

Agreement No. CE 13/2014 (CE)

Development of Kwu Tung North and Fanling North New Development Areas

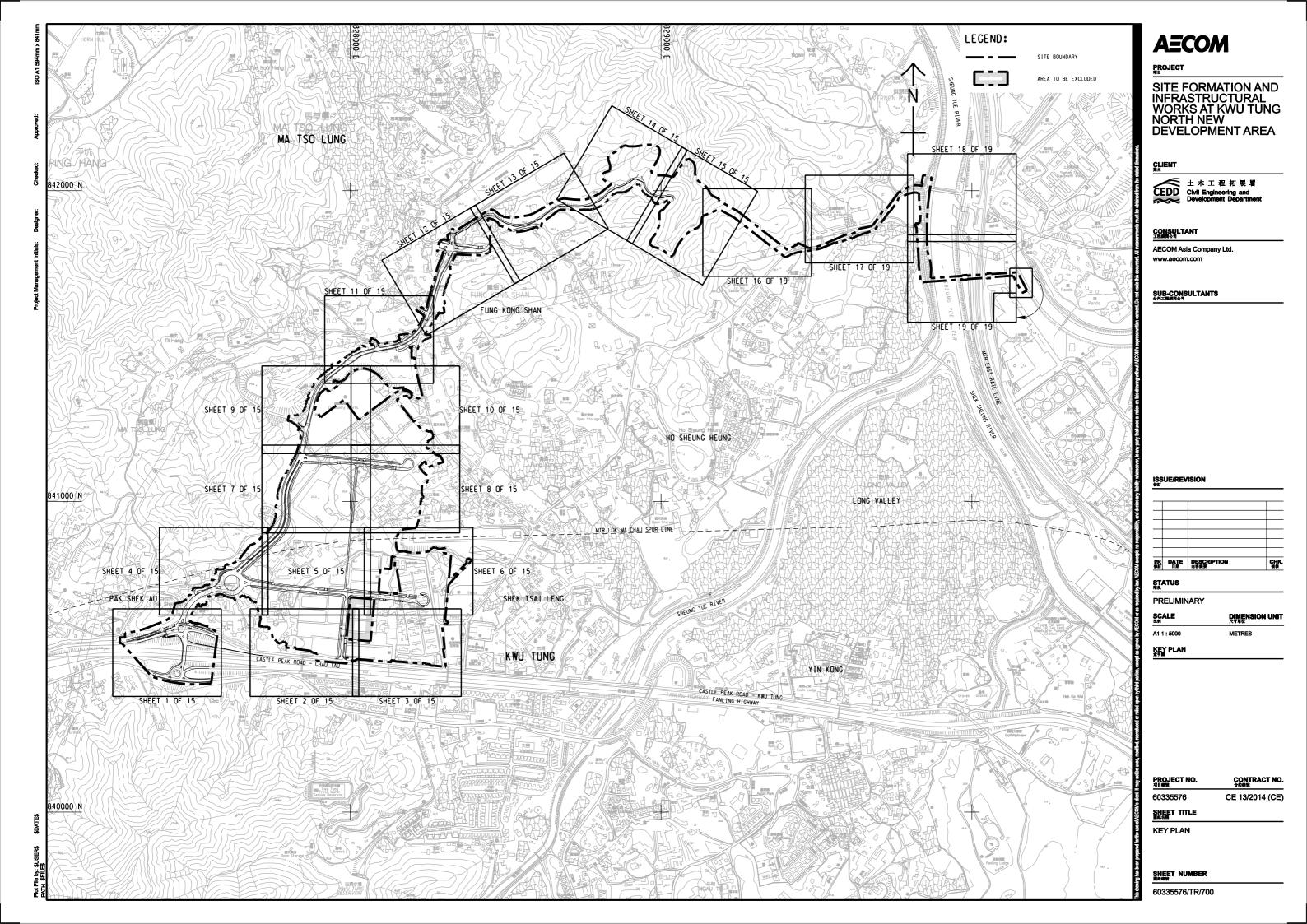
Phase 1 – Design and Construction

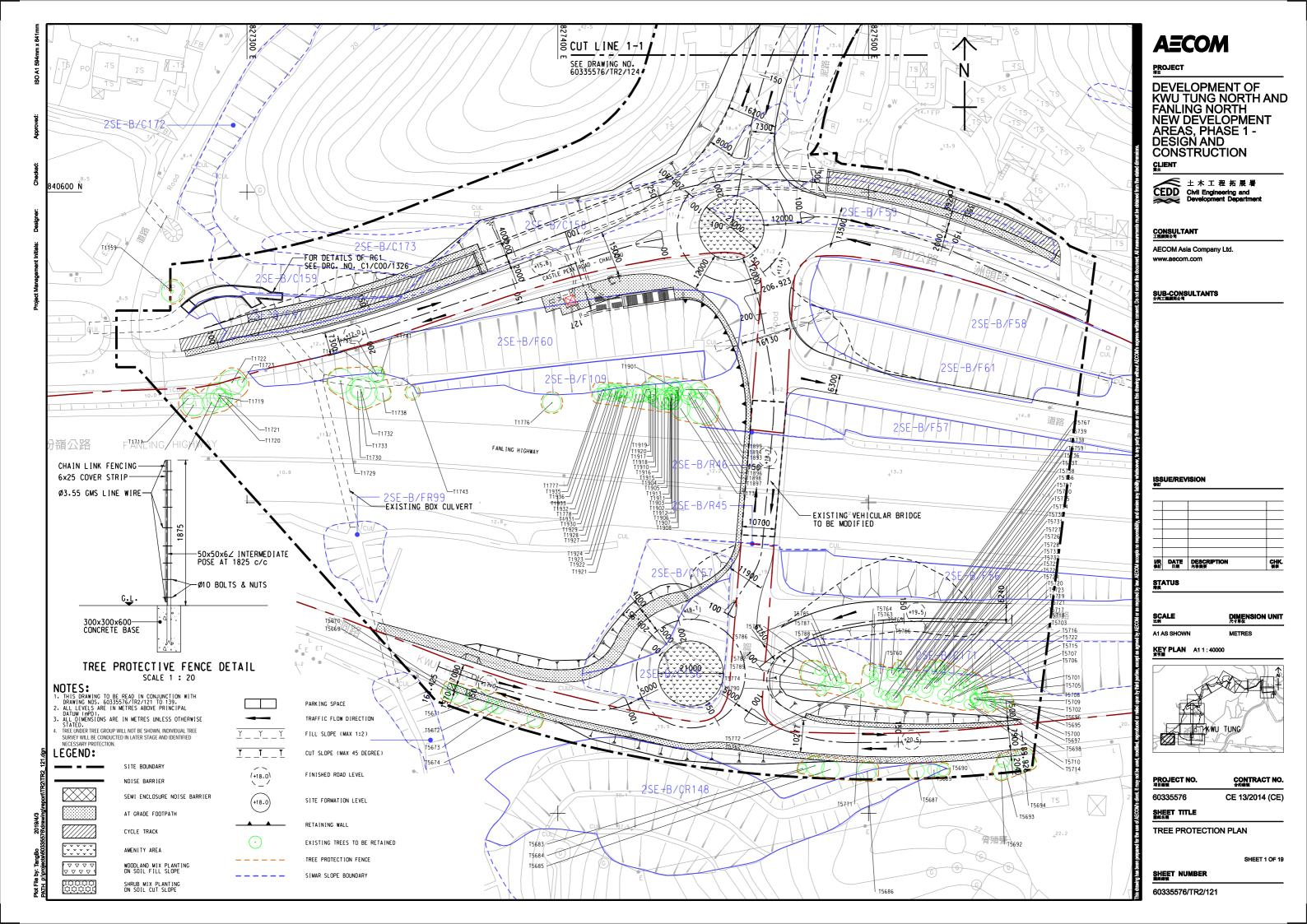


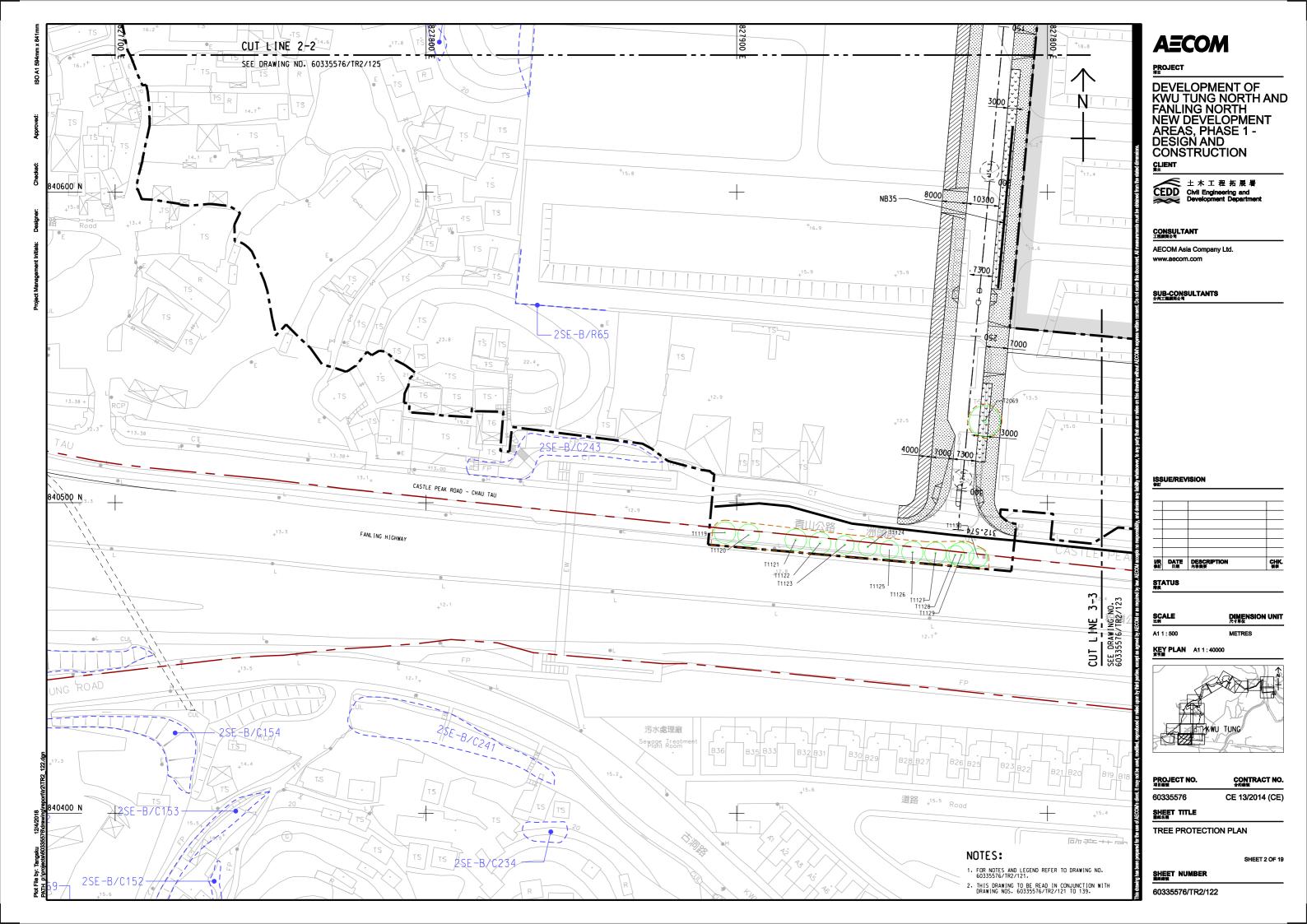
Appendix V

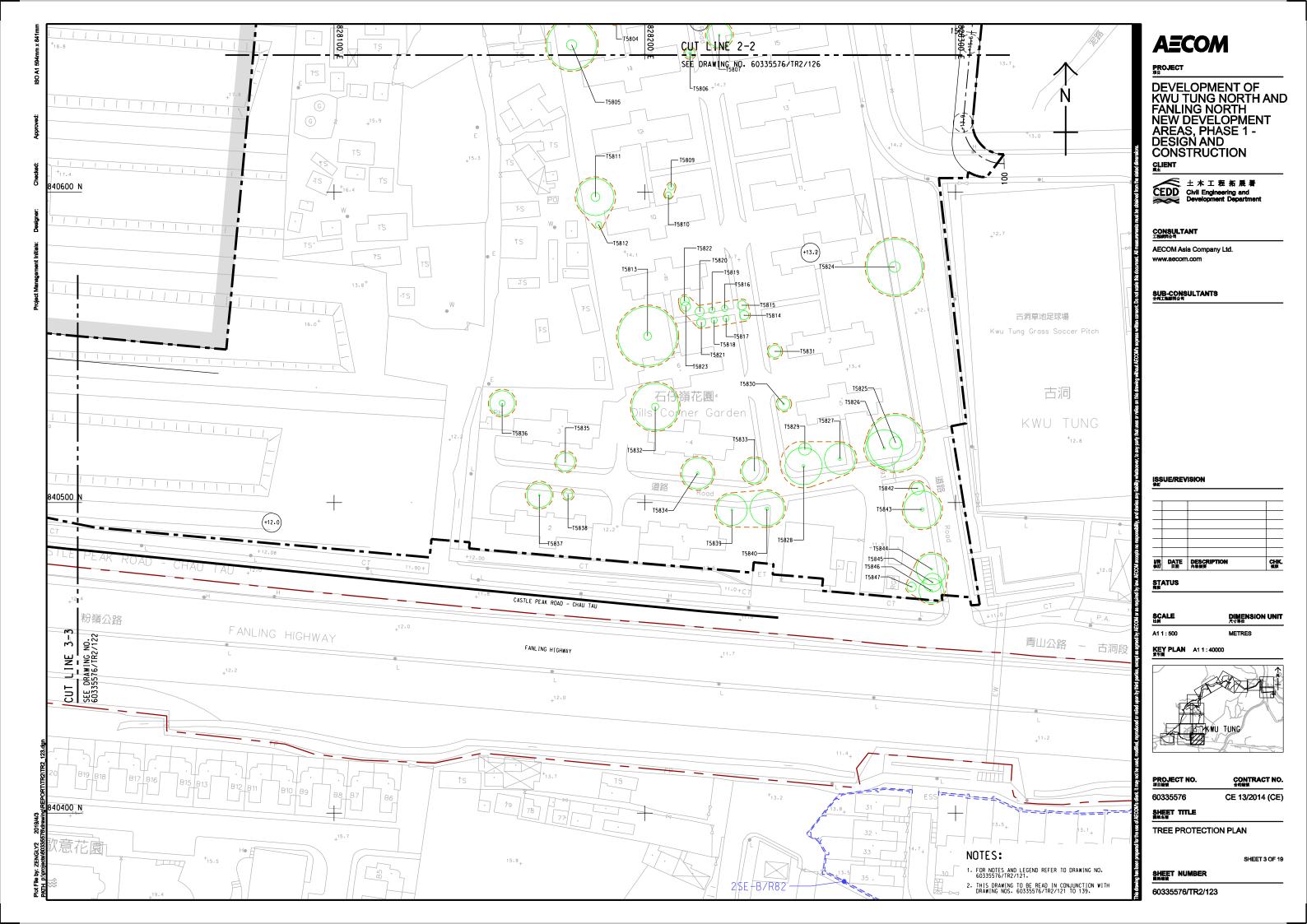
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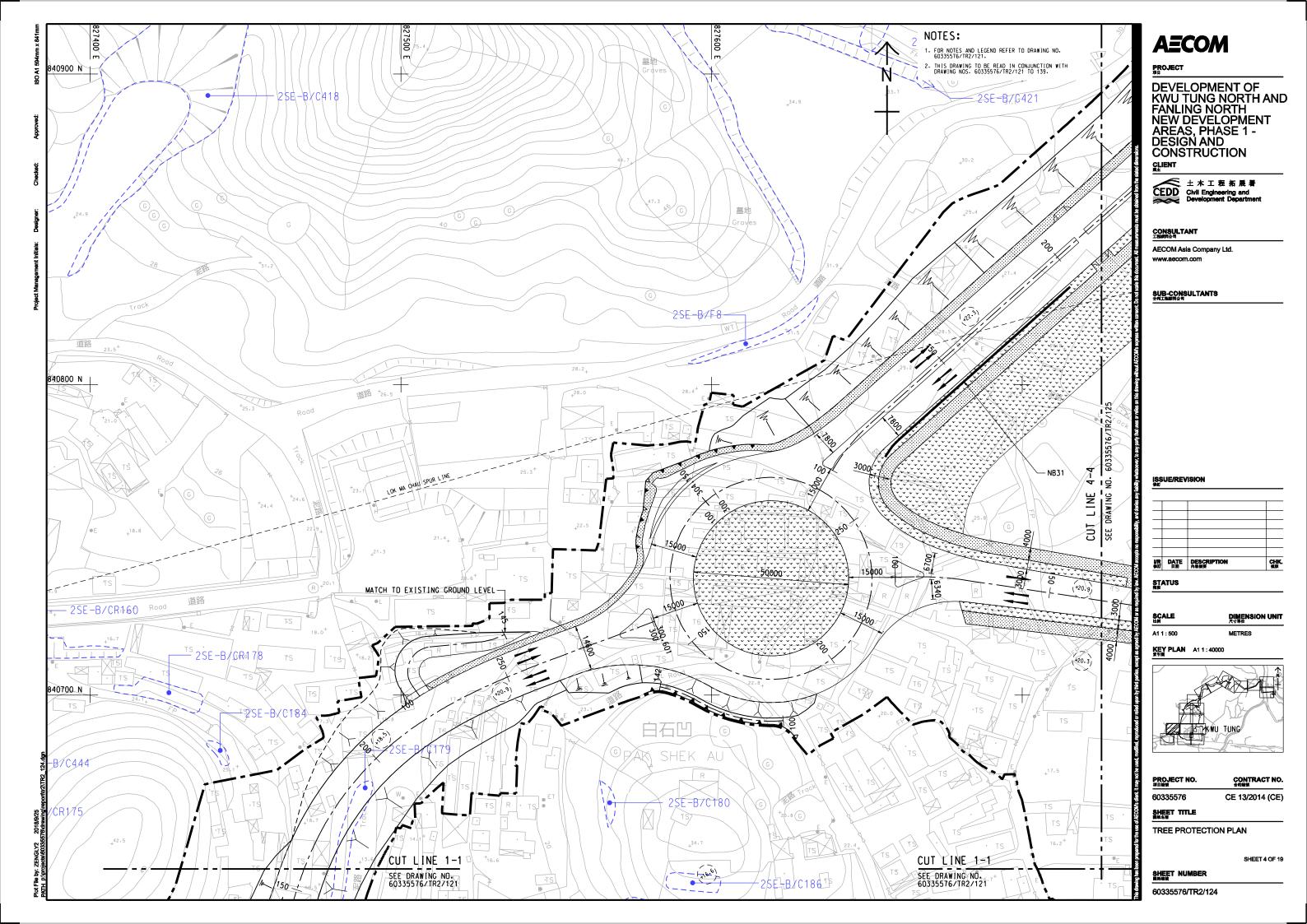


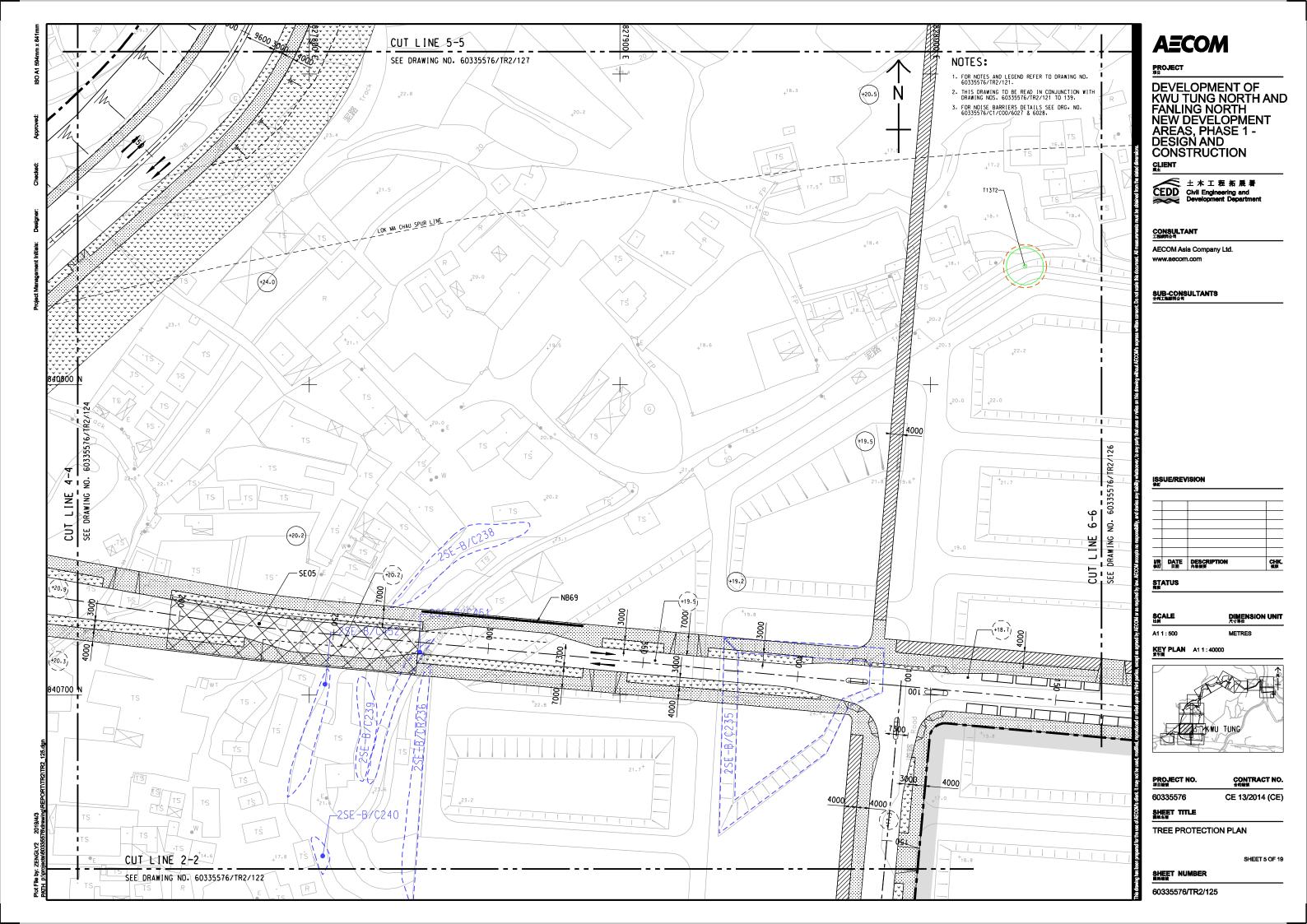


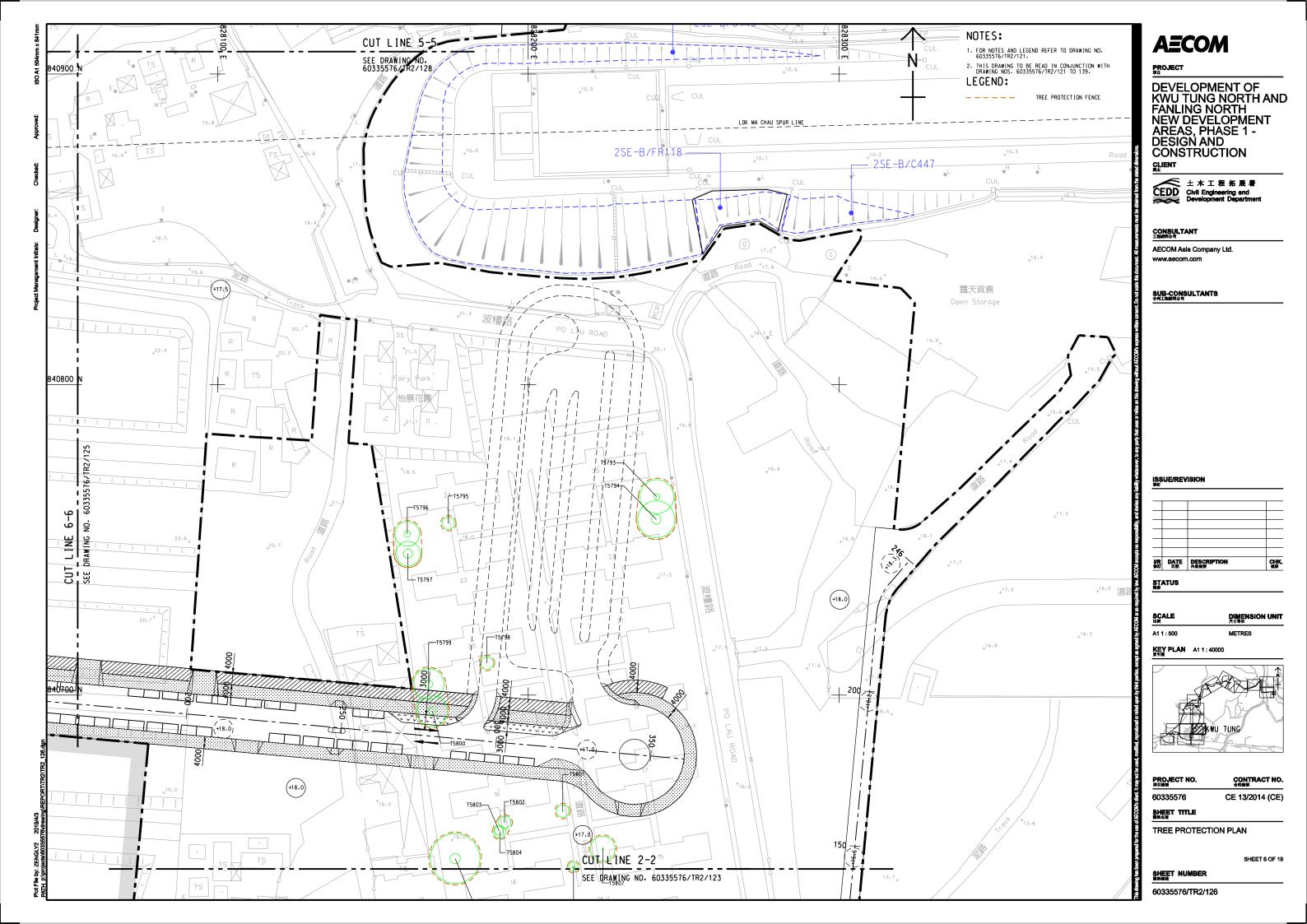


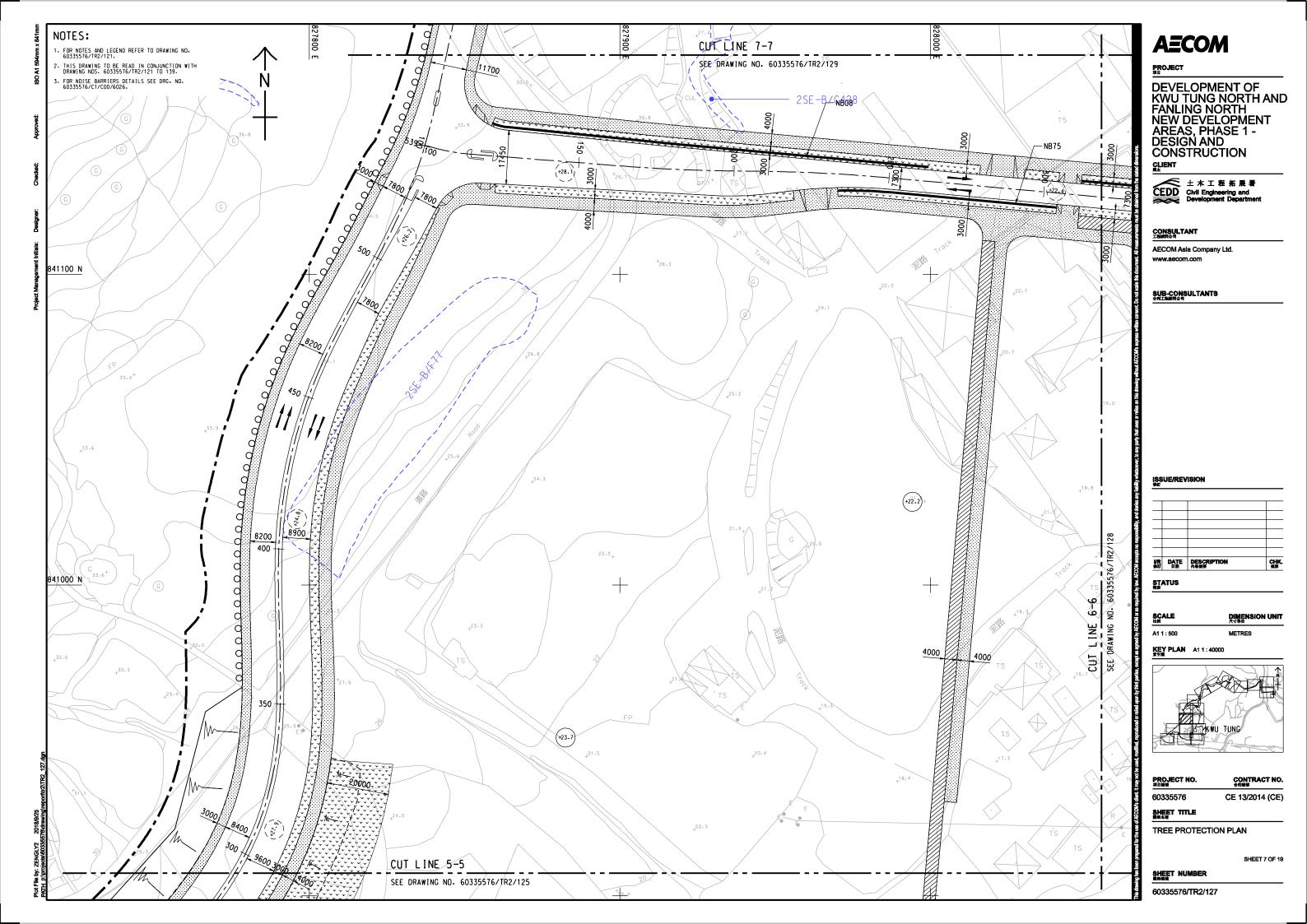


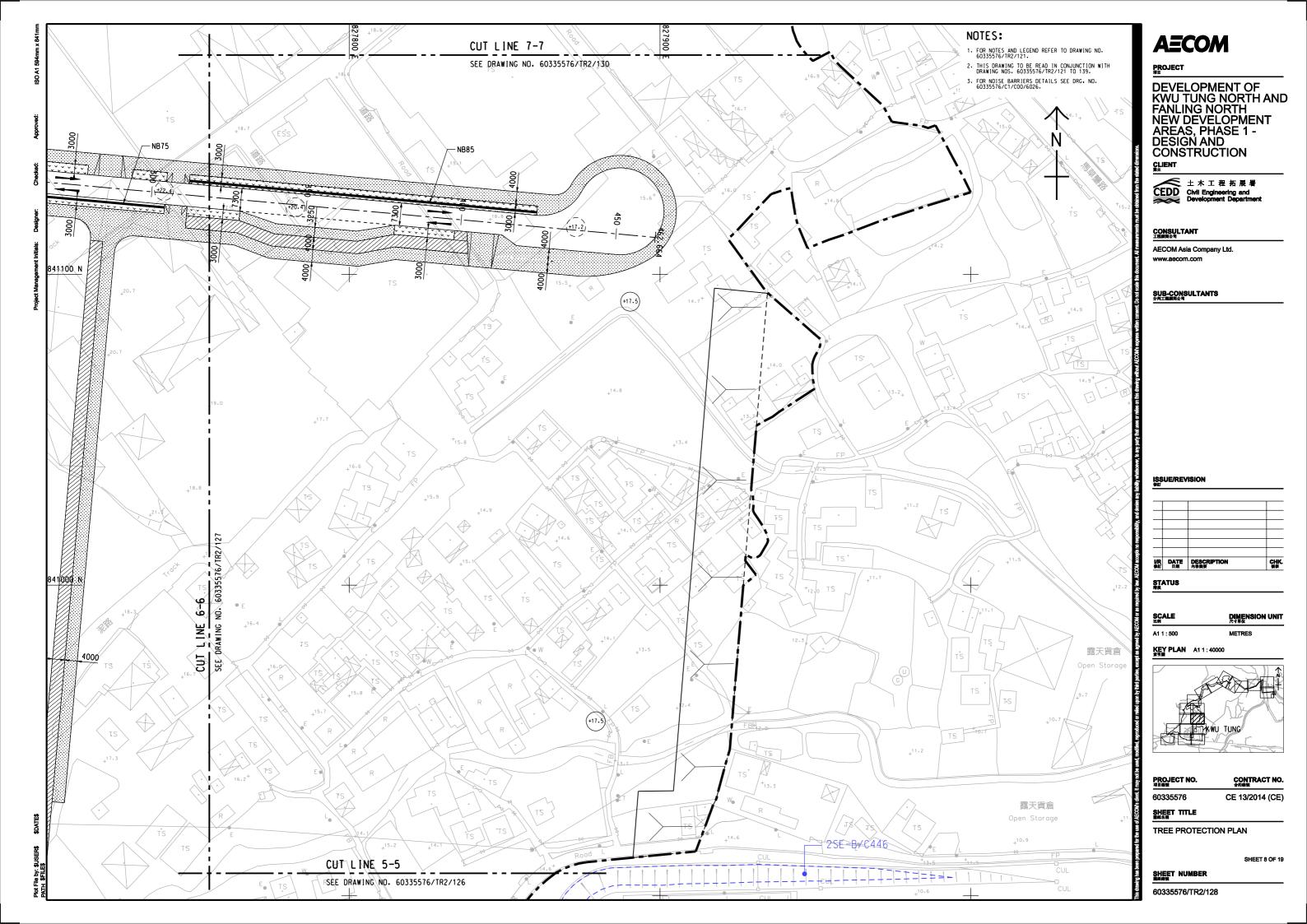


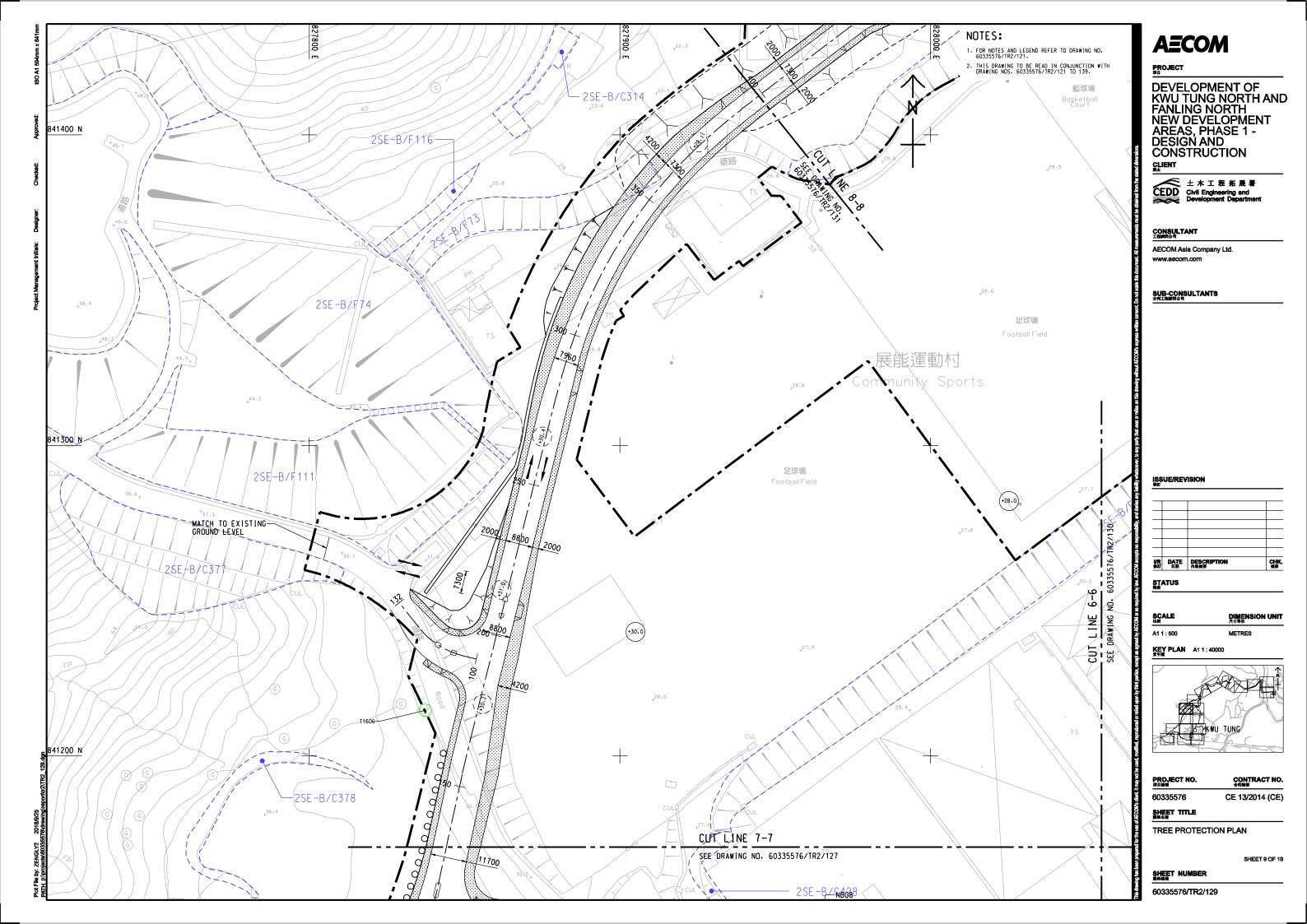


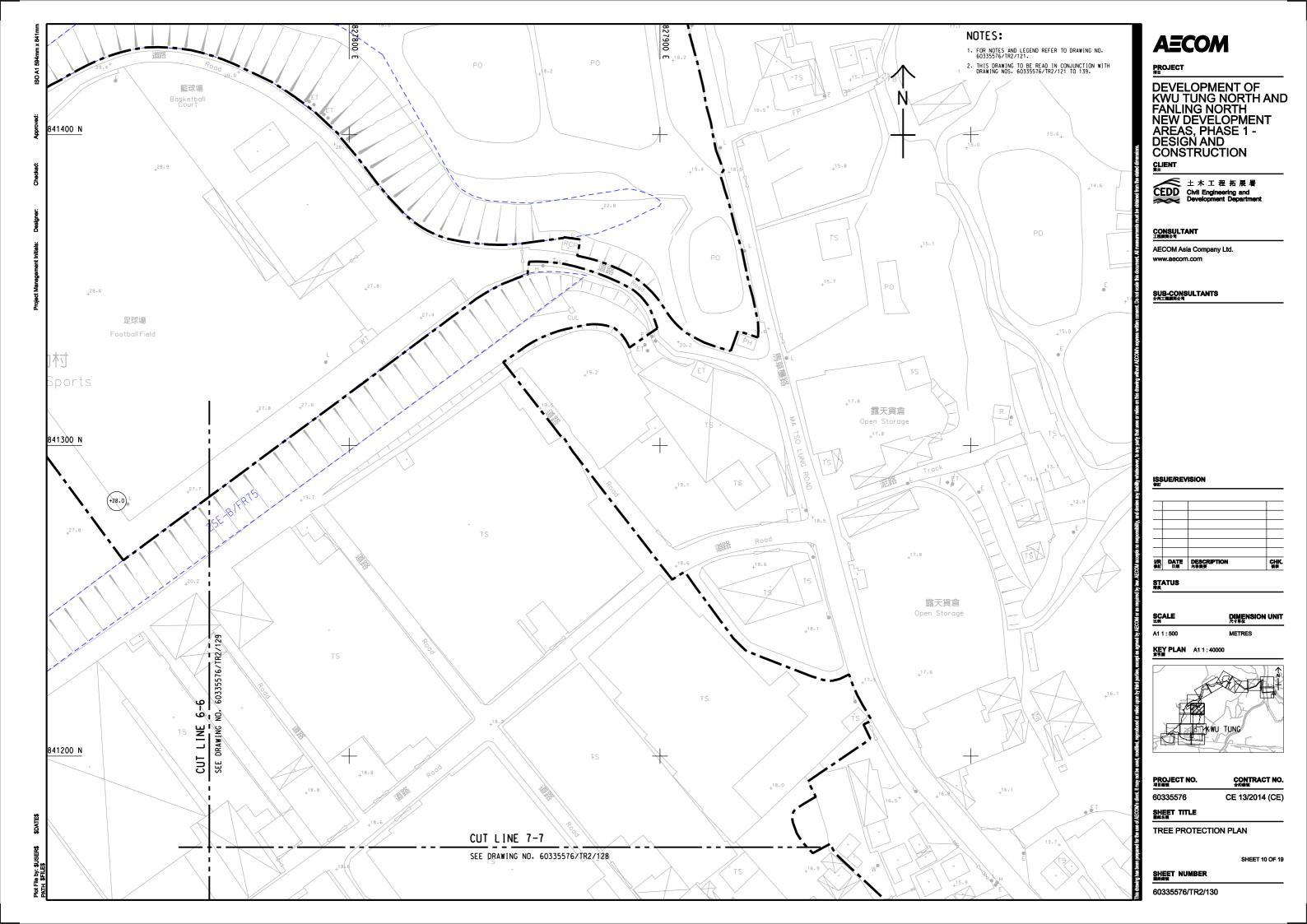


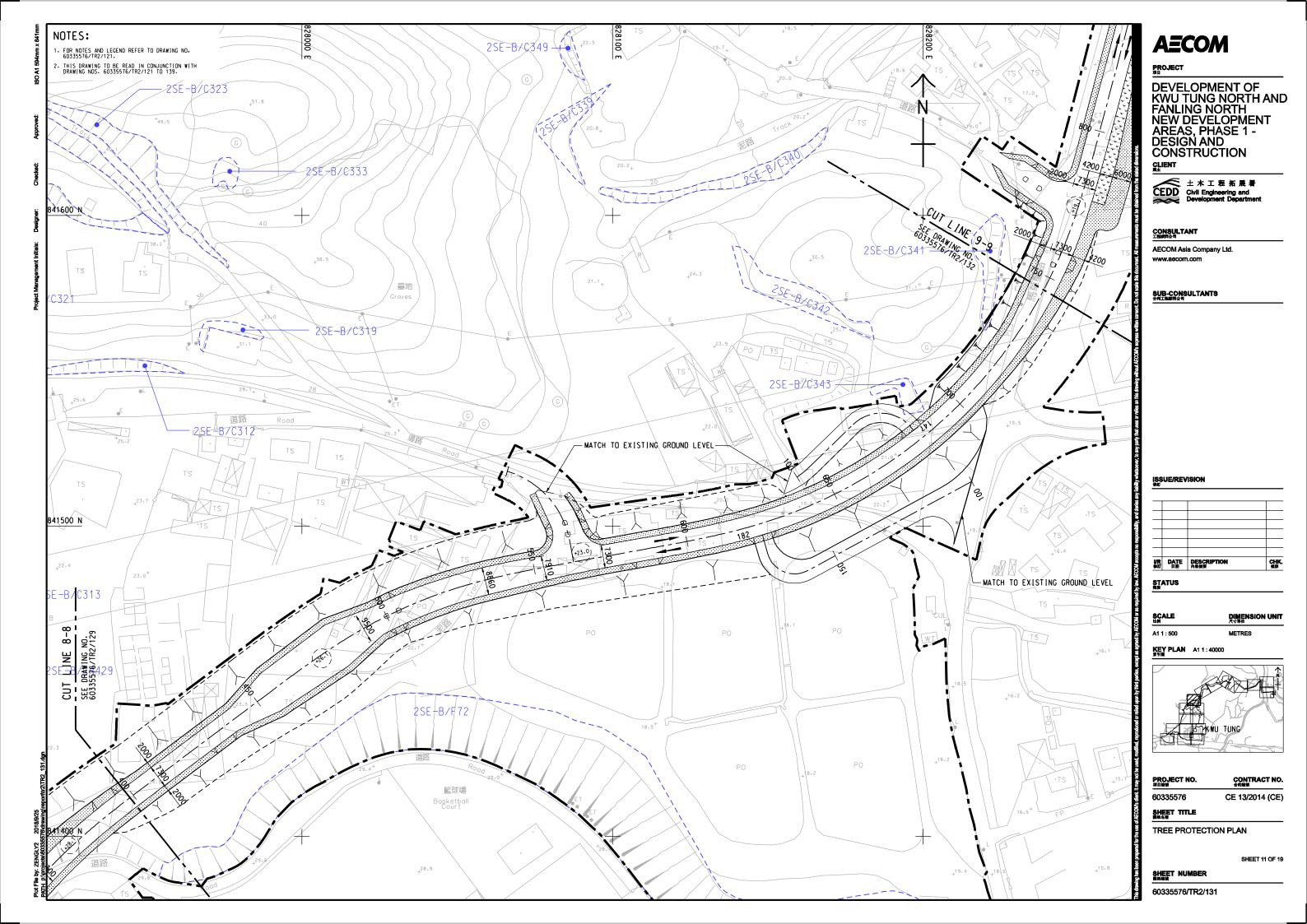


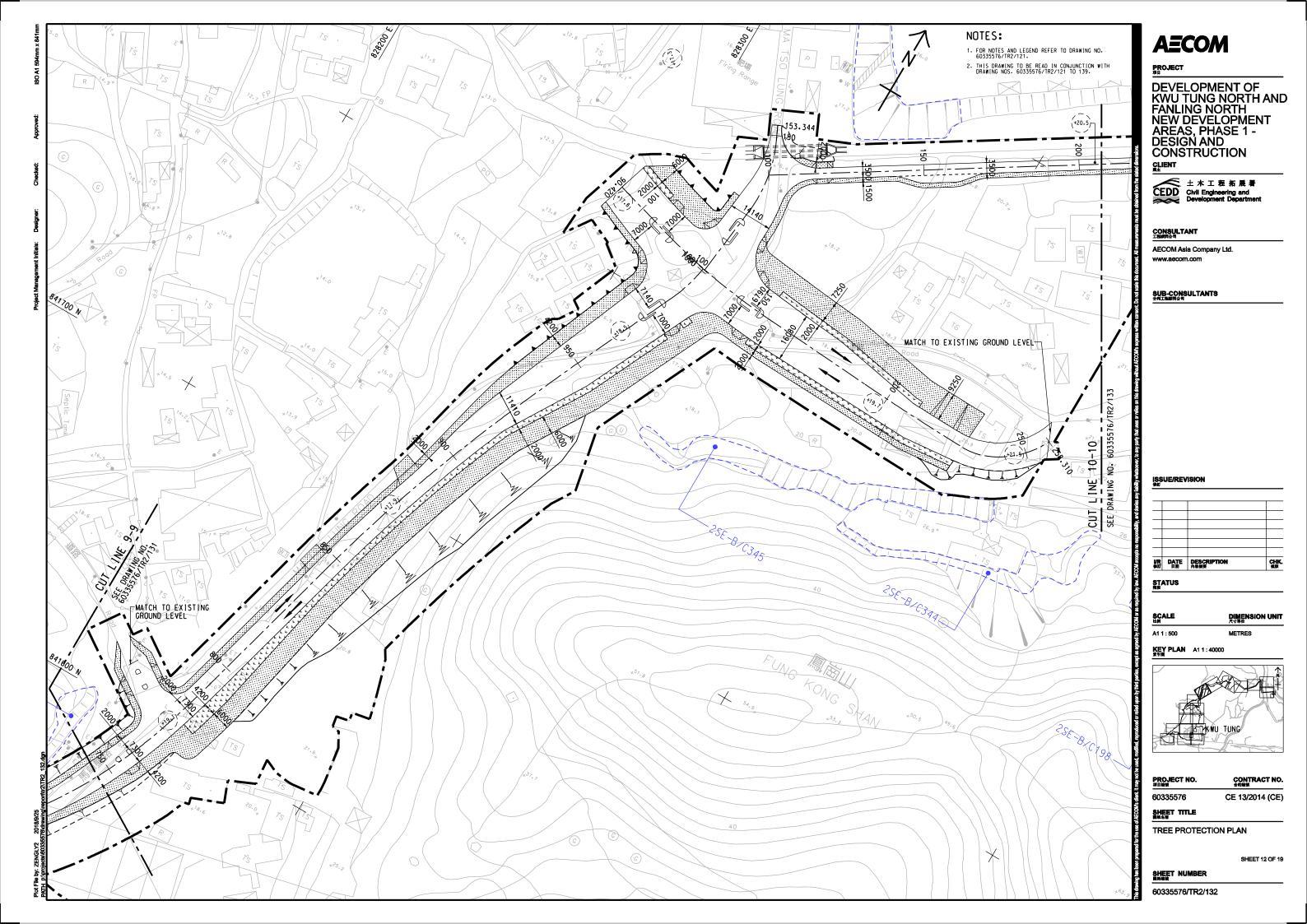


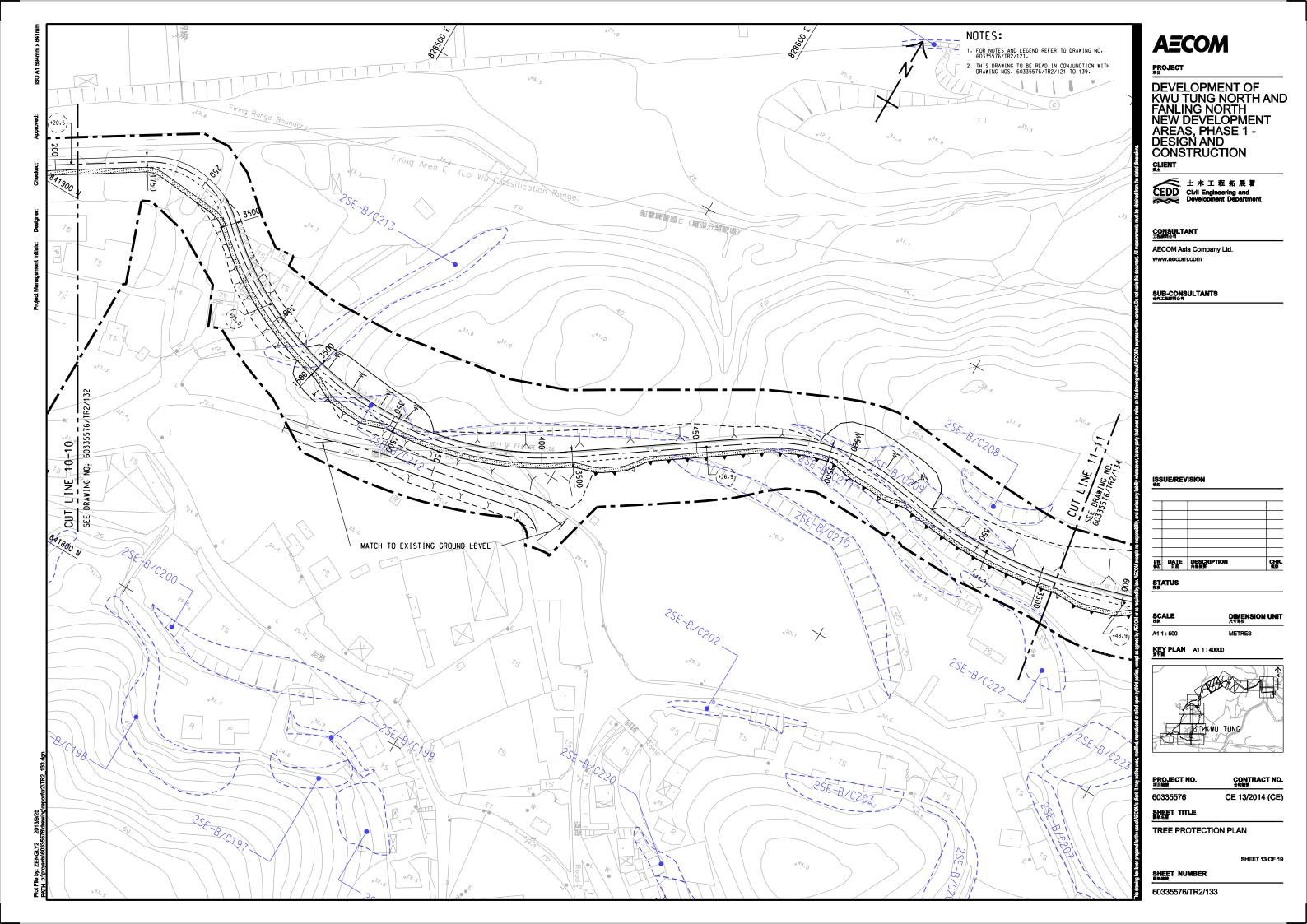


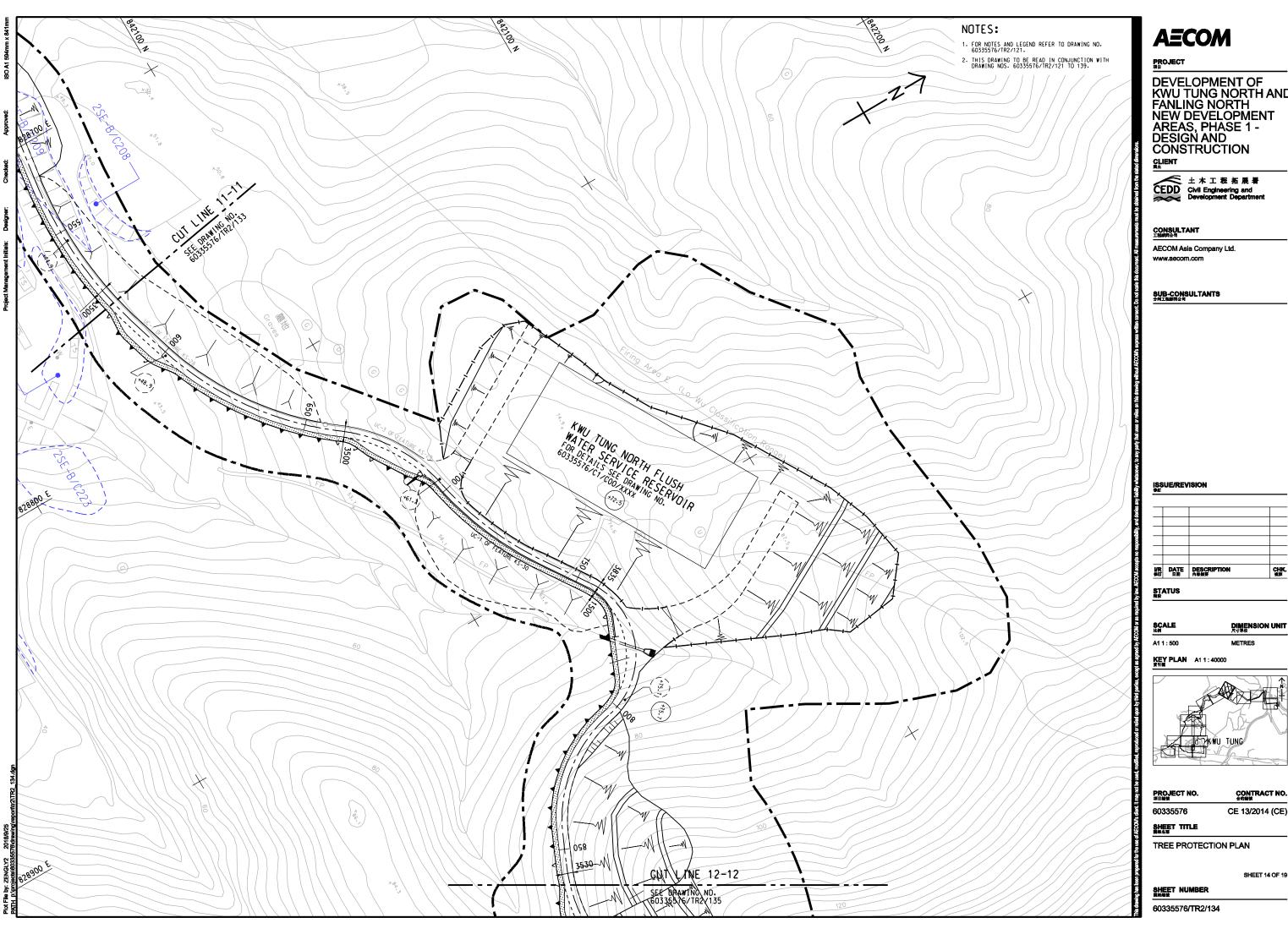




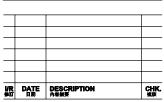




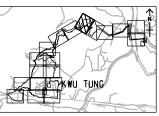




DEVELOPMENT OF KWU TUNG NORTH AND FANLING NORTH NEW DEVELOPMENT AREAS, PHASE 1 -DESIGN AND CONSTRUCTION

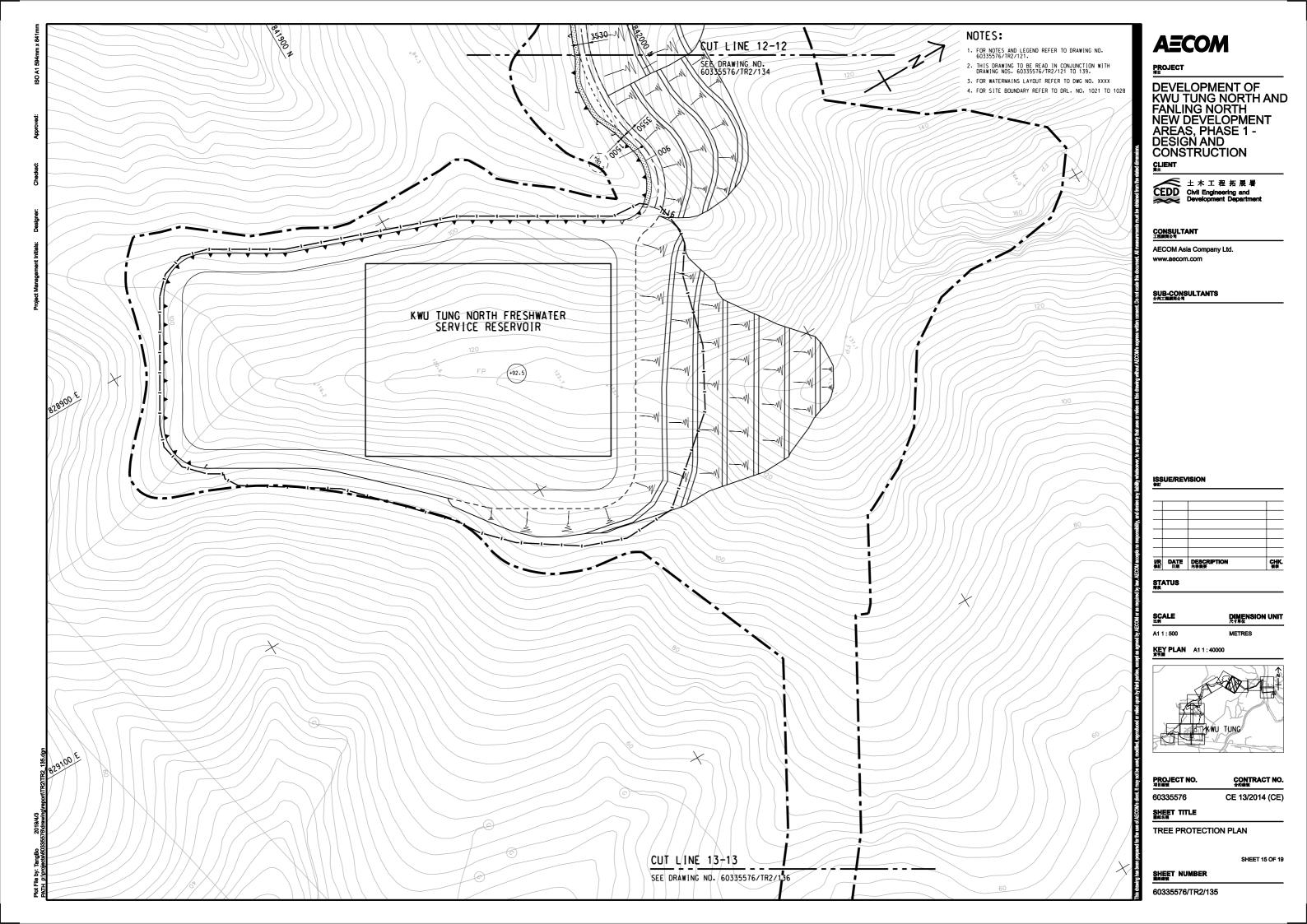


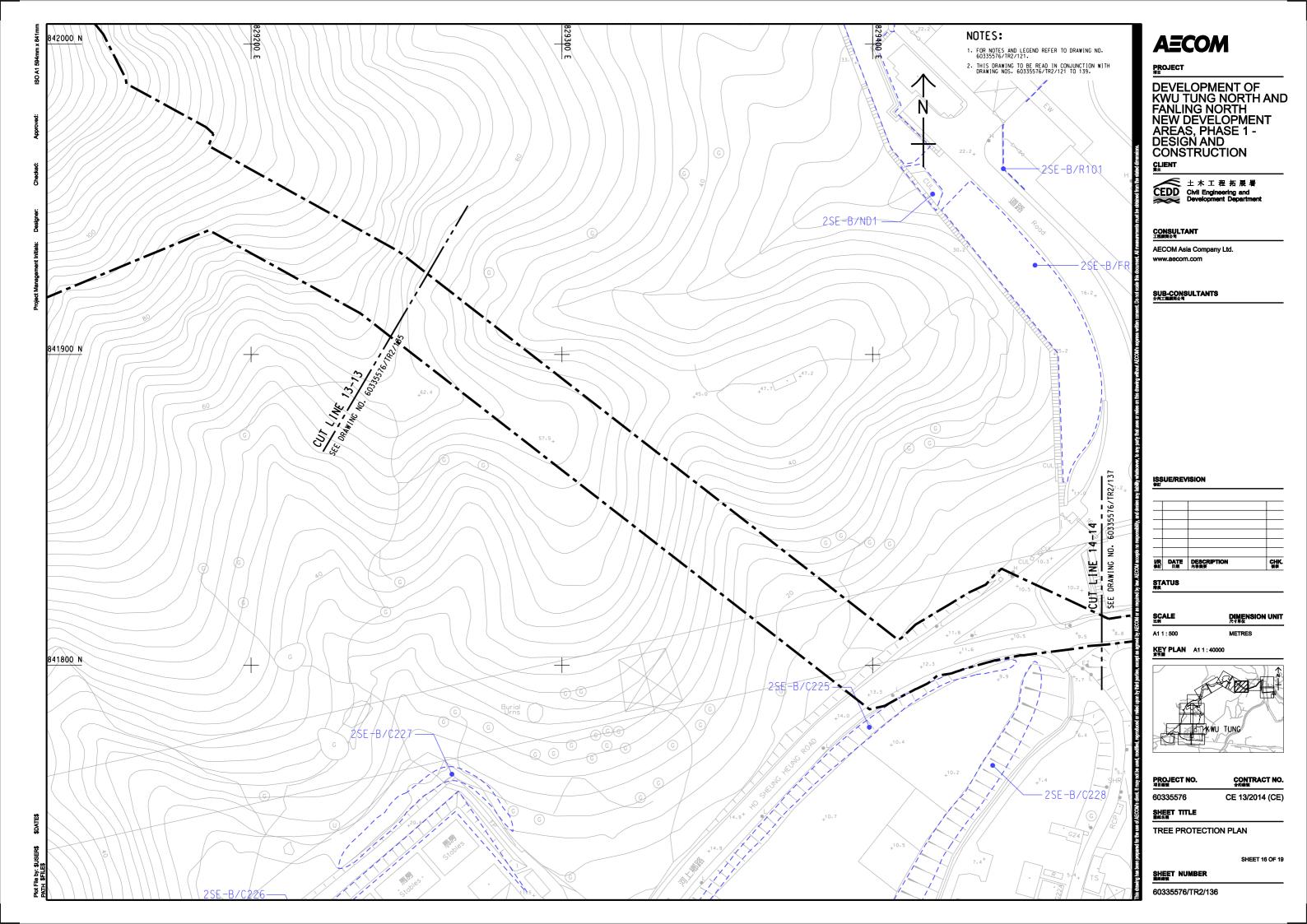
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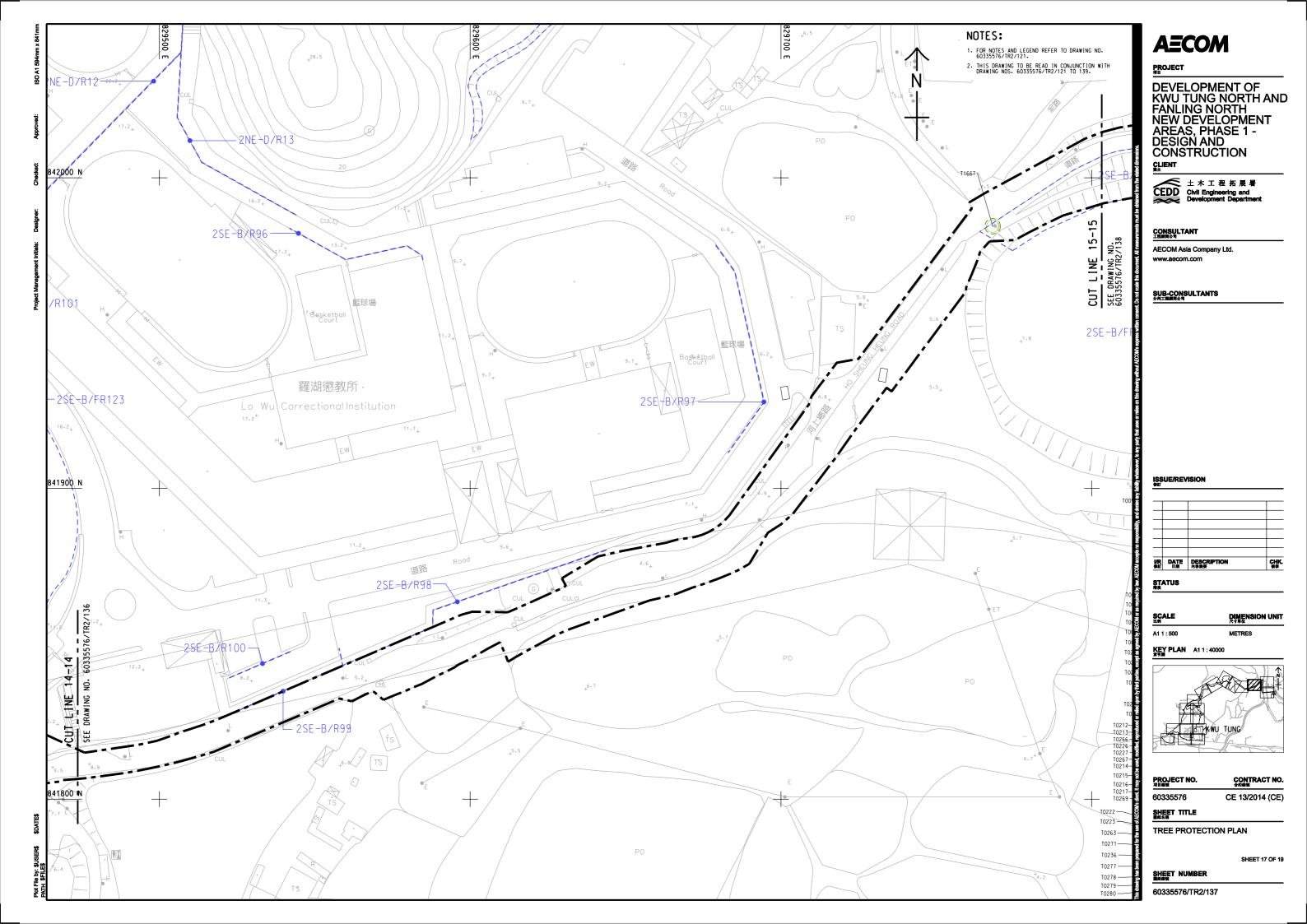


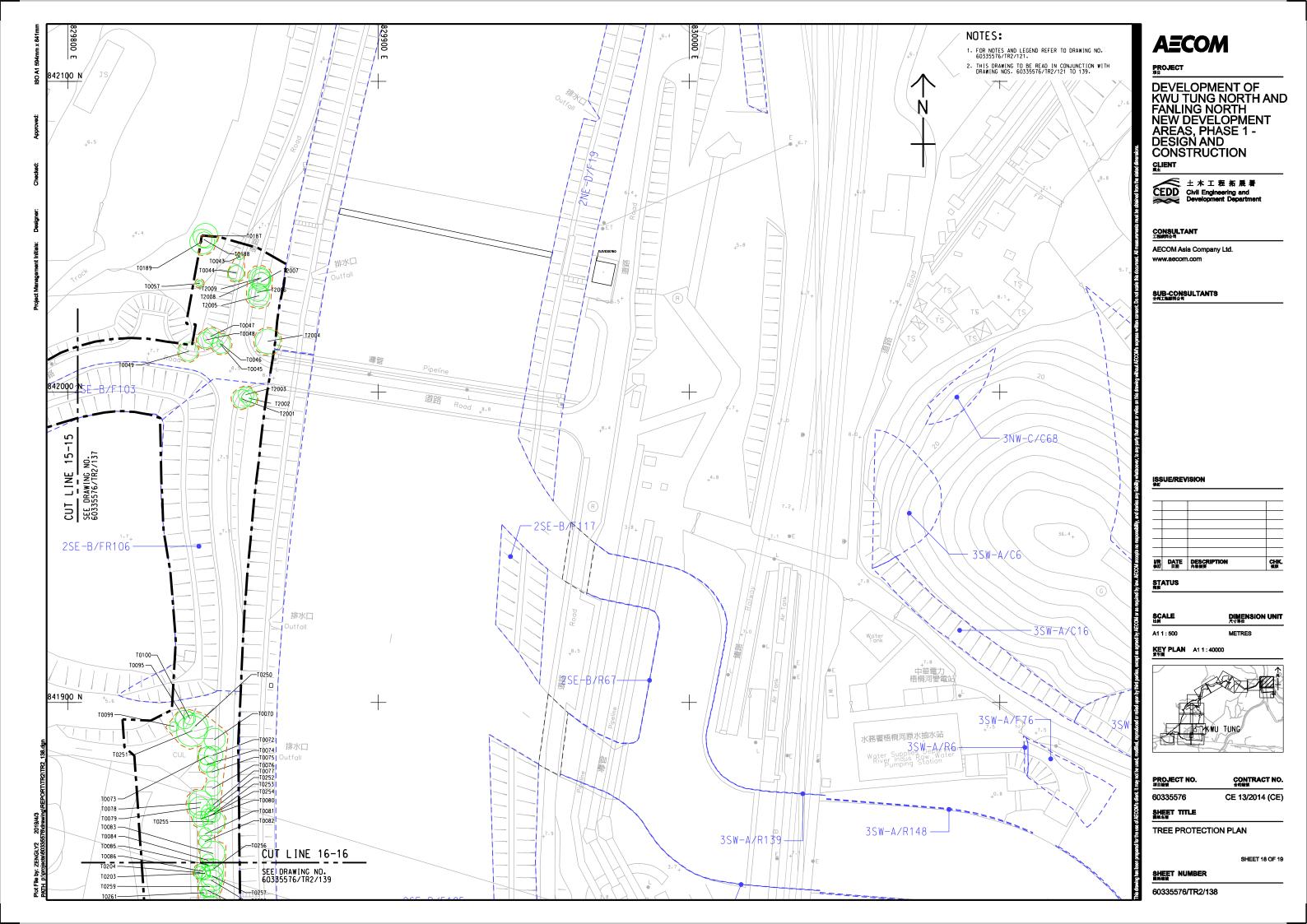
CE 13/2014 (CE)

