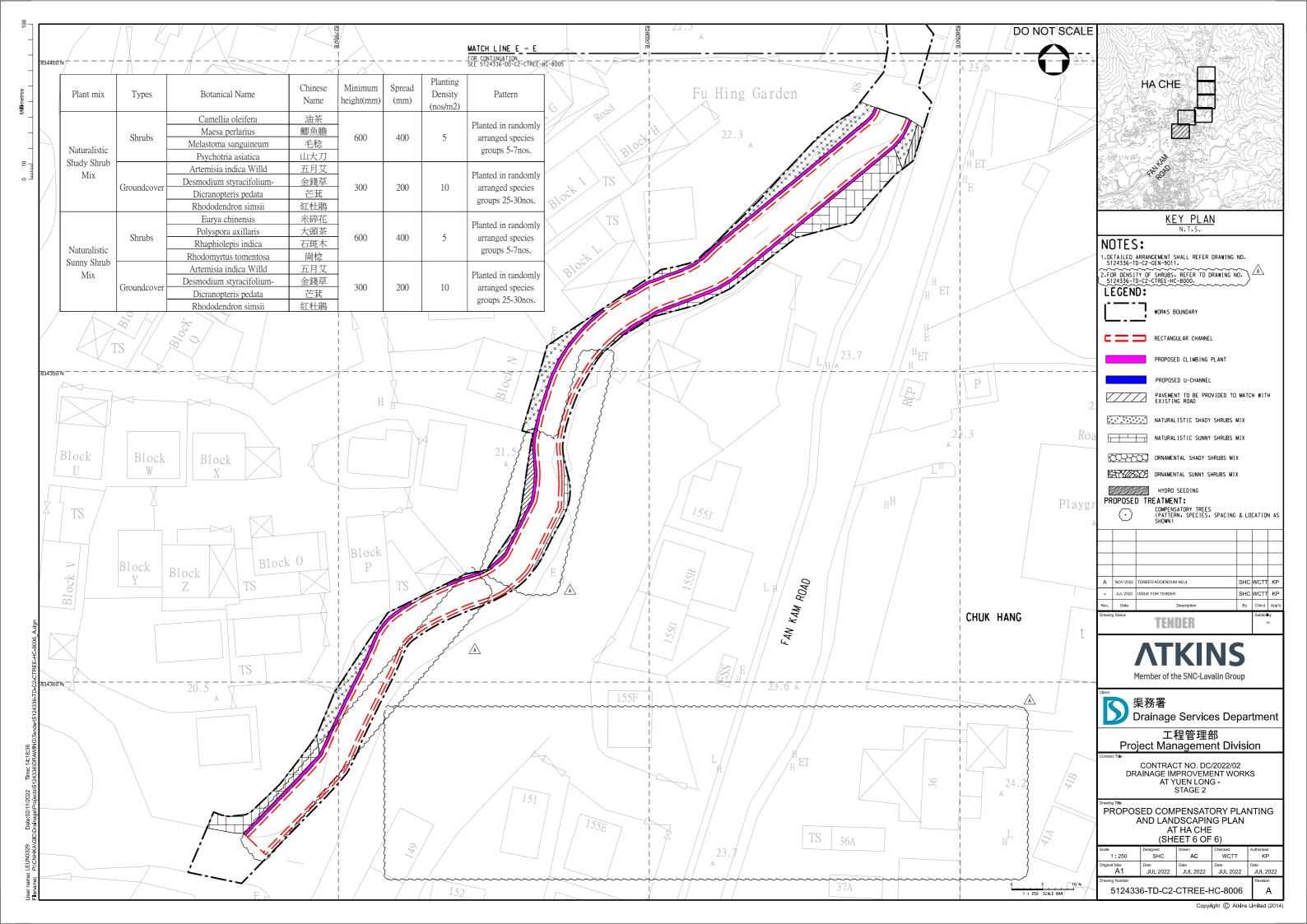


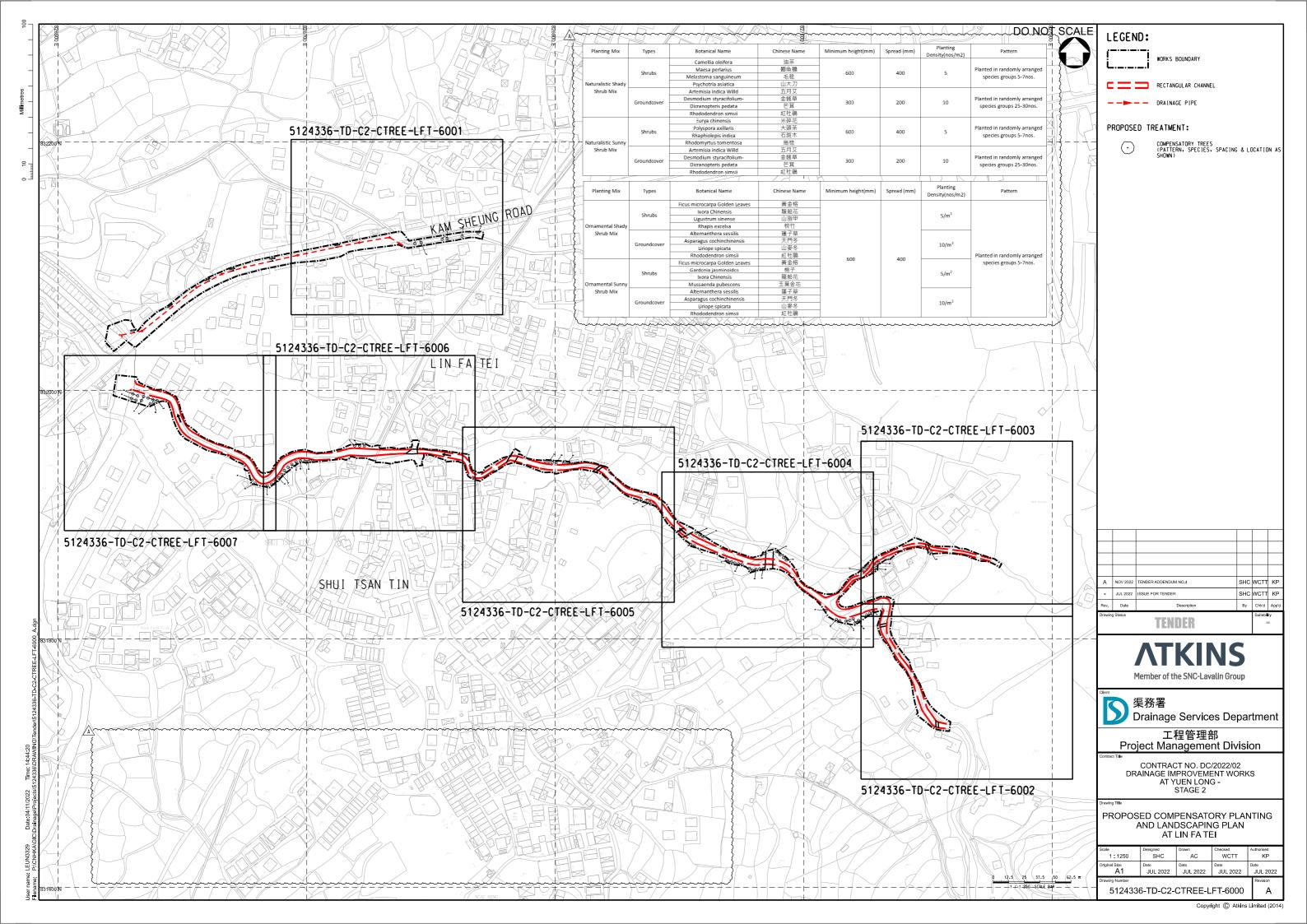


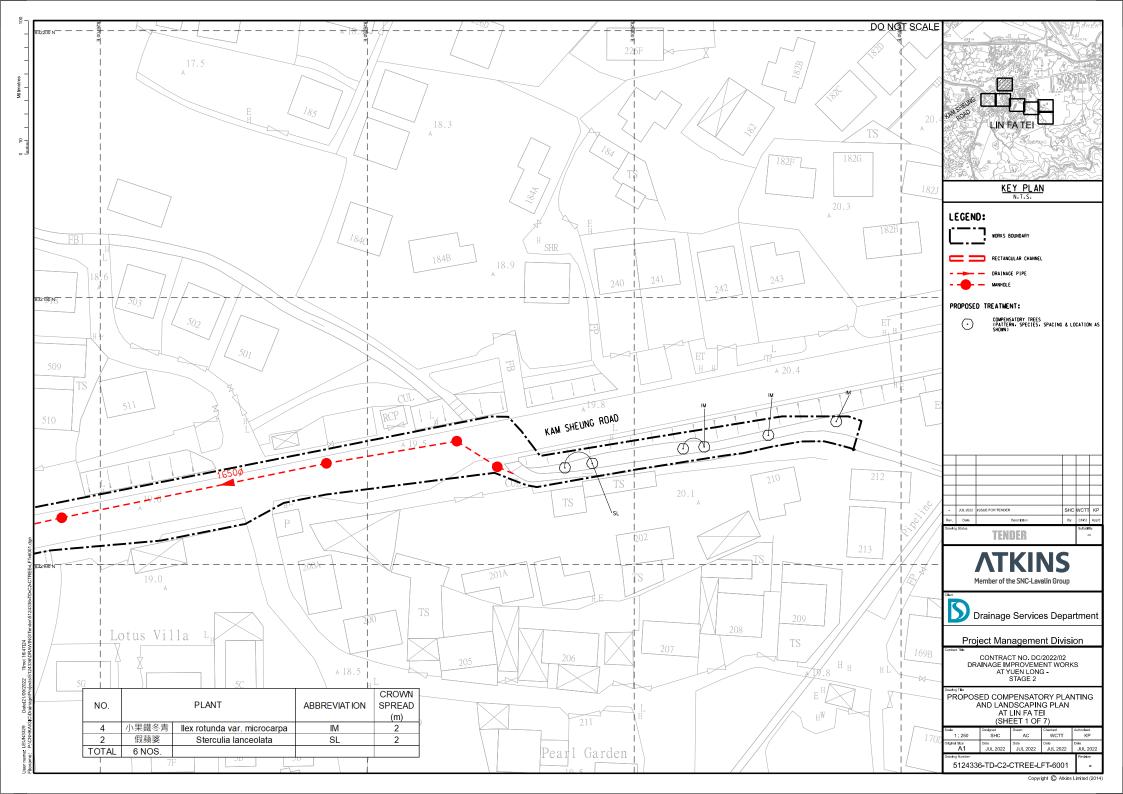


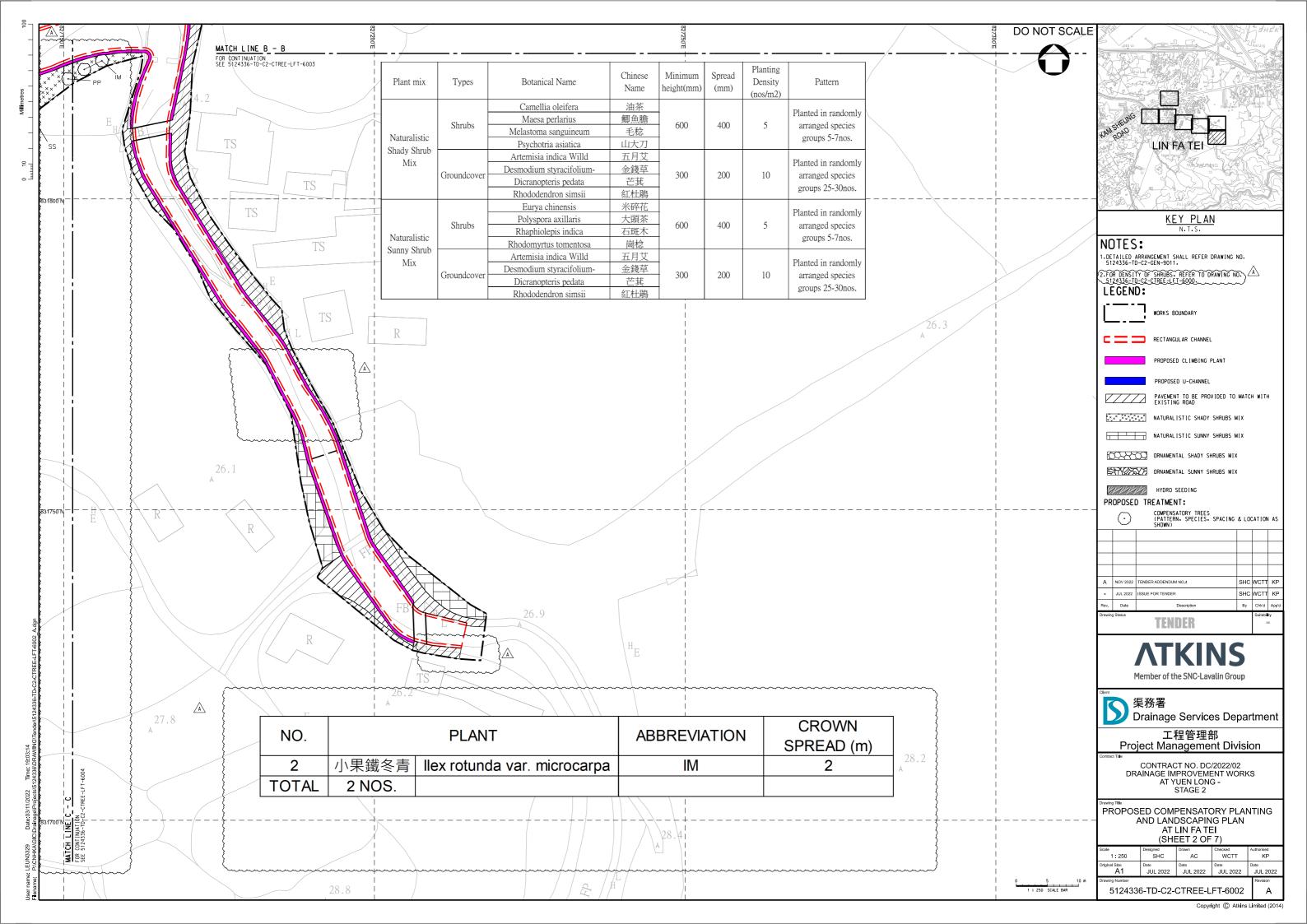


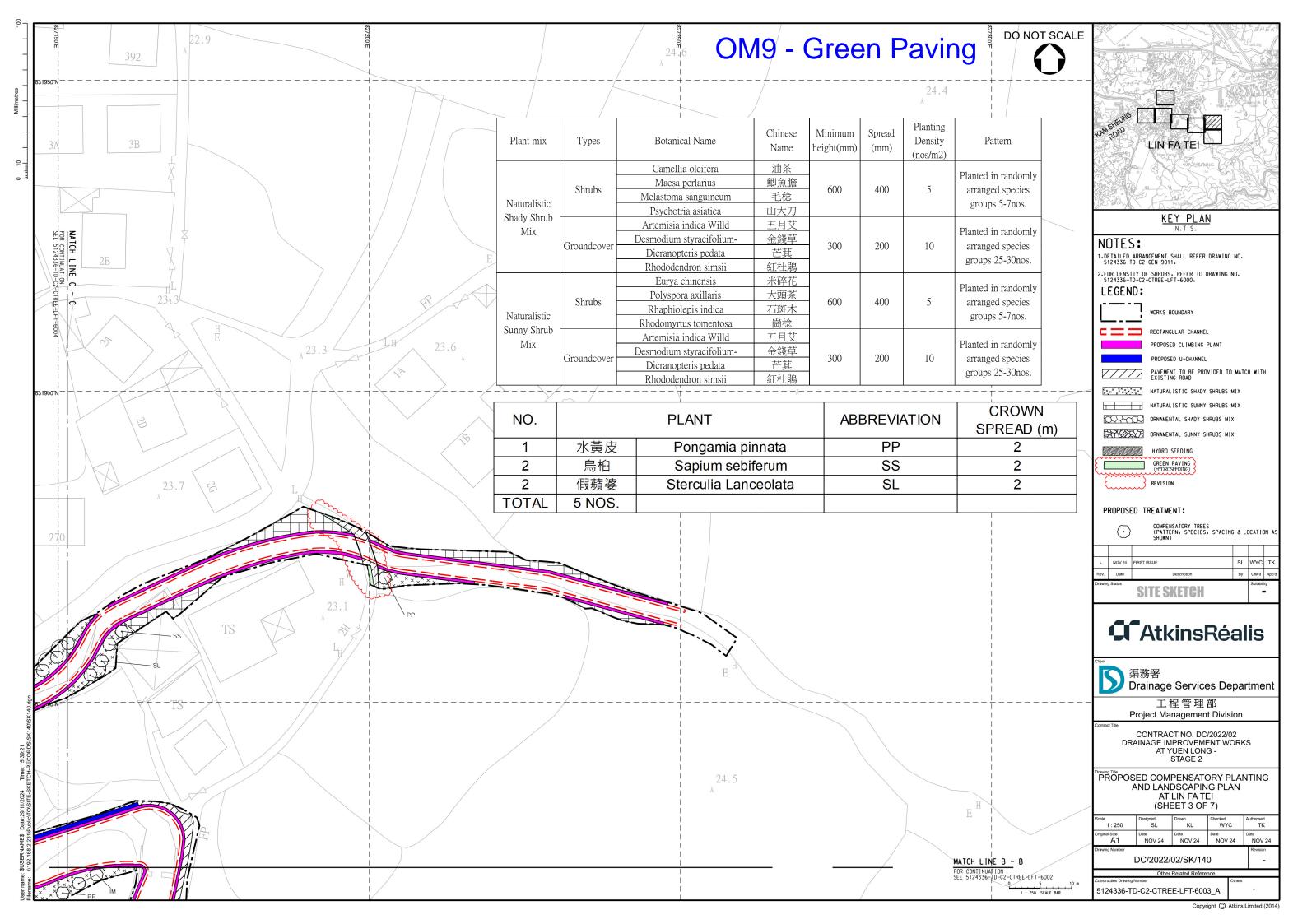


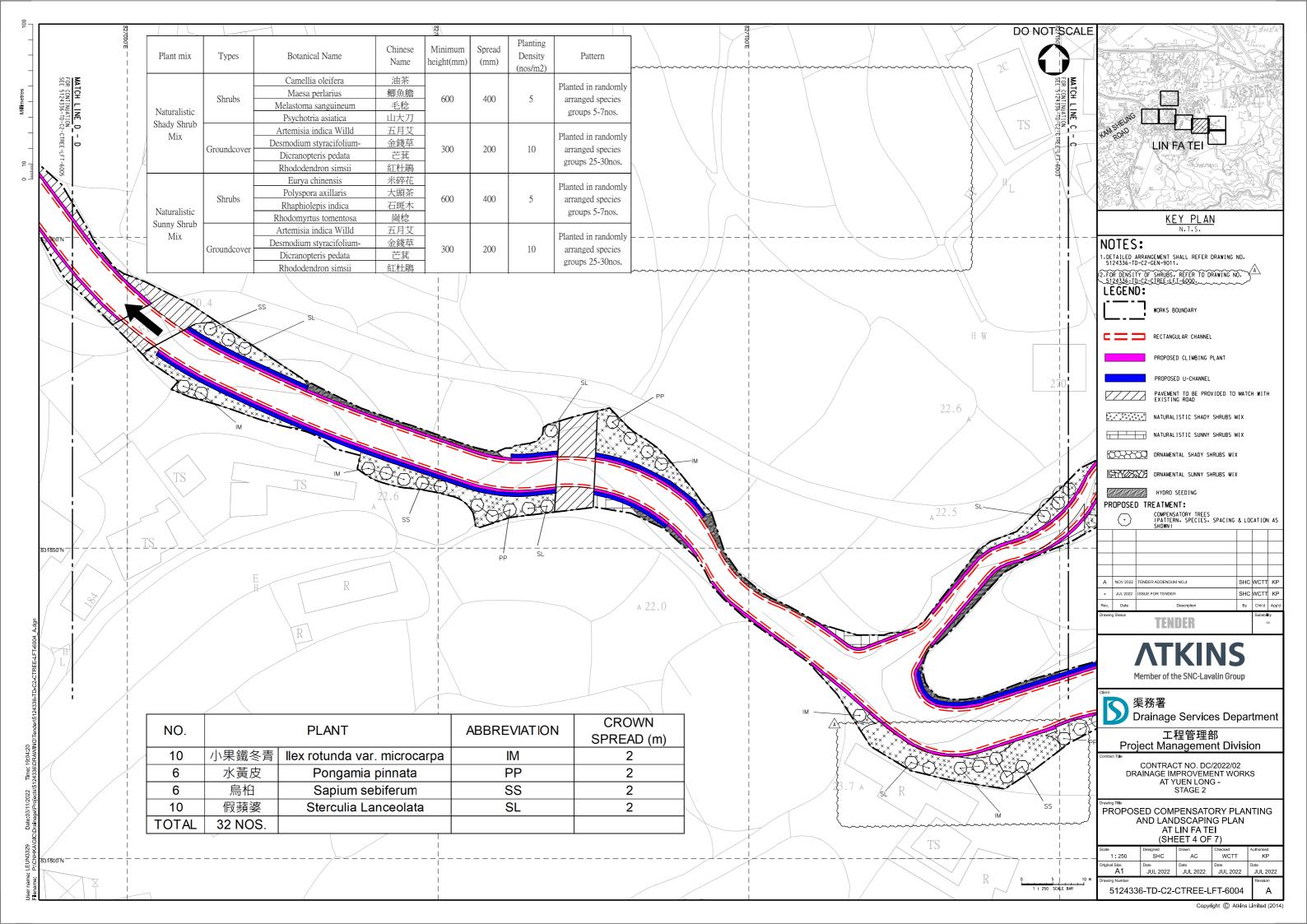


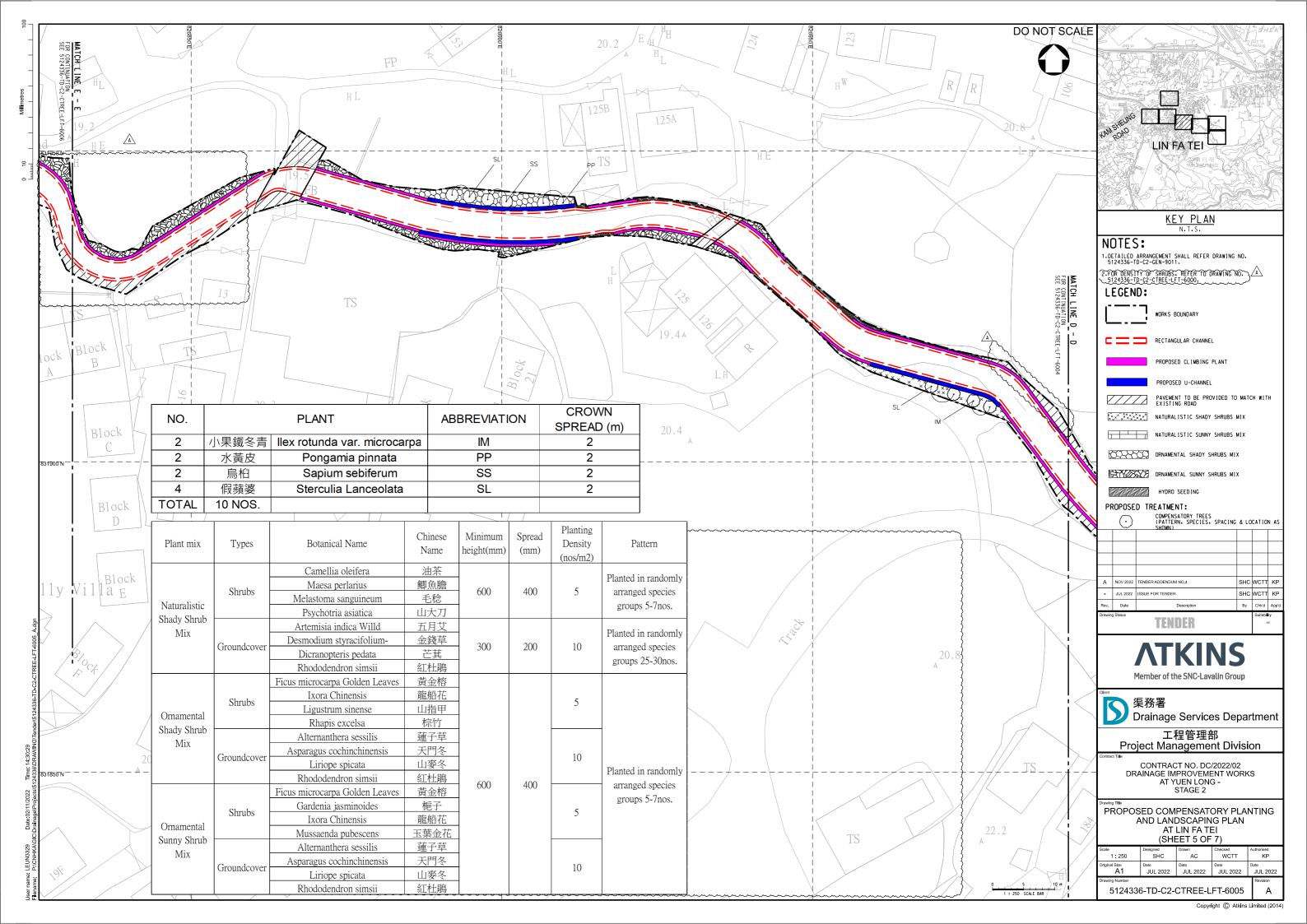


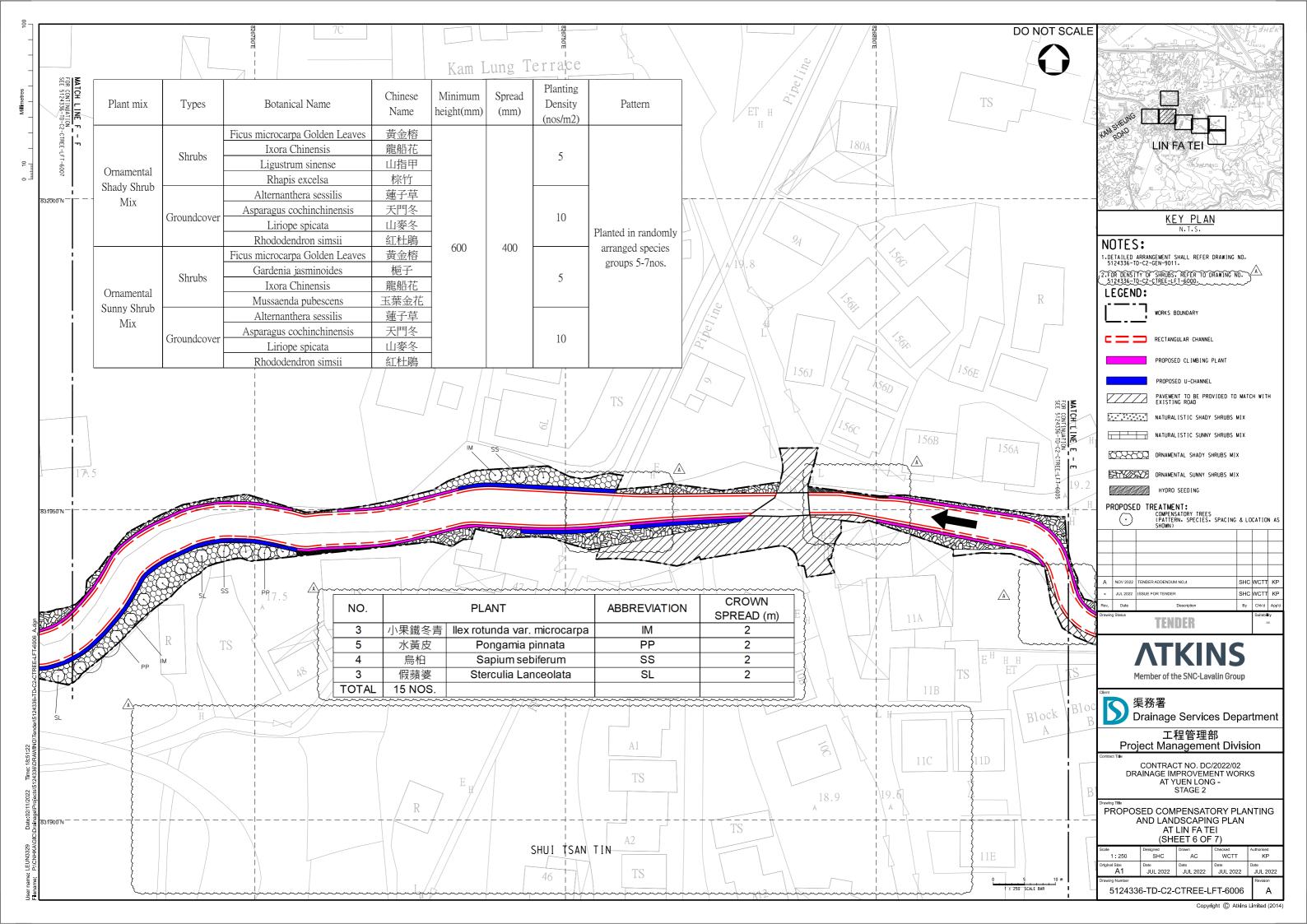


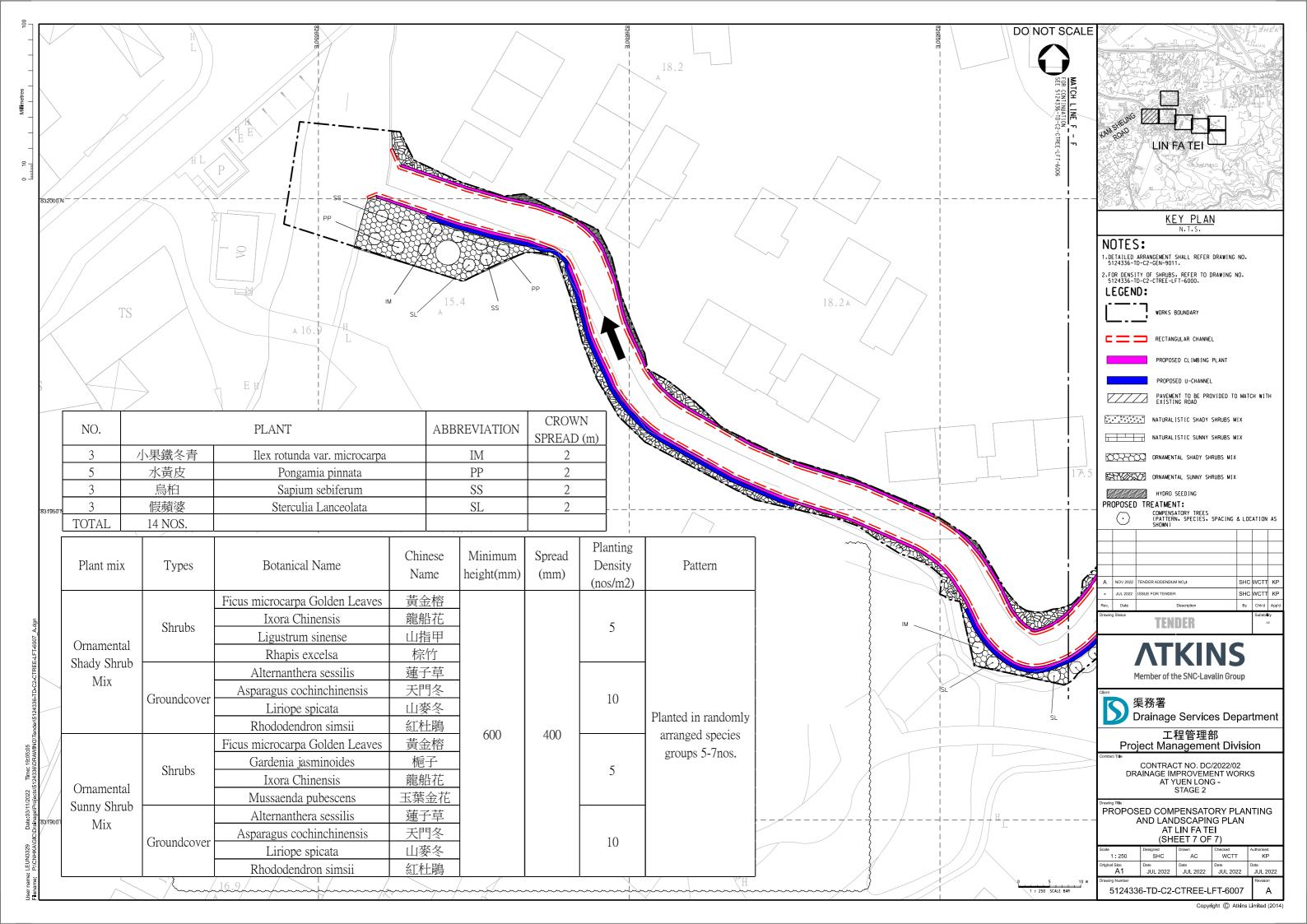


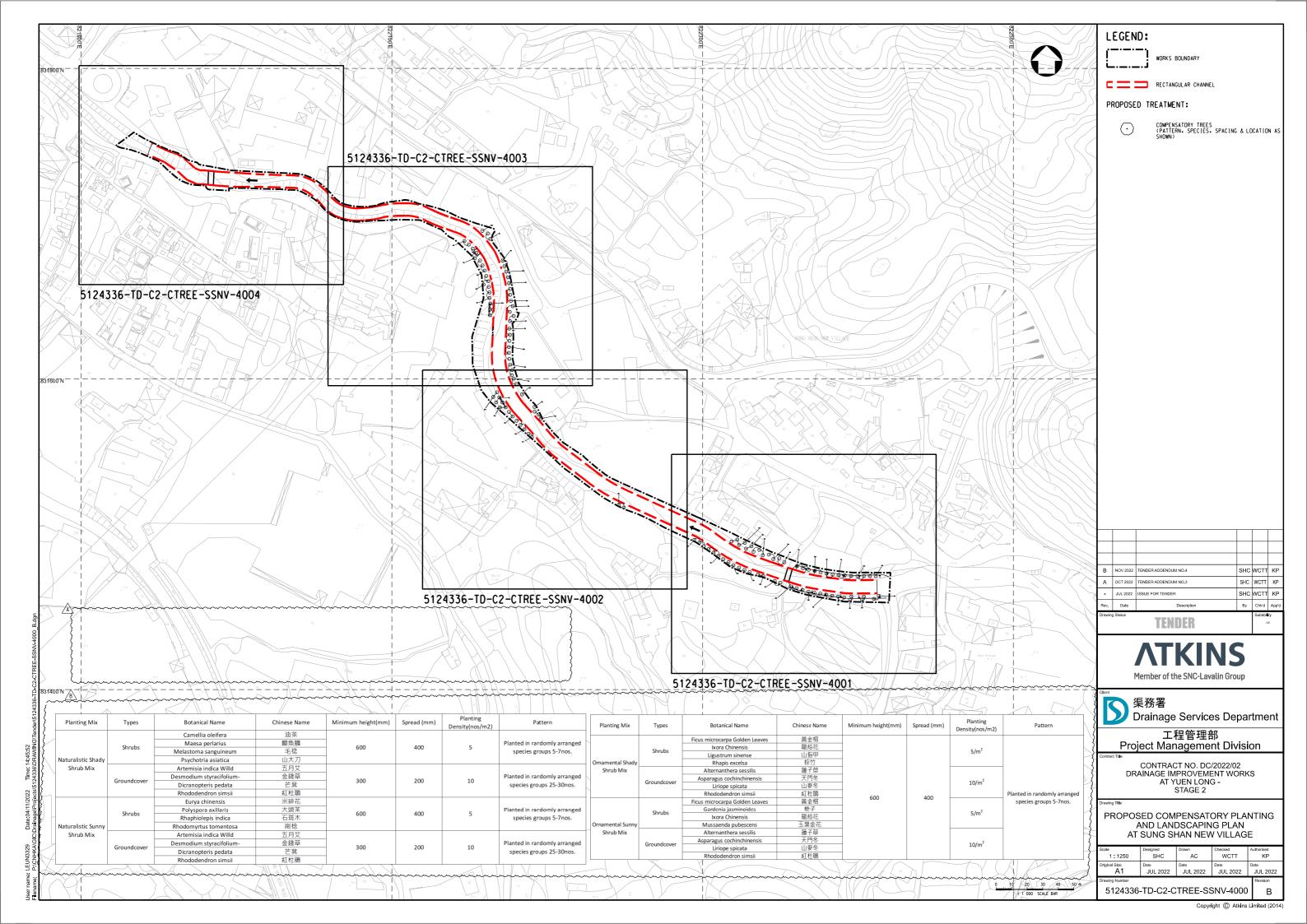


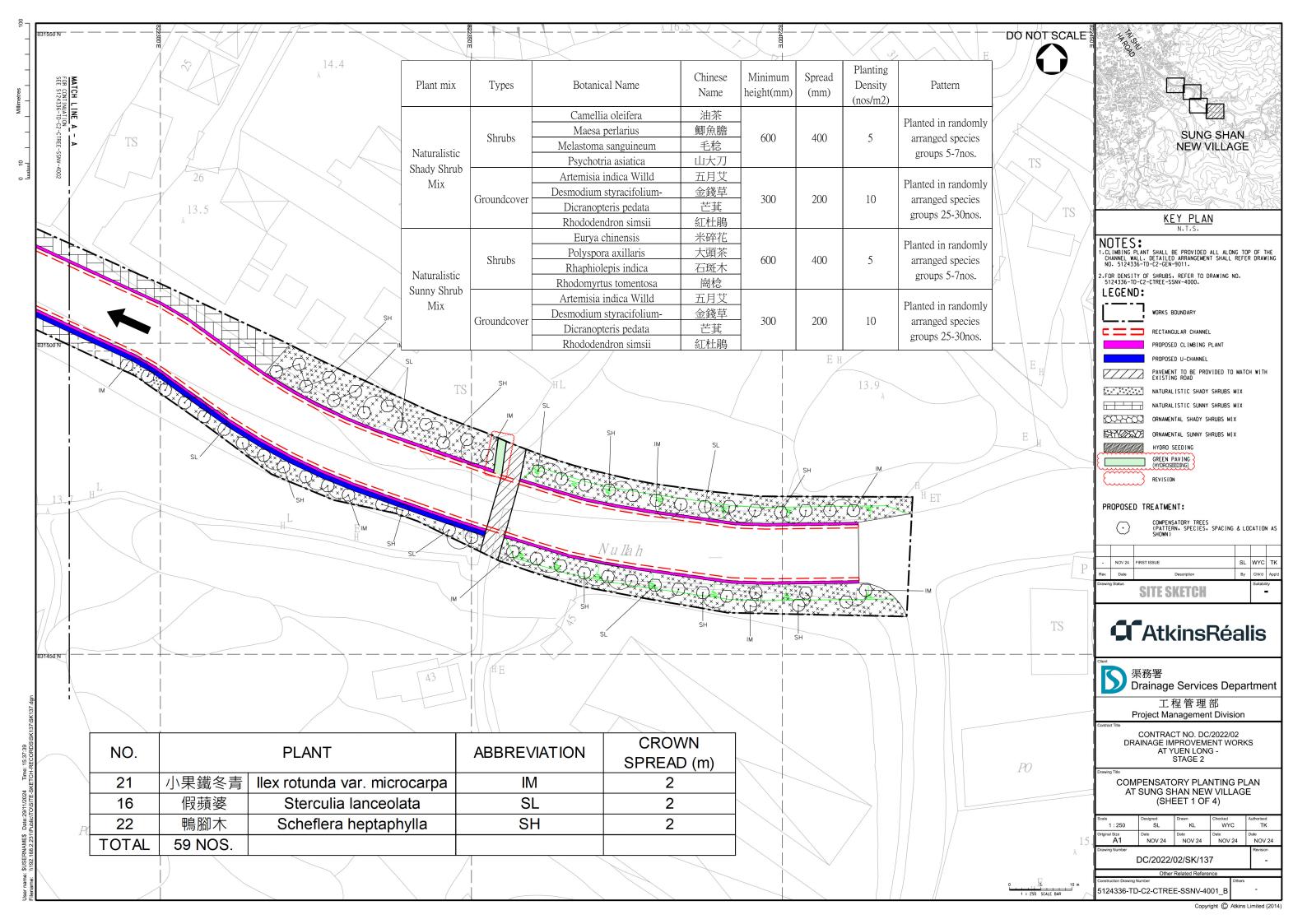


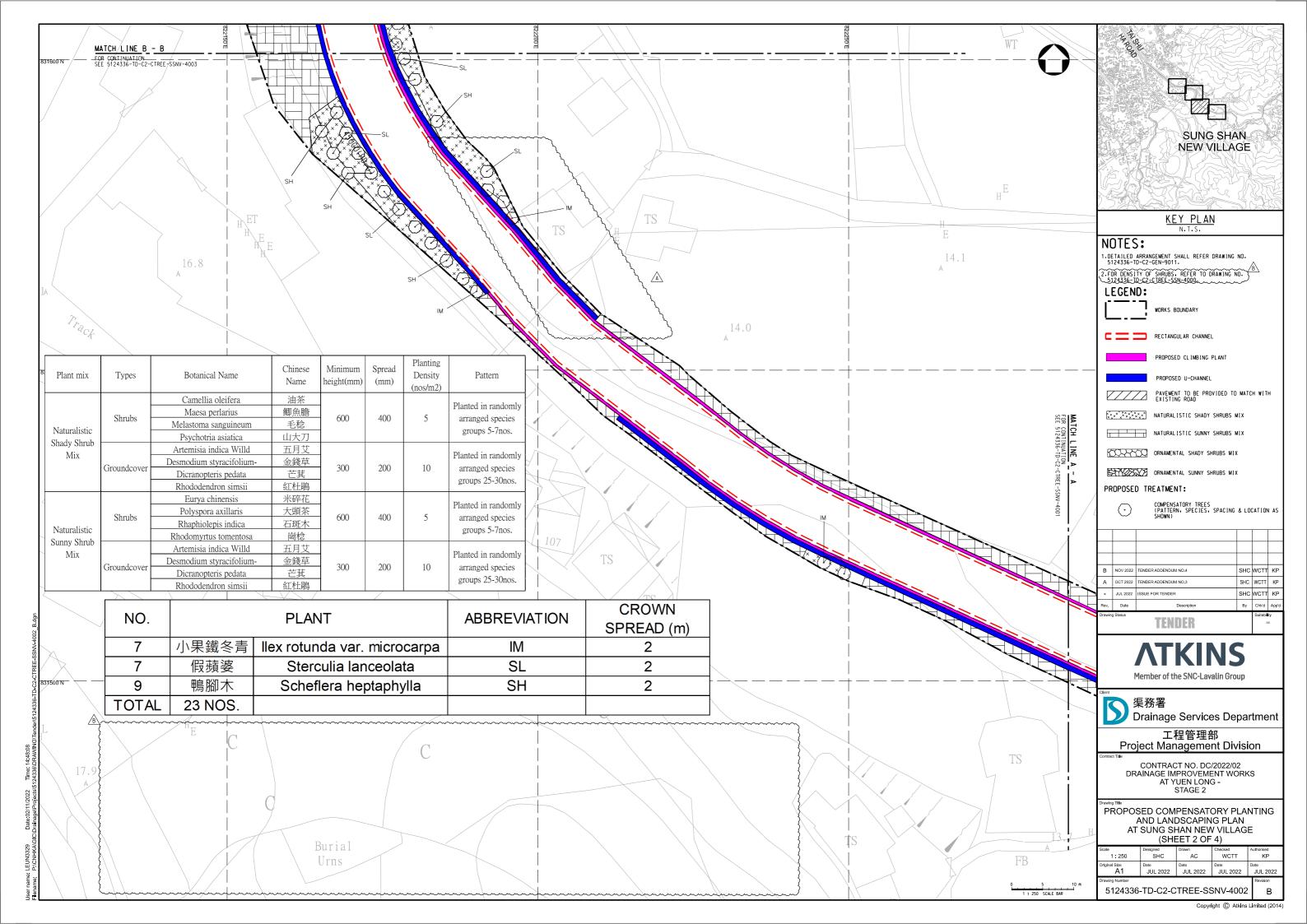


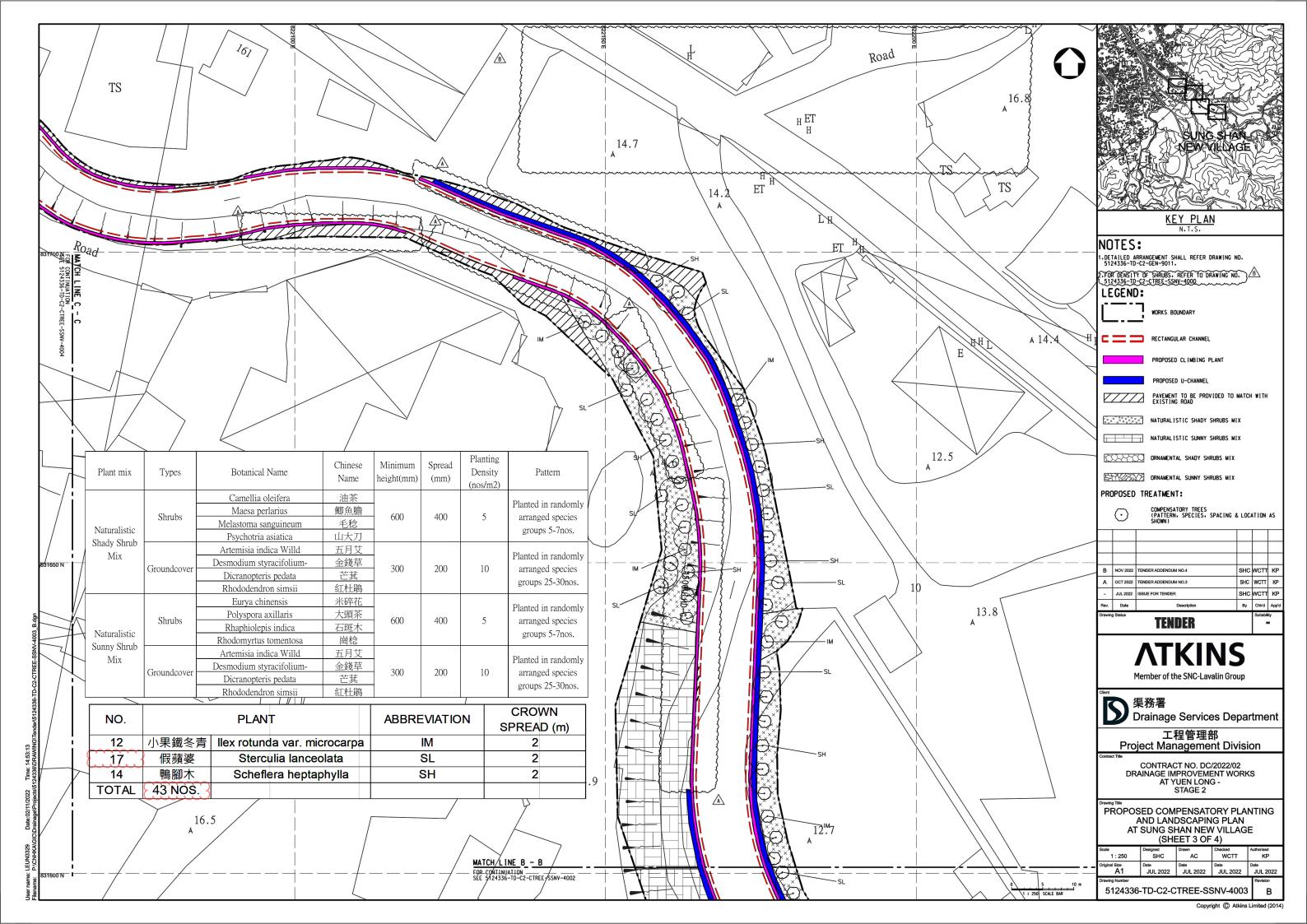


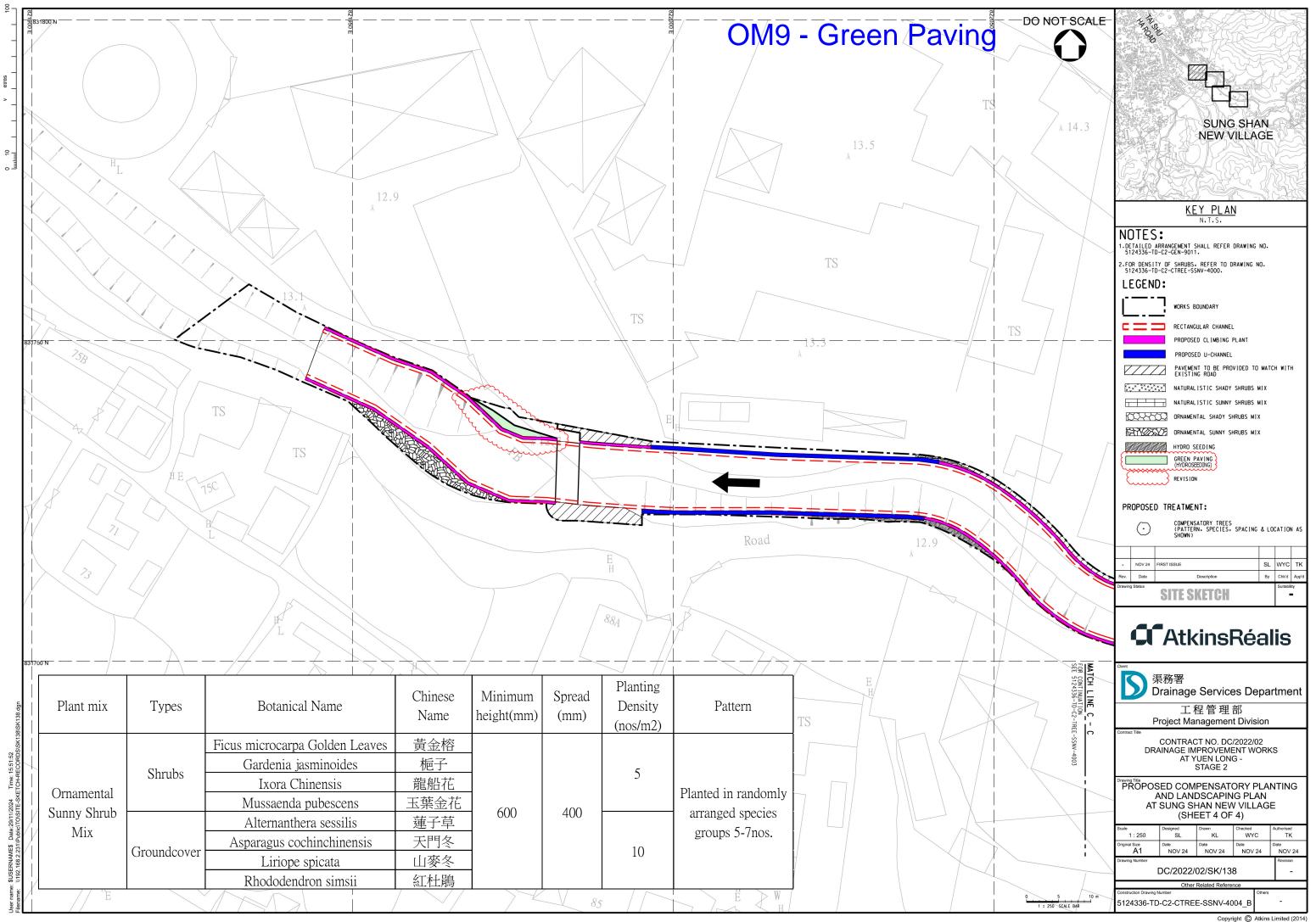


