Agriculture, Fisheries and Conservation Department

The Development of AFCD Animal Management and Animal Welfare Building Complex in Kai Tak Development

Pre-construction Audit Report

Final | January 2020

This report takes into account the particular instructions and requirements of our client. It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

Job number 271753-00

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1 Introduction

1.1 Background

- **1.1.1.1** The Environmental Permit (EP) (i.e. EP-563/2018) for Development of AFCD Animal Management and Animal Welfare Building Complex in Kai Tak Development (herein after referred to as the Project) was issued on 10th August 2018.
- **1.1.1.2** As stipulated in the Condition 2.1 of the EP, the Permit Holder shall, no later than 3 months before the commencement of construction of the Project or otherwise, deposit with the Director of Environmental Protection (DEP) of a Pre-construction Audit Report to confirm the design measures stipulated in the Project Profile (PP) (i.e. PP-569/2018), including the location of the entrance and exits, the open-air exercise areas for animals, and the air exhausts of the ventilation system of the animal keeping areas have been fully incorporate into the relevant design drawings.
- **1.1.1.3** After the issuance of the EP, AFCD proposed refinements to the design of the Project which are referenced in the attached drawings of this report. In addition, any further refinements in the later stage will not involve changes in the layout plan. Therefore, it will not affect design measures stipulated in the Project Profile.
- **1.1.1.4** For the proposed development, Agriculture, Fisheries and Conservation Department is the Project Proponent and acts as Permit Holder. ArchSD is the works agent of AFCD. The contractor will be employed by ArchSD at a later stage. The contractor will be responsible for carrying out construction works for the entire development as well as associated design measures.

1.2 Purpose of the Pre-construction Audit Report

1.2.1.1 As stipulated in the Condition 2.1 of the EP, this report is to confirm the design measures stipulated in the PP, including the location of the entrance and exits, the open-air exercise areas for animals, and the air exhausts of the ventilation system of the animal keeping areas have been fully incorporate into the relevant design drawings.

1.3 Management Structure

1.3.1.1 The management structure for the environmental works of the Project is indicated in **Figure 1.1**.

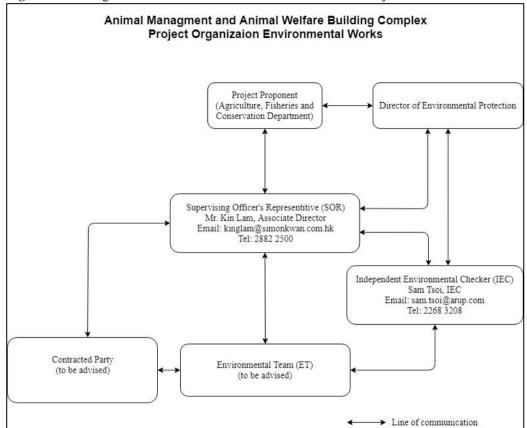


Figure 1.1: Management structure for environmental works of the Project

1.4 Structure of Pre-construction Audit Report

1.4.1.1 The structure of this Pre-construction Audit Report is as follows:

Chapter	Title	Aims
1	Introduction	Provides project background, purpose of the Pre- construction Audit Report, management structure, and structure of this Pre-construction Audit Report.
2	Project Description	Presents the Purpose and nature of the project, Site description, and Tentative implementation programme of the Pre-construction Audit Report.
3	Design Measures Confirmation	Presents the confirmation details of the 3 design measures.
4	Conclusion	Provides a summary of the Pre-construction Audit Report.

2 **Project Description**

2.1 **Purpose and Nature of The Project**

- 2.1.1.1 According to the PP, the Agriculture, Fisheries and Conservation Department (AFCD) Animal Management Centre/Kowloon (AMC/K) site at Sung Wong Toi Road in To Kwa Wan has been planned for public housing development. The reprovisioning of the AMC/K is necessary for release of land resources in To Kwa Wan in support of Government's pledge of public housing provision.
- 2.1.1.2 In line with government's policy to develop public housing at the existing AMC/K, the Secretary for Food and Health has supported the development of a new building complex for the policy objectives of protection advancement of public health safeguarding and promoting the welfare of animals, controlling diseases in the local animal population and enhancing the implementation of animal management initiatives.

2.2 Site Description

2.2.1.1 According to the PP, the Project site is located at the South Apron of the former Kai Tak Airport with Kai Fuk Road at the northeastern site boundary, a new one-way local road S20 at the northwest site boundary, and the new Central Kowloon Route (CKR) and Trunk Road T2 (T2) at the southwest site boundary, Shown in Figure 2.1. On the southeastern site boundary is the Kowloon Bay Sewage Interception Station (KBSIS) of Drainage Services Department (DSD), and Site 3A5 which will be developed into a Refuse Collection Point (RCP) is at the west of the site boundary.