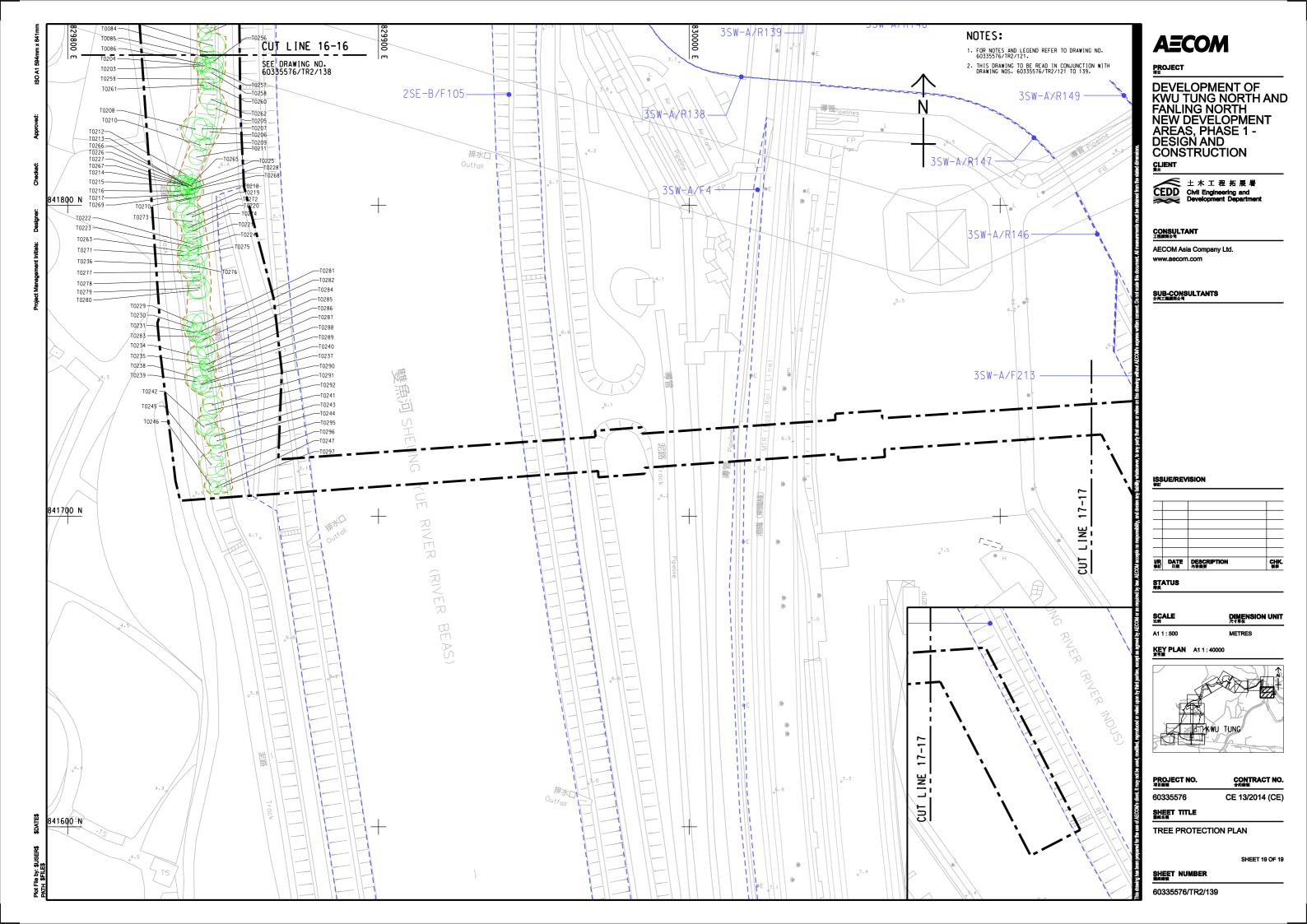
SHEET 14 OF 19

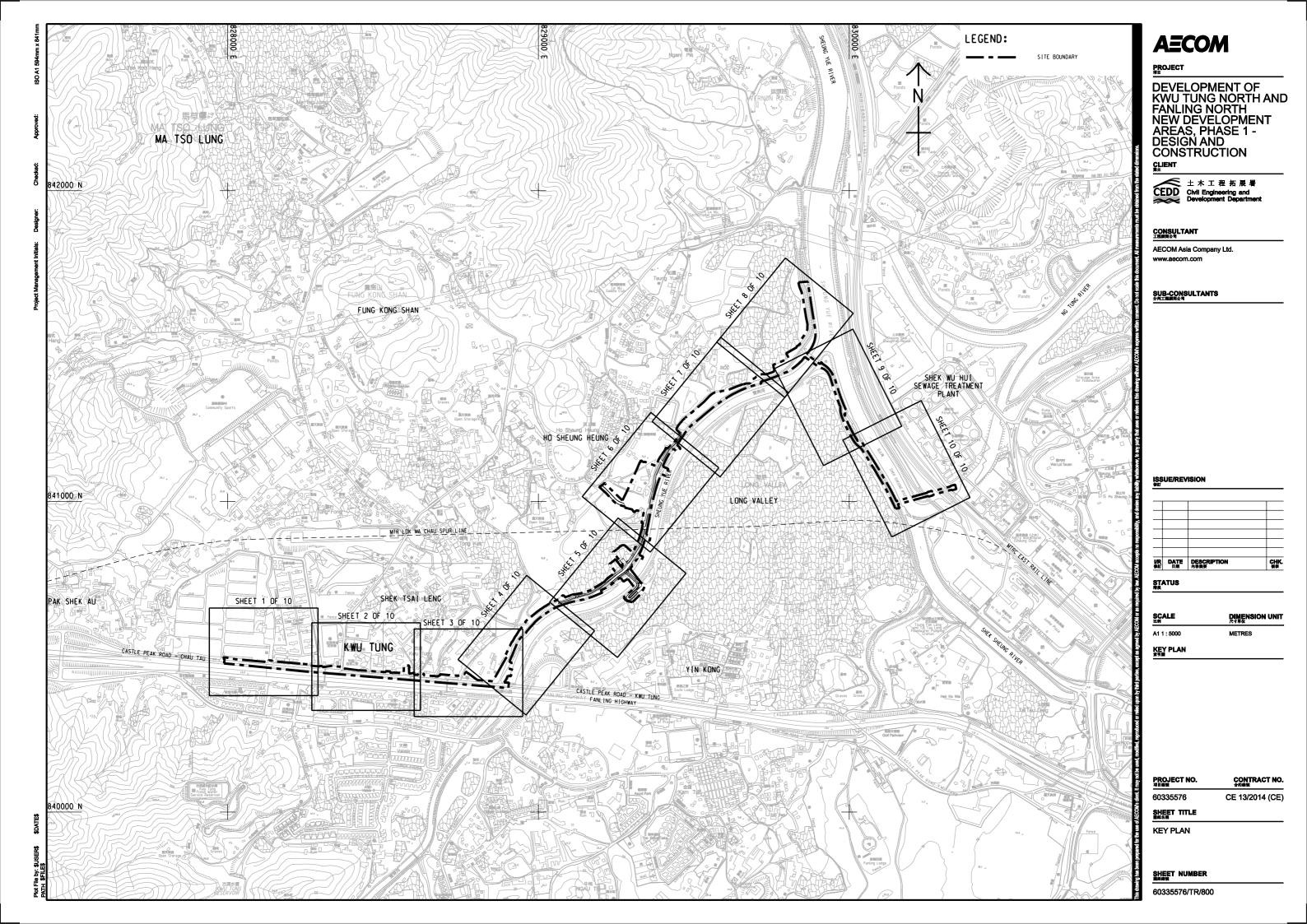


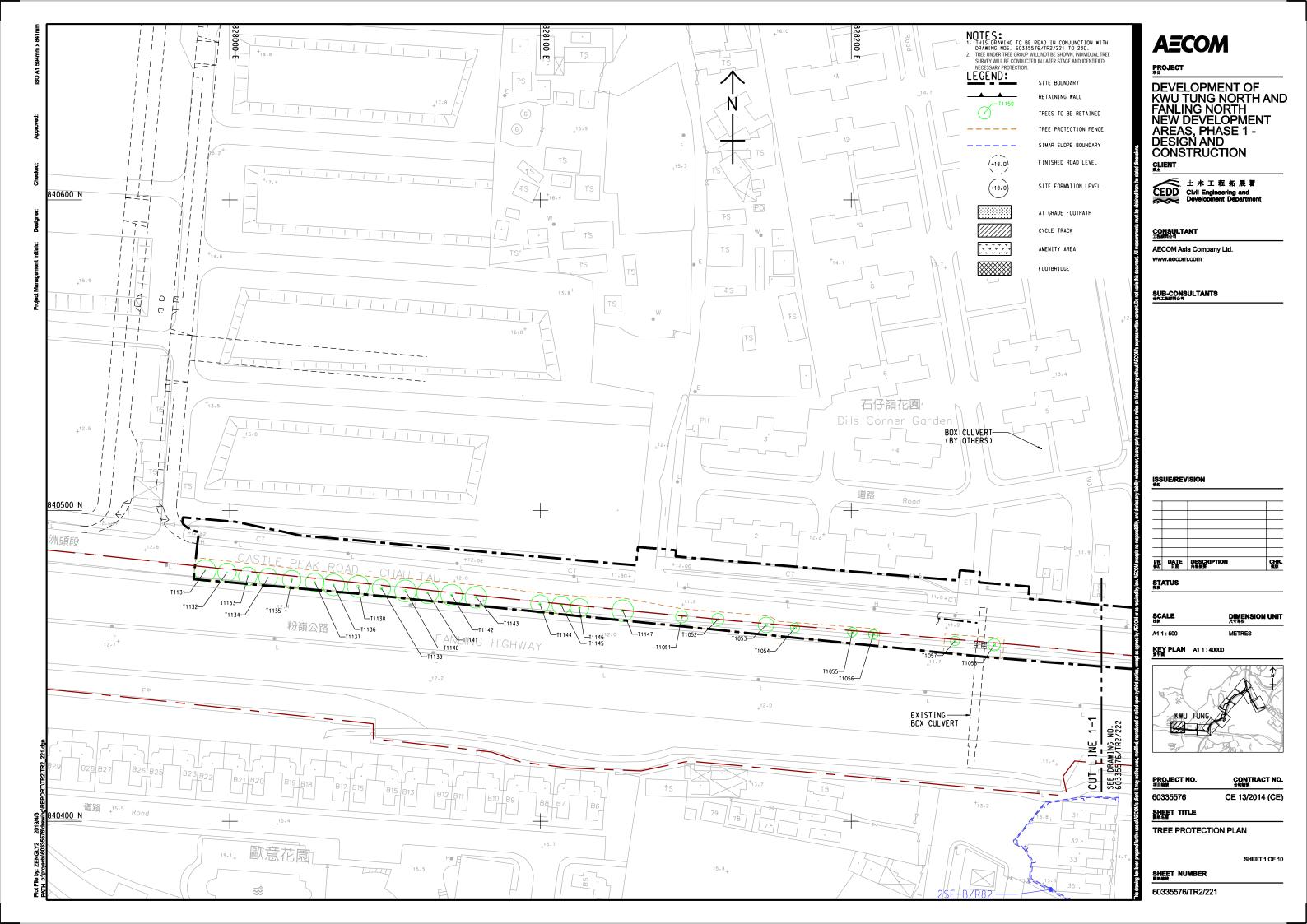


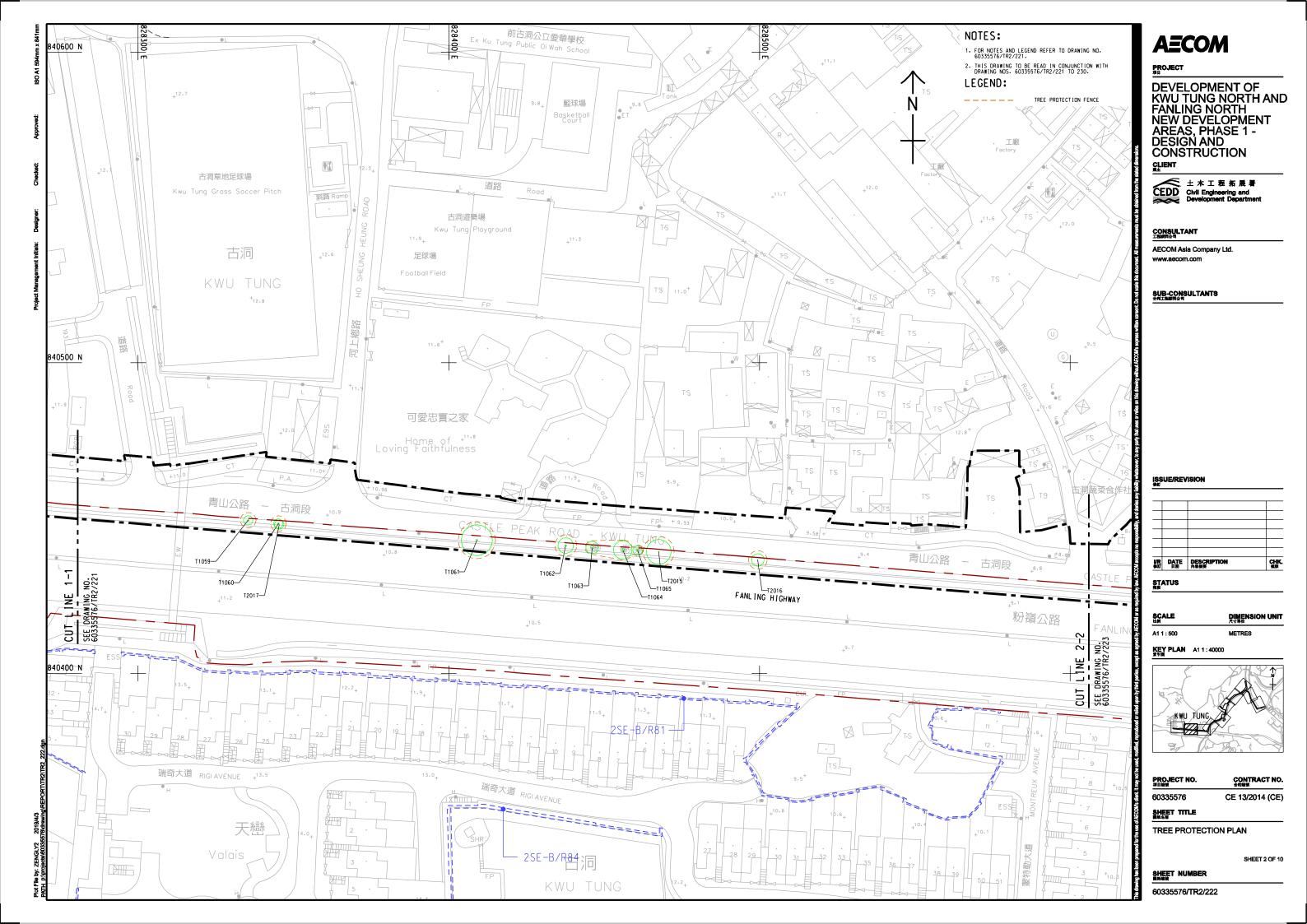


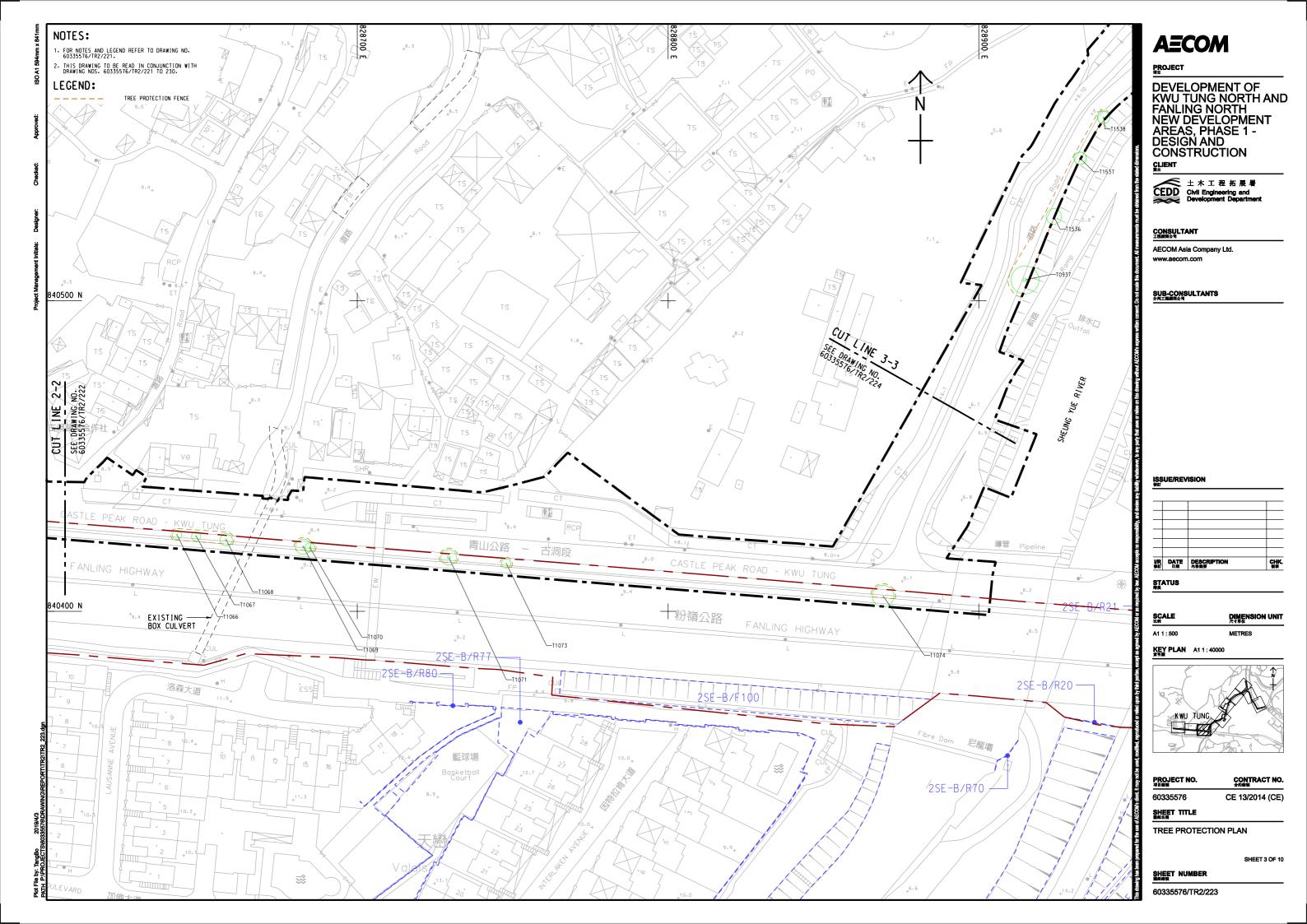


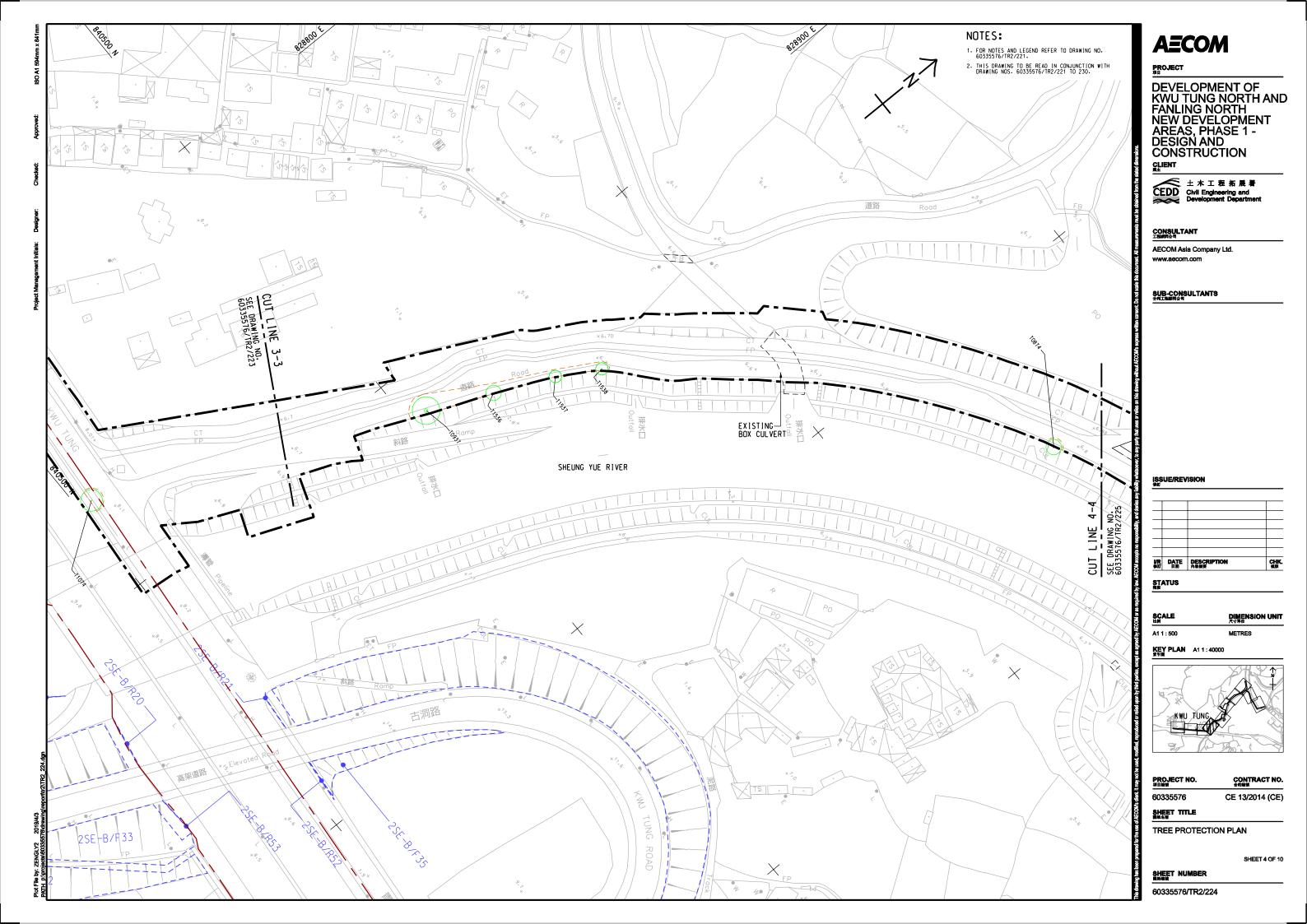


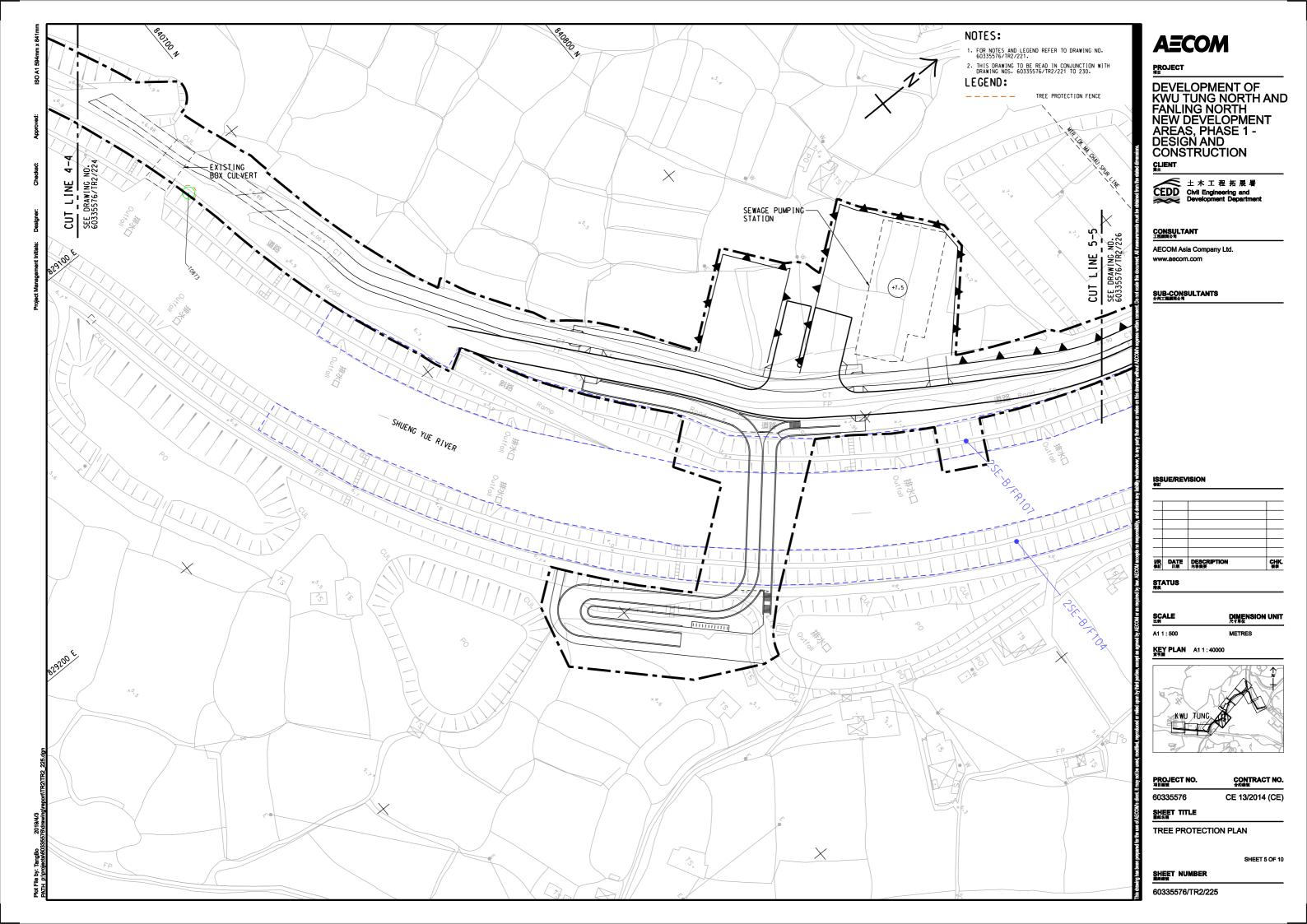


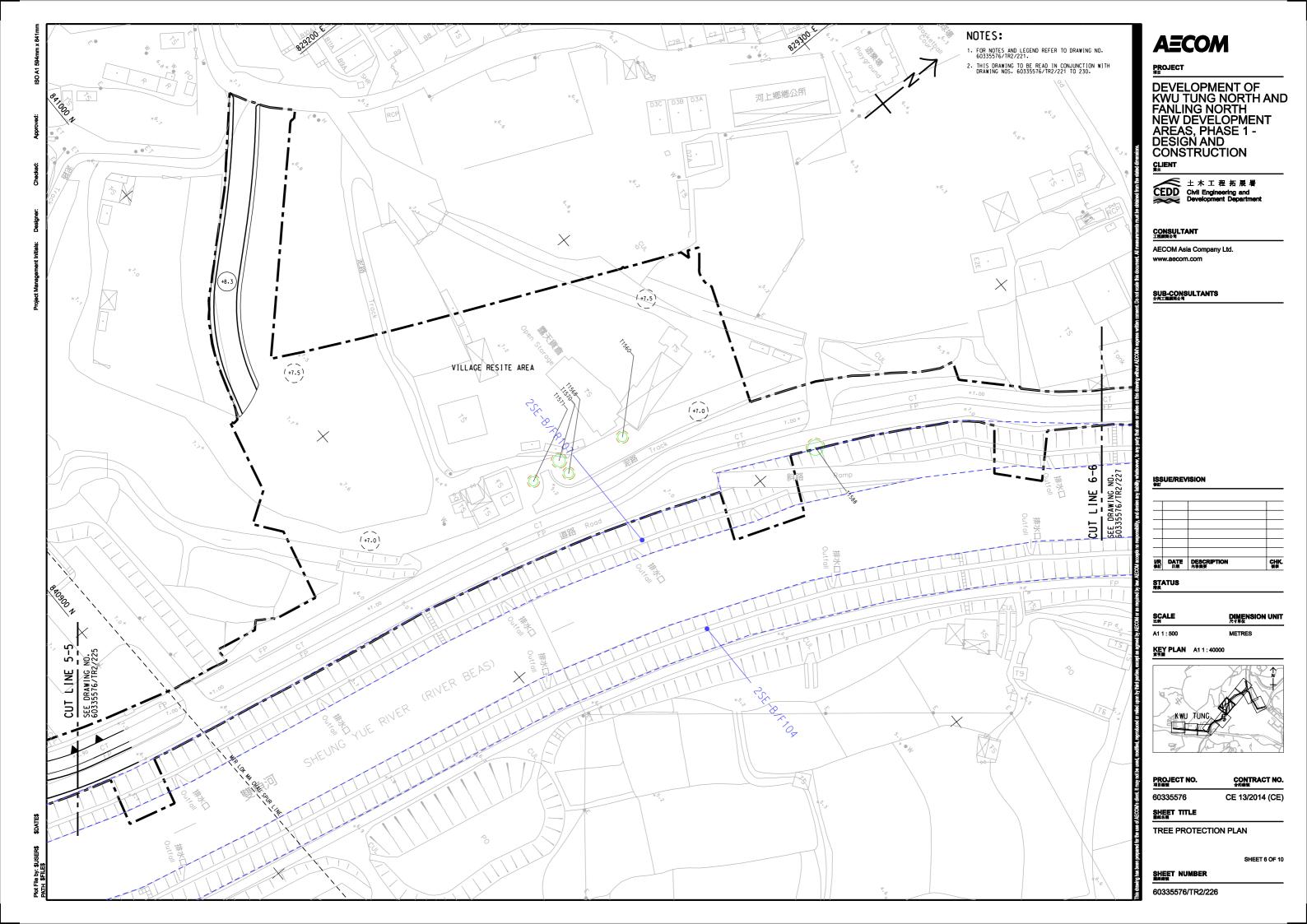


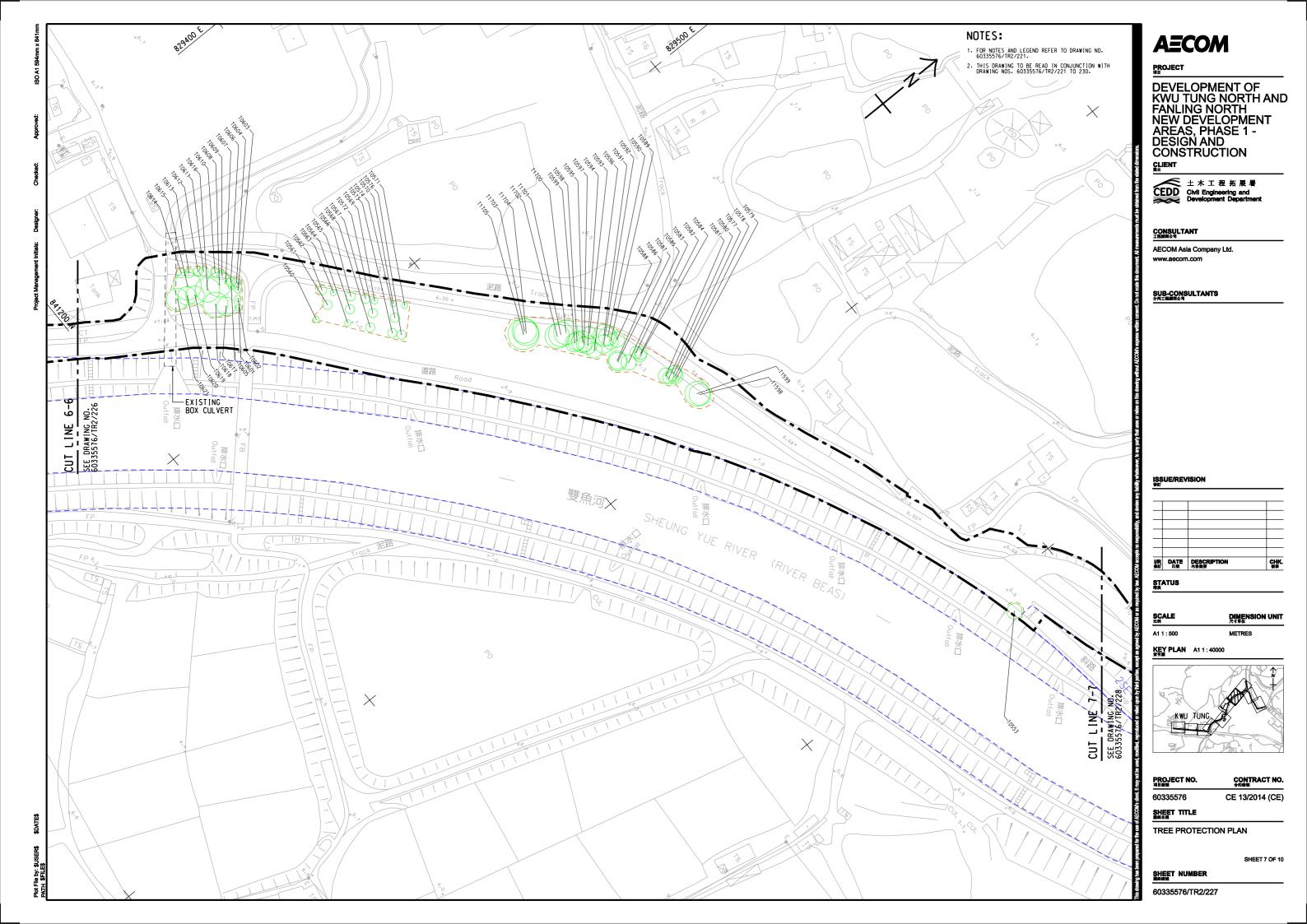


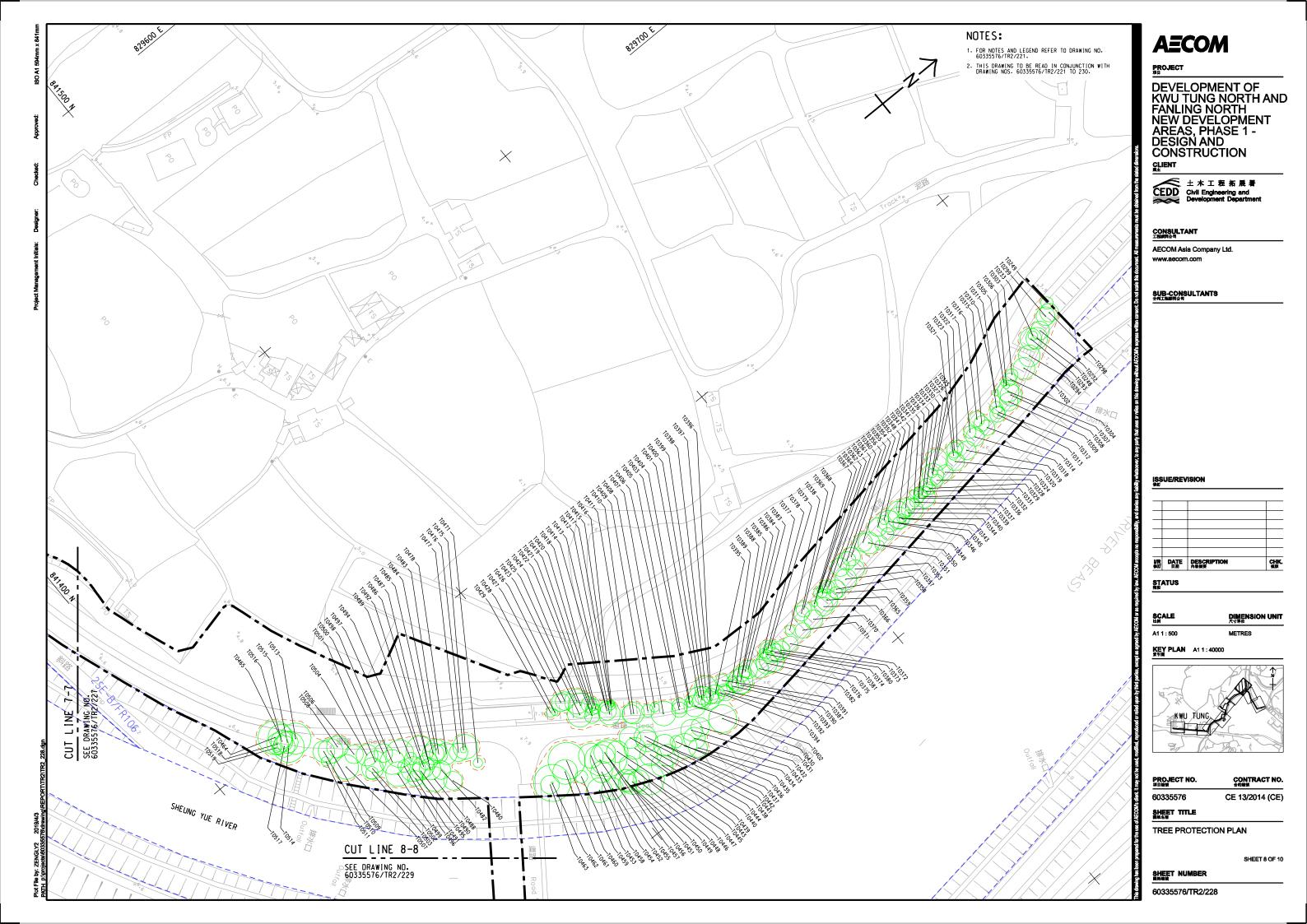


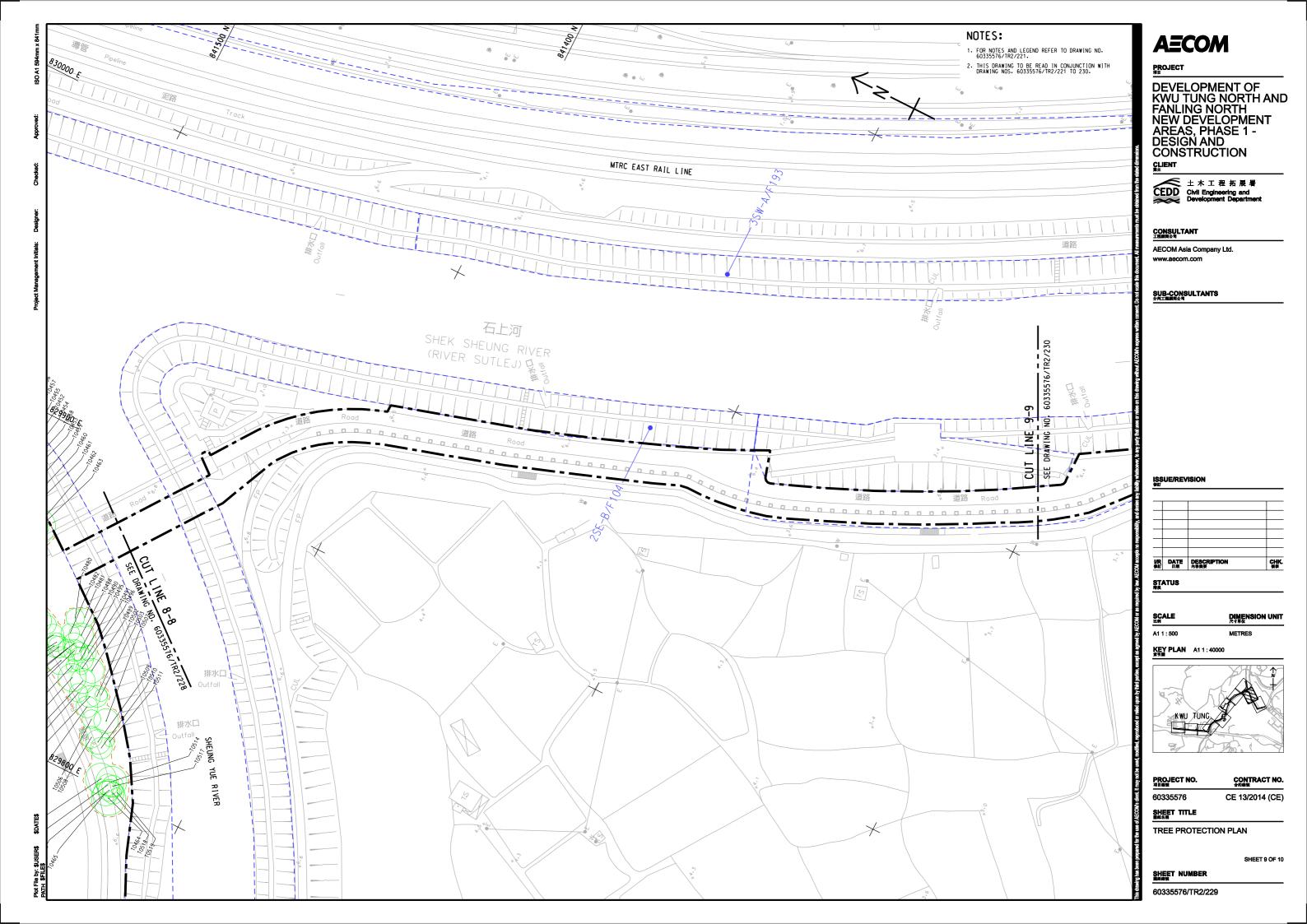


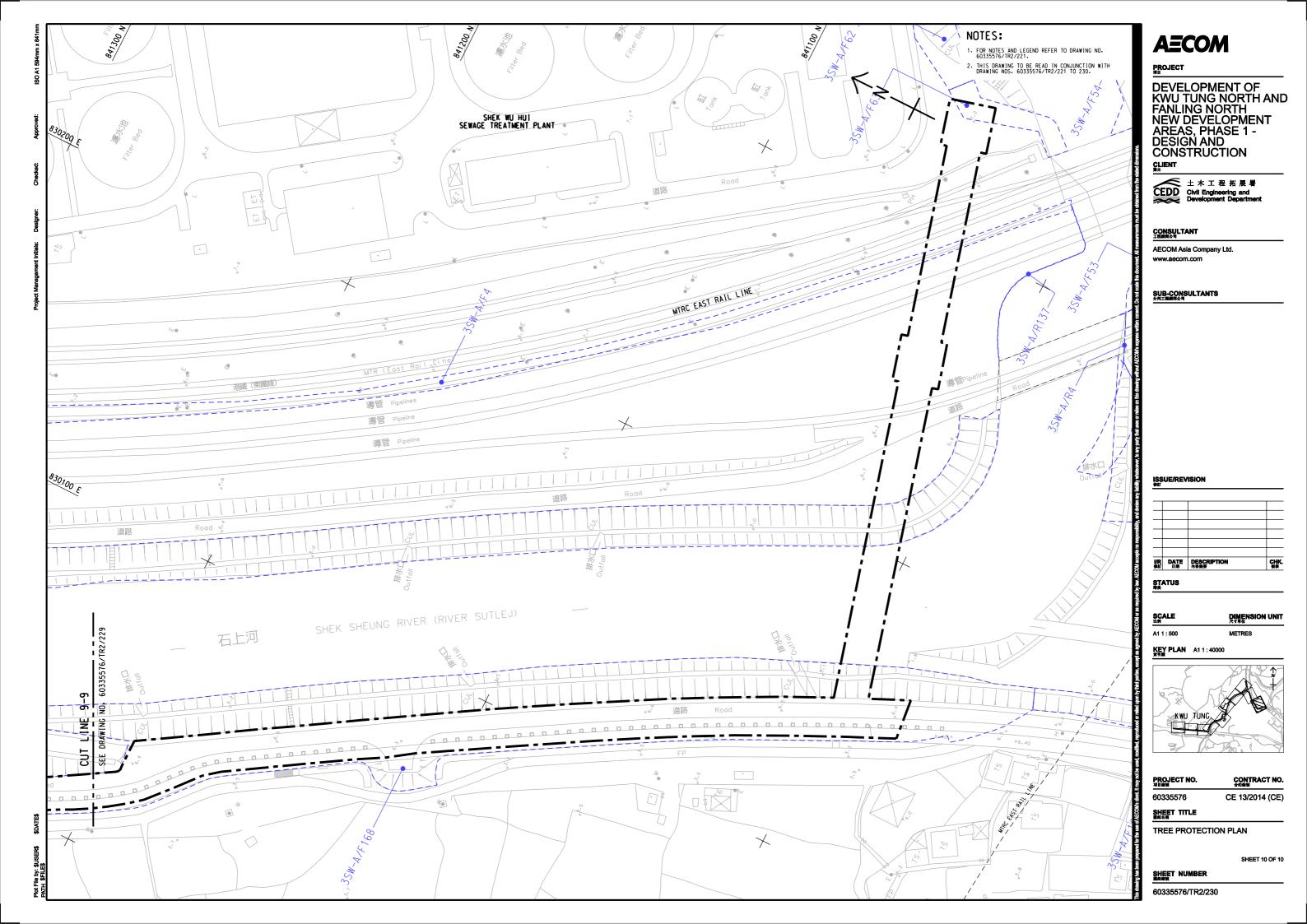


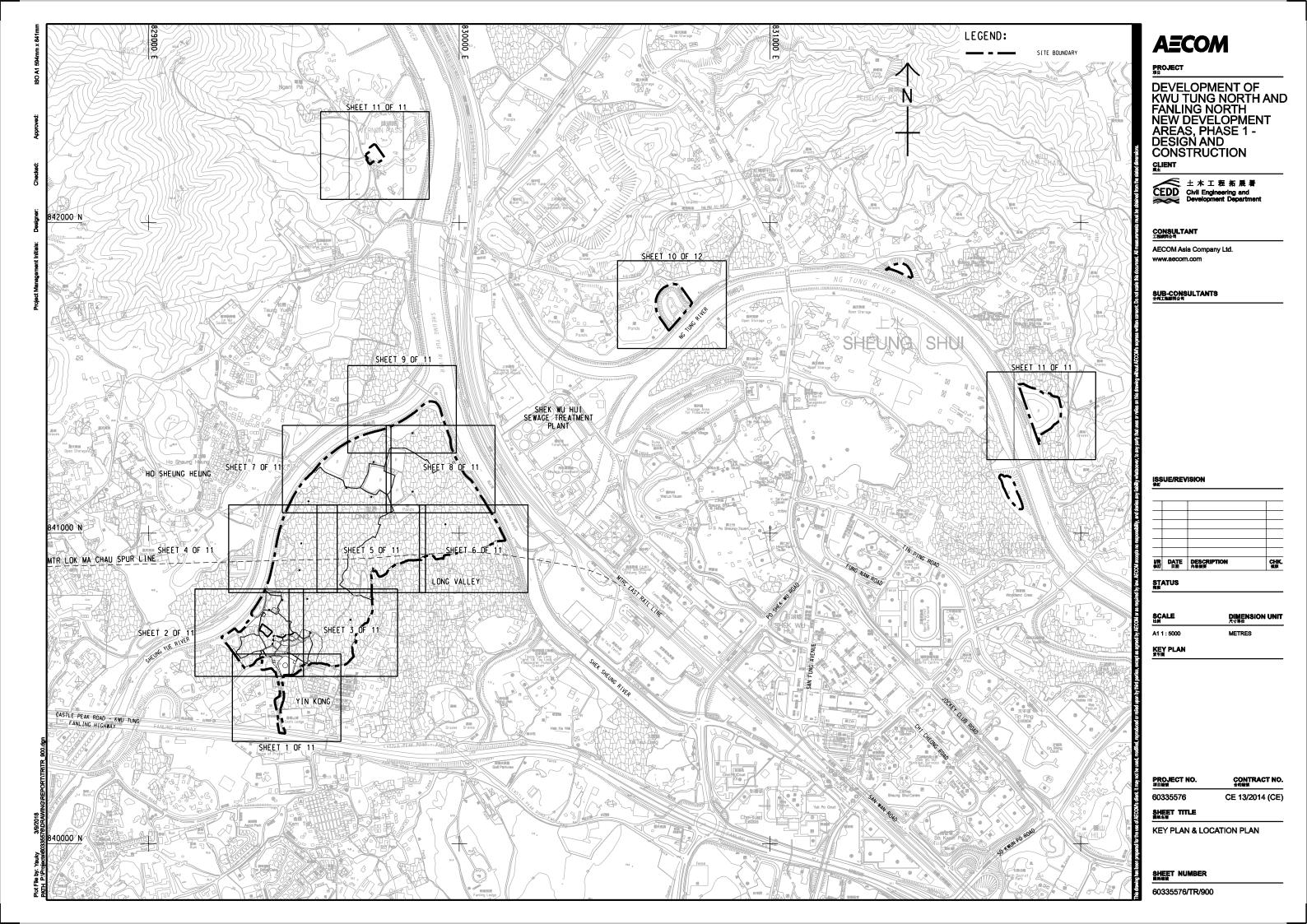


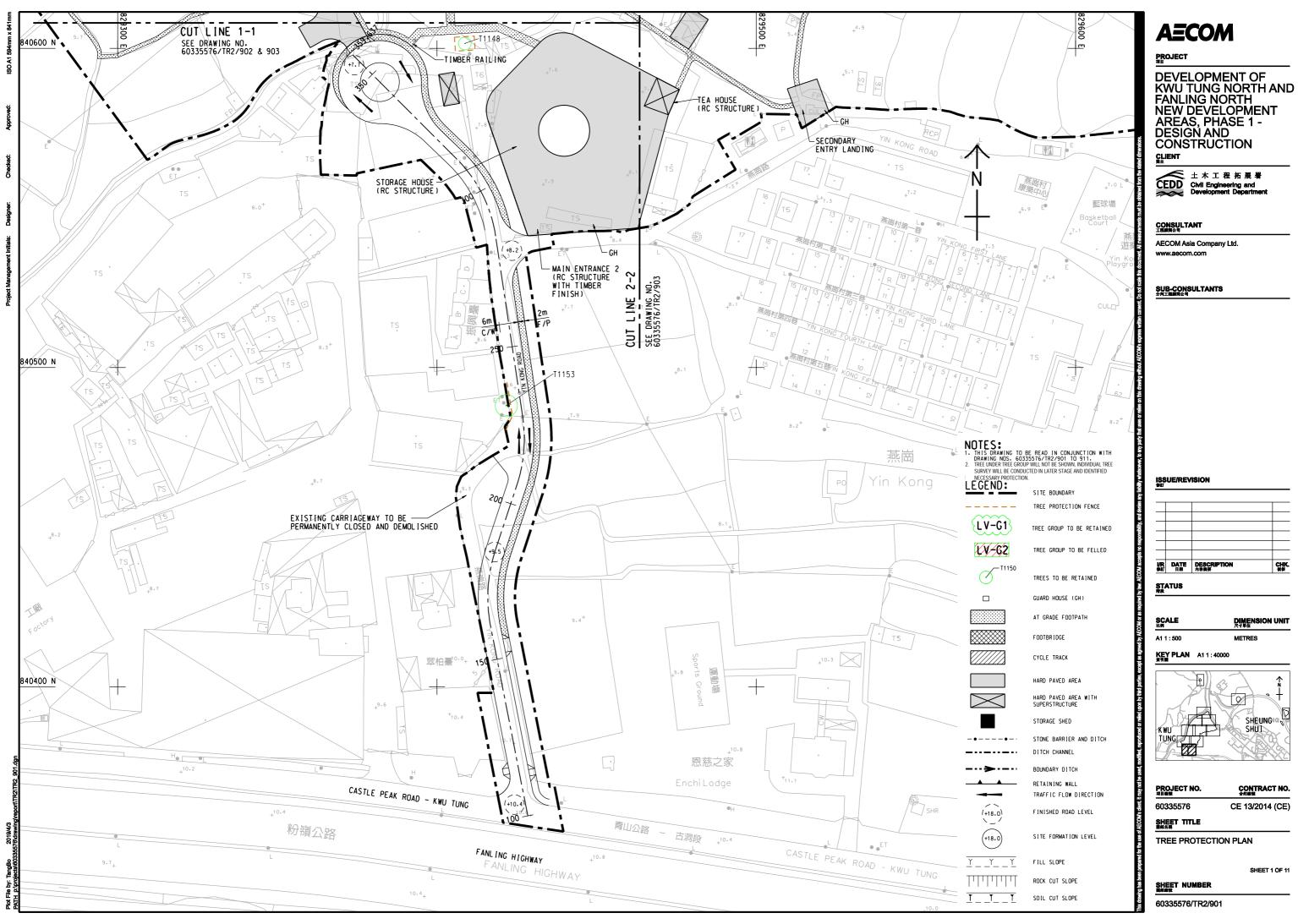




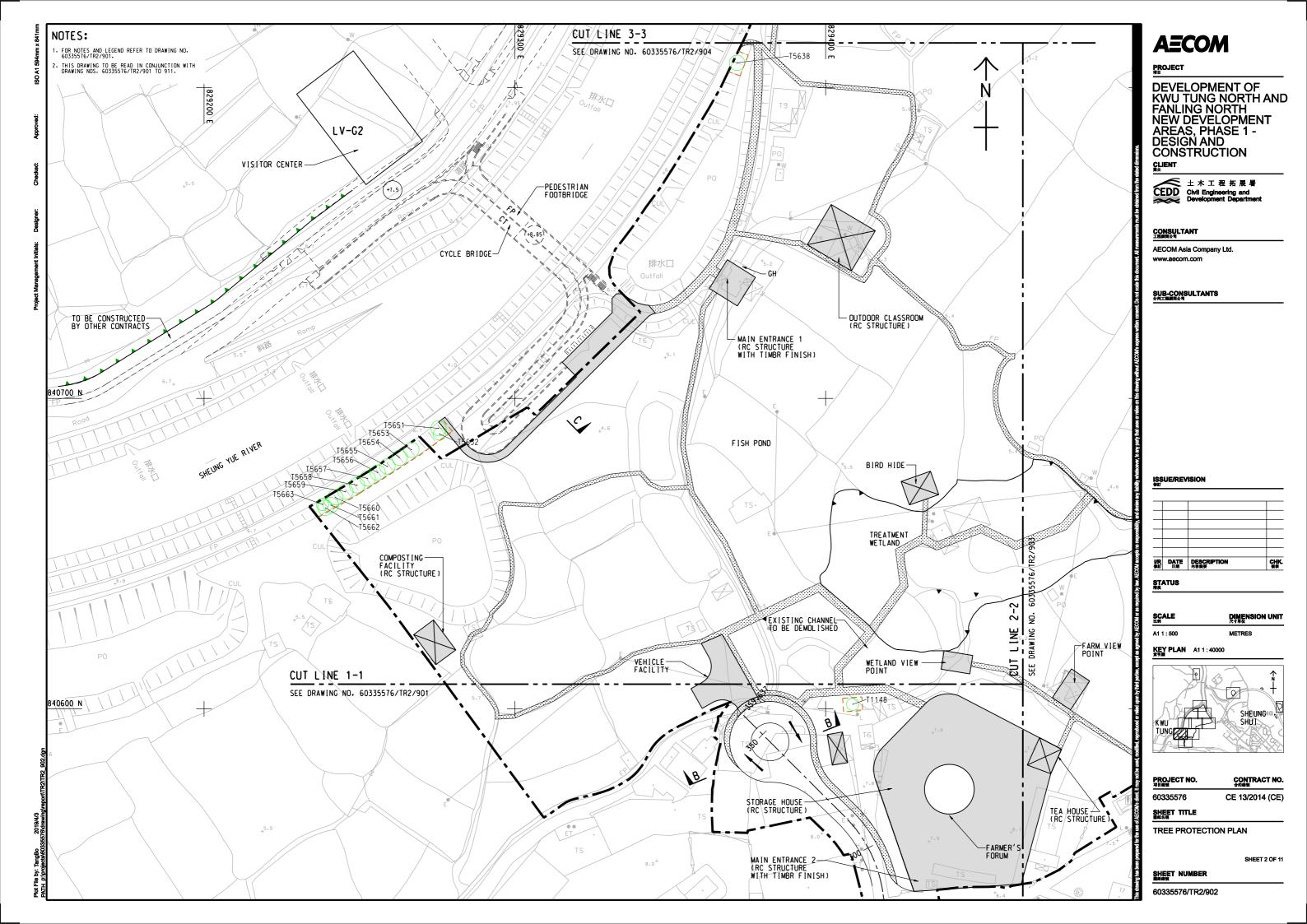


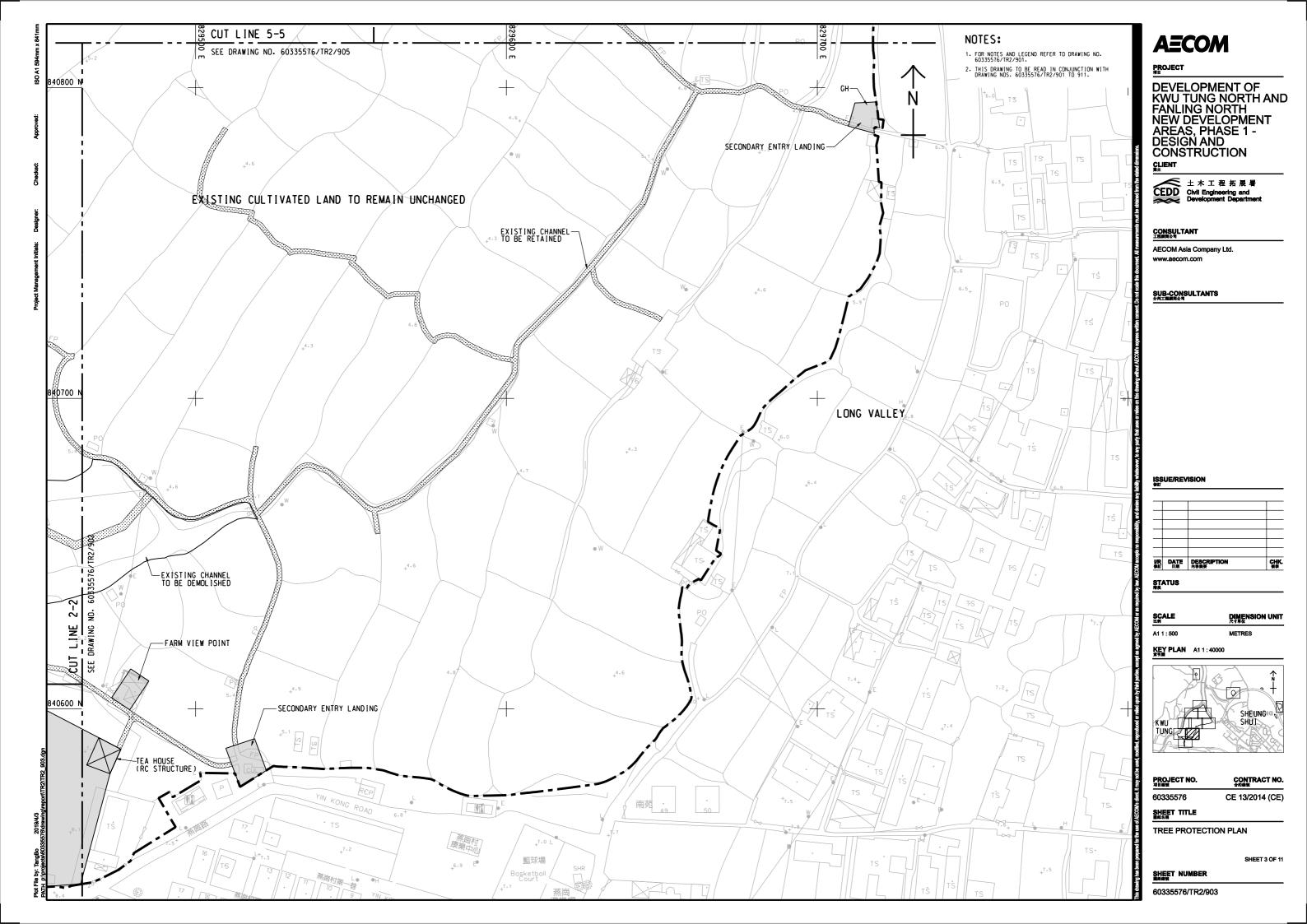


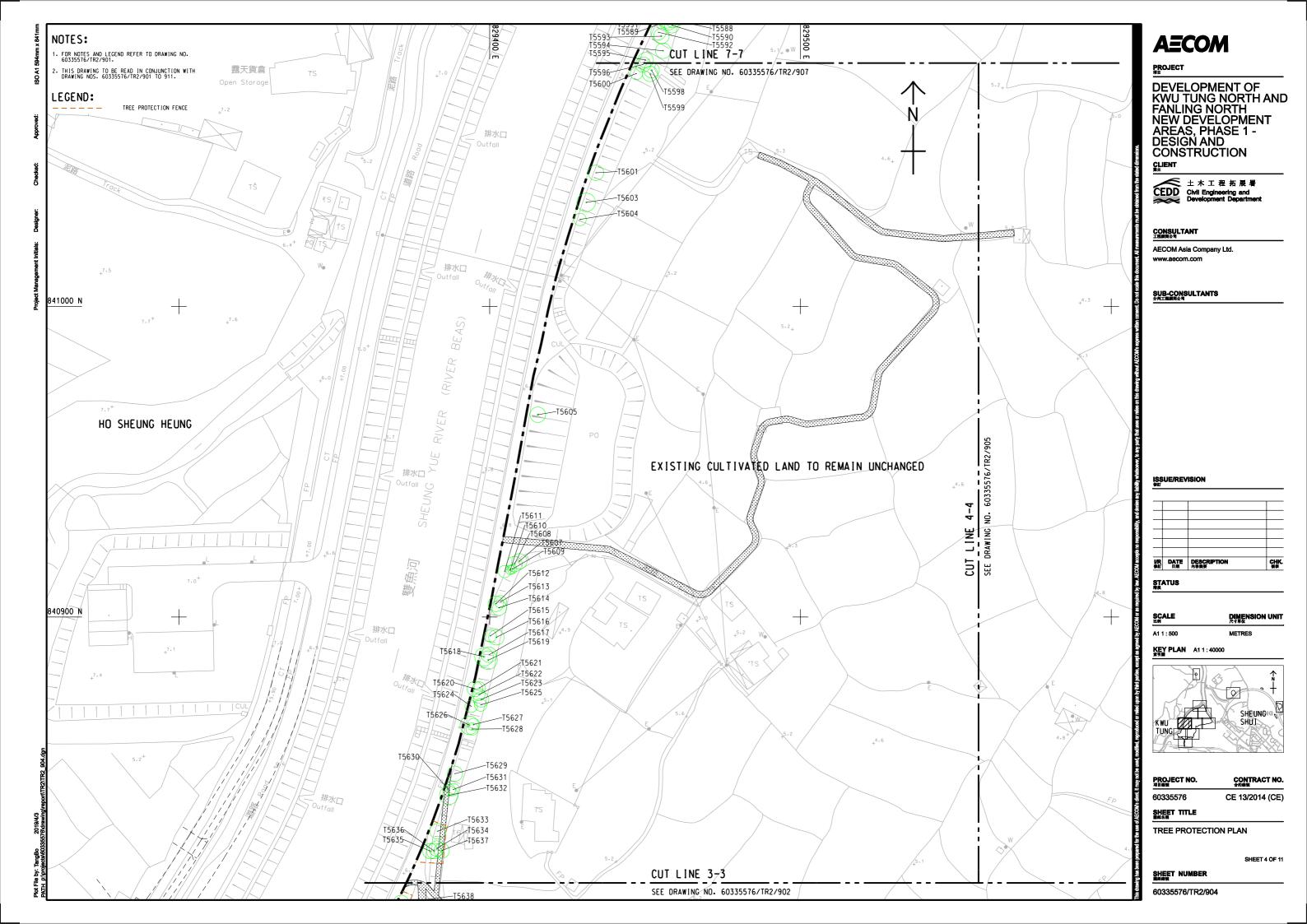


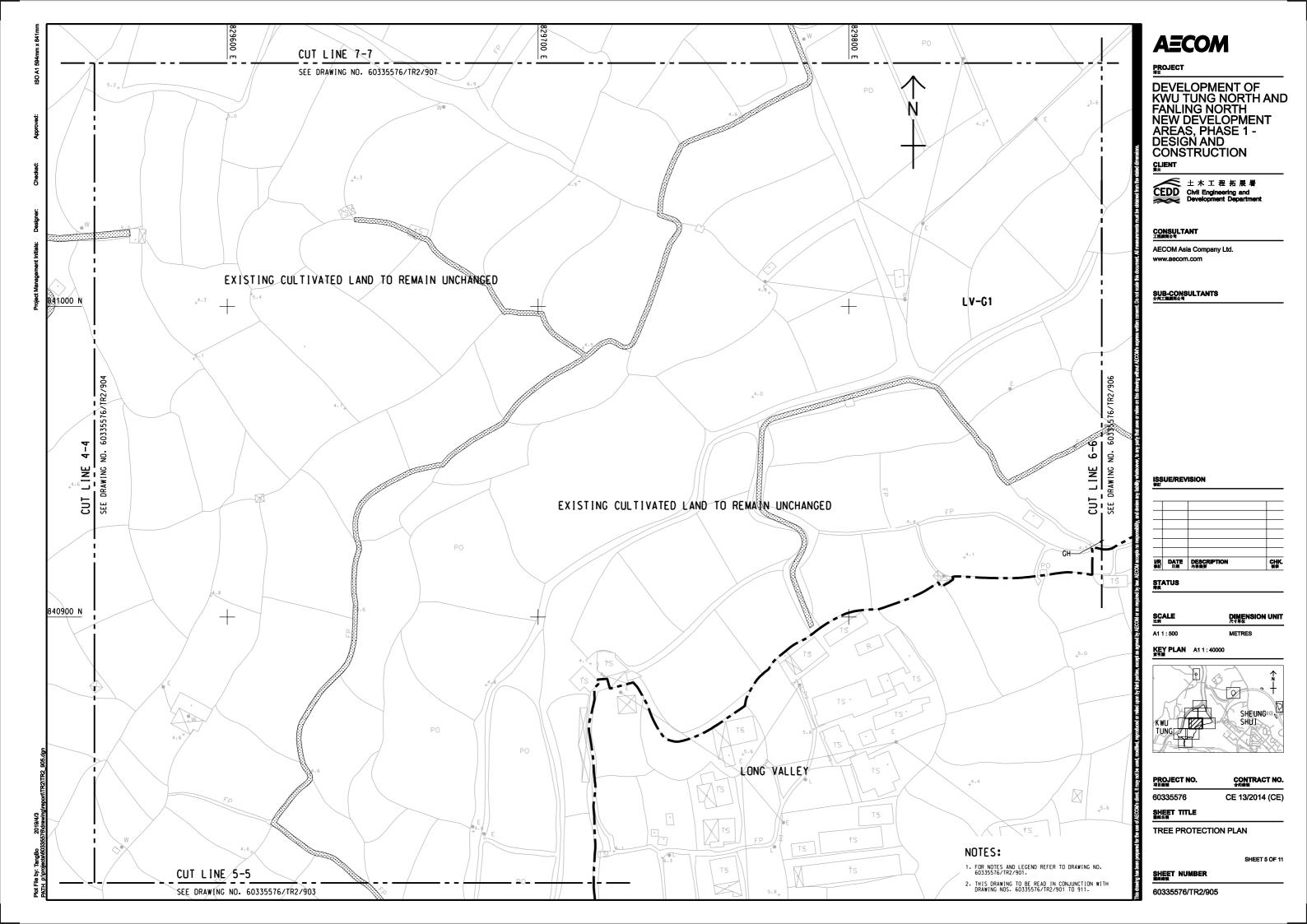


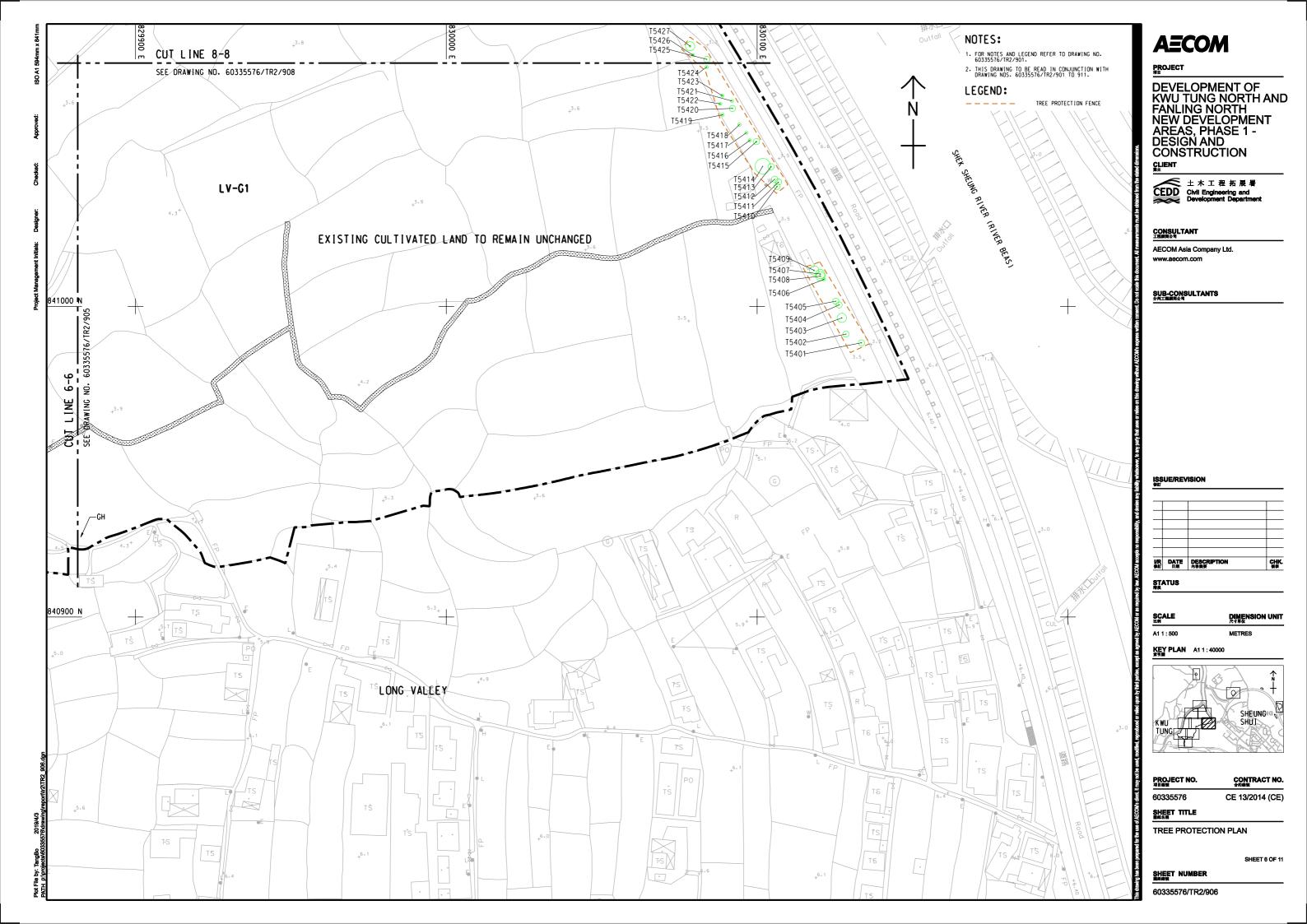


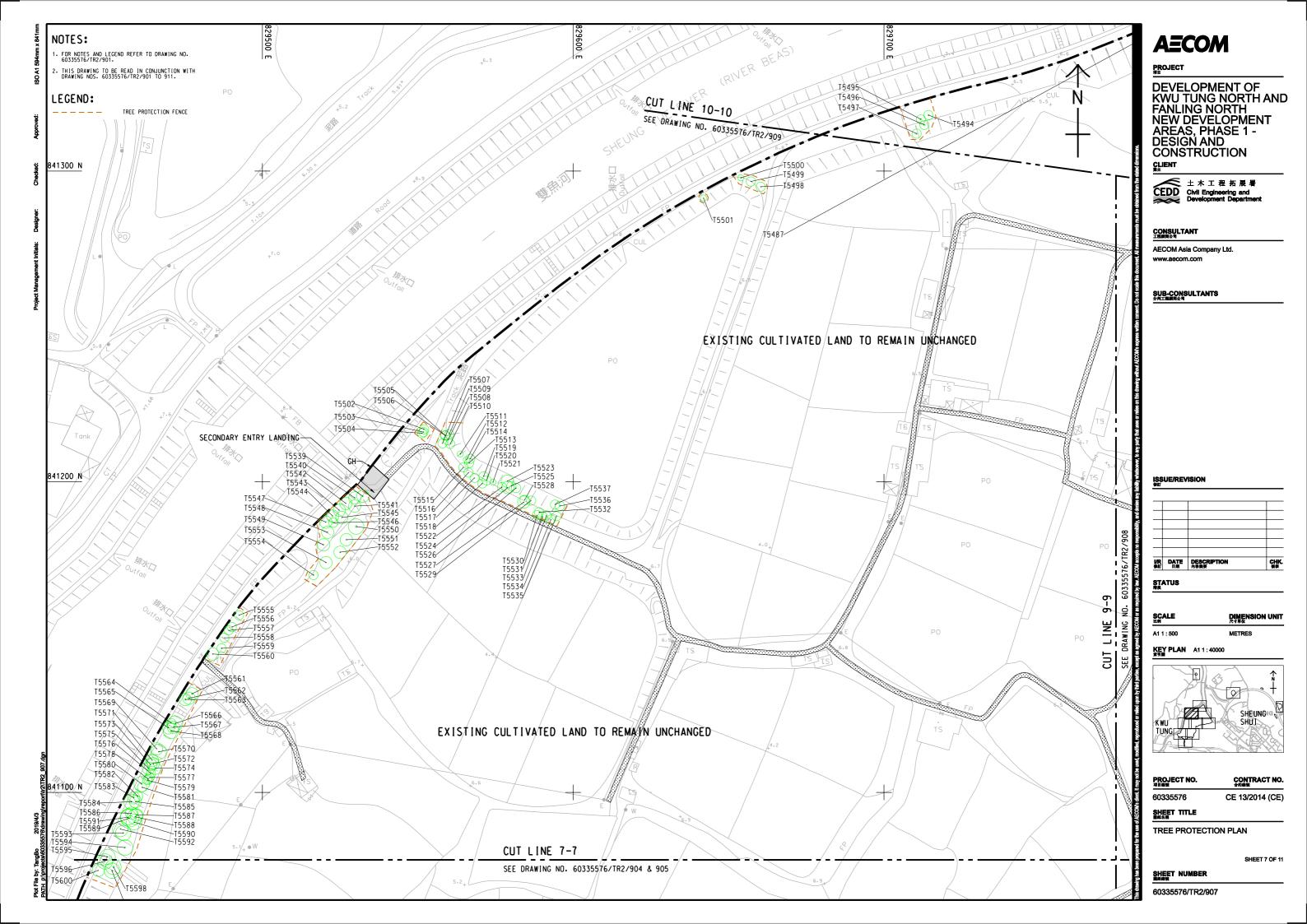


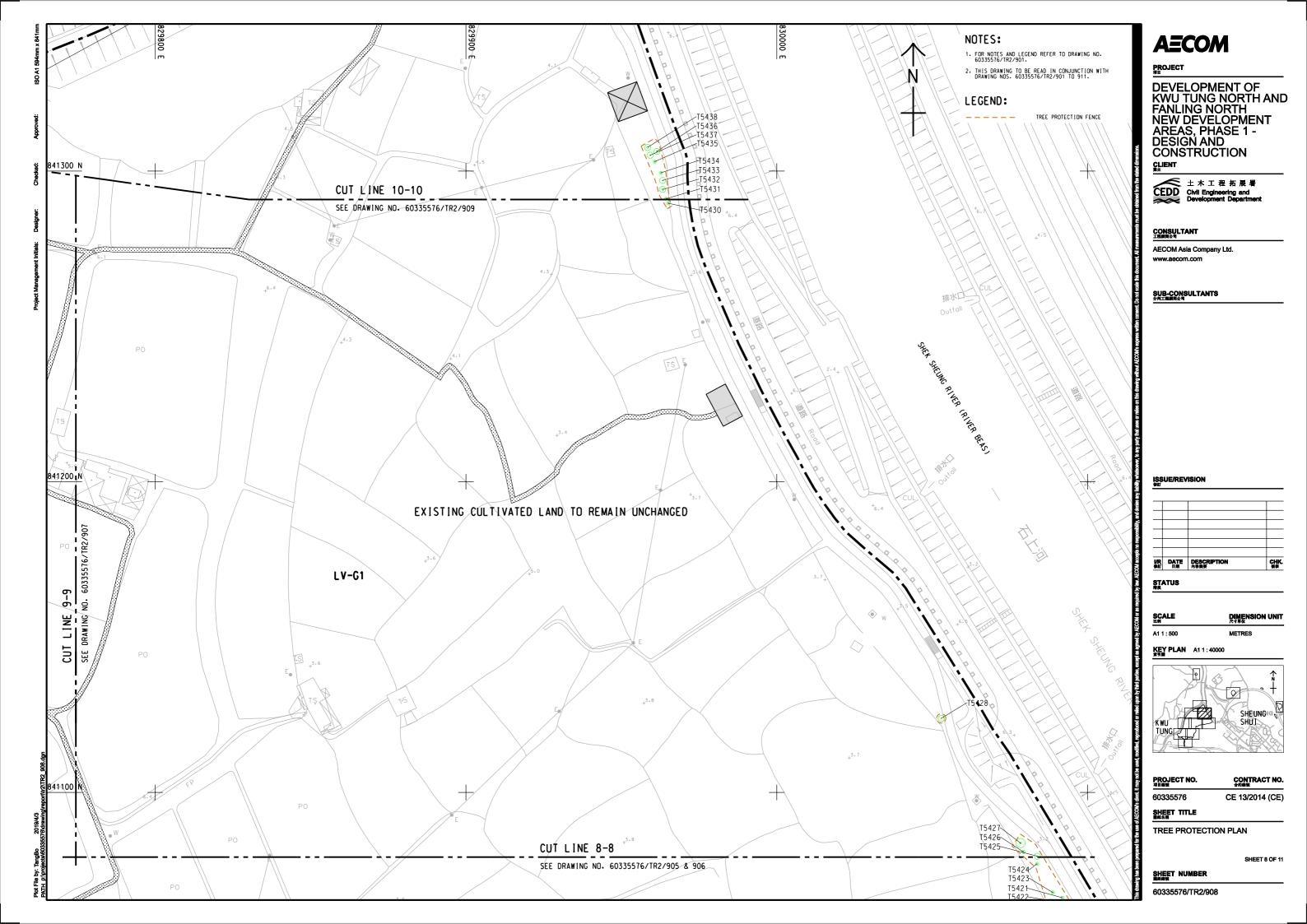


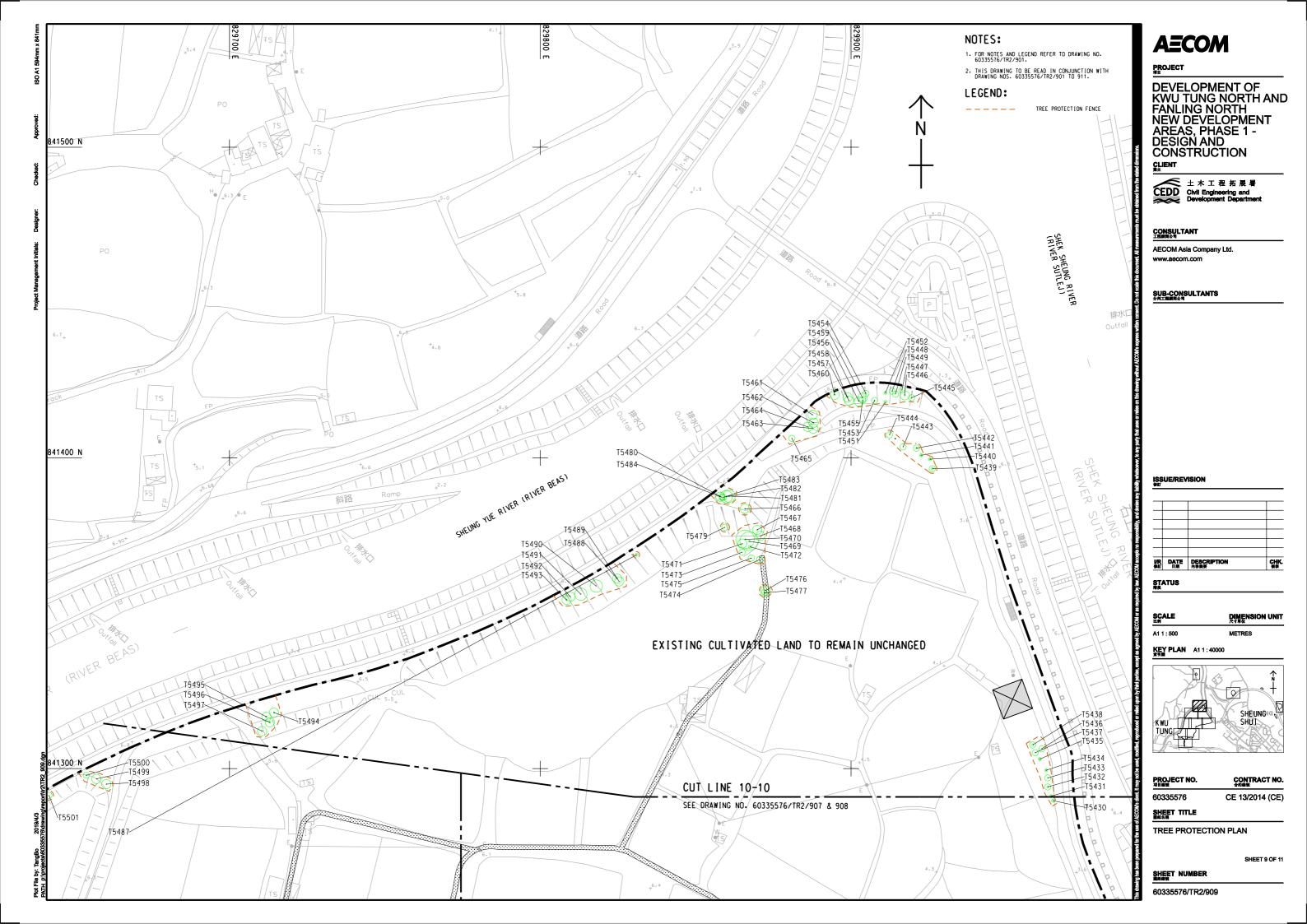


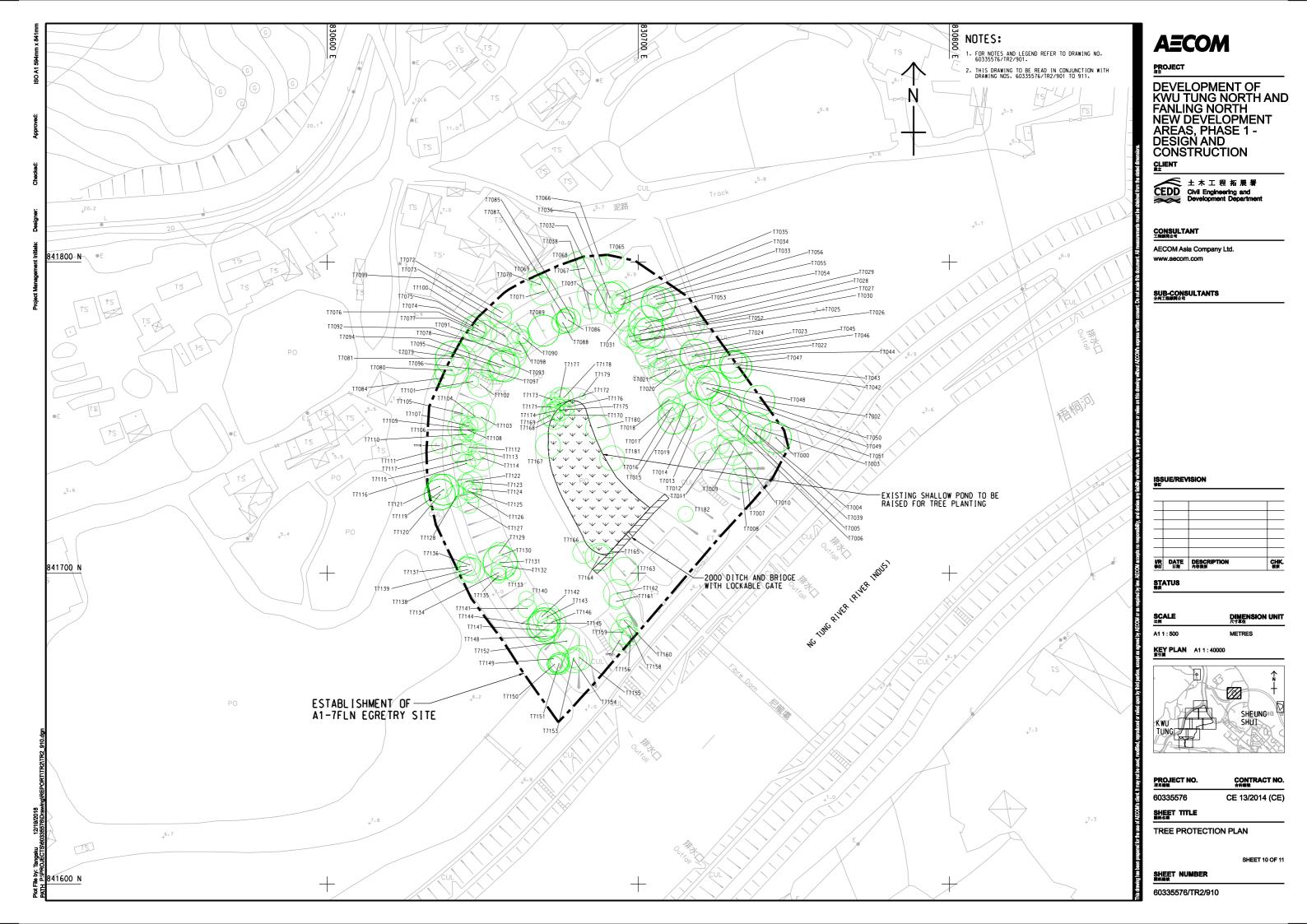


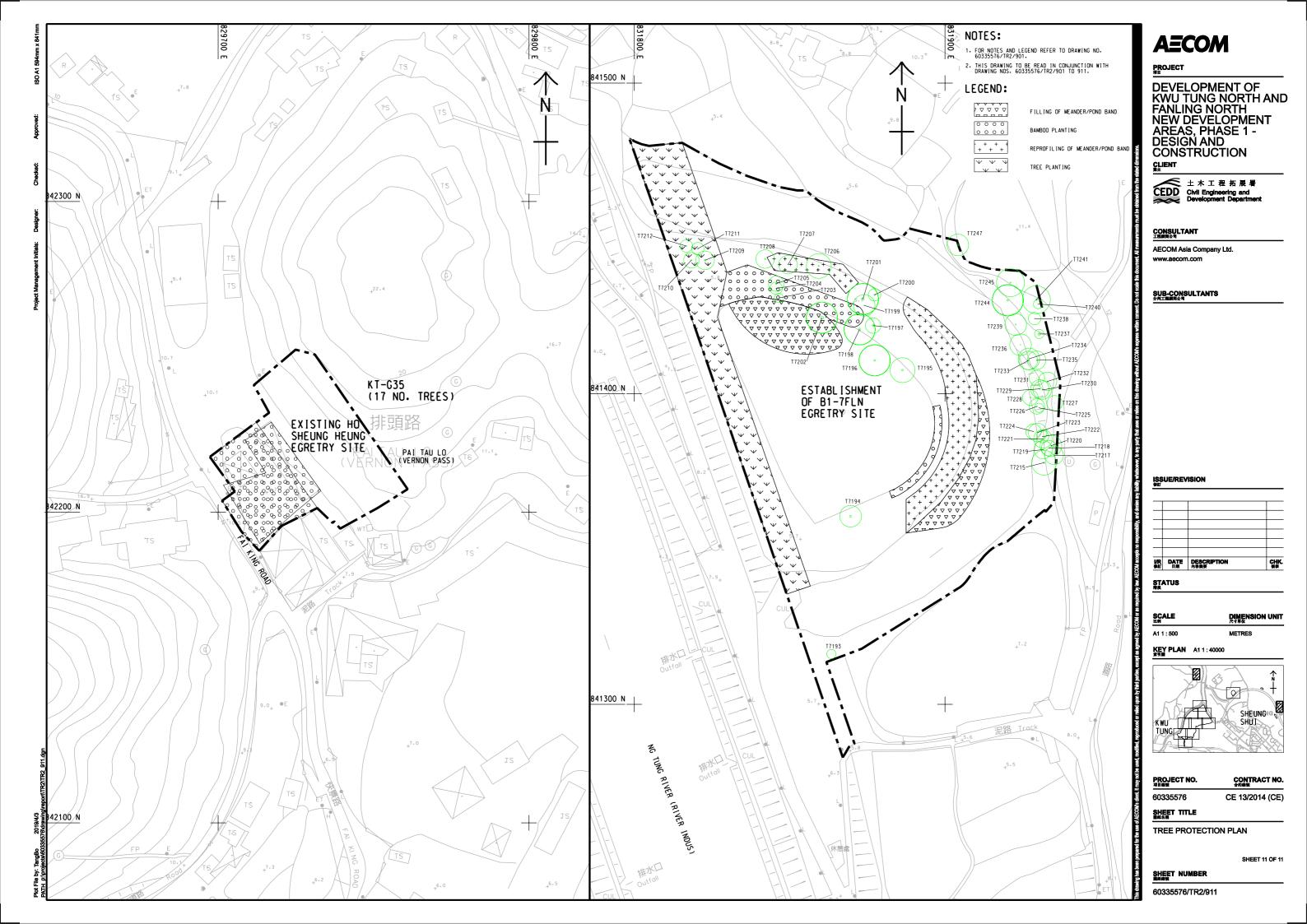


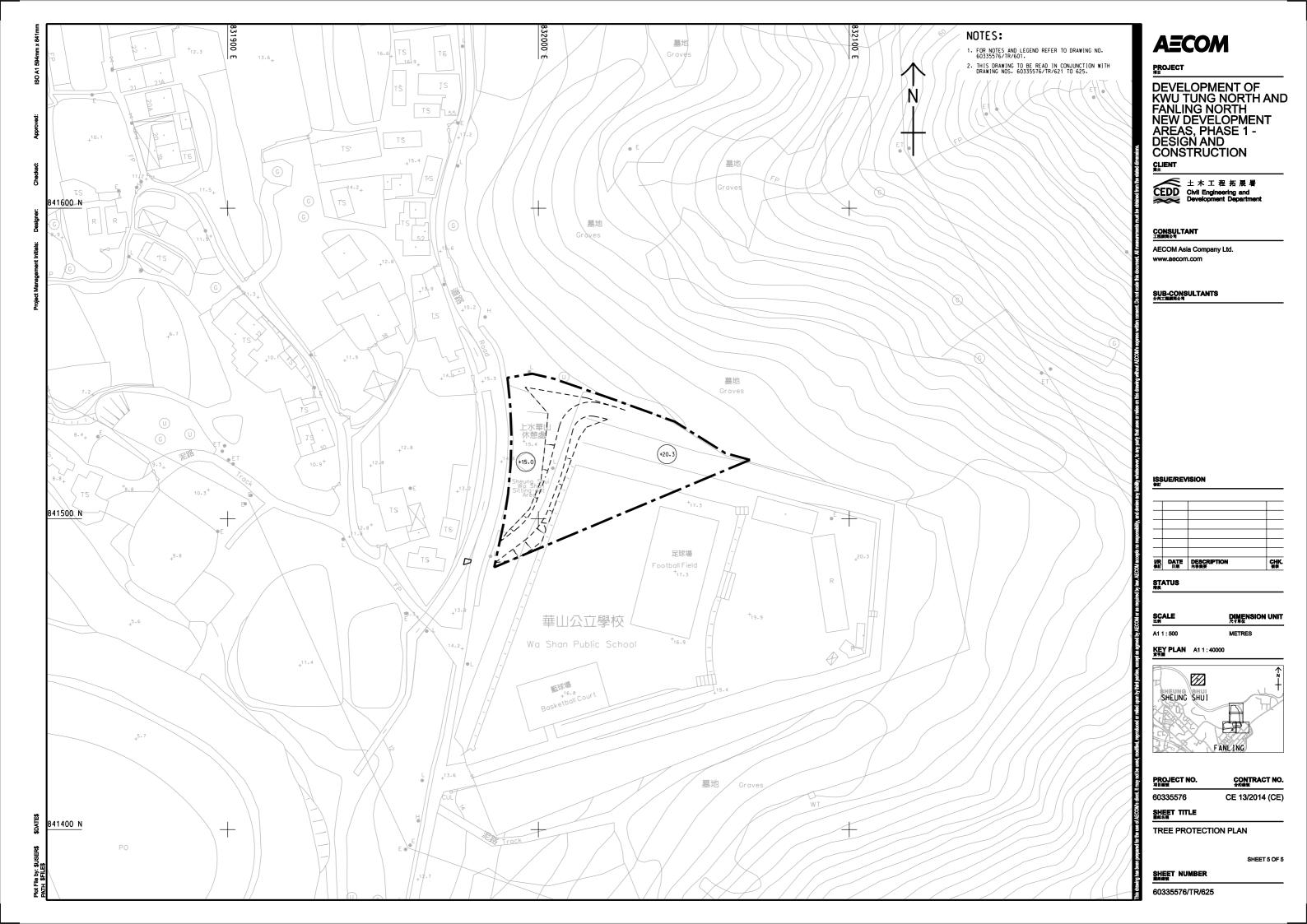


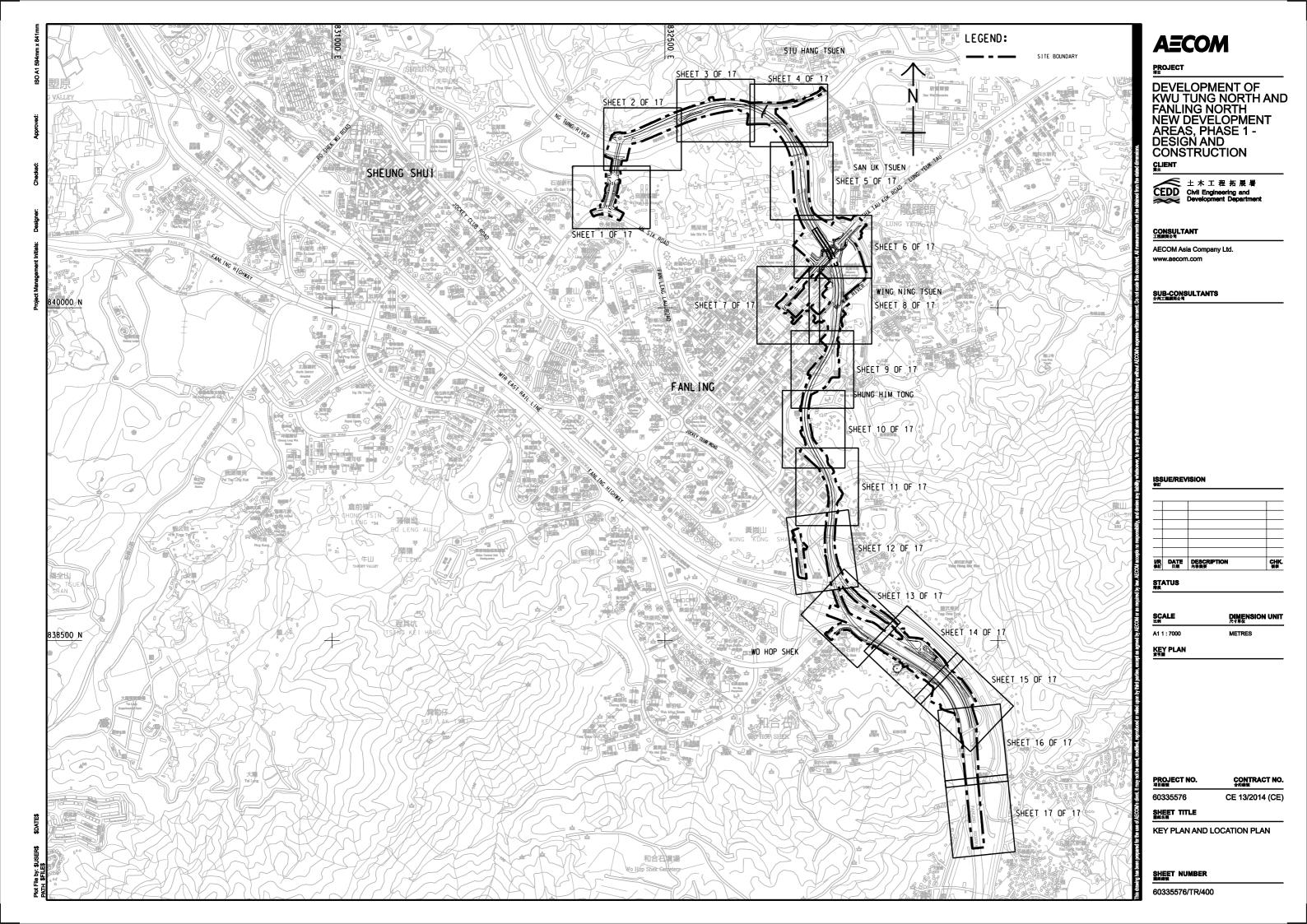