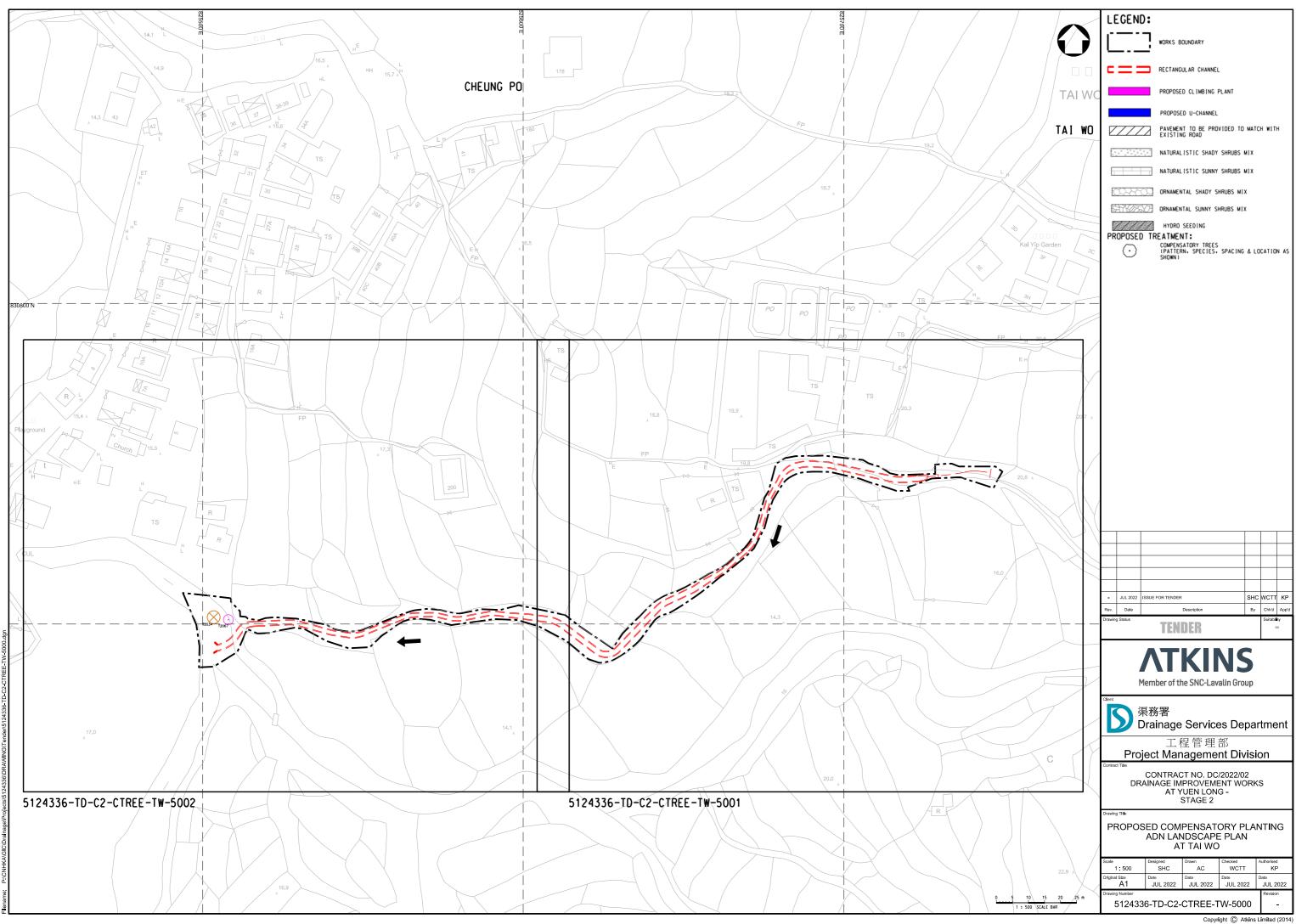




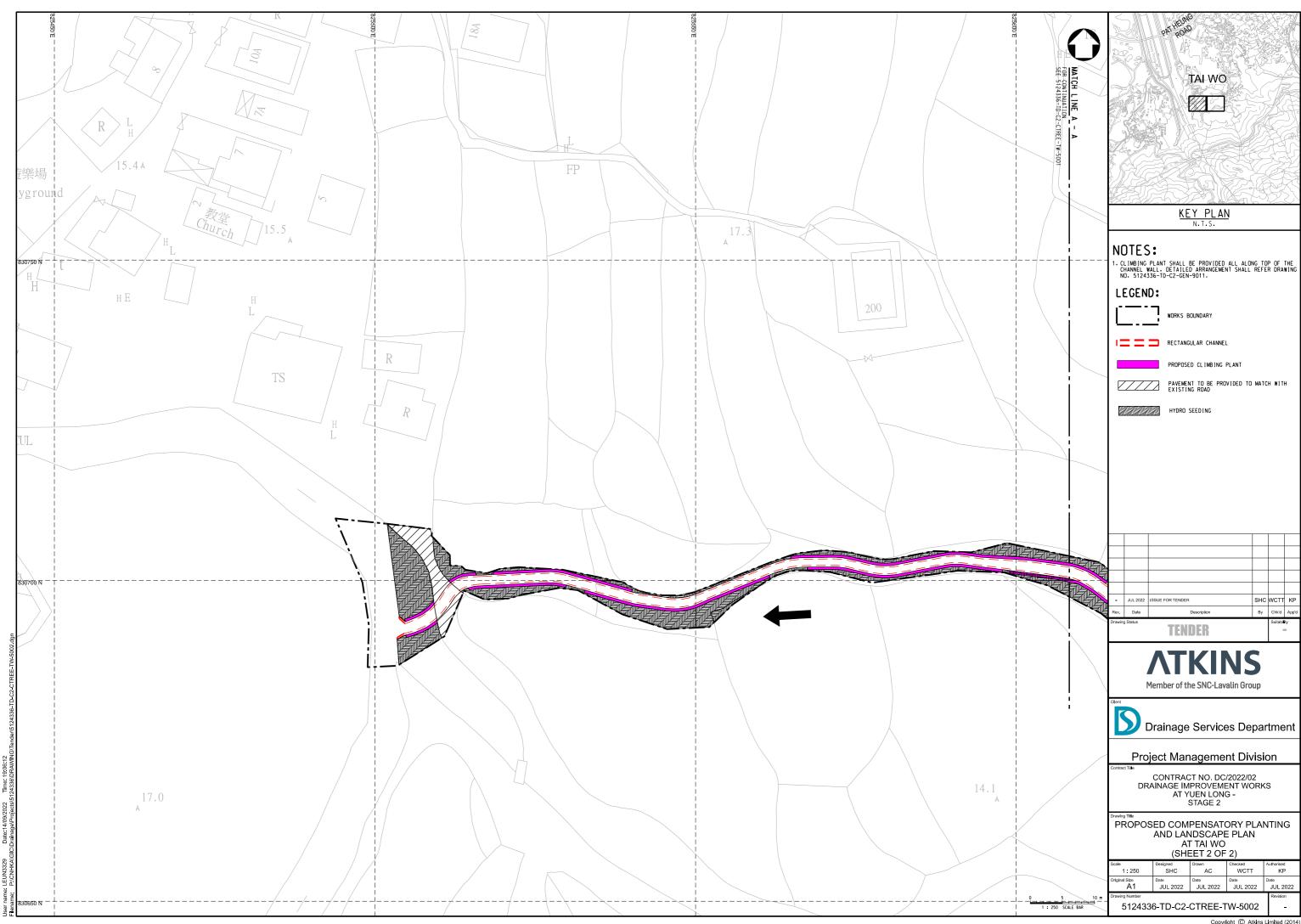












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Appendix E – Hoarding and Lighting Details



# **RHYNE** Floodlight

# Anti-Glare Shield

The RHYNE Floodlight Anti-Glare Shield is designed for minimizing light pollution and disturbance in sensitive environments. It can be used on signage, flagpoles around tall buildings, or residential areas.

Available to suit the complete RHYNE Floodlight Range. Can be retrofitted to existing applications.

#### **SPECIFICATIONS**

### **Material Specifications**

Material Steel