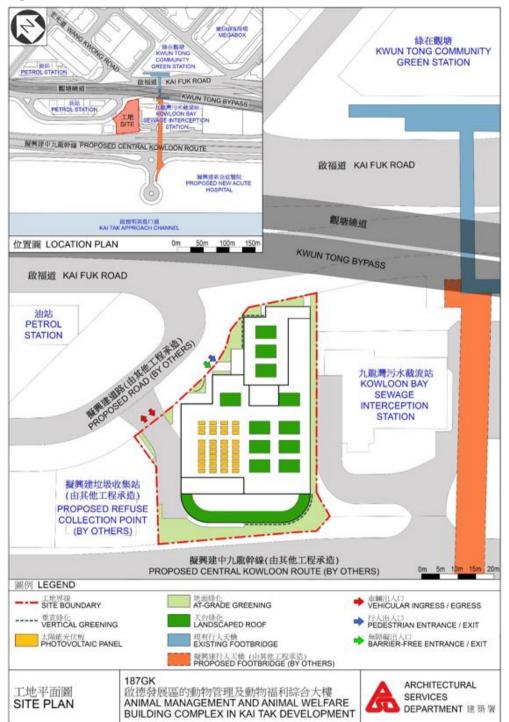


Figure 2.1: Site Plan

2.2.1.2 The types of animals to be kept in the Building Complex include dogs, cats, small mammals (including rabbits, chinchillas, hamsters and gerbils), reptiles and birds (including parrots, tortoises, turtles and lizards); and the maximum number of animals to be kept is approximately 1,558. The breakdown is tabulated below **Table 2.1**:

Table 2.1 Types and Estimated Numbers of Animals

Animal Types	Maximum Numbers
Dogs	130
Cats	78
Small mammals (including rabbits, chinchillas, hamsters and gerbils)	70
Reptiles and birds including 40 parrots, 1,200 palm-size tortoises and turtles, and 40 medium size lizards	1280

2.3 Tentative Implementation Programme

2.3.1.1 Based on the current tentative implementation programme, the construction works would likely commence in Q2 of Year 2020 and target for completion in Q4 of Year 2023.

3 Design Measures Confirmation

3.1 General

- **3.1.1.1** As stipulated in the Condition 2.1 of the EP, a total number of 3 design measures stipulated in the PP need to be confirmed incorporate into the relevant design drawings, including the location of the entrance and exits, the open-air exercise areas for animals, and the air exhausts of the ventilation system. Below are the confirmation details.
- **3.1.1.2** After the issuance of the EP, AFCD proposed refinements to the design of the Project. The proposed refinements include:
 - An additional division of the AFCD (i.e. the Animal Health Division including the Antimicrobial Resistance Surveillance Section (AMRSS) and Avian Influenza Surveillance Section (AISS)) which are mainly office type uses;
 - (ii) The number of employees working in the building complex increased from 603 to 640; and
 - (iii) Refinements in layout of the animal keeping areas and outdoor dog exercise yards.
- **3.1.1.3** The refinements have been taken into account in the design mitigation measures as confirmed in the updated layout plans.

3.2 The Location of the Entrance and Exits

- **3.2.1.1** As stipulated in the Section 7.8.4 of PP, the entrances and exits of the proposed Building Complex will be located away from the adjacent planned hospital, such that the cross traffic will be avoided between animals/staff and hospital subjects, vector and airborne transmission of pathogens, environmental contamination by waste, etc.
- **3.2.1.2** As shown in the design drawing **Figure 2.1** and **Appendix B**, the entrance and exits are located at the north of the Project adjacent to the Proposed Road (slip road of Kai Fuk Road). The Proposed New Acute Hospital will be located at the south of the Proposed Central Kowloon Route which will be away from the Kai Fuk Road and have no direct connection.
- **3.2.1.3** Hence, the design measures and design drawings of the location of the entrance and exits are incorporated.