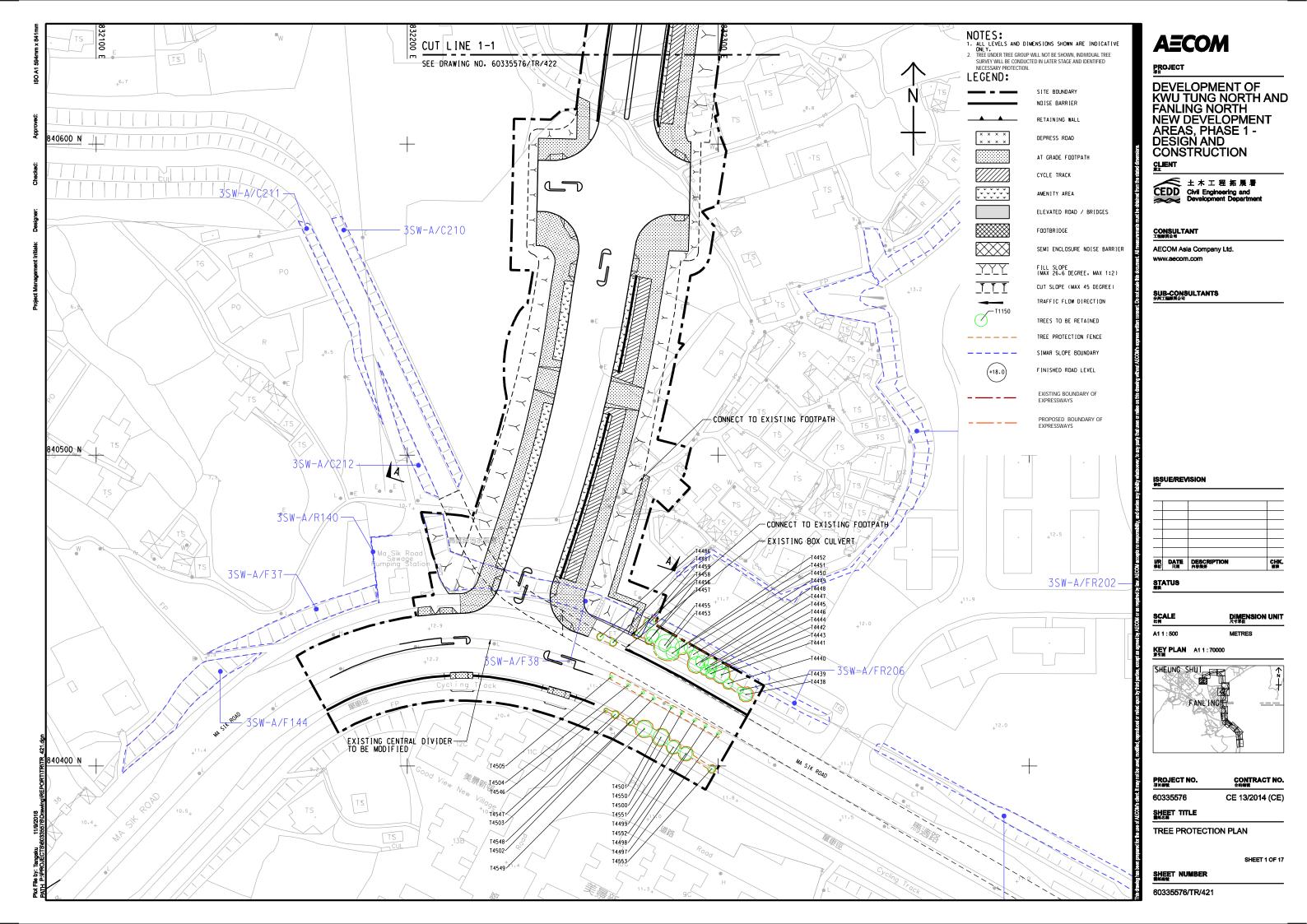


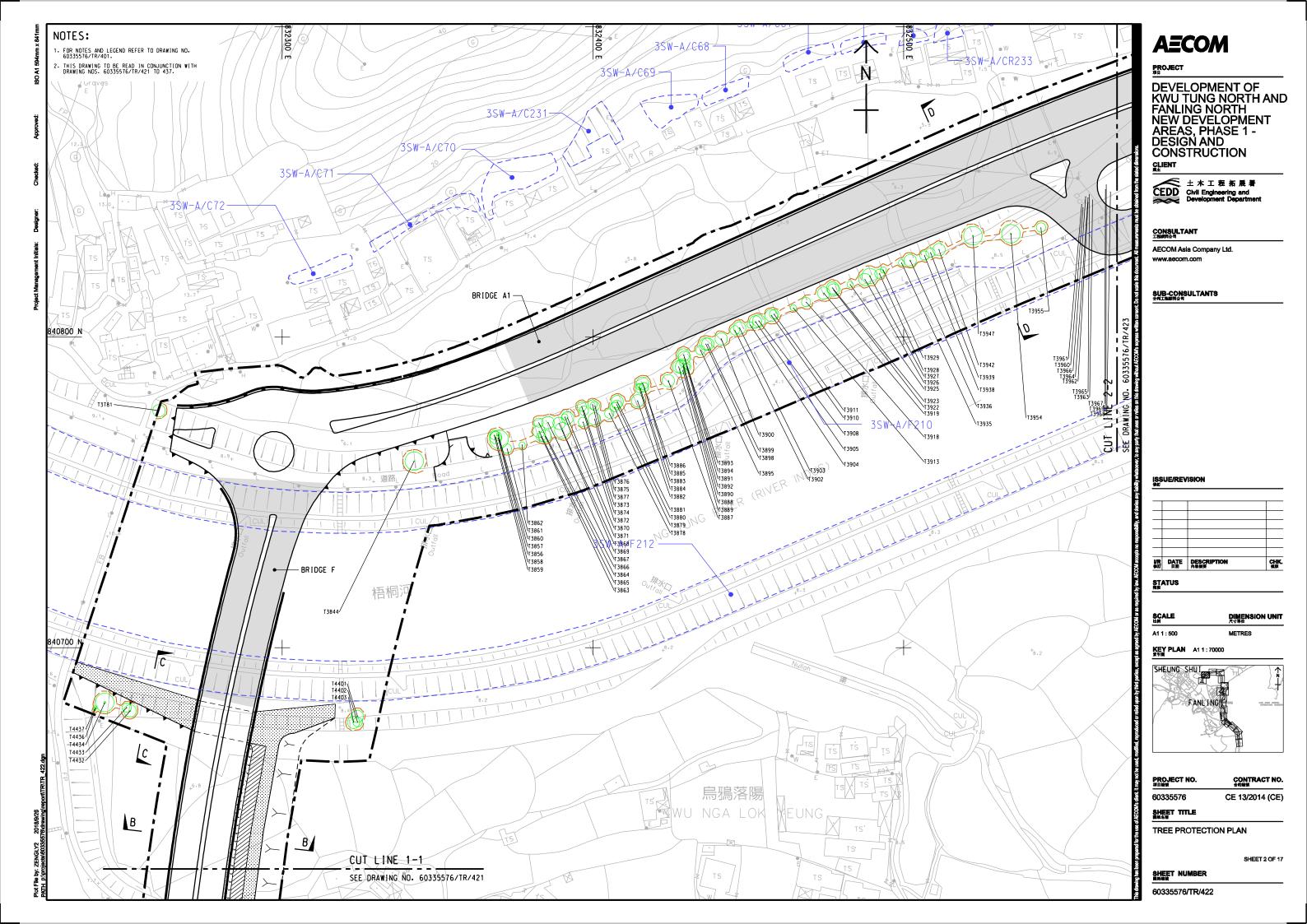


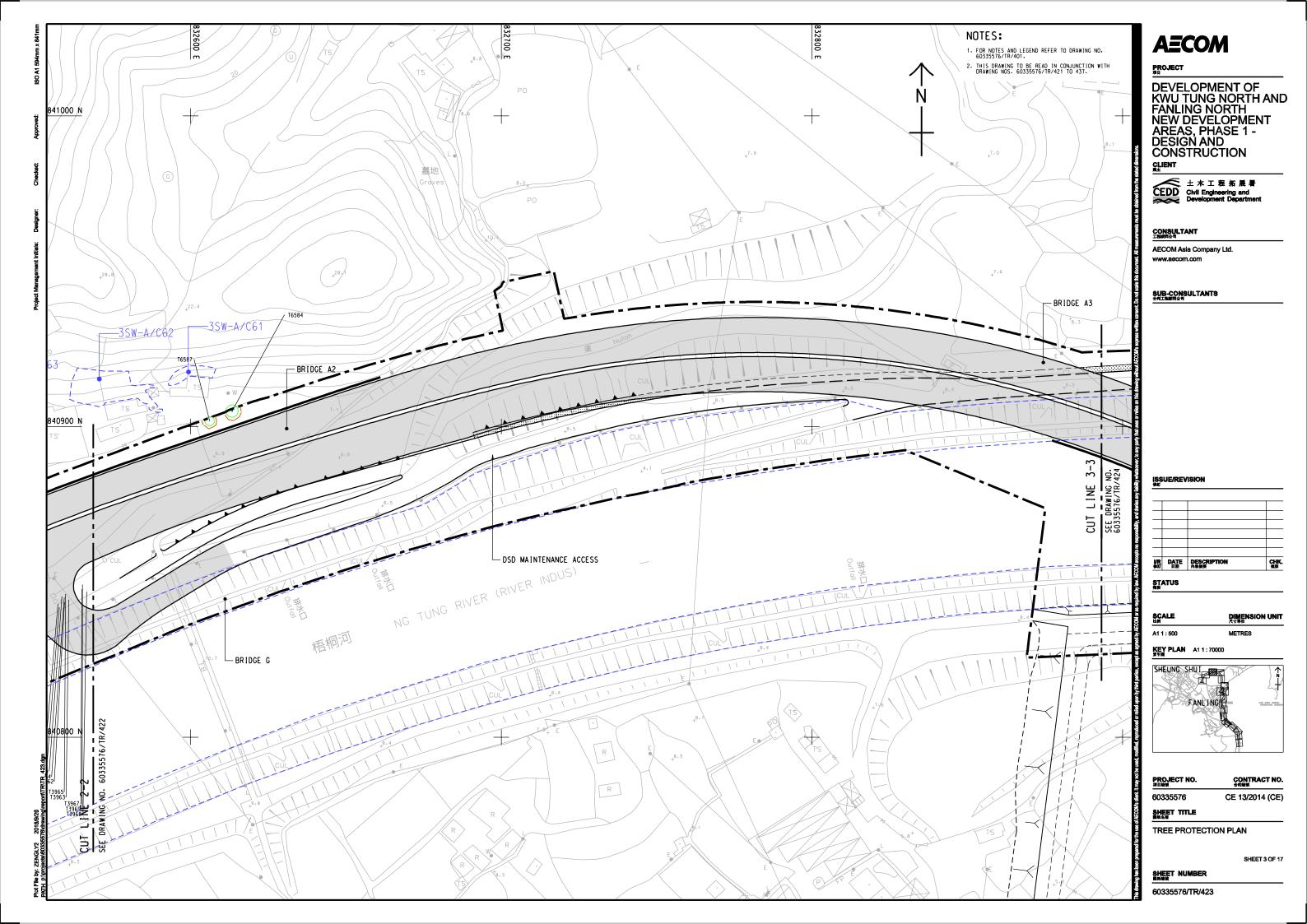


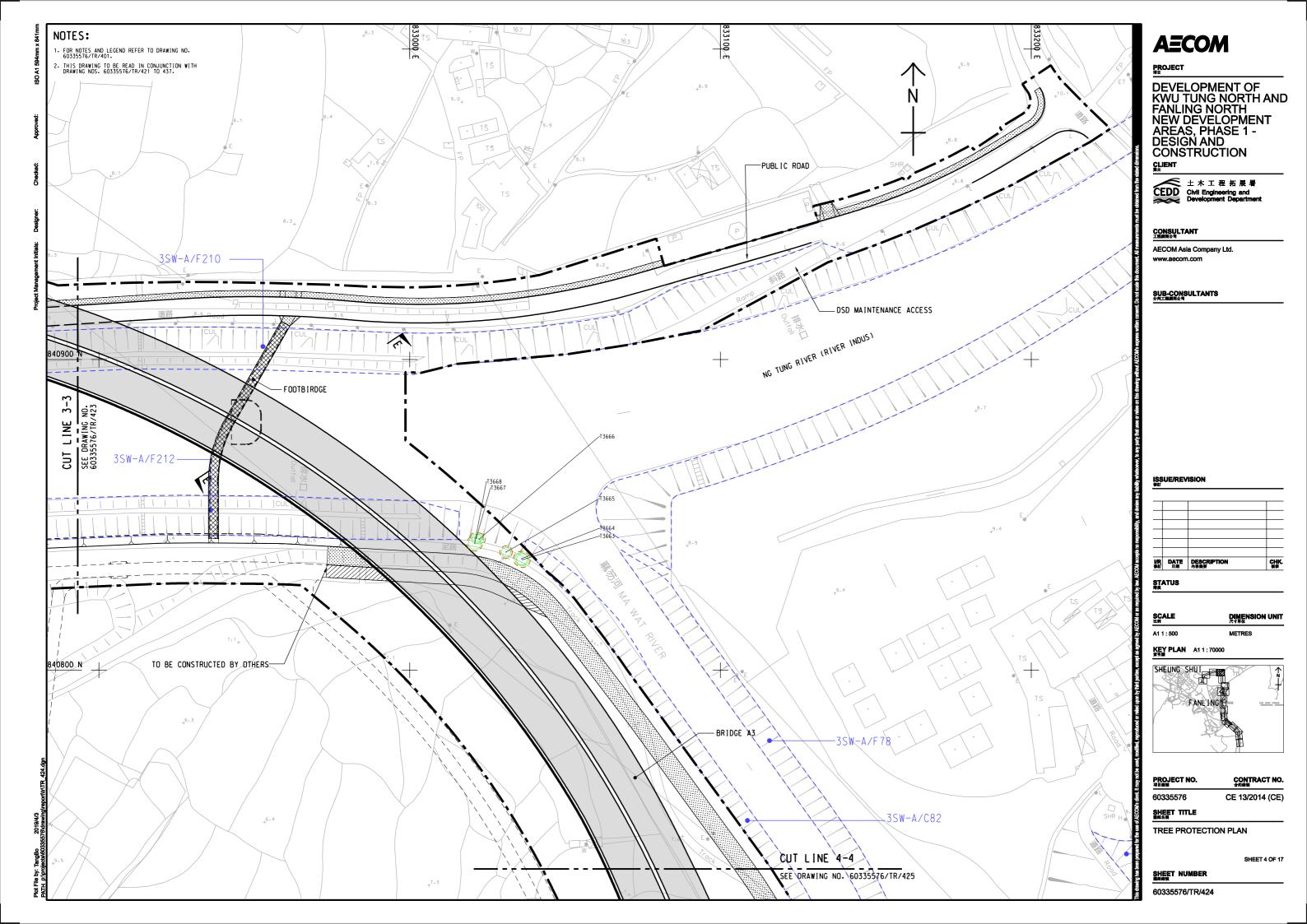


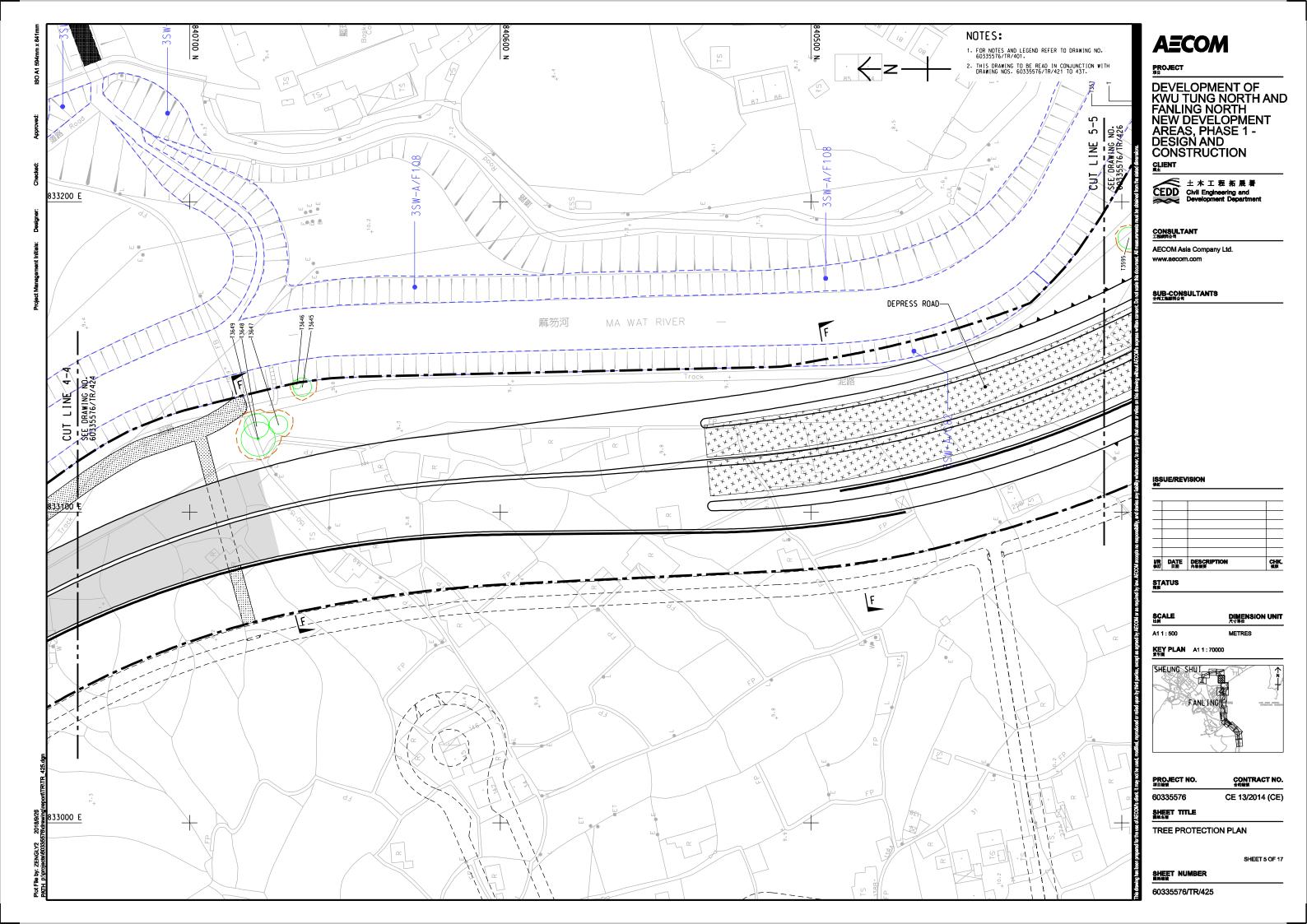


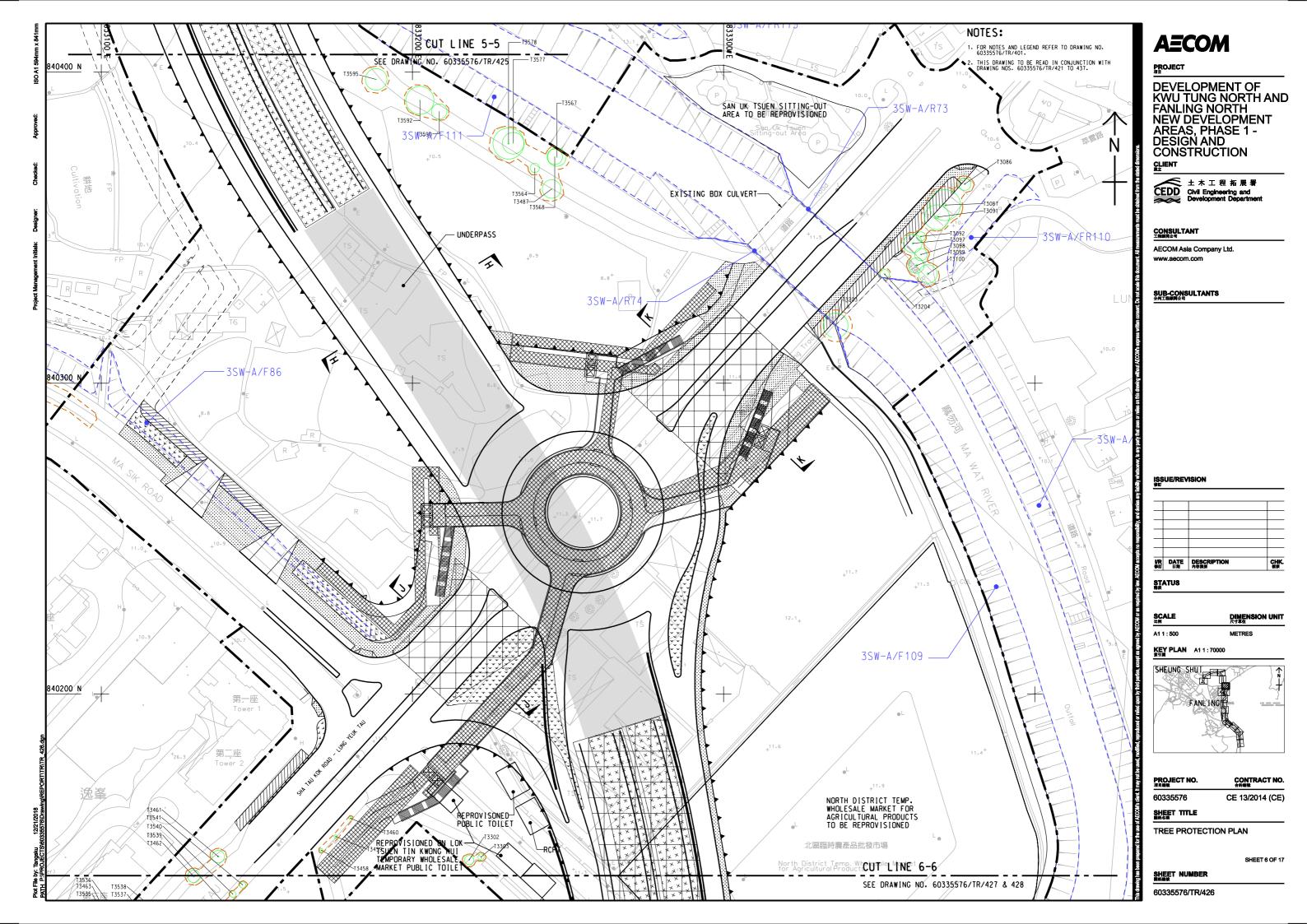


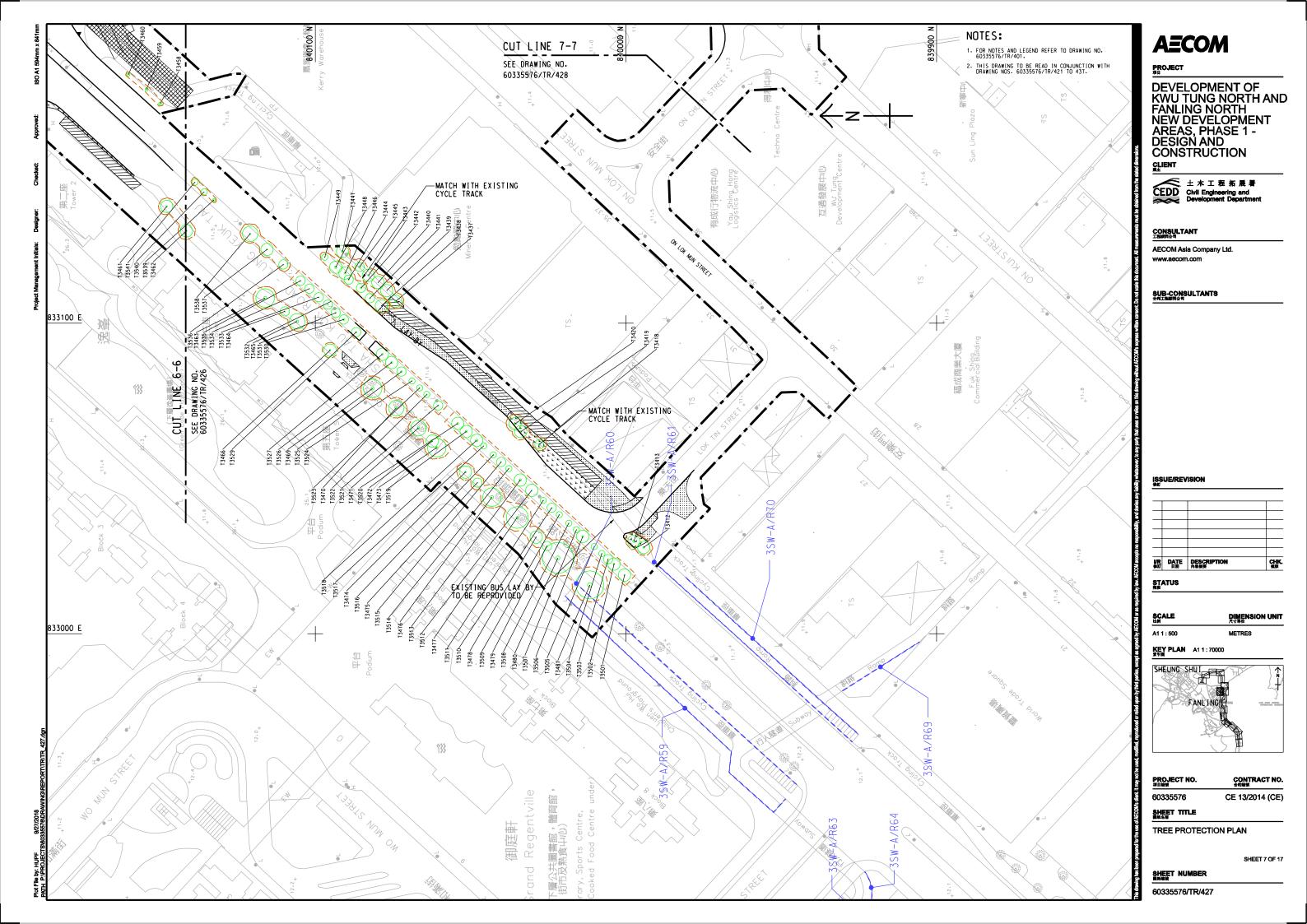


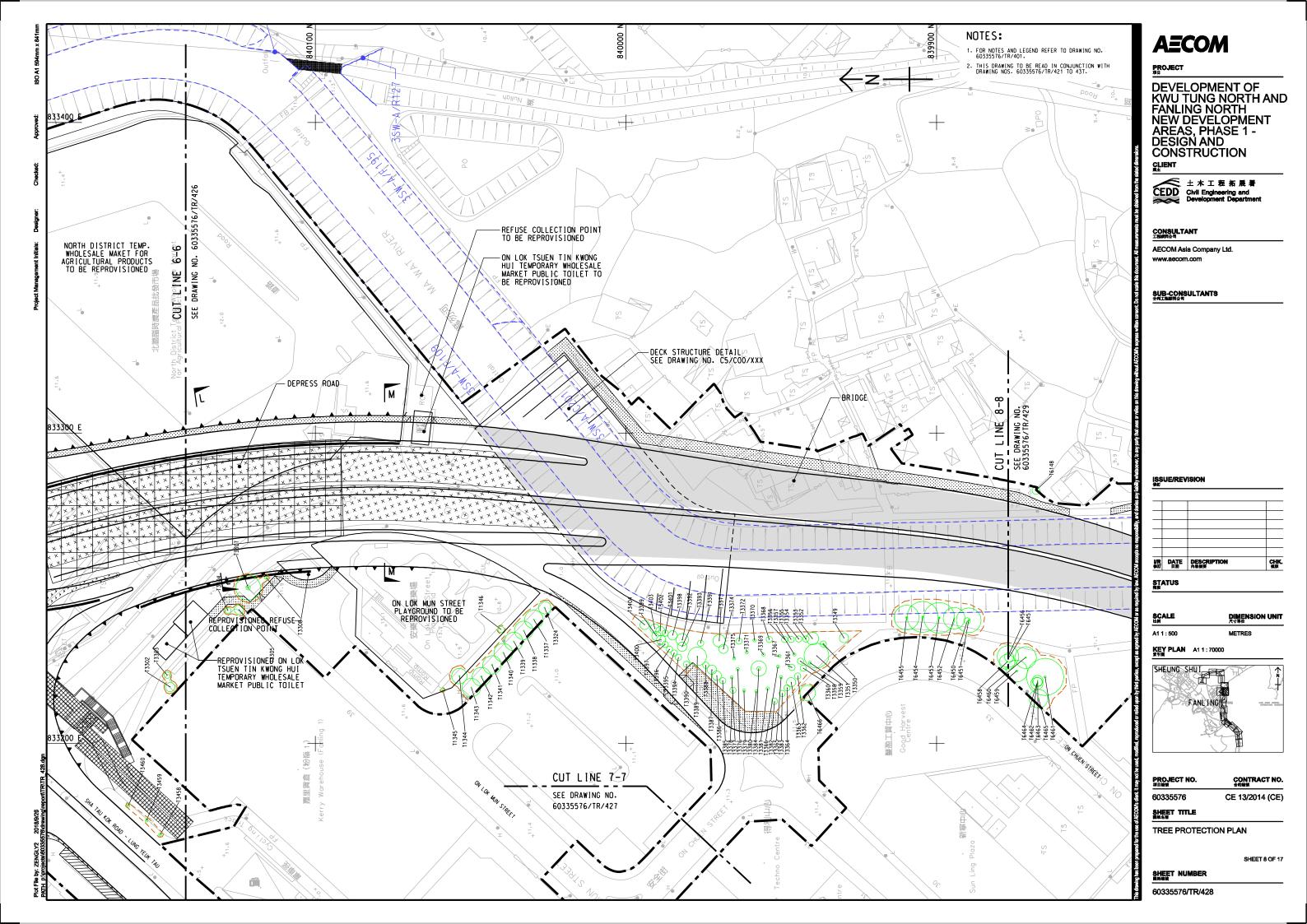


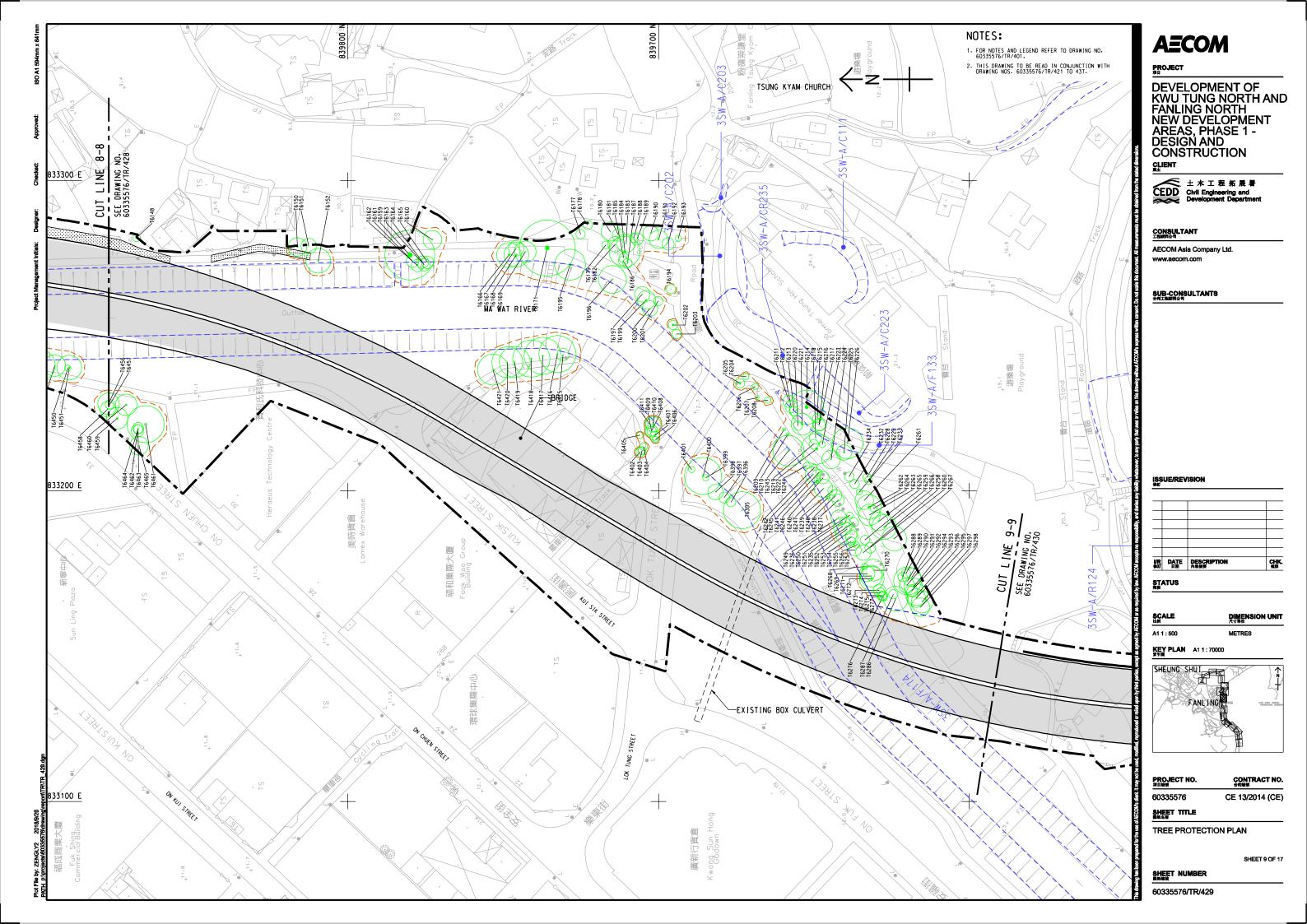


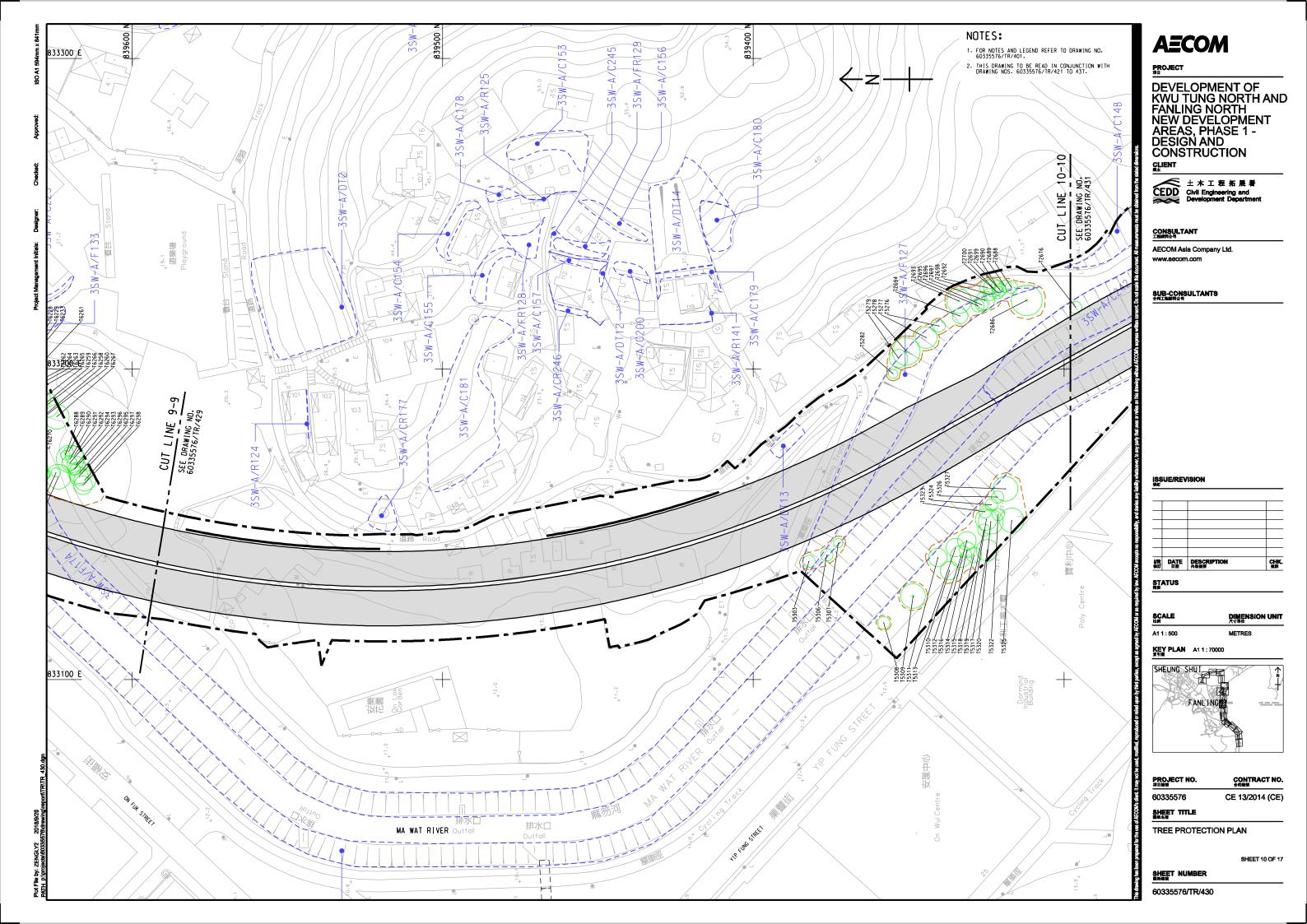


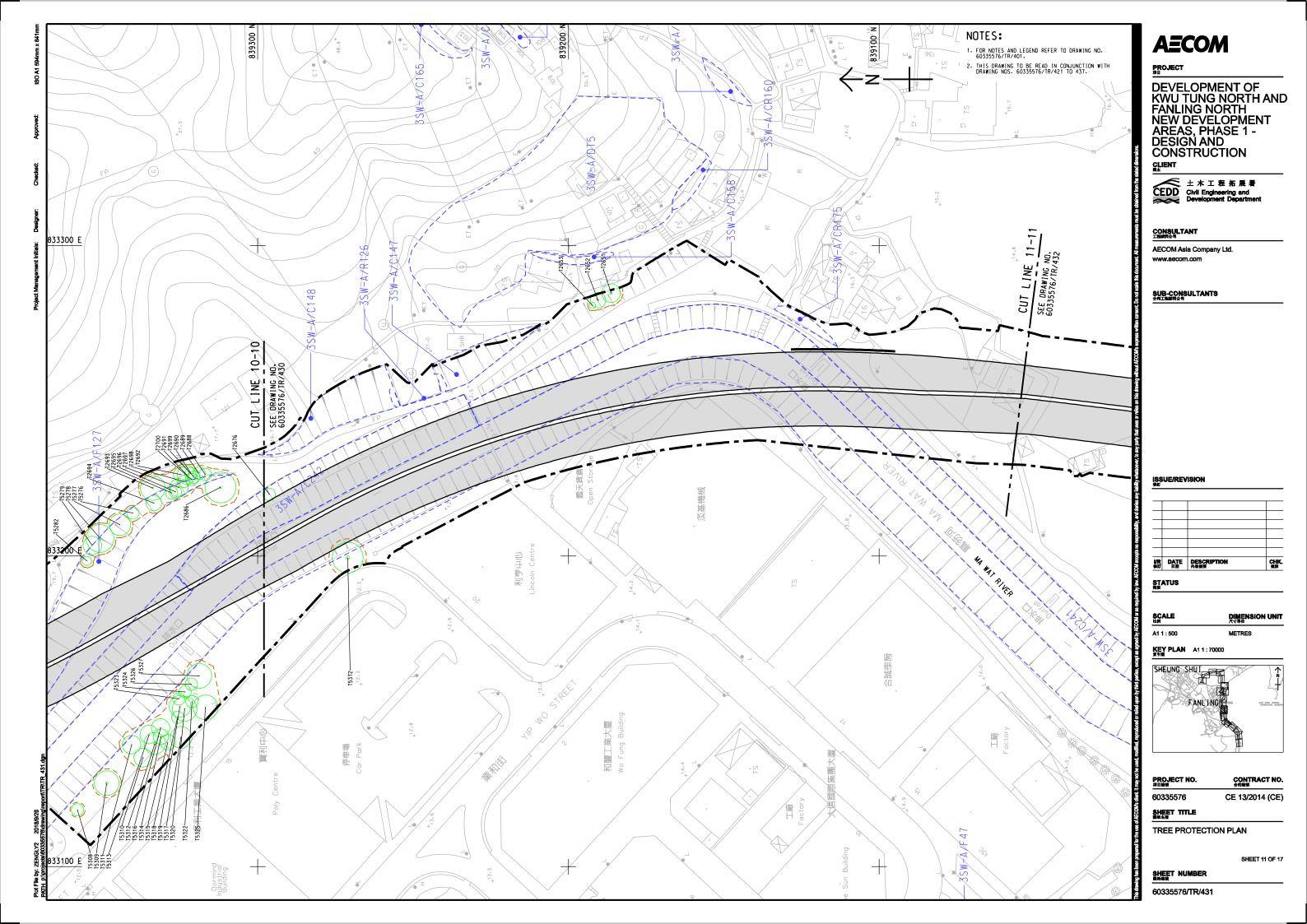


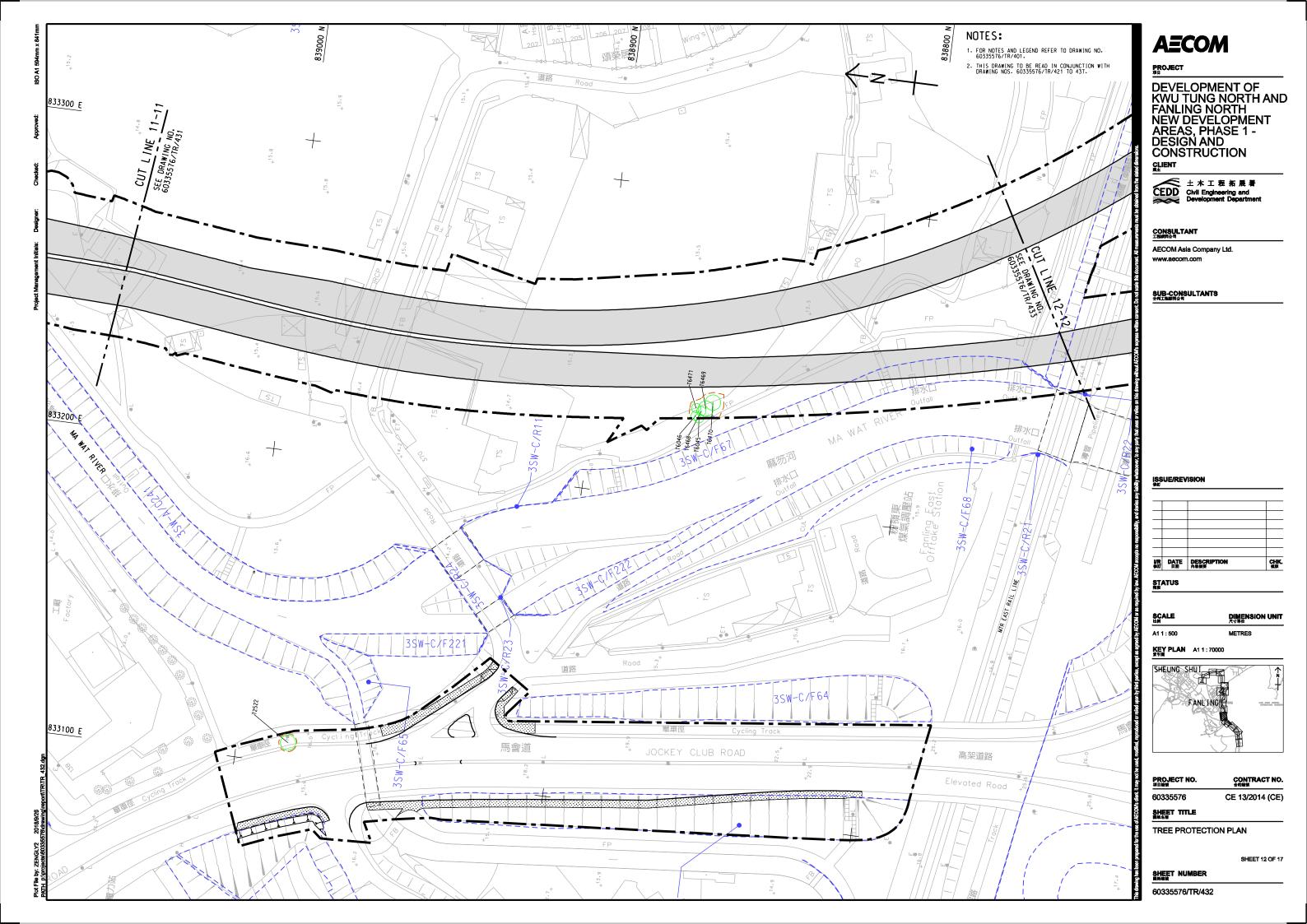


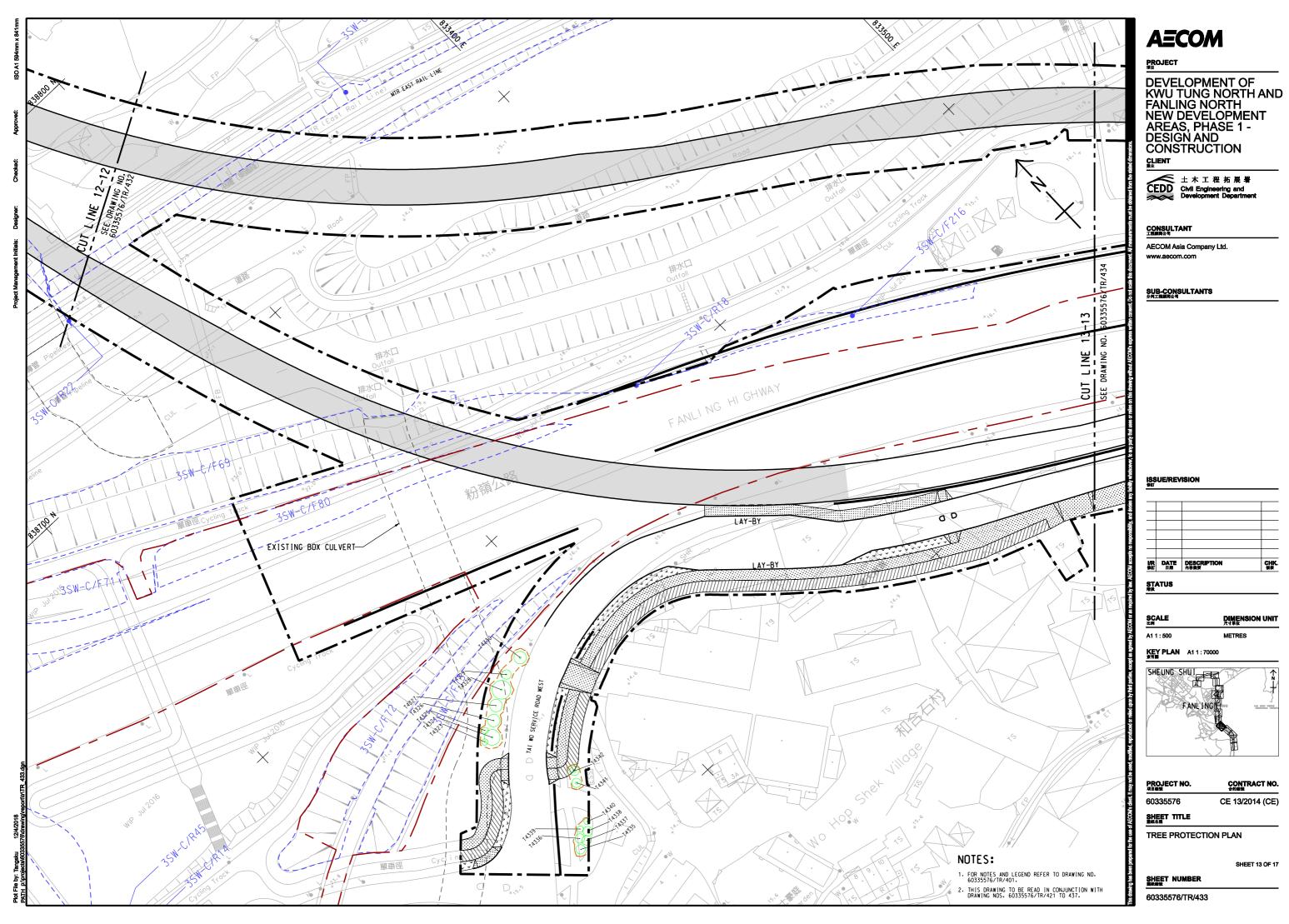


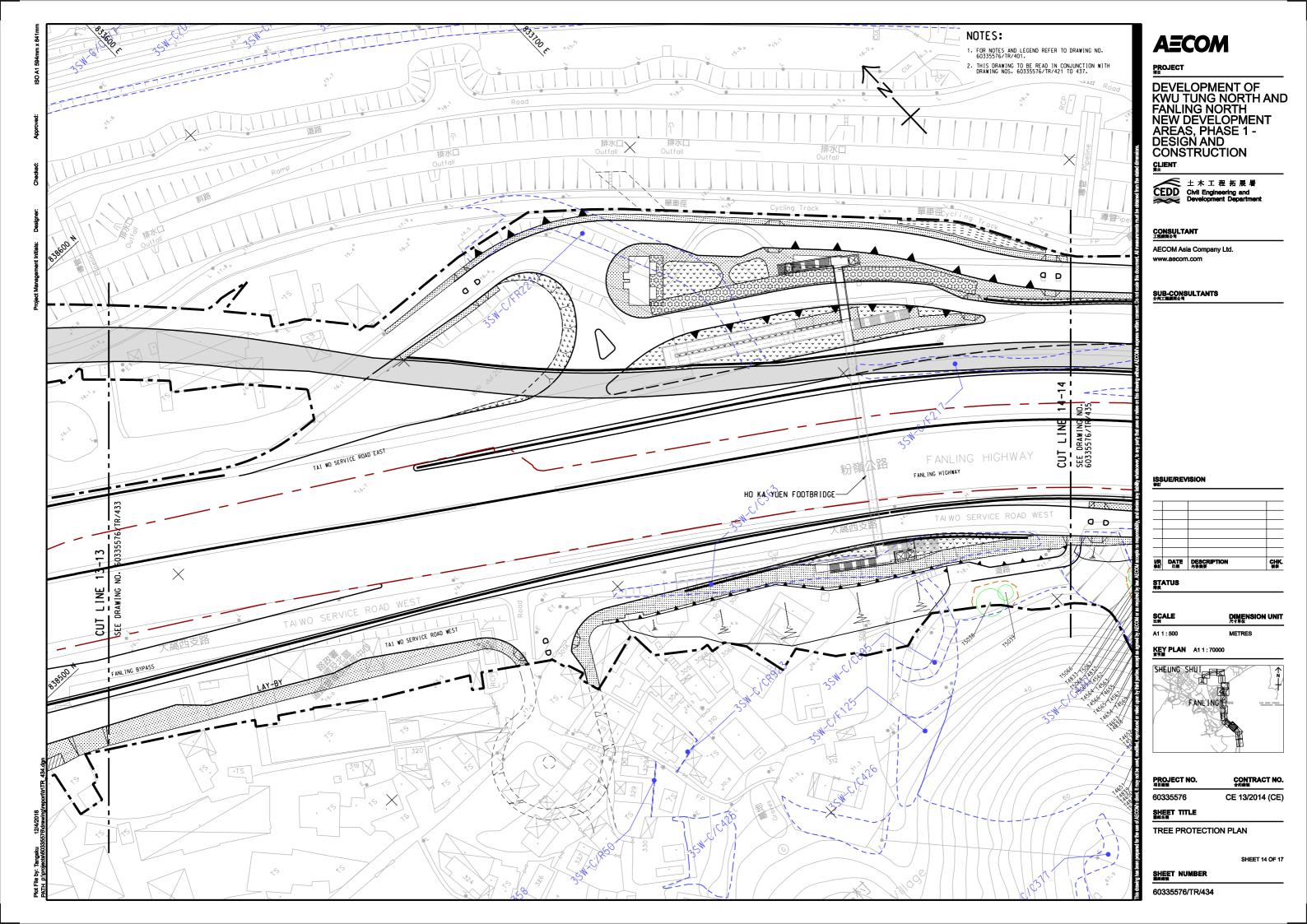


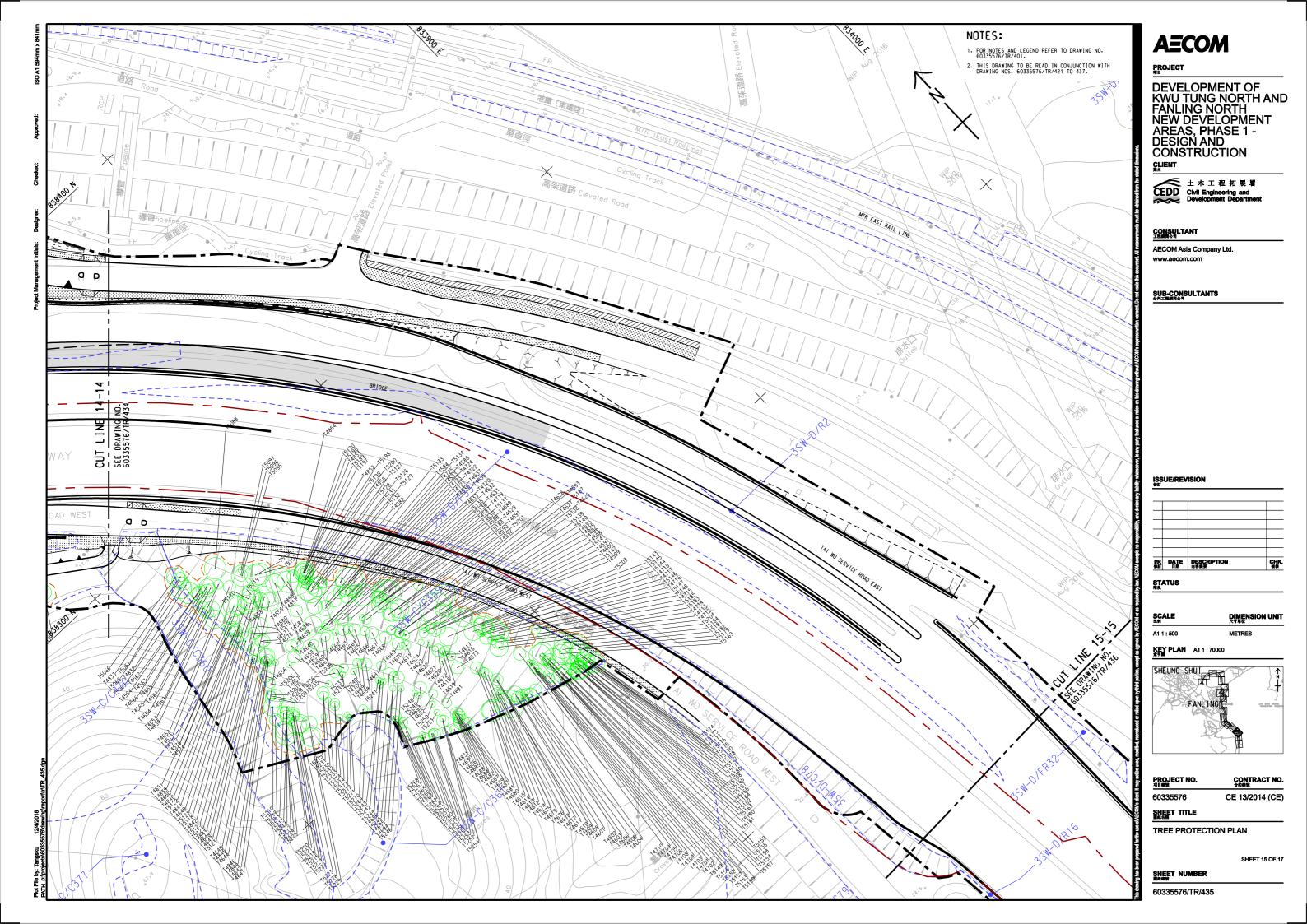


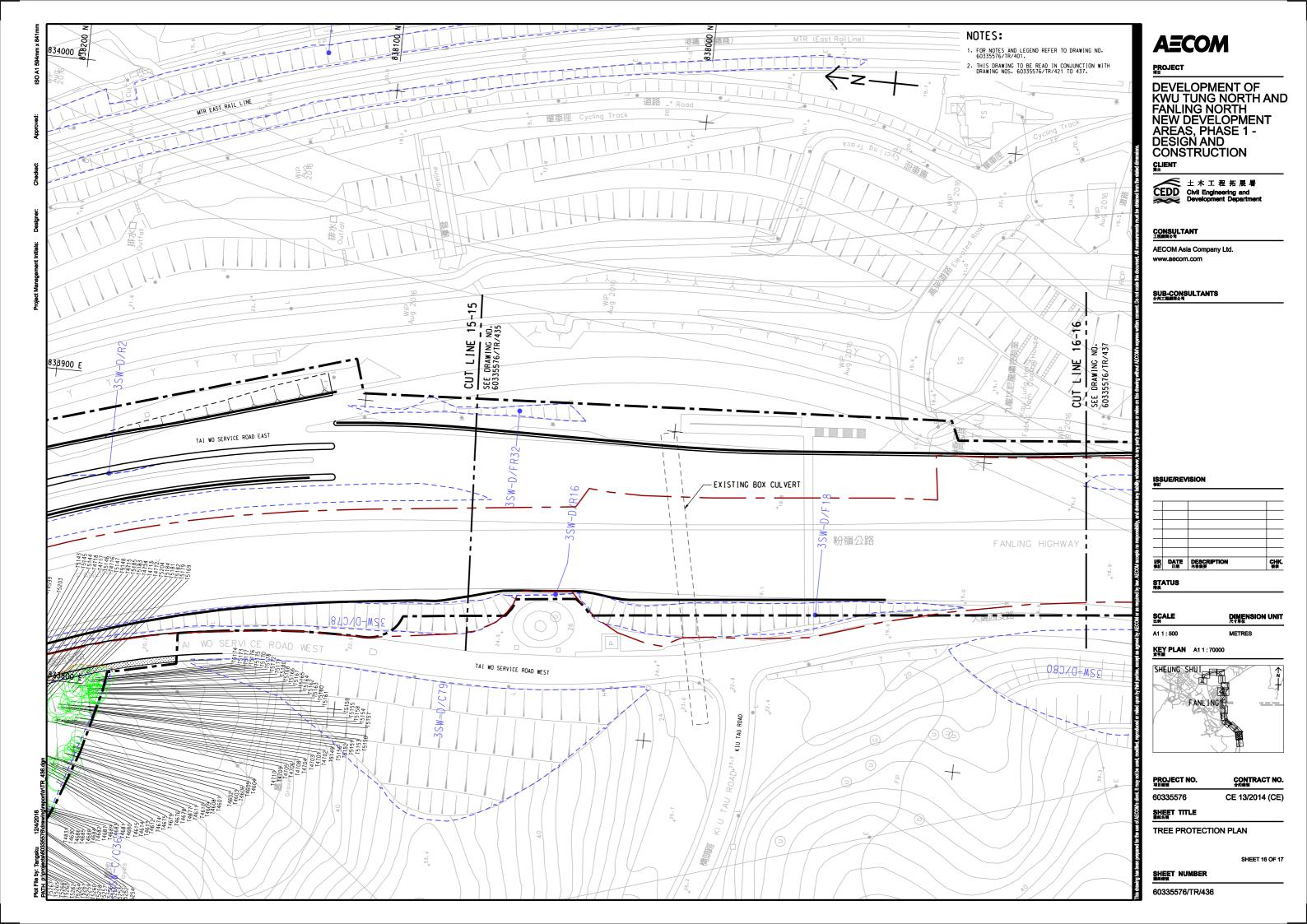


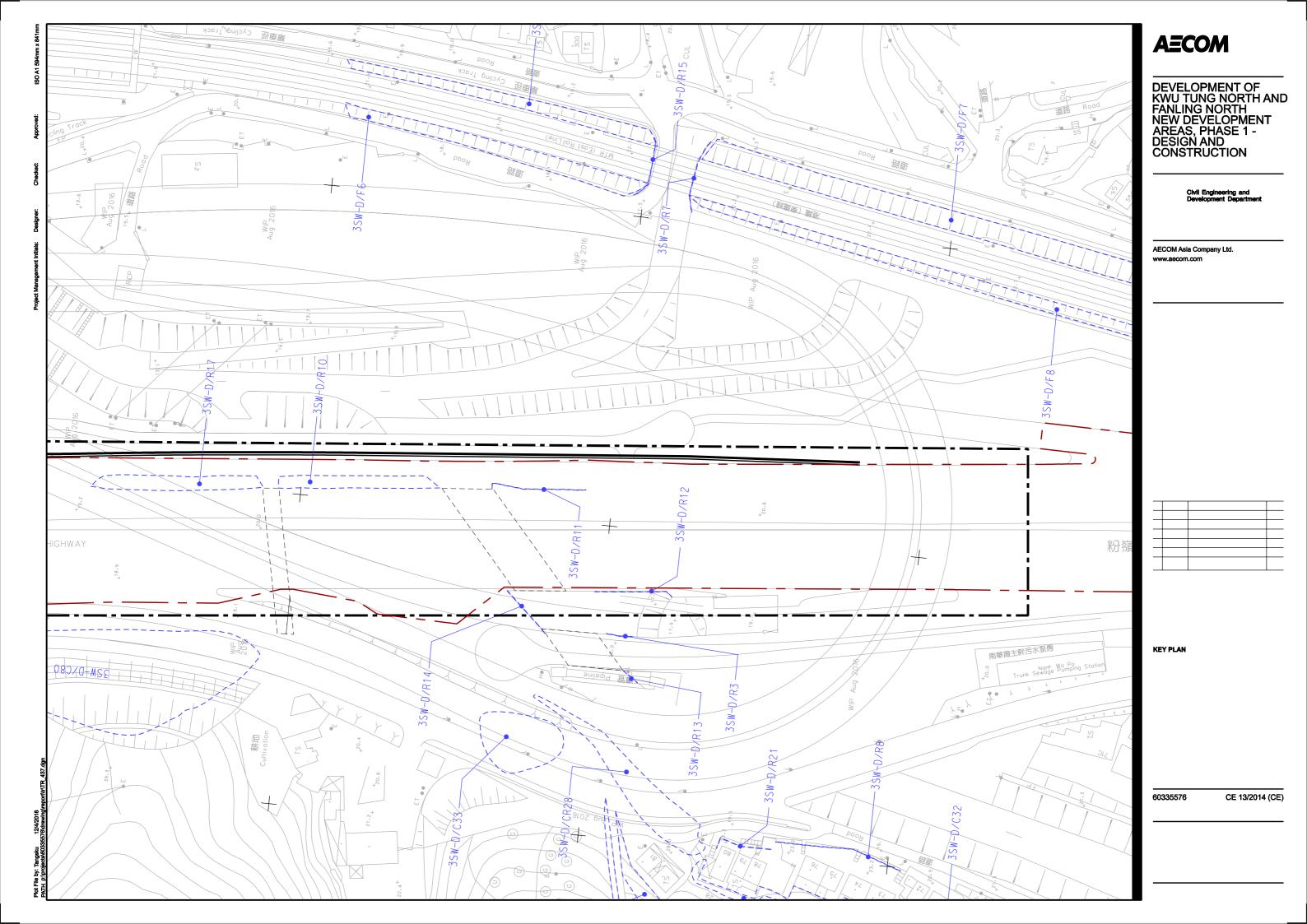


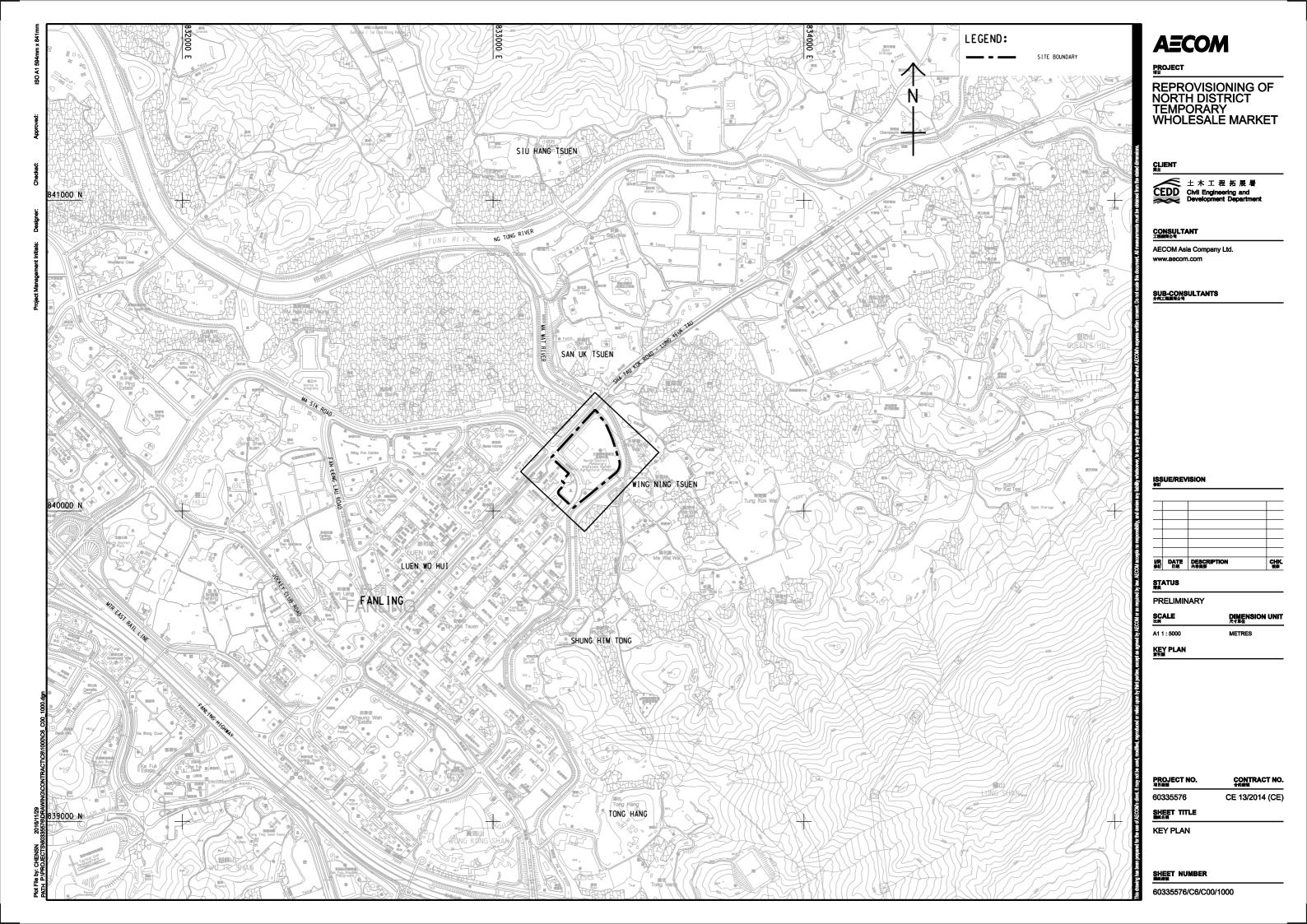


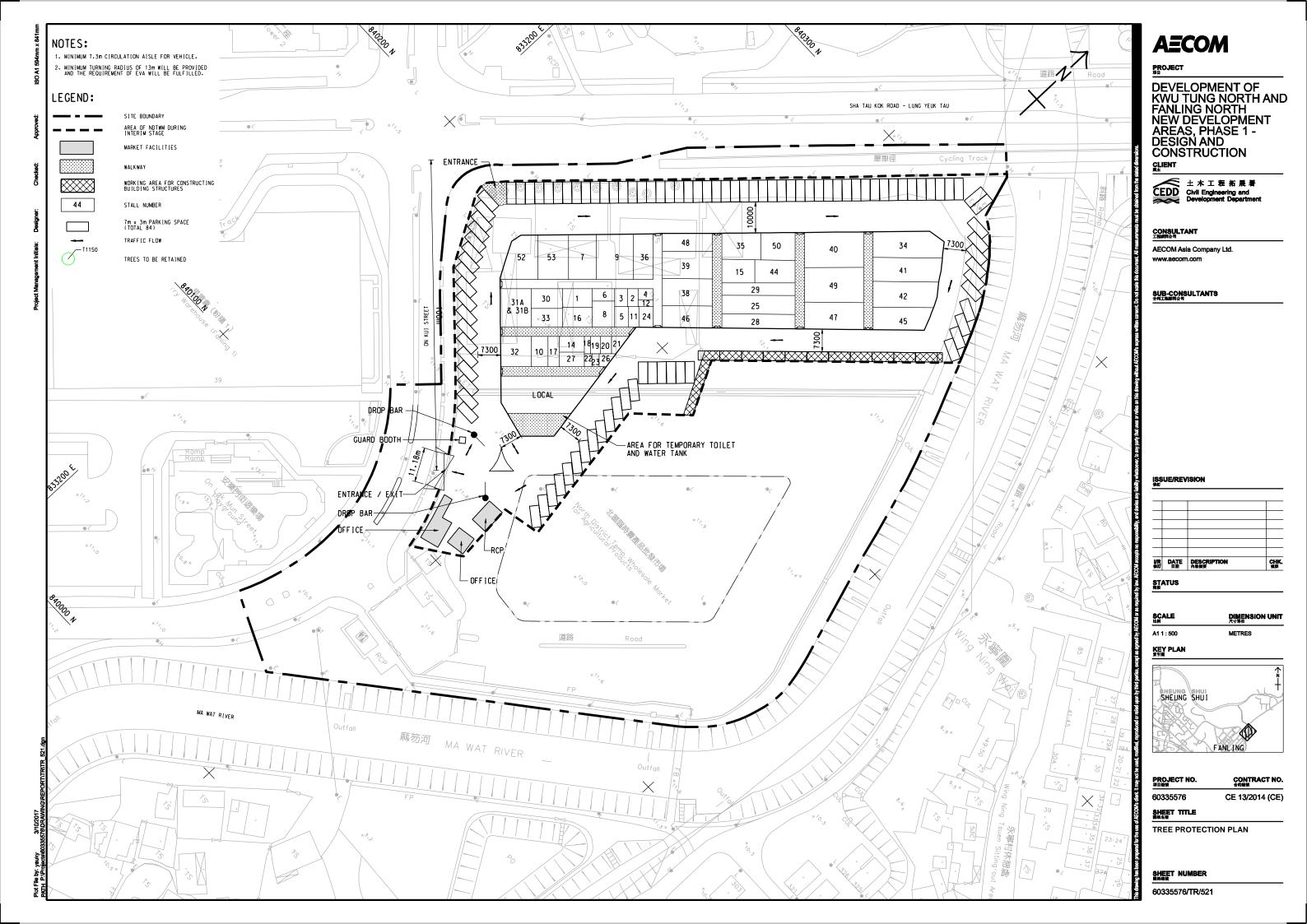


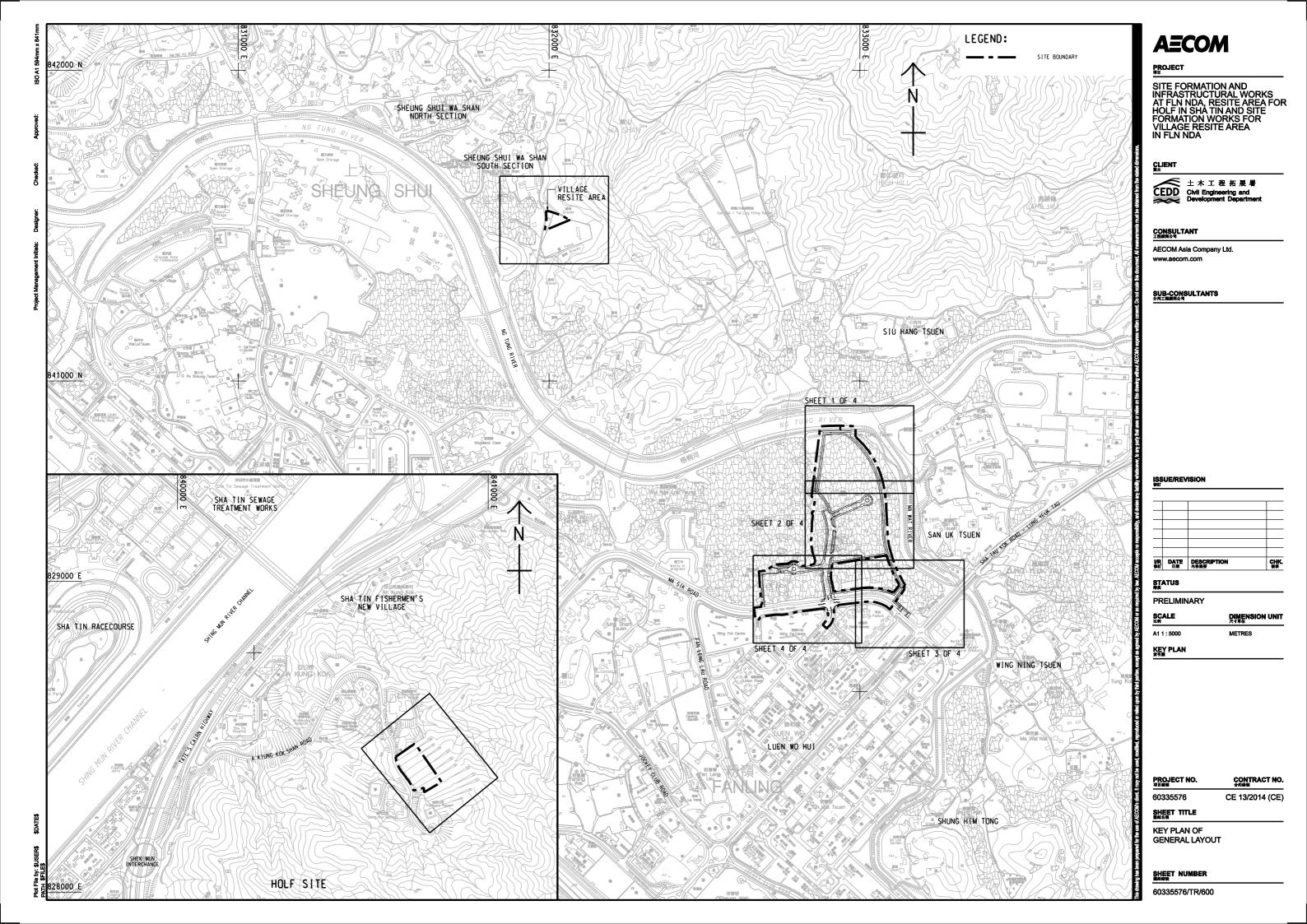


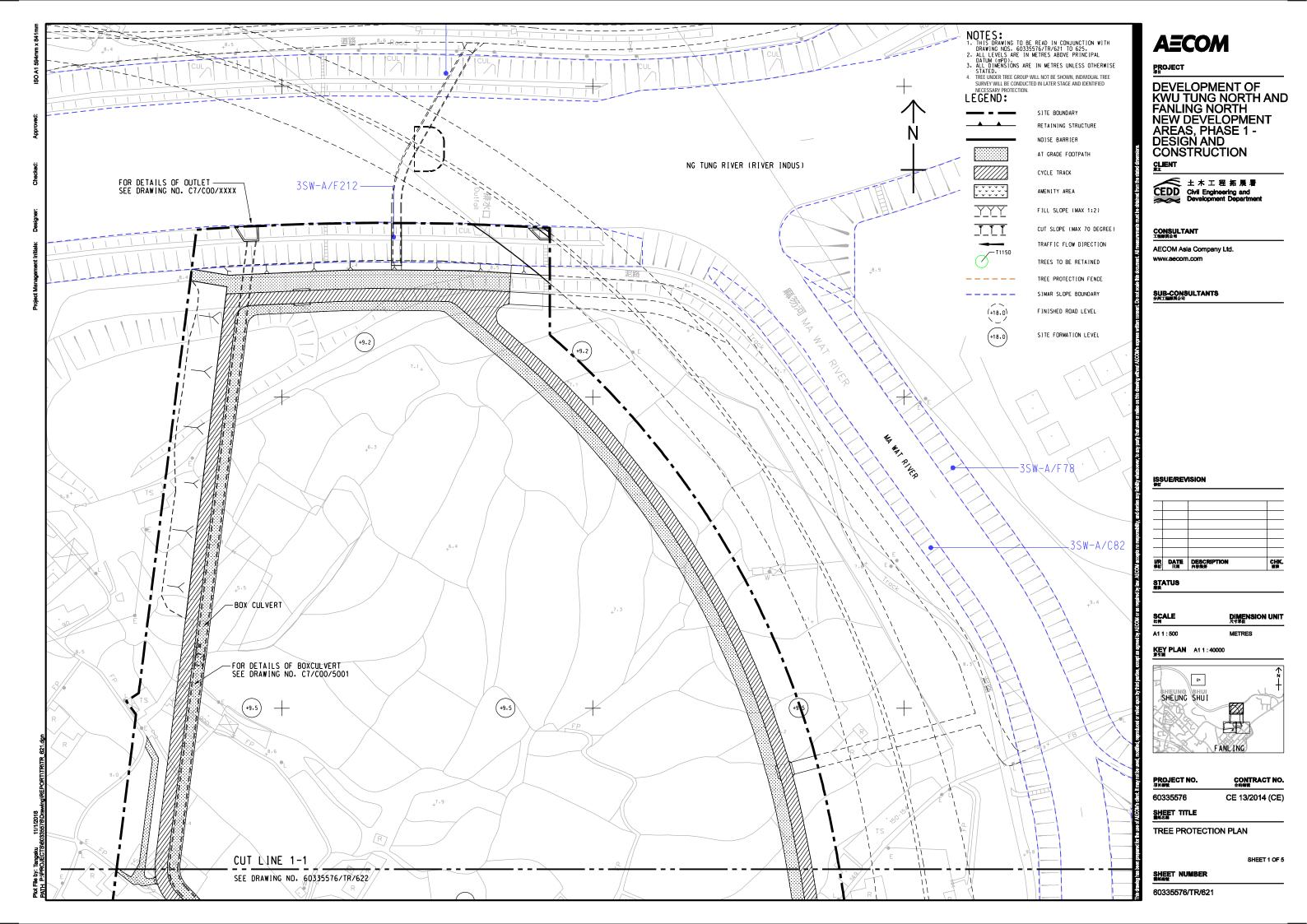


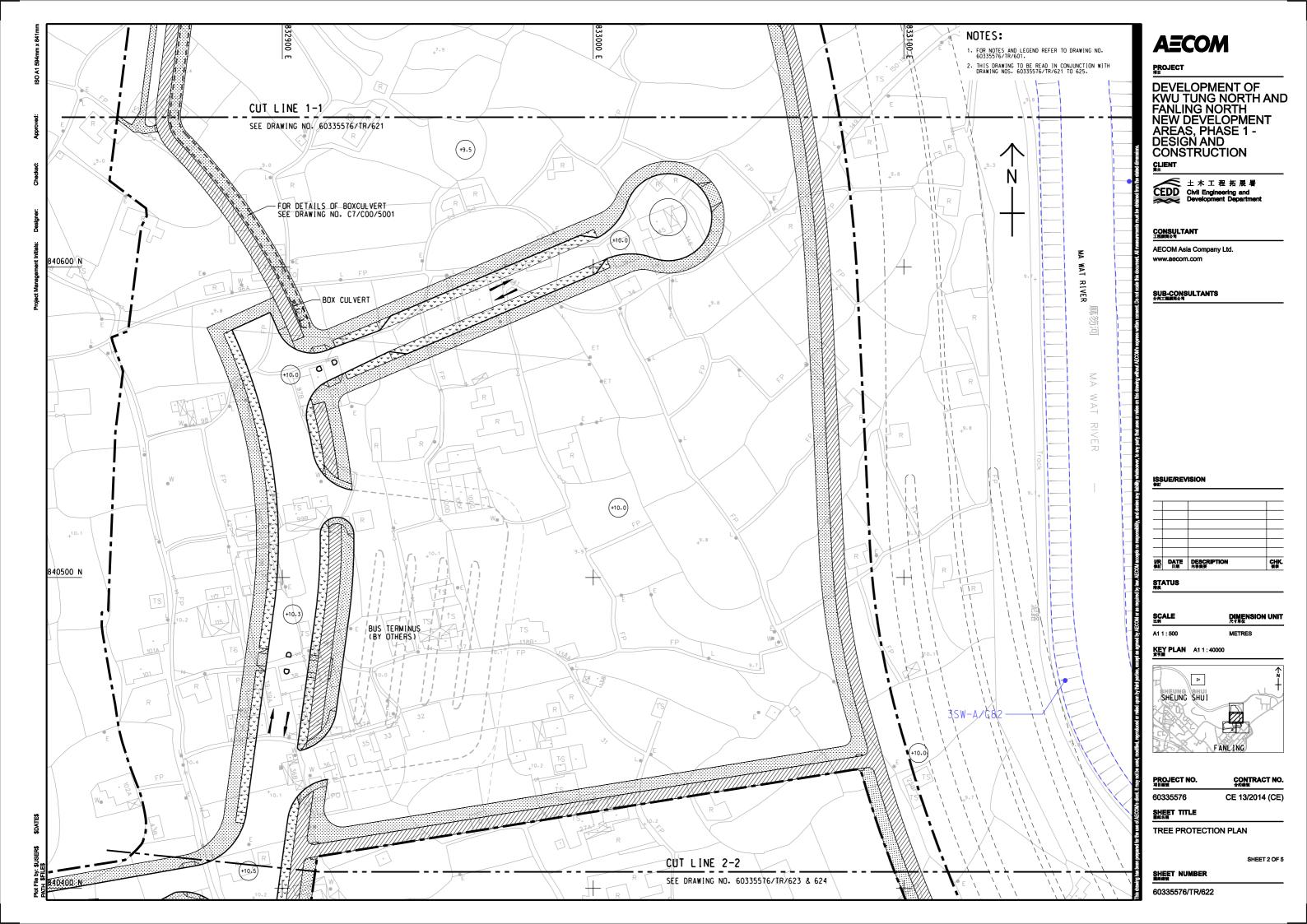


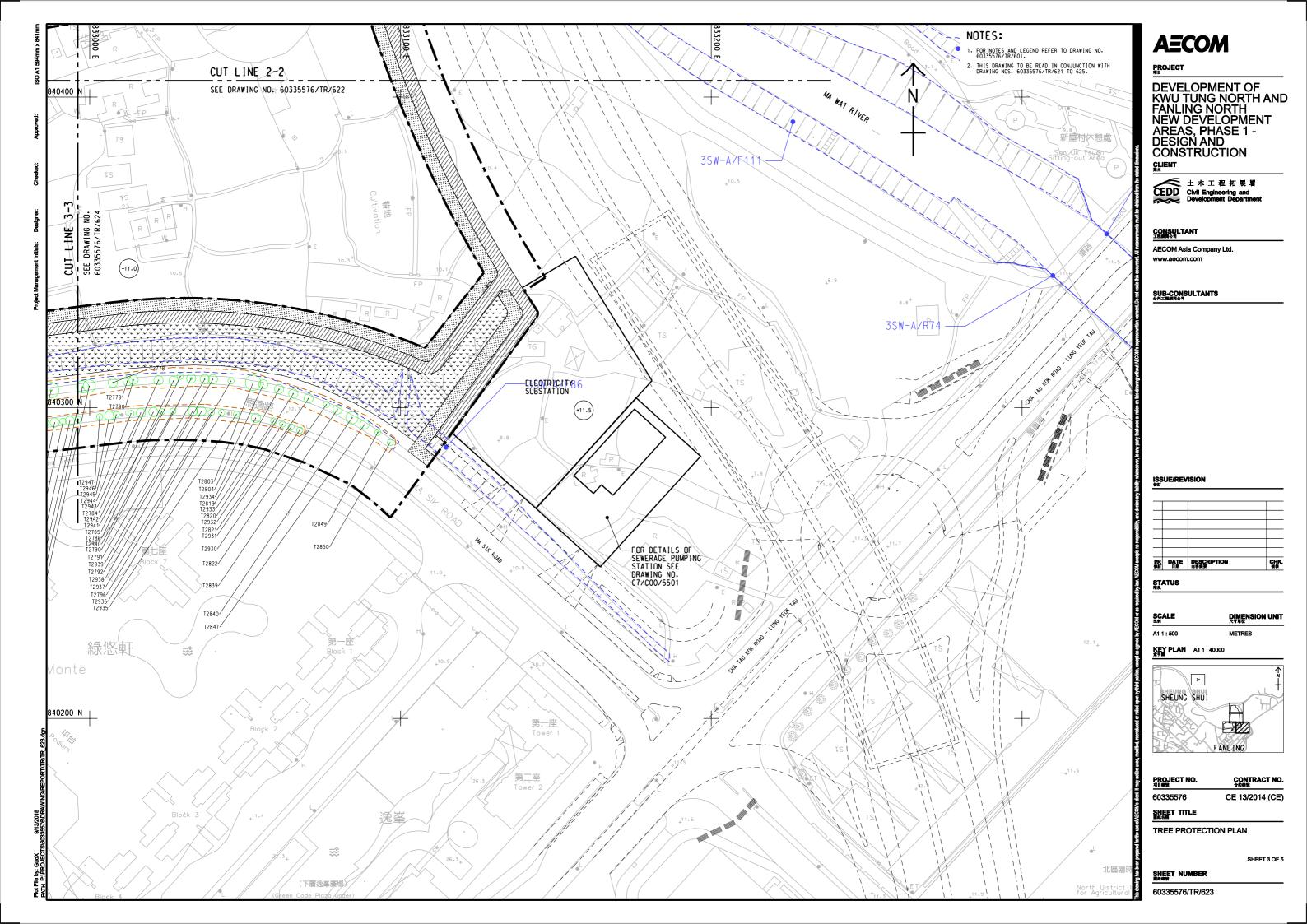


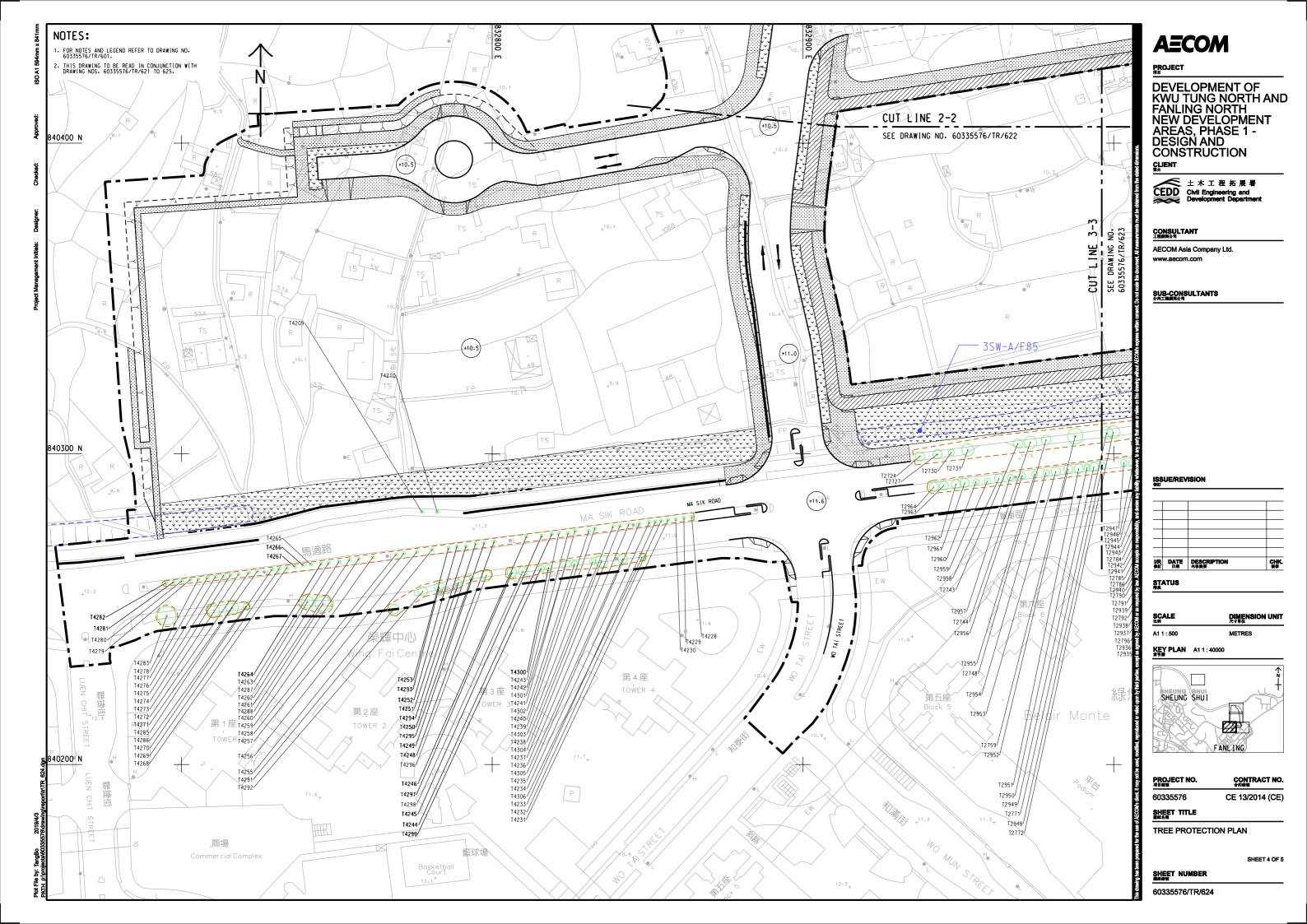


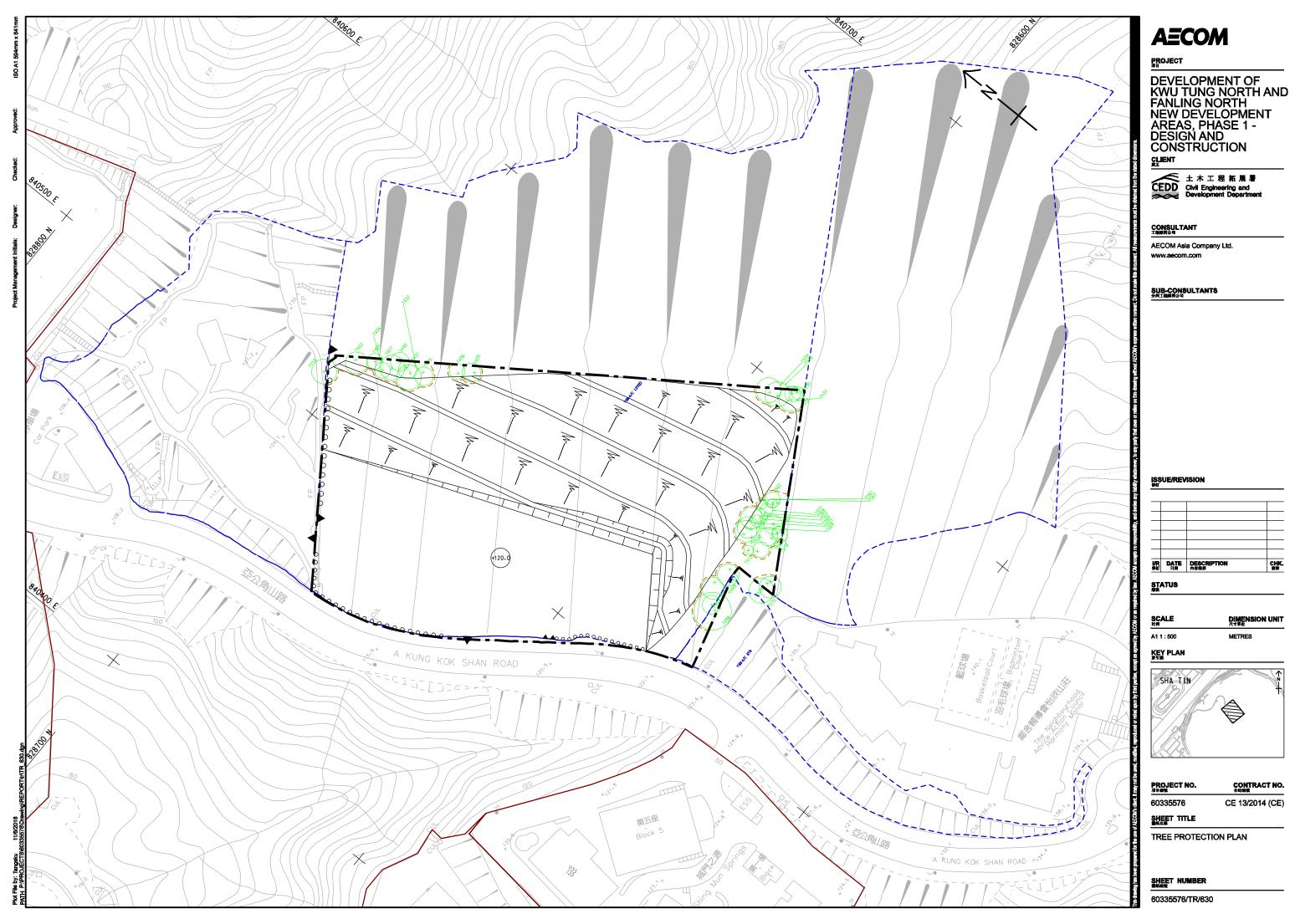


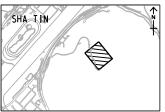