**Finish** Anti-Corrosive Powder Coat, Black

**Dimensions** 150mm Flaps

Ingress ProtectionIP66Impact RatingIK10

Warranty 5 Year Replacement

Weight 1kg

# Mounting

**Beam Angle** Adjustable

**Mounting** Attaches to RHYNE Floodlight Series

**Application** Flagpoles, Residential Areas

#### VARIATIONS

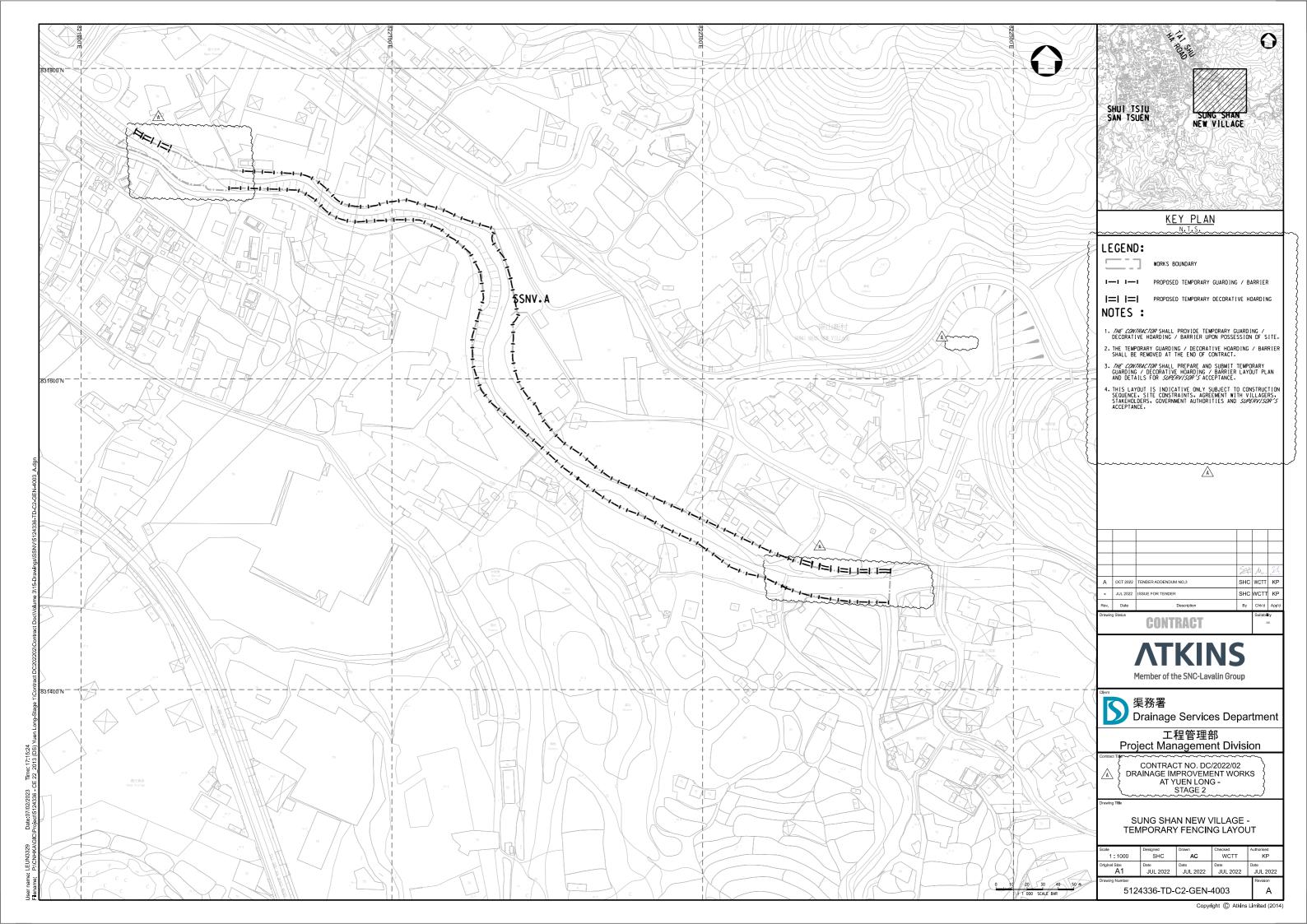
LC2380	RHYNE Anti-Glare Shield to suit 24W Floodlight
LC2381	RHYNE Anti-Glare Shield to suit 50W Floodlight
LC2382	RHYNE Anti-Glare Shield to suit 70W Floodlight
LC2383	RHYNE Anti-Glare Shield to suit 120W/200W Floodlight