3.3 The Open-air Exercise Areas for Animals

- **3.3.1.1** As stated in Sections 7.2.1 and 7.3.2 of the PP, open-air exercise areas for animals will be designed such that the opening would face north towards Kwun Tong Bypass and located at higher levels of the Building Complex so that the odour could be readily dispersed and diluted at higher levels and facing away from air sensitive receivers. The location of the ASRs is attached as **Appendix A**.
- **3.3.1.2** According to the General Layout Plan of **Appendix B**, the open-air exercise areas are located at 3F,6F,7F, and 8F which are considered higher levels of

the Building Complex as stipulated in the PP. It is facing north-west towards a proposed refuse collection point (to be designed, constructed and operated by others) and Kwun Tong Bypass.

- **3.3.1.3** According to the Section 2.2 of Technical Memorandum for the Assessment of Noise from Places Other Than Domestic Premises, Public Places or Construction Sites, the domestic premises, hotel, hostel, temporary housing accommodation, hospital, medical clinic, educational institution, place of public worship, library, court of law or performing arts centre shall be considered to be a noise sensitive receiver. The refuse collection point is not one of those building types mentioned above, therefore, it is not considered as noise sensitive receiver.
- **3.3.1.4** Hence, the design measures and design drawings of the location of the openair exercise areas are incorporated.

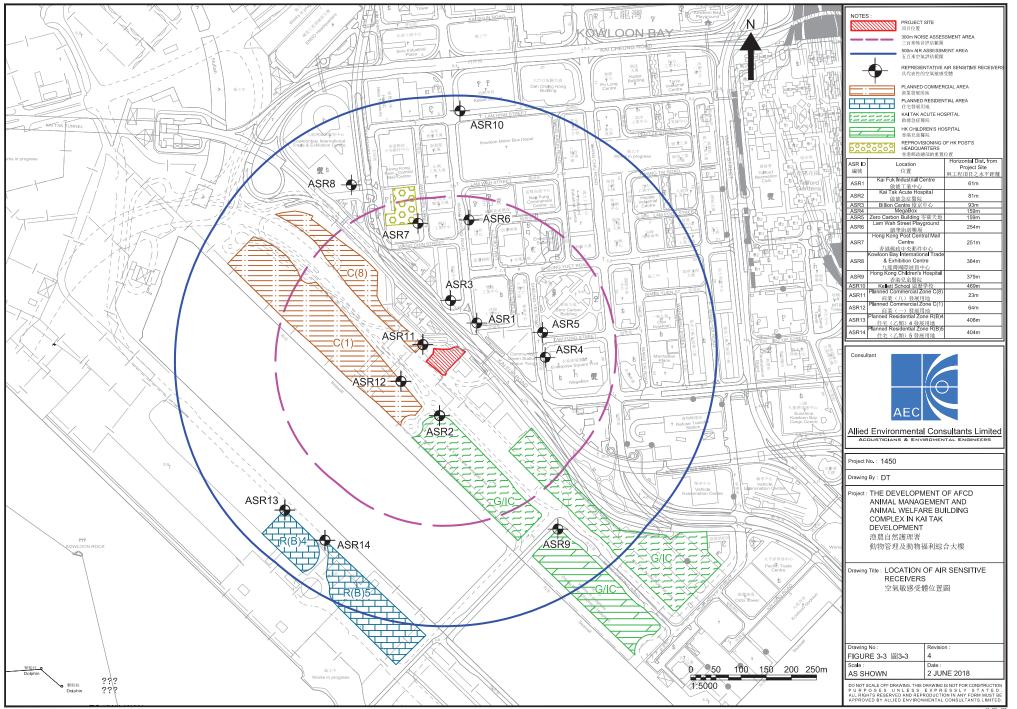
3.4 The Air Exhausts of the Ventilation System of the Animal Keeping Areas

- **3.4.1.1** As stipulated in the Section 7.2.1 of PP, indoor animal keeping areas and activity areas will be enclosed by building envelope, served with central air conditioning systems and equipped with deodourisation filters with at least 85% odour removal efficiency at air exhaust.
- 3.4.1.2 Indoor animal keeping areas will be enclosed by building envelop with independent air conditioning systems as shown in Appendix B. The air exhaust locations are the same as those in the PP and attached in Appendix C. Activated oxygen purifier will be installed at the exhaust. The air purifier shall have removal efficiency of no less than 95% of Total Bacteria Count (TBC) Test, 95% of airborne particulates of 0.5 micron to 2.0 micron, 95% of cigarette smoke particles, 85% of odours, and 95% of hydrogen sulphide.
- **3.4.1.3** Hence, the design measures and design drawings of the location of the air exhausts of the ventilation system are incorporated.