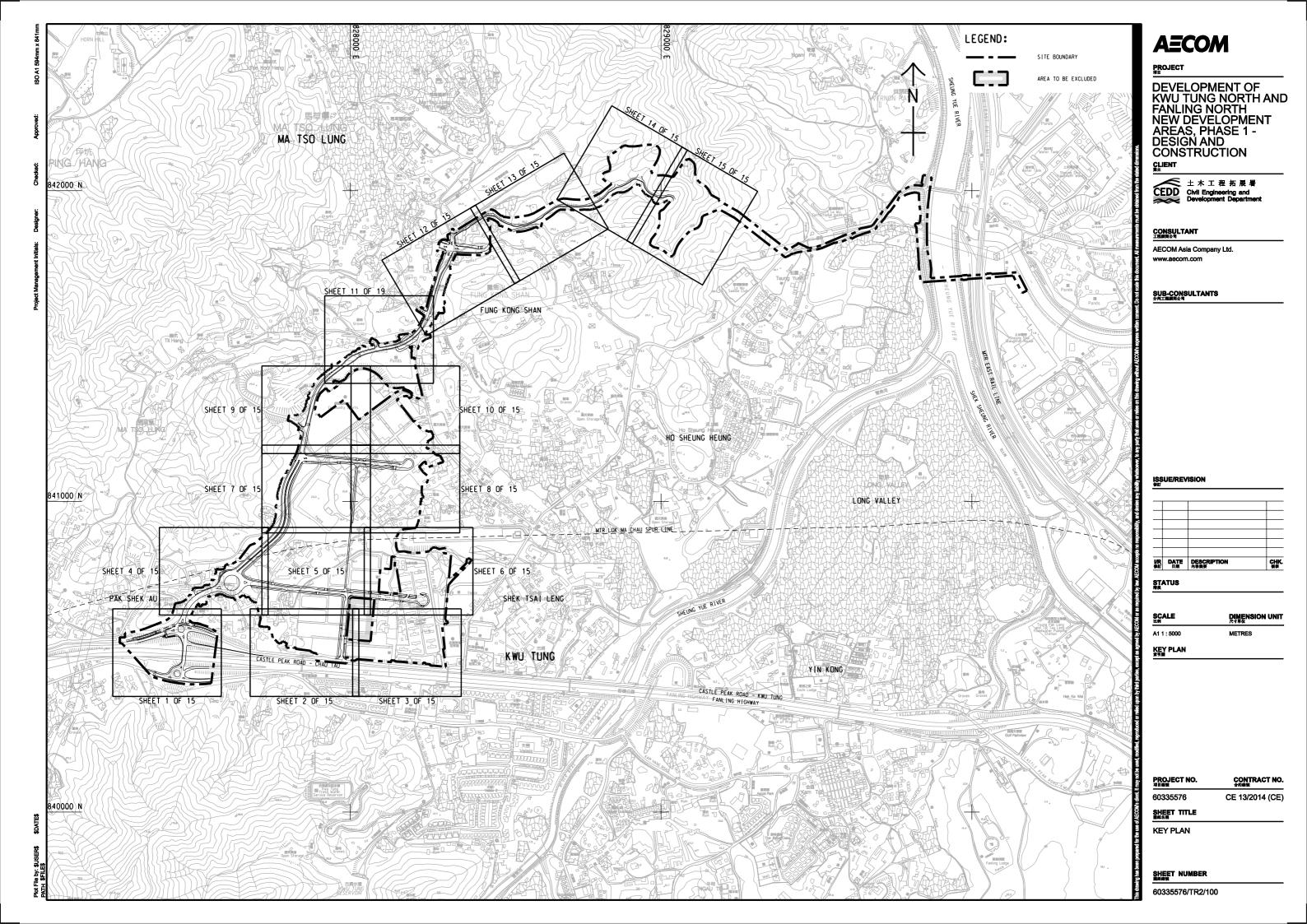


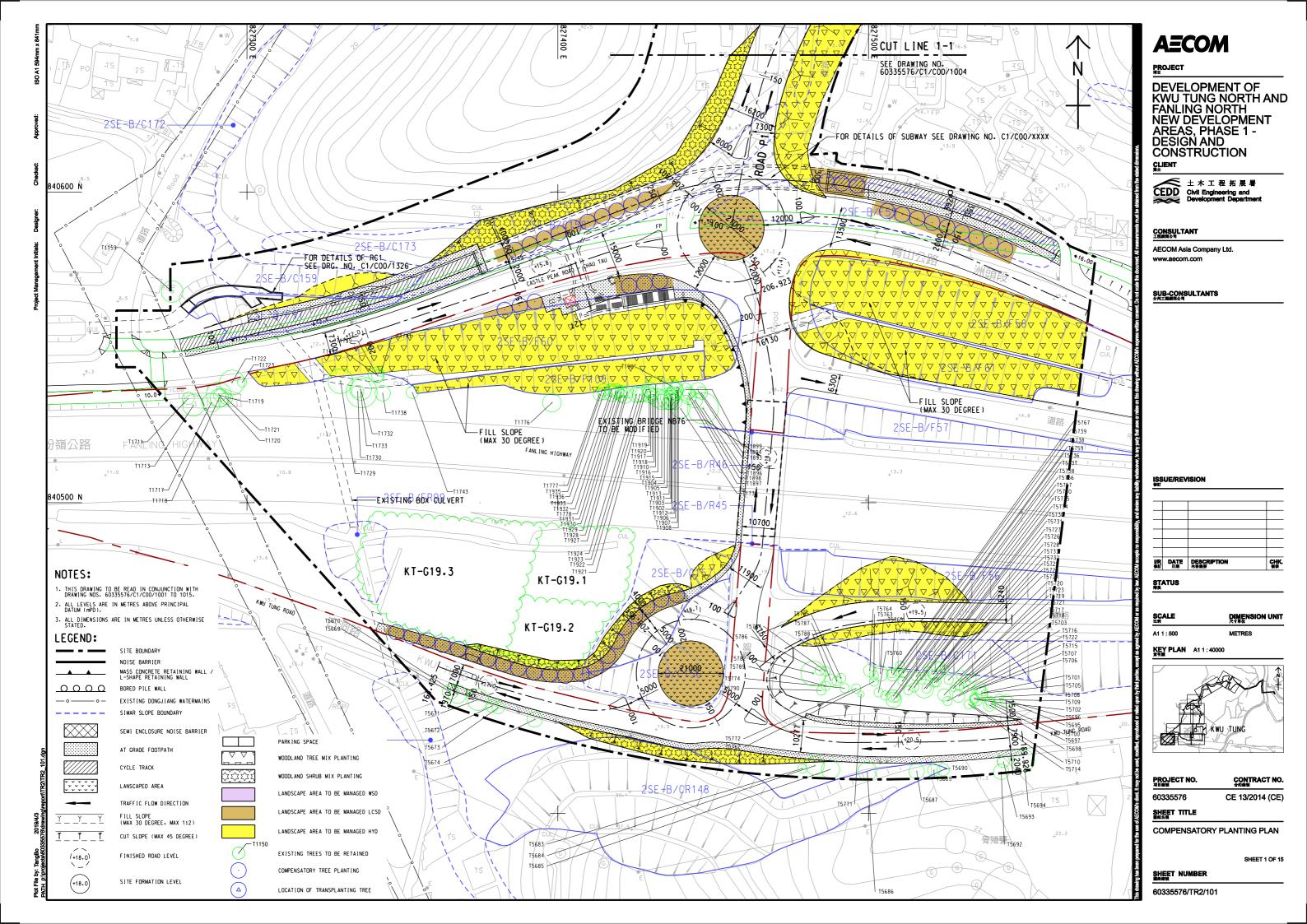


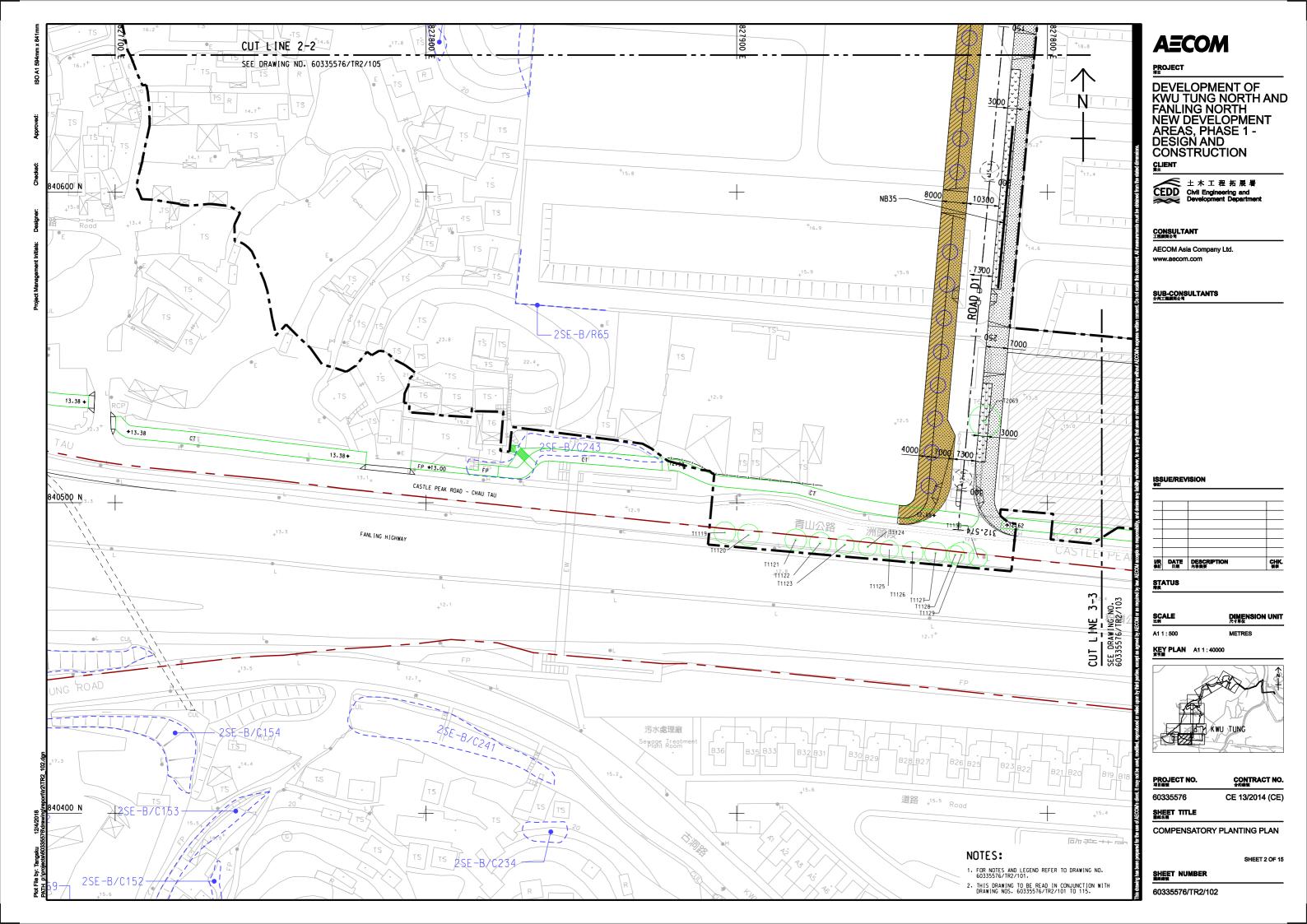
Appendix VI

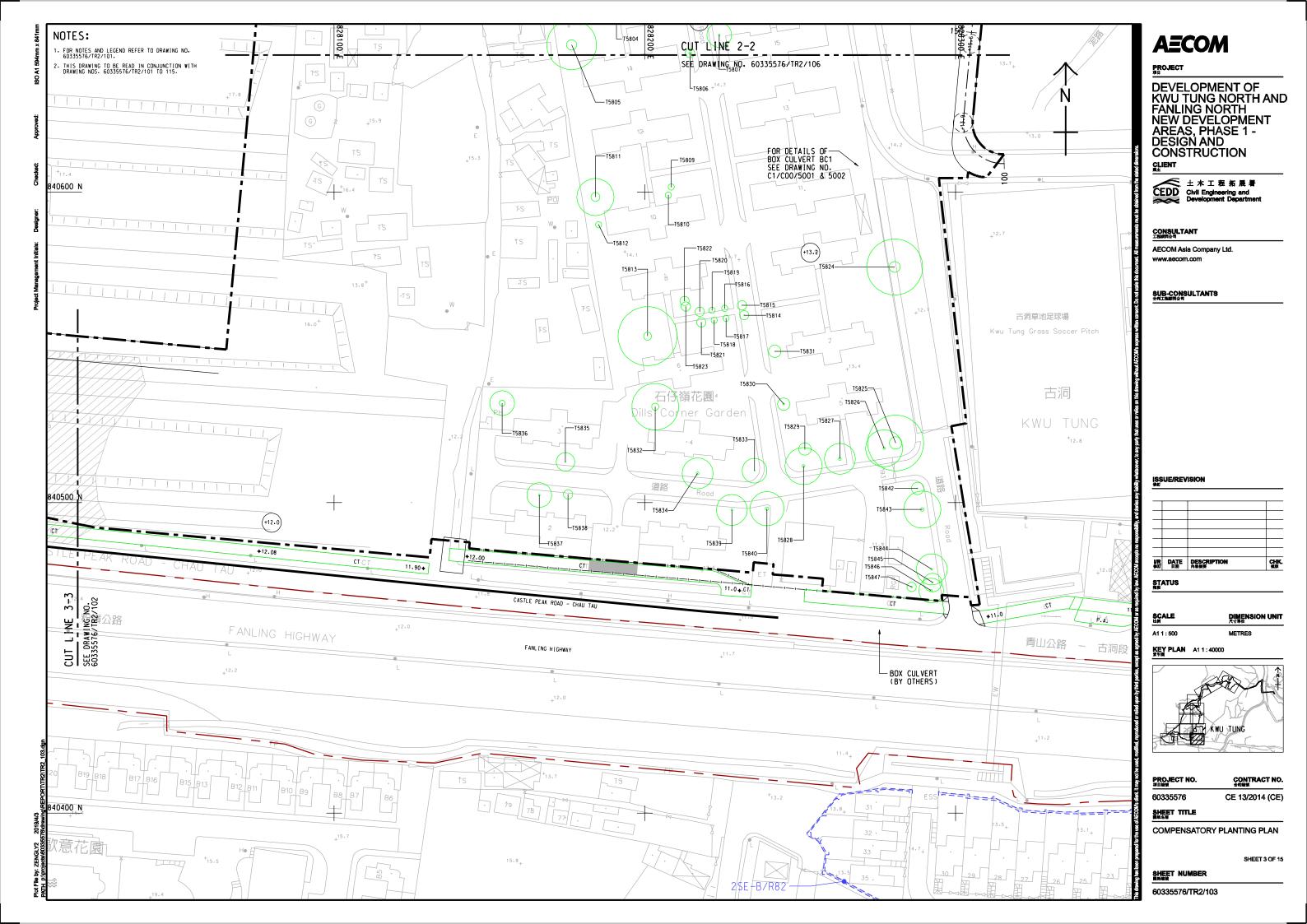
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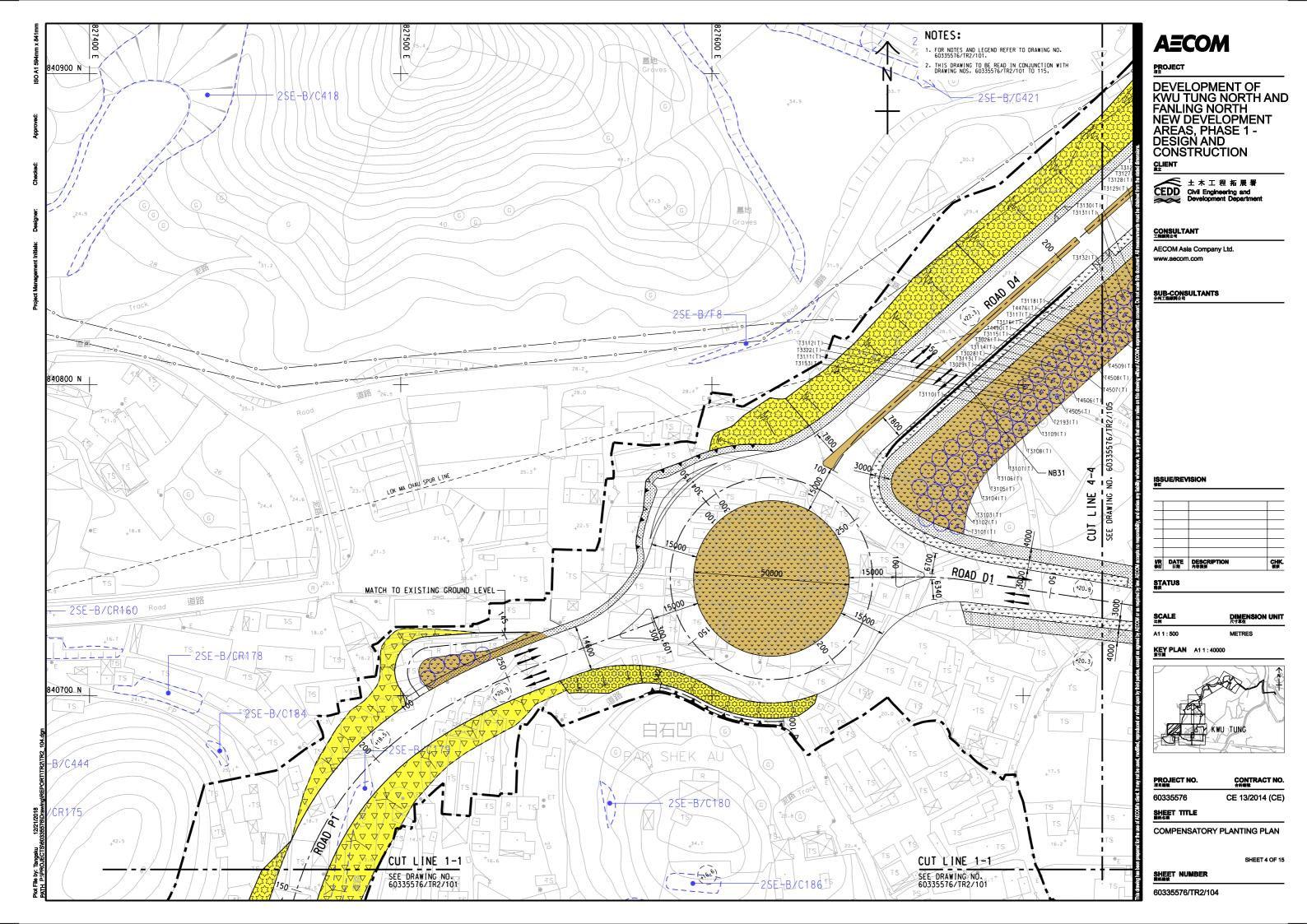


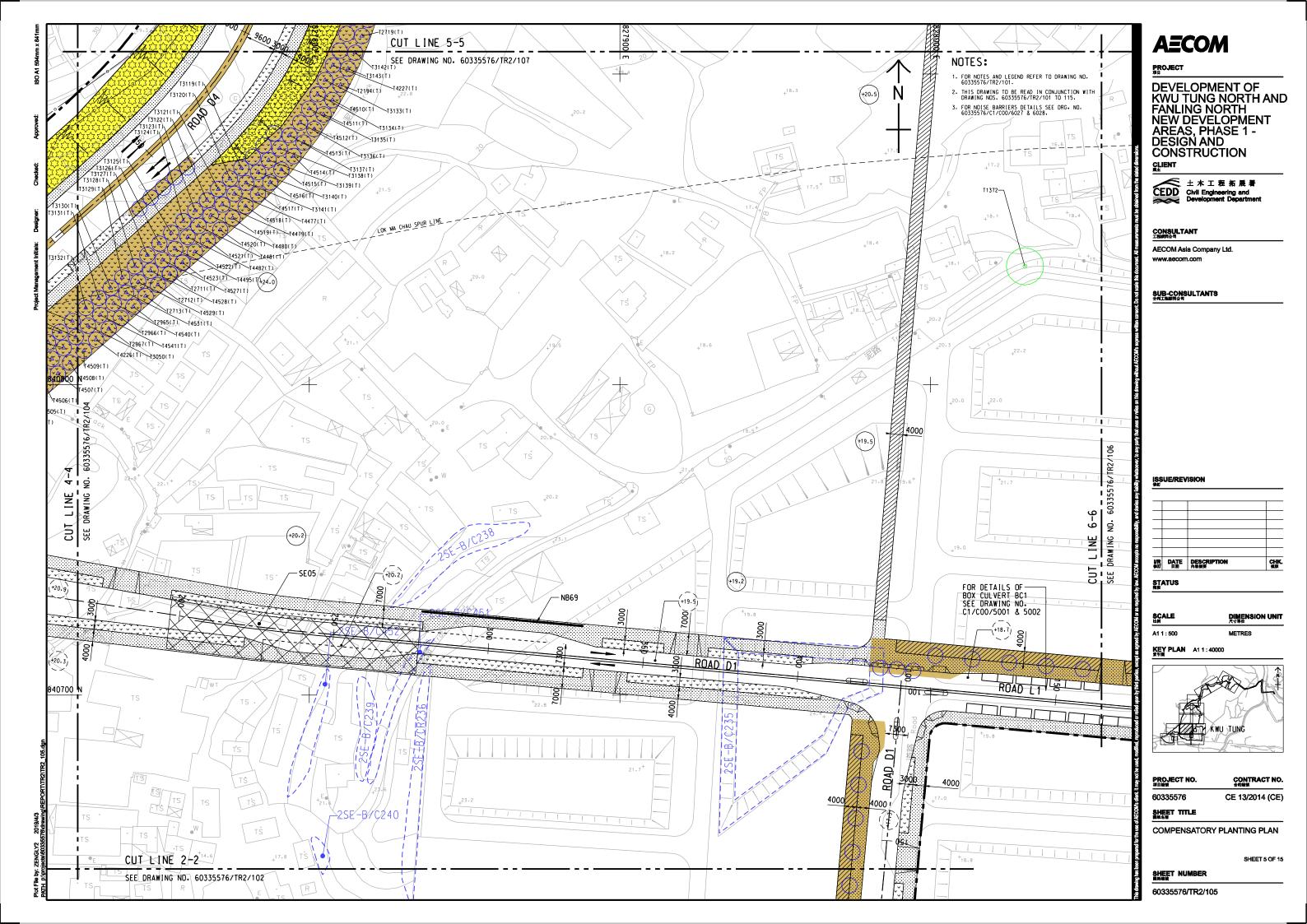


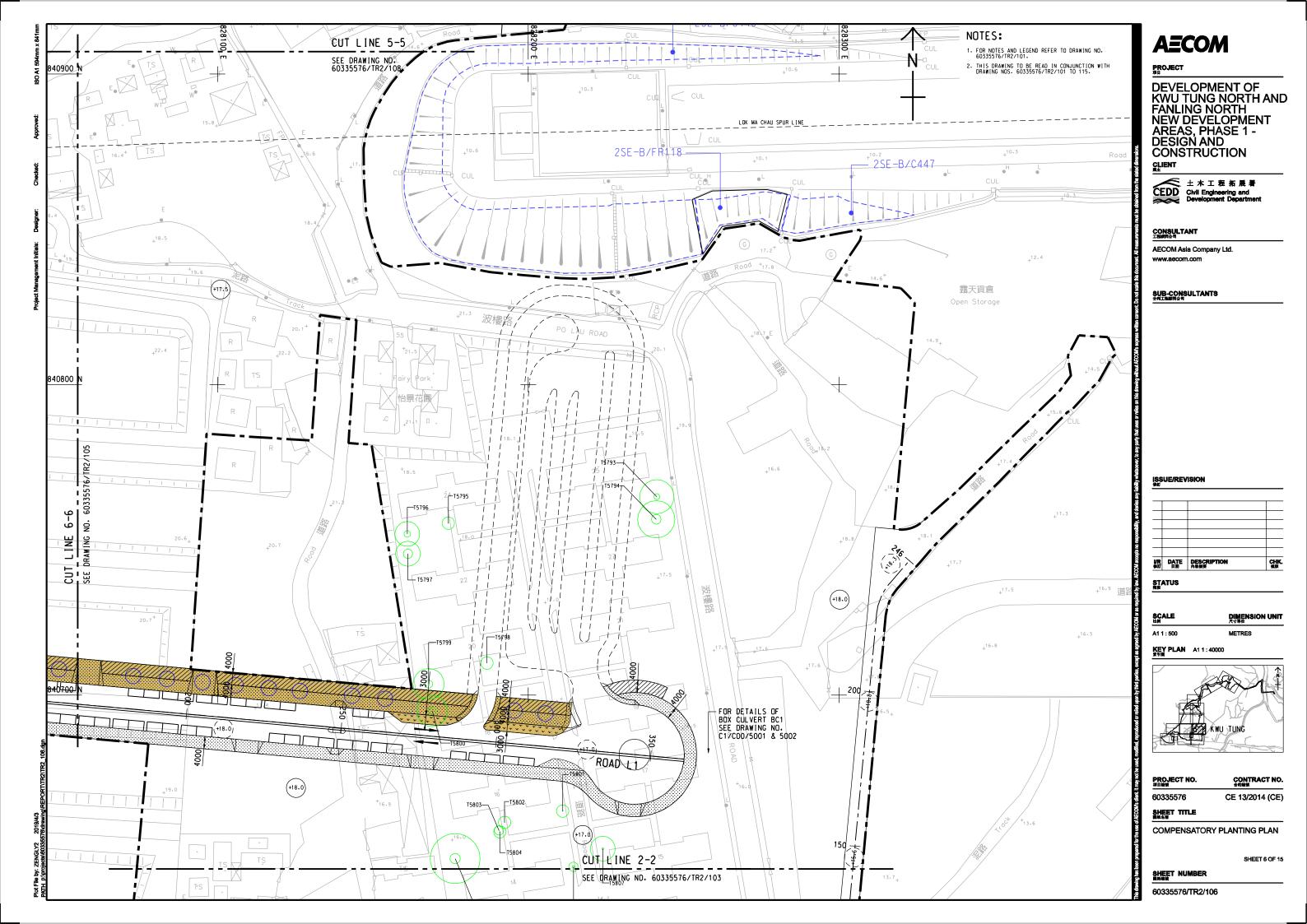


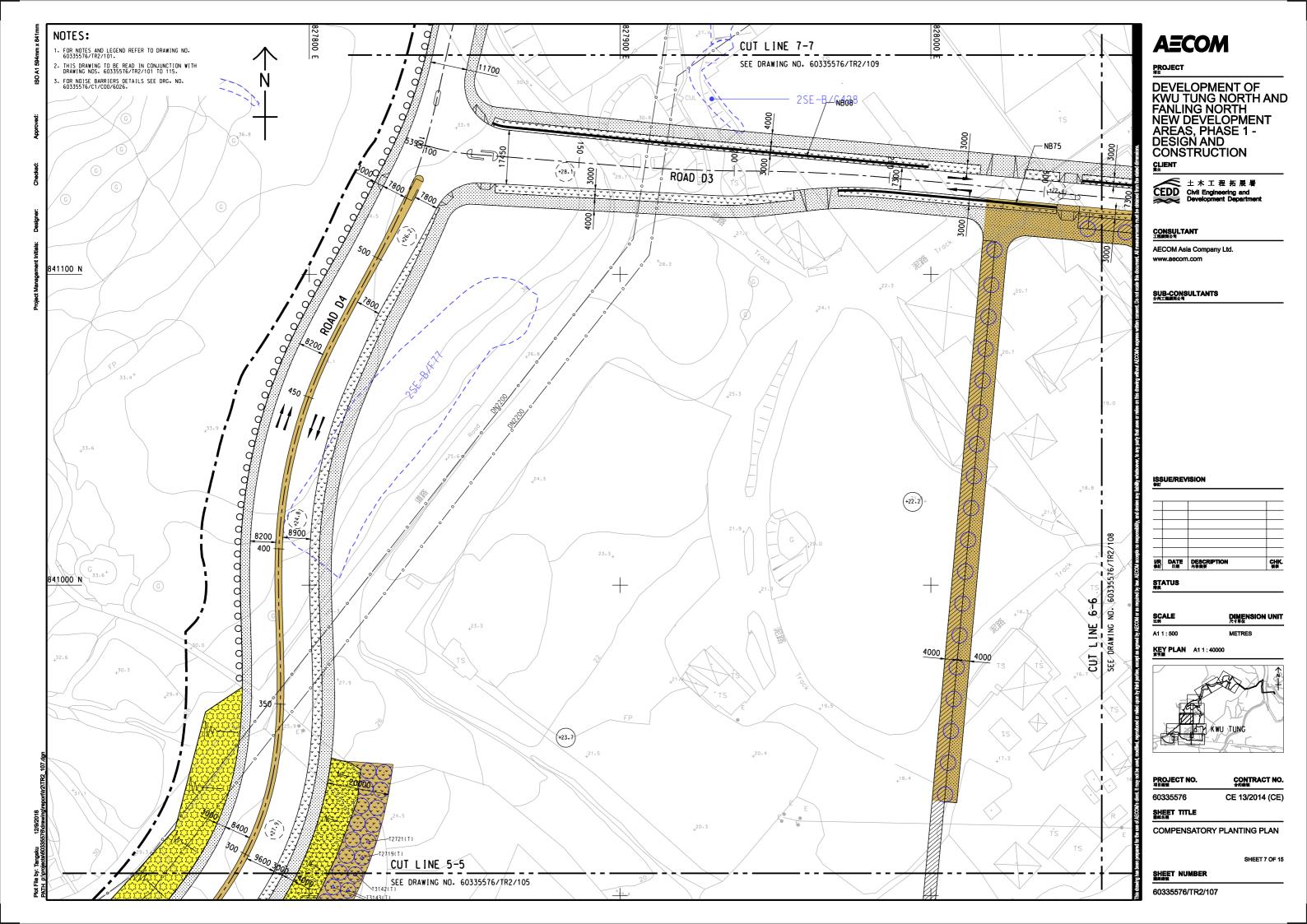


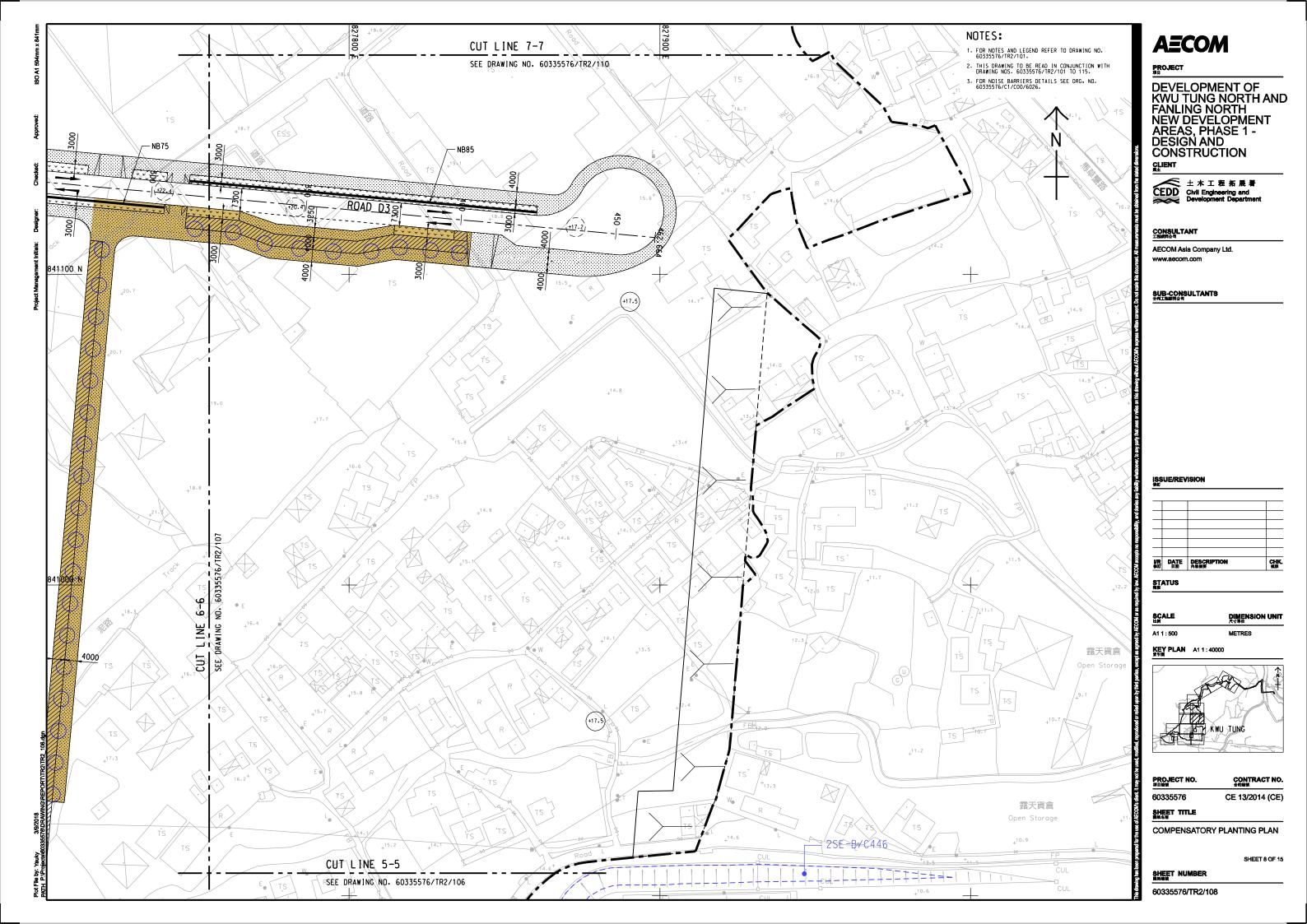


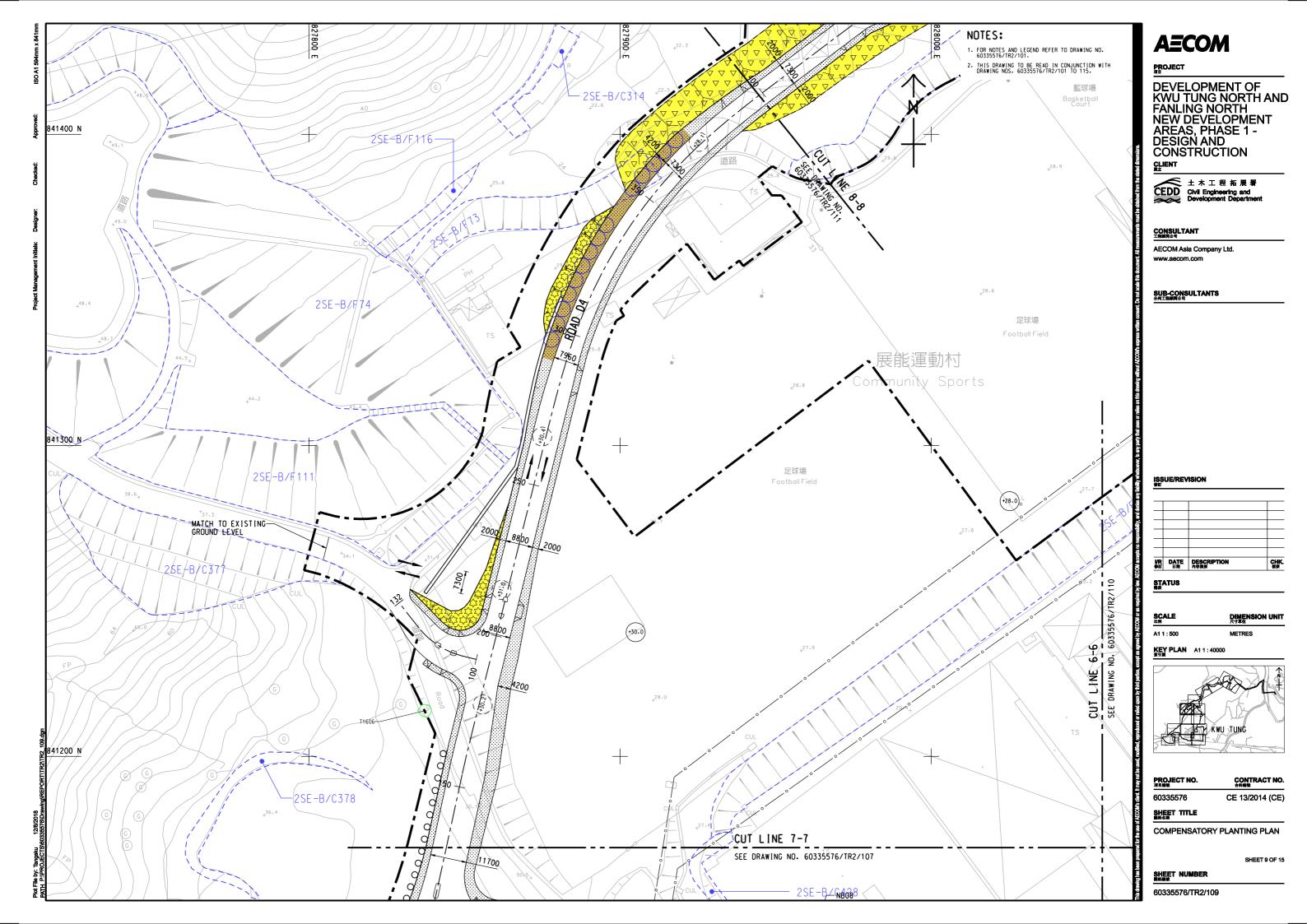


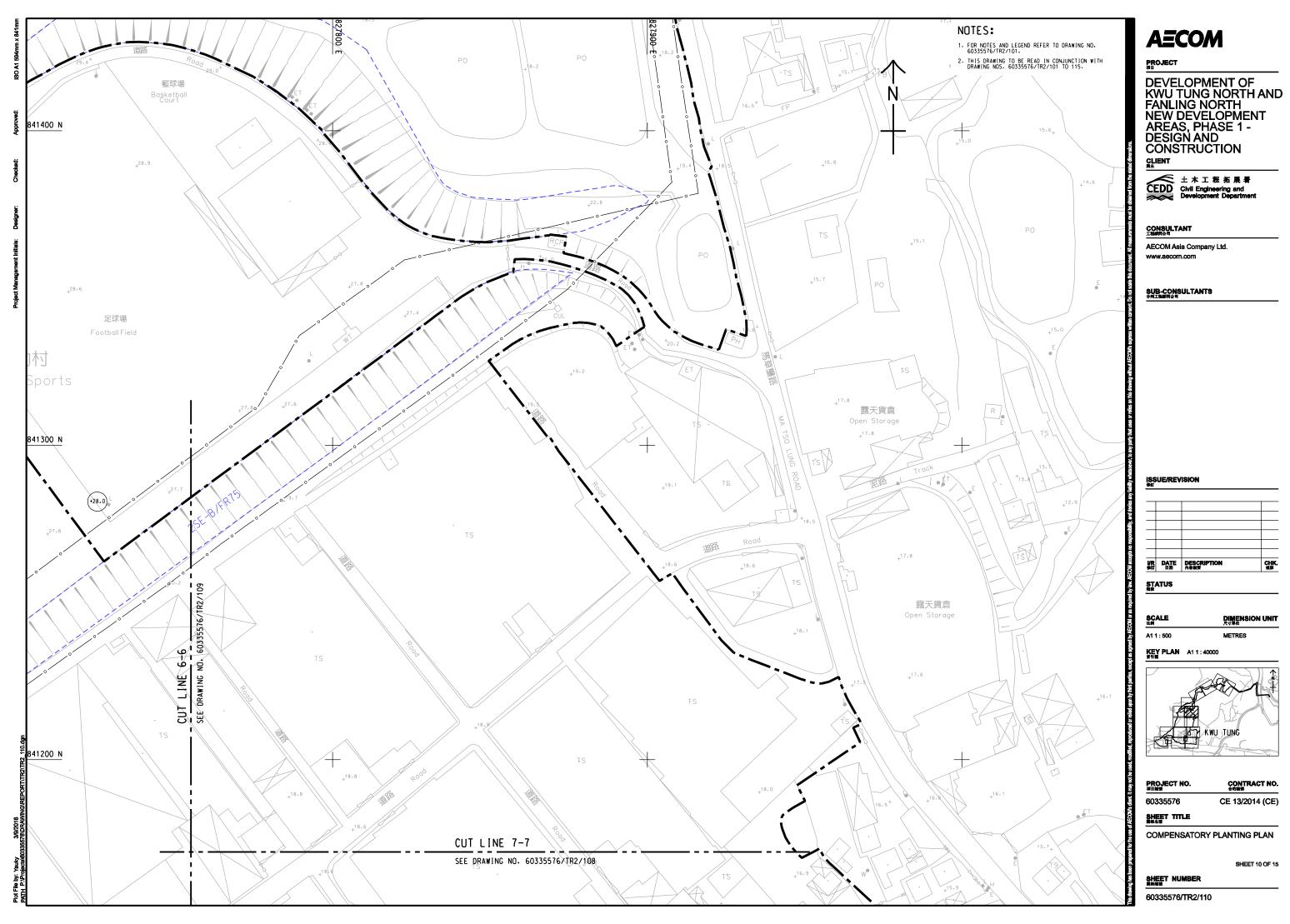


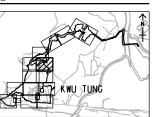


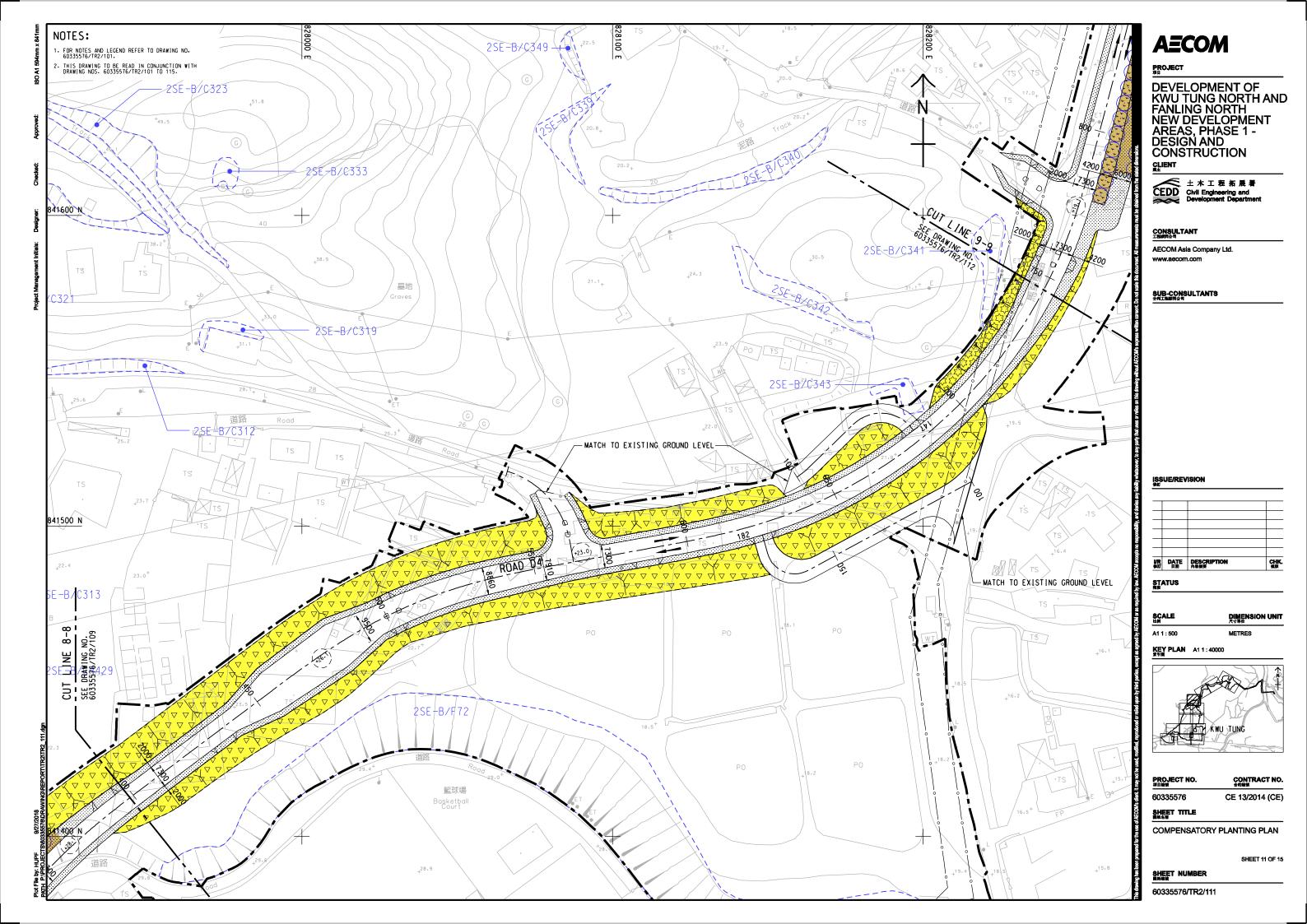


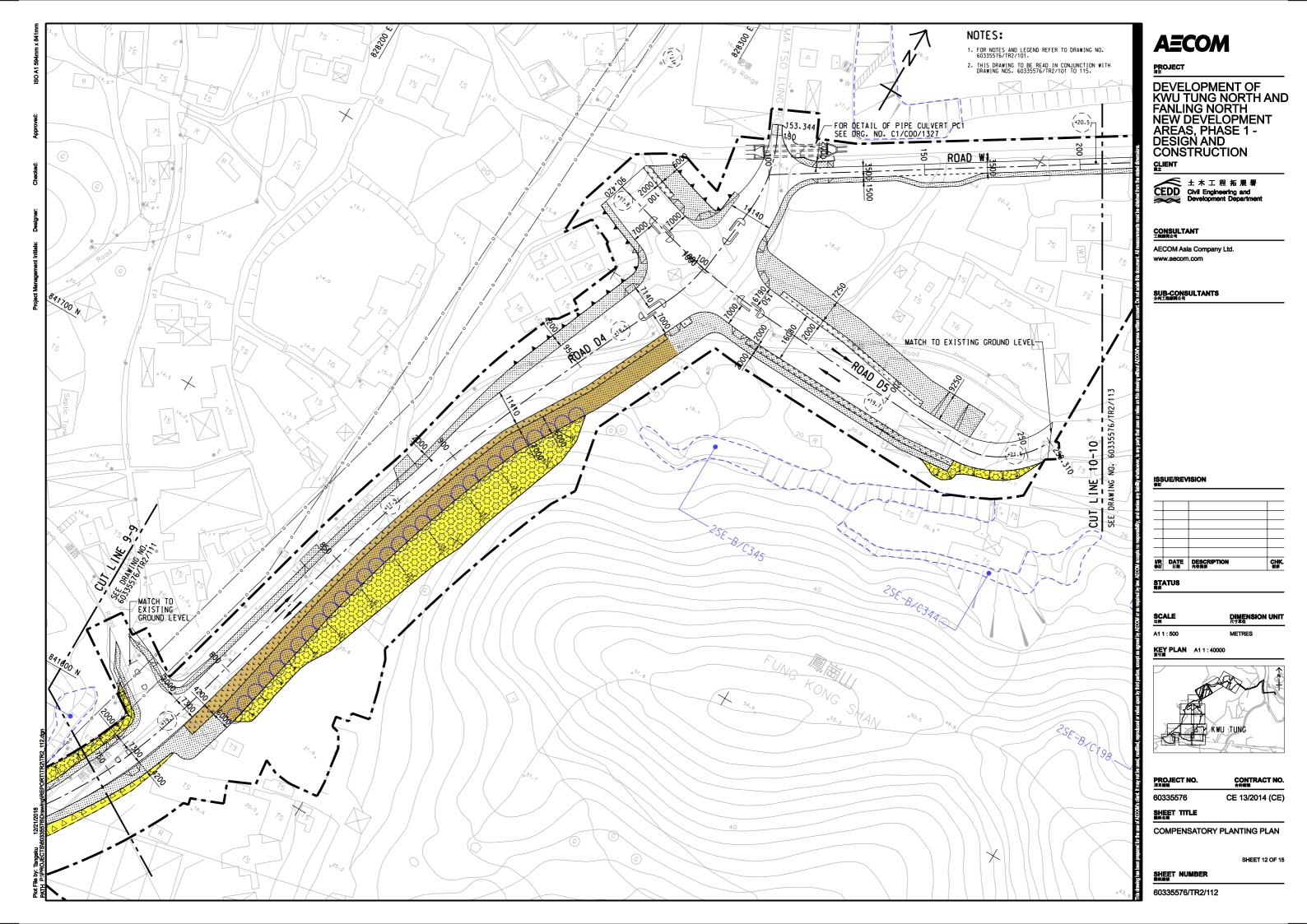


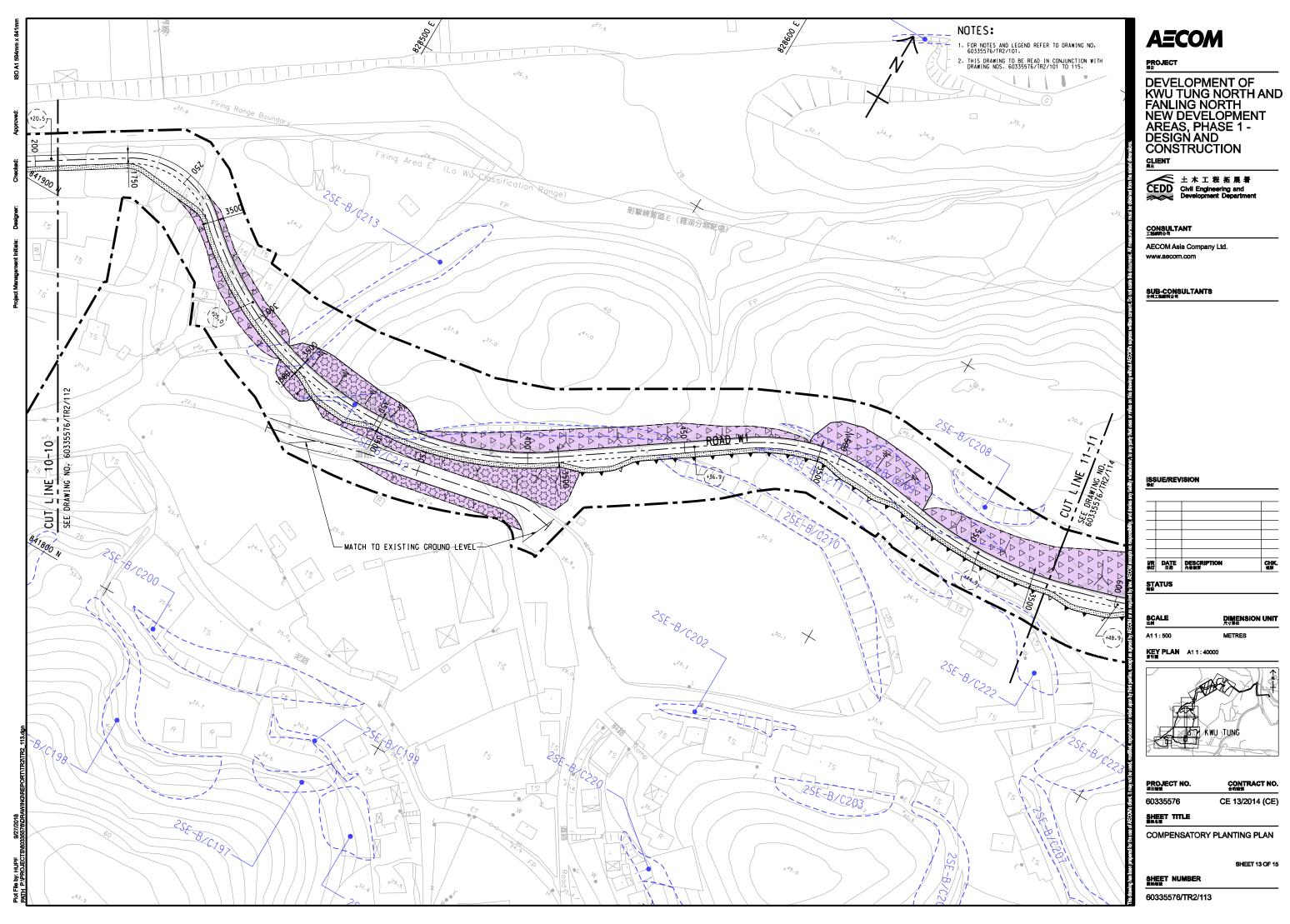


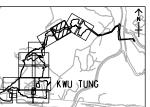


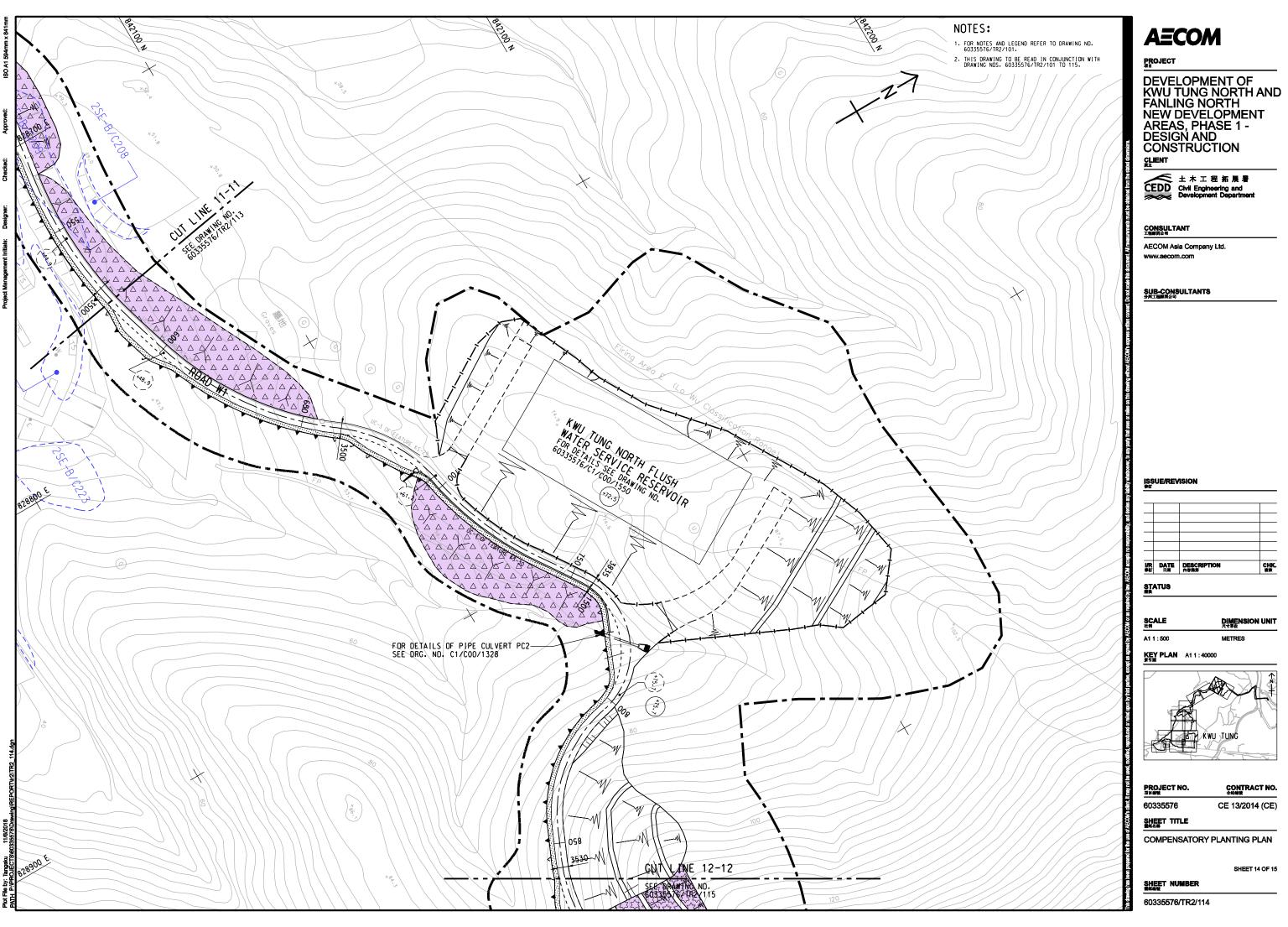




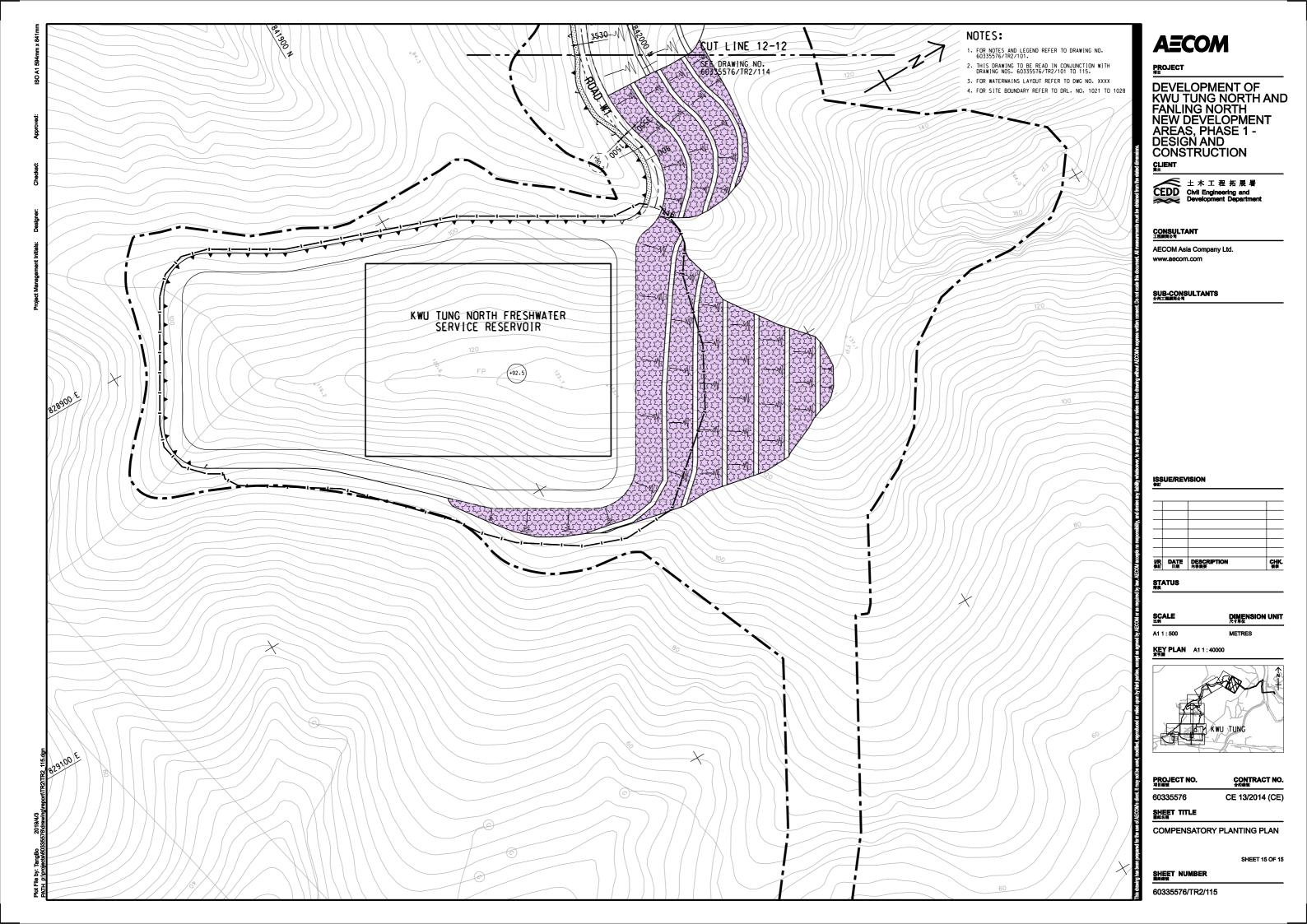


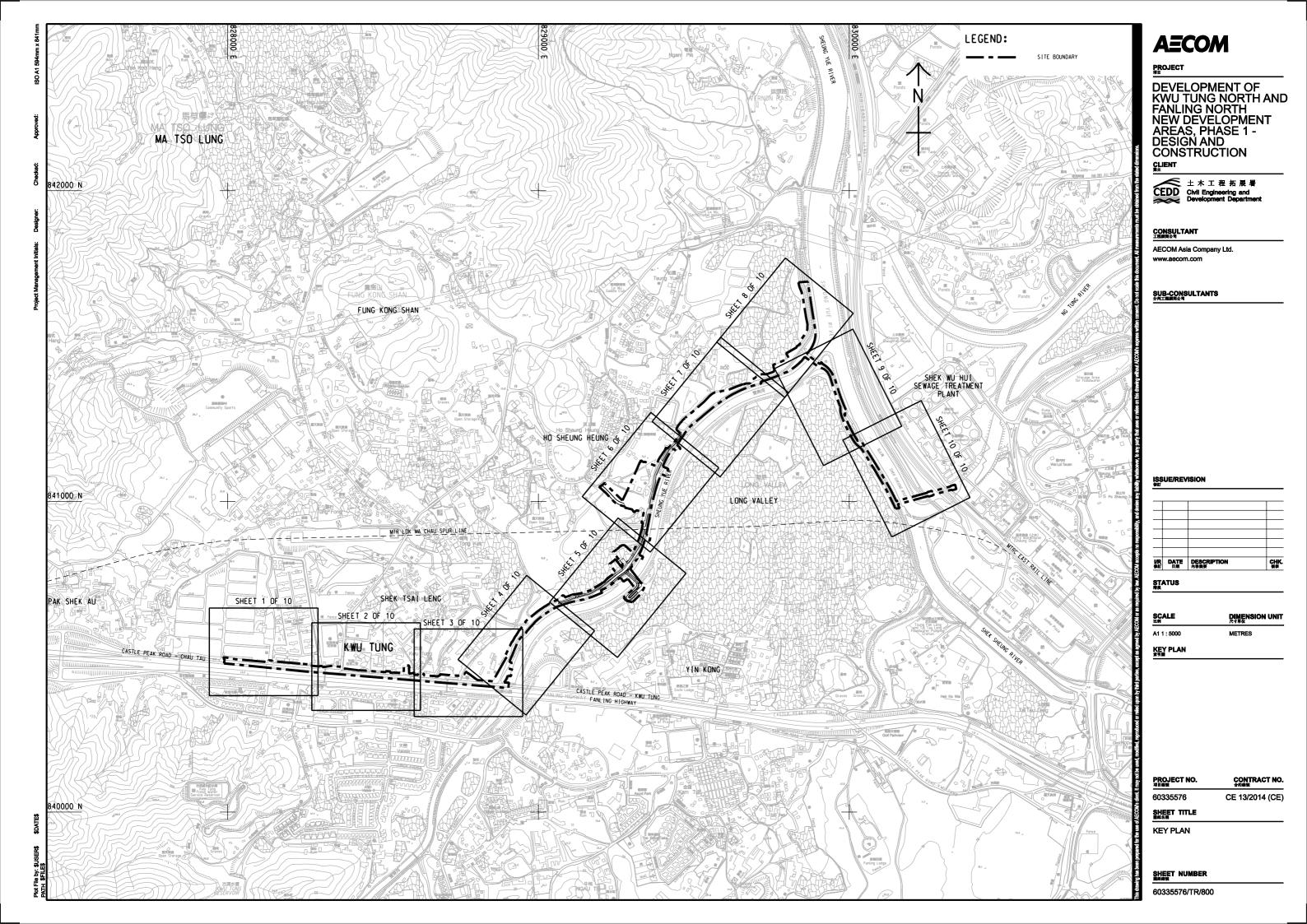


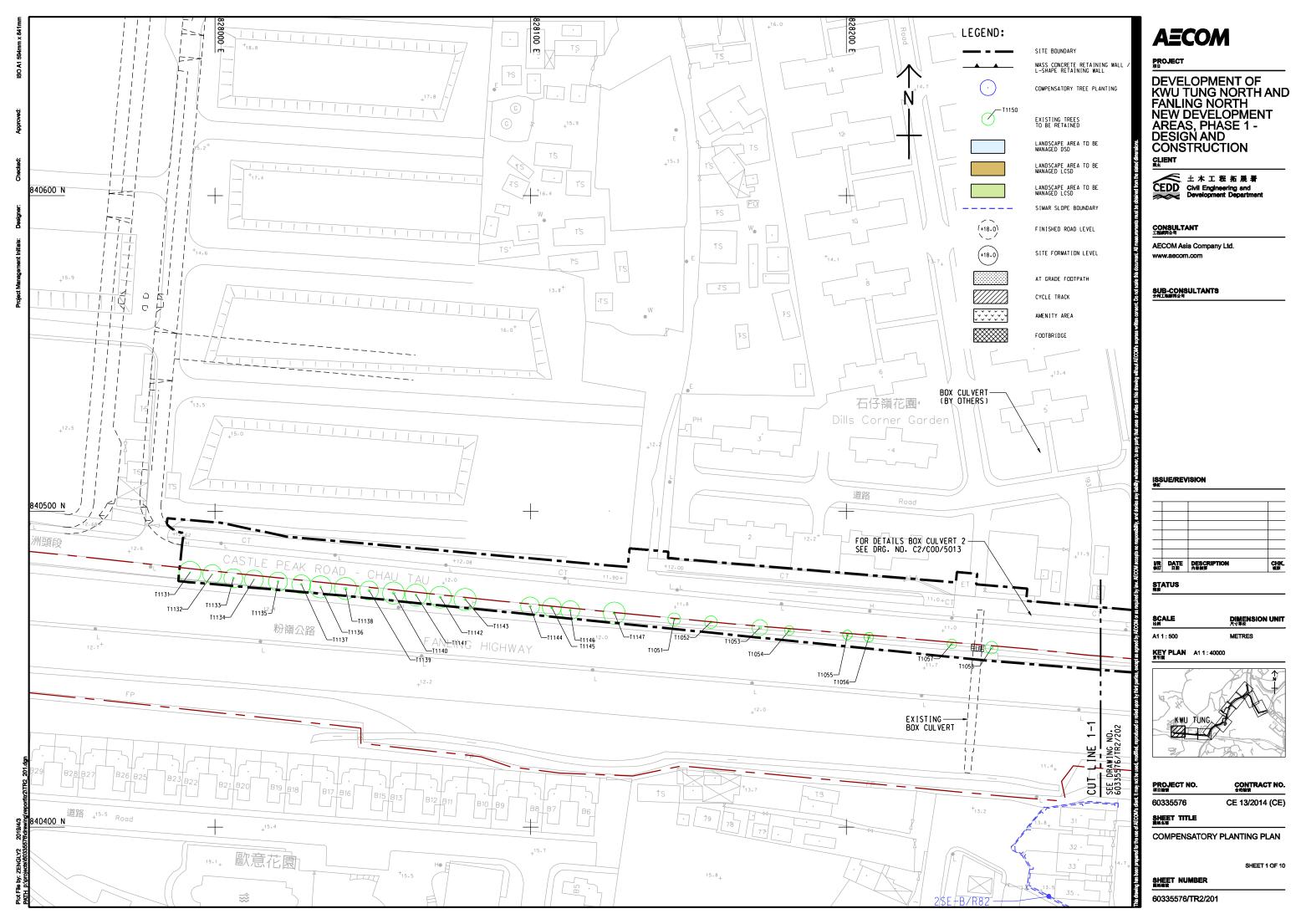


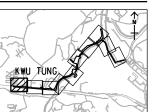


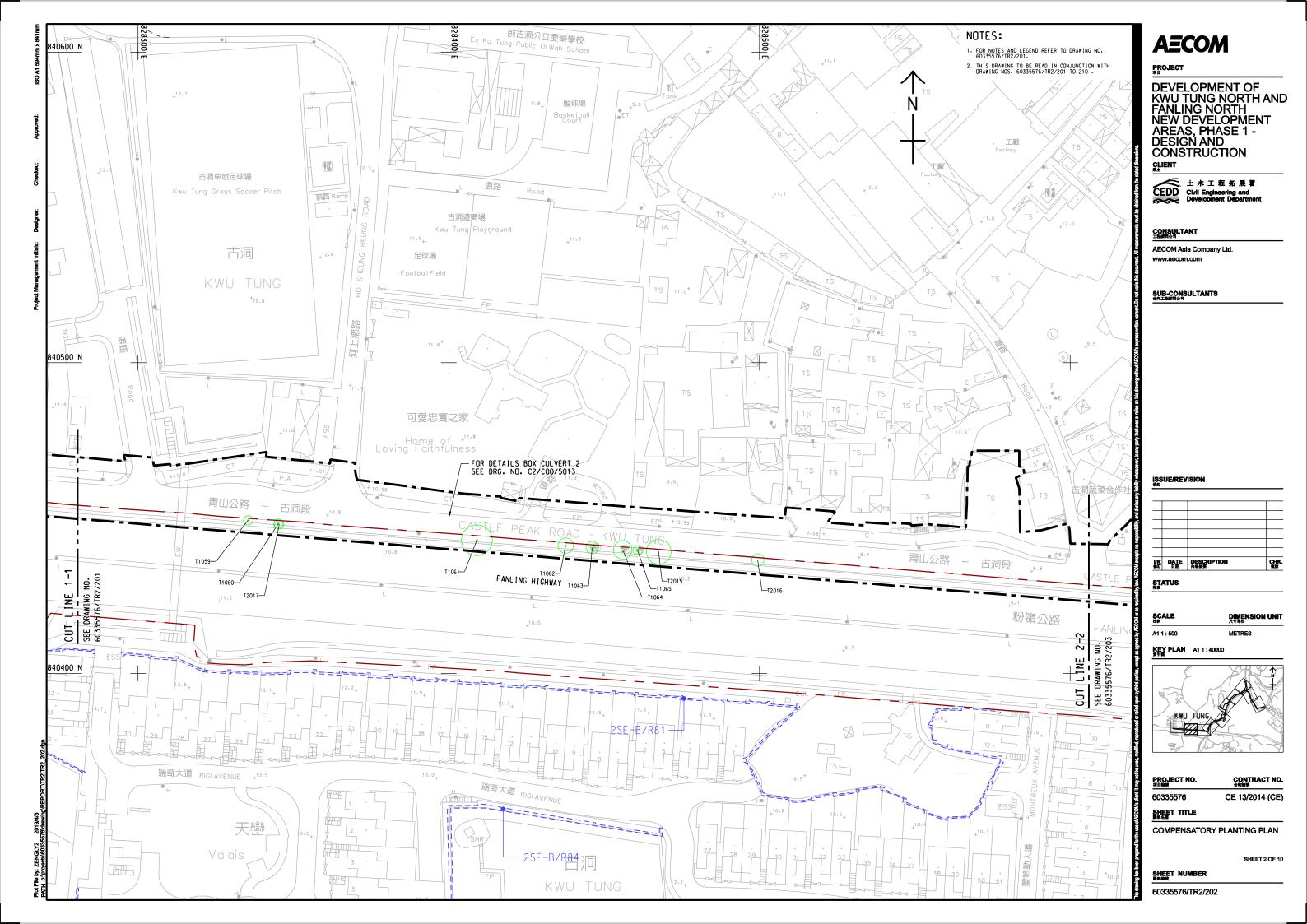
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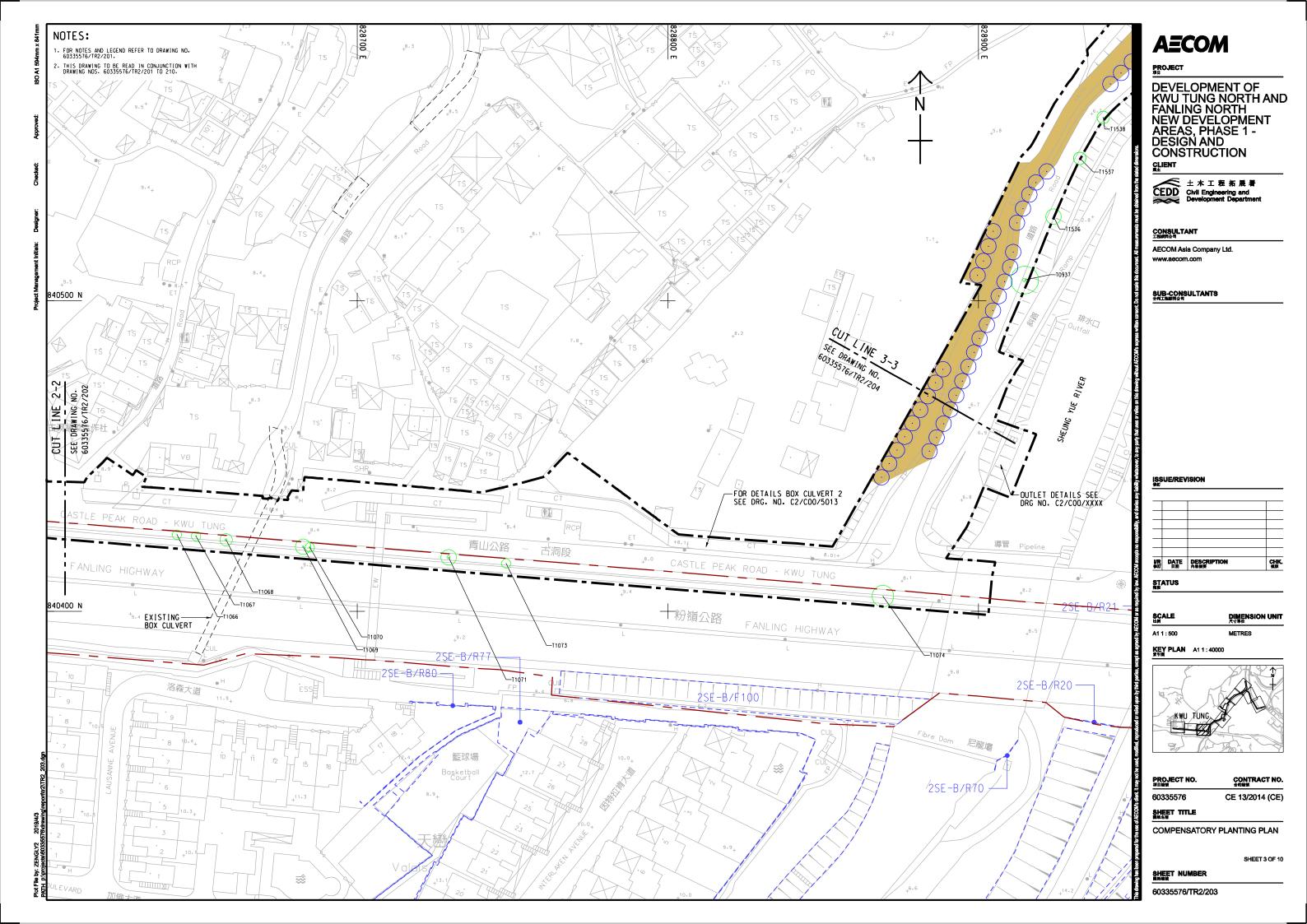