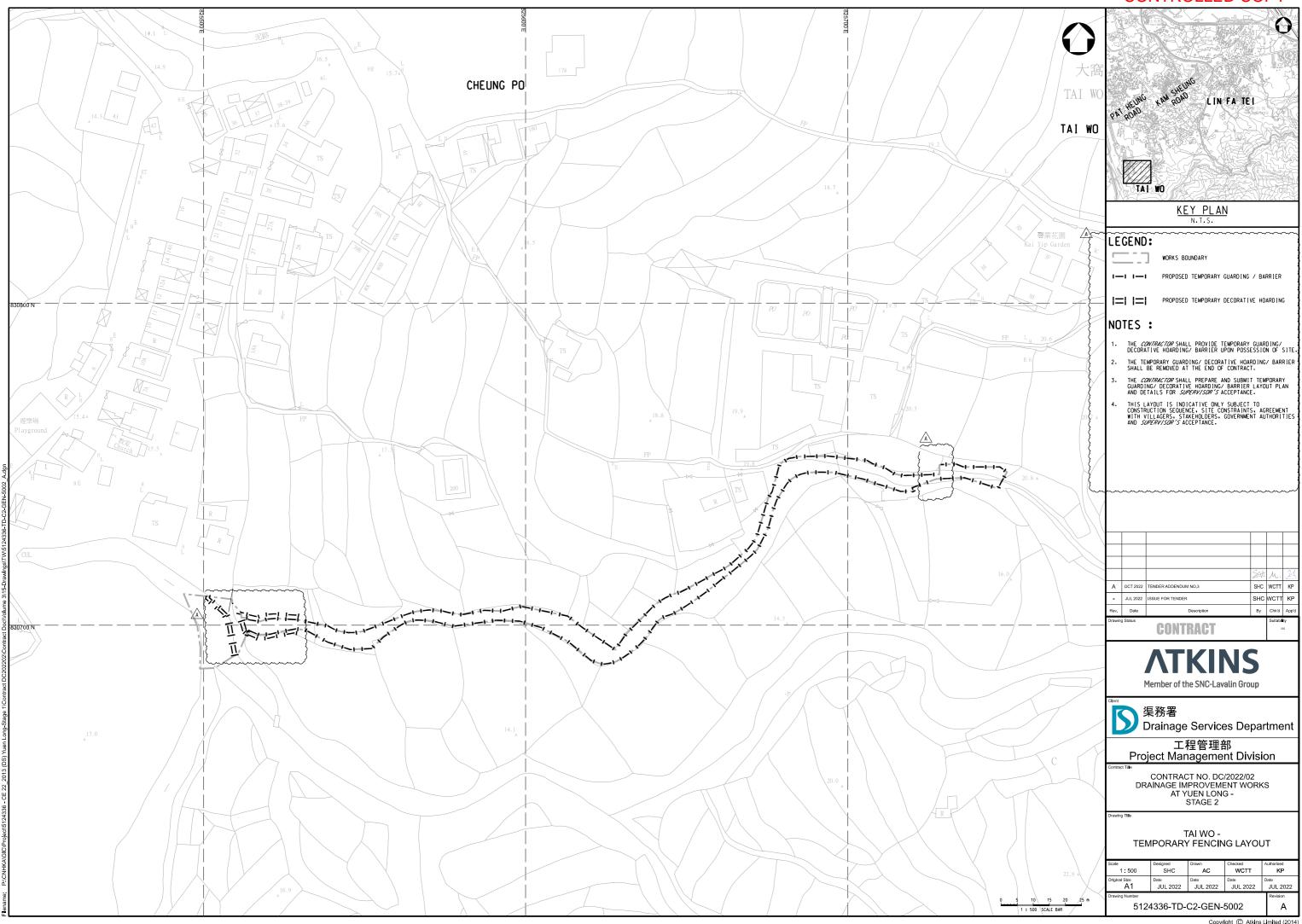
Adjustable Shield

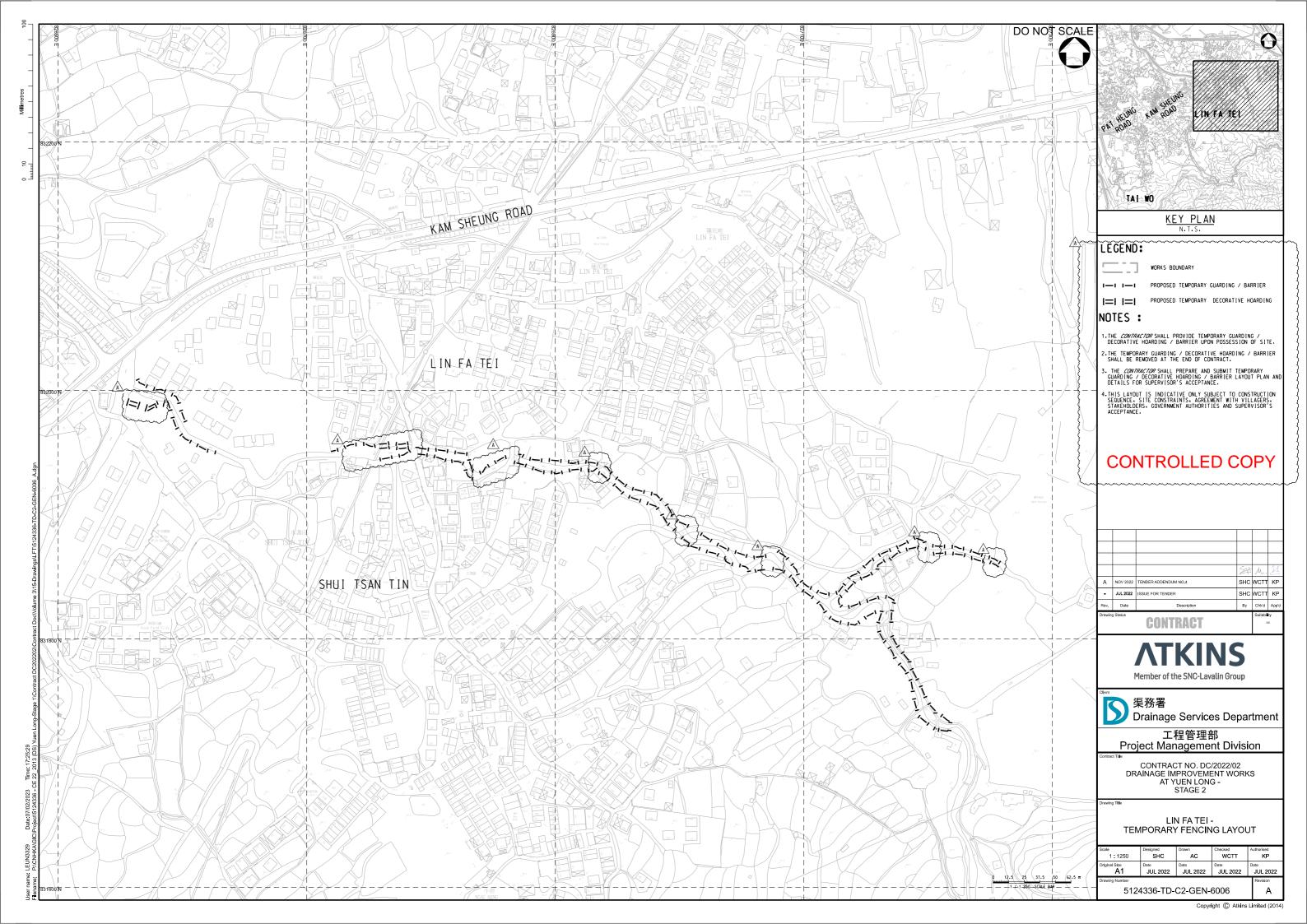


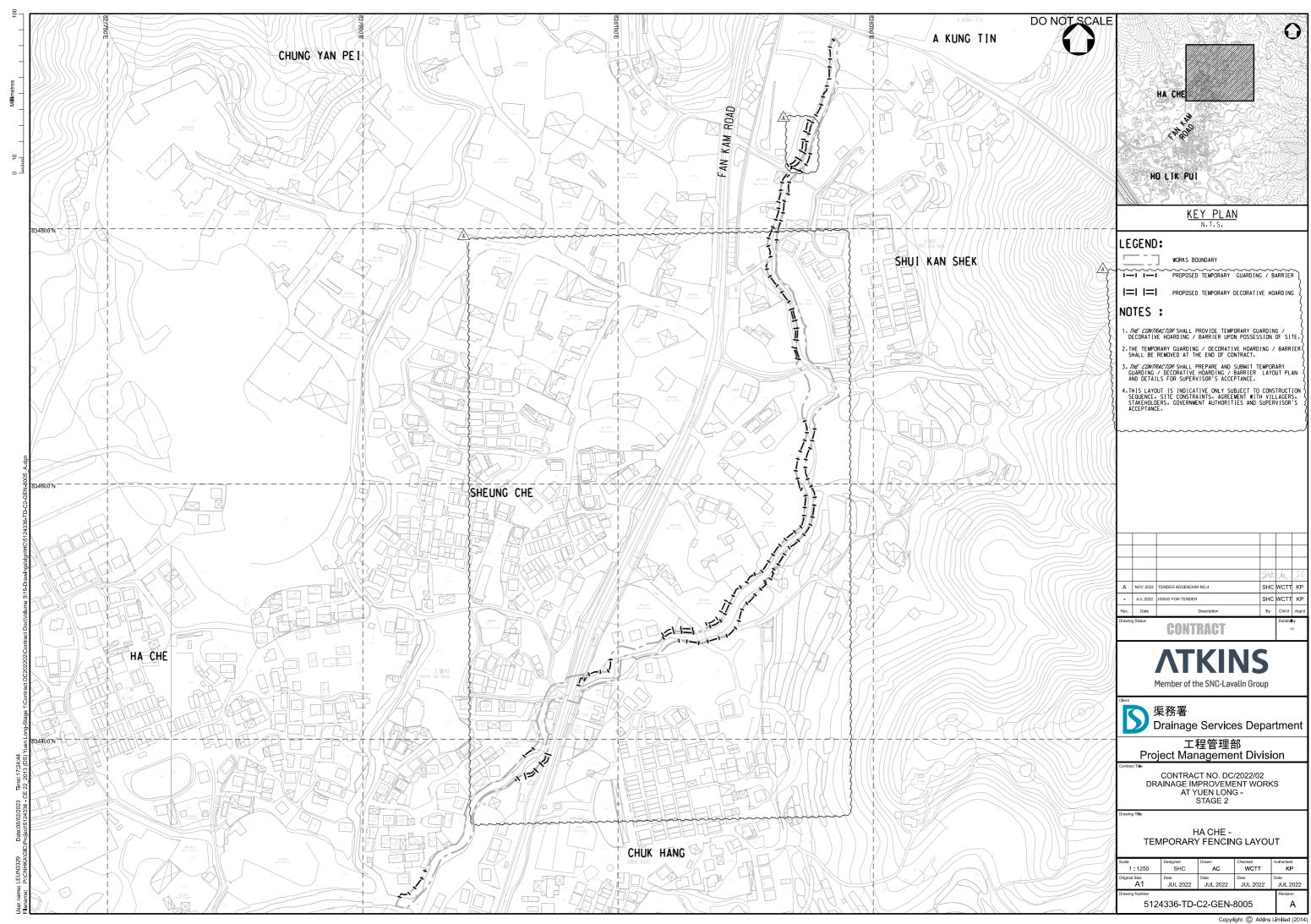


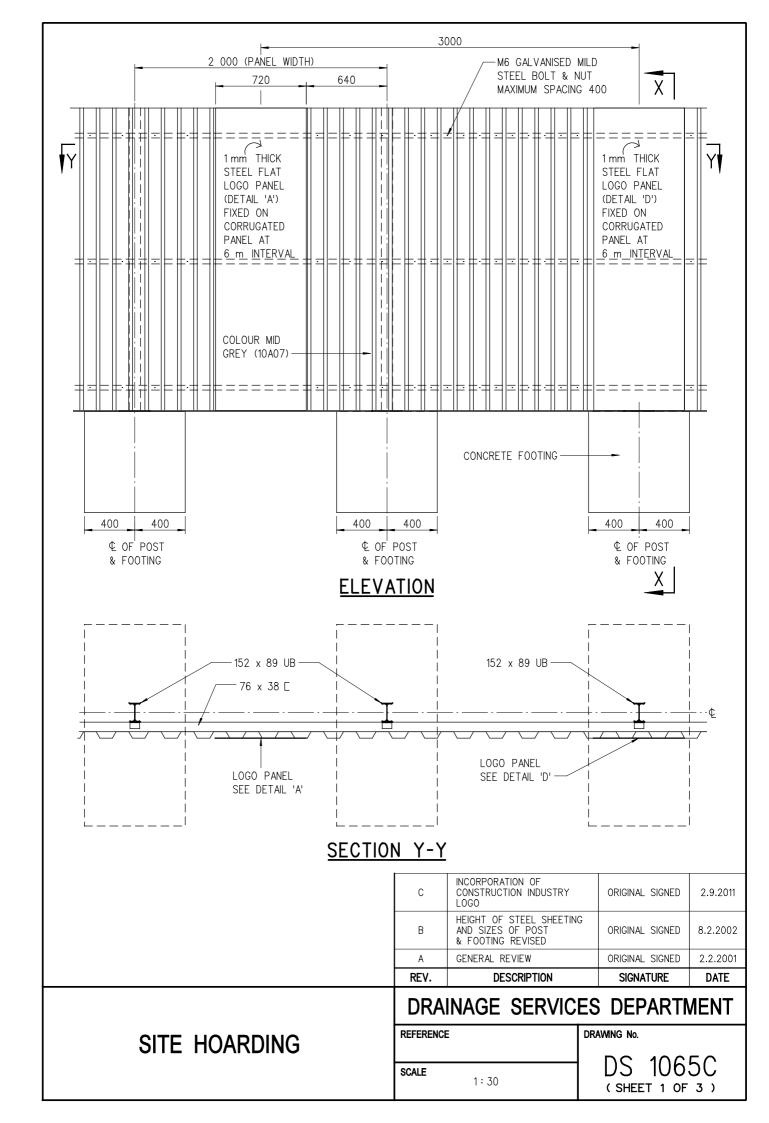


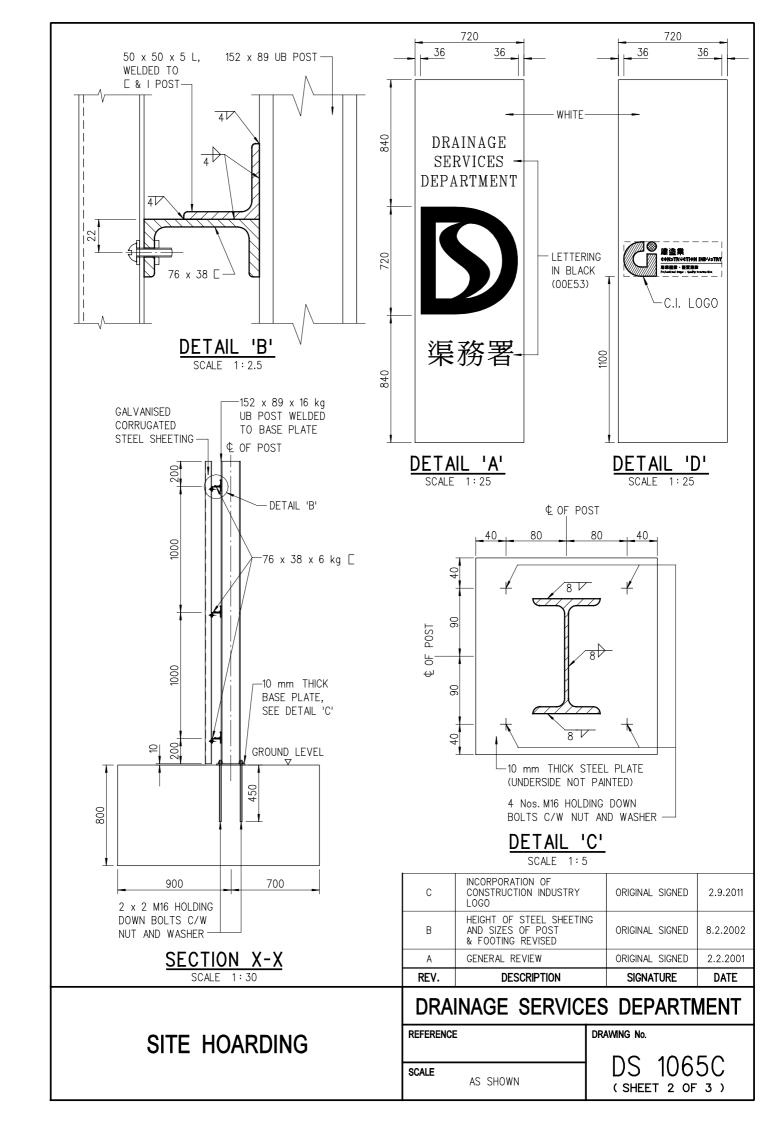
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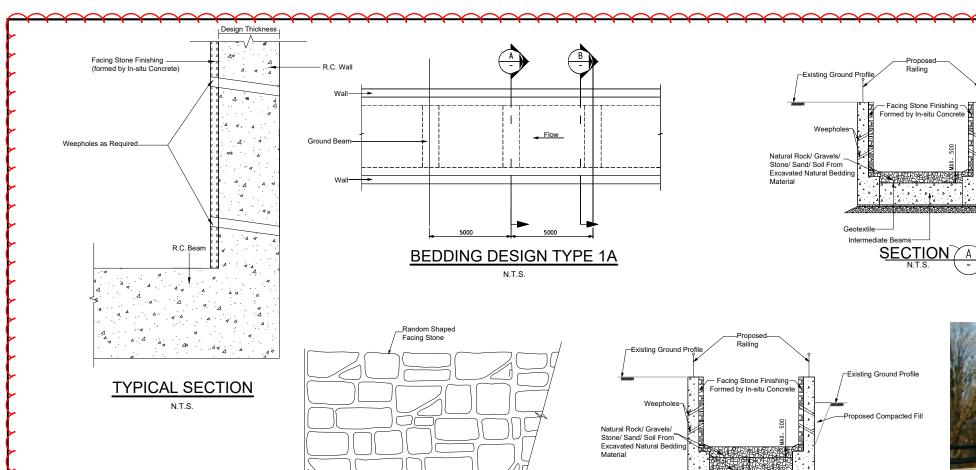








**Appendix F – Soft and Hard Landscape Designs** 



**ELEVATION OF FACING STONE** 

(RANDOM PATTERN)



ALL DIMENSION TO BE READ IN mm

FACING STONE IS 75mm.

CHANNELS.

VARYING AND RANDOM SIZE OF FACING STONE

SHALL BE PRODUCED. MAXIMUM THICKNESS OF

THE CONCRETE FINISHING WILL BE APPLIED SOLELY TO THE SECTIONS WITH ELS DUE TO ENGINEERING

CONCERN, RATHER THAN TO THE WHOLE GREEN

REINFORCEMENT CONCRETE

(FORMED BY IN-SITU CONCRETE)

FACING STONE FINISHING

TYPICAL TYPE AND ARRANGEMENT OF **FACING STONE** 

**OM2** - Aesthetically **Pleasing Design** 

roposed U-Channel with

Precast Concrete Cover
Existing Ground Profile

300 mm Thick Grade

300 mm Thick Grade

OM5 - Design of **Retaining Walls and Channel Embankments** 

# **CONTROLLED COPY**

Facing Stone acing Stone Stone/ Sand/ Soil From **ELEVATION OF FACING STONE WITH ELS** 

Wing Tat Civil Engineering Co. Limited 永達土木工程有限公司

DRAWN CHECKED **WWH** JL DATE SCALE **DEC 2024** N.T.S.

SECTION B

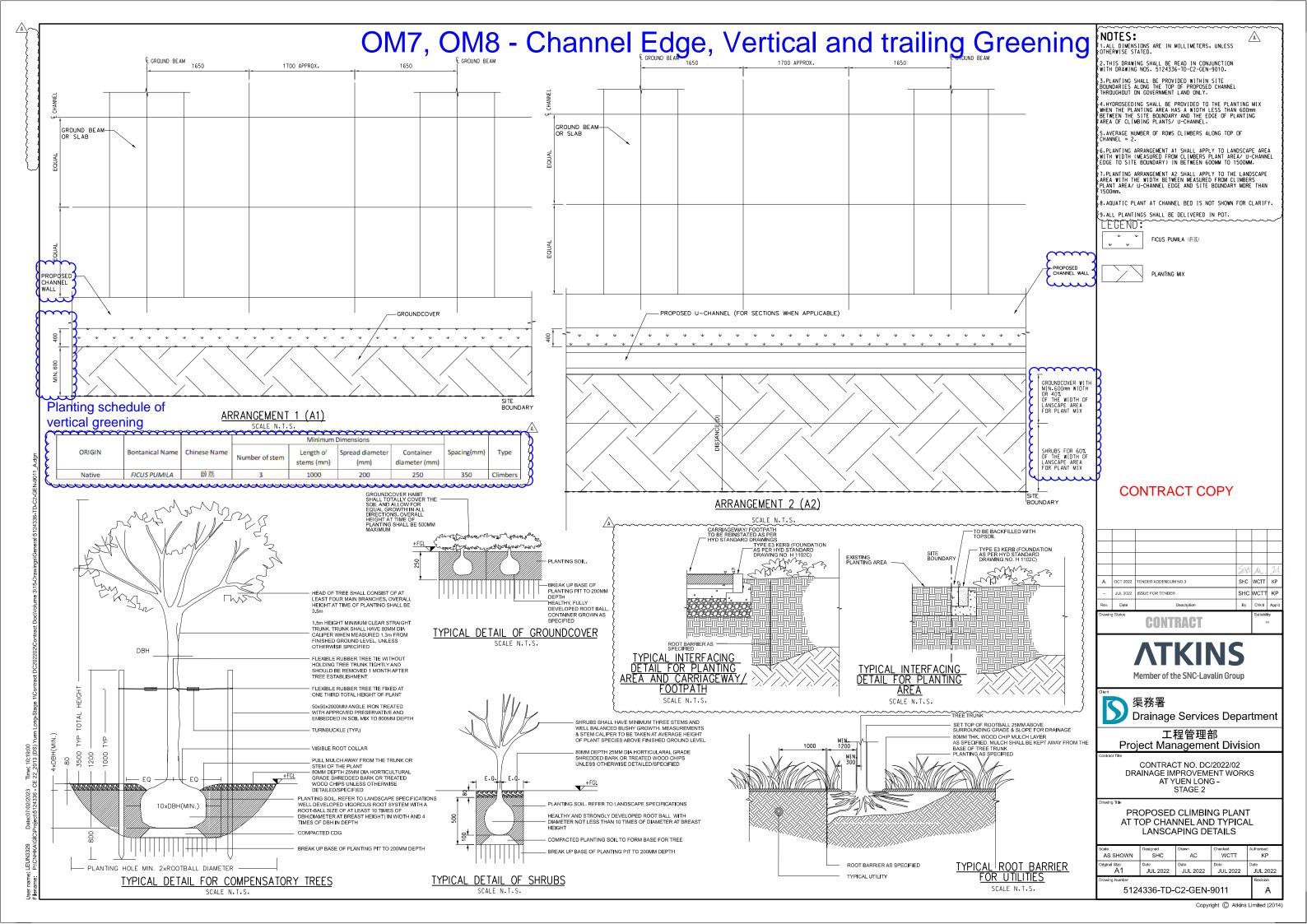
Contract No. DC/2022/02 **Drainage Improvement Works at Yuen Long-Stage 2** 

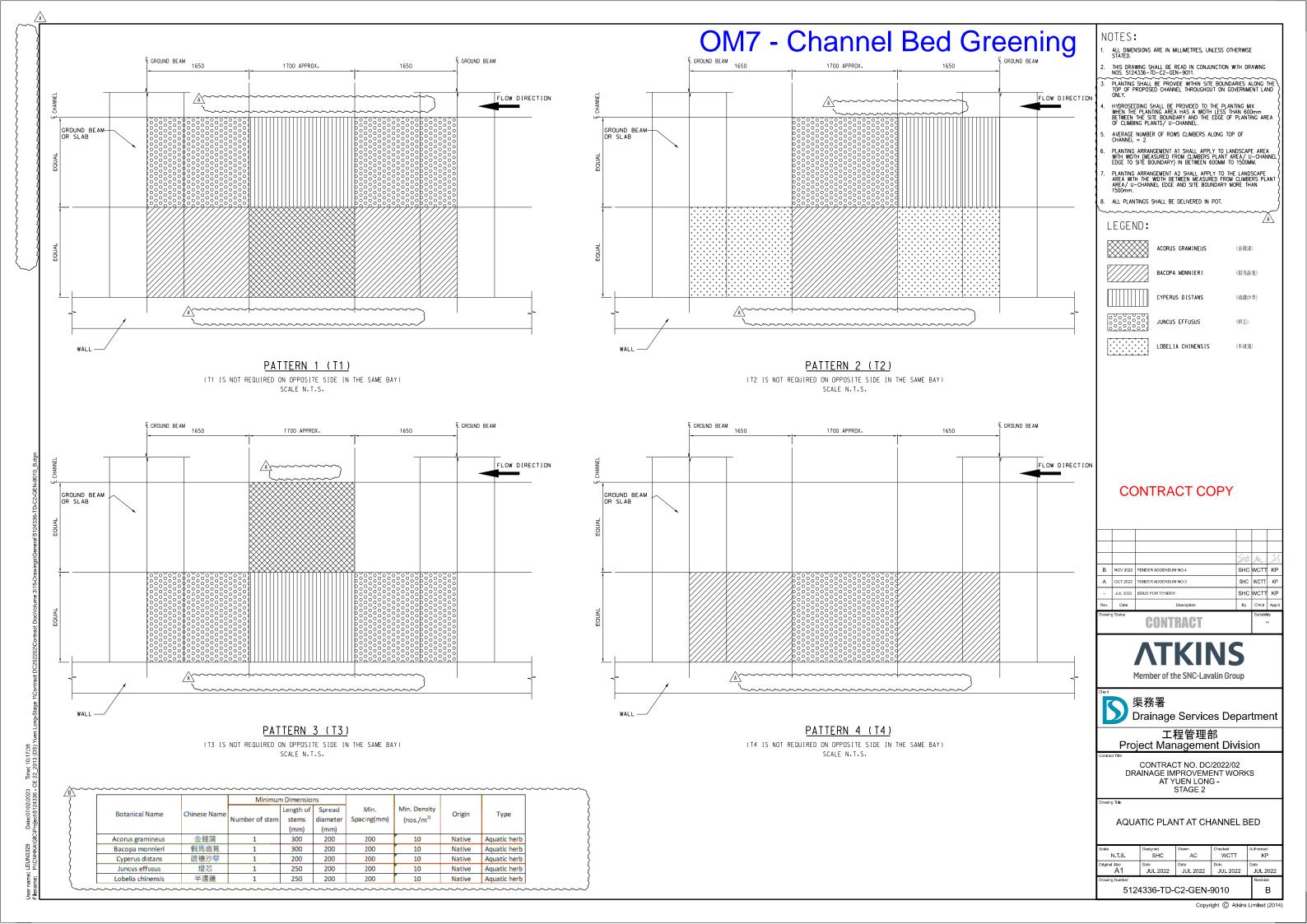
DETAIL OF CONCRETE FACING STONE FINISHING

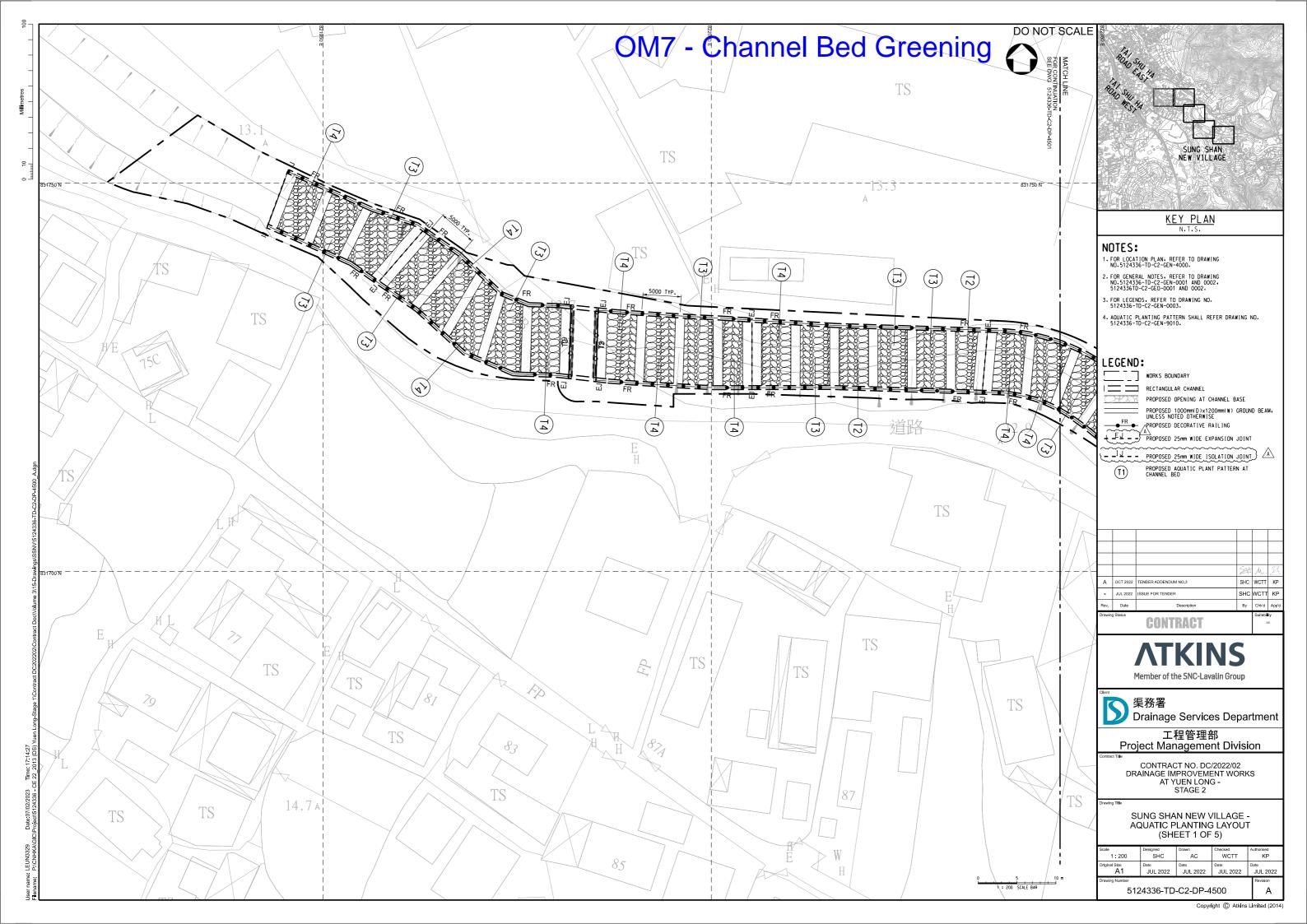
WT/DC/2022/02/CF/SK/001

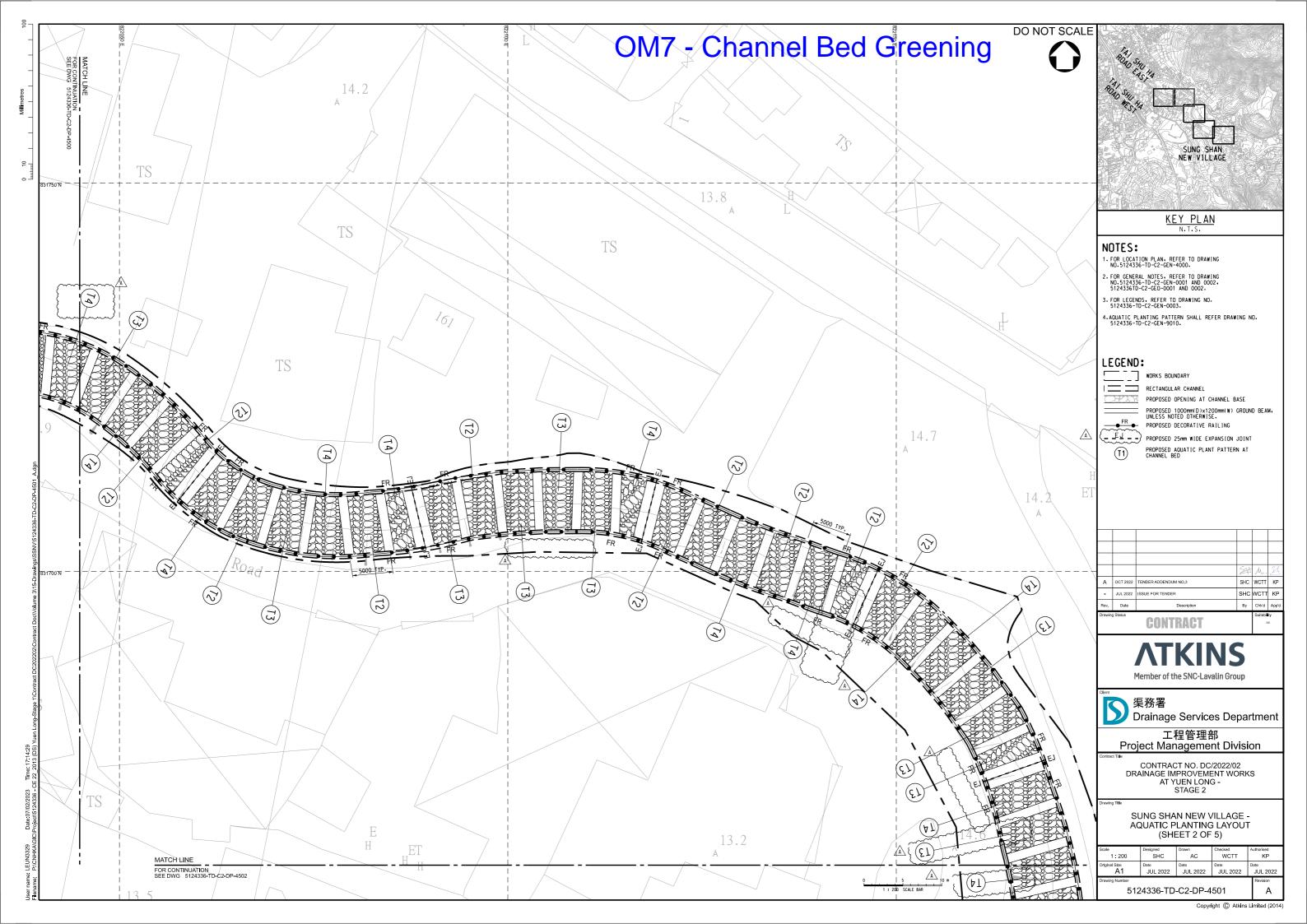
REV.