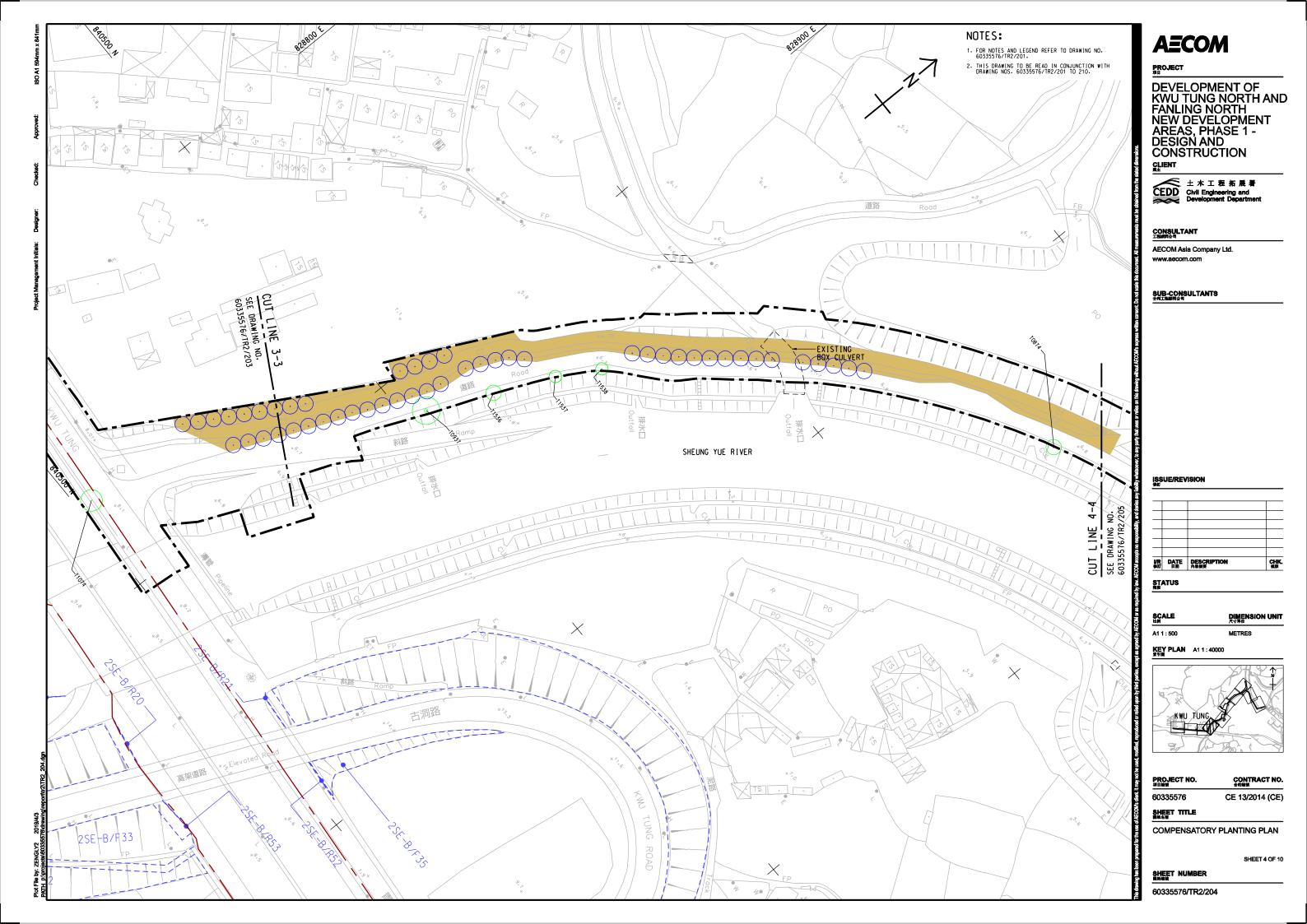


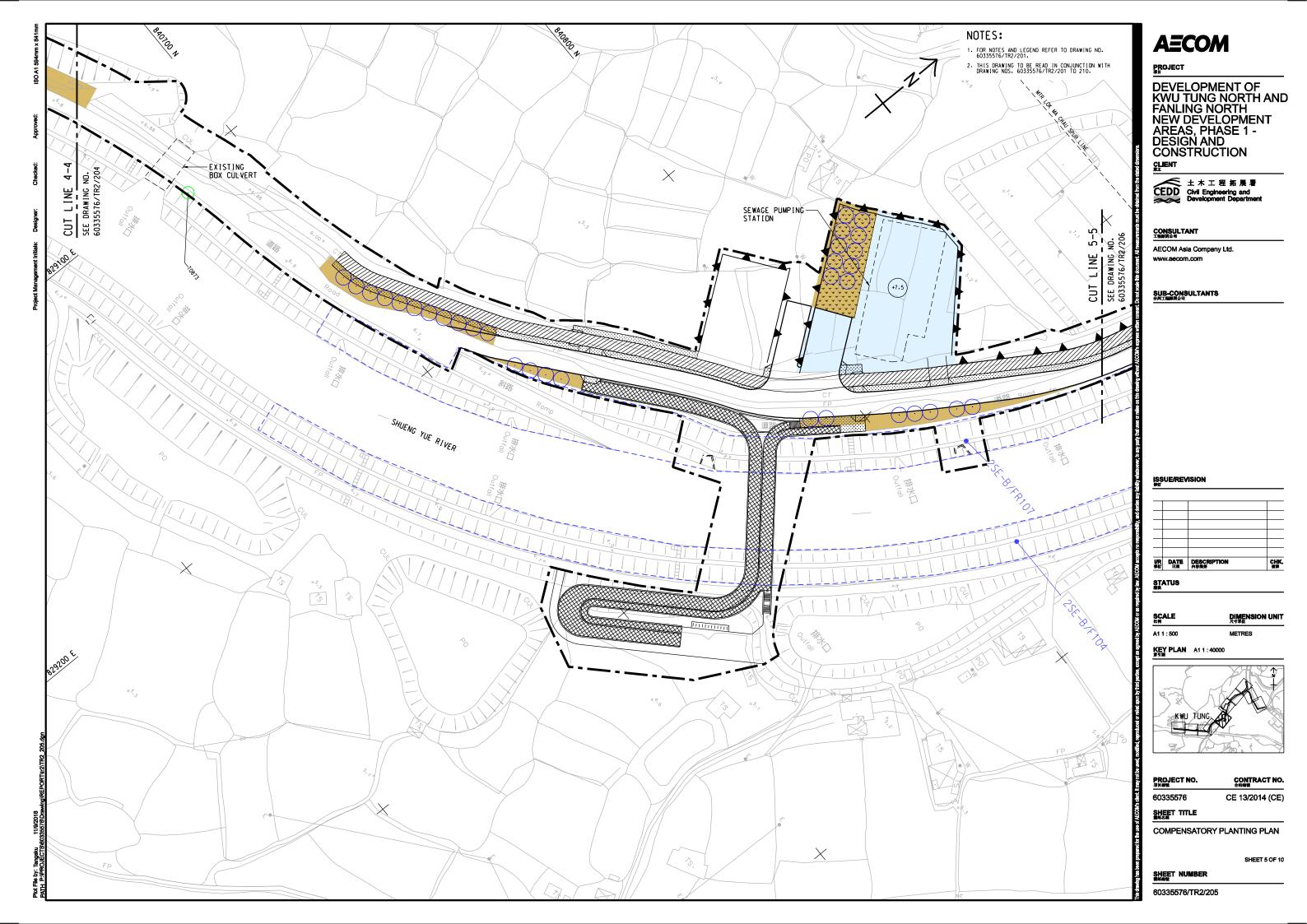


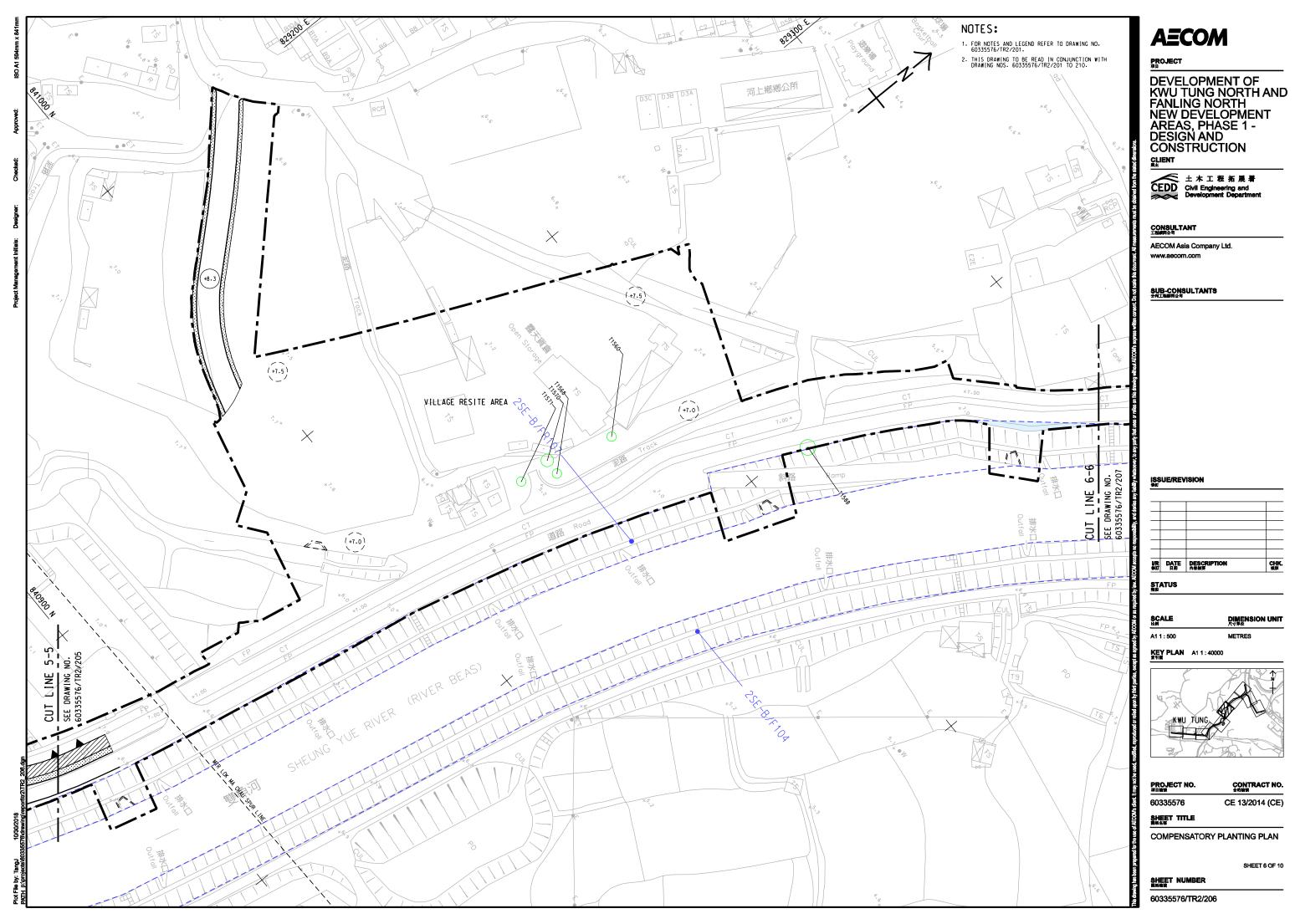


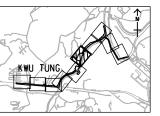


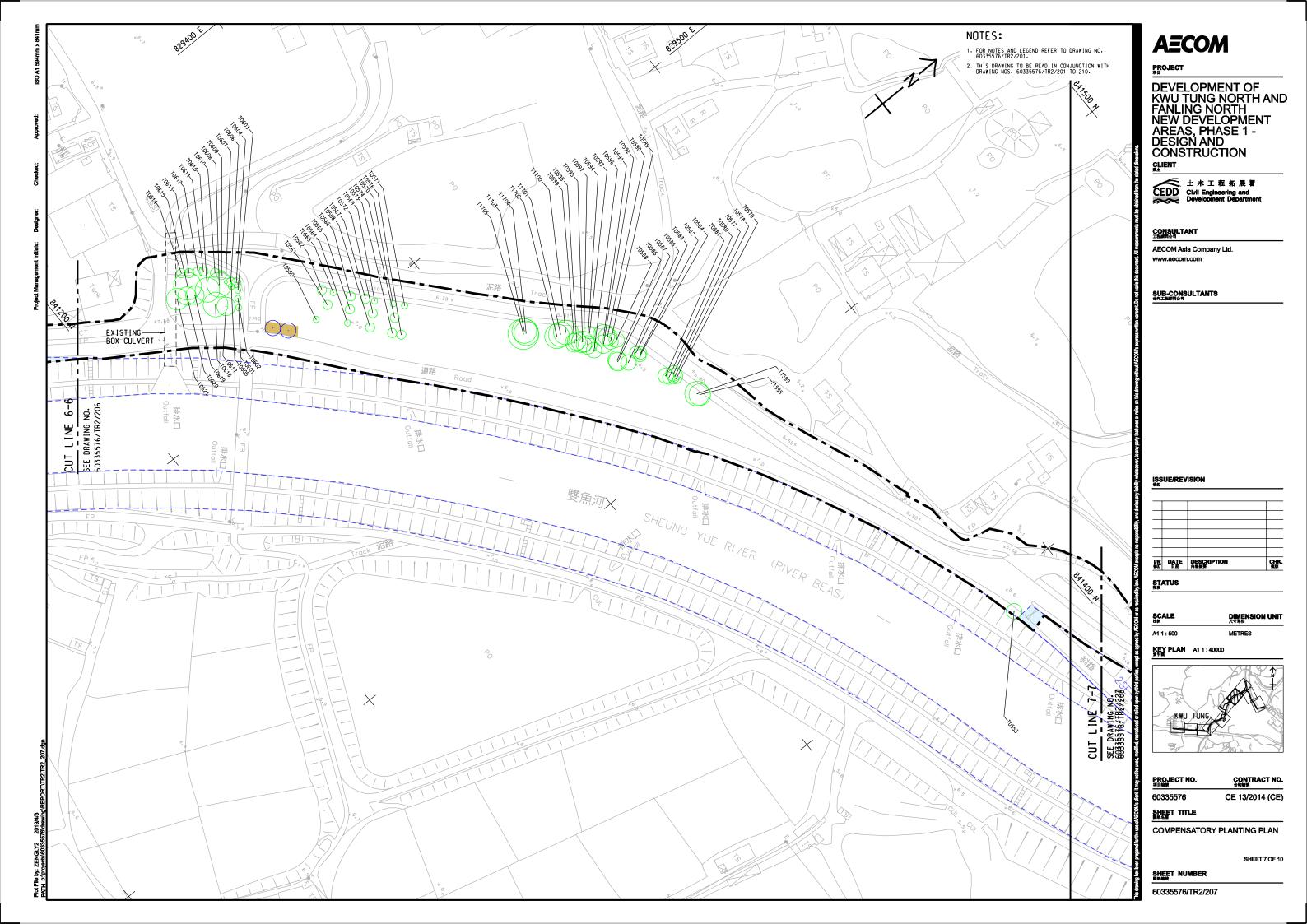


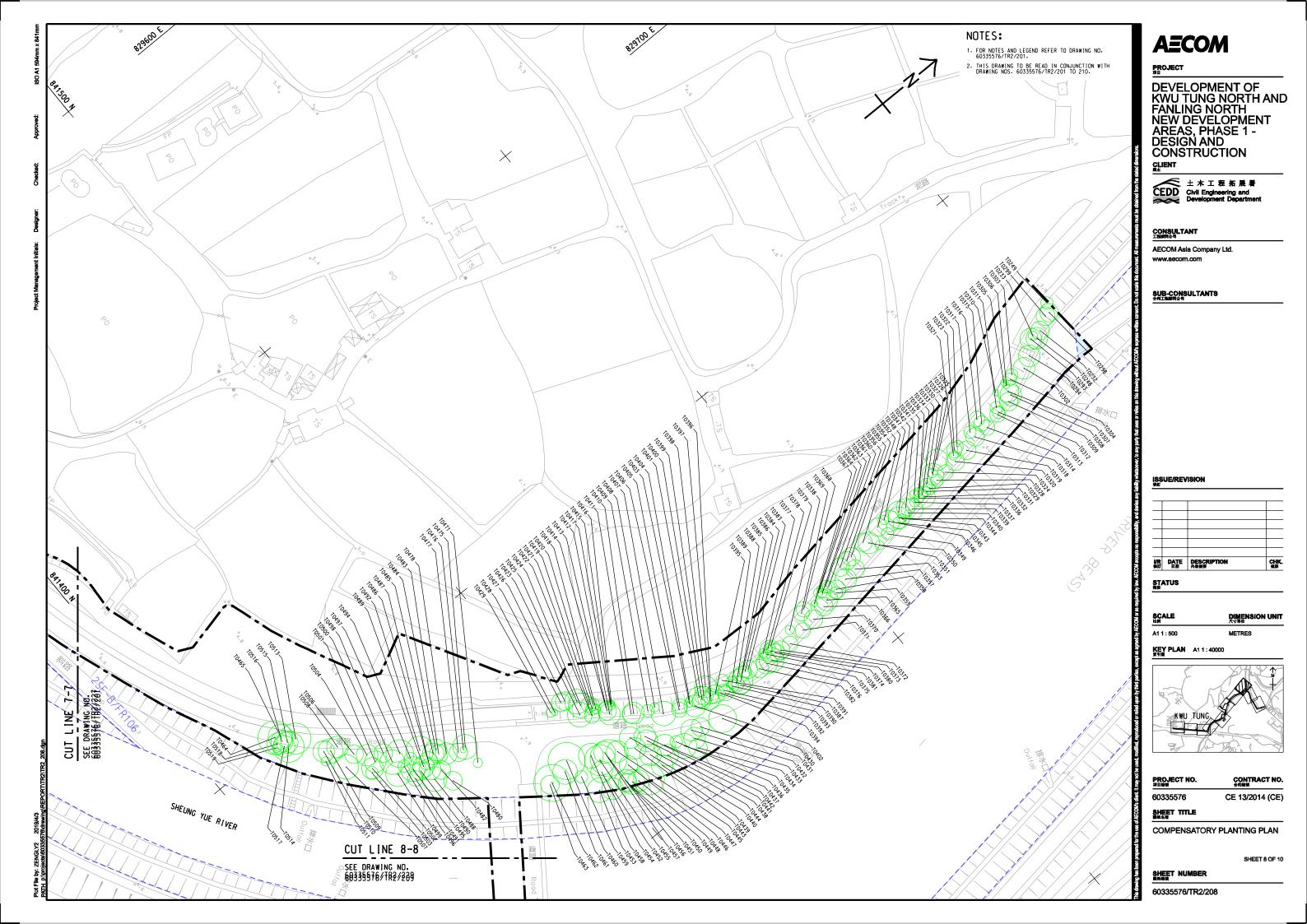


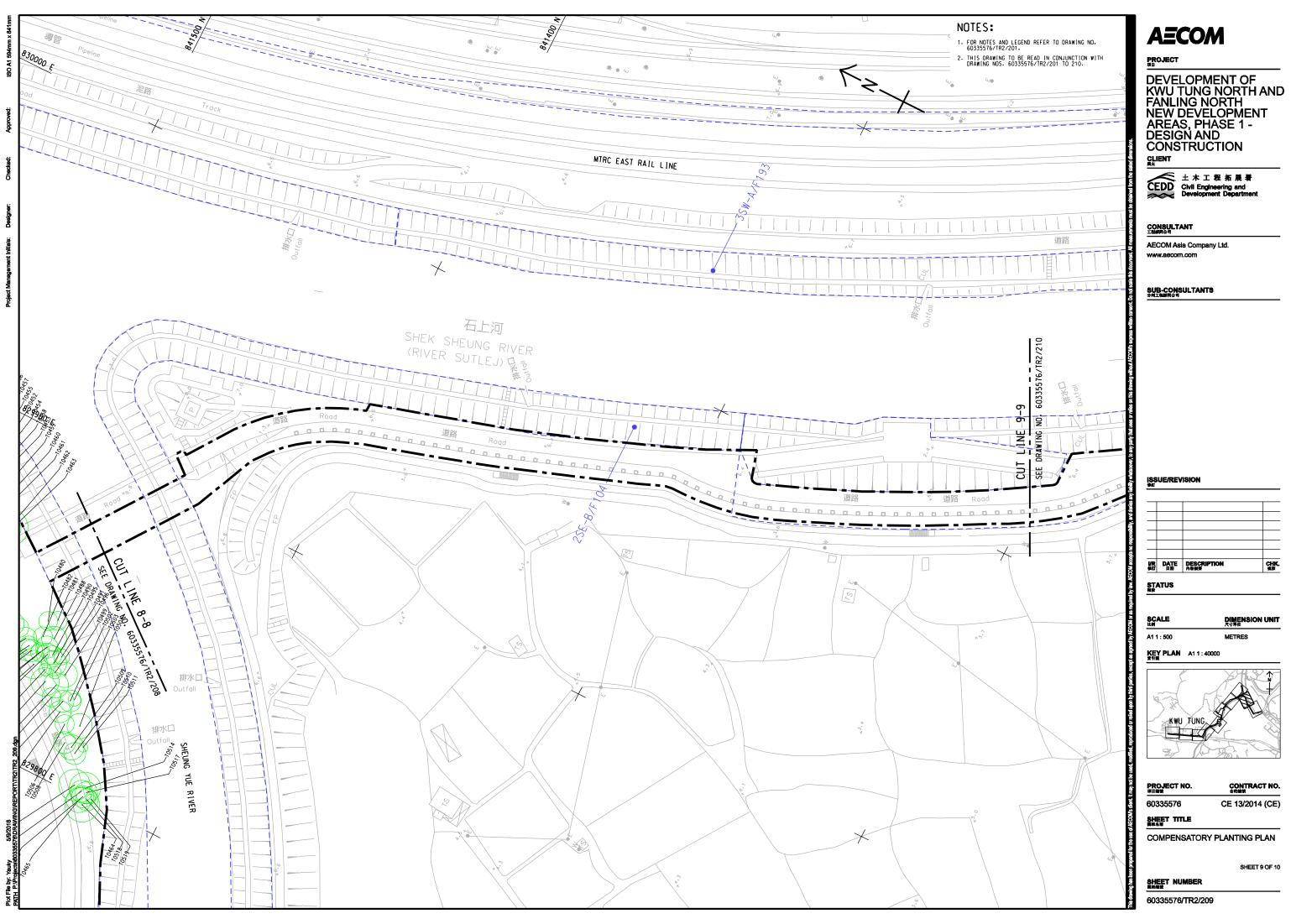


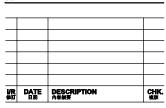


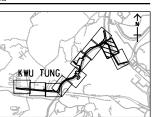




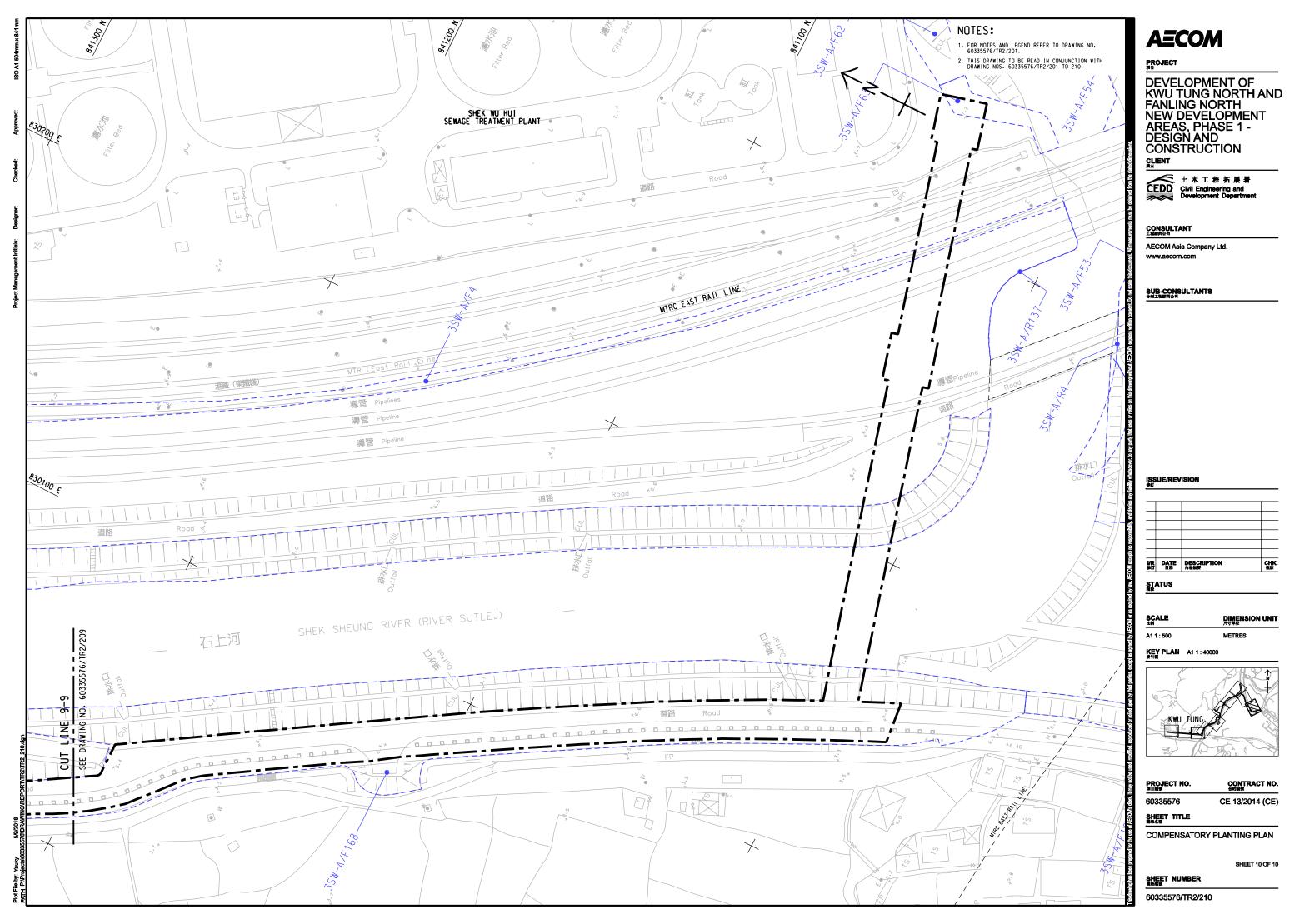


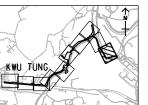


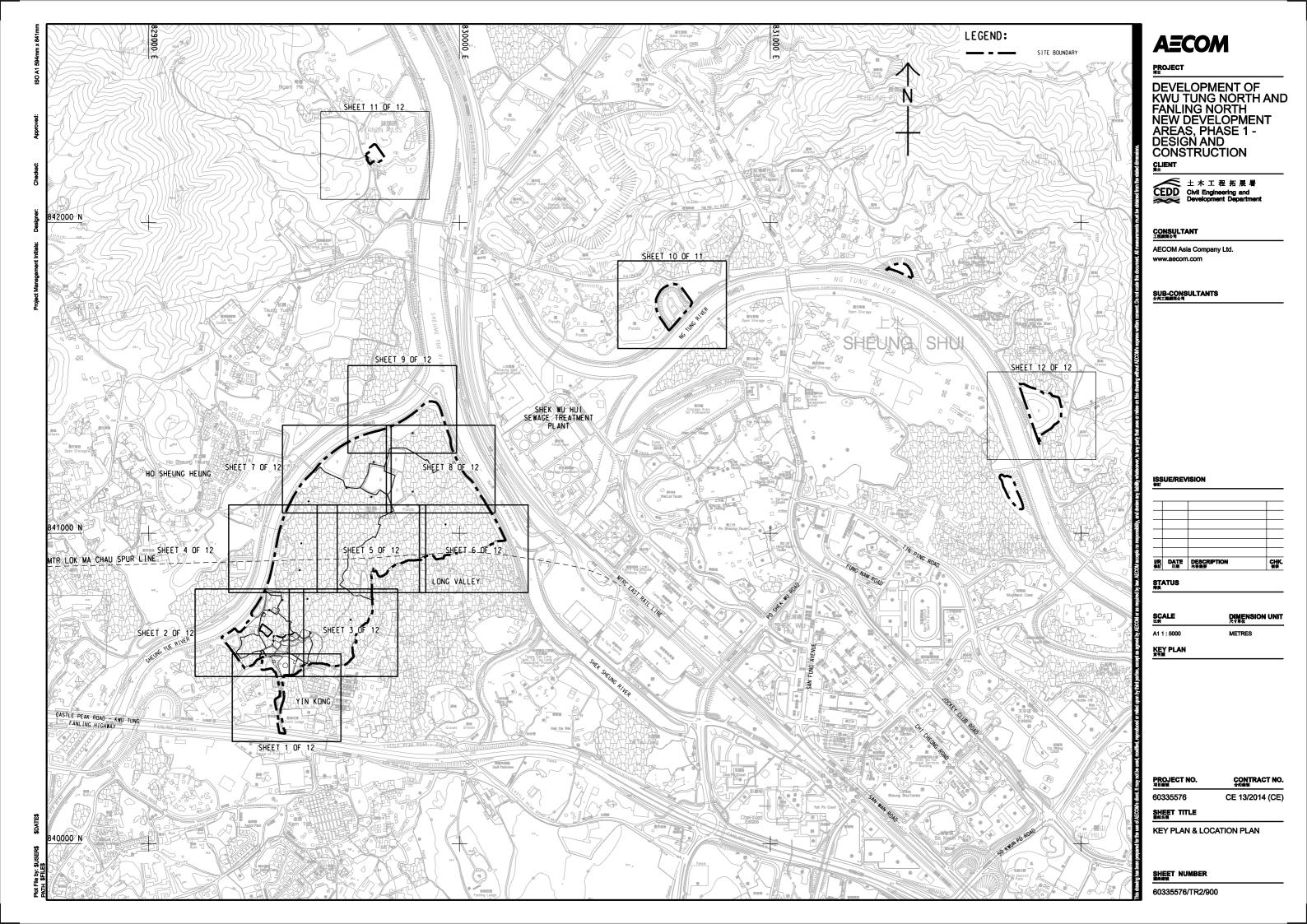


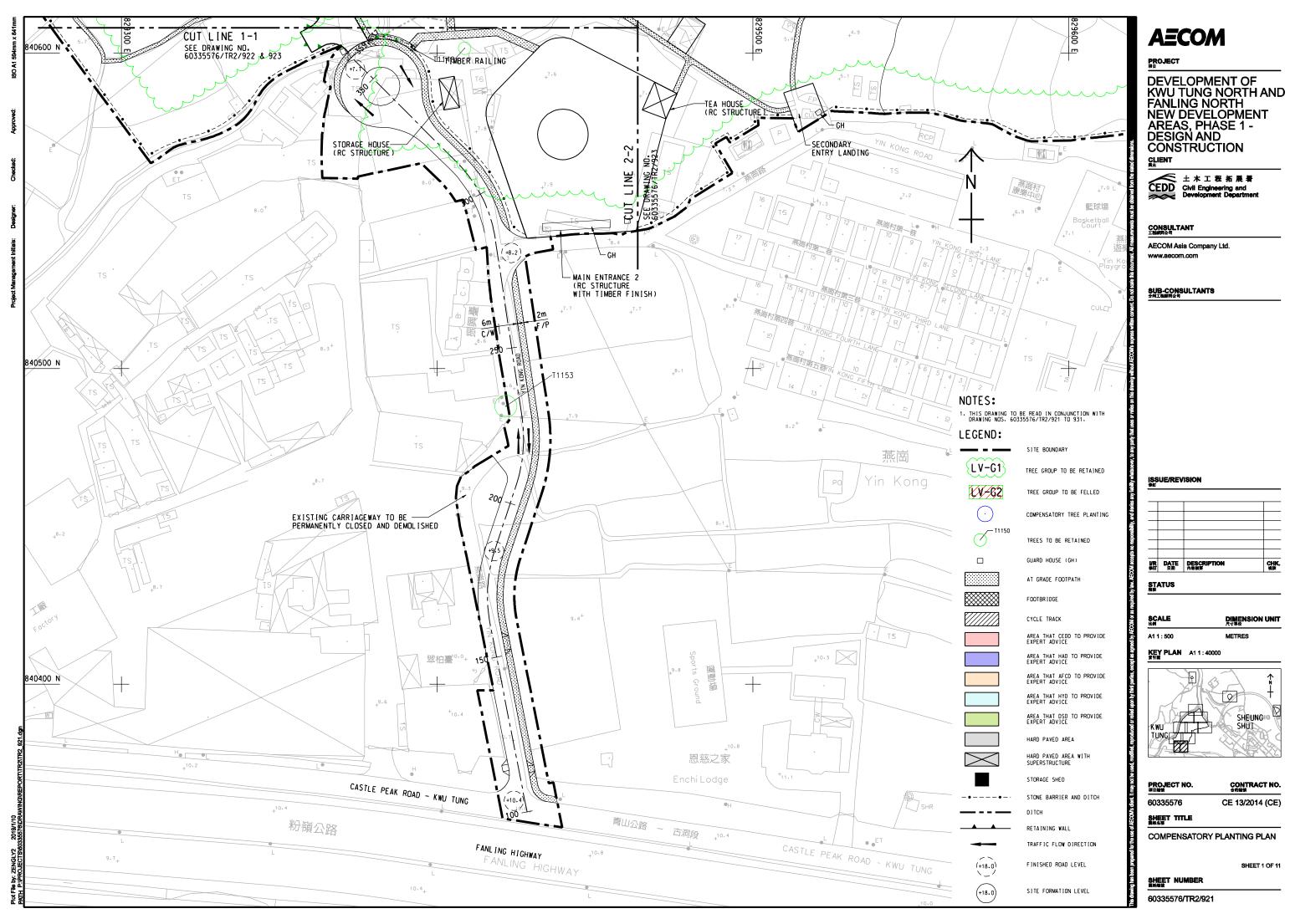


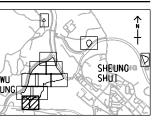
SHEET 9 OF 10

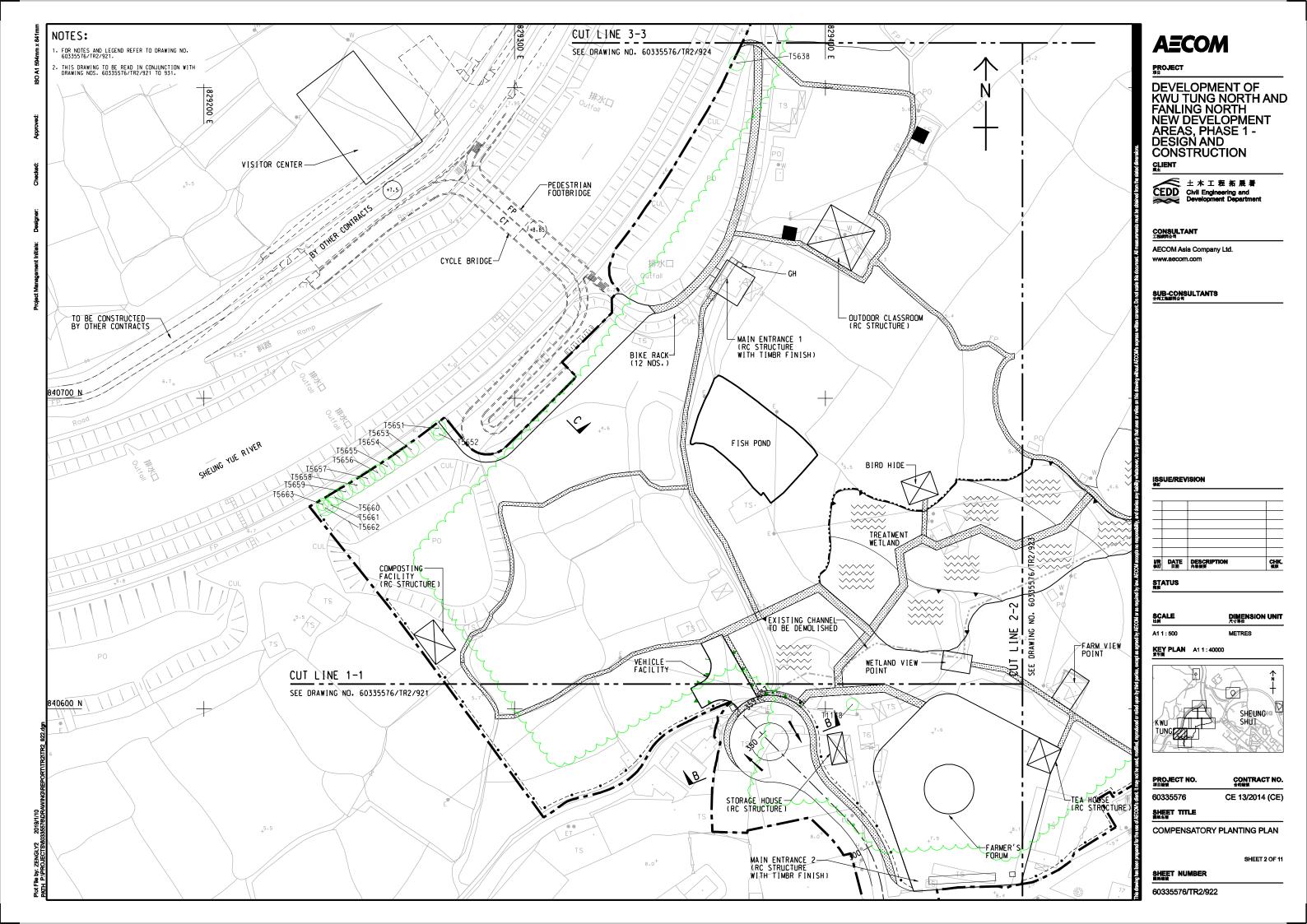


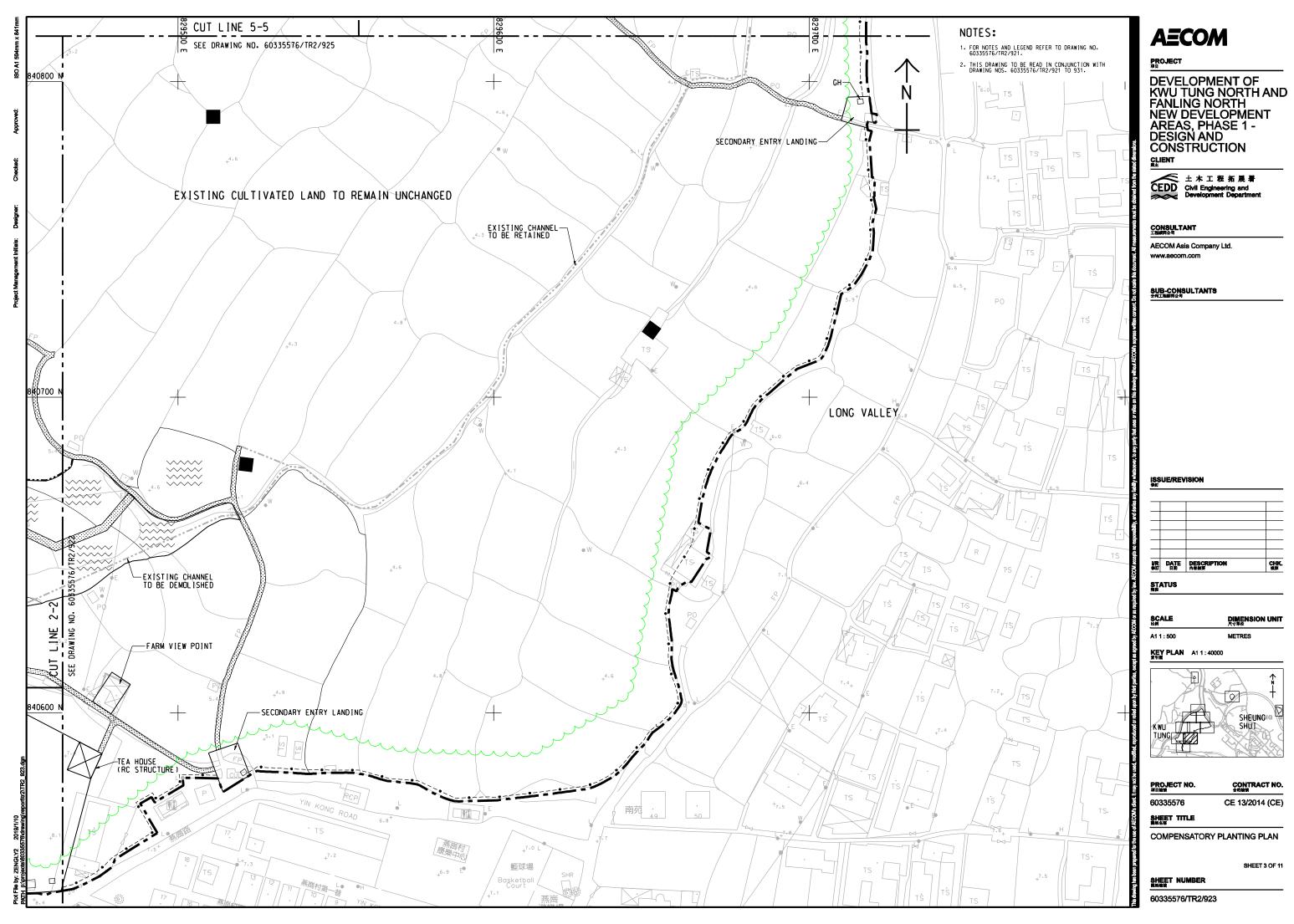


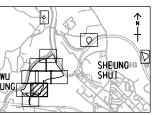


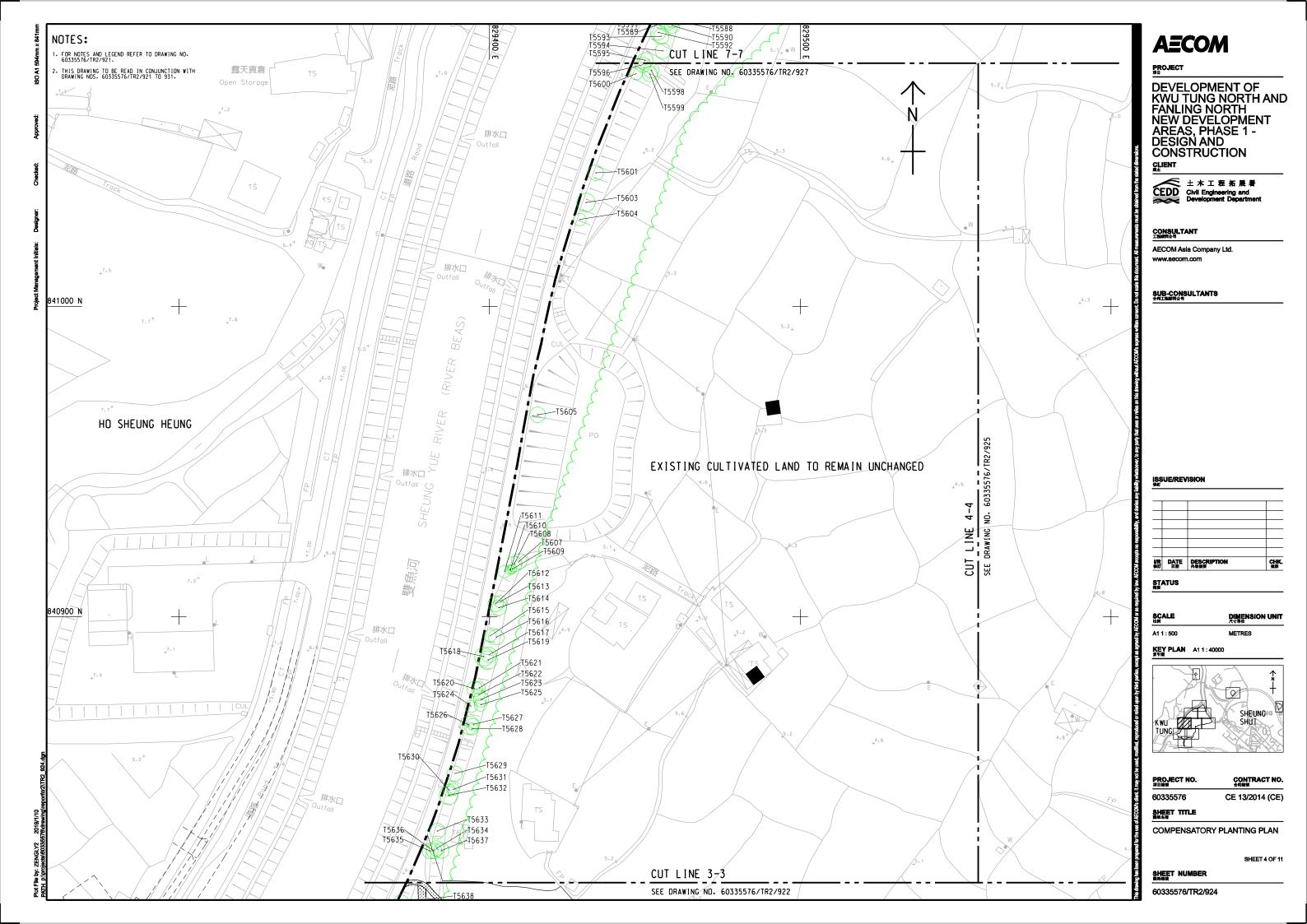


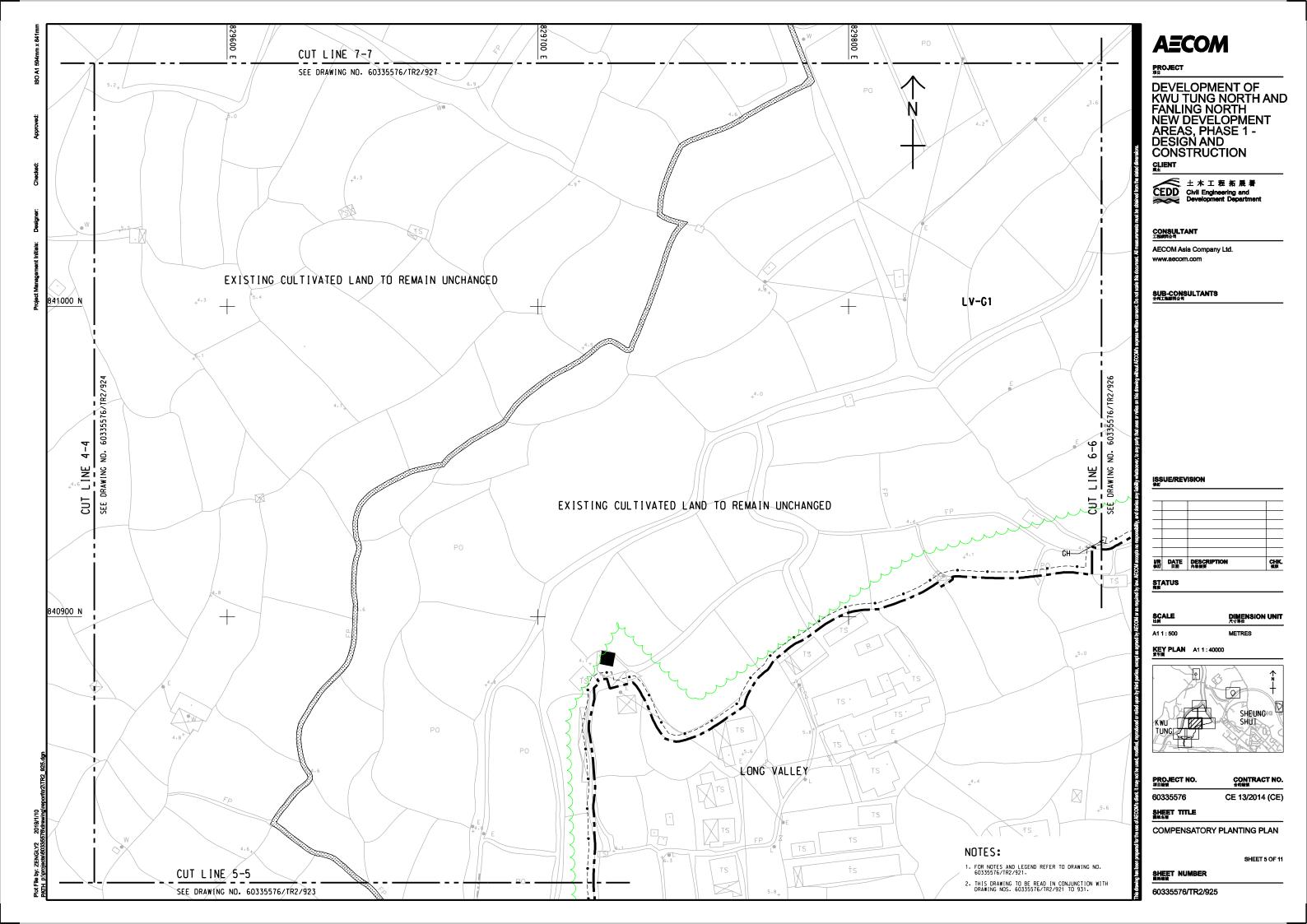


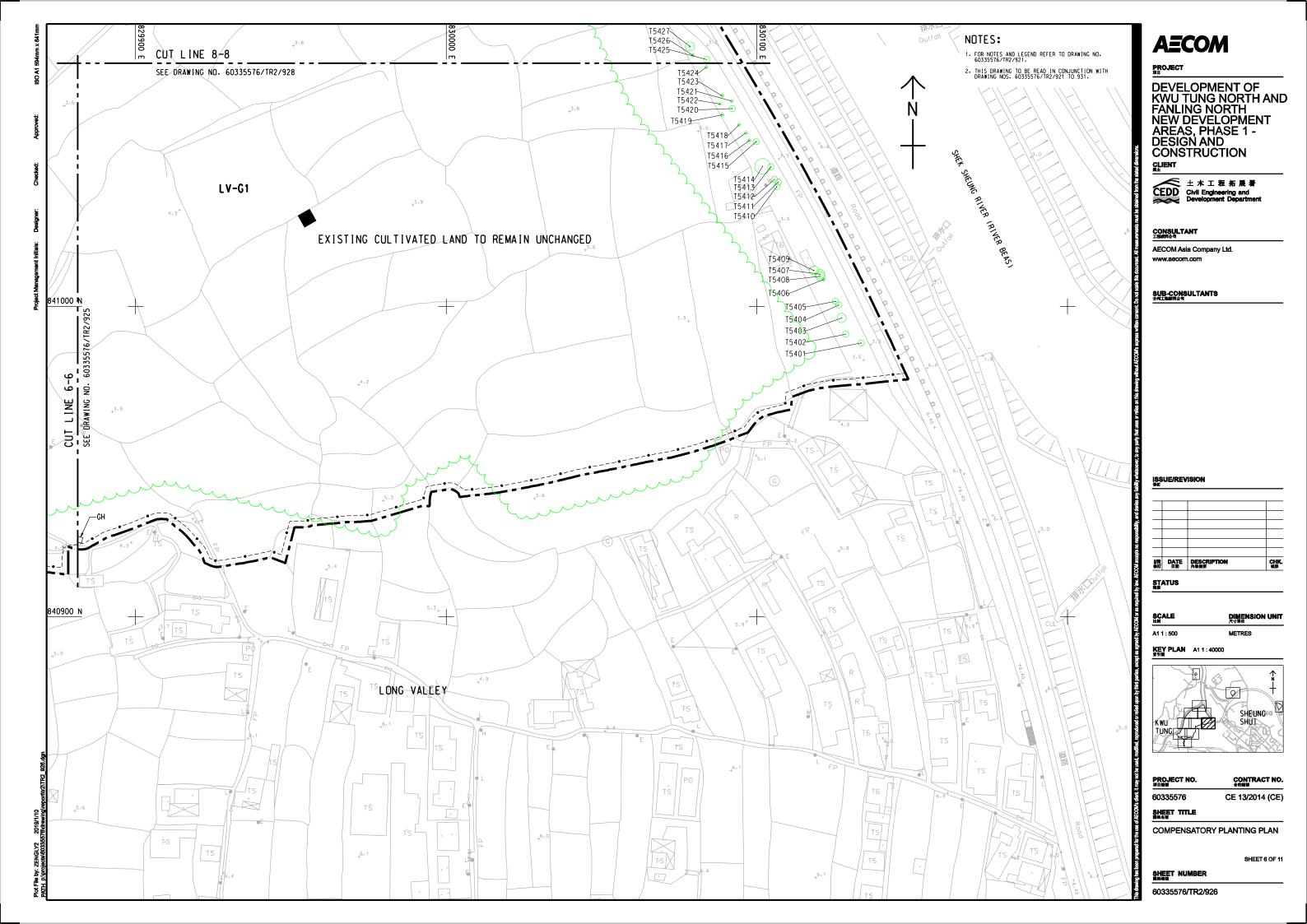


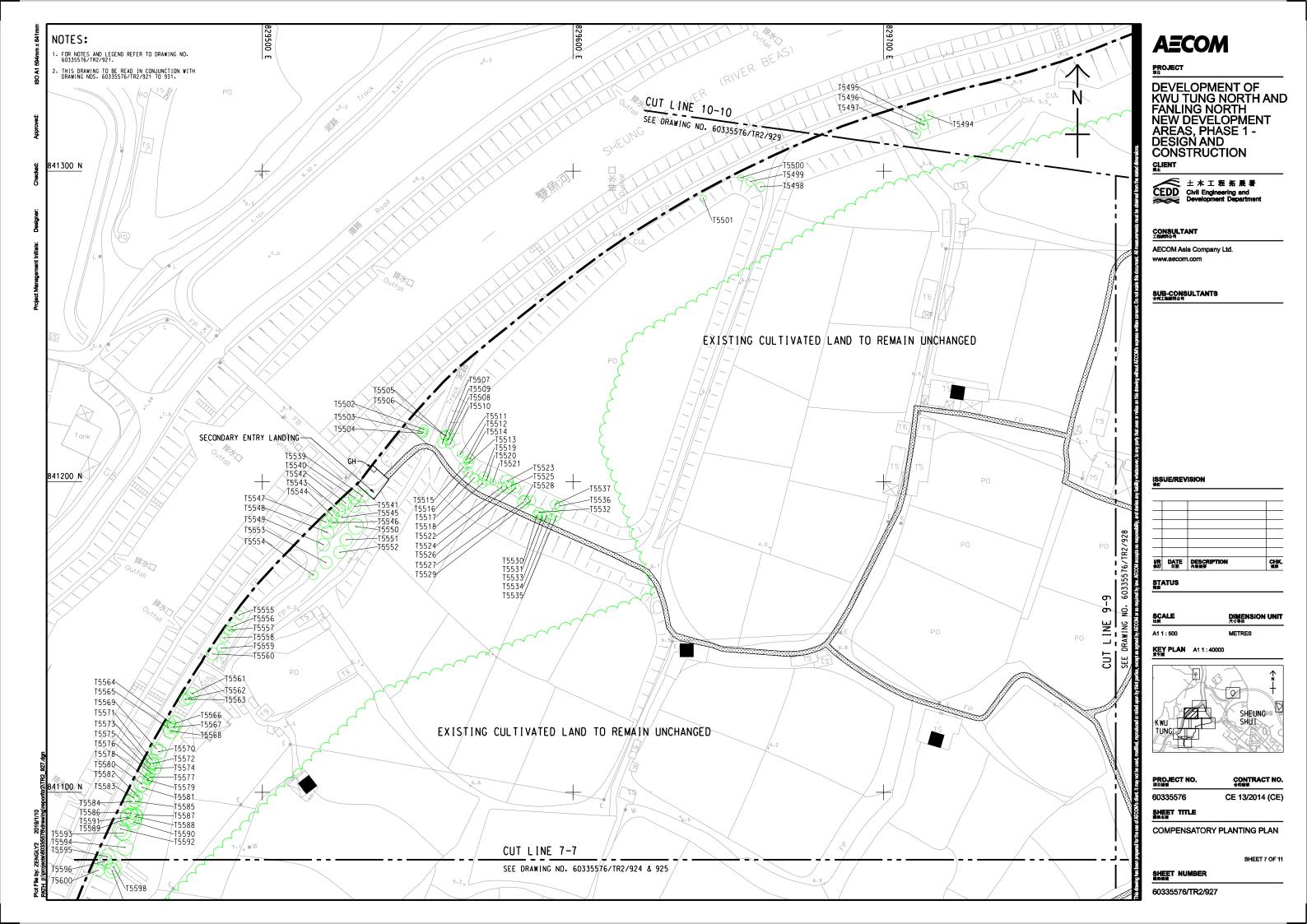


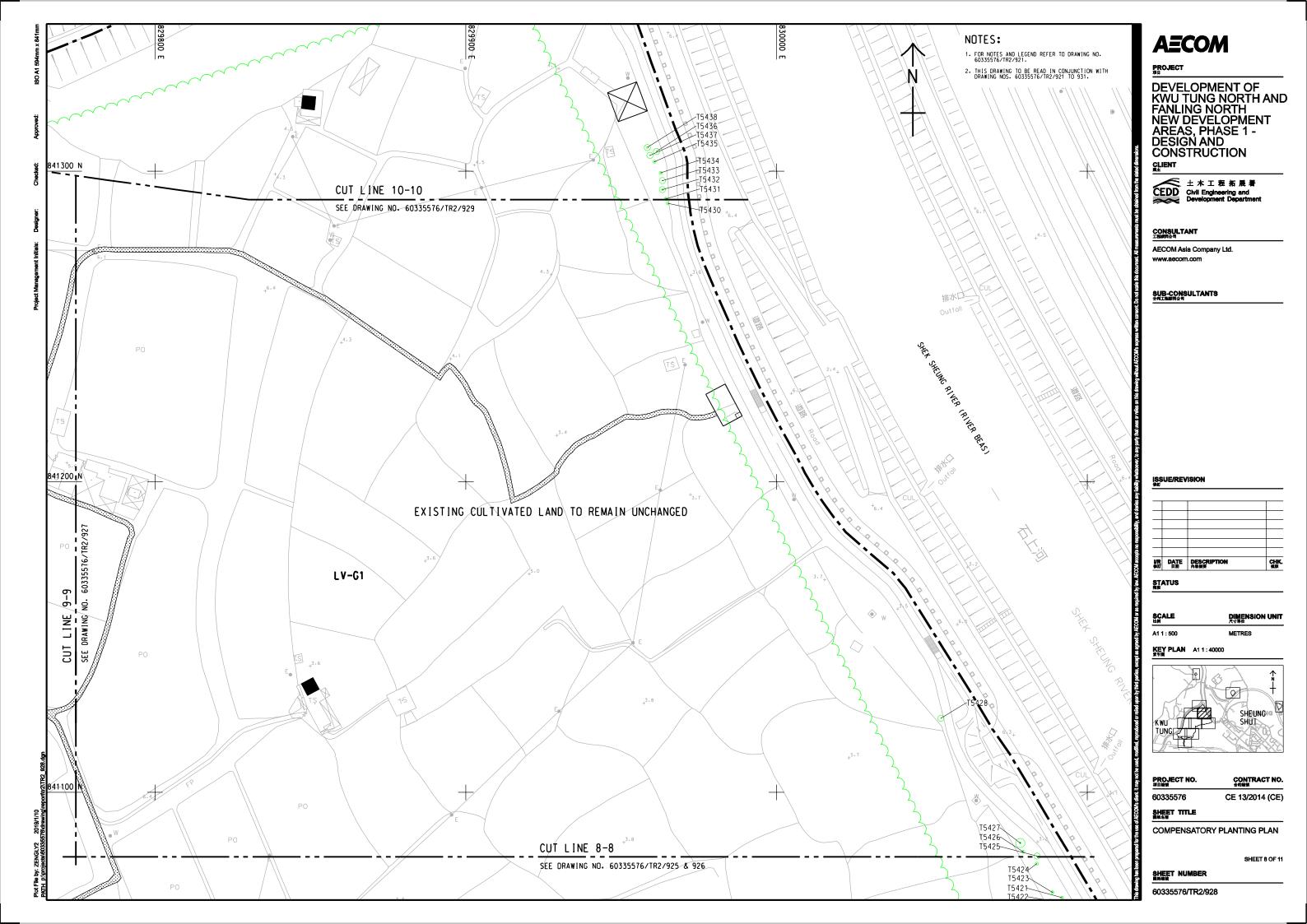


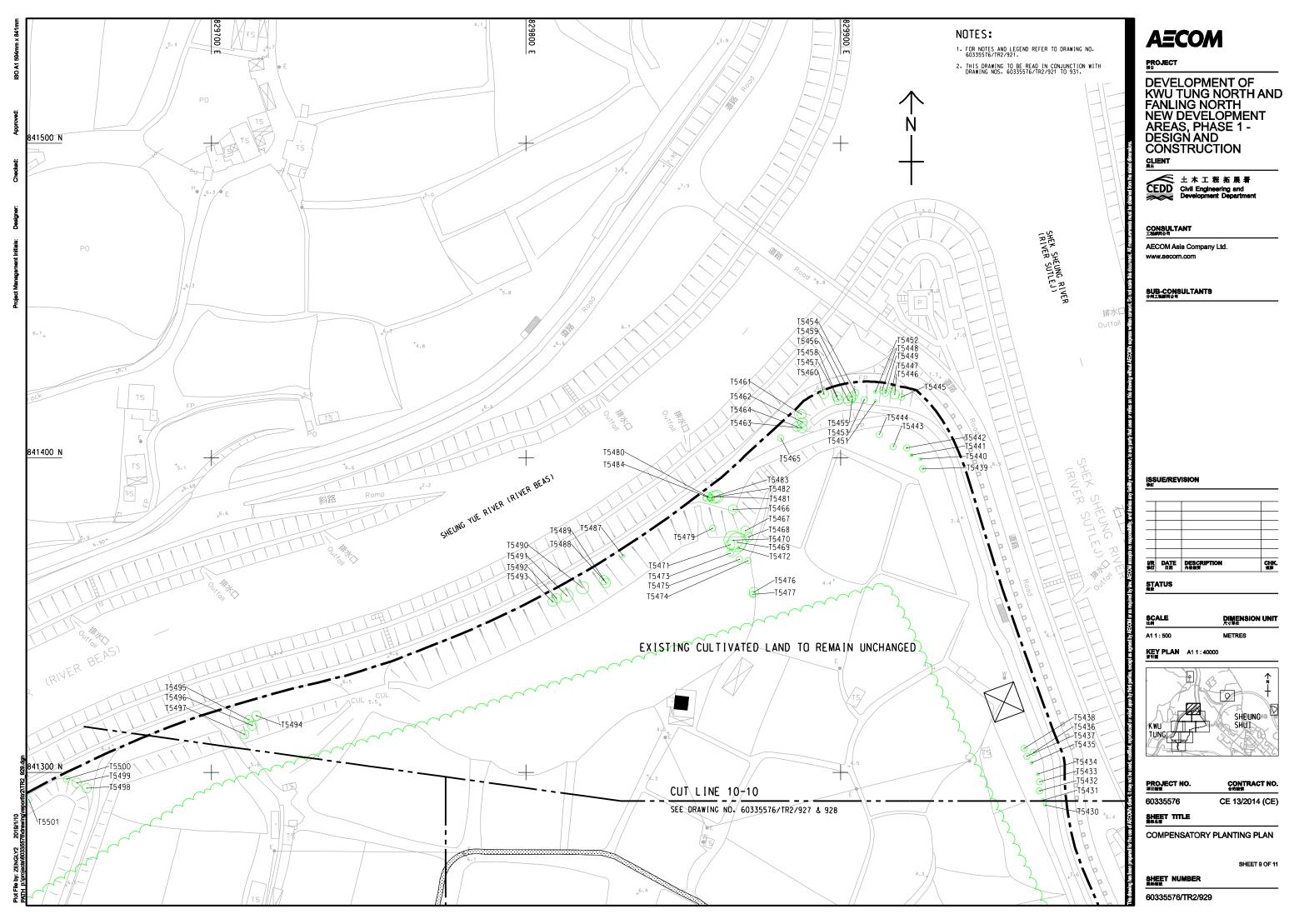


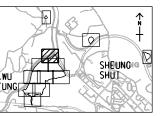


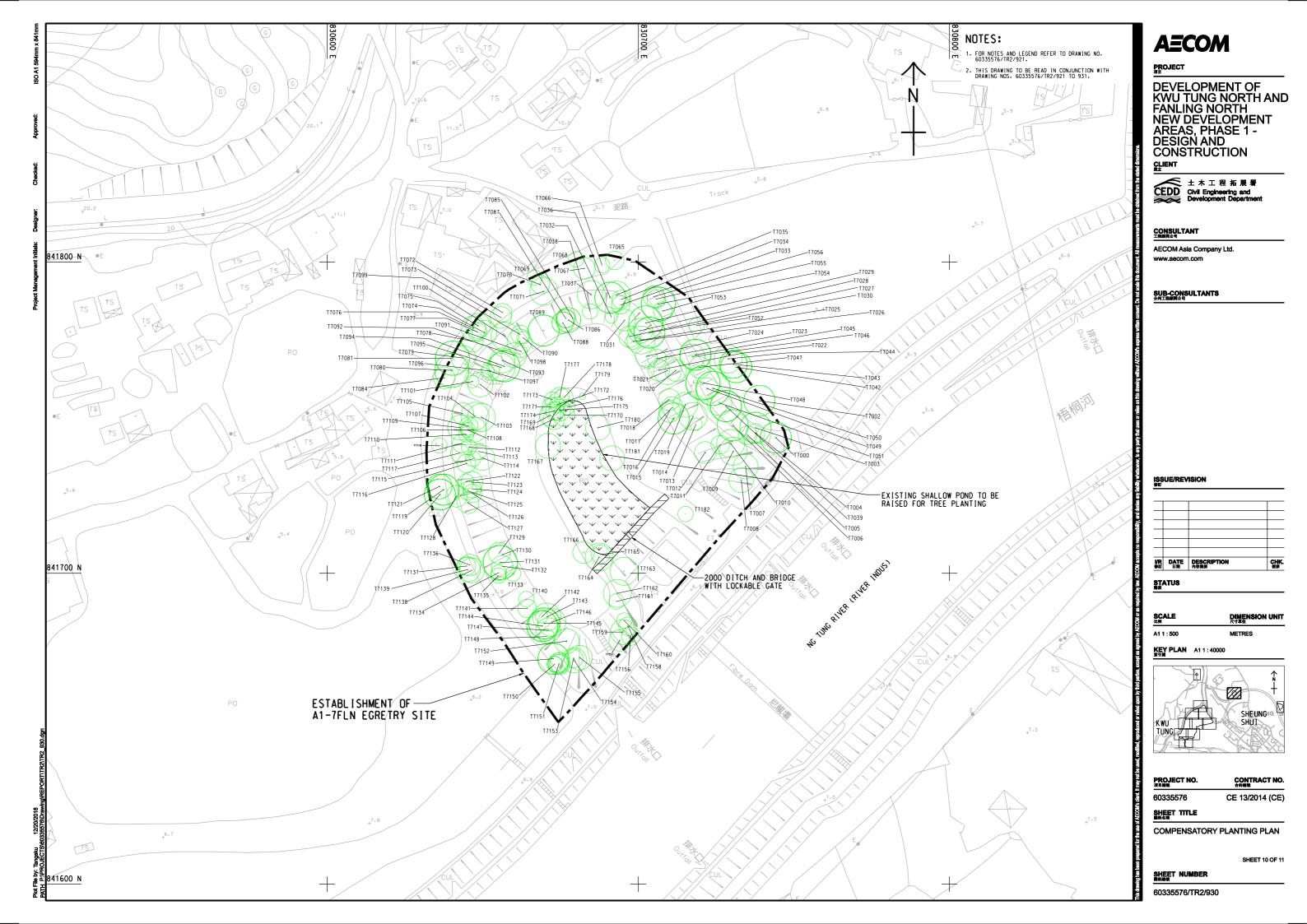


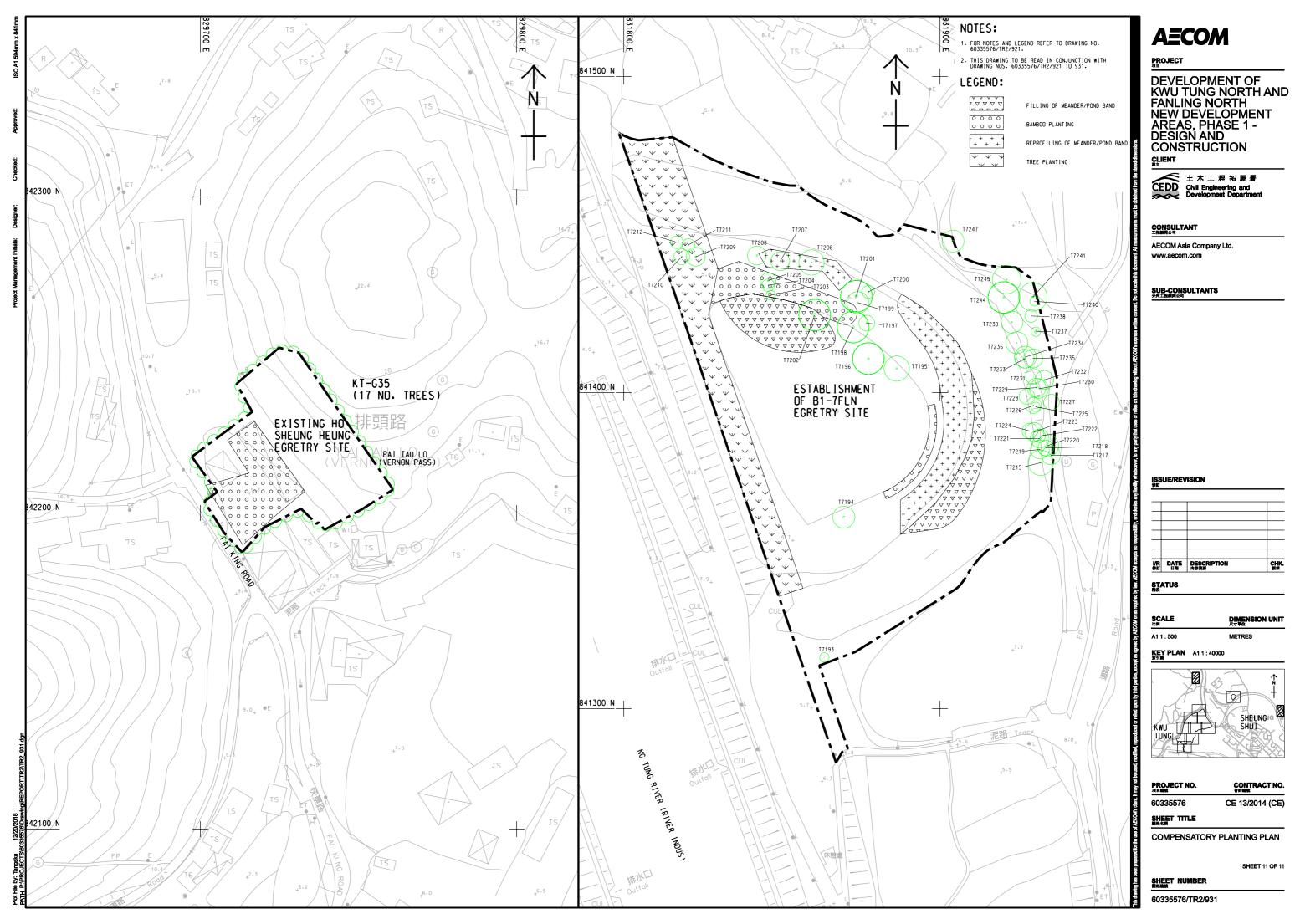




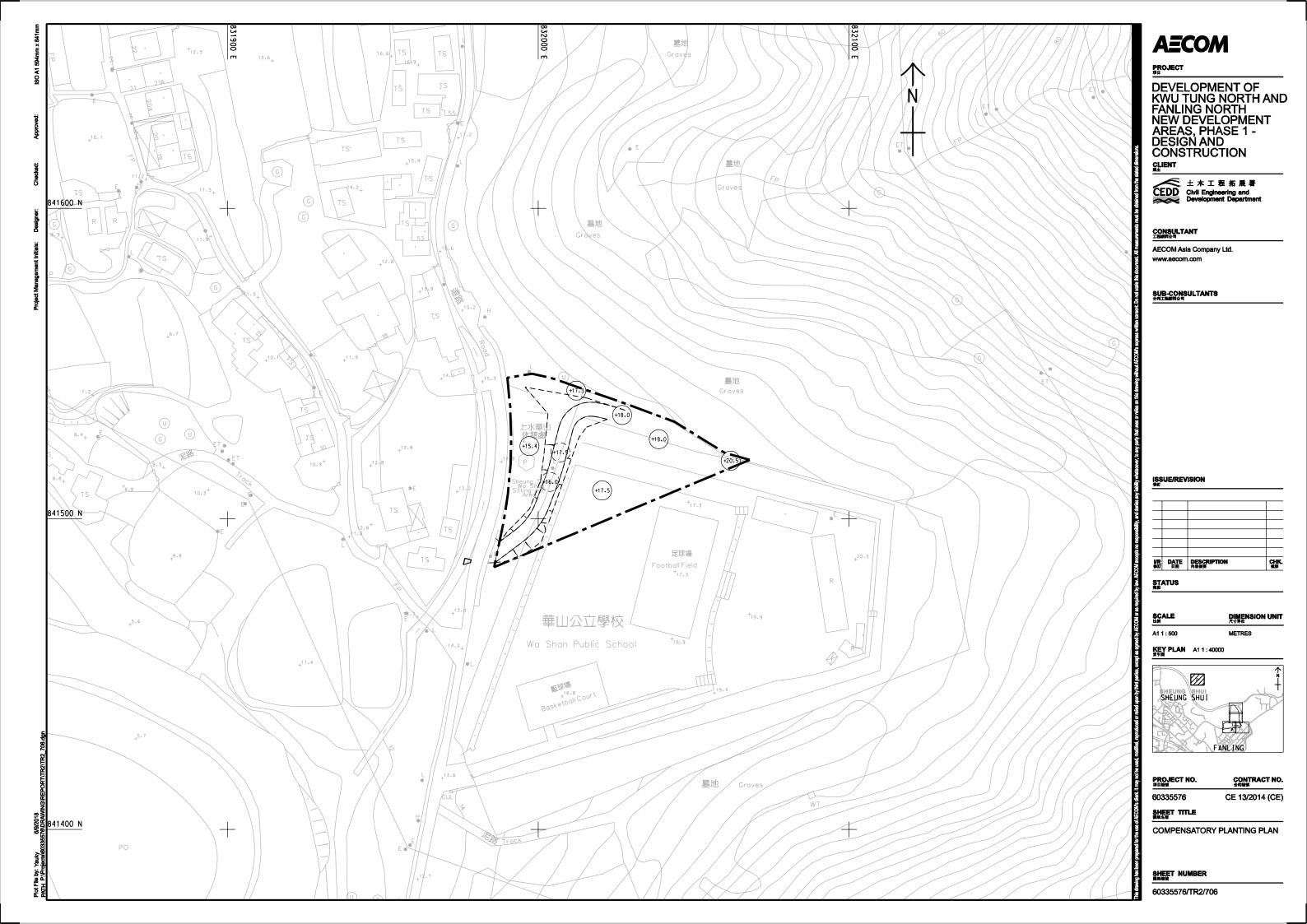


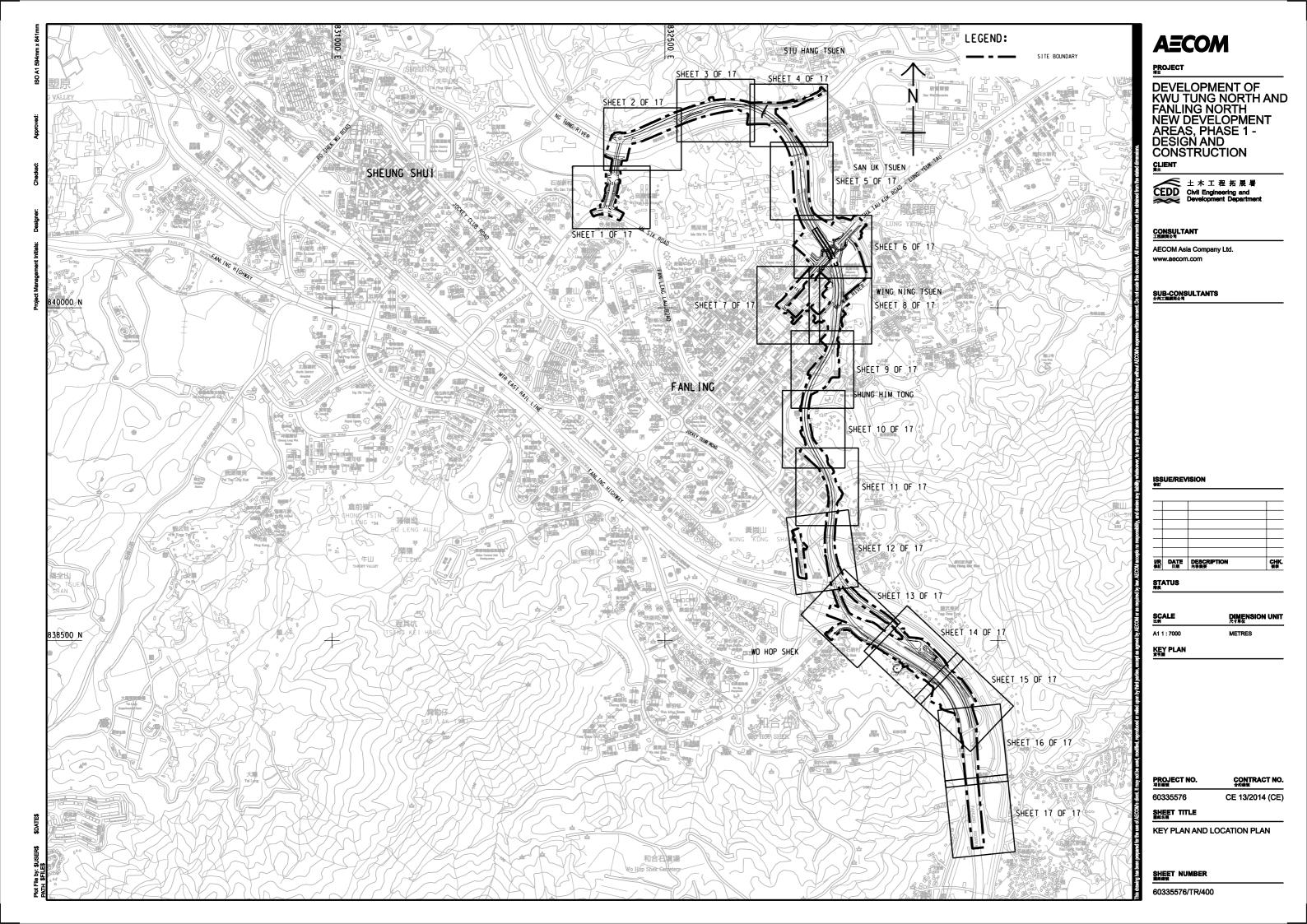


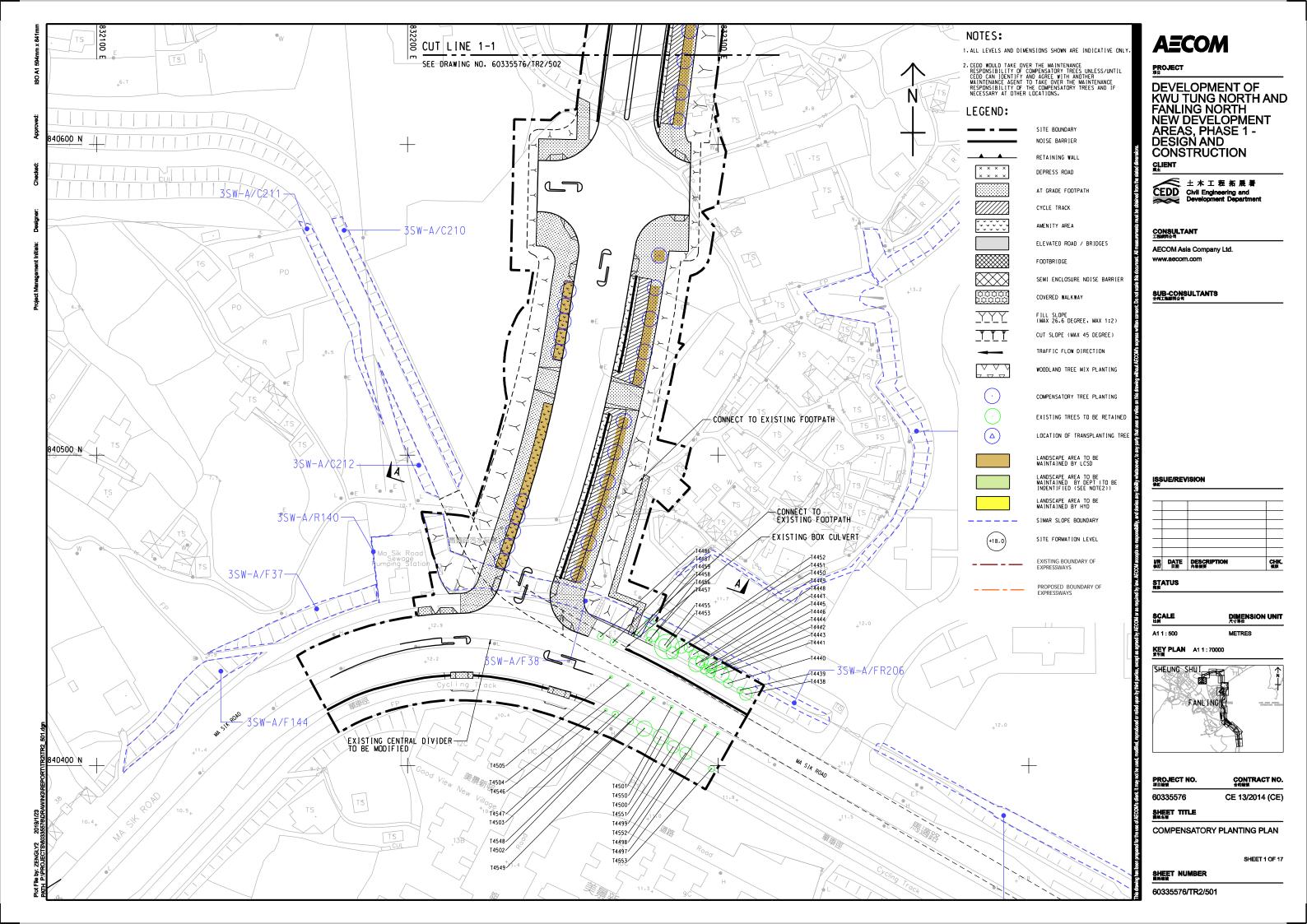


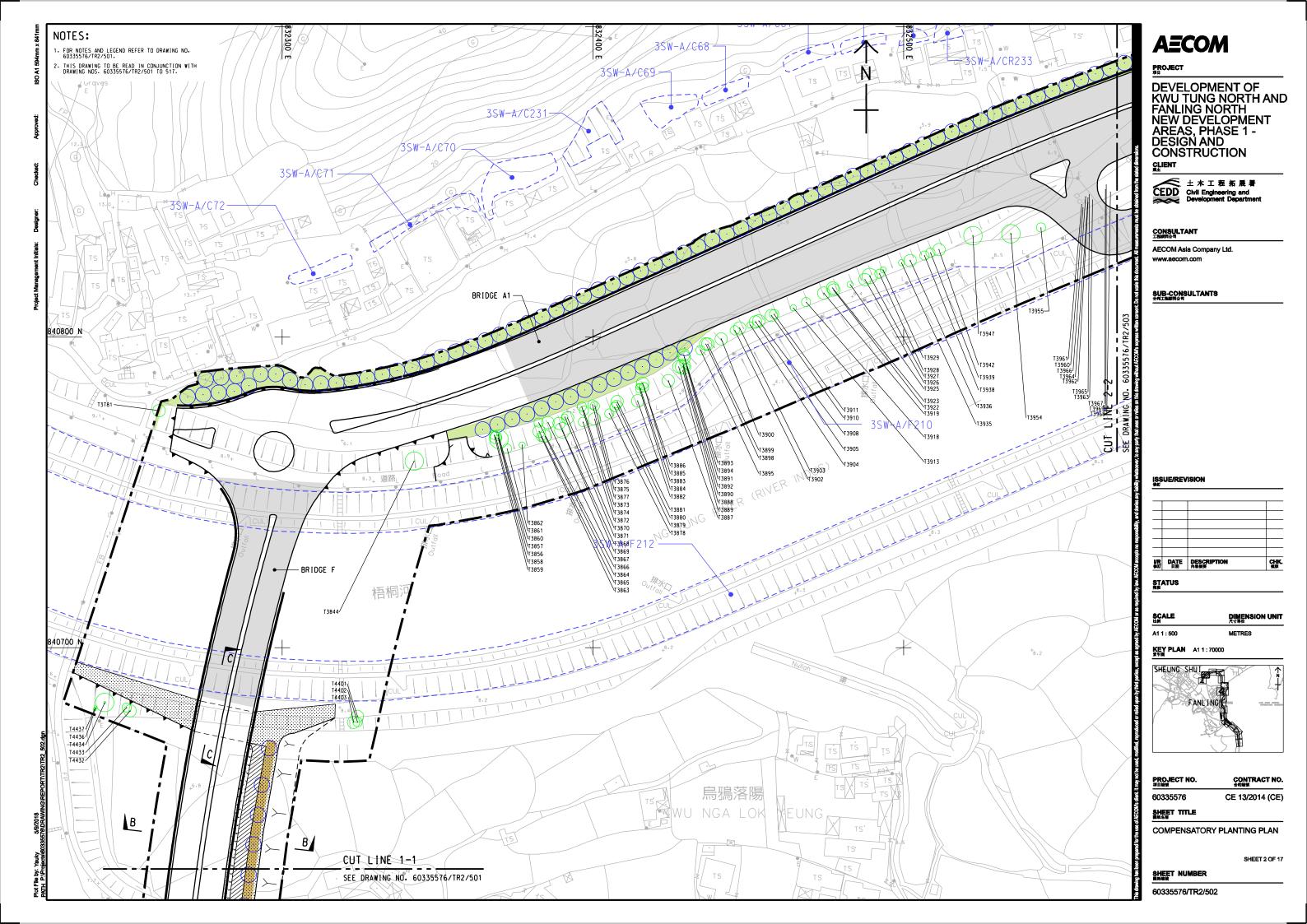


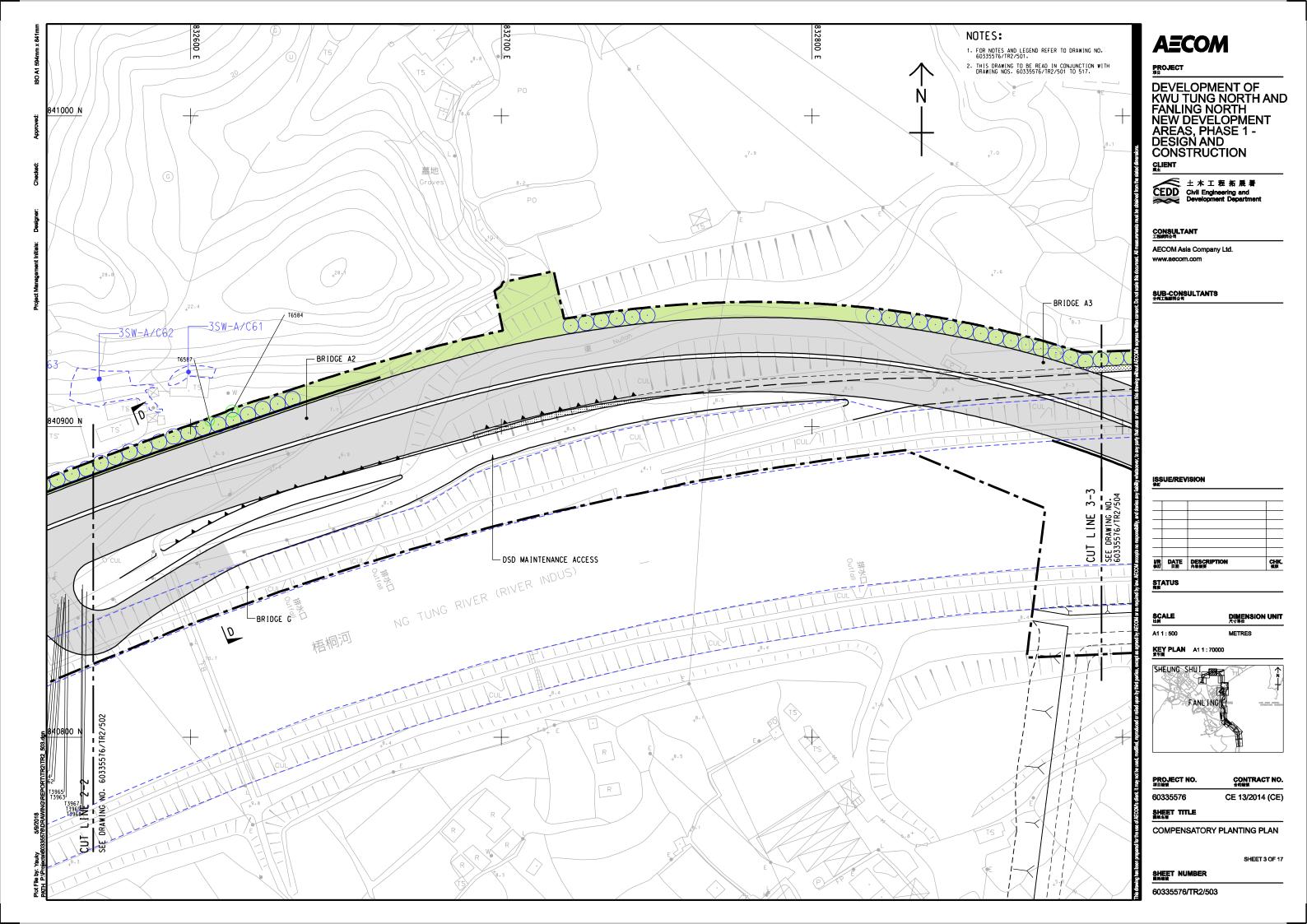


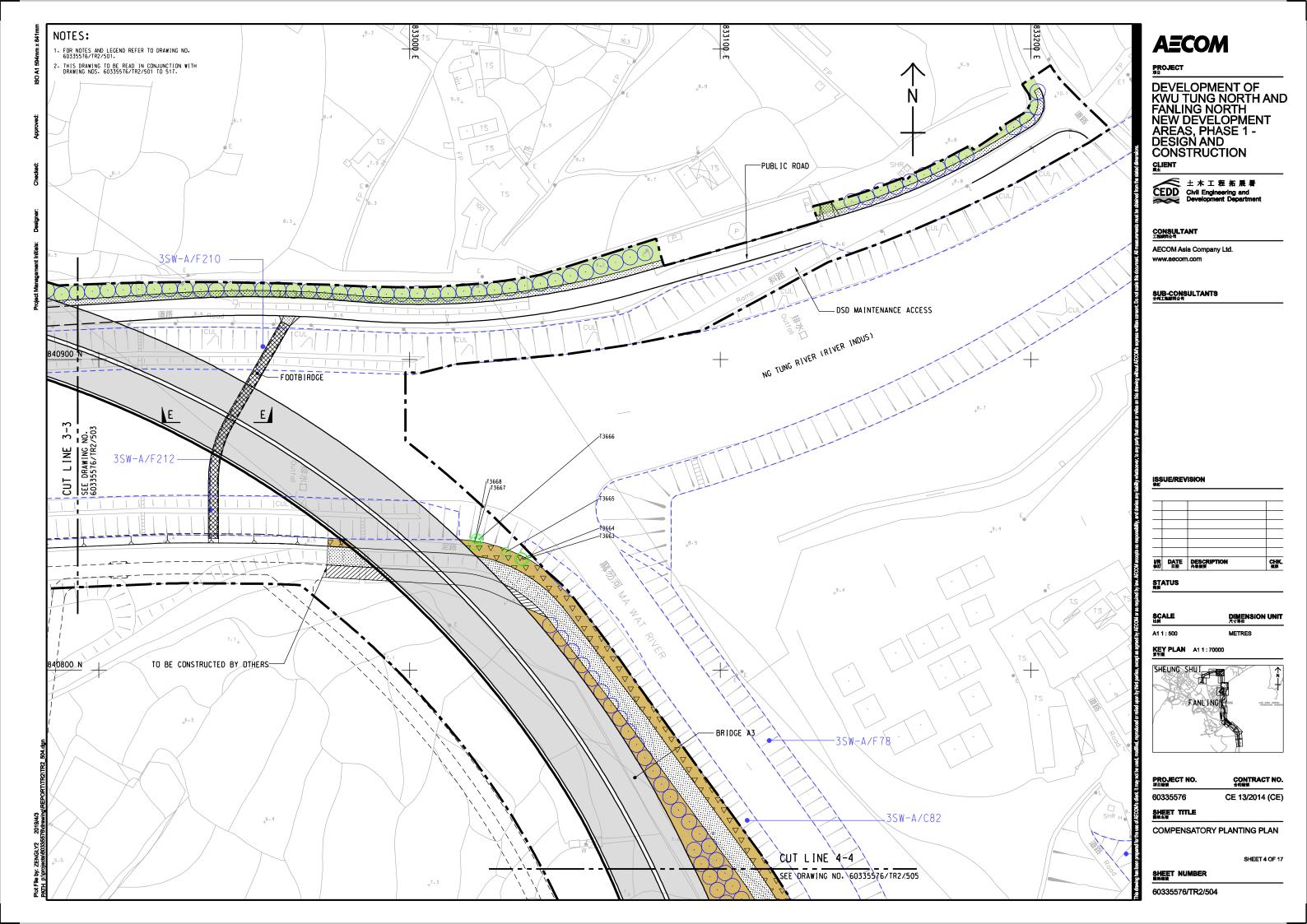


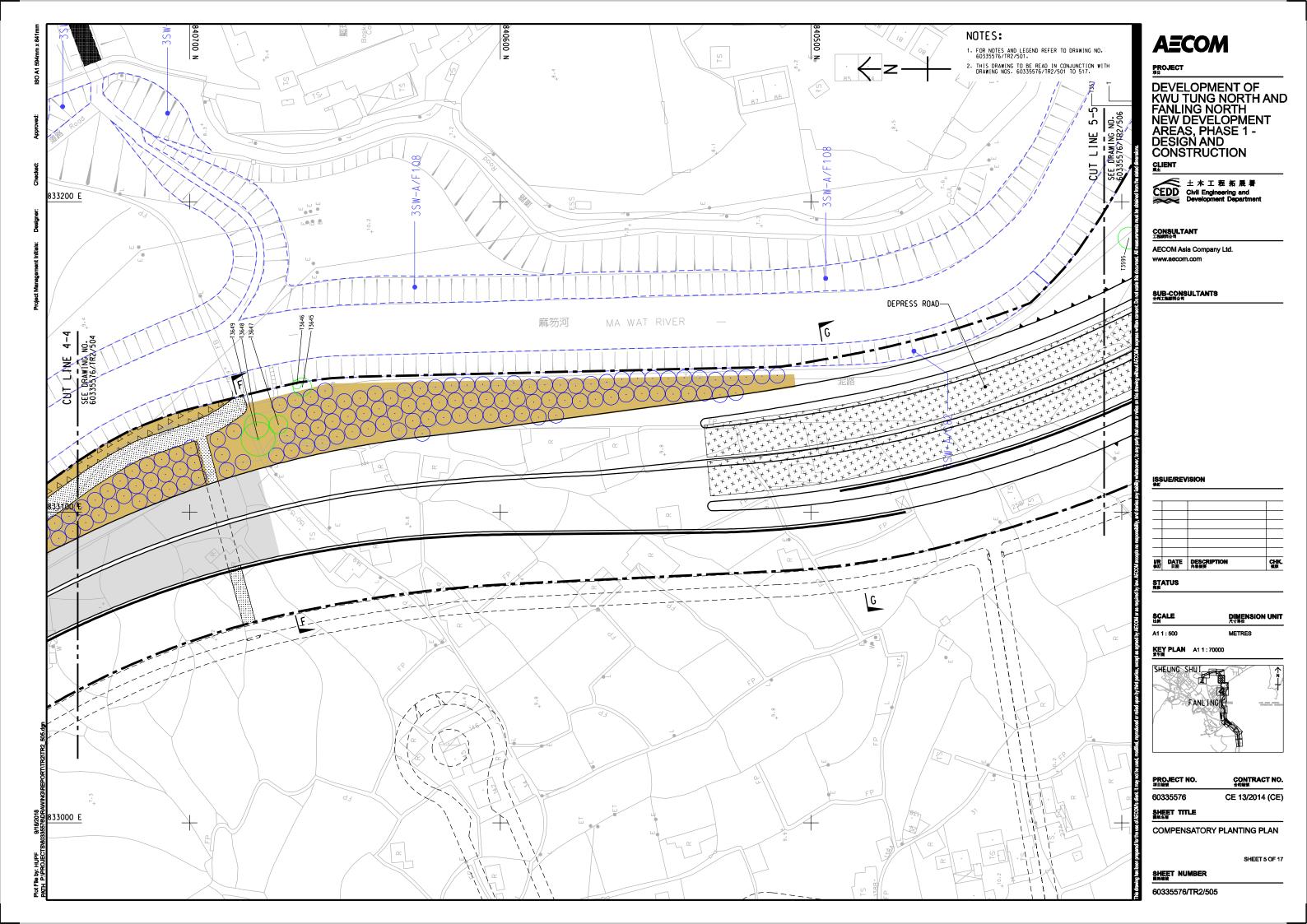


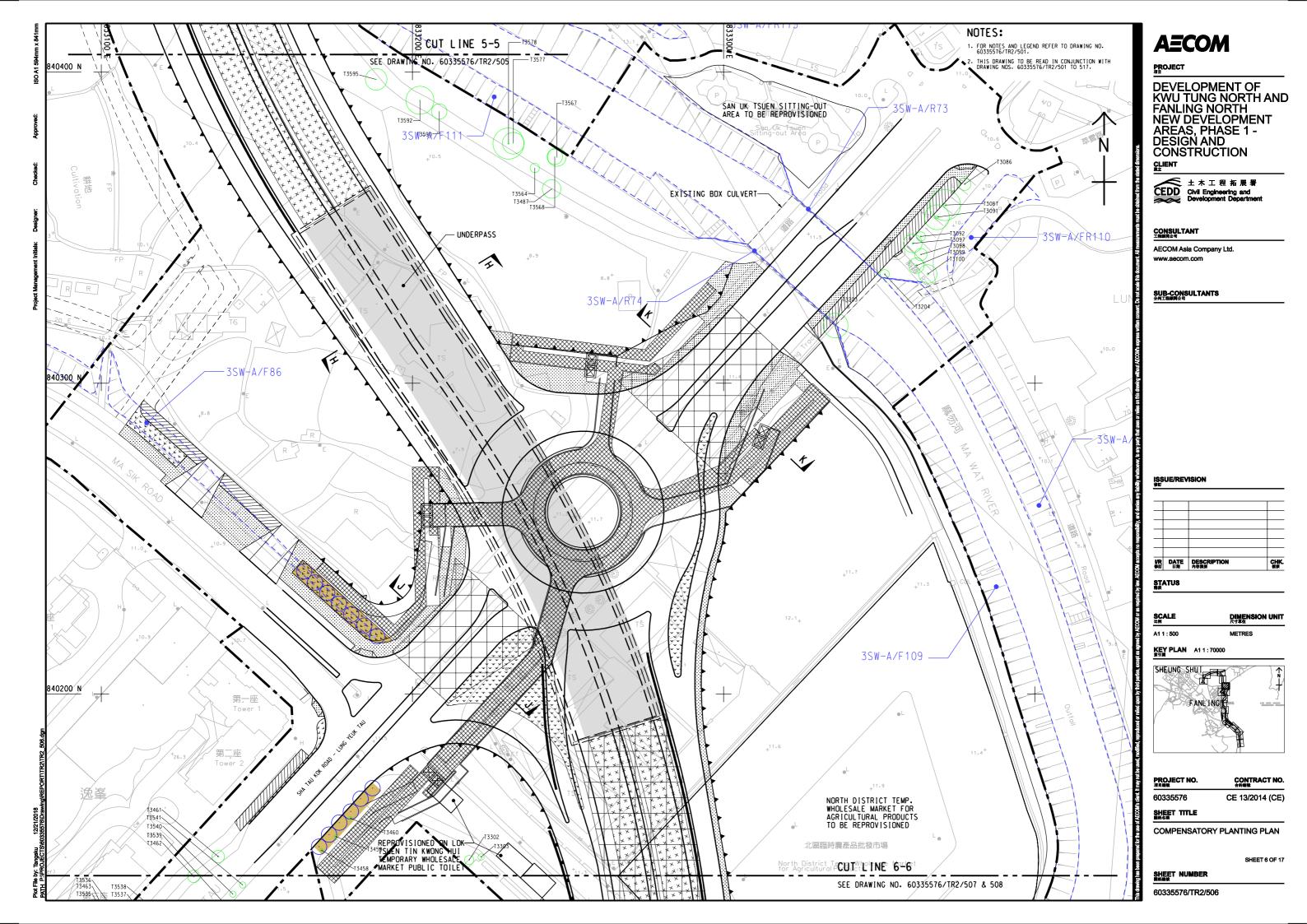


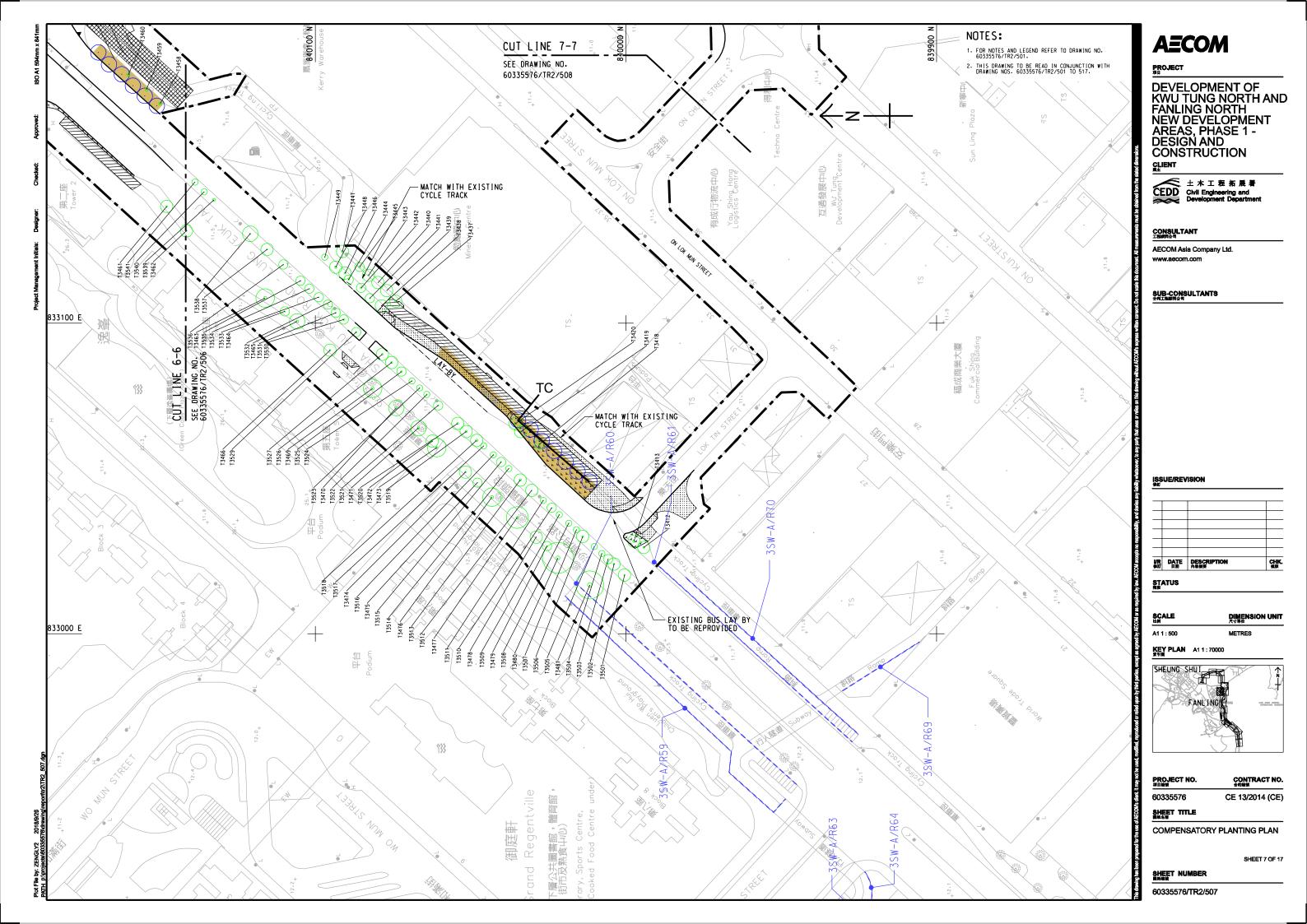


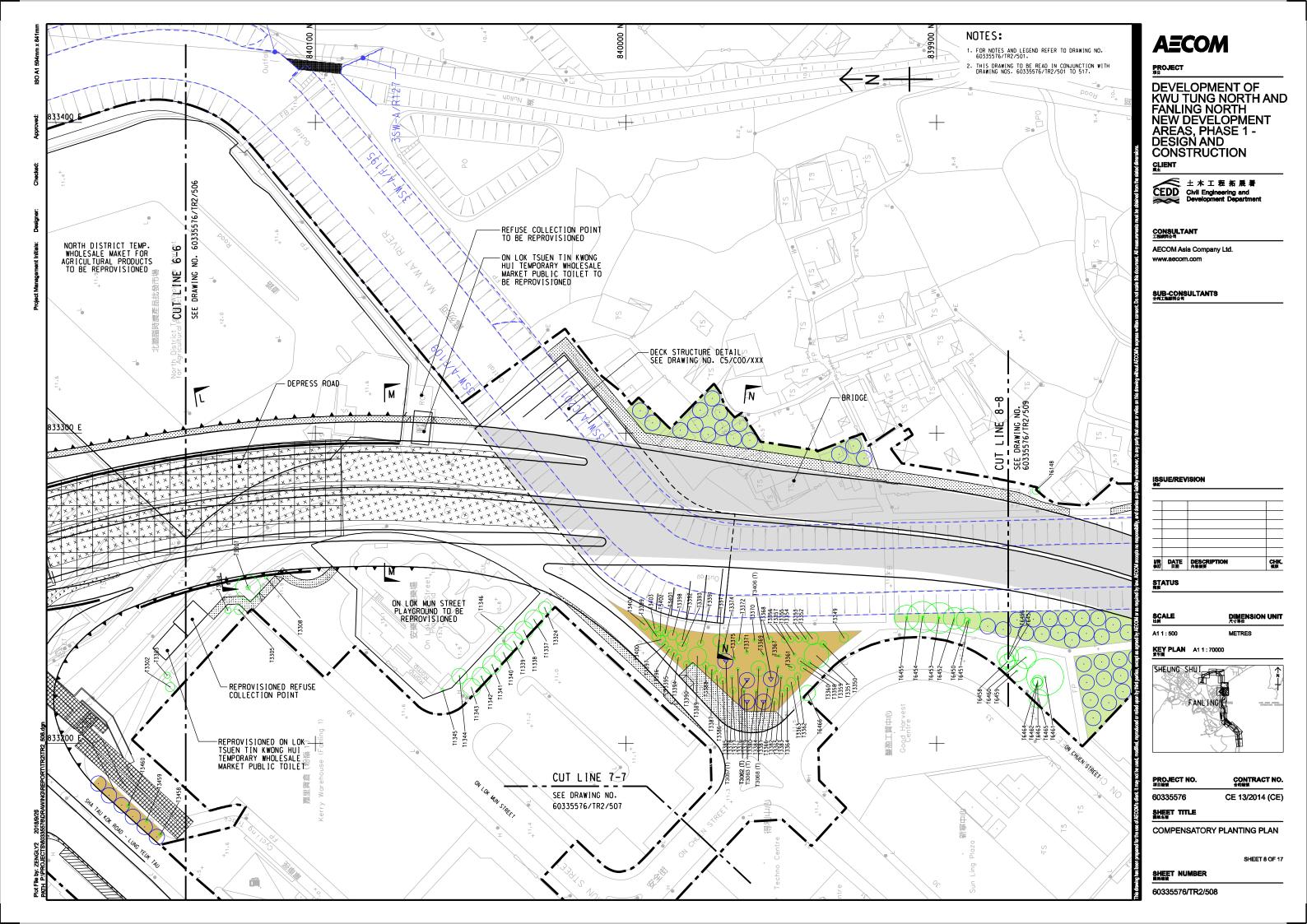


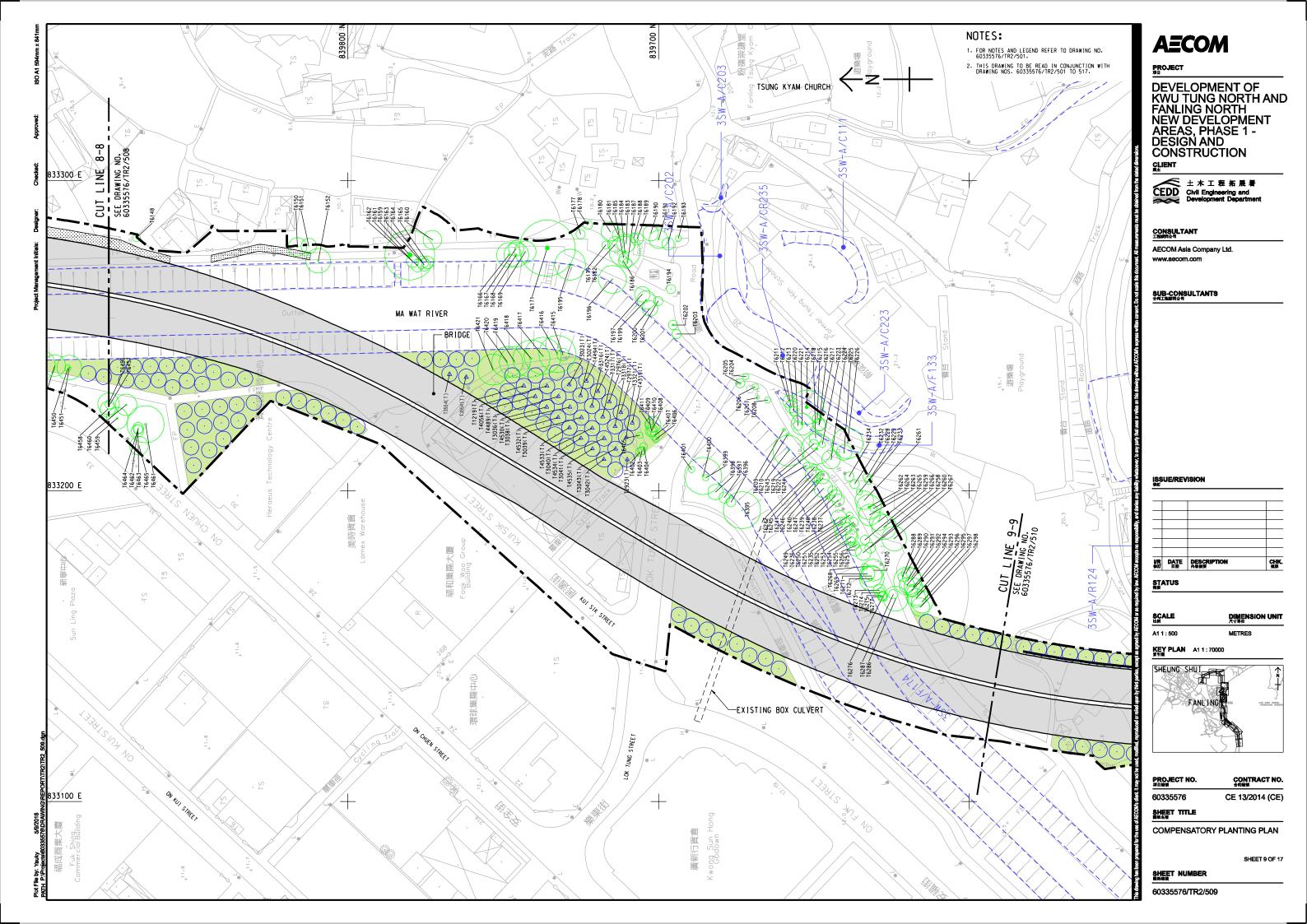


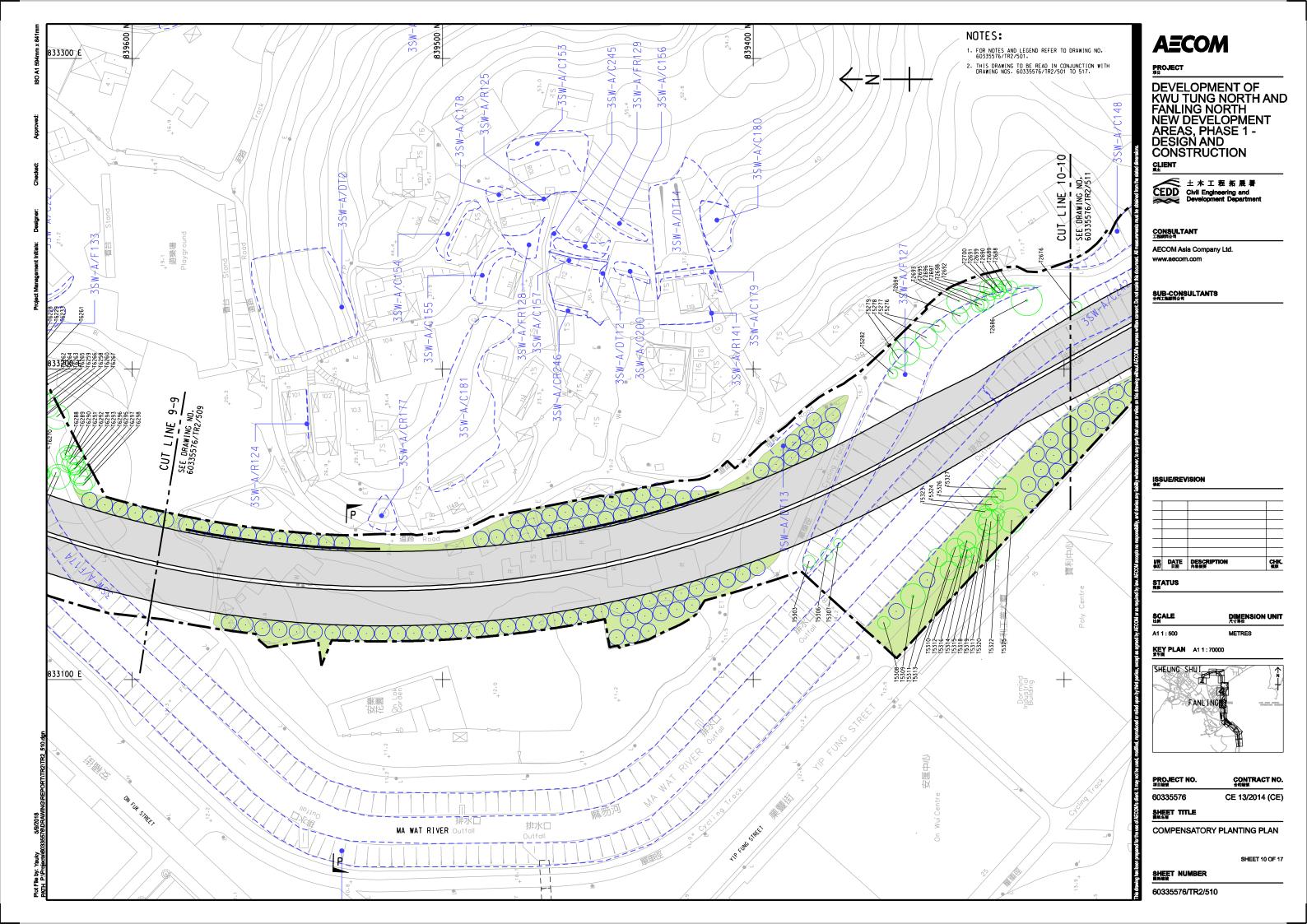


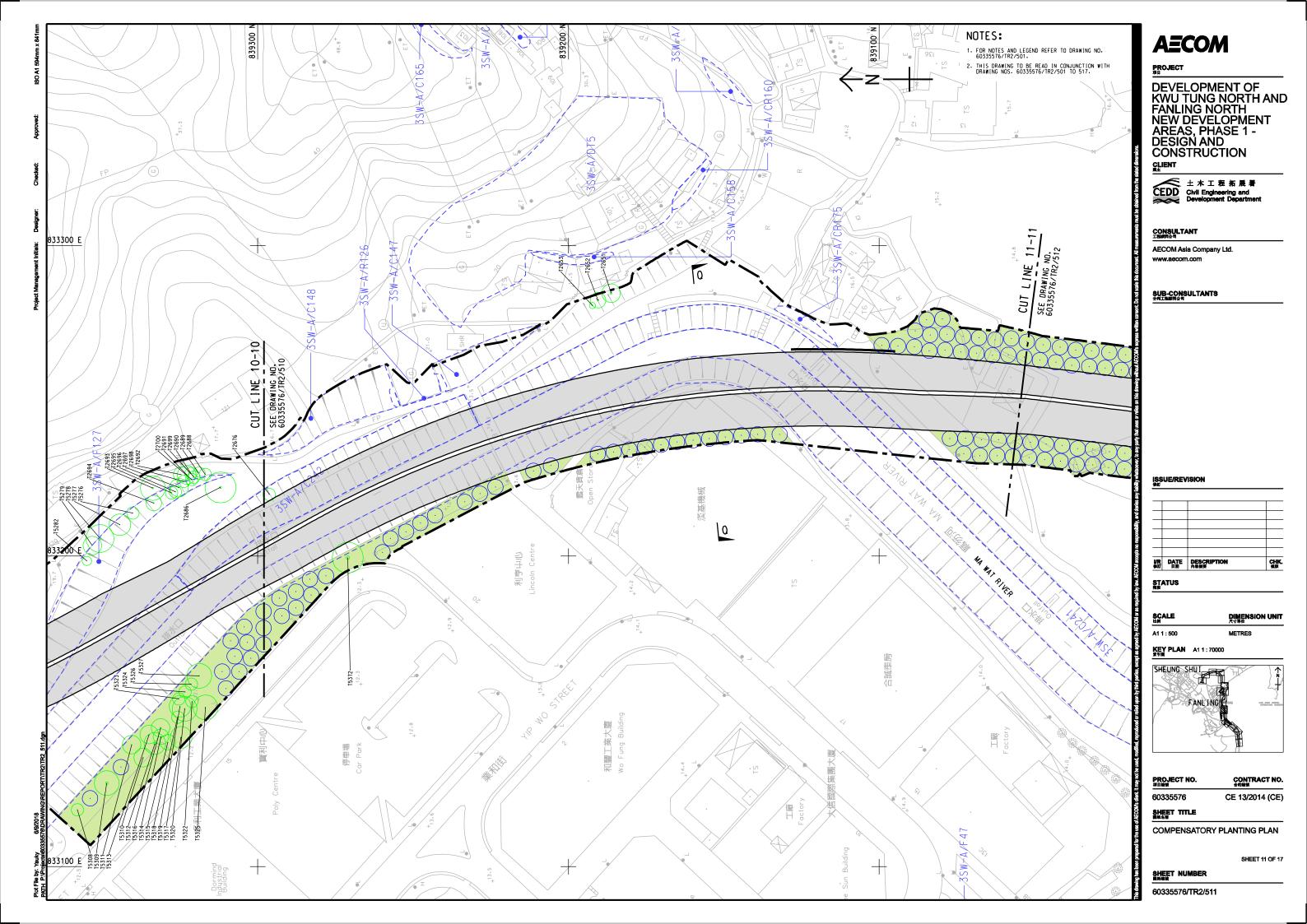


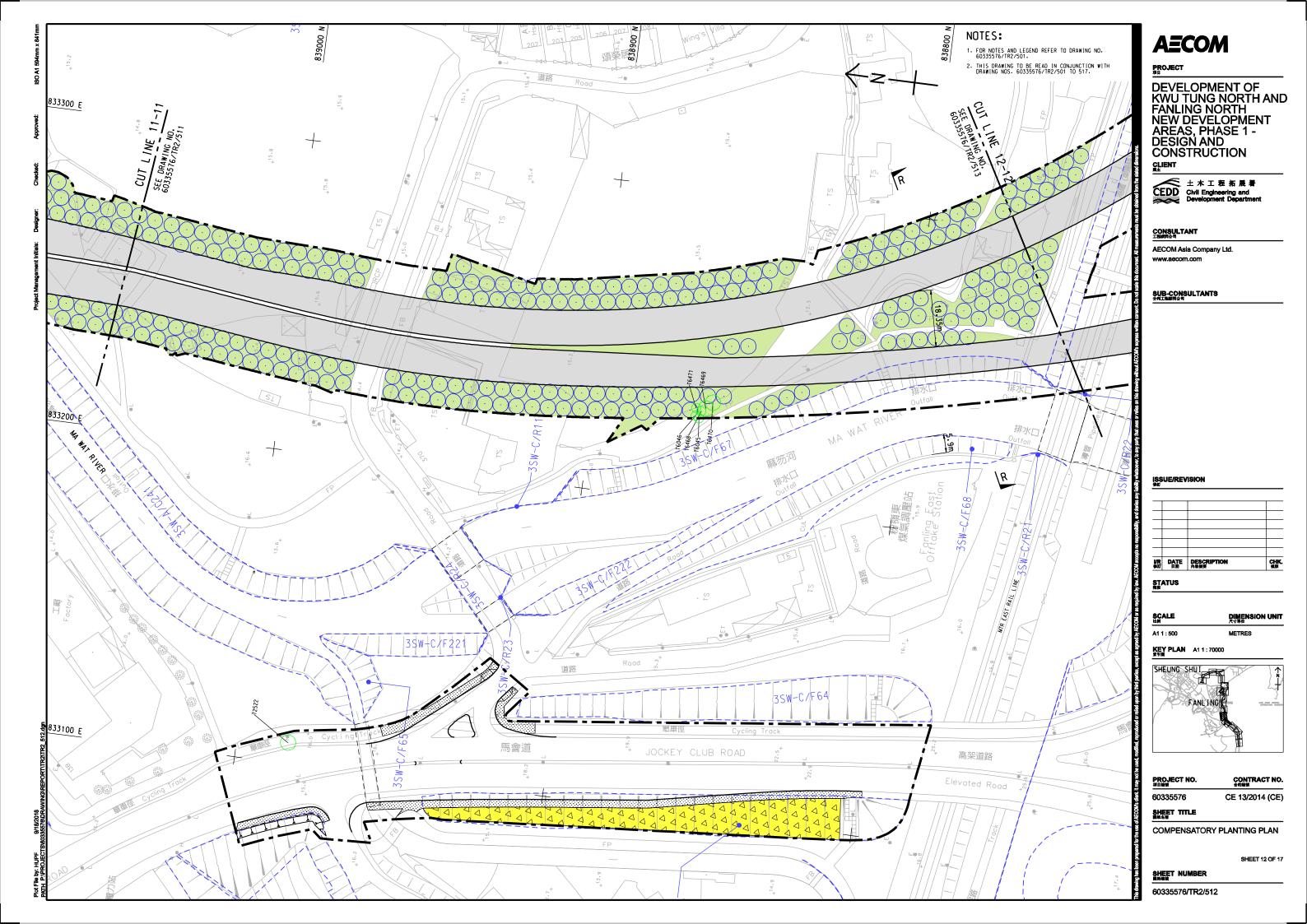


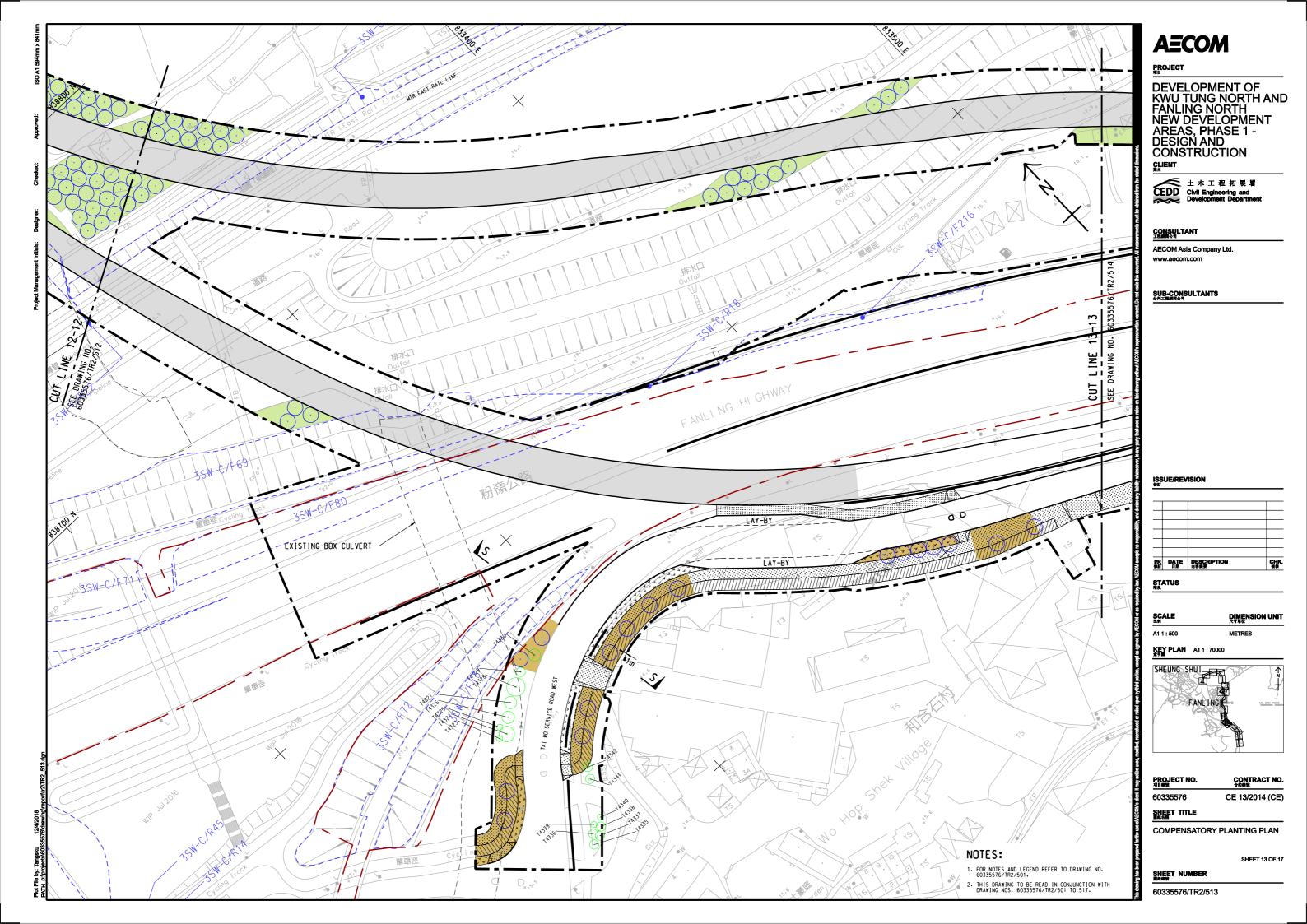


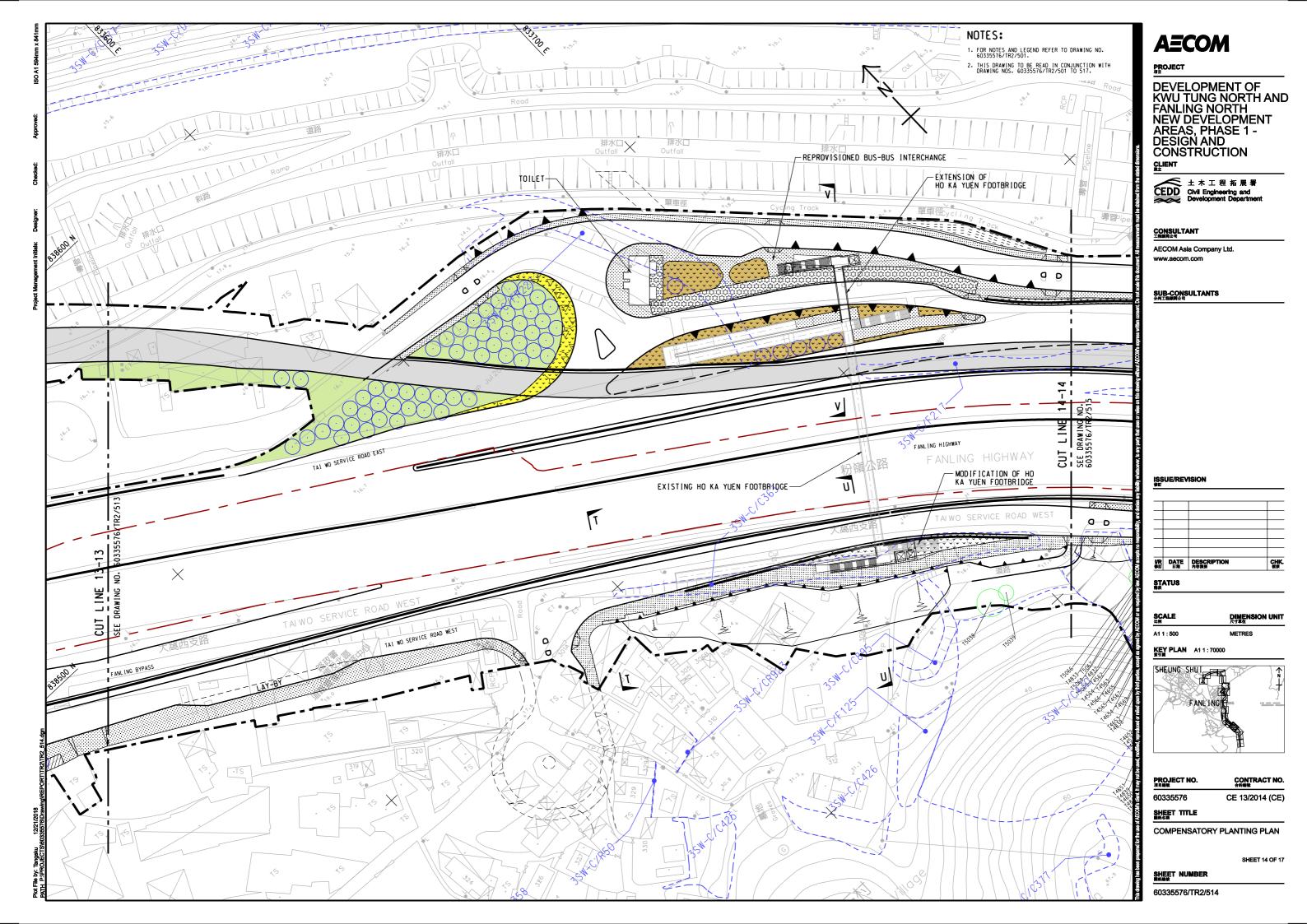


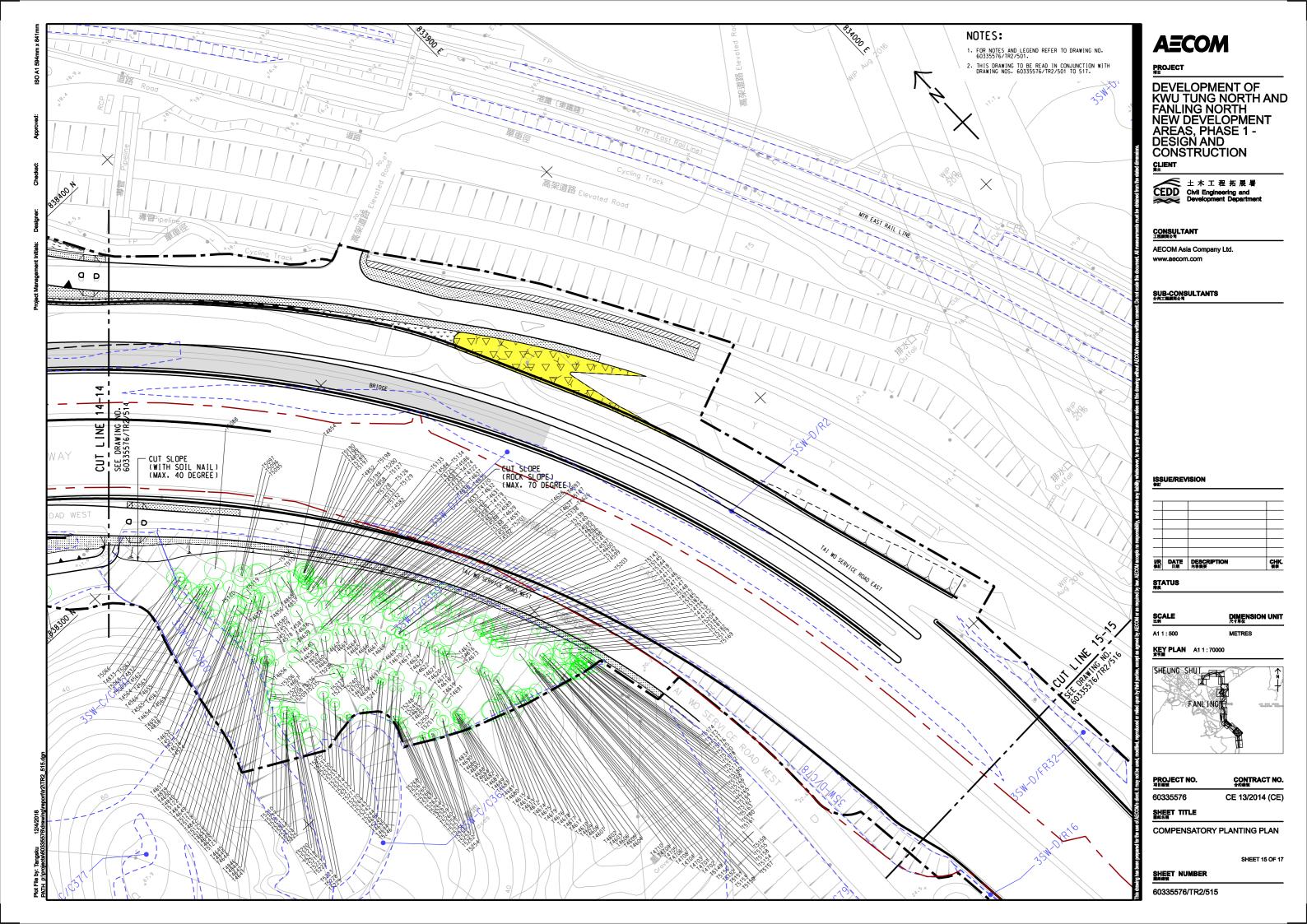


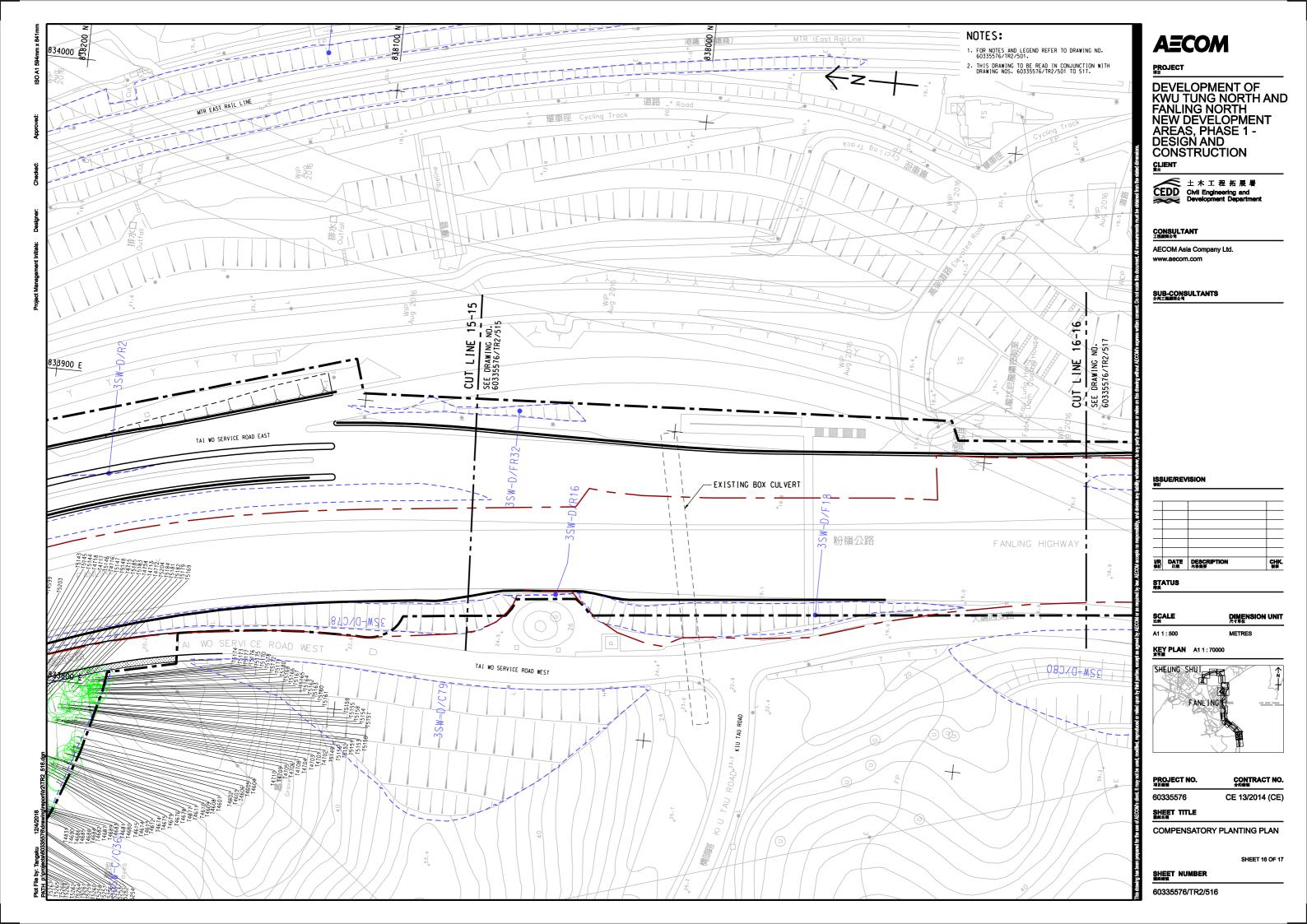


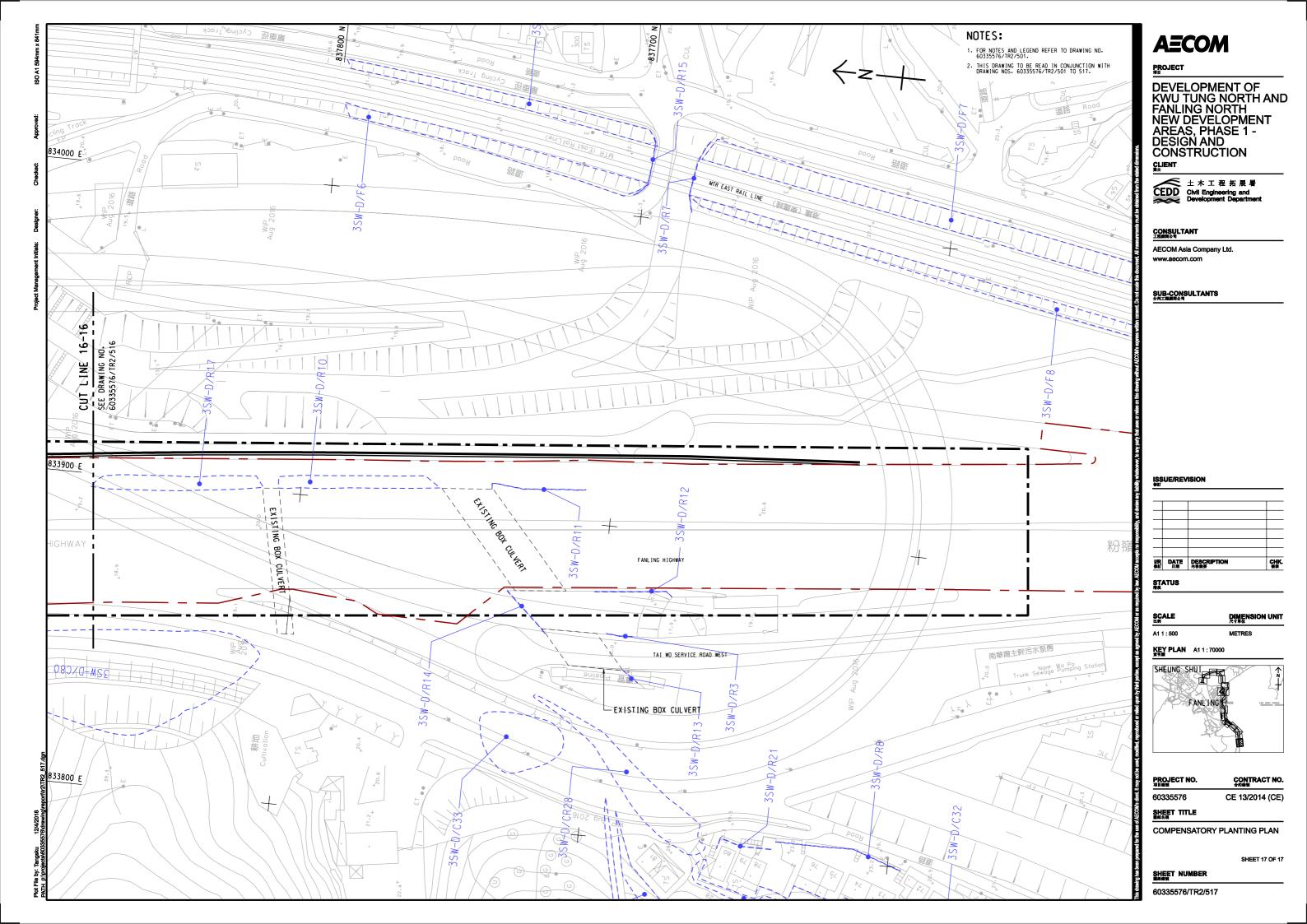


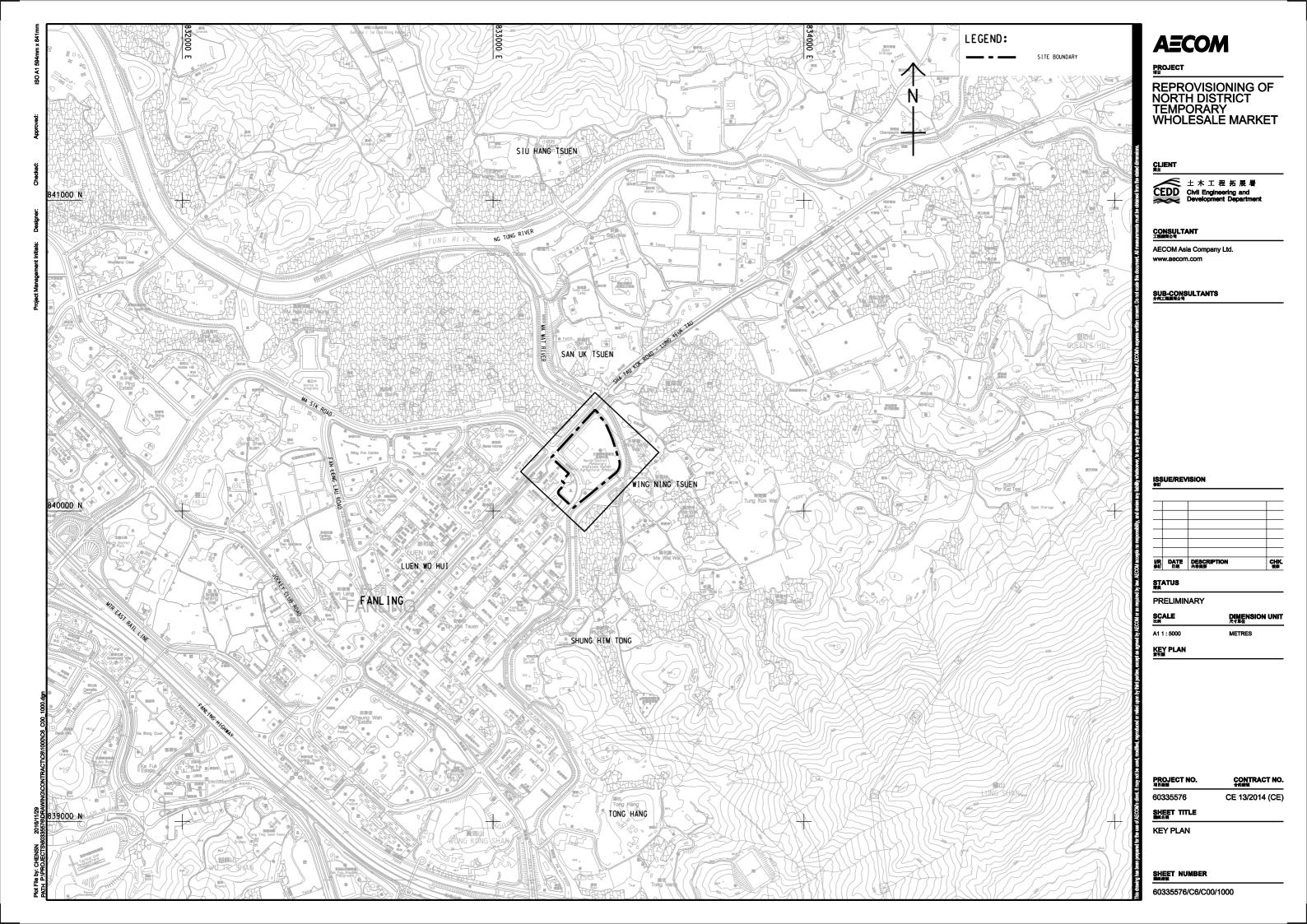