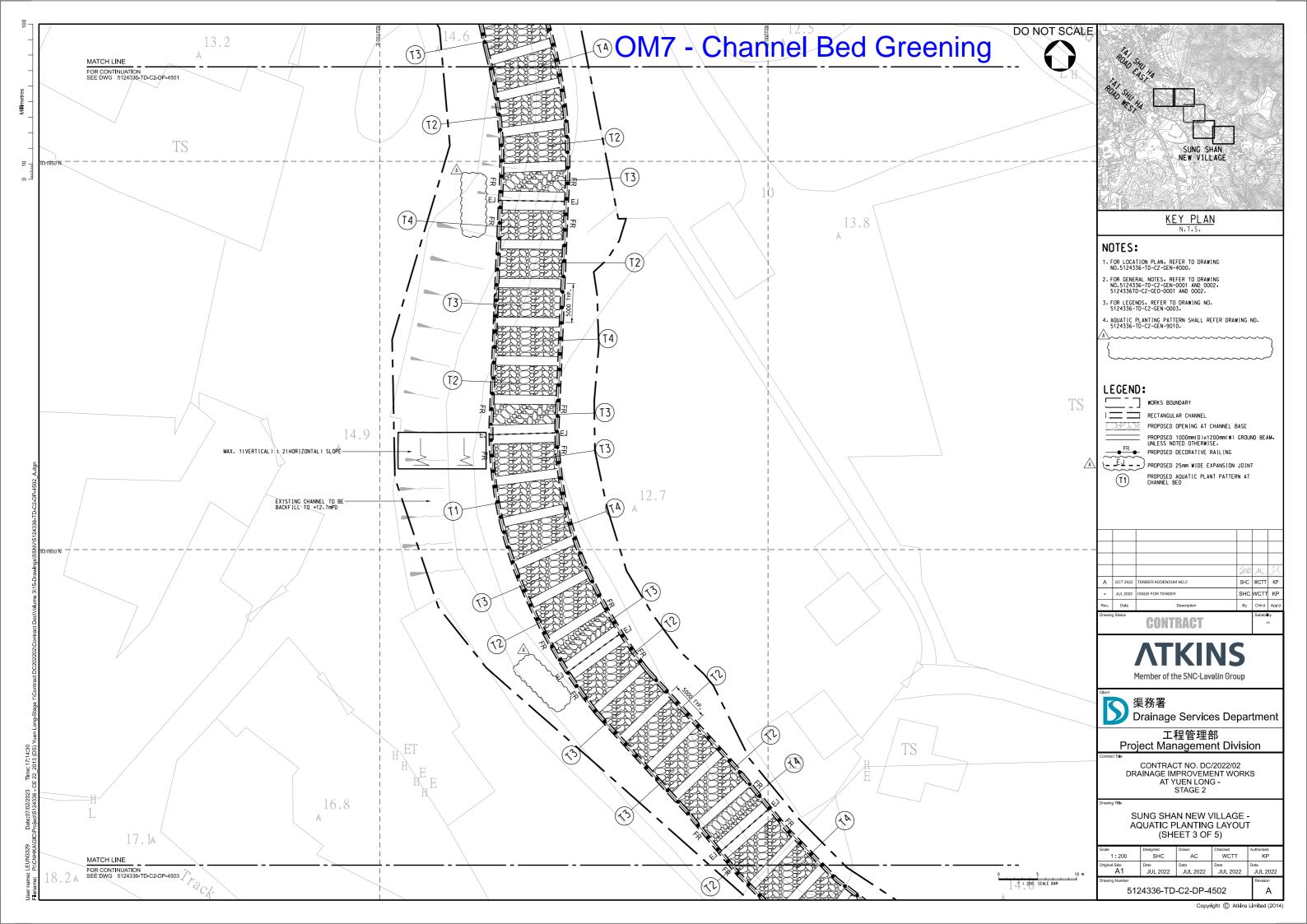


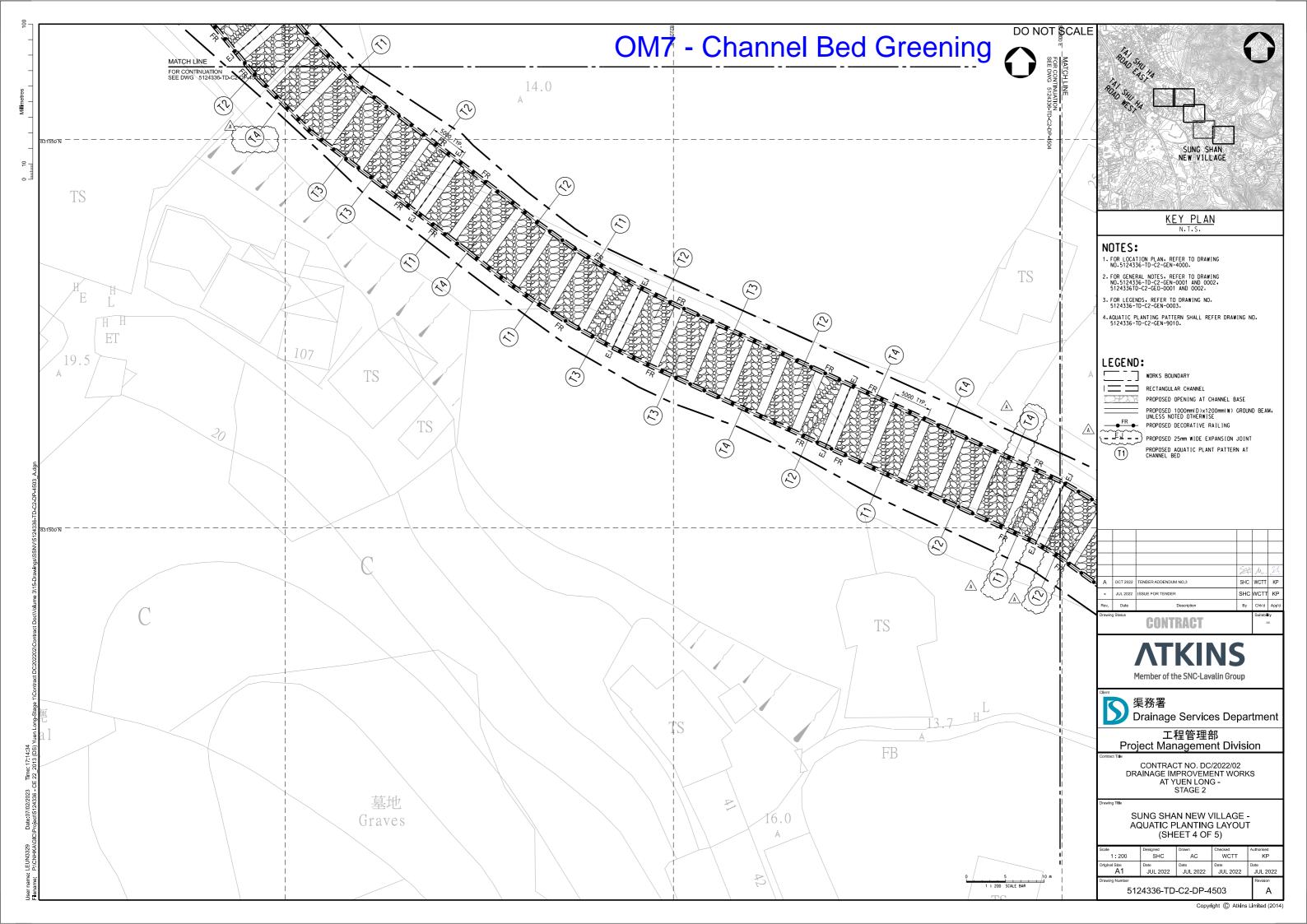


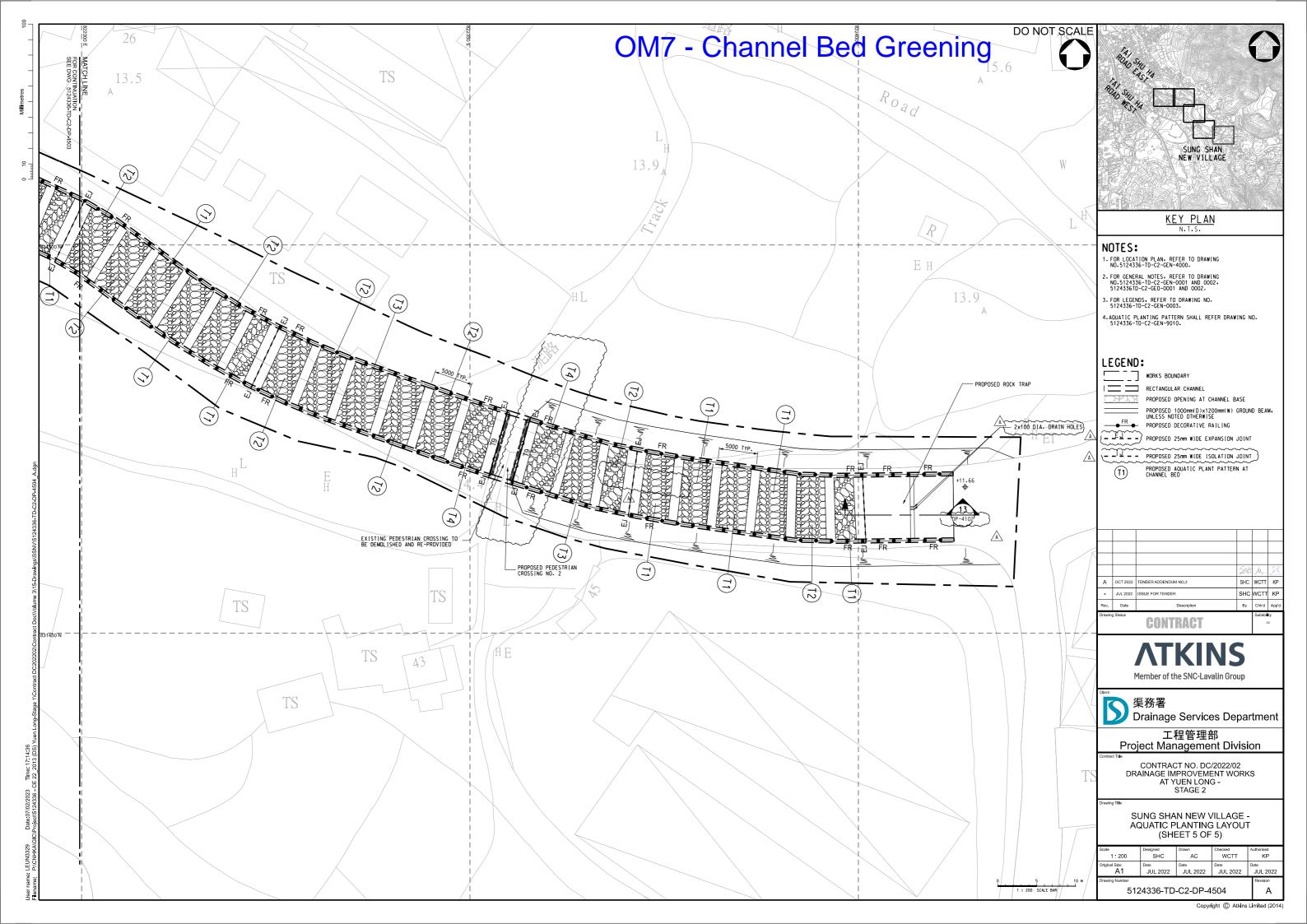


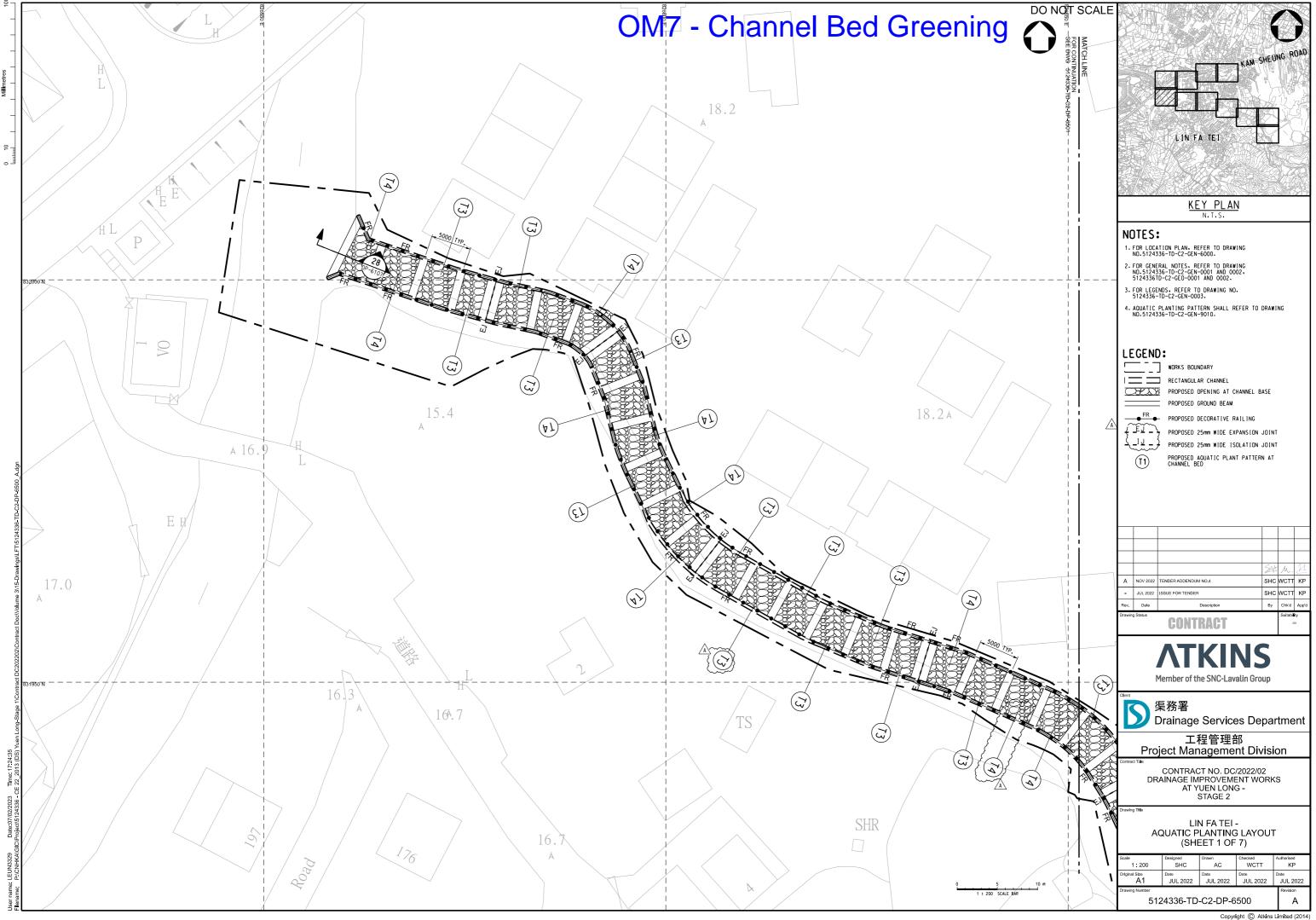


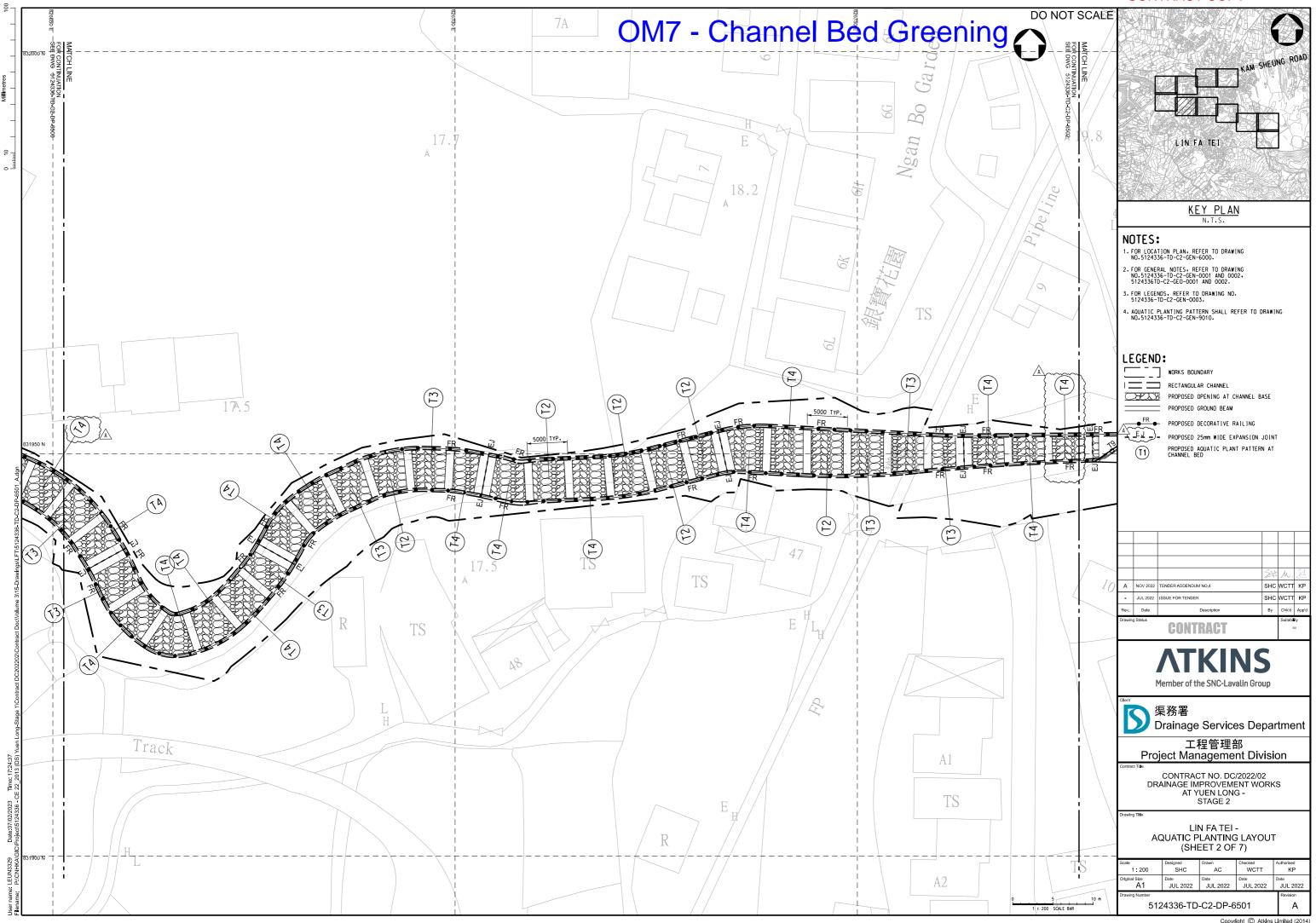


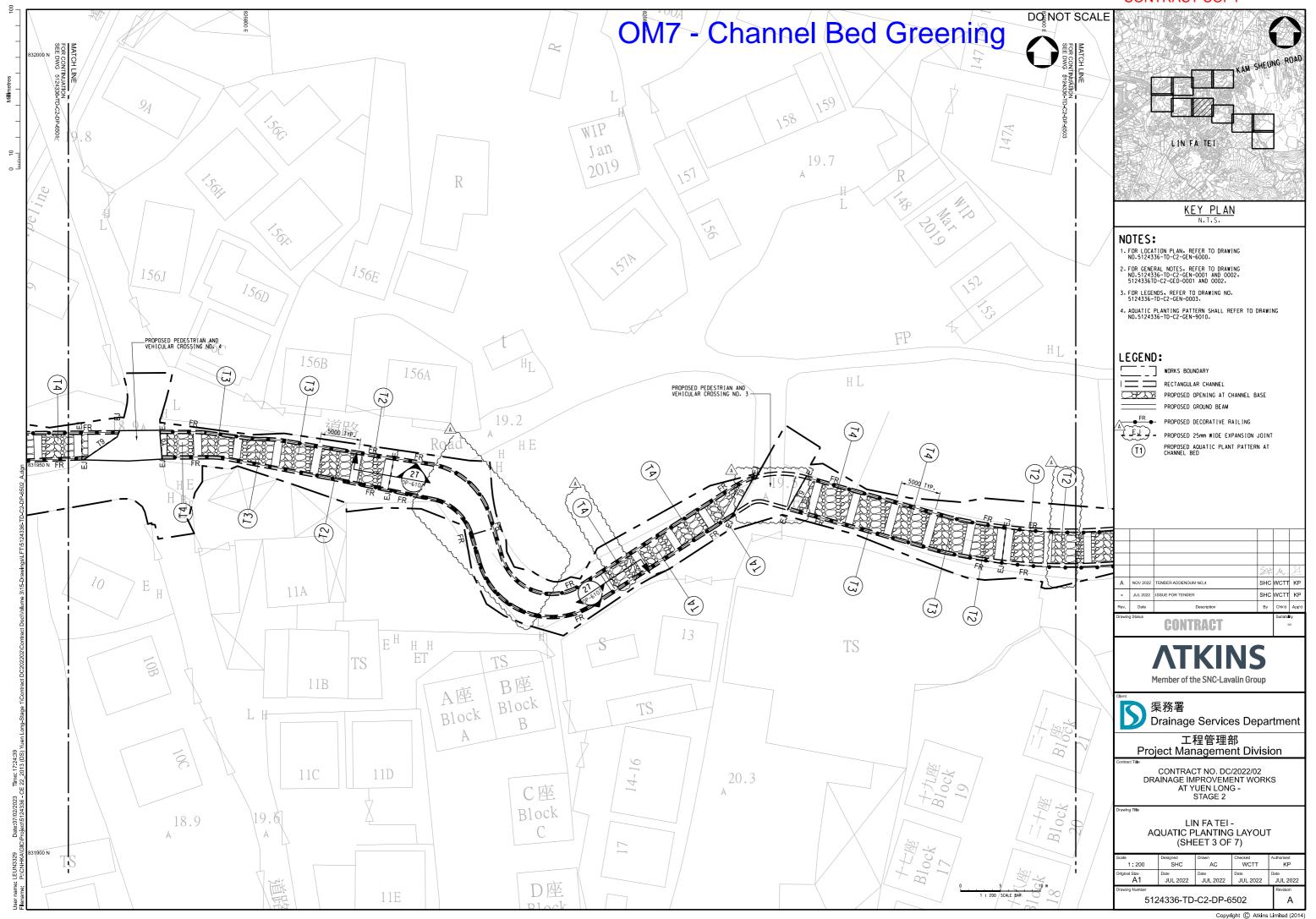


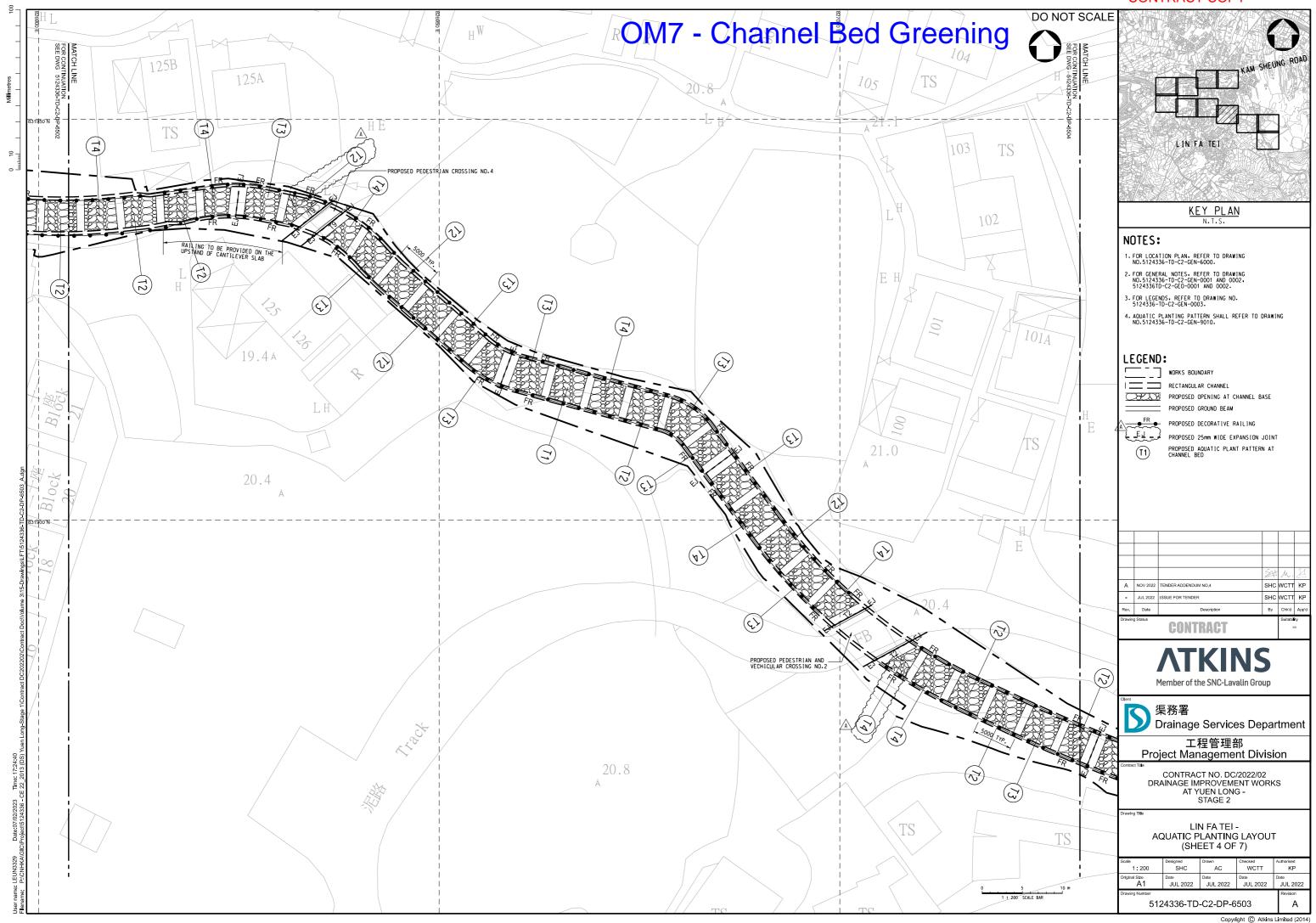




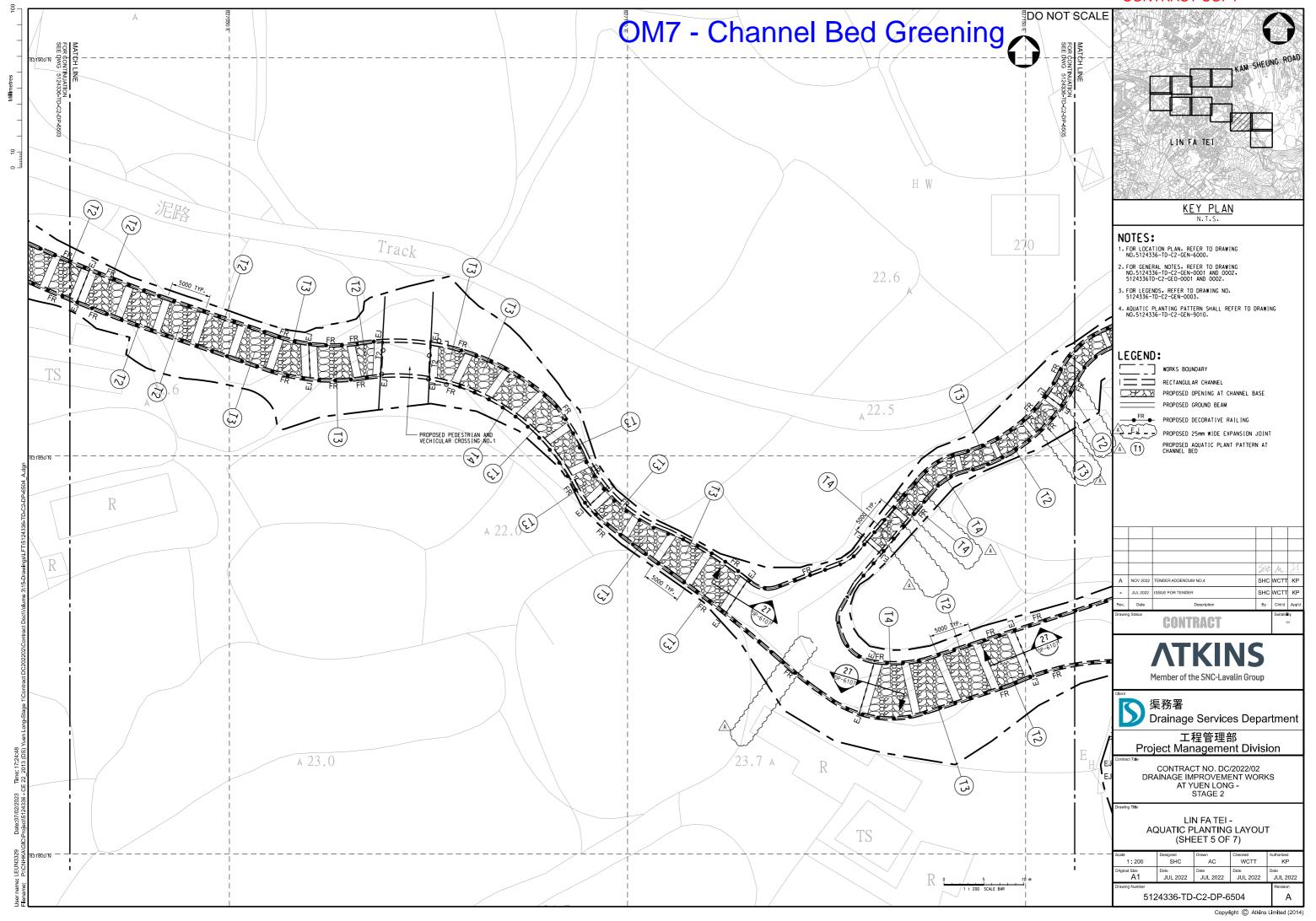