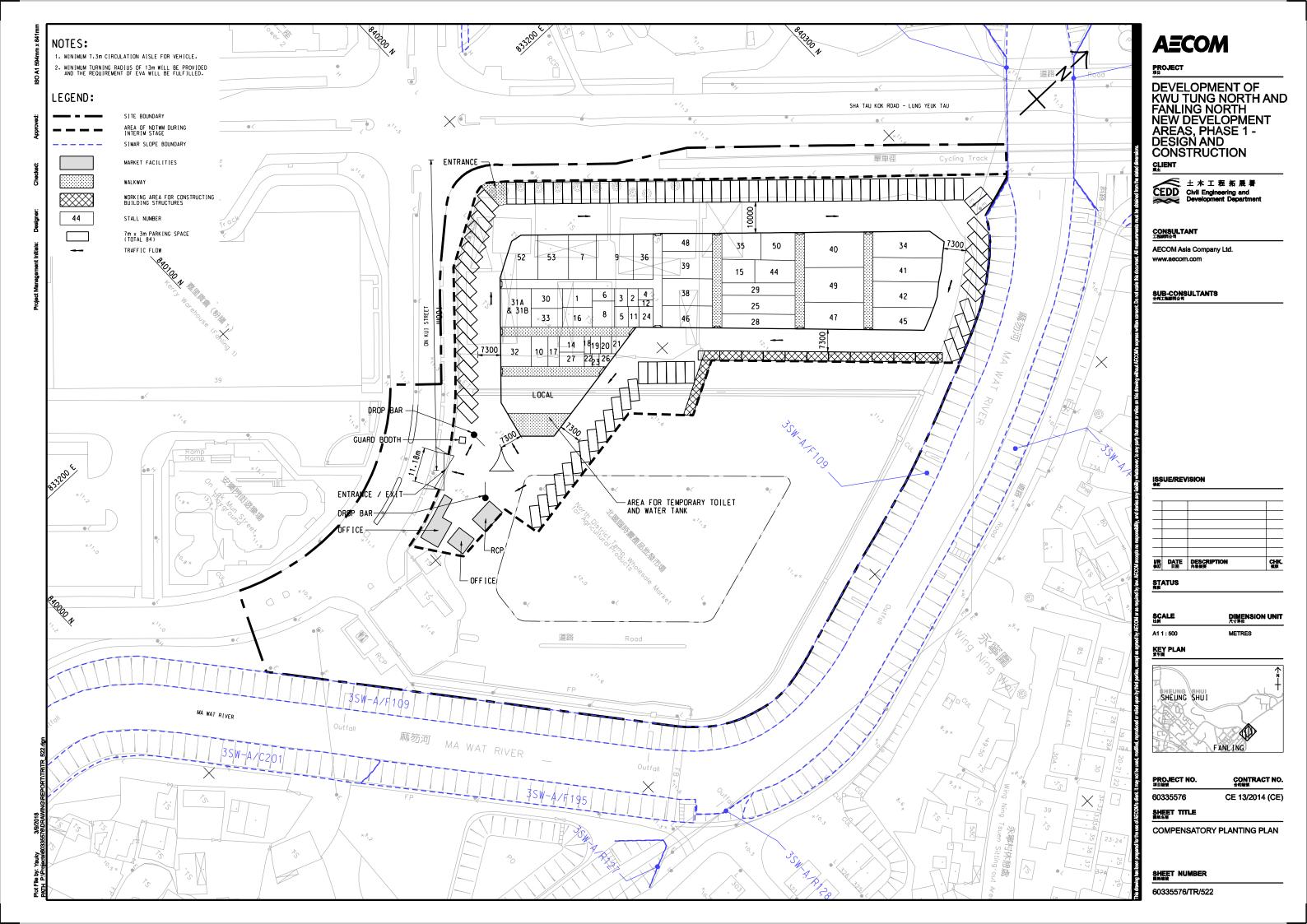


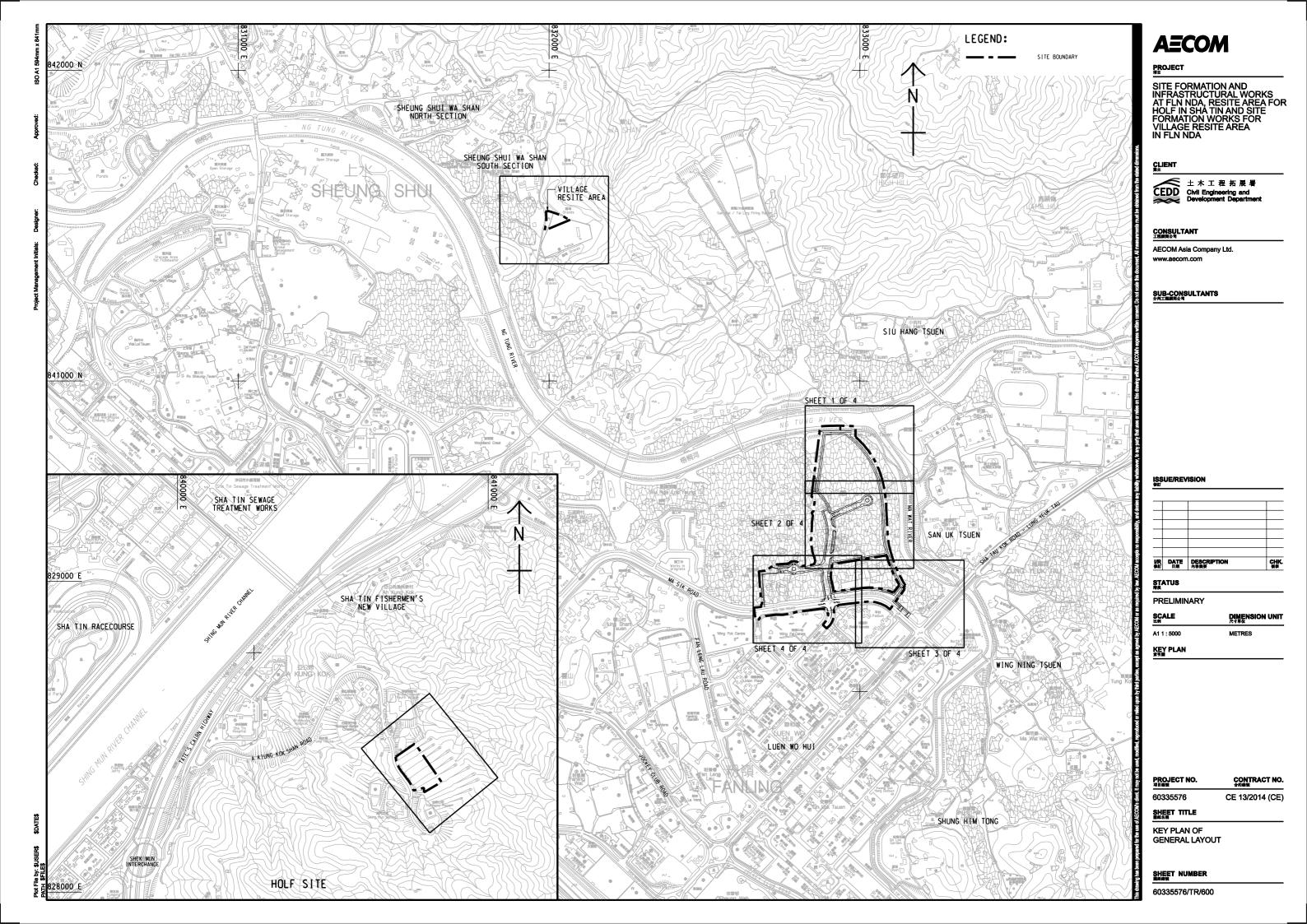


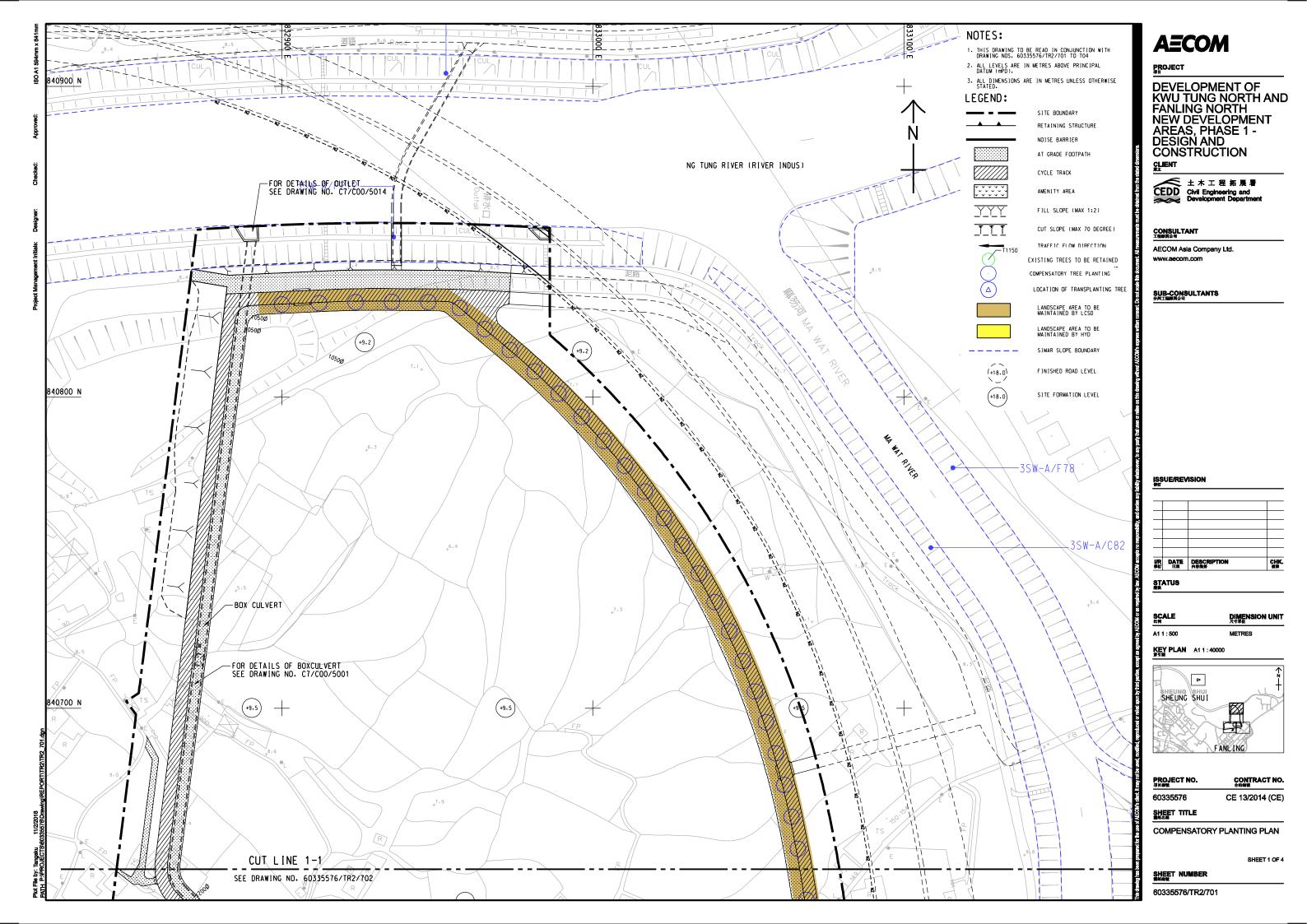


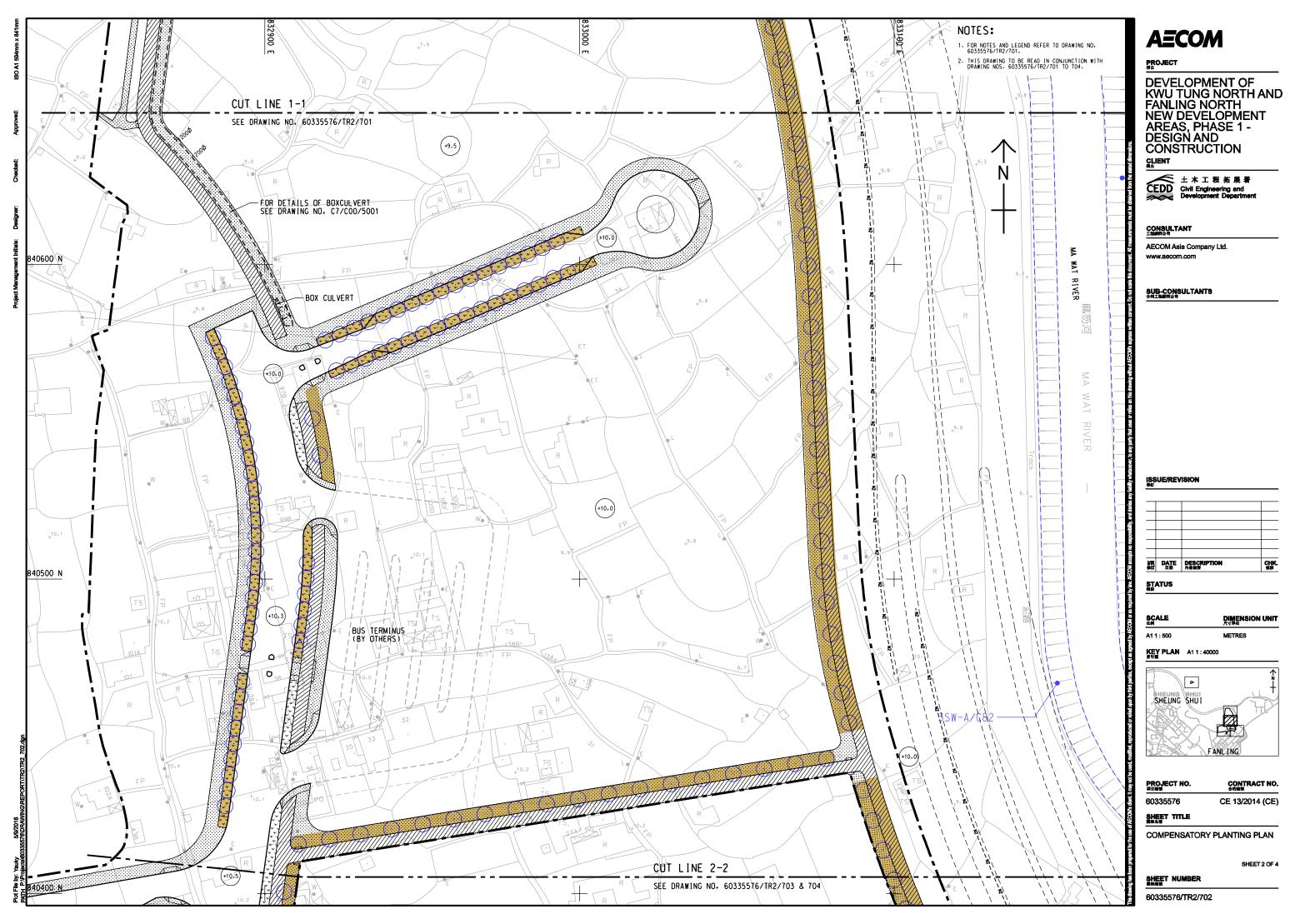


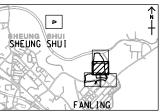


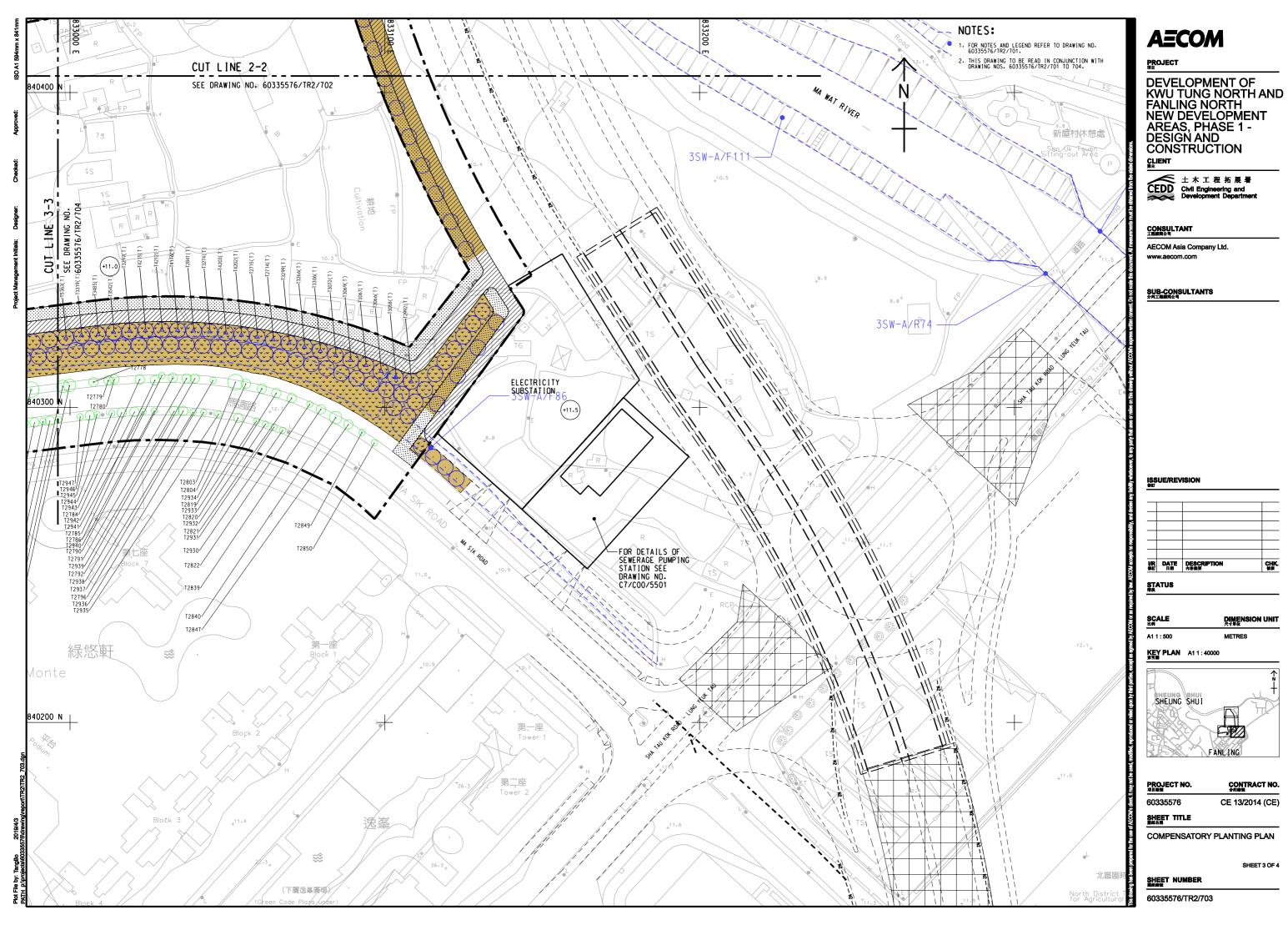




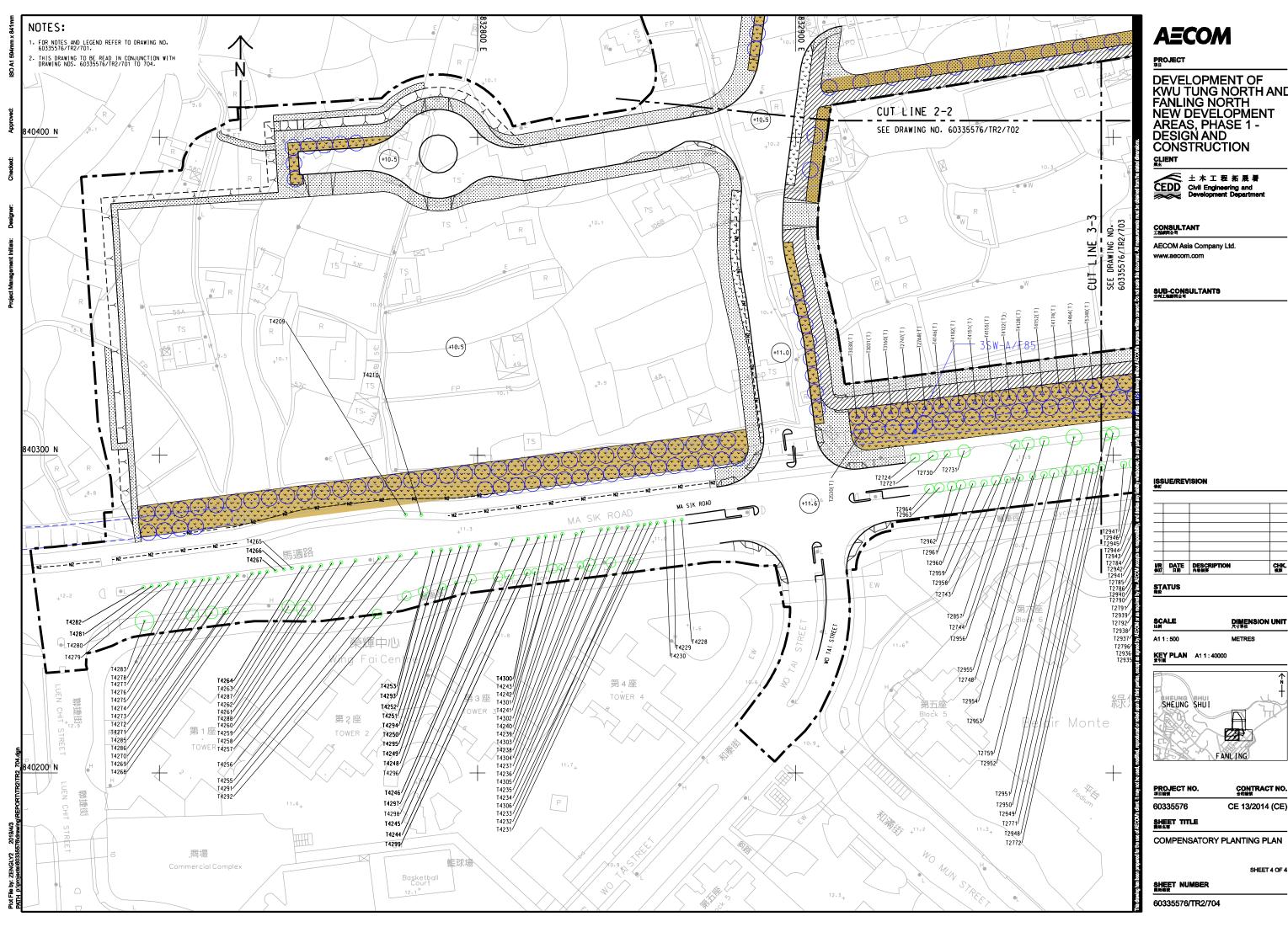




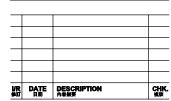








DEVELOPMENT OF KWU TUNG NORTH AND FANLING NORTH NEW DEVELOPMENT

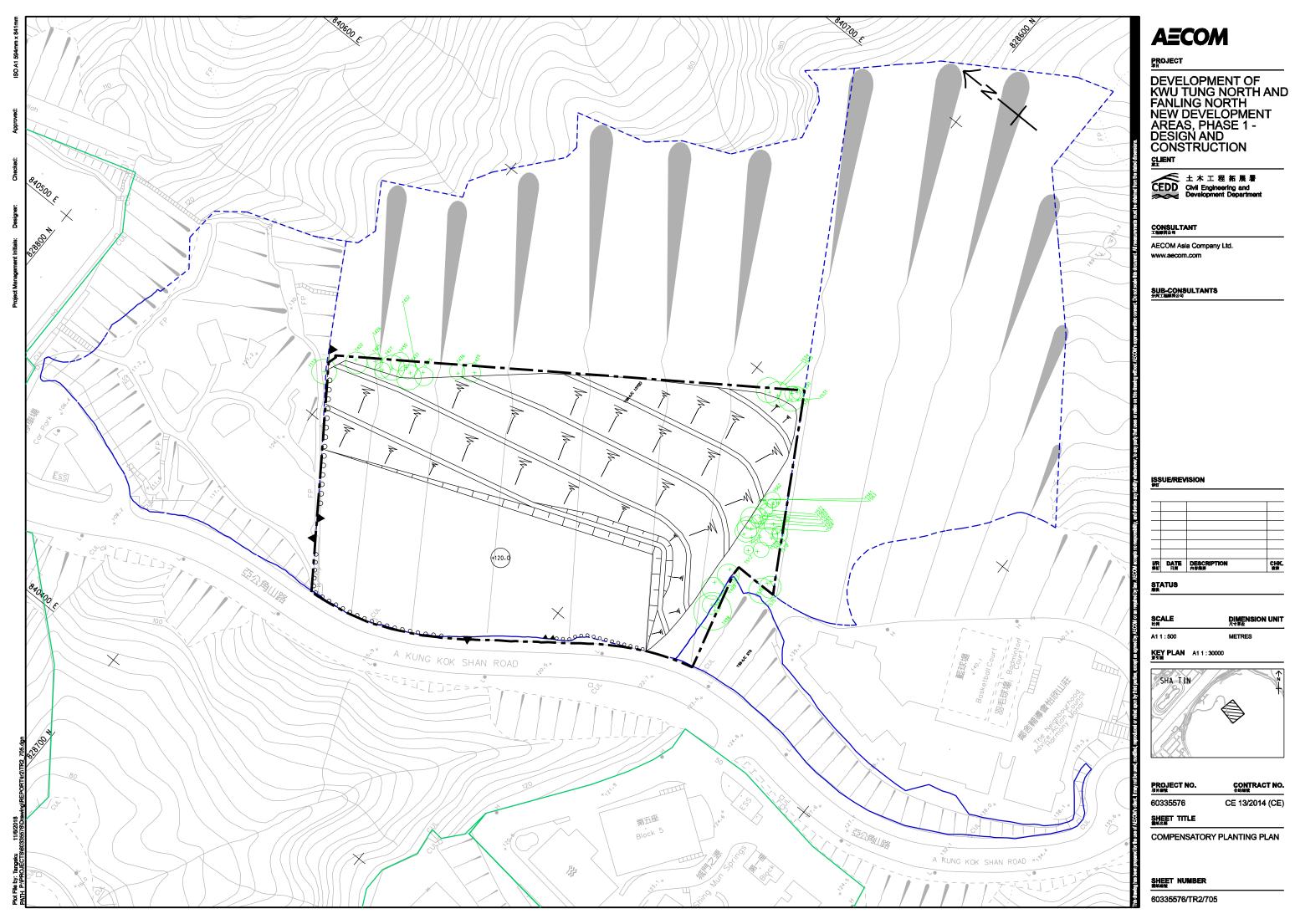


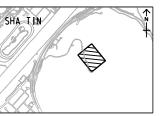
DIMENSION UNIT



CE 13/2014 (CE)

SHEET 4 OF 4





Appendix VII

The Proposed Works for Contract 2



	+ +	

Agreement No. CE 13/2014 (CE) Surveyed and Prepared by Stanley To Development of Kwu Tung North and Fanling North New Development Areas - Phase 1 - Design and Construction Latest Field Survey was conducted on 29-Nov-18

Tree Assessment Schedule - Individual Tree Survey

Drawing No.	Contract No.	Tree No.	Photo No.	Botanical Name	Common pro	Department to rovide expertise dvice to LandsD	SIMAR Slope No.	Height	Trunk DBH (mm)		Structural condition (Good / Fair / Poor)	(Good	/ Fair	(Good	Suitab (High/ Medium /Low)	Remarks	Conservation Status	Recommendations (Retain /Transplant/Fell)	Justification	Remarks	Additional Remarks
60335576/TR/802	C2	T1063	T1063	Melaleuca cajuputi subsp. Cumingian	白千層	LCSD		12	1150	12	Fair	Poor	Fair	Fair	Low	b,c,f	OVT	Retain	Nil	-	WDS/RR
60335576/TR/802	C2	T1064	T1064	Melaleuca cajuputi subsp. Cumingian	白千層	LCSD		13	1210	11	Fair	Poor	Fair	Fair	Low	b,c,f	OVT	Retain	Nil	-	WDS/MT/RR
60335576/TR/802	C2	T1065	T1065	Melaleuca cajuputi subsp. Cumingian	白千層	LCSD		12	800	8	Fair	Poor	Fair	Fair	Low	b,c,f	OVT	Retain	Nil	-	ASC

- (1) Tree being fell by other project(s) shall follow corresponding TPRP(s), and no tree will be compensated/considered under this Project.
 (2) Tree being transplanted by other project(s) shall follow corresponding TPRP(s), and no tree will be transplanted/cosidered under this Project.