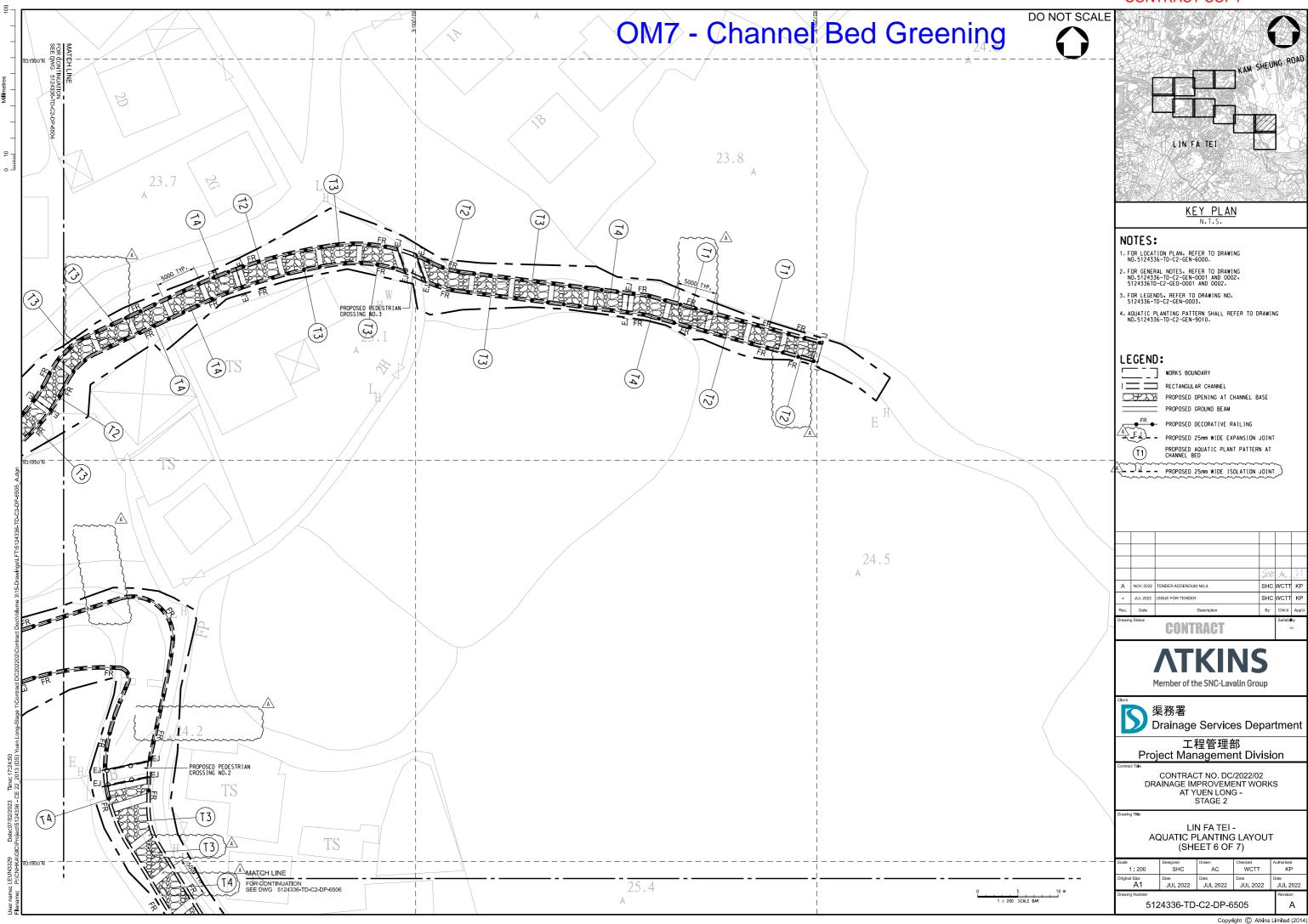




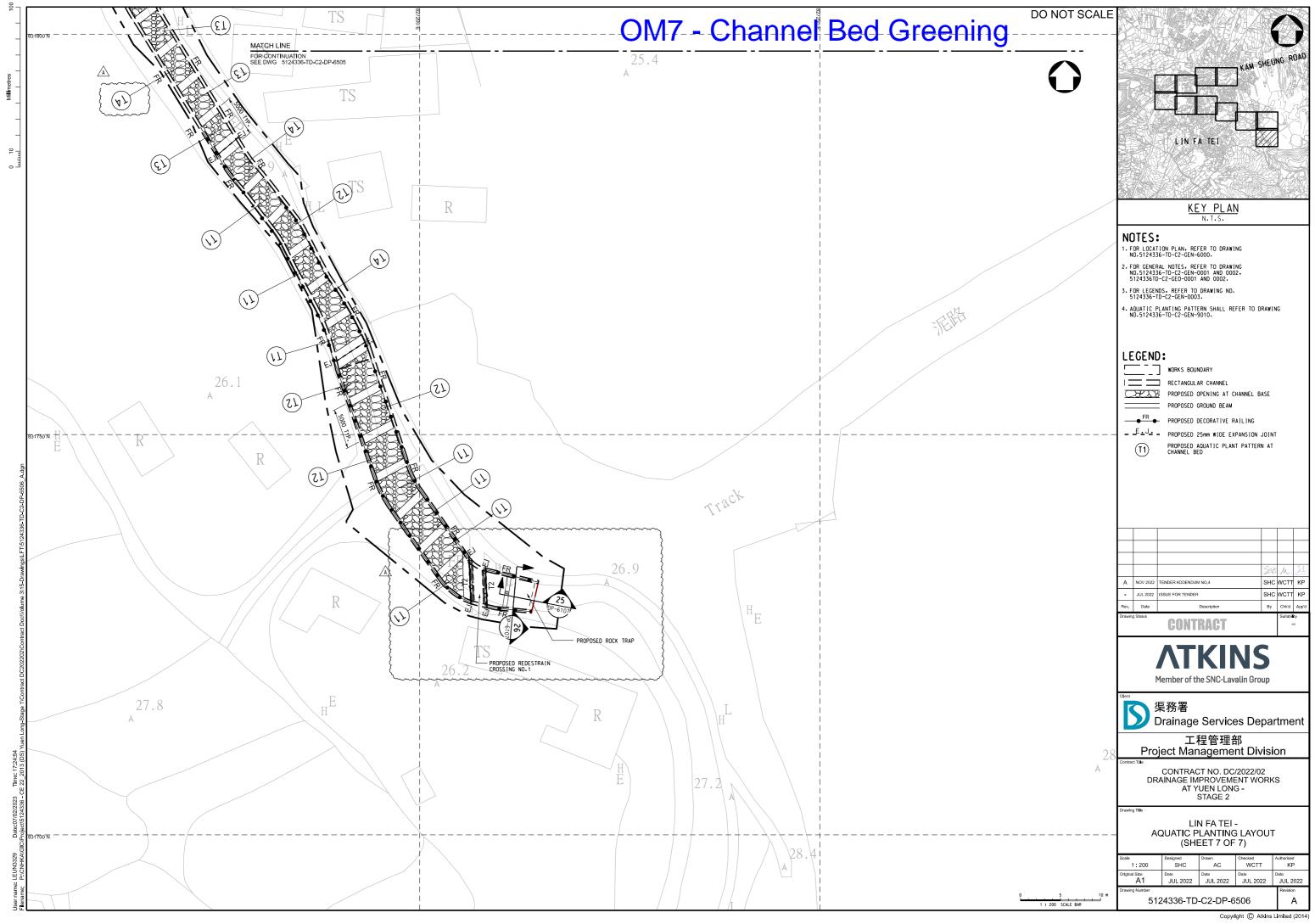
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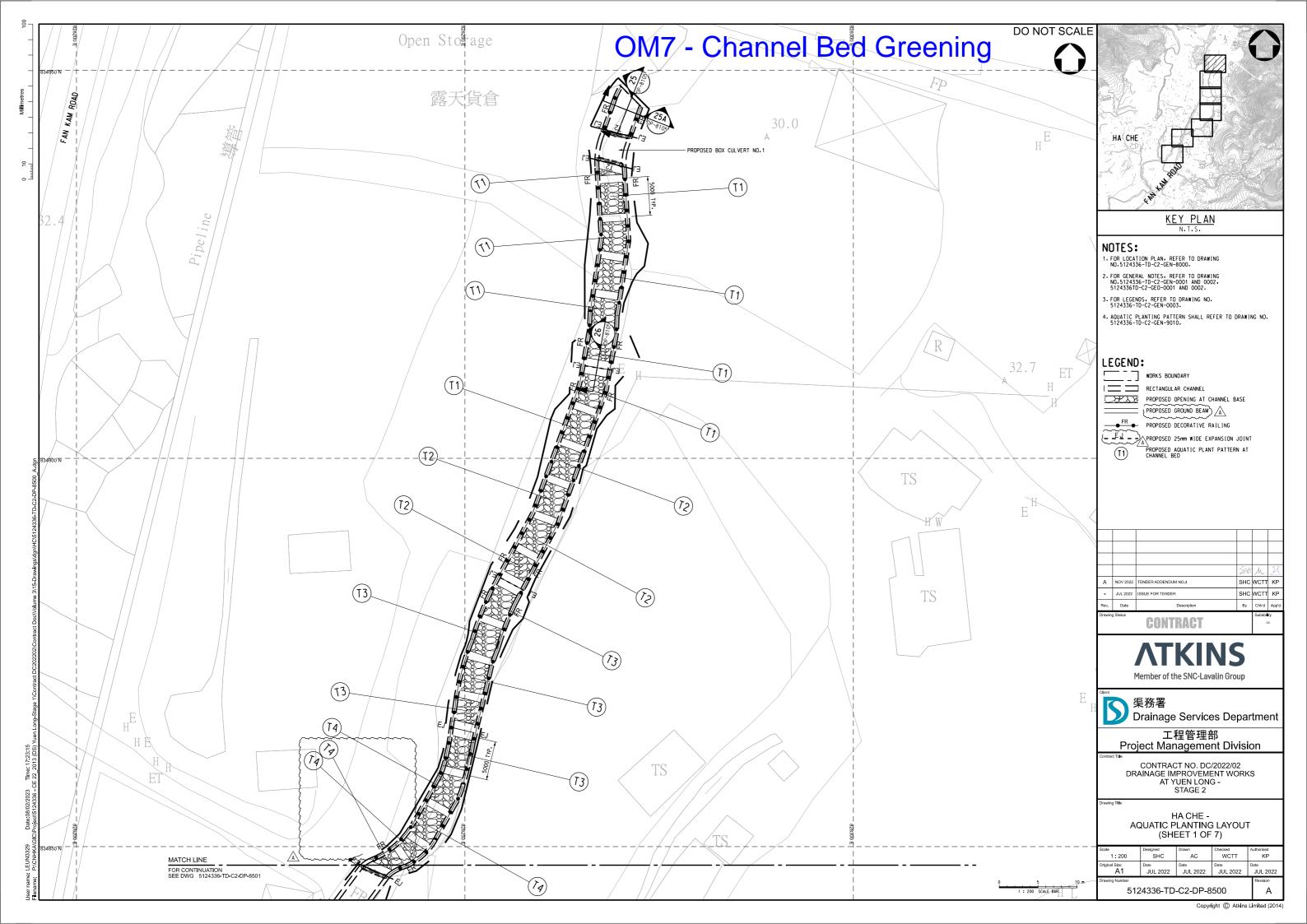


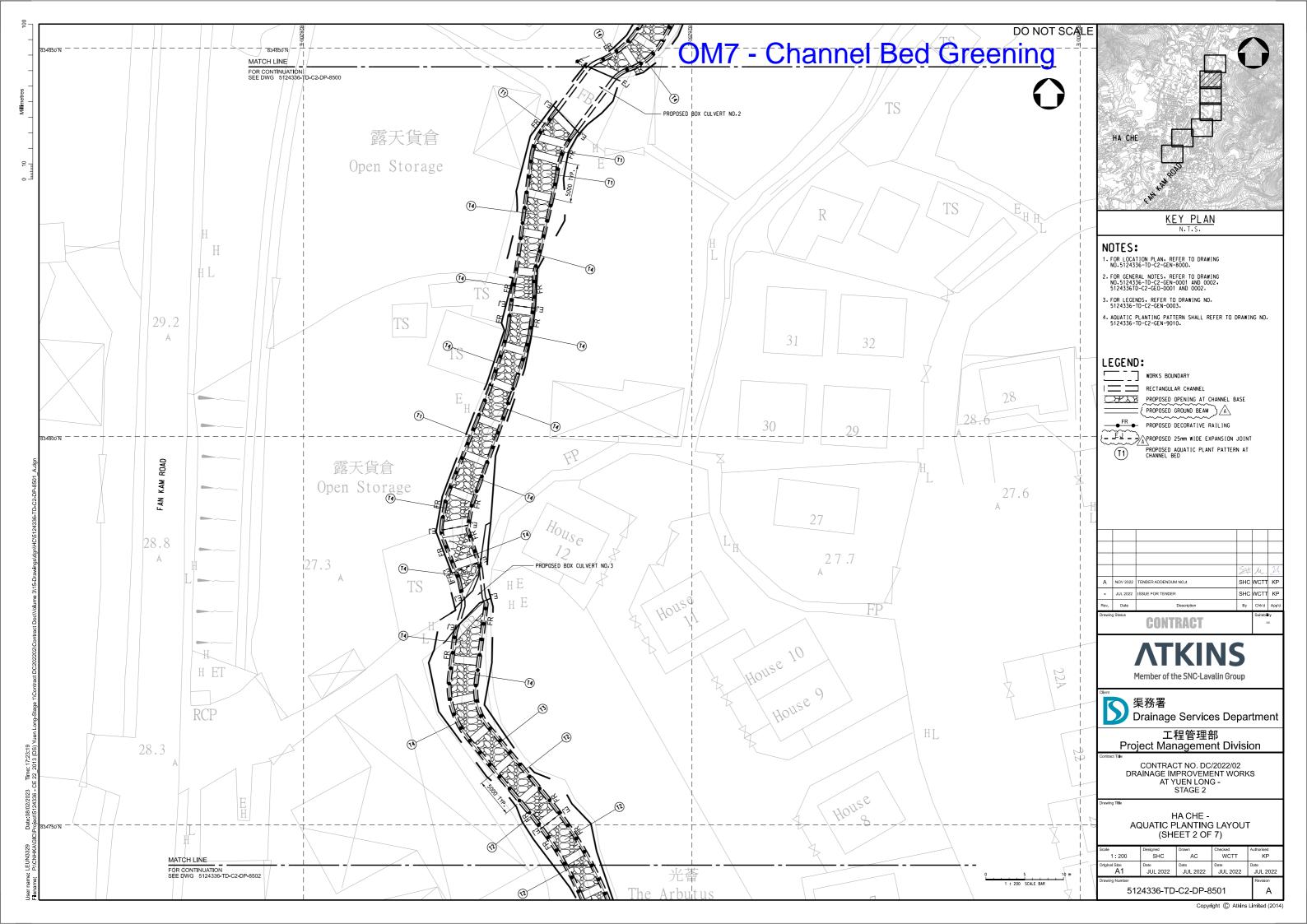
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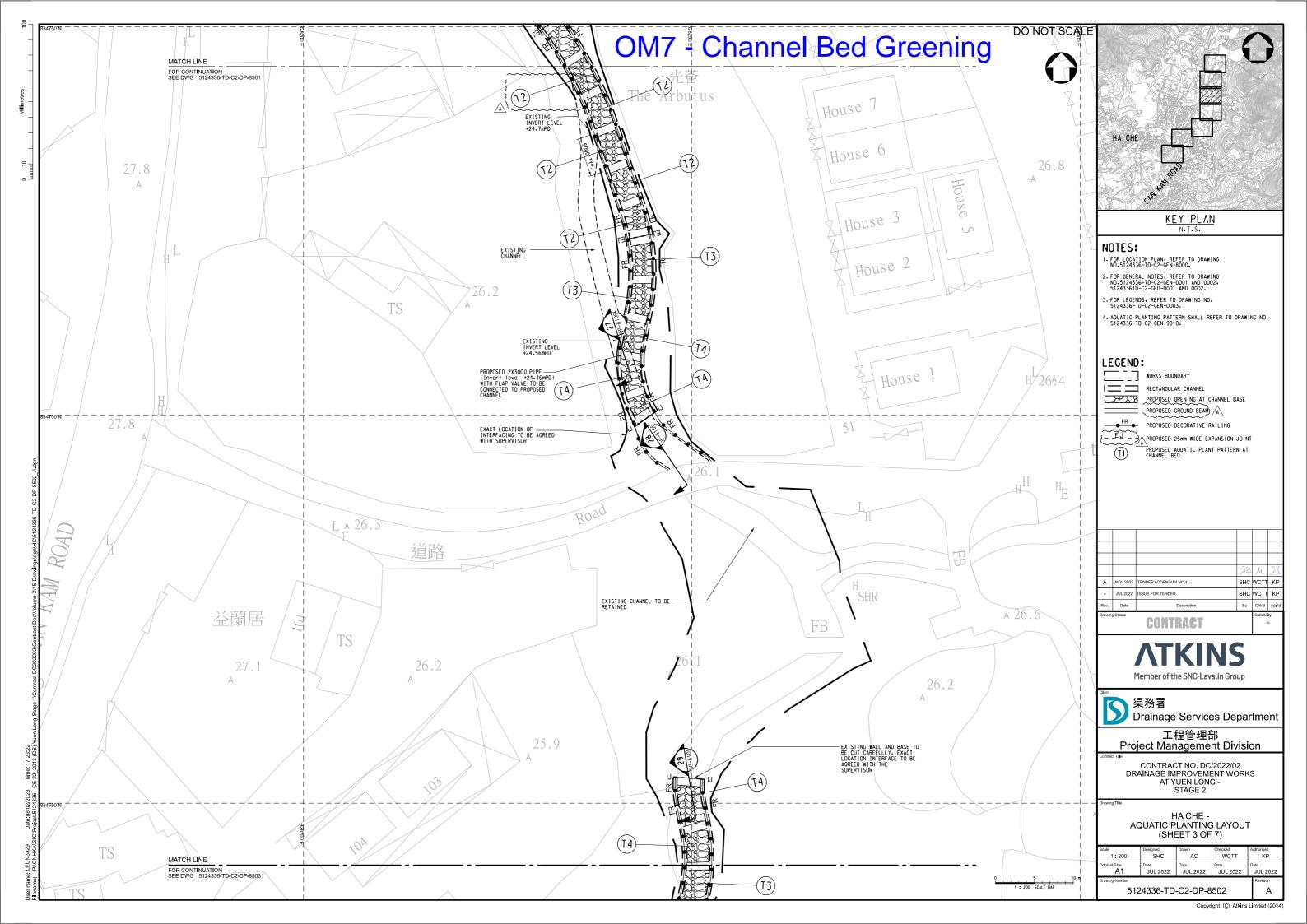