Remarks for Suitability for Transplanting

- Remarks for Suitability for Transplanting
 (a) Low amenity value;
 (b) irrecoverable form after transplanting (e.g. if substantial crown and root pruning are necessary to facilitate the transplanting);
 (c) Low survival rate after transplanting;
 (d) very large size (unless the feasibility to transplant has been considered financially reasonable and technically feasible during the (e) with evidence of over-maturity and onset of senescence;
 (f) with poor health, structure or form (e.g. imbalanced form, leaning, with majorcavity/cracks/splits); or cavity/cracks/splits); or (g) undesirable species (e.g. Leucaena leucocephala which is an invasive exotic tree).

- (h) On steep slope.
- (I) Not cost -effectiveness

Conservation status

- (A) The Protection of Endangered Species of Animals and Plants Ordinance (Cap.586)
- (B) Forests and Countryside Ordinance (Cap. 96)

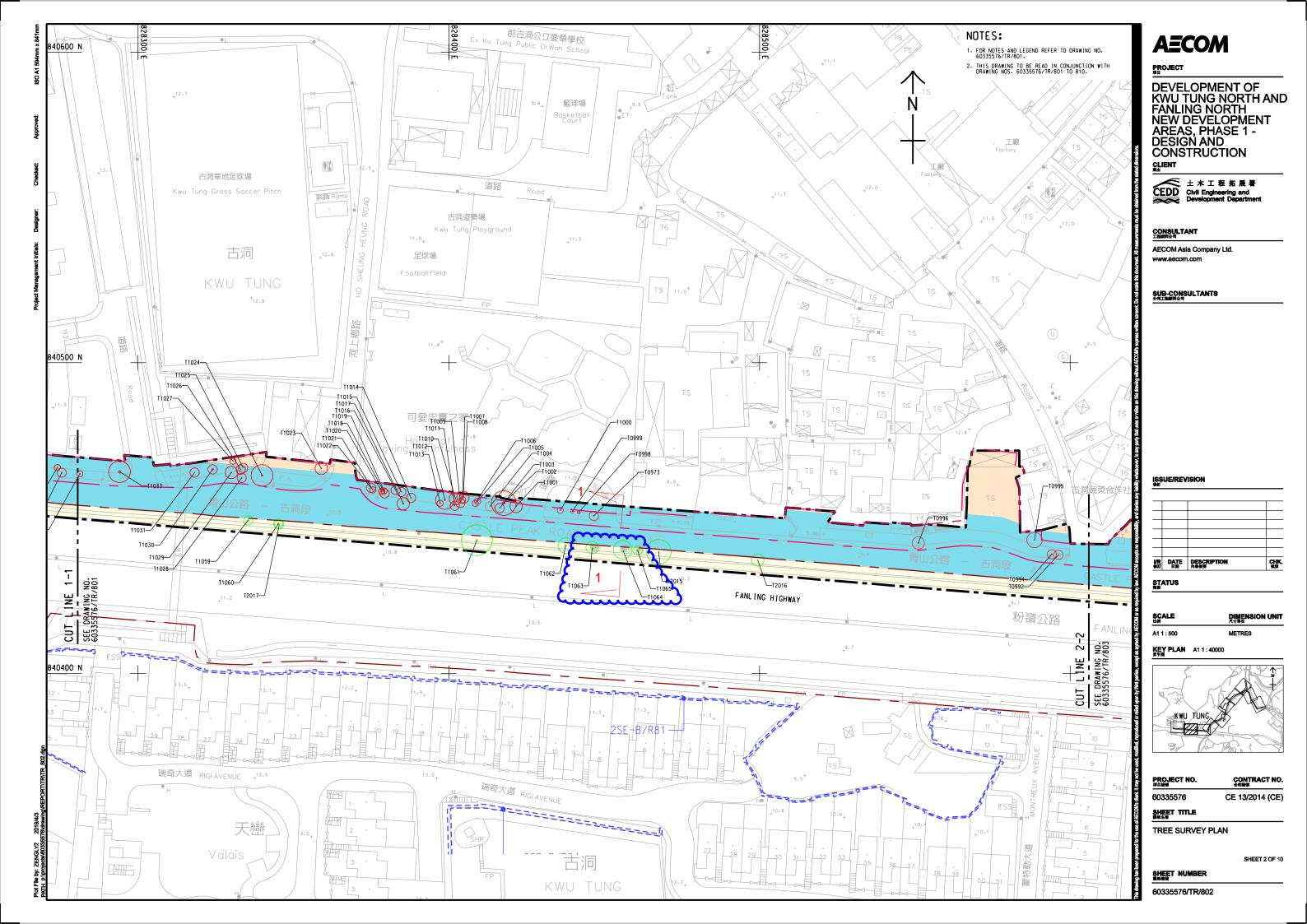
Additional Remarks

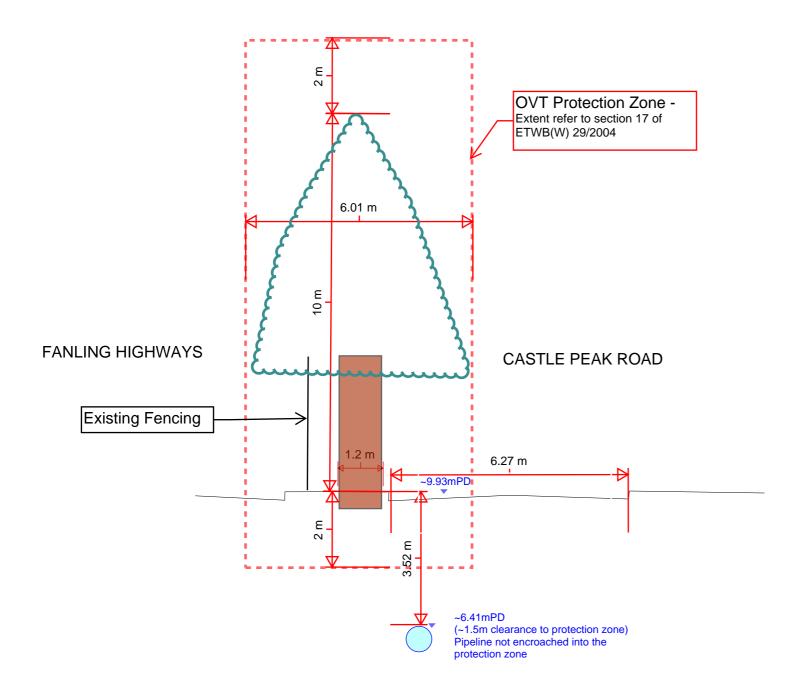
ASC-Asymmetric Canopy; BAD-Bark Distortation; BKB-Broken Branches-wounds; BKT-Broken Trunk-wounds; PHG-Phoenix Regeneration

CAV-Cavity; CLR-Climber; CNK-Canker; COB-Codominant Branches; COK-Crooks/Abrupt COT-Codominant Trunks; CRA-Cracks;

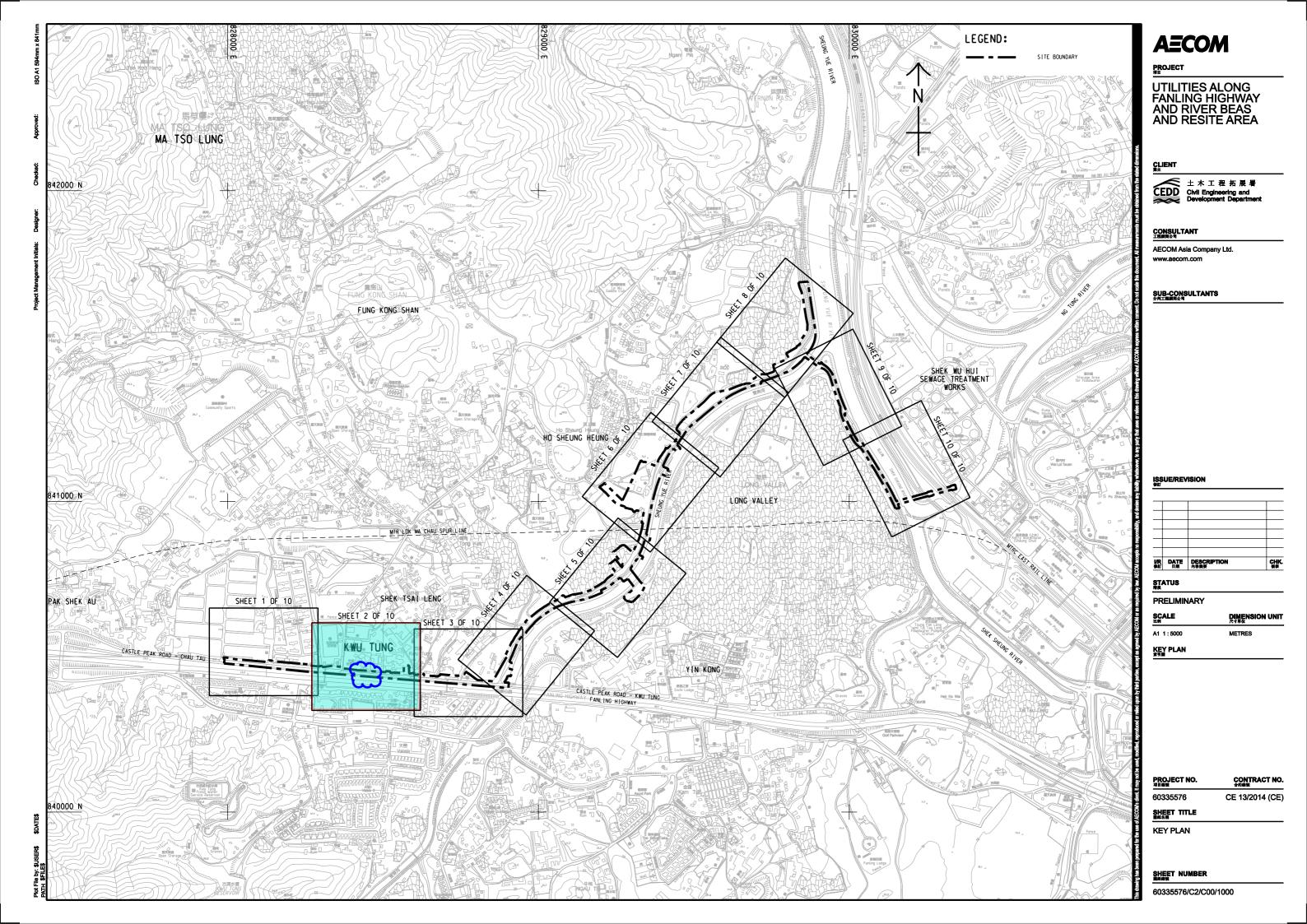
DB-Dead Branches; DBK-Dieback/Dead Twigs; DF-Dead Fronds; DK-Decay; DS-Dead Stubs; EPS-Epicormic Shoot; ER-Exposed Root; FB-Fungal Fruiting Bodies; GR-Girdling Roots; HGR-Hanger;

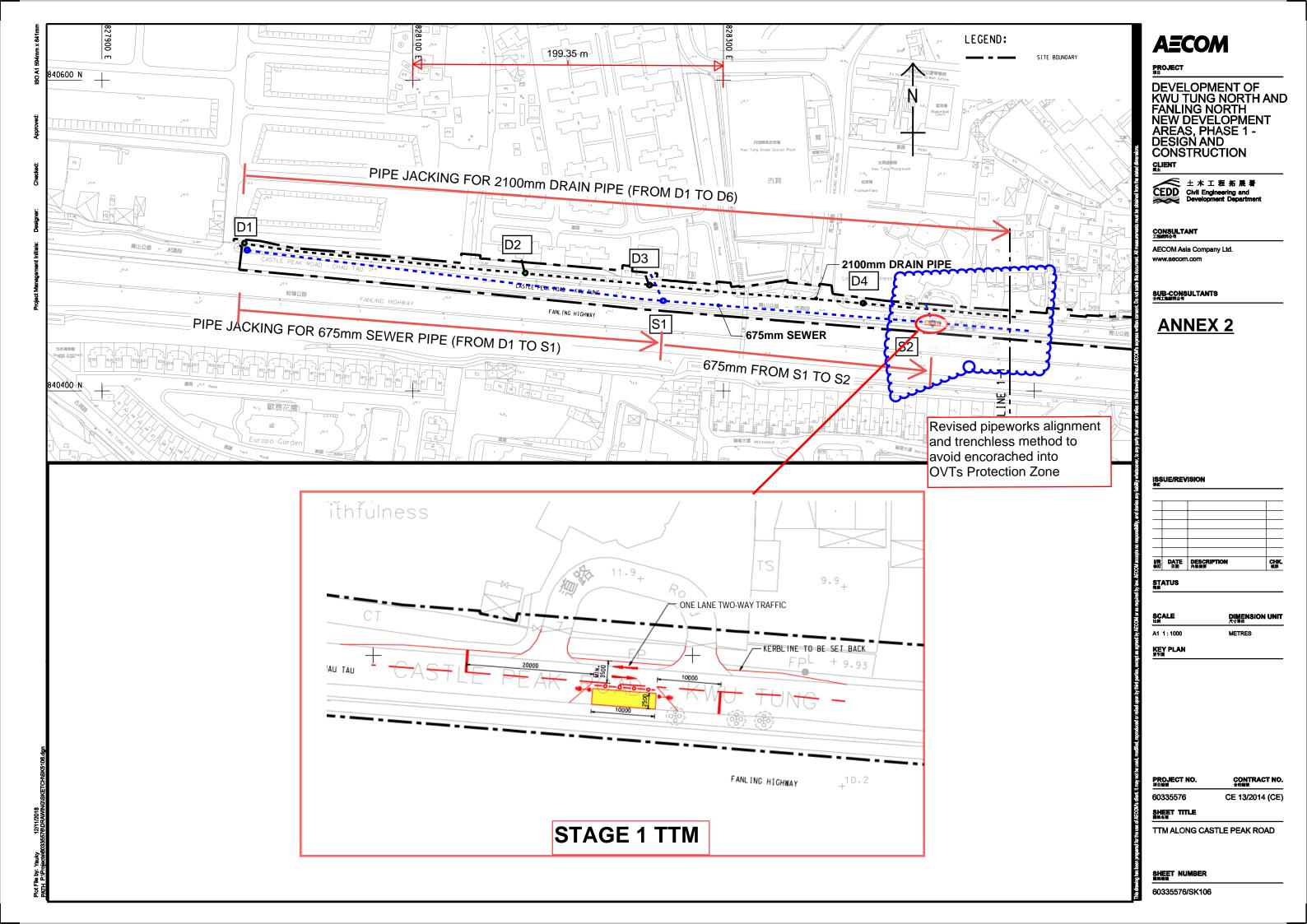
LN-Leaning; MT-Multi-Stems; RP-Root Plate Movement; RR-Restricted Root; SPT-Splits; SUK-Sucker; TB-Tipped Branch; TT-Termite Track; TW-Twisting; UR-Uprooted; WDS-Wounds; XB-Cross Branches

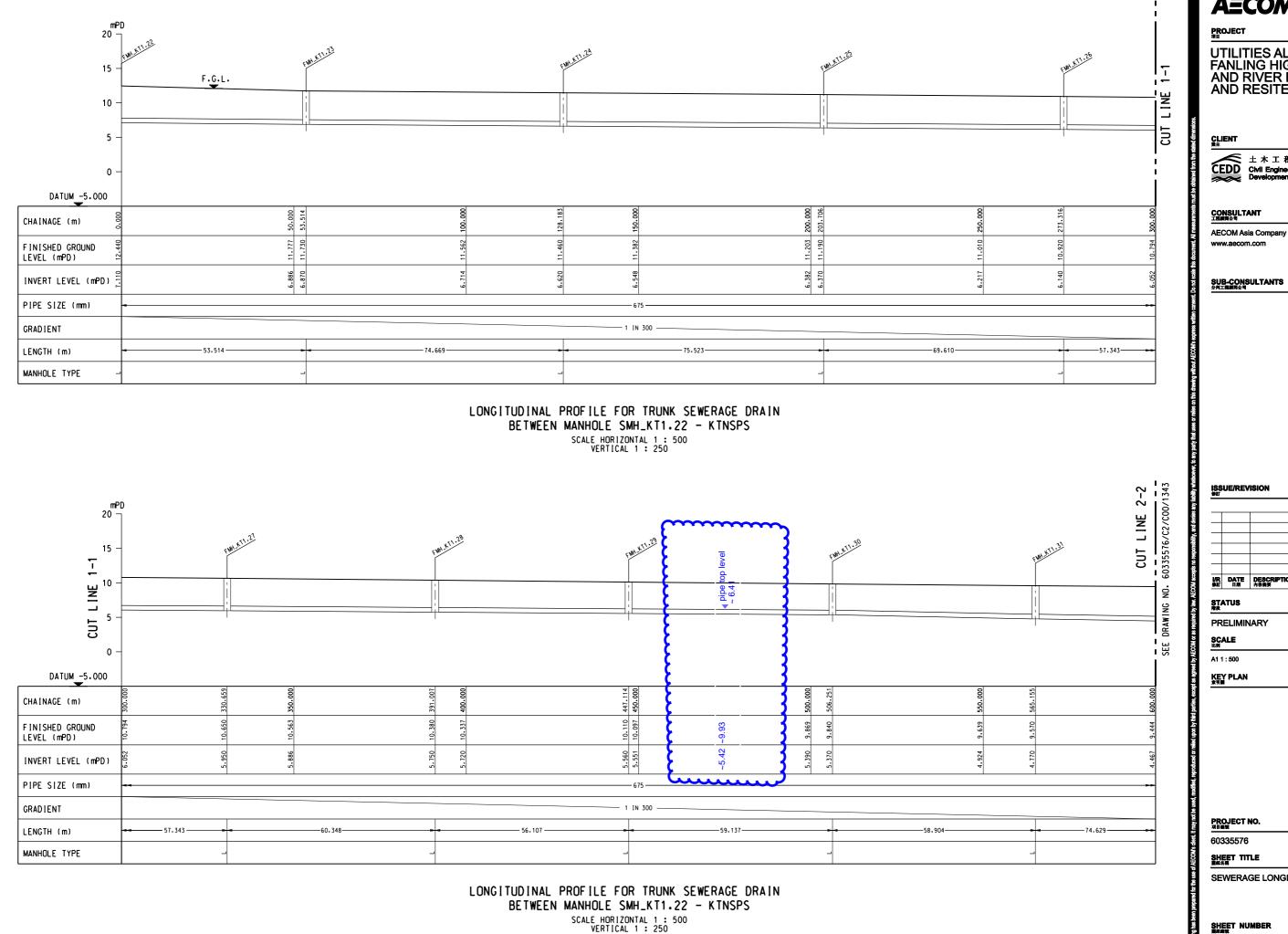




<u>Section 1-1</u> (T1064 - OVT)







AECOM

PROJECT

UTILITIES ALONG FANLING HIGHWAY AND RIVER BEAS AND RESITE AREA

CLIENT



土木工程拓展署
CEDD Civil Engineering and Development Department

CONSULTANT 工程網接受司

AECOM Asia Company Ltd.

ISSUE/REVISION

I/R DATE DESCRIPTION 内容接受 CHK.

STATUS

PRELIMINARY

A1 1:500

KEY PLAN

CONTRACT NO.

60335576

CE 13/2014 (CE)

SHEET TITLE

SEWERAGE LONGITUDINAL PROFILE

SHEET NUMBER

60335576/C2/C00/1342

Appendix VIII

Approval Memo TPRP from Lands Department and Tree Survey Plan of Contract 4

By Fax Only

MEMO .

From	CES/A, LandsD	To PM(NTE), CEDD
Ref.	(14) in LD NDA/RSM/T Pt.2	(Attn. Mr. William CHEUNG)
Tel. No.	3547 0718	Your Ref. () in
Fax. No.	3547 0756	Dated Fax No : 3547 1658
Date	27 March 2017	Total 1

Agreement No. CE 13/2014 (CE)
Development of Kwu Tung North and Fanling North
New Development Areas, Phase 1 – Design and Construction
Contract No. NE/2016/04

Site Formation and Associated Infrastructure Works
For Purpose-built Complex of Residential Care Homes for the Elderly
in Area 29 of Kwu Tung North New Development Area ("the Project")

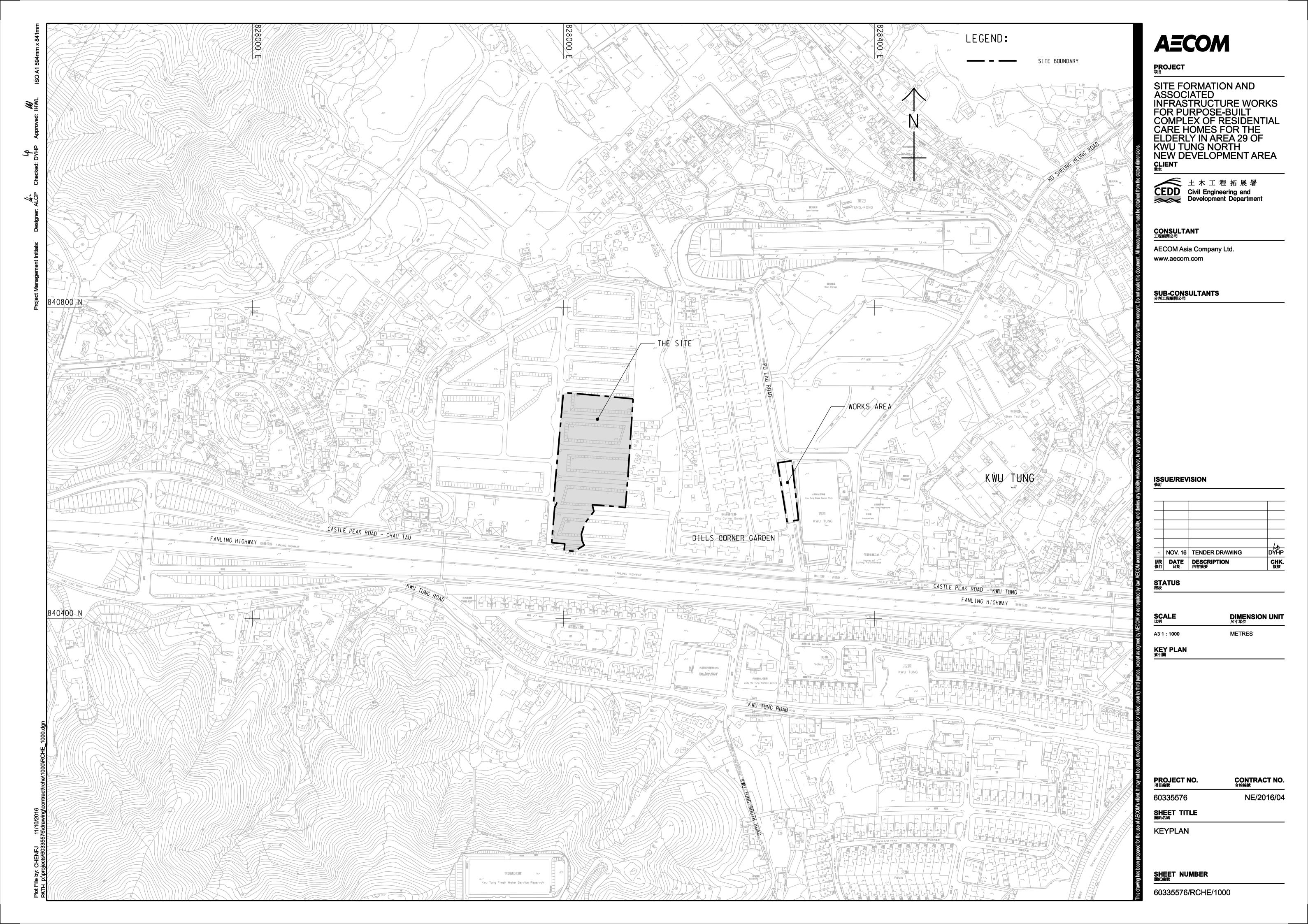
Tree Preservation and Removal Proposal (Final)

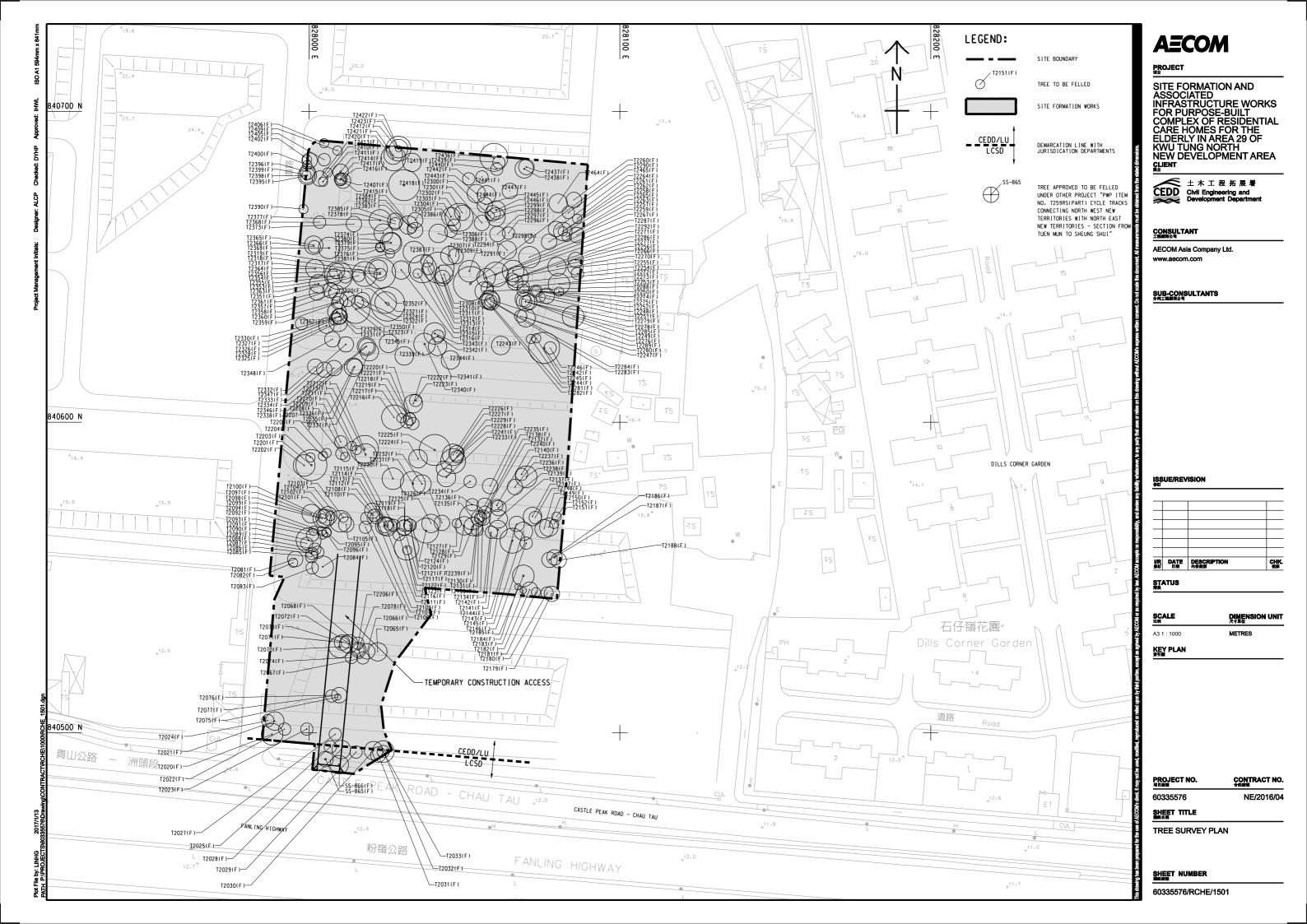
I refer to the submission of Tree Preservation and Removal Proposal (Final) ("TPRP") from your consultant AECOM dated 14.3.2017 regarding the captioned Project.

- 2. Given that the relevant departments including DLCS, DAFC and Landscape Unit of CEDD have no adverse comments to the TPRP, I am pleased to inform you that approval is hereby given to you for felling 325 trees which were in conflict with the construction of the Project, subject to your implementation of the compensatory planting proposal as indicated in Table 6.1 and para. 6.2.6 of the TPRP with locations shown in Appendix V and Appendix X and to be maintained by DLCS and DAFC respectively.
- 3. I wish to reiterate that this office will not take up the maintenance responsibility of any compensated trees. Unless and until other competent office(s) or department(s) is/are identified and agree to take up the maintenance responsibilities of all compensated trees, you are required to shoulder the maintenance responsibilities concerned during the interim period immediately commencing from the completion of the planting.

(KONG Tat-ming)
for Chief Estate Surveyor/Acquisition
Lands Department

c.c.Fax No.Leisure Mgr (Tree) NTN, LCSD(Attn: Ms. Y.T. TAM)2602 0297Nature Conservation Offr (N), AFCD(Attn: Ms. Aidia CHAN)2377 4427SLA/HQ 2, LU, CEDD(Attn: Ms. Kimberley H. Y. LAU)2760 9401SES/N2, LandsD(Attn: Ms. Janice S. F. CHAN)2675 9224





Appendix IX

Practical Difficulties of Conducting Group Tree Survey

Practical Difficulties of Conducting Group Tree Survey

GROUP NO.	SITE SITUATION
KT-G1	Access denied due to local villagers or tenants objection
KT-G2_1	Access denied due to local villagers or tenants objection
KT-G2_2	Access denied due to local villagers or tenants objection
KT-G3	Most of the existing trees were within the vicinity of tenant and access denied
KT-G4	The subject site was fenced off
KT-G5	The subject site was fenced off
KT-G6_1	Access denied due to local villagers or tenants objection
KT-G6_2	Access denied due to local villagers or tenants objection
KT-G7_2	The existing trees are located in the private lots
KT-G7_3	The existing trees are located in the private lots
KT-G7_4	The existing trees are located in the private lots
KT-G7_5	The existing trees are located in the private lots
KT-G7_6	The existing trees are located in the private lots
KT-G7_7	The existing trees are located in the private lots
KT-G7_8	The existing trees are located in the private lots
KT-G7_9	The existing trees are located in the private lots
KT-G7_10	The existing trees are located in the private lots
KT-G7_11	The existing trees are located in the private lots
KT-G7_12	The existing trees are located in the private lots
KT-G7_13	The existing trees are located in the private lots
KT-G7_14	The existing trees are located in the private lots
KT-G7_15	The existing trees are located in the private lots
KT-G8	The existing trees were mostly located in the private land parcel and were surrounded by the adjacent private lots. At the time of survey, access was not allowed to subject trees due to the objections from villagers and owners of lands.
KT-G9_1	Access denied due to local villagers or tenants objection
KT-G9_2	Access denied due to local villagers or tenants objection
KT-G9_3	Access denied due to local villagers or tenants objection
KT-G9_4	Access denied due to local villagers or tenants objection
KT-G9_5	Access denied due to local villagers or tenants objection

GROUP NO.	SITE SITUATION
KT-G10	The existing trees were mostly located in the private land parcel and were surrounded by the adjacent private lots. At the time of survey, access was not allowed to subject trees due to the objections from villagers and owners of lands.
KT-G11	Access denied due to local villagers or tenants objection
FL-G14_1	The existing trees are located in the private lots
FL-G14_2	The existing trees are located in the private lots
FL-G14_3	The existing trees are located in the private lots
FL-G14_4	The existing trees are located in the private lots
FL-G14_5	The existing trees are located in the private lots
FL-G14_6	The existing trees are located in the private lots
FL-G14_7	The existing trees are located in the private lots
FL-G14_8	The existing trees are located in the private lots
FL-G14_9	The existing trees are located in the private lots
FL-G14_10	The existing trees are located in the private lots
FL-G16	The subject site was fenced off
FL-G17	Still waiting for the approval from villagers
FL-G18	The subject site was fenced off
KT-G19_1	The subject site was fenced off
KT-G19_2	The subject site was fenced off
KT-G19_3	The subject site was fenced off
KT-G20	At the time of survey, the location of subject trees could not be tagged and surveyed using survey instrument due to the objections from villagers and tenants. In light of the above, group tree surveys were done
KT-G21	At the time of survey, the location of subject trees could not be tagged and surveyed using survey instrument due to the objections from villagers and tenants. In light of the above, group tree surveys were done
KT-G22	At the time of survey, the location of subject trees could not be tagged and surveyed using survey instrument due to the objections from villagers and tenants. In light of the above, group tree surveys were done
KT-G23	At the time of survey, the location of subject trees could not be tagged and surveyed using survey instrument due to the objections from villagers and tenants. In light of the above, group tree surveys were done
KT-G24	Access denied due to local villagers or tenants objection

Practical Difficulties of Conducting Group Tree Survey

GROUP NO.	SITE SITUATION
KT-G25	Access denied due to local villagers or tenants objection
KT-G26_1	The subject site was fenced off
KT-G26_2	Access denied due to local villagers or tenants objection
KT-G26_3	The subject site was fenced off
KT-G26_4	Access denied due to local villagers or tenants objection
KT-G26_5	The subject site was fenced off
KT-G27_1	Access denied due to local villagers or tenants objection
KT-G27_2	Access denied due to local villagers or tenants objection
KT-G27_3	Access denied due to local villagers or tenants objection
KT-G27_4	Access denied due to local villagers or tenants objection
KT-G27_5	Access denied due to local villagers or tenants objection
KT-G28_1	The subject site was fenced off
KT-G28_2	The subject site was fenced off
KT-G29	Access denied due to local villagers or tenants objection
LV-1	The existing trees are located in the private lots
KT-G31	The subject site was fenced off
KT-G32	The subject site was fenced off
KT-G33_1	The existing trees are located in the private lots
KT-G33_2	The existing trees are located in the private lots
KT-G33_3	The existing trees are located in the private lots
KT-G33_4	The existing trees are located in the private lots
KT-G33_5	The existing trees are located in the private lots
KT-G33_6	The existing trees are located in the private lots
KT-G35	The subject site was fenced off



Appendix X

Method Statement of Tree Preservation, Protection and Transplanting



A. Tree Preservation and Protection Measures

1. Introduction

A specialist landscape contractor from the "List of Approved Suppliers of Materials and Specialist Contractors for Public Works – Landscaping: Class I – General Landscape Work" shall be engaged to carry out the works relating to trees that shall include but not be limited to tree protection, tree surgery work, control of pests and diseases and transplanting.

The contractor shall assign tree protection issues to a suitably qualified and experienced full-time member of the site staff. This member of staff shall be responsible for monitoring and reporting on all tree related issues. All tree survey work shall be supervised by a qualified Arborist or Registered Landscape Architect.

To protect the trees to be retained, the Contractor shall ensure the following for the whole duration of the Contract:

- No unnecessary intrusions such as passage or parking into tree protection areas of existing trees are to be made;
- no access routes will be allowed to pass through existing tree stands;
- the limits of site clearance are to be agreed with the Landscape Architect/Engineer on site before site clearance commences;
- no nails or other fixings shall be driven into trees;
- no soil, materials, equipment or machinery shall be stockpiled or stored within tree protection areas;
- no fencing or signs shall be attached to trees;
- no materials or machinery shall be stored under or against trees;
- no workshop, canteens, or similar shall be installed beneath trees, nor shall equipment maintenance etc. be carried out under trees;
- no trees shall be used as anchors for ropes or chains used in guying, pulling and the like;
- any flammable material or other materials likely to be injurious to the trees shall be kept away from the tree protection areas;
- no fires shall be lit inside or within 5m of the tree protection zone;
- no unauthorised stripping of surface vegetation within tree protection areas;
- no concrete mixing or use or washing out of chemicals shall take place within the tree protection zone;
- excessive water shall be drained away from the tree protection area;
- adjacent felling of trees is done so as not to damage or affect the health of retained trees;
- no unauthorised use of herbicides shall be permitted within the tree protection zone;
- Any equipment shall be carefully operated to avoid causing damage to the trees;
- alkaline fills or paving shall not be applied within the tree protection zone;

To enhance the health and the appearance of the retained trees, advance tree surgery works may be required prior to any construction activity. The following tree surgery work may be required.

- i. Removal of broken, damaged and diseased branches;
- ii. removal of weak or crossing branches to ensure a well-balanced crown.
- iii. protection by fencing;
- iv. Securing of trees with cables throughout the construction period.

2. Crown Thinning

Generally, no crown thinning should be necessary on the retained trees except where preparation works for root pruning are required or as per item 1.i and ii above.

3. Root Pruning

Generally, no root pruning shall be permitted on the retained trees except where permission for pruning has been obtained in the Approved Tree Removal Application or for trees identified for transplanting. The contractor shall submit method statements for the proposed pruning works to the Landscape Architect/Engineer prior to commencing root pruning works.

4. Securing and Staking retained Trees

During construction work and for the duration of the contract, should the site conditions require (eg. local excavations in the vicinity of tree roots or removal of adjacent trees thus exposing retained trees to risk of wind blow), existing trees should be provided with adequate physical support including securing and tying to temporary supports. The contractor shall be liable for the cost of reinstatement of any tree that dies or is damaged due to lack of support and protection. The area of trunk guyed above ground shall be wrapped with pads of hessian or rubber to prevent the tie from chafing the trunk or branches. Retained trees shall be secured with 3 no. cables from the trunk attached to metal stakes 1000mm long driven 700mm into the ground.

5. Pruning works

Damaged branches or branches that must be removed shall be carefully pruned using a sharp clean implement to give a single flat sloping face cut and wounds shall be left open to the air to self heal. All pruning works are to be supervised by a qualified arborist and are to be in accordance with recognised best practice including the Development Bureau's guidelines on pruning works.

6. Pests & Fungal Growth

The site shall be regularly checked for any insect or termite attack or fungus infestation particularly during known periods of activity. Remedial measures shall be carried out. All pesticides, fungicides or chemicals shall be propriety products registered in Hong Kong. Use of sprayed insecticide/fungicides shall only be permitted in strict accordance with the manufacturer's instructions. Use of such materials shall be undertaken with due care and have regard to the safety, environmentally friendly and convenience of the general public and is to be carefully controlled to avoid unnecessary dispersion. In the case of termite attack, specialists shall be employed by the contractor to provide proposals to eliminate the termites and shall submit monthly monitoring reports throughout the contract and the Establishment Period.

7. Maintenance/Establishment Works

Retained trees shall be maintained from site possession until the completion of the project by the contractor who shall engage staff suitably trained and experienced in arboricultural and tree surgery works to undertake the task. The maintenance works shall include all measures necessary to establish and maintain the trees in an acceptable, vigorous and healthy growing condition.

8. Creation and Protection of the Cordon Zone by protective fencing

Tree protective chain link fence shall be erected before other works commence. Protective fencing (minimum 1.5m high) should be erected beyond the crown spread/drip line or the designed protection zone of all existing trees. The protective chain link fence with cover strip to be installed on a concrete base. The protective fence shall be restricted only to workers directly involved in tree work. No construction worker shall enter the cordon zone (CZ). No construction equipment or materials shall breach the CZ. No fires shall be lit in or near the CZ and hoisted materials shall not encroach into the CZ. Where there is a risk of the entry of contaminated construction water and other effluent into the CZ, the base of the protective fence shall be sealed by sand bags at least 200 mm tall if necessary or instructed by the Landscape Architect/Engineer.

9. Monitoring System

The performance of the retained trees shall be monitored throughout the project construction period on a monthly basis by the submission of Tree Protection Reports. Tree growth conditions with reference to trunk, branches, foliage, soil and root, any arboricultural problems and associated remedial measures shall be recorded. Any construction activities that may impact the trees negatively shall be reported well in advance by the Contractor to the Landscape Architect/Engineer for planning of preventive tree work to avoid possible damages.

The contractor shall report to the management office the day's establishment work on the retained trees and a countersigned record log book of the work carried out shall be kept at the site office and made available for inspection. All non-routine tree problems are to be promptly reported to the Landscape Architect/Engineer.

Photographs shall be taken at the following key stages of the tree works:

- i. <u>Before</u> commencement of construction;
- ii. Monthly, throughout the construction and establishment period.

Monthly progress reports with progress photographs on the status of the retained trees including statements on their health should be prepared by the contractor's tree specialist or arborist for the Landscape Architect/Engineer's review and a complete copy provided at the stage of Certificate of Completion.

B. Method Statement and Monitoring System for Transplanting of Existing Trees

The contractor shall submit a method statement for the engineer's approval prior to commencing any transplanting works including advance pruning and preparation works.

1. Crown thinning

The total extent of crown thinning should be minimized and should not exceed 1/4 of the original crown on leaf removal. The height of the tree shall not be reduced, unless crown reduction and thinning are considered appropriate. <u>Under no circumstances should the central main leader of the trees should be pruned or interfered with.</u> Should branch pruning be considered necessary, this should aim specifically at the removal of dead, decayed, diseased, infested, broken, crossed, competing or dangerous branches. The objective shall be to produce a clean, well-spaced, well-shaped and balanced head. Other than these conditions, all other healthy wood should not be cut or removed. To reduce transpiration through leaves in anticipation of root pruning, additional crown thinning shall be implemented by means of leaf picking. This minimum-impact approach will also prevent the loss of the original tree crown form. All work shall be carried out in accordance with good horticultural practice and British Standard 4043:1989 - Recommendations for Transplanting Root Balled Tree Work, ANSI A300 Part 6 – Transplanting Standard, and also based on the latest arboricultural concepts and best international practices, and shall be directed and supervised by the tree specialist or Certified Arborist.

Safety precautions shall be taken to protect those engaged in operations as well as people and property in the vicinity. Pruning and removal of branches shall be done using sharp, clean implements to give a single flat, sloping face. Ragged edges of bark or wood are to be trimmed with a sharp knife. Large branches shall be removed in stages beginning with removal of the main weight of the branch with the final cut as close to the main stem as possible without damaging the bark. In the case of branch removal, the final cut should be aligned with the branch collar and the mid-point of the crotch. All cuts shall be made to avoid splintering or tearing of bark which would catch water and encourage rot. Branches less than 15 mm diameter may be cut with sharp secateurs. Cuts and wounds shall be left open to the air to self heal. Fungicidal bituminous sealing compounds shall not be used.

Cracks and cavities with rotten wood shall be cut back to healthy tissue. If necessary, a cavity that may accumulate water could be drained by drilling a small hole of 5 mm diameter into its bottom at an angle of about 45 degrees taking as far as possible the shortest path and pointing downwards. If necessary, cracks may be secured by rot bracing.

2. Tree pruning

Trees should be checked prior to transplanting to determine the type and extent of pruning required. The following types of pruning may be required:

- a) No hard pruning on tree canopy is allowed.
- b) Light prune
 This shall include the removal of a few branches up to 75mm in diameter.

c) Thin crown

This shall include the picking of leaves of the crown with the extent not to exceed 1/4 of the original tree crown size.

d) Crown cleaning

The removal of dead, diseased or crossed branches

3. Root Pruning

The width of root ball shall be ranging from 8-10 times the trunk diameter (DBH). Immediately upon commencement of the contract, root pruning to the specified size of root ball shall be carried out to ensure maximum new fibrous root growth prior to transplanting operations. The first root pruning should be conducted at least 3 months in advance of transplanting.

The depth of the root ball varies for size and species, normally it shall be 1500mm for DBH of 700 - 1200mm (large tree) 1200 mm for DBH of 300 - 700 mm (medium tree) and 700mm for DBH below 300 (small tree).

Root cutting shall be done in three stages. Each root cutting stage shall be performed at equal intervals throughout the designated root preparation period as mentioned above.

Stage 1: two parallel straight trenches on two sides of the proposed root ball;

Stage 2: trenches on the other two sides of the proposed root ball;

Stage 3: cutting of the underside of the root ball and the transplanting of the tree to the final location.

Roots shall be cut free from ground, not pulled, using a suitable implement to give a clean cut. Cuts and wounds shall be left open to the air to self heal. Fungicidal bituminous sealing compounds shall not be used.

4. Root Ball Preparation

The formed root ball should be wrapped with hessian burlap and on the outside with wire mesh to ensure the soil is kept in full contact around the root system. The root ball shall then be tied with stainless steel chain net with wooden spacers for lifting.

The trenches for the root ball shall be 500 mm wide and backfilled with a prepared soil mix constituting of 3 parts by volume of decomposed granite thoroughly mixed with 1 part by volume of moist peat and root activator.

5. Preparation of the Receptor Site

At the receptor site, pits at pre-determined locations shall be dug in advance to appropriate width and depth to receive the transplanted trees. Tree pits should have a diameter of at least 500mm greater than that of the root ball and should be the same depth as the root ball. During digging operations, topsoil should be stripped and put to one side for reuse and as much of the indigenous soil as possible should be retained, to avoid a distinct interface between the planting pit and the

surrounding soil. The pit shall be of a saucer shape, with a domed centre and sloping sides. The base of the pit should be de-compacted to further improve the interface with the surrounding soil.

6. Tree Uplifting and transit

The lifting, transplanting and planting of the trees shall be closely supervised on site by the tree specialist or Certified Arborist. The logistics of the transplanting operation shall be properly organized and timed in advance so as to enable transplanting of trees directly and promptly to the designated permanent receptor sites for planting.

The trees shall be lifted carefully to avoid damage to stem, foliage and roots. The lifting cables and harnesses shall only be anchored to the chain net wrapping around the root ball for the ball and burlap method. They should never be attached to the trunk or branches. The upper part of the lifting cable should be spread out by frame spacers to prevent the cable from touching the branches at the time of lifting. Guying ropes should be tied to the lifting cable to stabilise the tree at the time of lifting. The trunk and the branch should be temporarily protected by burlap wrapping and be removed once complete.

After root ball preparation and during the process of transplanting to the receptor site, root balls are to be carefully protected against direct sunlight, wind, drought, mechanical, smoke, artificial heat and other damage. Damaged branches shall be carefully pruned using a sharp clean implement to give a single flat sloping face cut. Cuts and wounds shall be left open to the air to self heal and not be painted with fungicidal bituminous sealing compounds.

The transplanted trees shall be planted in an upright position and allowing adequate space for future growth. A soil saucer of 150 mm high shall be formed on the soil surface around the edge of the root ball to permit rain or irrigation water to be retained and to slowly infiltrate into the root ball. Immediately thereafter the trees shall be watered to ensure a thorough soaking of the root balls.

7. Securing and Staking Transplanted Trees

All trees to be staked or guyed shall be wrapped above ground with pads of hessian or rubber to prevent from chafing the trunk or branches.

Transplanted trees shall be staked with 3 no. cables from the trunk with one end tied above the lowest branch of the trunk and the other end tied to metal stakes 1000mm long, driven 700 mm into the ground.

8. Maintenance, Establishment and Monitoring of Transplanted Trees

The transplanted trees shall be maintained immediately after transplanting and thereafter for a period of 12 more months. Maintenance shall include all measures necessary for the tree to establish and to recover from the transplant shock and to permit an acceptable vigorous healthy growing condition. This is to include watering, fertilizing, weeding, application of root activator, staking, application of insecticides, etc.

Should weather conditions be too dry or too hot, mist irrigation should be applied to each tree to upgrade the micro climatic condition surrounding the tree.

The performance of the transplanted trees shall be monitored throughout the maintenance period with monthly Tree Reports submitted with photographs recording: tree growth condition with reference to trunk, branches, foliage, soil and root, any arboricultural problems and associated remedial measures. Any construction activities that may impact the trees negatively shall be reported well in advance to the Landscape Architect for planning of preventive tree work to avoid possible damages.

The contractor shall report to the management office before and after carrying out each days' maintenance works on the transplanted trees and a countersigned record log book of the work carried out shall be kept at the site office and made available for inspection. All non-routine tree problems are to be promptly reported to the Landscape Architect.

Photographs will be taken at the following stage of the tree works:

- 1. Before commencement:
- 2. After crown thinning;
- 3. 1st root pruning;
- 4. 2nd root pruning;
- 5. Final root pruning (under-cutting);
- 6. Forming of root ball;
- 7. Excavation of tree pit at receptor site;
- 8. Transit to final location at receptor site;
- 9. Planting at receptor site;
- 10. Monthly record photographs during 12 months establishment *I* maintenance period after Certificate of Completion.

Monthly progress reports with progress photos on the status of the transplanted trees including all stages of transplanting works, their health and condition will be prepared by the Contractor's tree specialist or Certified Arborist for the Landscape Architect's review and presented at the stage of Certificate of Completion.

Tree Preservation and Protection Measures

1. Introduction

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To protect the trees to be retained, the Contractor shall ensure the following for the whole duration of the Contract:

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- no access routes will be allowed to pass through existing tree stands;
- the limits of site clearance are to be agreed with the Landscape Architect/Engineer on site before site clearance commences;
- no nails or other fixings shall be driven into trees;
- no soil, materials, equipment or machinery shall be stockpiled or stored within tree protection areas;
- no fencing or signs shall be attached to trees;
- no materials or machinery shall be stored under or against trees;
- no workshop, canteens, or similar shall be installed beneath trees, nor shall equipment maintenance etc. be carried out under trees;
- no trees shall be used as anchors for ropes or chains used in guying, pulling and the like;
- any flammable material or other materials likely to be injurious to the trees shall be kept away from the tree protection areas;
- no fires shall be lit inside or within 5m of the tree protection zone;
- no unauthorised stripping of surface vegetation within tree protection areas;
- no concrete mixing or use or washing out of chemicals shall take place within the tree protection zone;
- excessive water shall be drained away from the tree protection area;
- adjacent felling of trees is done so as not to damage or affect the health of retained trees;
- no unauthorised use of herbicides shall be permitted within the tree protection zone;
- Any equipment shall be carefully operated to avoid causing damage to the trees;
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- iv. Securing of trees with cables throughout the construction period.

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Generally, no crown thinning should be necessary on the retained trees except where preparation works for root pruning are required or as per item 1.i and ii above.

3. Root Pruning

Generally, no root pruning shall be permitted on the retained trees except where permission for pruning has been obtained in the Approved Tree Removal Application or for trees identified for transplanting. The contractor shall submit method statements for the proposed pruning works to the Landscape Architect/Engineer prior to commencing root pruning works.

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5. Pruning works

Damaged branches or branches that must be removed shall be carefully pruned using a sharp clean implement to give a single flat sloping face cut and wounds shall be left open to the air to self heal. All pruning works are to be supervised by a qualified arborist and are to be in accordance with recognised best practice including the Development Bureau's guidelines on pruning works.

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9. Monitoring System

The performance of the retained trees shall be monitored throughout the project construction period on a monthly basis by the submission of Tree Protection Reports. Tree growth conditions with reference to trunk, branches, foliage, soil and root, any arboricultural problems and associated remedial measures shall be recorded. Any construction activities that may impact the trees negatively shall be reported well in advance by the Contractor to the Landscape Architect/Engineer for planning of preventive tree work to avoid possible damages.

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- i. Before commencement of construction;
- ii. Monthly, throughout the construction and establishment period.

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Method Statement and Monitoring System for Transplanting of Existing Trees

The contractor shall submit a method statement for the engineer's approval prior to commencing any transplanting works including advance pruning and preparation works.

1. Crown thinning

The total extent of crown thinning should be minimized and should not exceed 1/4 of the original crown on leaf removal. The height of the tree shall not be reduced, unless crown reduction and thinning are considered appropriate. <u>Under no circumstances should the central main leader of the trees should be pruned or interfered with.</u> Should branch pruning be considered necessary, this should aim specifically at the removal of dead, decayed, diseased, infested, broken, crossed, competing or dangerous branches. The objective shall be to produce a clean, well-spaced, well-shaped and balanced head. Other than these conditions, all other healthy wood should not be cut or removed. To reduce transpiration through leaves in anticipation of root pruning, additional crown thinning shall be implemented by means of leaf picking. This minimum-impact approach will also prevent the loss of the original tree crown form. All work shall be carried out in accordance with good horticultural practice and British Standard 4043:1989 - Recommendations for Transplanting Root Balled Tree Work, ANSI A300 Part 6 – Transplanting Standard, and also based on the latest arboricultural concepts and best international practices, and shall be directed and supervised by the tree specialist or Certified Arborist.

Safety precautions shall be taken to protect those engaged in operations as well as people and property in the vicinity. Pruning and removal of branches shall be done using sharp, clean implements to give a single flat, sloping face. Ragged edges of bark or wood are to be trimmed with a sharp knife. Large branches shall be removed in stages beginning with removal of the main weight of the branch with the final cut as close to the main stem as possible without damaging the bark. In the case of branch removal, the final cut should be aligned with the branch collar and the mid-point of the crotch. All cuts shall be made to avoid splintering or tearing of bark which would catch water and encourage rot. Branches less than 15 mm diameter may be cut with sharp secateurs. Cuts and wounds shall be left open to the air to self heal. Fungicidal bituminous sealing compounds shall not be used.

Cracks and cavities with rotten wood shall be cut back to healthy tissue. If necessary, a cavity that may accumulate water could be drained by drilling a small hole of 5 mm diameter into its bottom at an angle of about 45 degrees taking as far as possible the shortest path and pointing downwards. If necessary, cracks may be secured by rot bracing.

2. Tree pruning

Trees should be checked prior to transplanting to determine the type and extent of pruning required. The following types of pruning may be required:

- a) No hard pruning on tree canopy is allowed.
- b) Light prune
 This shall include the removal of a few branches up to 75mm in diameter.
- c) Thin crown

This shall include the picking of leaves of the crown with the extent not to exceed 1/4 of the original tree crown size.

d) Crown cleaning

The removal of dead, diseased or crossed branches

3. Root Pruning

The width of root ball shall be ranging from 8-10 times the trunk diameter (DBH). Immediately upon commencement of the contract, root pruning to the specified size of root ball shall be carried out to ensure maximum new fibrous root growth prior to transplanting operations. The first root pruning should be conducted at least 3 months in advance of transplanting.

The depth of the root ball varies for size and species, normally it shall be 1500mm for DBH of 700 - 1200mm (large tree) 1200 mm for DBH of 300 - 700 mm (medium tree) and 700mm for DBH below 300 (small tree).

Root cutting shall be done in three stages. Each root cutting stage shall be performed at equal intervals throughout the designated root preparation period as mentioned above.

Stage 1: two parallel straight trenches on two sides of the proposed root ball;

Stage 2: trenches on the other two sides of the proposed root ball;

Stage 3: cutting of the underside of the root ball and the transplanting of the tree to the final location.

Roots shall be cut free from ground, not pulled, using a suitable implement to give a clean cut. Cuts and wounds shall be left open to the air to self heal. Fungicidal bituminous sealing compounds shall not be used.

4. Root Ball Preparation

The formed root ball should be wrapped with hessian burlap and on the outside with wire mesh to ensure the soil is kept in full contact around the root system. The root ball shall then be tied with stainless steel chain net with wooden spacers for lifting.

The trenches for the root ball shall be 500 mm wide and backfilled with a prepared soil mix constituting of 3 parts by volume of decomposed granite thoroughly mixed with 1 part by volume of moist peat and root activator.

5. Preparation of the Receptor Site

At the receptor site, pits at pre-determined locations shall be dug in advance to appropriate width and depth to receive the transplanted trees. Tree pits should have a diameter of at least 500mm greater than that of the root ball and should be the same depth as the root ball. During digging operations, topsoil should be stripped and put to one side for reuse and as much of the indigenous soil as possible should be retained, to avoid a distinct interface between the planting pit and the surrounding soil. The pit shall be of a saucer shape, with a domed centre and sloping sides. The

base of the pit should be de-compacted to further improve the interface with the surrounding soil.

6. Tree Uplifting and transit

The lifting, transplanting and planting of the trees shall be closely supervised on site by the tree specialist or Certified Arborist. The logistics of the transplanting operation shall be properly organized and timed in advance so as to enable transplanting of trees directly and promptly to the designated permanent receptor sites for planting.

The trees shall be lifted carefully to avoid damage to stem, foliage and roots. The lifting cables and harnesses shall only be anchored to the chain net wrapping around the root ball for the ball and burlap method. They should never be attached to the trunk or branches. The upper part of the lifting cable should be spread out by frame spacers to prevent the cable from touching the branches at the time of lifting. Guying ropes should be tied to the lifting cable to stabilise the tree at the time of lifting. The trunk and the branch should be temporarily protected by burlap wrapping and be removed once complete.

After root ball preparation and during the process of transplanting to the receptor site, root balls are to be carefully protected against direct sunlight, wind, drought, mechanical, smoke, artificial heat and other damage. Damaged branches shall be carefully pruned using a sharp clean implement to give a single flat sloping face cut. Cuts and wounds shall be left open to the air to self heal and not be painted with fungicidal bituminous sealing compounds.

The transplanted trees shall be planted in an upright position and allowing adequate space for future growth. A soil saucer of 150 mm high shall be formed on the soil surface around the edge of the root ball to permit rain or irrigation water to be retained and to slowly infiltrate into the root ball. Immediately thereafter the trees shall be watered to ensure a thorough soaking of the root balls.

7. Securing and Staking Transplanted Trees

All trees to be staked or guyed shall be wrapped above ground with pads of hessian or rubber to prevent from chafing the trunk or branches.

Transplanted trees shall be staked with 3 no. cables from the trunk with one end tied above the lowest branch of the trunk and the other end tied to metal stakes 1000mm long, driven 700 mm into the ground.

8. Maintenance, Establishment and Monitoring of Transplanted Trees

The transplanted trees shall be maintained immediately after transplanting and thereafter for a period of 12 more months. Maintenance shall include all measures necessary for the tree to establish and to recover from the transplant shock and to permit an acceptable vigorous healthy growing condition. This is to include watering, fertilizing, weeding, application of root activator, staking, application of insecticides, etc.

Should weather conditions be too dry or too hot, mist irrigation should be applied to each tree to upgrade the micro climatic condition surrounding the tree.

The performance of the transplanted trees shall be monitored throughout the maintenance period

with monthly Tree Reports submitted with photographs recording: tree growth condition with reference to trunk, branches, foliage, soil and root, any arboricultural problems and associated remedial measures. Any construction activities that may impact the trees negatively shall be reported well in advance to the Landscape Architect for planning of preventive tree work to avoid possible damages.

The contractor shall report to the management office before and after carrying out each days' maintenance works on the transplanted trees and a countersigned record log book of the work carried out shall be kept at the site office and made available for inspection. All non-routine tree problems are to be promptly reported to the Landscape Architect.

Photographs will be taken at the following stage of the tree works:

- 1. Before commencement;
- 2. After crown thinning;
- 3. 1st root pruning;
- 4. 2nd root pruning;
- 5. Final root pruning (under-cutting);
- 6. Forming of root ball;
- 7. Excavation of tree pit at receptor site;
- 8. Transit to final location at receptor site;
- 9. Planting at receptor site;
- 10. Monthly record photographs during 12 months establishment *I* maintenance period after Certificate of Completion.

Monthly progress reports with progress photos on the status of the transplanted trees including all stages of transplanting works, their health and condition will be prepared by the Contractor's tree specialist or Certified Arborist for the Landscape Architect's review and presented at the stage of Certificate of Completion.

Appendix XI

Method Statement For Preservation of OVTs



APPENDIX XI METHOD STATEMENT AND PROPOSAL FOR PRESERVATION OF OVTS

1.1 Contract Provisions for OVT Protection

- 1.1.1 Preservation of the OVTs will be implemented under the construction contract in accordance with the requirements as stated in ETWB TC(W) No. 29/2004 Registration of Old and Valuable Trees, and Guidelines for their Preservation.
- 1.1.2 Contract provision for preservation of the existing trees including the employment of Independent Tree Specialist will be incorporated into the contract documents of the construction contract for the compliance of the future contractor.

1.2 <u>Preparation of Tree Protection Works</u>

- 1.2.1 Submit working programme to indicate specific work task duration for approval of and coordination with LCSD.
- 1.2.2 Detailed tree survey report for tree and site condition
 - Site condition including soil level, root collar level
 - Tree condition including surface root spread, overall height, crown spread, DBH; foliage, branch, trunk and root
 - c. Carry out detailed topographic survey for all the tree branches with diameter >50mm in diameter
 - d. Carry out radar inspection to identify the extent of the tree roots of the OVTs
- 1.2.3 Photographic record of whole tree, crown, trunk, root collar, ground condition and special feature; imprinted with date.
- 1.2.4 Identify tree protection zone at canopy dripline to ground in accordance with ETWB TCW No. 29/2004.
- 1.2.5 Pruning works shall be carried out by a certified arborist or under supervision of the competent supervisory staff with arboriculture knowledge in accordance with the minimum requirements as stated in Appendix D of DEVB TCW No. 7/2015 Tree Preservation.
- 1.2.6 All tools to be sterilized with diluted bleach or equivalent after each tree operation to minimize the potential fungal and bacterial infection.

1.3 Advanced Construction of Tree Protective Fence

- 1.3.1 The proposed tree protection zone for the OVTs are shown in Tree Protection Plan in Tree Removal Application and the method for the preparation of tree protection works are summarized below:
 - a. erect protective fence 2 m height on perimeter of the tree protection zone with access opening at access path. Foundation of protective fence should be outside TPZ
 - b. construction details to be submitted for approval

- c. the base of the protective fence shall be sealed by a waterproof rim such as sandbag at least 300 mm tall to prevent the entry of contaminated construction water and other effluent from entering into the soil in tree protection zone
- 1.3.2 Tree protective fence shall be constructed prior to the commencement of any engineering works.

1.4 Protection of Tree Root

- 1.4.1 No root pruning will be allowed for all the OVTs to minimize any potential adverse impact to the OVTs.
- 1.4.2 Prior to the commencement of road works, the extent of the root of the OVT shall be surveyed by Radar Inspection. The soil above the root shall be removed by hand tools.
- 1.4.3 A protective geotextile membrane, which has high textile strength and can allow free flow of water and air, shall laid on top of the root to avoid potential damage of tree root surface by abrasion.
- 1.4.4 A minimum of 100mm thick drainage aggregates, which can withstand high structural load, shall be laid on top of the root before the construction of any road works above the root to ensure that air and water can flow freely above the root surface.

1.5 Anchoring

- a. install physical support to ensure its stability
- b. anchoring material and guying method to be submitted for approval
- trunk and branch to be protected with 2mm thick and 190mm wide flexible rubber pad

1.6 <u>Safety Measures</u>

- avoid pruning trees on humid, windy and rainy days as far as possible
- b. deploy adequate manpower to maintain traffic flow
- c. clear and fence off the tree pruning area to prevent entry by others
- d. place directional/warning signs to divert traffic/pedestrian, with approval from the authority, if necessary
- e. operatives will put on proper protective clothing such as goggles, chainsaw trousers, safety boots, gloves and helmets
- f. use appropriate tools for the job such as small chainsaws, polesaws, bow saws, long pruners, and ropes
- g. apply suitable platform or hydraulic platform to carry out canopy pruning if necessary

1.7 <u>Tree Maintenance during Construction</u>

1.7.1 During the construction phase, trees will be maintained by CEDD's Contractor in accordance with the General Specification which include but not limited to watering, weeding, fertilizing, litter collection and control of pests, fungi and disease etc.



1.8 Establishment Works

- 1.8.1 During establishment period (1 year), trees will be maintained by CEDD's Contractor until completion of all construction works; maintenance works include watering, weeding, grass cutting and apply insecticide and fungicide if necessary:
 - a. inspect and maintain well drained of the ground soil
 - b. inspect and adjust tree support, tree ties
 - c. carry out precautionary measure when typhoon or inclement weather is forecast
 - d. remove the temporary protective fencing from the Site upon completion of all construction works

1.9 Regular Monitoring during the Construction and Establishment Period

- 1.9.1 The OVTs shall be closely monitored during the construction and establishment period. An Independent Tree Specialist shall be engaged to carry out daily inspection for tree protection works for OVTs on site as well as all requirements as stated in the contract provisions. He shall ensure that all tree protection measures recommended are fully executed during the construction and establishment period.
- 1.9.2 The Independent Tree Specialist shall also carry out detailed assessment to the health of the OVTs and provide recommendations to arboricultural treatment as necessary.
- 1.9.3 Monthly report including photographic records of the health conditions and arboricultural treatments applied to the OVTs shall be prepared and Tree Risk Assessment at least twice per year and after the lowering of Tropical Cyclone Signal No.8 and/or Black Rain Storm Warning shall be submitted during the construction period and establishment period until handover to final maintenance party.

1.10 Tree Preservation and Protection Measures for Public Works

- 1.10.1 For public works construction contracts (including maintenance works contracts and ground investigation contracts) for which tenders are invited on or after 1 November 2004, the project office should incorporate the contractual requirements for preservation of any registered tree that exists within the site. A set of sample contractual clauses for inclusion in the Form of Tender, Special Conditions of Contract, Particular Specification (PS), Method of Measurement and associated items in the Bill of Quantities for preservation of registered trees will soon be available in the Cyber Manual for Greening (http://portal.ccgo.hksarg/index.jsp). Where appropriate, the sample PS may need to be modified to suit specific project requirements after taking into consideration the comments of LCSD/AFCD as well as the approval conditions stipulated by LandsD as mentioned in paragraphs 18 and 19 above.
- 1.10.2 The contractual clauses also stipulate that if the contractor is found liable for the damage or unauthorized removal of any registered trees in the site, he is required to reimburse the cost that Government has expended on preservation, protection, maintenance and nurturing of the trees. Furthermore, the contractor will be required to carry out replacement planting and the necessary landscape works to reinstate the affected land at his own cost.



Appendix XII

Tree Maintenance Schedule For Retained Trees and Transplanted Trees

Appendix XIII - Tree Maintenance Schedule For Retained Trees, Transplanted Trees and New Trees

- Tree Maintenance Schedule i) All retained trees will be maintained throughout the construction period, whereas all transplanted trees and new trees will receive a minimum 12-month establishment period.
 - Maintenance works will include caring works such as irrigation, application of fertilizers and pesticides, mulching and staking etc.
 - iii) Details of Maintenance Schedules for Retained Trees, Transplanted Trees and New Trees will be illustrated as follows:

Maintenance Operations During Construction Period - Retained Tree

mammonario oporationo	<u> </u>	<u> </u>	4011011			0 <u>4 1100</u>						
Maintenance Operation	Jan	Feb	Mar	Apr	May	Jun	<u>Jul</u>	Aug	Sep	Oct	Nov	Dec
General inspection	once	once	once	once	once	once	once	once	once	once	once	once
Check for insect/fungus	once	once	once	once	once	once	once	once	once	once	once	once
Litter collection	once	once	once	once	once	once	once	once	once	once	once	once
Watering												
Weeding			once	once	once	once	once	once	once	once		
Replacement planting												
Pruning			(once)					(once)				
Fertilising												
Staking and tying												

(every day) operation if required

(once) operation if required

Maintenance Operations During Establishment Period - Transplanted Tree

Maintenance Operation	<u>Jan</u>	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
General inspection	once	once	once	once	once	once	once	once	once	once	once	once
Check for insect/fungus	once	once	once	once	once	once	once	once	once	once	once	once
Litter collection	once	once	once	once	once	once	once	once	once	once	once	once
Watering	every day	every day	every day	(every day)	(every day)	(every day)	(every day)	(every day)	every day	every day	every day	every day
Weeding			once	once	once	once	once	once	once	once		
Replacement planting				any time	any time	any time	any time					
Fertilising				once								
Staking and tying				once								

(every day) operation if required

(once) operation if required

Maintenance Operations During Establishment Period - New Trees

Maintenance Operation	lon	Feb	Mar	Anr	May	lun	lul	Λιια	Son	Oot	Nov	Dec
Maintenance Operation	Jan	гер	iviai	Apr	iviay	Jun	Jul	Aug	Sep	Oct	Nov	Dec
General inspection	once	once	once	once	once	once	once	once	once	once	once	once
Check for insect/fungus	once	once	once	once	once	once	once	once	once	once	once	once
Litter collection	once	once	once	once	once	once	once	once	once	once	once	once
Watering	every day	every day	every day	(every day)	(every day)	(every day)	(every day)	(every day)	every day	every day	every day	every day
Weeding			once	once	once	once	once	once	once	once		
Replacement planting				any time	any time	any time	any time					
Pruning			(once)					(once)				
Fertilising				once								
Staking and tying				once								

(every day) operation if required

(once) operation if required

Appendix XIII

Justification of Felling Large Diameter Trees



Agreement No. CE 13/2014 (CE)

Surveyed and Prepared by Stanley To Latest Field Survey was conducted on 29-Nov-18

Development of Kwu Tung North and Fanling North New Development Areas - Phase 1 - Design and Construction

Tree Assessment Schedule - Individual Tree Survey

								SIZE	(M)	Structura	Form	Health	Amenity	Suita	ability for					
Drawing No.	Contract No	o. Tre No	Photo No.	Botanical Name	Chinese Common Name	Department to provide expertise advice to LandsD	SIMAR Slope No. He	ght DBF	Spread (m)	condition (Good / Fair / Poor)	(Good / Fair / Poor)	(Good / Fair / Poor)	Value (Good / Fair / Poor)	(High/ Medium /Low)	Remarks	Conservation Status	Recommendations (Retain /Transplant/Fell)	Justification	Remarks	Additional Remarks
60335576/TR/709	C1	T16	17 T1617	Eucalyptus urophylla	尾葉桉	AFCD	1	5 112	0 10	Fair	Poor	Fair	Fair	Low	b,c,f	Nil	Fell	Direct Conflict with Proposed Road Works	Refer to Appendix XIII for more Detail	BKB/DB/DS/HGR/MT
60335576/TR/409	C5	T61	49 T6149	Ficus microcarpa	細葉榕	AFCD	1:	.5 136	9 13	Fair	Poor	Fair	Fair	Low	b,c,f	Nil	Fell	Direct Conflict with Proposed Bridge due Insufficient Headroom	Refer to Appendix XIII for more Detail	ASC/DB/WDS/DS
60335576/TR/411	C5	T26	38 T2638	Ficus microcarpa	榕樹	AFCD	1	4 118	0 12	Fair	Poor	Fair	Fair	Low	b,c,f	Nil	Fell	Direct Conflict with Proposed Bridge due Insufficient Headroom	Refer to Appendix XIII for more Detail	XB/DB/MT
60335576/TR/412	C5	T60	06 T6006	Ficus microcarpa	細葉榕	AFCD	1	2 179	3 10	Fair	Poor	Fair	Fair	Low	b,c,f	Nil	Fell	Direct Conflict with Proposed Bridge due Insufficient Headroom	Refer to Appendix XIII for more Detail	ASC/DB/XB
60335576/TR/412	C5	T60	10 T6010	Ficus microcarpa	細葉榕	AFCD	1	2 186	6 10	Fair	Poor	Fair	Fair	Low	b,c,f	Nil	Fell	Direct Conflict with Proposed Bridge due Insufficient Headroom	Refer to Appendix XIII for more Detail	ASC/DB
60335576/TR/412	C5	T60	16 T6016	Ficus microcarpa	細葉榕	AFCD	1	4 150	6 10	Fair	Poor	Fair	Fair	Low	b,c,f	Nil	Fell	Direct Conflict with Proposed Bridge due Insufficient Headroom	Refer to Appendix XIII for more Detail	ASC/DB/XB
60335576/TR/413	C5	T43	354 T4354	Cinnamomum camphora	樟	AFCD		3 100	8 0	Fair	Fair	Fair	Fair	Low	b,c,d	Nil	Fell	Direct Conflict with Proposed Bridge due Insufficient Headroom	Refer to Appendix XIII for more Detail	WDS/DB/DS/TB

- (1) Tree being fell by other project(s) shall follow corresponding TPRP(s), and no tree will be compensated/considered under this Project.(2) Tree being transplanted by other project(s) shall follow corresponding TPRP(s), and no tree will be transplanted/cosidered under this Project.

Remarks for Suitability for Transplanting

- (a) Low amenity value;
- (b) irrecoverable form after transplanting (e.g. if substantial crown and root pruning are necessary to facilitate the transplanting);
- (c) Low survival rate after transplanting;
- (d) very large size (unless the feasibility to transplant has been considered financially reasonable and technically feasible during the feasib
- (e) with evidence of over-maturity and onset of senescence;
- (f) with poor health, structure or form (e.g. imbalanced form, leaning, with majorcavity/cracks/splits); or cavity/cracks/splits); or (g) undesirable species (e.g. Leucaena leucocephala which is an invasive exotic tree).
- (h) On steep slope.
- (I) Not cost -effectiveness

(A) The Protection of Endangered Species of Animals and Plants Ordinance (Cap.586)

(B) Forests and Countryside Ordinance (Cap. 96)

Additional Remarks

ASC-Asymmetric Canopy; BAD-Bark Distortation; BKB-Broken Branches-wounds; BKT-Broken Trunk-wounds; PHG-Phoenix Regeneration

CAV-Cavity; CLR-Climber; CNK-Canker; COB-Codominant Branches; COK-Crooks/Abrupt COT-Codominant Trunks; CRA-Cracks;

DB-Dead Branches; DBK-Dieback/Dead Twigs; DF-Dead Fronds; DK-Decay; DS-Dead Stubs; EPS-Epicormic Shoot; ER-Exposed Root; FB-Fungal Fruiting Bodies; GR-Girdling Roots; HGR-Hanger; LN-Leaning; MT-Multi-Stems; RP-Root Plate Movement; RR-Restricted Root; SPT-Splits; SUK-Sucker; TB-Tipped Branch; TT-Termite Track; TW-Twisting; UR-Uprooted; WDS-Wounds; XB-Cross Branches

Agreement No. CE 13/2014 (CE) Surveyed and Prepared by Stanley To Latest Field Survey was conducted on 29-Nov-18 Development of Kwu Tung North and Fanling North New Development Areas - Phase 1 - Design and Construction

Tree Assessment Schedule - Individual Tree Survey

Drawing No. Contract No. Tree No. No.	Botanical Name	Chinese Common Name	Department to provide expertise advice to LandsD	e No. Heigh	SIZE (M Trunk DBH (mm)		Structural condition (Good / Fair / Poor)	Form (Good / Fair / Poor)	Health (Good / Fair / Poor)	Amenity Value (Good / Fair / Poor)	Suital (High/ Medium /Low)	Remarks	Conservation Status	Recommendations (Retain /Transplant/Fell)	Justification	Remarks	Additional Remarks
60335576/TR/709 C1 T1617 T1617	Eucalyptus urophylla	尾葉桉	AFCD	15	1120	10	Fair	Poor	Fair	Fair	Low	b,c,f	Nil	Fell	Direct Conflict with Proposed Road Works	Refer to Appendix XIII for more Detail	BKB/DB/DS/HGR/MT

- (1) Tree being fell by other project(s) shall follow corresponding TPRP(s), and no tree will be compensated/considered under this Project.
- (2) Tree being transplanted by other project(s) shall follow corresponding TPRP(s), and no tree will be transplanted/cosidered under this Project.