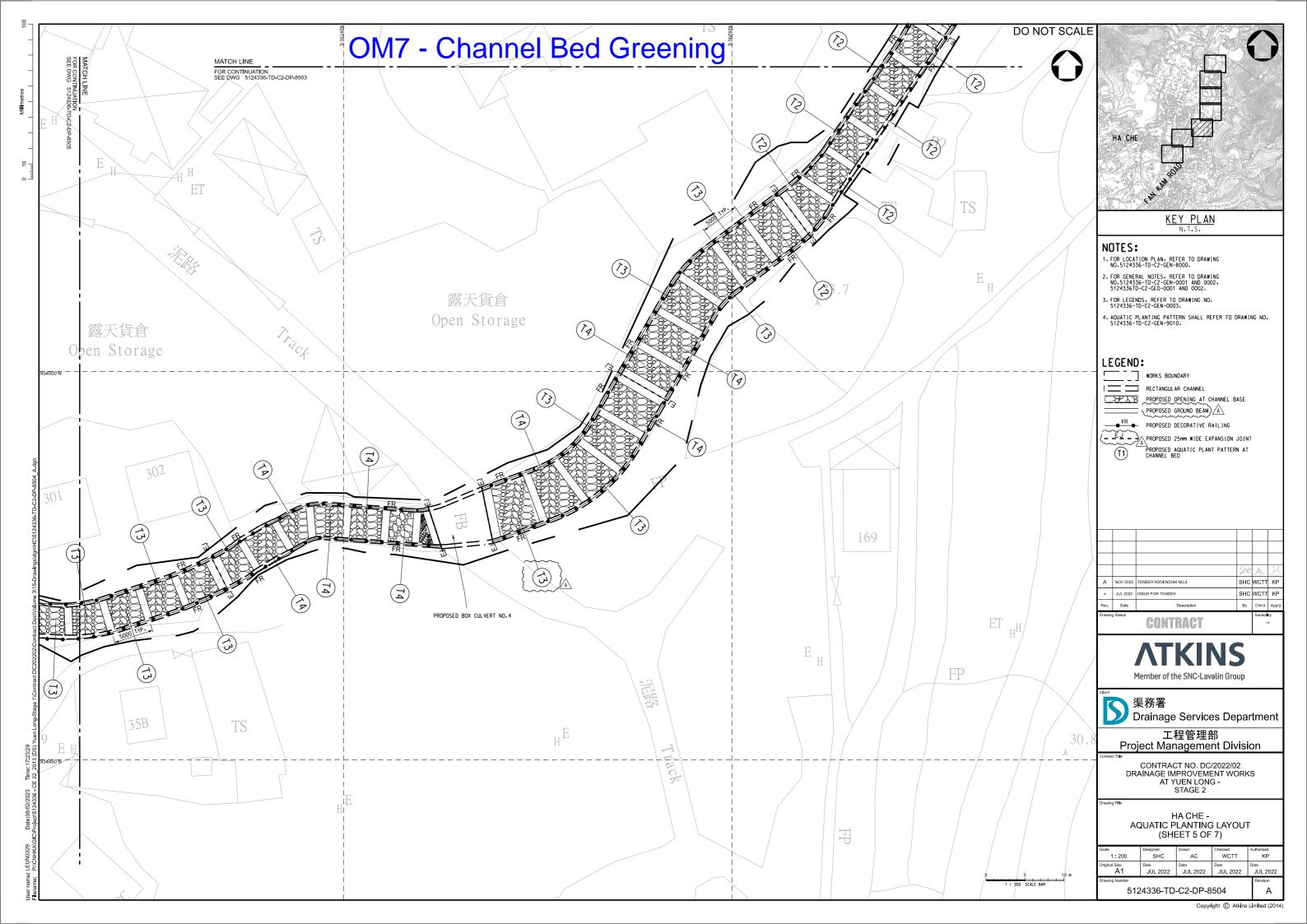
## CONTRACT COPY

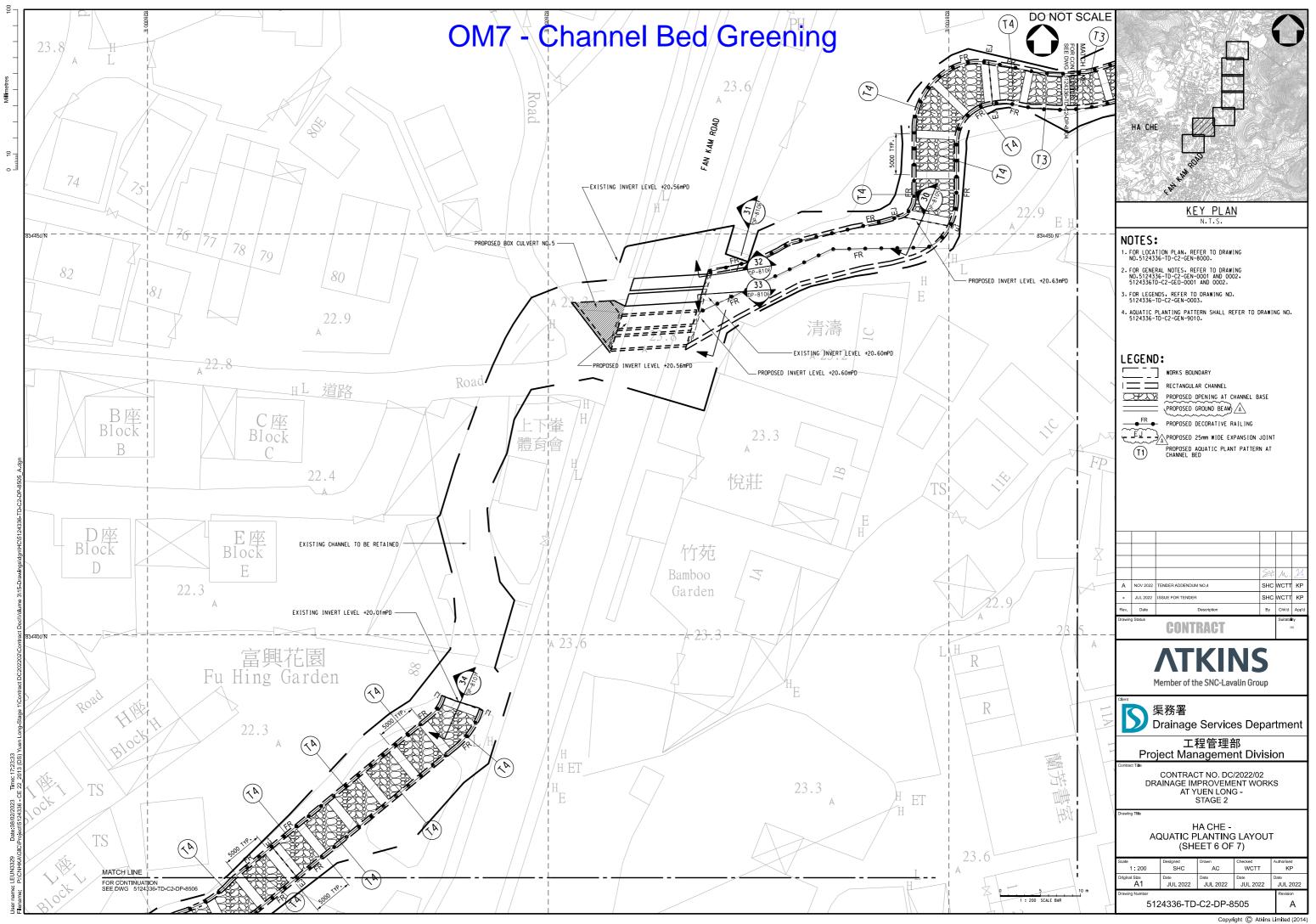


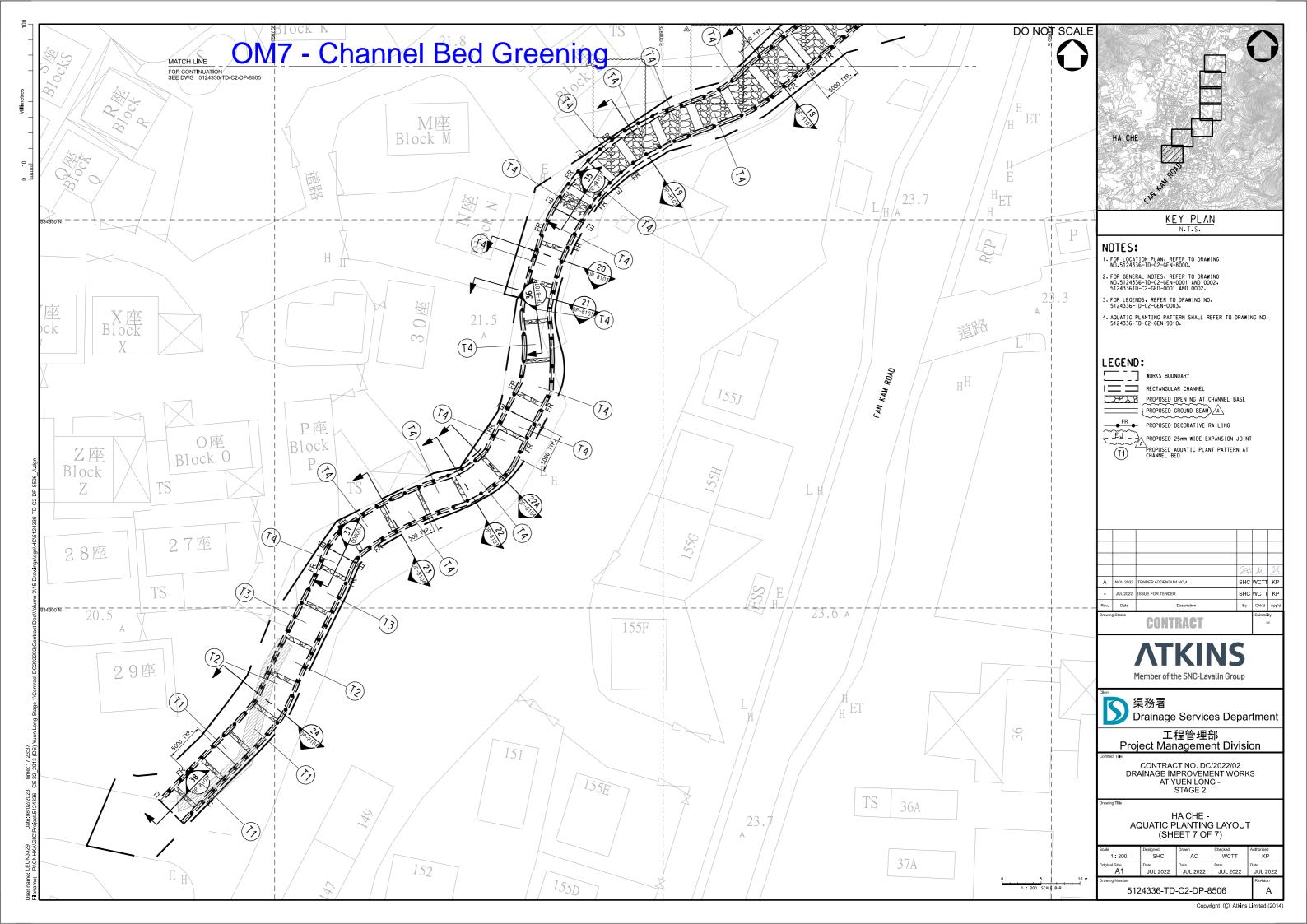












Appendix G – Implementation Programme, Maintenance and Management Schedule

EIA Ref.	EM&A Ref.	Recommended Environmental Protection Measures/ Mitigation Measures	Environmental Performance / Reference	Location/ Timing of implementation of Measures	Implementation agent	Maintenance and Management agent
Construction	n Phase - C	Construction site control				
S9.12.1.1	S.9.2	CM01 - Tree Protection and Preservation Trees / woodland within the Project Site which are unaffected by the works shall be protected and preserved during the construction phase. The tree preservation proposals shall be coordinated with the layout and design of the engineering and architectural works at detailed design stage for further retention of individual trees  A total 54 nos. trees will be retained and protected carefully according to DEVB TC(W) No. 4/2020 - Tree Preservation. Location of retain trees is showed in Appendix C.	EIAO-TM, DEVB TCW No. 4/2020 – Tree Preservation and latest Guidelines on Tree Preservation during construction period issued by GLTM Section of DEVB	Q1 2024 - Q3 2026	Contractor	Contractor
S9.12.1.1	S.9.2	CM02 – Offsite Compensatory Tree Planting If removal of trees unavoidable due to construction impacts, trees will be compensated where technically feasible.  A total of 235 nos. compensatory tree are proposed to be planted along the sides of the existing/proposed water course. No offsite compensatory tree planting is needed. The proposed compensatory planting is shown in Appendix D.	EIAO-TM; <i>DEVB TCW No.</i> 4/2020 – Tree Preservation and GEO Publication No. 1/2011	Work Sites / Q1 2024 - Q3 2026	Contractor	Contractor
S9.12.1.1	S.9.2	CM03 - Works Area and Temporary Works Areas (Good Site Practice) The construction sequence and construction programme shall be optimized in order to minimize the duration of impact. Construction site controls shall be enforced including the storage of materials, and the location and appearance of site accommodation and site storage. The site office or temporary above-ground structures shall be sited in locations which are not visually prominent.  Construction and demolition waste will be removed as soon as possible to avoid stockpiling onsite, whereas the excavated natural bedding materials will be properly stored with covering for reuse in the Project.  Construction materials and equipment will be properly stored after use.	EIAO-TM	Work Sites / Q1 2024 - Q3 2026	Contractor	Contractor
S9.12.1.1	S.9.2	CM04 - Advance Implementation of Mitigation Planting Replanting of existing / disturbed vegetation shall be undertaken as soon as technically feasible.  Temporary loss of trees and vegetation will be compensated upon the completion of the construction activities. 235 nos. compensatory tree, as well as shrubs, and groundcover will be replanted along the sides of the existing/proposed water course, native species will be adopted in the vegetation compensation. Location and planting schedule of mitigation plantation are shown in Appendix D.	EIAO-TM; DEVB TCW No. 4/2020 – <i>Tree Preservation</i> and GEO Publication No. 1/2011	Work Sites / Q1 2024 - Q3 2026	Contractor	Contractor

EIA Ref.	EM&A Ref.	Recommended Environmental Protection Measures/ Mitigation Measures	Environmental Performance / Reference	Location/ Timing of implementation of Measures	Implementation agent	Maintenance and Management agent
Construction	n Phase - C	Construction site control	1			
S9.12.1.1	S.9.2	CM05 - Coordination with Concurrent Projects Coordinated implementation programme with concurrent projects to minimise impacts and where possible reduce the period of disturbance.  Construction works have been planned and programmed to minimise impacts and reduce the period of disturbance. For example, the project is scheduled to avoid concurrent construction works with HAD's project which involves the construction of a bridge near the Village Office of Shui Tsan Tin Tsuen, downstream of Lin Fa Tei, such that the extent of construction impact is minimised. Besides, site works and material delivery are well-coordinated and planned to enhance works efficiency to avoid programme delays such that period of disturbance can be reduced.	EIAO-TM	Work Sites / Q1 2024 - Q3 2026	Contractor	Contractor
S9.12.1.1	S.9.2	CM06 - Decorative Screen Hoarding Decorative screen hoarding will be erected along areas of the construction works site boundary where the works site borders publicly accessible routes and/or is close to visually sensitive receivers (VSRs) to screen undesirable views of the works site. It is proposed that the screening be compatible with the surrounding environment and where possible, non-reflective, recessive colours be used.  Decorated screen hoardings shall be provided for the site offices area and site hoarding designs and location are shown in Appendix E.	EIAO-TM	Work Sites / Q1 2024 - Q3 2026	Contractor	Contractor
S9.12.1.1	S.9.2	CM07 – Light Control Construction and night time lighting glare will be controlled to minimize glare impact to adjacent VSRs during the construction stage. This is considered a general measure for good practice.  Lighting fixture with anti-glare design will be used at site office for security purpose, refer to Appendix E for the lighting specification. No lighting will be provided at night-time at the construction sites.	EIAO-TM	Work Sites / Q1 2024 - Q3 2026	Contractor	Contractor
S9.12.1.1	S.9.2	CM08 – Topsoil reuse Excavated topsoil should be conserved for re-use by the Project or other projects. This is considered a general measure for good site practice.	EIAO-TM	Work Sites / Q1 2024 - Q3 2026	Contractor	Contractor
S9.12.1.1	S.9.2	CM09 - Channel Bed Translocation Excavated natural stream bedding should be conserved for re-use by the Project. This is considered a general measure for promoting sustainability and ecological continuity.  Natural rocks, gravel, stone, sand and soil from the excavation natural bedding materials will be conserved and reused in formation of channel bed, refer to OM07 for further details.	EIAO-TM	Work Sites / Q1 2024 - Q3 2026	Contractor	Contractor

EIA Ref.	EM&A Ref.	Recommended Environmental Protection Measures/ Mitigation Measures	Environmental Performance / Reference	Location/ Timing of implementation of Measures	Implementation agent	Maintenance and Management agent
Operational	Phase - De	esign and Construction of the Works, including Hard work and Soft work				
S.12.1.2	S.9.2	OM01- Detailed Design Considerations Detailed design of development components should reduce landscape footprint and visibility of structures. The area allowed for necessary structures should be reduced to a practical minimum.  The alignment of the channel has been designed with minimal landscape and visual impact. For example, rectangular channel design, which has lesser footprint than trapezoidal channel design is considered in the drainage improvement works. The alignment of the channel has enabled the preservation of 54 nos. existing trees, which demonstrate the considerations of minimal landscape impact in the design. Also, the excavated natural bedding material will be re-used to pave the channel to maintain its natural conditions. Design details are shown in Appendix F.	EIAO-TM	Work Sites / Q1 2024 - Q3 2026 Operation phase	Design Consultant / Contractor	DSD /its management and maintenance agents
S.12.1.2	S.9.2	OM02 - Aesthetically Pleasing Design The form, textures, finishes and colours of the proposed development components should be compatible with the existing surroundings. Light earthy tone colours such as shades of green, shades of grey, shades of brown and off- white may be utilised where technically feasible to reduce the visibility of the development components, including all roadwork, buildings and noise barriers etc. To further improve visual amenity, natural building materials such as stone and timber, should be preferably adopted for architectural features, where technically feasible.  Retaining walls will be finished with a layer of stone facing finishing which is made of maximum 75mm thick in- situ concrete to create a rough texture mimicking natural stones, this design helps to harmoniously connect the structure with nature and allow climbers planting, design details are shown in Appendix F.	EIAO-TM	Work Sites / Q1 2024 - Q3 2026 Operation phase	Design Consultant / Contractor	DSD /its management and maintenance agents
S.12.1.2	S.9.2	OM03 – Responsive Design of Channel alignments The proposed use of a responsive design for the disposition of the main elements of the proposed drainage scheme including the routing of the channel to enable the preservation of significant landscape elements, such as large trees and the development of aesthetic treatments in response to the urban context within which the projects are to be implemented. The disposition and height profile of the developments and above ground utilities structures to respond to the existing context particularly the existing landform and preserved trees. Proposals designed to minimise the single use of space for functional and utility purposes and promote integrated design solutions. Create a subtle transition at the edges of the sites to enhance the sense of visual integration with the existing context and avoid abrupt transitions between the existing and proposed built environment.  The design of the channel improvement has considered minimizing the impact on existing trees, 54 nos. existing trees including trees of large size can be preserved. Furthermore, standard size trees are proposed for tree compensation along the sides of the channel. These provide pleasing landscape along the channels.	EIAO-TM	Work Sites / Q1 2024 - Q3 2026 Operation phase	Design Consultant / Contractor	DSD /its management and maintenance agents

EIA Ref.	EM&A Ref.	Recommended Environmental Protection Measures/ Mitigation Measures	Environmental Performance / Reference	Location/ Timing of implementation of Measures	Implementation agent	Maintenance and Management agent
Operational	Phase - De	esign and Construction of the Works, including Hard work and Soft work	,	•		•
S.12.1.2	S.9.2	OM04 – Design of Engineering Structures The design of the proposed Engineering Structures such as the proposed retaining culverts and footbridges should pay particular attention to the appearance and construction methods. The detailed design landscape consultants shall work in unison with the engineers on the aesthetic aspects of the structures and their relationship with the landscape. Planting would be used wherever possible to minimise the apparent height of structures and to soften their appearance in medium and long distance views. The design of engineering structures shall avoid any unnecessary visual clutter; this would be achieved through the co-ordination of the various engineering disciplines involved to arrive at integrated design solutions.  The reinstatement of improved urban features such as footpaths and bridges associated with the drainage proposals has considered integrating of these engineering structures into the existing landscape to help	EIAO-TM	Work Sites / Q1 2024 - Q3 2026 Operation phase	Design Consultant / Contractor	DSD /its management and maintenance agents
S.12.1.2	S.9.2	mitigate any slight losses in physical area due to channel realignment and enlargement within the urban area.  OM05 – Design of Retaining Walls and Channel Embankments The proposed treatment of Retaining Wall and Slopes will be undertaken in accordance with GEO Publication No. 1/2000 "Technical Guidelines on Landscape Treatment and Bio-engineering for Man-made Slopes and Retaining Walls" as well as DSD Practice Note No. 1/2015 Guidelines on Environmental and Ecological Considerations for River Channel Design. These engineering structures will be aesthetically enhanced through		Work Sites / Q1 2024 - Q3 2026 Operation phase	Design Consultant / Contractor	DSD /its management
		the use of soft landscape works including tree and shrub planting to give man-made slopes a more natural appearance blending into the local rural landscape. Whip sized tree planting is preferred on the face of soil cut slopes. The smaller, younger plant stock will adapt to their new growing conditions more quickly than larger sized stock and establish a naturalistic effect more rapidly. Larger sized tree stock shall be missed with whip sized trees to create a more diverse woodland structure enhance the screening effect from day one. Hydroseeding will be applied on slope has a gradient more than 30 degree.  Retaining walls and vertical-wall embankments shall be finished with a layer of stone facing finishing which is made of in-situ concrete as shown in Appendix F. Different types of shrubs mix planting are proposed along suitable locations of the channel embankments as shown in Appendix D.	Channel Design			and maintenance agents

EIA Ref.	EM&A	Recommended Environmental Protection Measures/ Mitigation Measures	Environmental Performance /	Location/ Timing of	Implementation	
	Ref.		Reference	implementation of Measures	agent	Management agent
Operational	l Phase - De	I esign and Construction of the Works, including Hard work and Soft work				
S.12.1.2	S.9.2	OM06 – Compensatory Planting Proposals at Channel edges All compensatory planting of trees is to be carried out in accordance with ETWB TCW No. 10/2013. A total woodland compensation area of 5.54 ha is proposed. The planting proposals will utilise native species. Some compensatory shrub and ground cover planting will also be provided within the channel edge area to create more structurally diverse woodland and a layered vegetated edge to the watercourse.  235 nos. compensatory tree planting are proposed, all proposed tree plantings are standard size trees. They all have 2m crown spread and are at minimal 3m spacing as shown in the Appendix D. The trees will be planted in random pattern along the sides of the existing/proposed water course to resemble the village setting and enhance the existing eco-system along the existing water course. All proposed compensatory trees are native trees species of Hong Kong and are commonly found either in the vicinity of surveyed area or in village areas.  Moreover, the river channels edges, channel bed riparian area, channel slope embankment shall be planted with naturalistic shady shrub mix and ornamental shady shrub mix, which are in the combination of various native species of shrubs and groundcovers to give channel structure a more natural appearance blending into the local rural landscape. The location and planting schedule of the naturalistic shady shrub mix and ornamental shady shrub mix are shown in Appendix D.		Work Sites / Q1 2024 - Q3 2026 Operation phase	Design Consultant / Contractor	DSD /its management and maintenance agents/ DLO/ LCSD
S.12.1.2	S.9.2	OM07 – Channel bed and embankment toe greening Develop practical greening and ecological enhancements in accordance with DSD Practice Note No. 1/2015 Guidelines on Environmental and Ecological Considerations for River Channel Design.  Excavated natural bedding materials will be reused for the formation of channel bed, various types of aquatic plant will be planted on the channel bed in 4 planting patterns. The planting schedule and general arrangement of the planting patterns are showed in Appendix F.	1/2015 Guidelines on Environmental and Ecological Considerations for River Channel Design.	Work Sites / Q1 2024 - Q3 2026 Operation phase	Design Consultant / Contractor	DSD /its management and maintenance agents

EIA Ref.	EM&A Ref.	Recommended Environmental Protection Measures/ Mitigation Measures	Environmental Performance / Reference	Location/ Timing of implementation of Measures	Implementation agent	Maintenance and Management agent
Operational	Phase - De	esign and Construction of the Works, including Hard work and Soft work				
S.12.1.2	S.9.2	OM08 – Vertical and trailing Greening Vertical planting should be established to soften the hard, vertical surfaces of the proposed development components. These components will include walls of the proposed culvert sand retaining walls. Planting to utilise climbing and trailing plants. Location and extent of vertical greening subject to detailed design.  Apart from the compensatory tree planting along the proposed channel, groundcover and shrub planting are proposed to beautify the proposed works and help the channel to blend into the surrounding environment. Planting schedule of the shrub mix and groundcover mix and planting arrangement in different landscape area settings are showed in Appendix D. Climbing plants species Ficus pumila are used to provide vertical greening at the channel wall. Greening designs of channel and planting schedule are showed in Appendix F.		Work Sites / Q1 2024 - Q3 2026 Operation phase	Design Consultant / Contractor	DSD /its management and maintenance agents
S.12.1.2	S.9.2	OM09 – Green Paving Where technically feasible utilise a green paving approach such as grass-crete or grass-grid to maximise the area of planting and reduce the area of hard paving.  The pedestrian/vehicular crossing and footpath area will be reinstated with hard surfacing to provide adequate access for local commuting use, with a portion of the area subject to less traffic loading to be green paved in form of hydroseeding in lieu of grass-crete/ grass-grid. Location of green paving is shown in Appendix D. All available spaces for permanent planting have been maximized.	EIAO-TM	Work Sites / Q1 2024 - Q3 2026 Operation phase	Design Consultant / Contractor	DSD /its management and maintenance agents