Remarks for Suitability for Transplanting

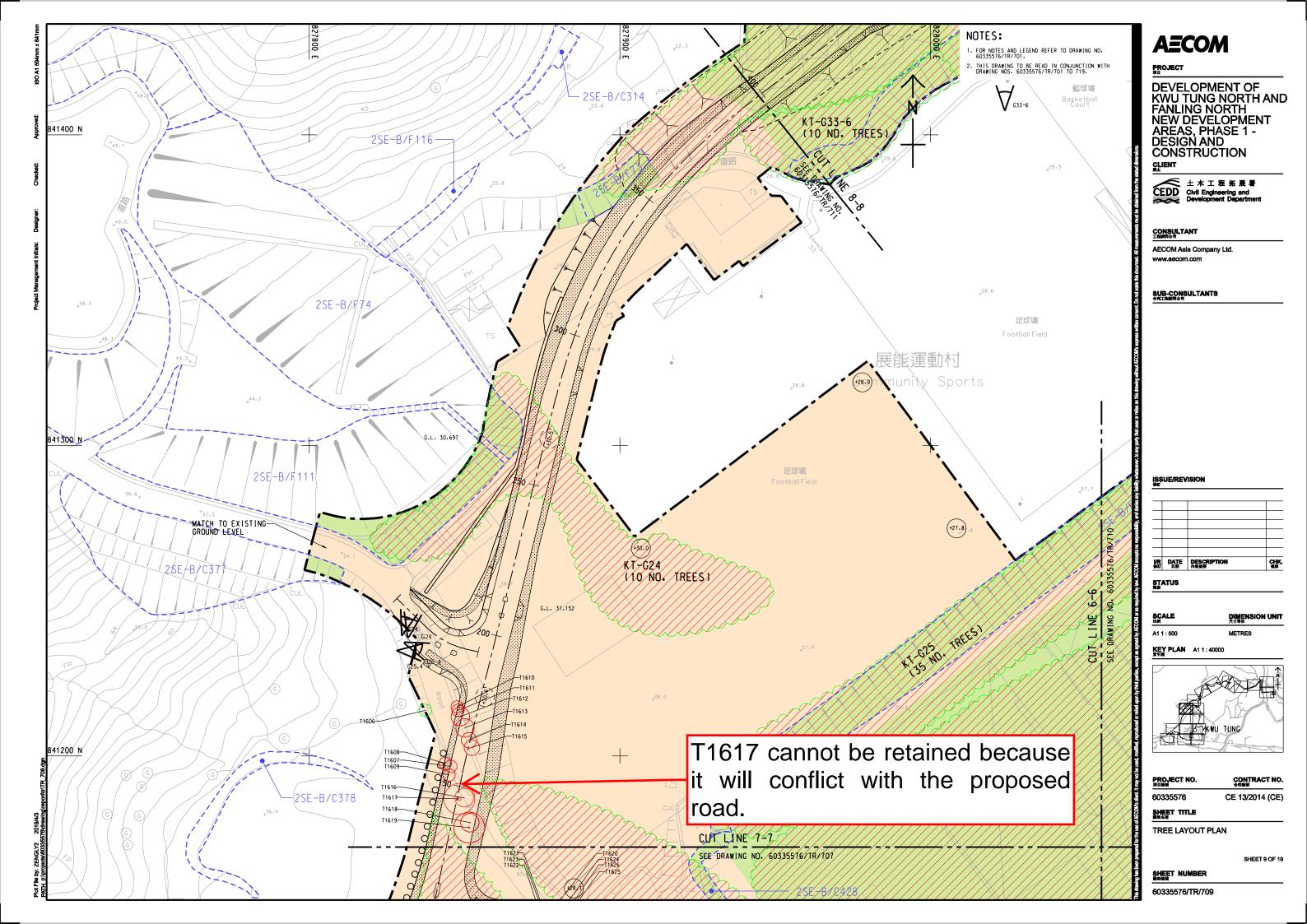
- (a) Low amenity value;
- (b) irrecoverable form after transplanting (e.g. if substantial crown and root pruning are necessary to facilitate the transplanting);
- (c) Low survival rate after transplanting;
 (d) very large size (unless the feasibility to transplant has been considered financially reasonable and technically feasible during the feasib
- (e) with evidence of over-maturity and onset of senescence;
- (f) with poor health, structure or form (e.g. imbalanced form, leaning, with majorcavity/cracks/splits); or cavity/cracks/splits); or
- (g) undesirable species (e.g. Leucaena leucocephala which is an invasive exotic tree).
- (h) On steep slope.
- (I) Not cost -effectiveness

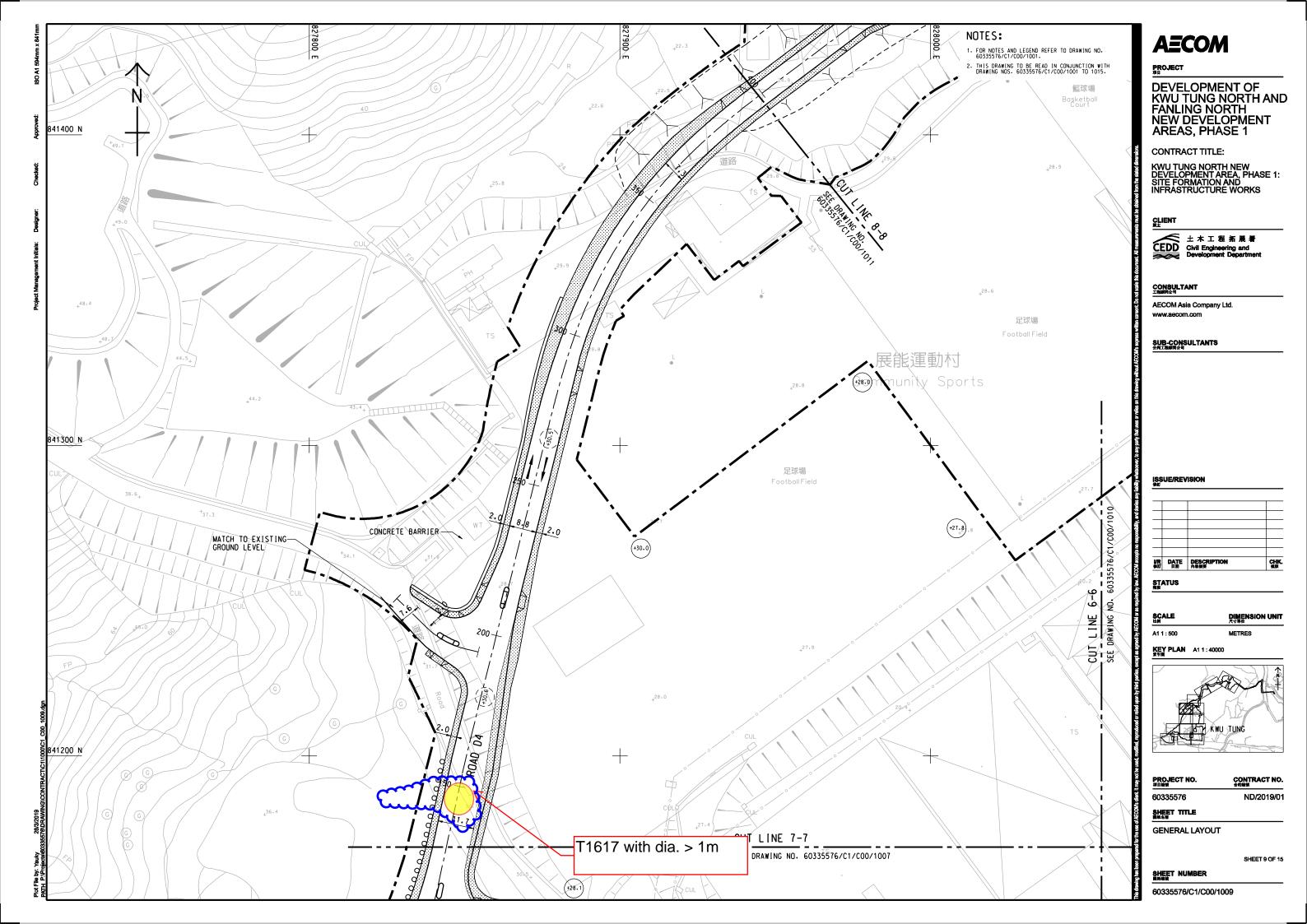
Conservation status

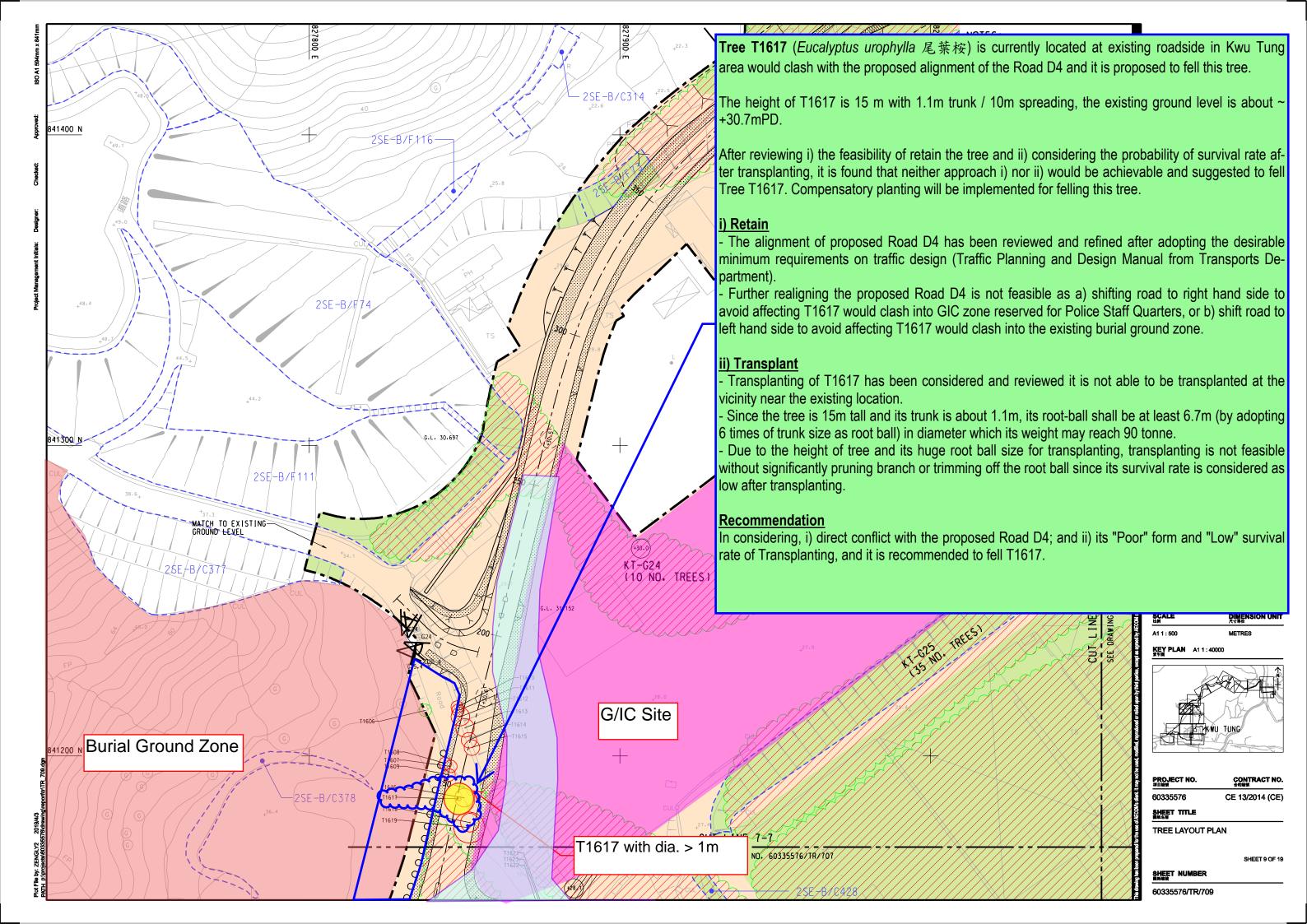
- (A) The Protection of Endangered Species of Animals and Plants Ordinance (Cap.586)
- (B) Forests and Countryside Ordinance (Cap. 96)

Additional Remarks









Agreement No. CE 13/2014 (CE) Surveyed and Prepared by Stanley To Latest Field Survey was conducted on 29-Nov-18

Development of Kwu Tung North and Fanling North New Development Areas - Phase 1 - Design and Construction

				SIZE	(M)	Structural	Form	Health A	Amenity	Suitab	ility for					
Drawing No. Contract No. Tree No. No. Photo No.	Botanical Name		Department to provide expertise SIMAR Slope N advice to LandsD	o. Height (mm)	Spread (m)	(Good / Fair / Poor)	(Good / Fair / Poor)	(Good / Fair / Poor)	Value (Good / Fair / Poor)	(High/ Medium /Low)	Remarks	Conservation Status	Recommendations (Retain /Transplant/Fell)	Justification	Remarks	Additional Remarks
60335576/TR/409 C5 T6149 T6149	Ficus microcarpa	細葉榕	AFCD	13.5 1369	13	Fair	Poor	Fair	Fair	Low	b,c,f	Nil	Fell	Direct Conflict with Proposed Bridge due to Insufficient Headroom	Refer to Appendix XIII for more Detail	ASC/DB/WDS/

- (1) Tree being fell by other project(s) shall follow corresponding TPRP(s), and no tree will be compensated/considered under this Project.
- (2) Tree being transplanted by other project(s) shall follow corresponding TPRP(s), and no tree will be transplanted/cosidered under this Project.

Remarks for Suitability for Transplanting

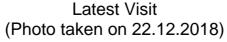
- (a) Low amenity value;
- (b) irrecoverable form after transplanting (e.g. if substantial crown and root pruning are necessary to facilitate the transplanting);
- (c) Low survival rate after transplanting;
- (d) very large size (unless the feasibility to transplant has been considered financially reasonable and technically feasible during the feasib
- (e) with evidence of over-maturity and onset of senescence;
- (f) with poor health, structure or form (e.g. imbalanced form, leaning, with majorcavity/cracks/splits); or cavity/cracks/splits); or
- (g) undesirable species (e.g. Leucaena leucocephala which is an invasive exotic tree).
- (I) Not cost -effectiveness

Conservation status

- (A) The Protection of Endangered Species of Animals and Plants Ordinance (Cap.586)
- (B) Forests and Countryside Ordinance (Cap. 96)

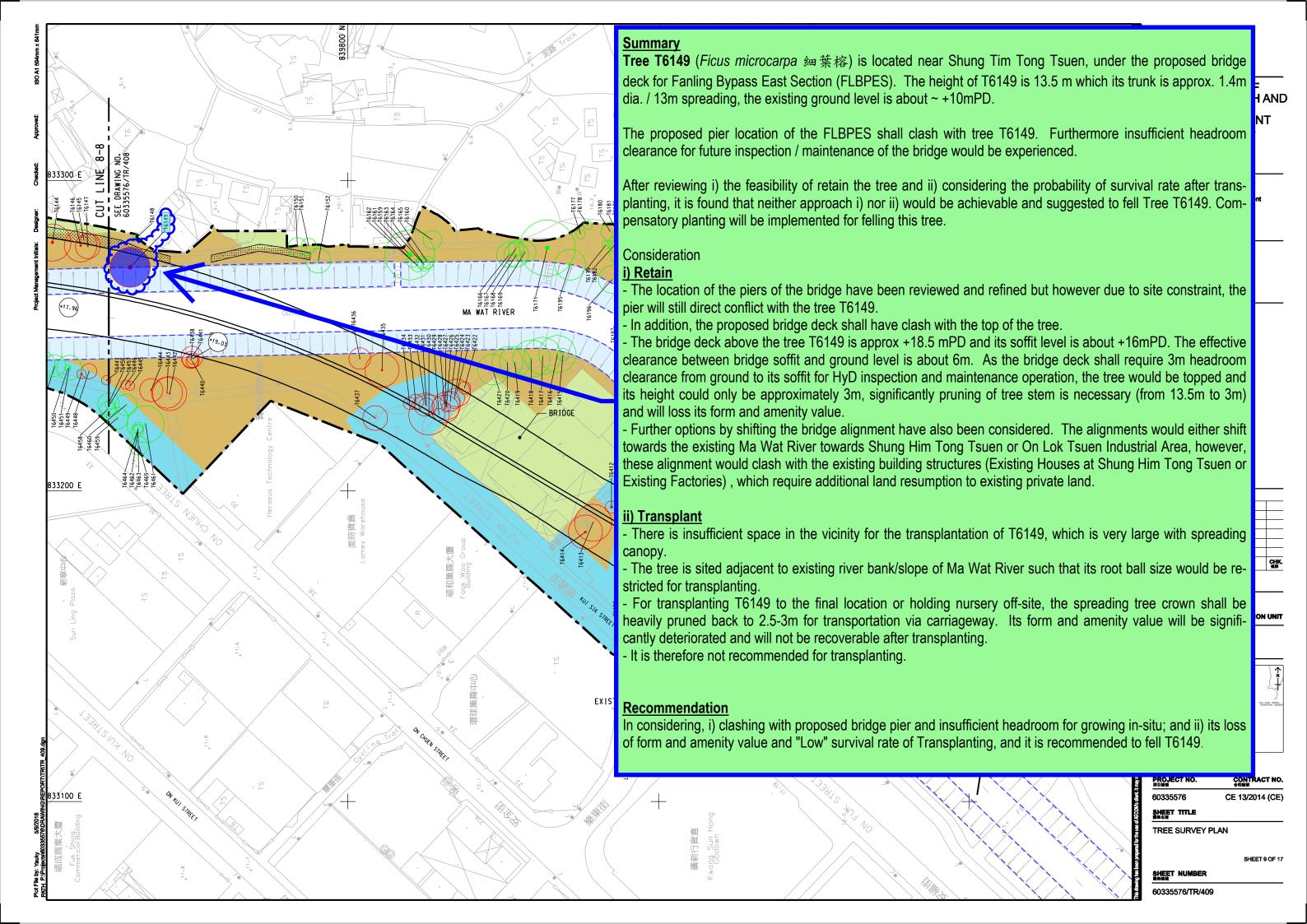
Additional Remarks

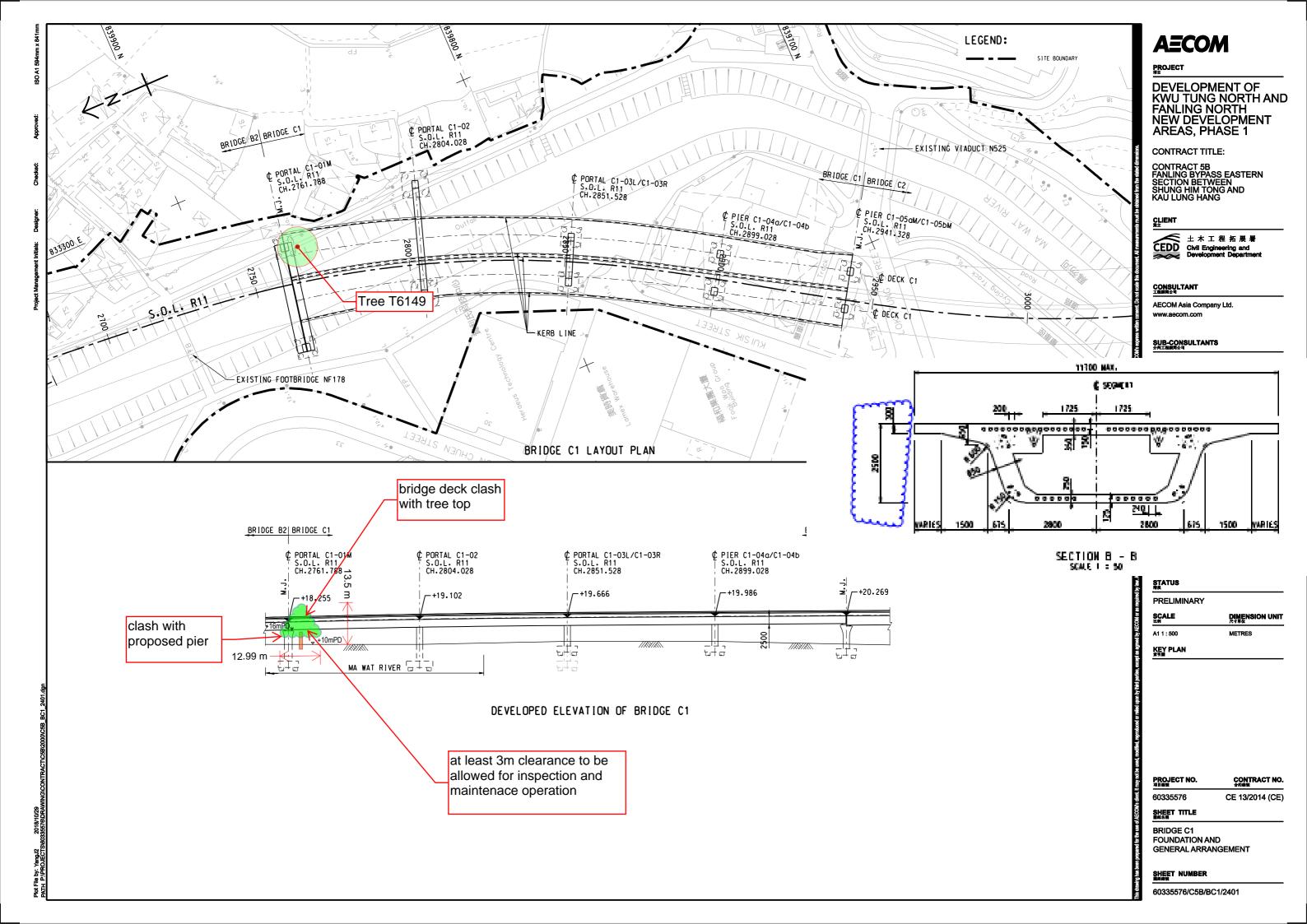


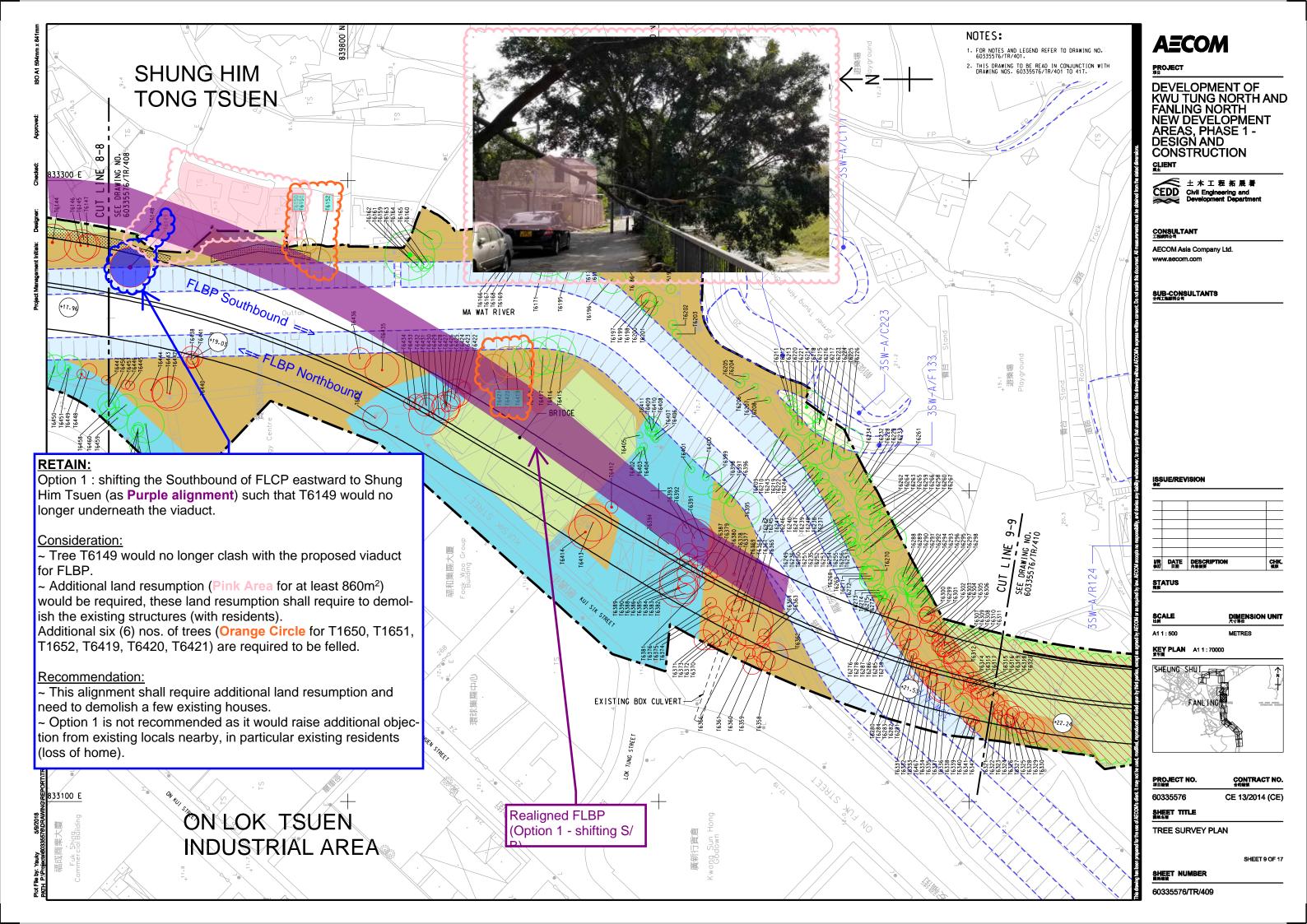




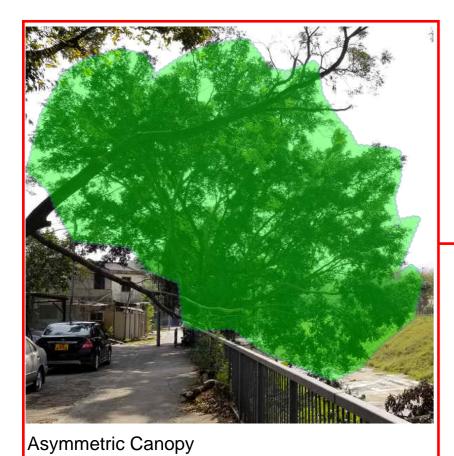
T6149











Restricted Root - Tree near inclined slope



Tree T6149 (Ficus microcarpa 細葉榕) (Fell)

TRANSPLANT: (Tree T6149)

Restricted Root - unable to prepare the root ball in sufficient size - located at the existing river bank of Ma Wat River. Asymmetric Canopy - loss of form and amenity value

Agreement No. CE 13/2014 (CE) Surveyed and Prepared by Stanley To Development of Kwu Tung North and Fanling North New Development Areas - Phase 1 - Design and Construction Latest Field Survey was conducted on 29-Nov-18

Drawing No.	Contract No	Tree No.	Photo No.	Botanical Name	Chinese Common Name	Department to provide expertise advice to LandsD	SIMAR Slope No.		Trunk DBH (mm)		Structural condition (Good / Fair / Poor)	Form (Good / Fair / Poor)	/ Fair	Amenity Value (Good / Fair / Poor)	Suita (High/ Medium /Low)	Remarks	Conservation Status	Recommendations (Retain /Transplant/Fell)	Justification	Remarks	Additional Remarks
60335576/TR/411	C5	T263	8 T2638	Ficus microcarpa	榕樹	AFCD		14	1180	12	Fair	Poor	Fair	Fair	Low	b,c,f	Nil	Fell	Direct Conflict with Proposed Bridge due to Insufficient Headroom	Refer to Appendix XIII for more Detail	XB/DB/MT

- (1) Tree being fell by other project(s) shall follow corresponding TPRP(s), and no tree will be compensated/considered under this Project.
- (2) Tree being transplanted by other project(s) shall follow corresponding TPRP(s), and no tree will be transplanted/cosidered under this Project.

Remarks for Suitability for Transplanting

- (a) Low amenity value;
- (b) irrecoverable form after transplanting (e.g. if substantial crown and root pruning are necessary to facilitate the transplanting);
- (c) Low survival rate after transplanting;
- (d) very large size (unless the feasibility to transplant has been considered financially reasonable and technically feasible during the feasib
- (e) with evidence of over-maturity and onset of senescence;
- (f) with poor health, structure or form (e.g. imbalanced form, leaning, with majorcavity/cracks/splits); or cavity/cracks/splits); or
- (g) undesirable species (e.g. Leucaena leucocephala which is an invasive exotic tree).
- (I) Not cost -effectiveness

Conservation status

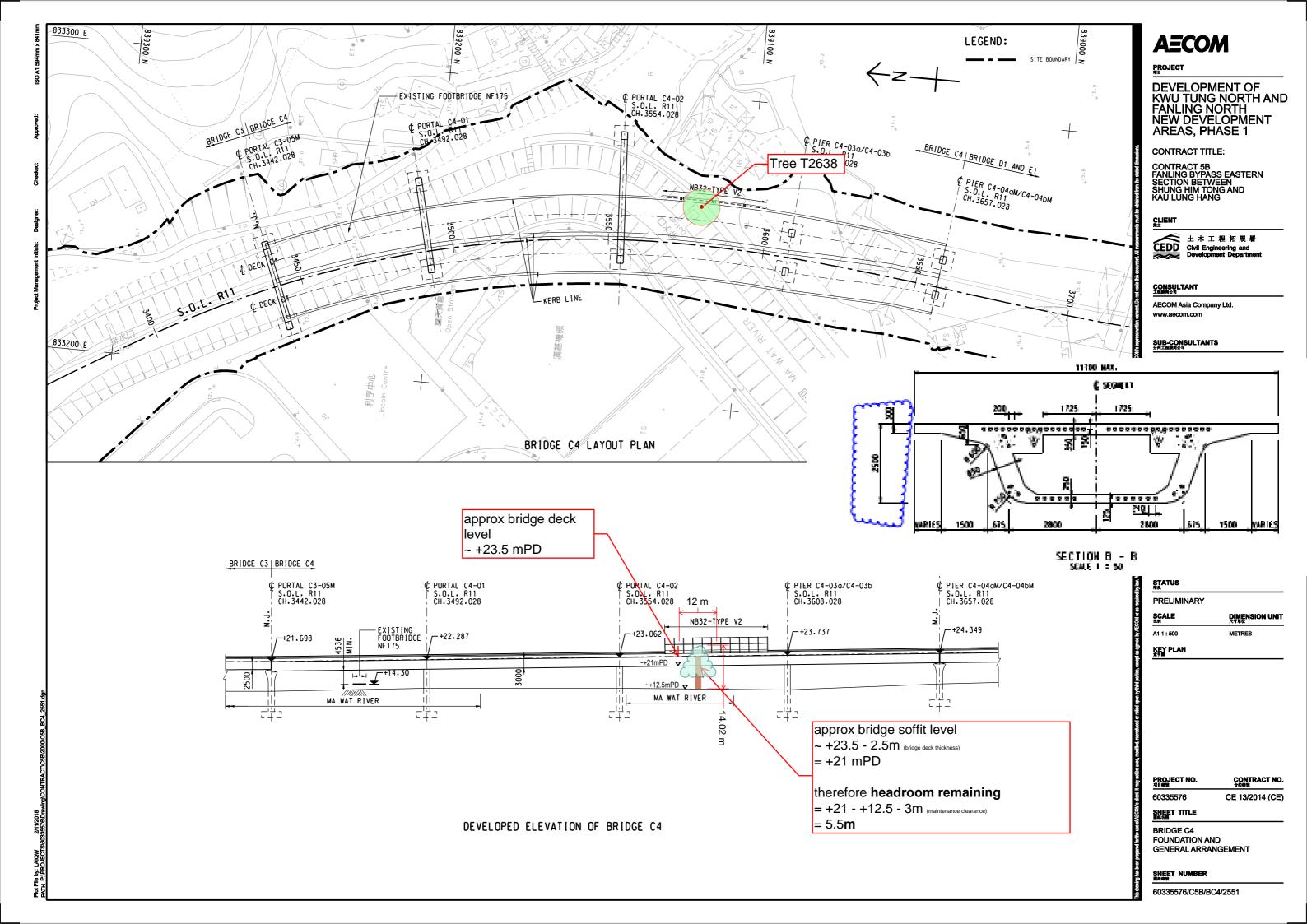
- (A) The Protection of Endangered Species of Animals and Plants Ordinance (Cap.586)
- (B) Forests and Countryside Ordinance (Cap. 96)

Additional Remarks









Summary

T2638 (Ficus microcarpa 榕樹) is located under the proposed bridge deck for Fanling Bypass East Section (FLBPES). The height of T2638 is 14 m with 1.18m trunk / 12m spreading, the existing ground level is about $\sim +12.5mPD$.

The proposed FLBPES will clash with tree T2638 and cannot provide sufficient headroom clearance for the tree.

After reviewing i) the feasibility of retain the tree and ii) considering the probability of survival rate after transplanting, it is found that neither approach i) nor ii) would be achievable and thus Tree T2638 is suggested to be felled. Compensatory planting will be implemented for felling this tree.

i) Retain

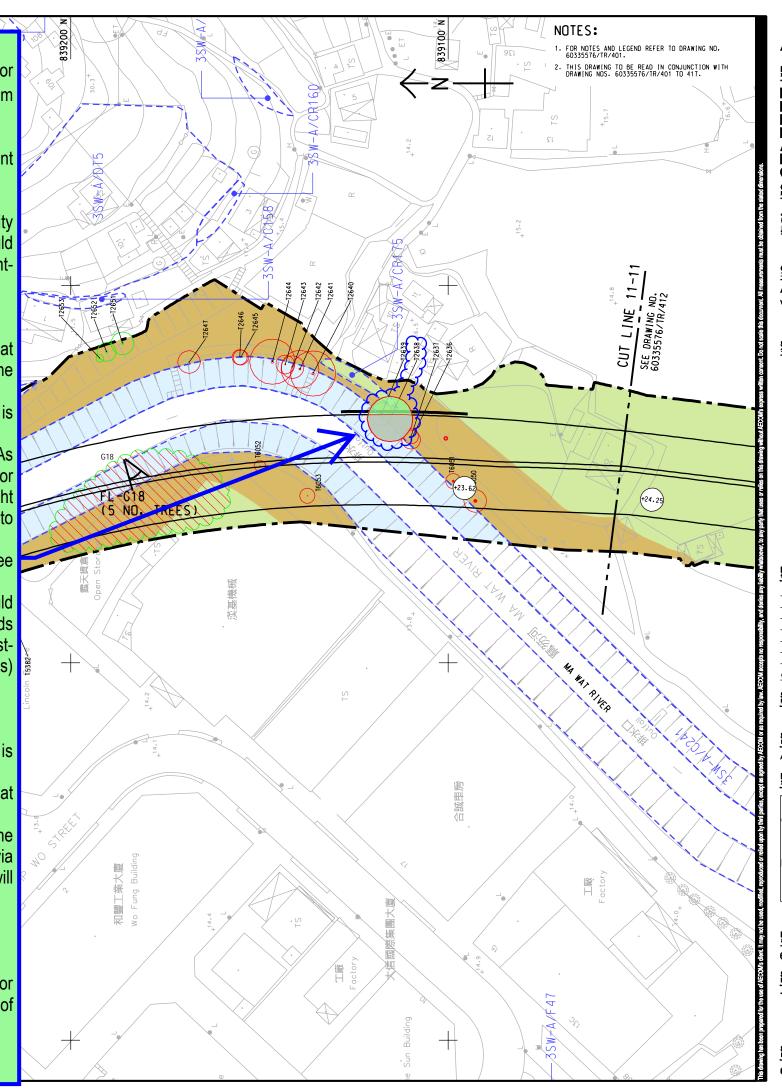
- The location of the piers of the bridge have been reviewed and refined such that no direct conflict with the tree T2638, however the bridge deck will be on top of the
- The bridge deck above the tree T2638 is approx +23.5mPD and its soffit level is about +21mPD.
- The effective clearance between bridge soffit and ground level is about 8.5m. As the bridge deck shall require 3m headroom clearance from ground to its soffit for inspection and maintenance operation, the tree would be topped and its height could only be approximately 5.5m. Significant pruning of tree stem (from 14m to 5.5m) will cause the tree losing its form and amenity value.
- In addition, the bridge deck will cover more than 60% of the crown area of tree T2638, which consider insufficient sunlight for healthy growth of the tree.
- Shifting the bridge alignment have also been considered. The alignments would either shift towards the existing Ma Wat River and Tong Hang Tsuen or towards On Lok Tsuen Industrial Area, however, these alignment could clash with the existing building structures (Existing Houses at Tong Hang Tsuen or Existing Factories) , which require additional land resumption of existing private land.

ii) Transplant

- There is insufficient space in the vicinity for the transplantation of T2638, which is very large with spreading canopy.
- The tree is sited adjacent to existing river bank/slope of Ma Wat River such that its root ball size would be restricted for transplanting.
- For transplanting T2638 to the final location or holding nursery off-site, the spreading tree crown shall be heavily pruned back to 2.5-3m for transportation via carriageway. Its form and amenity value will be significantly deteriorated and will not be recoverable after transplanting.
- It is therefore not recommended for transplanting.

Recommendation

In considering, i) clashing with proposed bridge deck with insufficient headroom for growing in-situ; and ii) its loss of form and amenity value and "Low" survival rate of Transplanting, and it is recommended to fell T2638.



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DEVELOPMENT OF KWU TUNG NORTH AND FANLING NORTH NEW DEVELOPMENT AREAS, PHASE 1 -DESIGN AND CONSTRUCTION

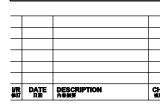


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CONSULTANT

AECOM Asia Company Ltd.

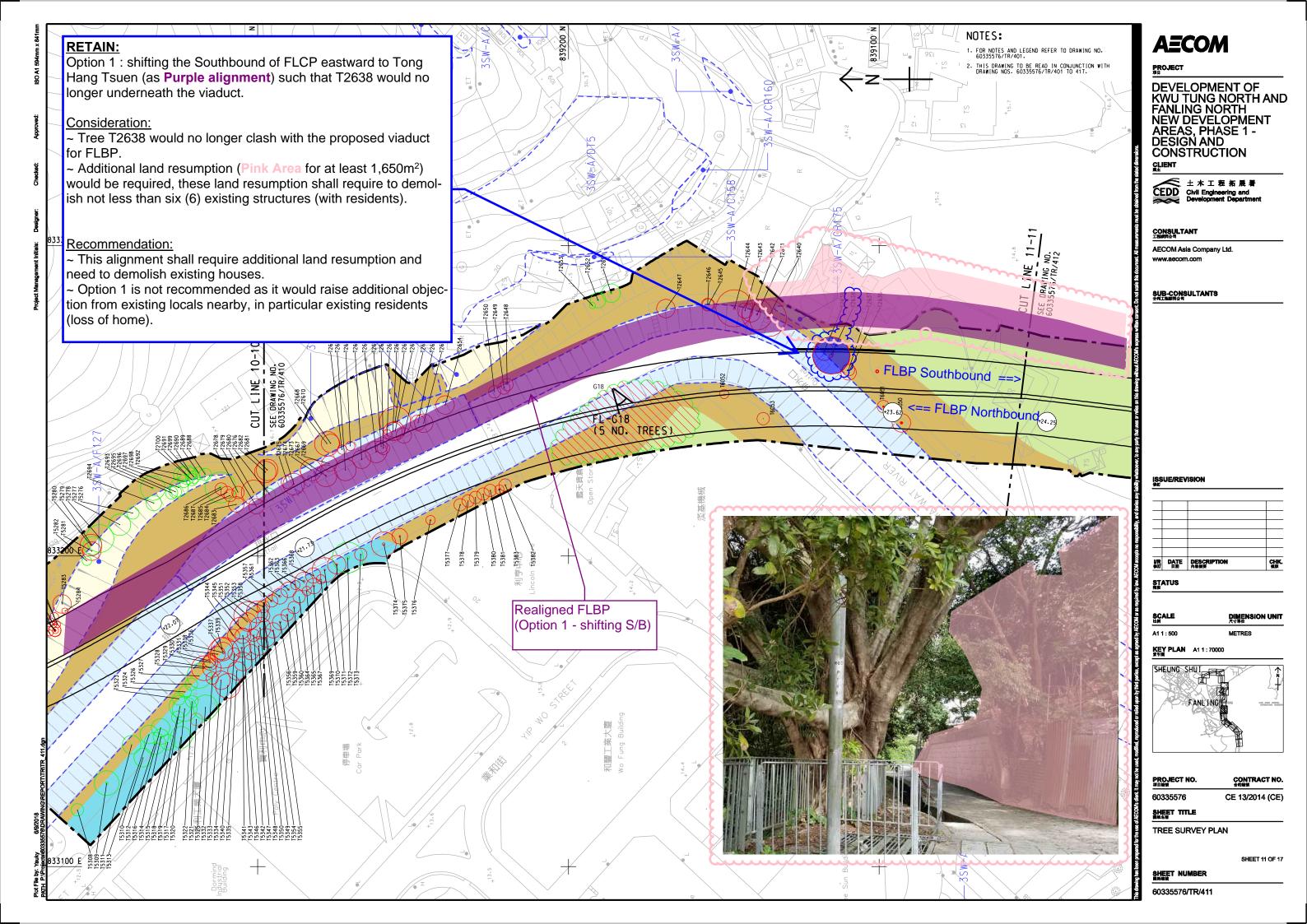
SUB-CONSULTANTS

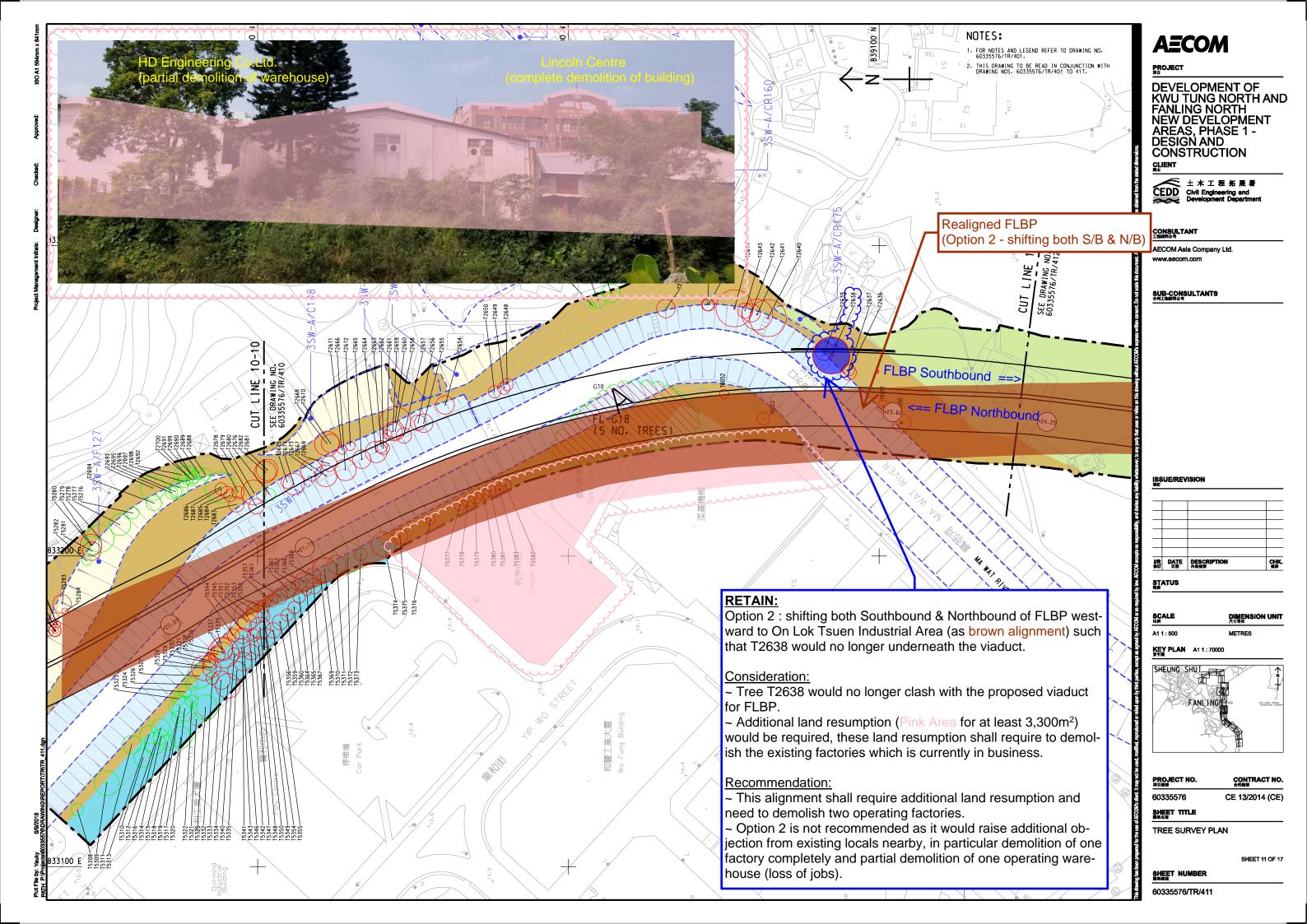




CE 13/2014 (CE)

TREE SURVEY PLAN







Multi-Stems



Cross Branches



Restricted Root - Tree near inclined slope







Restricted Root - Existing Drainage Channel and Outfall

TRANSPLANT: (T2638)
Restricted Root - unable to prepare the root ball in sufficient size - located at the existing river bank of Ma Wat River.

Asymmetric Canopy - loss of form and amenity value

Agreement No. CE 13/2014 (CE) Surveyed and Prepared by Stanley To Latest Field Survey was conducted on 29-Nov-18

Development of Kwu Tung North and Fanling North New Development Areas - Phase 1 - Design and Construction

Drawing No.	Contract No.	Tree No.	Photo No.	Botanical Name	Chinese Common Name	Department to provide expertise advice to LandsD	SIMAR Slope No.	Height (m)	Trunk DBH (mm)	Spread (m)	Structural condition (Good / Fair / Poor)	(Good / Fair	Health (Good / Fair / Poor)	Amenity Value (Good / Fair / Poor)	(High/ Medium	Remarks	Conservation Status	Recommendations (Retain /Transplant/Fell)	Justification	Remarks	Additional Remarks
60335576/TR/412	C5	T6006	T6006	Ficus microcarpa	細葉榕	AFCD		12	1793	10	Fair	Poor	Fair	Fair	Low	b,c,f	Nil	Fell	Direct Conflict with Proposed Bridge due to Insufficient Headroom	Refer to Appendix XIII for more Detail	ASC/DB/XB
60335576/TR/412	C5	T6010	T6010	Ficus microcarpa	細葉榕	AFCD		12	1866	10	Fair	Poor	Fair	Fair	Low	b,c,f	Nil	Fell	Direct Conflict with Proposed Bridge due to Insufficient Headroom	Refer to Appendix XIII for more Detail	ASC/DB
60335576/TR/412	C5	T6016	T6016	Ficus microcarpa	細葉榕	AFCD		14	1506	10	Fair	Poor	Fair	Fair	Low	b,c,f	Nil	Fell	Direct Conflict with Proposed Bridge due to Insufficient Headroom	Refer to Appendix XIII for more Detail	ASC/DB/XB

- (1) Tree being fell by other project(s) shall follow corresponding TPRP(s), and no tree will be compensated/considered under this Project.
- (2) Tree being transplanted by other project(s) shall follow corresponding TPRP(s), and no tree will be transplanted/cosidered under this Project.

- Remarks for Suitability for Transplanting
 (a) Low amenity value;
 (b) irrecoverable form after transplanting (e.g. if substantial crown and root pruning are necessary to facilitate the transplanting);
 (c) Low survival rate after transplanting;
- (d) very large size (unless the feasibility to transplant has been considered financially reasonable and technically feasible during the feasib
- (e) with evidence of over-maturity and onset of senescence;
- (f) with poor health, structure or form (e.g. imbalanced form, leaning, with majorcavity/cracks/splits); or cavity/cracks/splits); or cavity/cracks/splits); or
- (g) undesirable species (e.g. Leucaena leucocephala which is an invasive exotic tree).
- (h) On steep slope.
- (I) Not cost -effectiveness

Conservation status

- (A) The Protection of Endangered Species of Animals and Plants Ordinance (Cap.586)
- (B) Forests and Countryside Ordinance (Cap. 96)

Additional Remarks

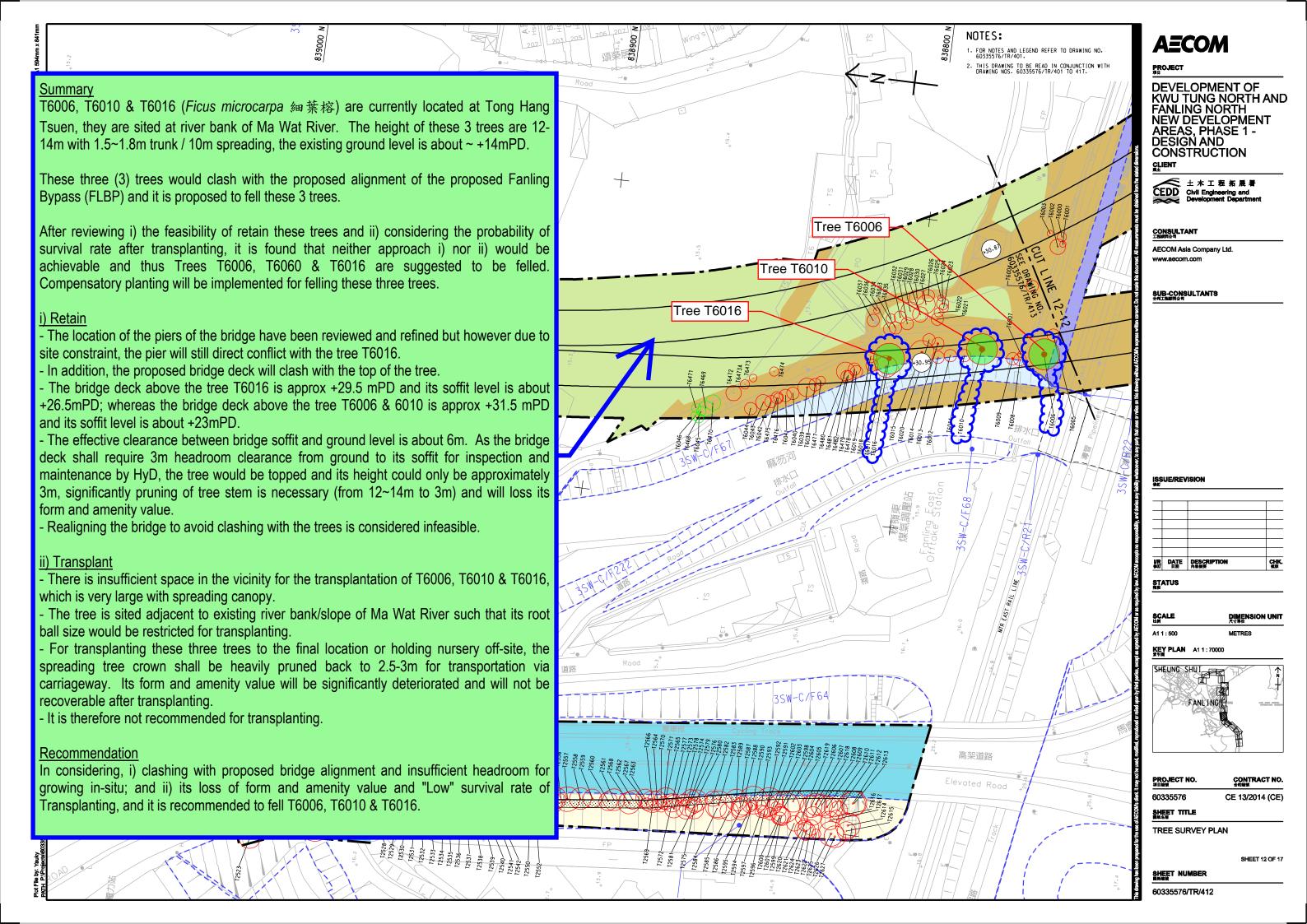
ASC-Asymmetric Canopy; BAD-Bark Distortation; BKB-Broken Branches-wounds; BKT-Broken Trunk-wounds; PHG-Phoenix Regeneration CAV-Cavity; CLR-Climber; CNK-Canker; COB-Codominant Branches; COK-Crooks/Abrupt COT-Codominant Trunks; CRA-Cracks; DB-Dead Branches; DBK-Dieback/Dead Twigs; DF-Dead Fronds; DK-Decay; DS-Dead Stubs; EPS-Epicormic Shoot; ER-Exposed Root; FB-Fungal Fruiting Bodies; GR-Girdling Roots; HGR-Hanger; LN-Leaning; MT-Multi-Stems; RP-Root Plate Movement; RR-Restricted Root; SPT-Splits; SUK-Sucker; TB-Tipped Branch; TT-Termite Track; TW-Twisting; UR-Uprooted; WDS-Wounds; XB-Cross Branches

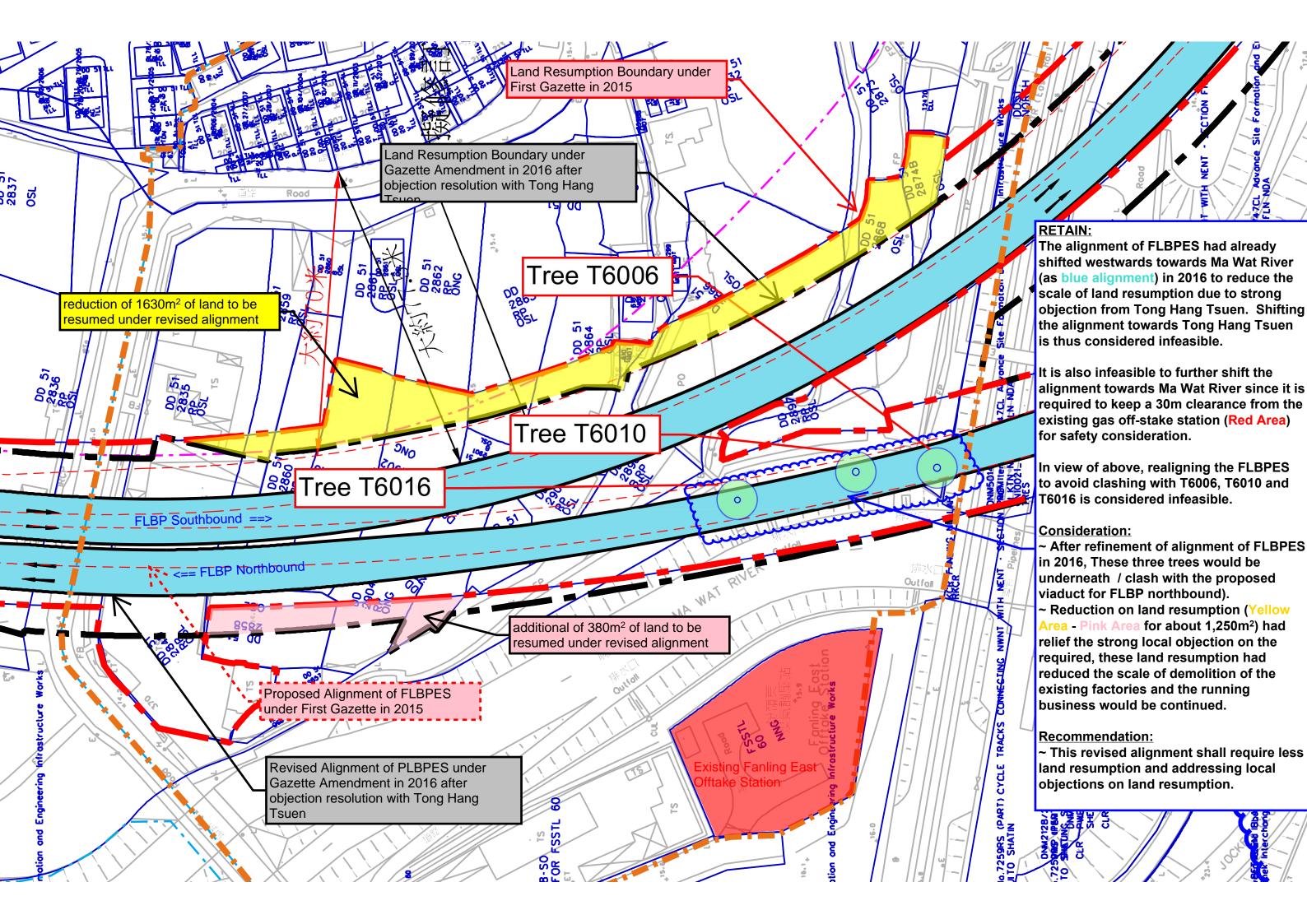


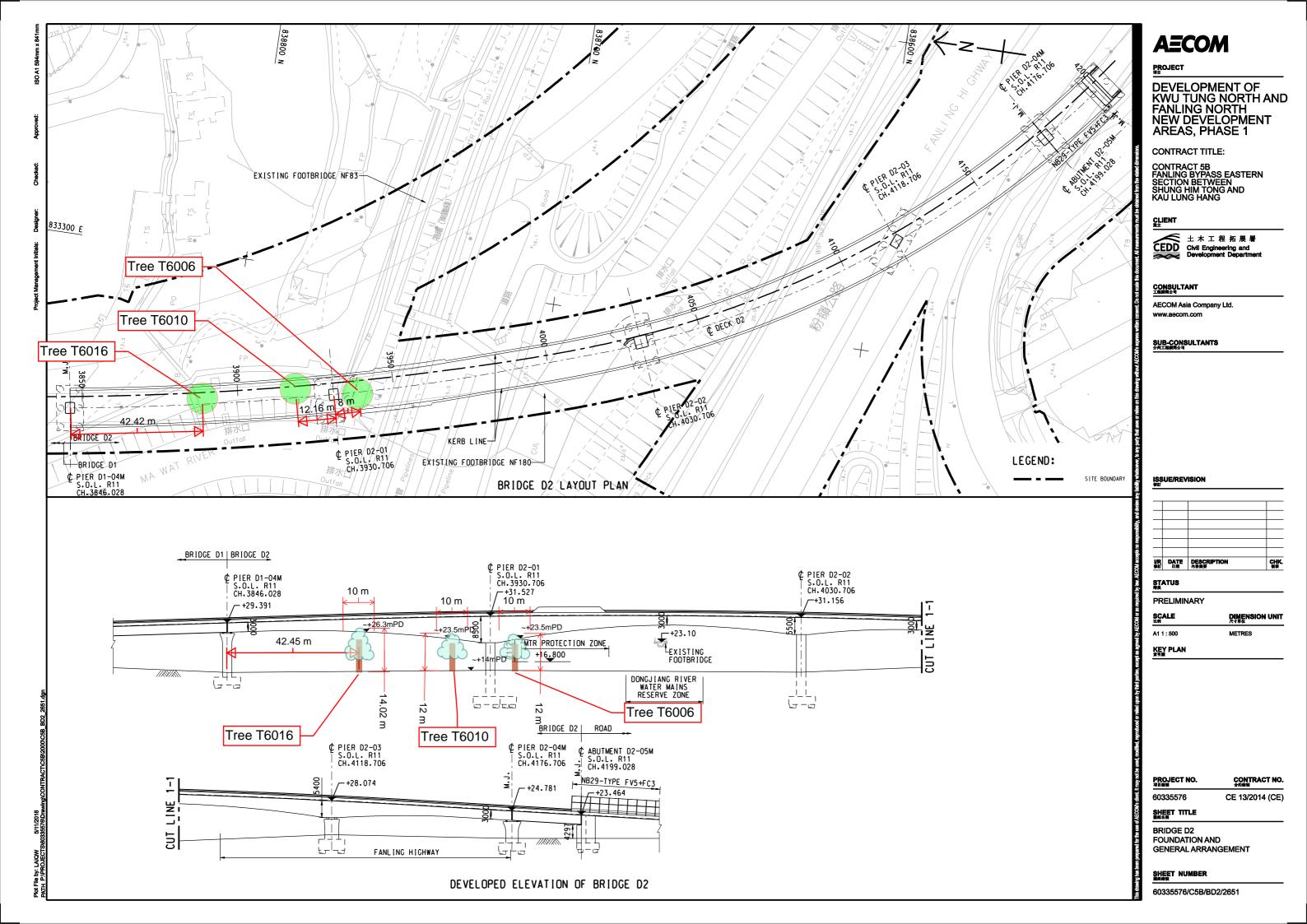




T6006 T6010 T6016

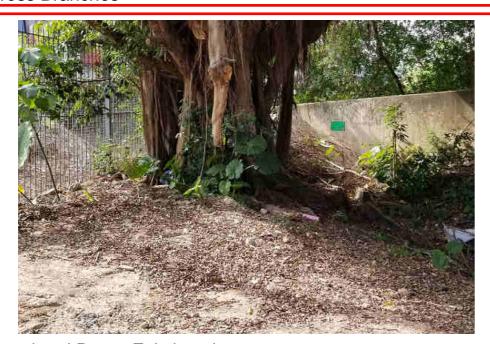








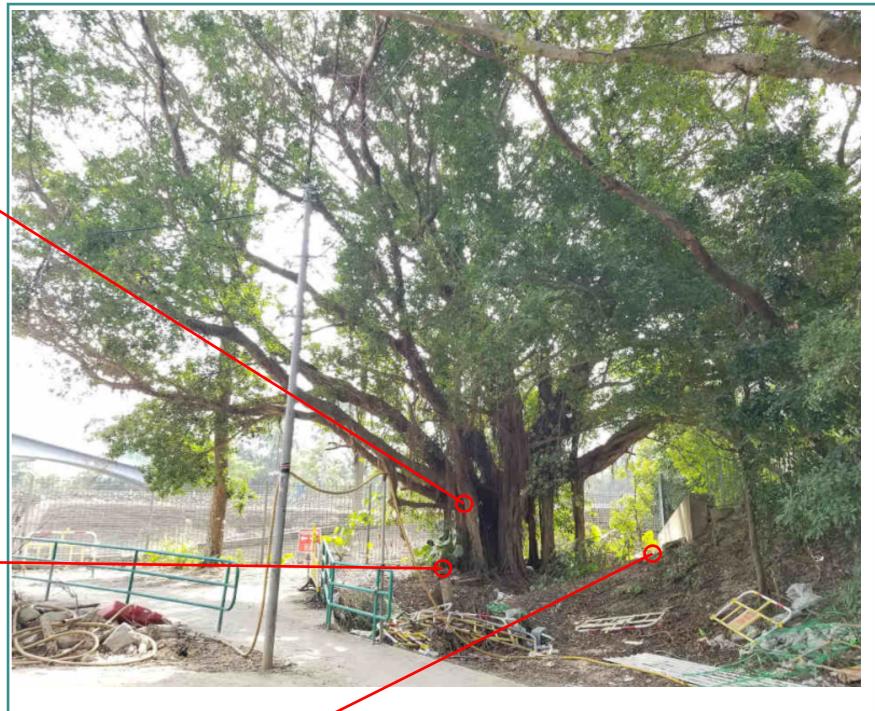
Cross Branches



Restricted Root - Existing slope



Restricted Root - Existing upstand wall of Drainage Channel



T6006 (Ficus microcarpa 細葉榕) (Fell)

TRANSPLANT: (T6006)

Restricted Root - unable to prepare the root ball in sufficient size - located at the existing river bank of Ma Wat River, low survival rate after transplanting.

Tree size very large and very tall - need heavy pruning before transplanting, loss of form and amenity value after

transplanting.



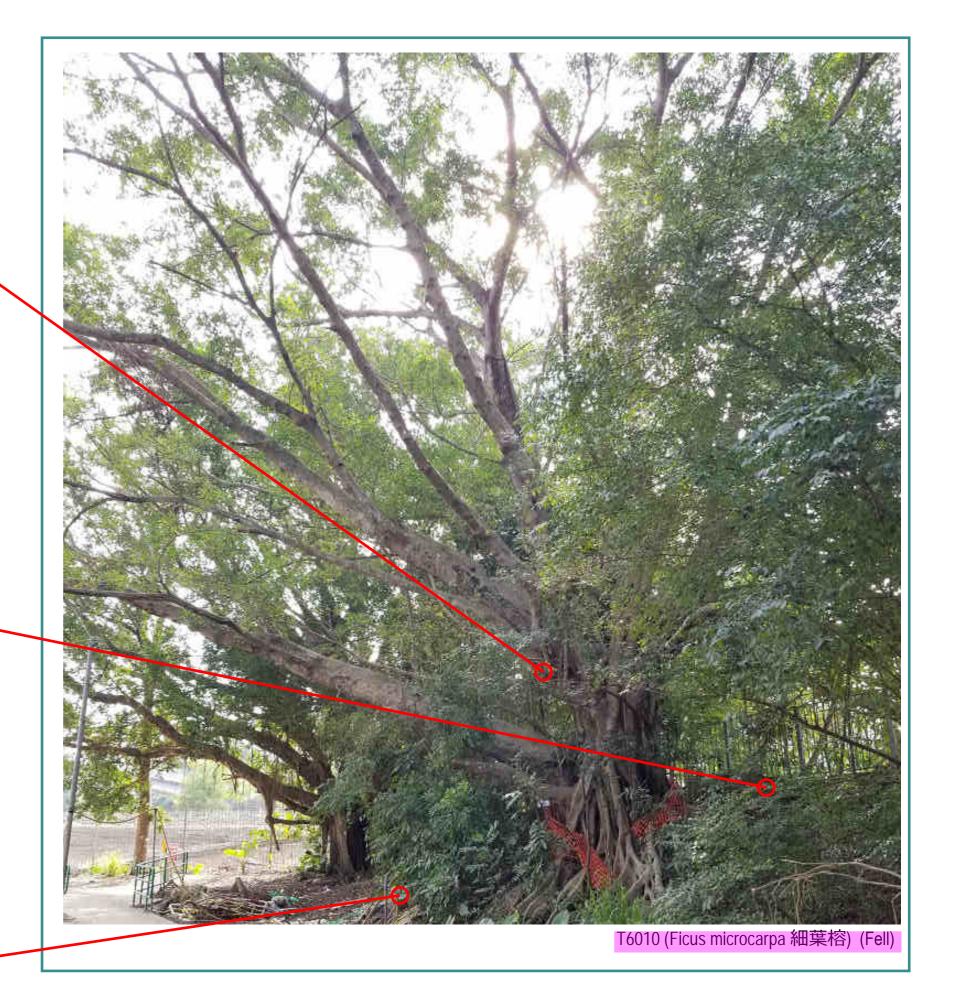
Cross Branches



Restricted Root - Existing slope of Drainage Channel



Restricted Root - Existing drainage channel in front of sloping ground



TRANSPLANT: (T6010)

Restricted Root - unable to prepare the root ball in sufficient size - located at the existing river bank of Ma Wat River, low survival rate after transplanting.

Tree size very large and very tall - need heavy pruning before transplanting, loss of form and amenity value after transplanting.



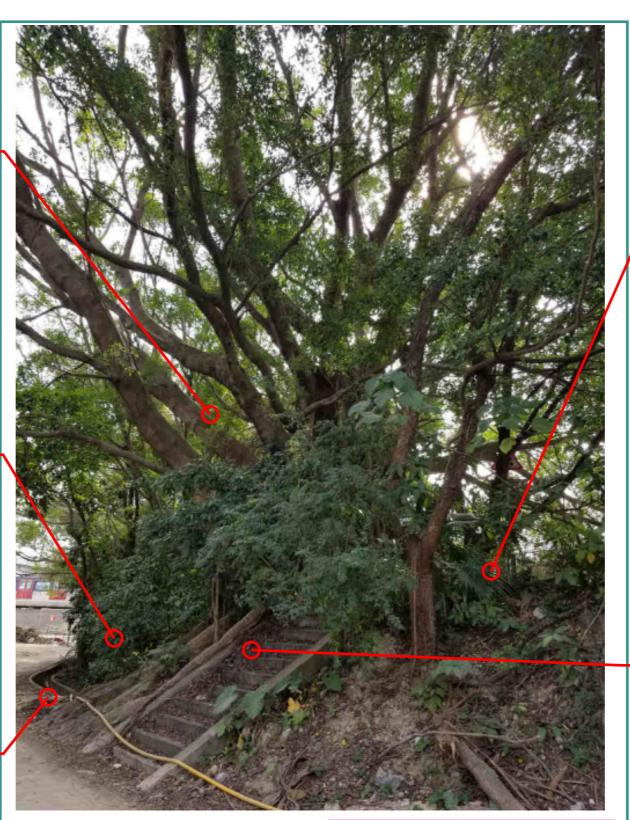
Cross Branches



Exposed Root



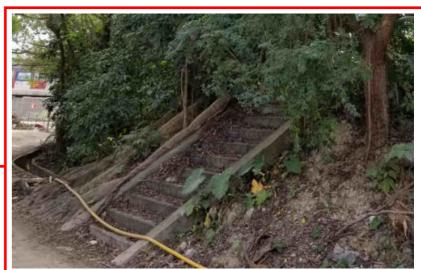
Restricted Root - Existing Drainage Outfall



T6016 (Ficus microcarpa 細葉榕) (Fell)



Restricted Root -Tree near inclined slope of existing river



Restricted Root - Existing Staircase to drainage channel

TRANSPLANT: (T6016)
Restricted Root - unable to prepare the root ball in sufficient size - located at the existing river bank of Ma Wat River, low survival rate after transplanting.

Tree size very large and very tall - need heavy pruning before transplanting, loss of form and amenity value after transplanting.

Agreement No. CE 13/2014 (CE) Surveyed and Prepared by Stanley To Development of Kwu Tung North and Fanling North New Development Areas - Phase 1 - Design and Construction Latest Field Survey was conducted on 29-Nov-18

Drawing No.	Contract No	Tree No.	Photo No.	Botanical Name	Chinese Common Name	Department to provide expertise advice to LandsD	SIMAR Slope No.	Uniobs	Trunk DBH (mm)		(Good	Good / Fair	Health (Good / Fair / Poor)	Amenity Value (Good / Fair / Poor)	Suita (High/ Medium /Low)	Remarks	Conservation Status	Recommendations (Retain /Transplant/Fell)	Justification	Remarks	Additional Remarks
60335576/TR/413	C5	T4354	T4354	Cinnamomum camphora	樟	AFCD		8	1000	8	Fair	Fair	Fair	Fair	Low	b,c,d	Nil	Fell	Direct Conflict with Proposed Bridge due to Insufficient Headroom	Refer to Appendix XIII for more Detail	WDS/DB/DS/

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- (2) Tree being transplanted by other project(s) shall follow corresponding TPRP(s), and no tree will be transplanted/cosidered under this Project.

Remarks for Suitability for Transplanting

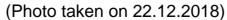
- (a) Low amenity value;
- (b) irrecoverable form after transplanting (e.g. if substantial crown and root pruning are necessary to facilitate the transplanting);
- (c) Low survival rate after transplanting;
- (d) very large size (unless the feasibility to transplant has been considered financially reasonable and technically feasible during the feasib
- (e) with evidence of over-maturity and onset of senescence;
- (f) with poor health, structure or form (e.g. imbalanced form, leaning, with majorcavity/cracks/splits); or cavity/cracks/splits); or
- (g) undesirable species (e.g. Leucaena leucocephala which is an invasive exotic tree).
- (I) Not cost -effectiveness

Conservation status

- (A) The Protection of Endangered Species of Animals and Plants Ordinance (Cap.586)
- (B) Forests and Countryside Ordinance (Cap. 96)

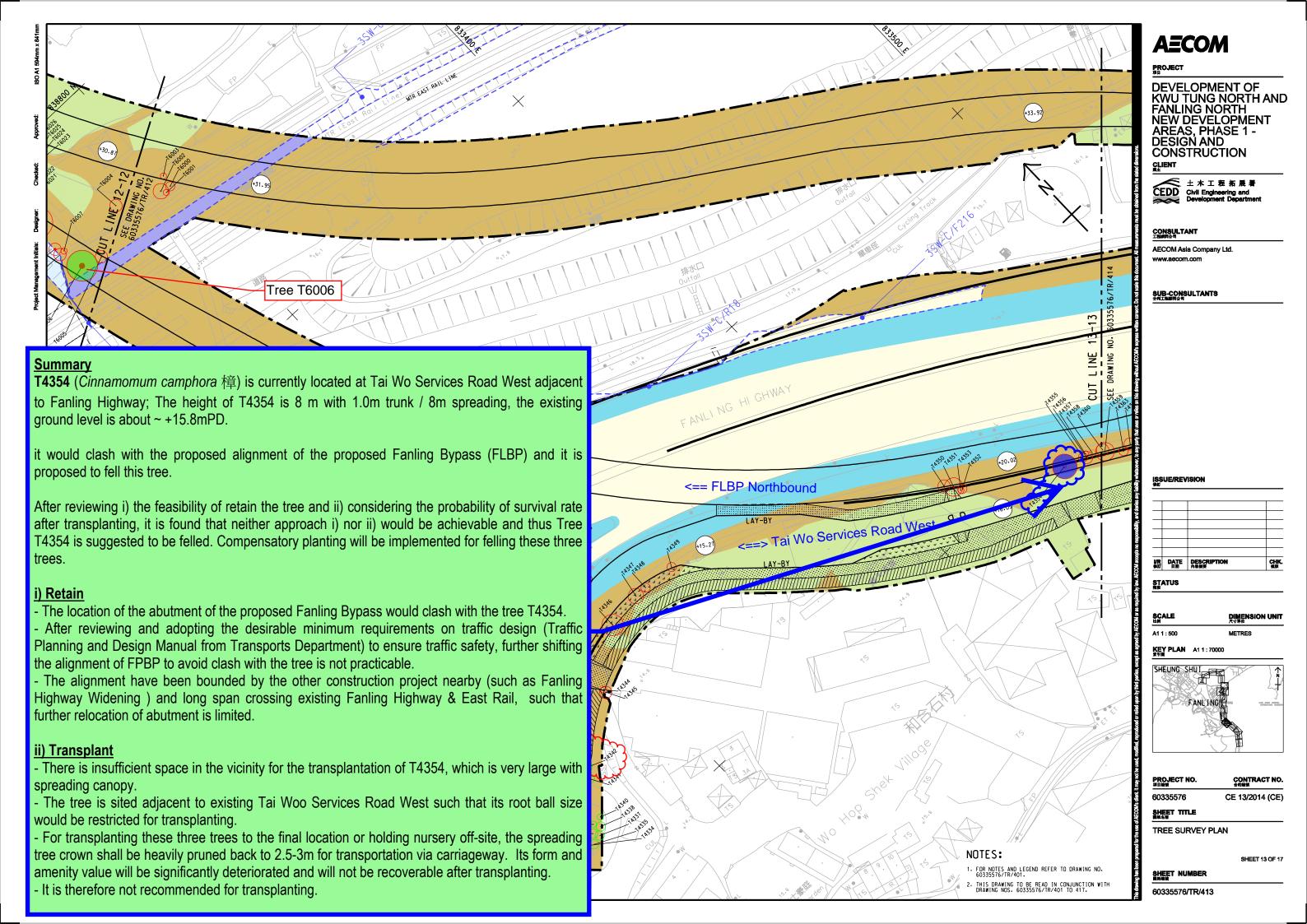
Additional Remarks

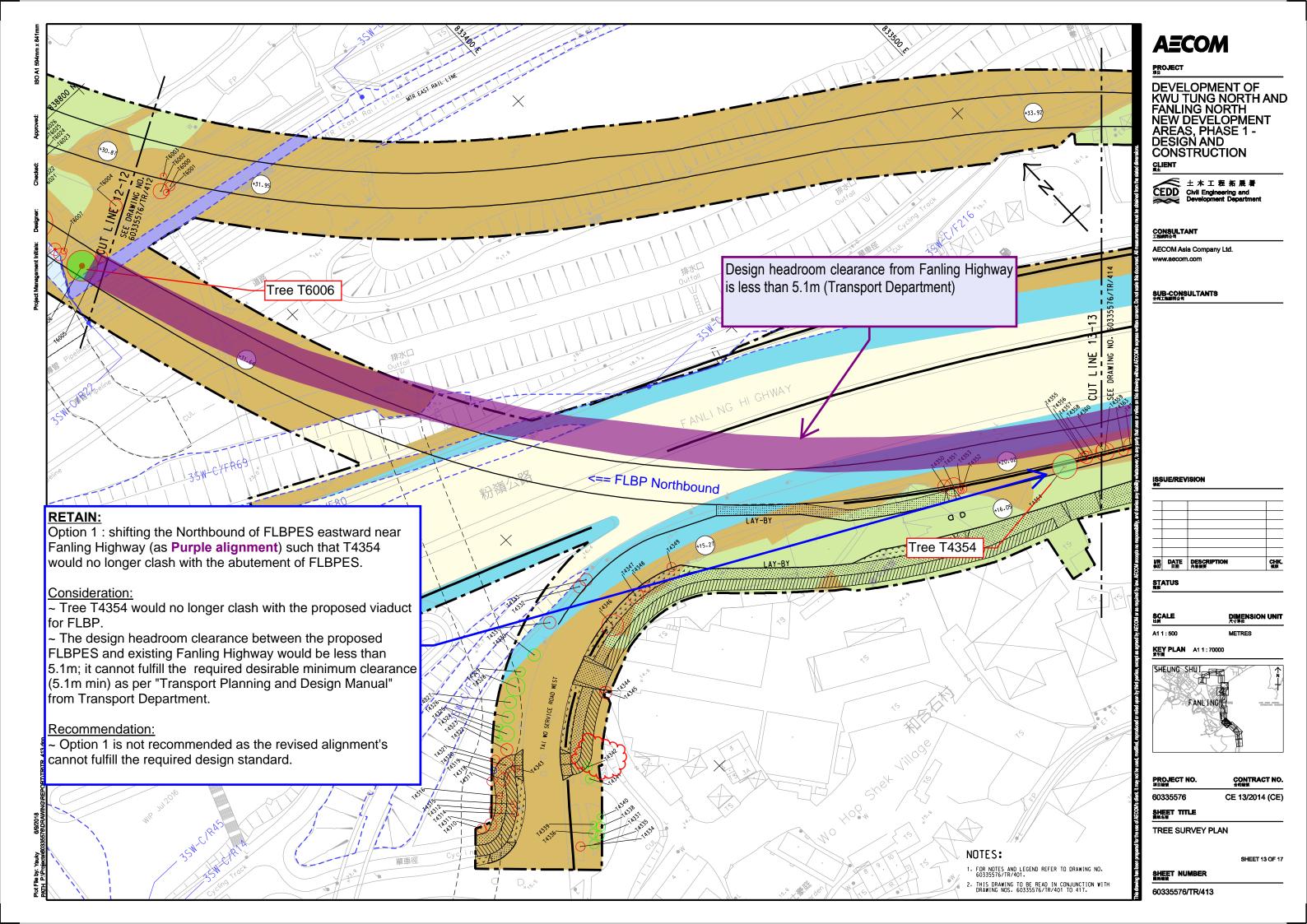


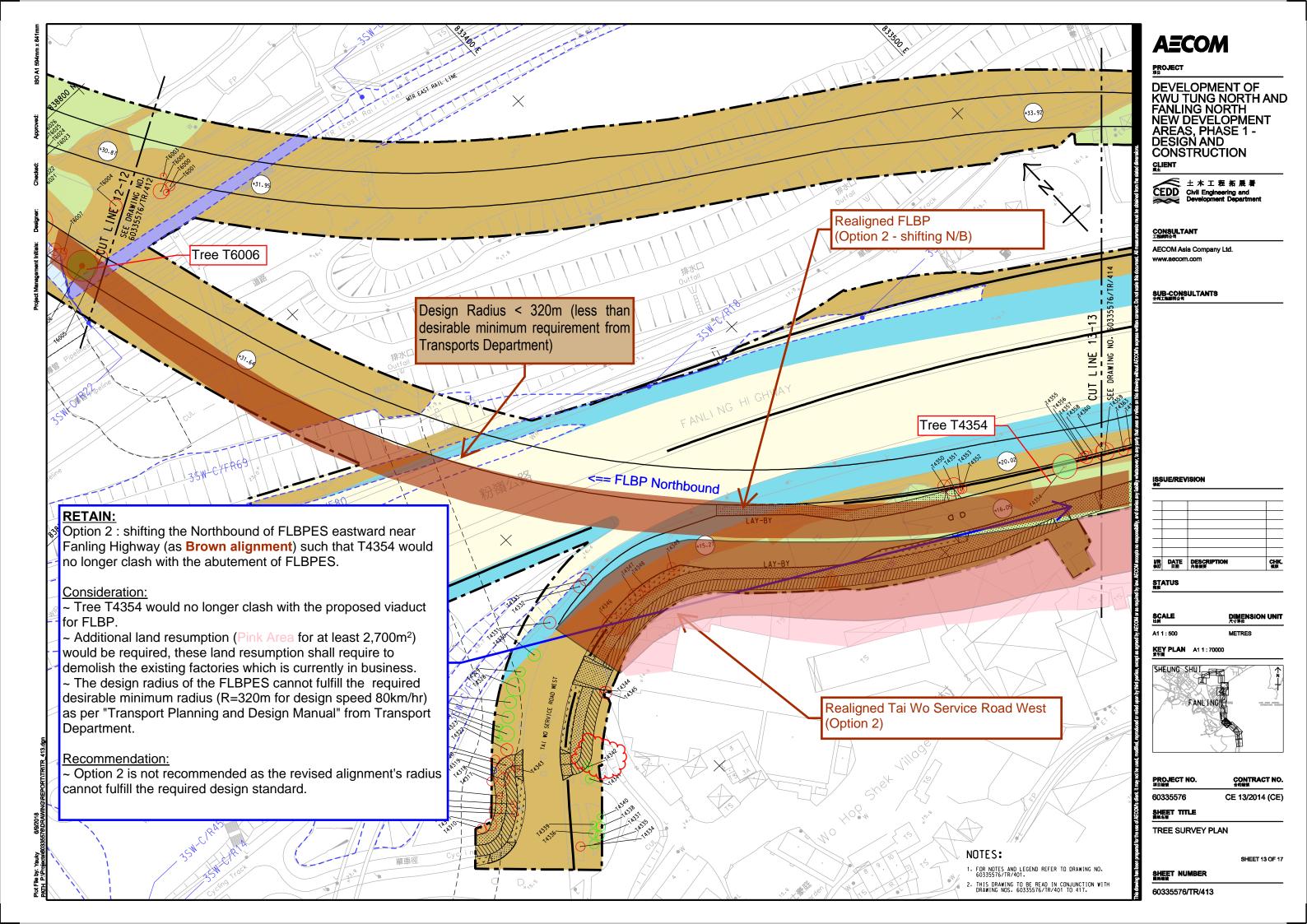


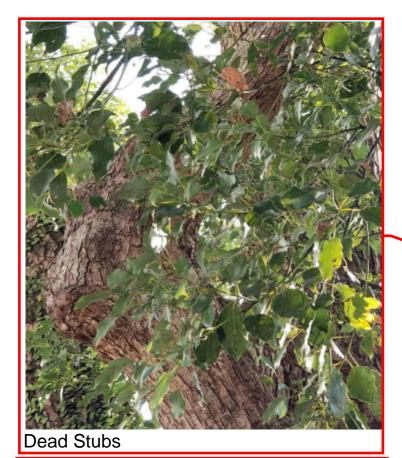


T4354







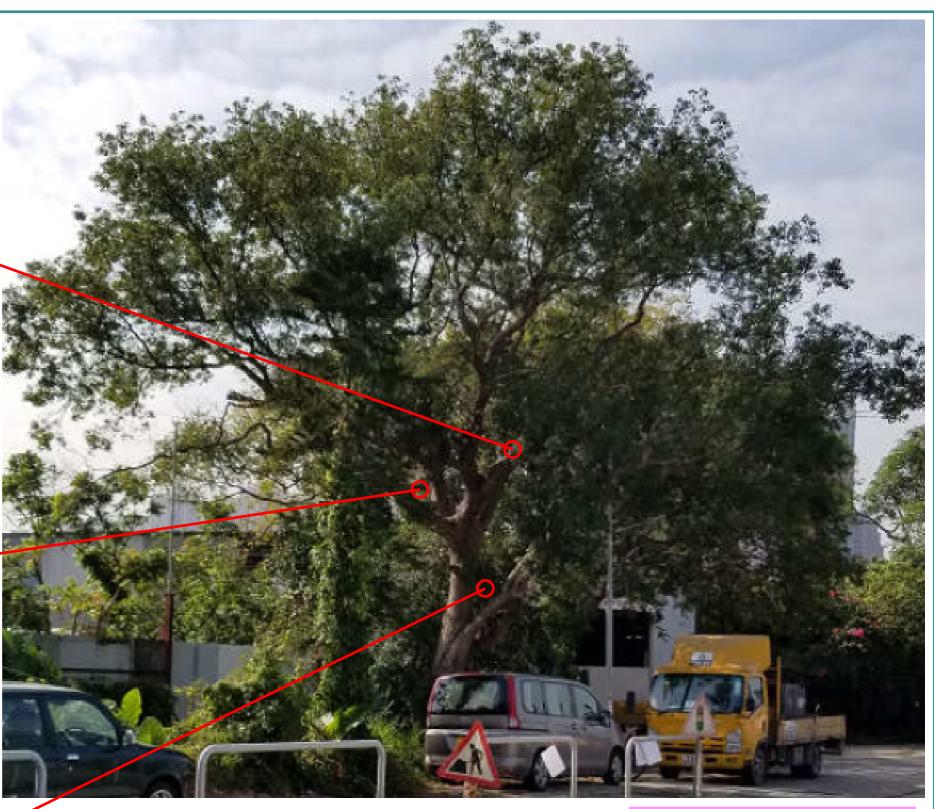




Tipped Branch



Codominant Trunk & Restricted Root at Roadside



T4354 (Cinnamomum camphora 樟) (Fell)

TRANSPLANT: (T4354)
Restricted Root - unable to prepare the root ball in sufficient size - located at the existing carriageway, low survival rate after

Tree size very large and very tall - need heavy pruning before transplanting, loss of form and amenity value after transplanting.