4 Conclusion

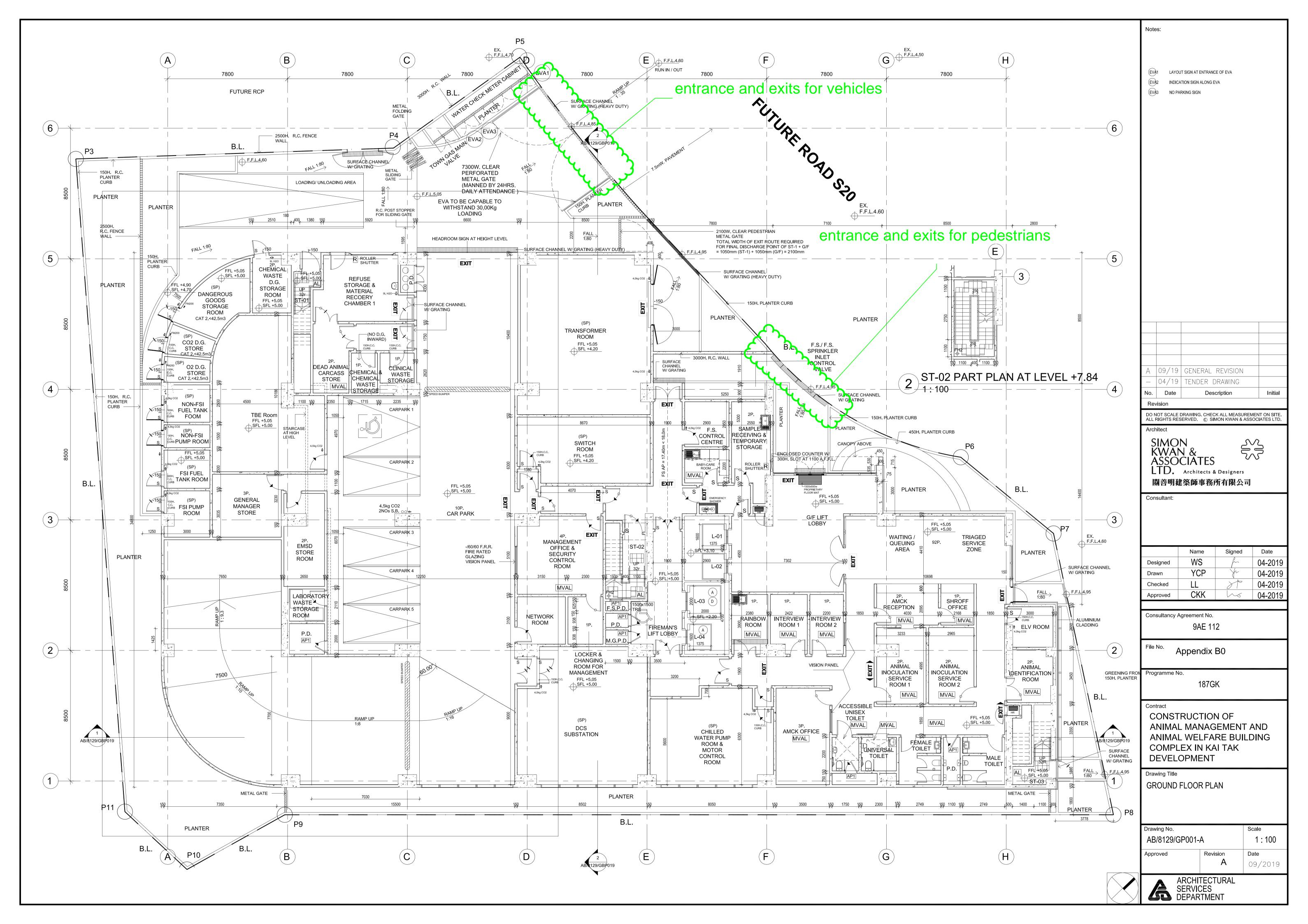
- **4.1.1.1** According to Condition 2.1 of the EP-563/2018, the Permit Holder shall, no later than 3 months before the commencement of construction of the Project or otherwise, deposit with the Director of Environmental Protection (DEP) of the Pre-construction Audit Report to confirm the design measures stipulated in the Project Profile.
- **4.1.1.2** This Pre-construction Audit Report submission has been prepared to confirm the design measures stipulated in the PP, including the location of the entrance and exits, the open-air exercise areas for animals, and the air exhausts of the ventilation system of the animal keeping areas of the Project. The refinements proposed by AFCD are also considered.
- **4.1.1.3** After comparation of the relevant contents, all the design measures and design drawings of the location of the open-air exercise areas are fully incorporated, which fulfils the Condition 2.1 of the EP-563/2018.

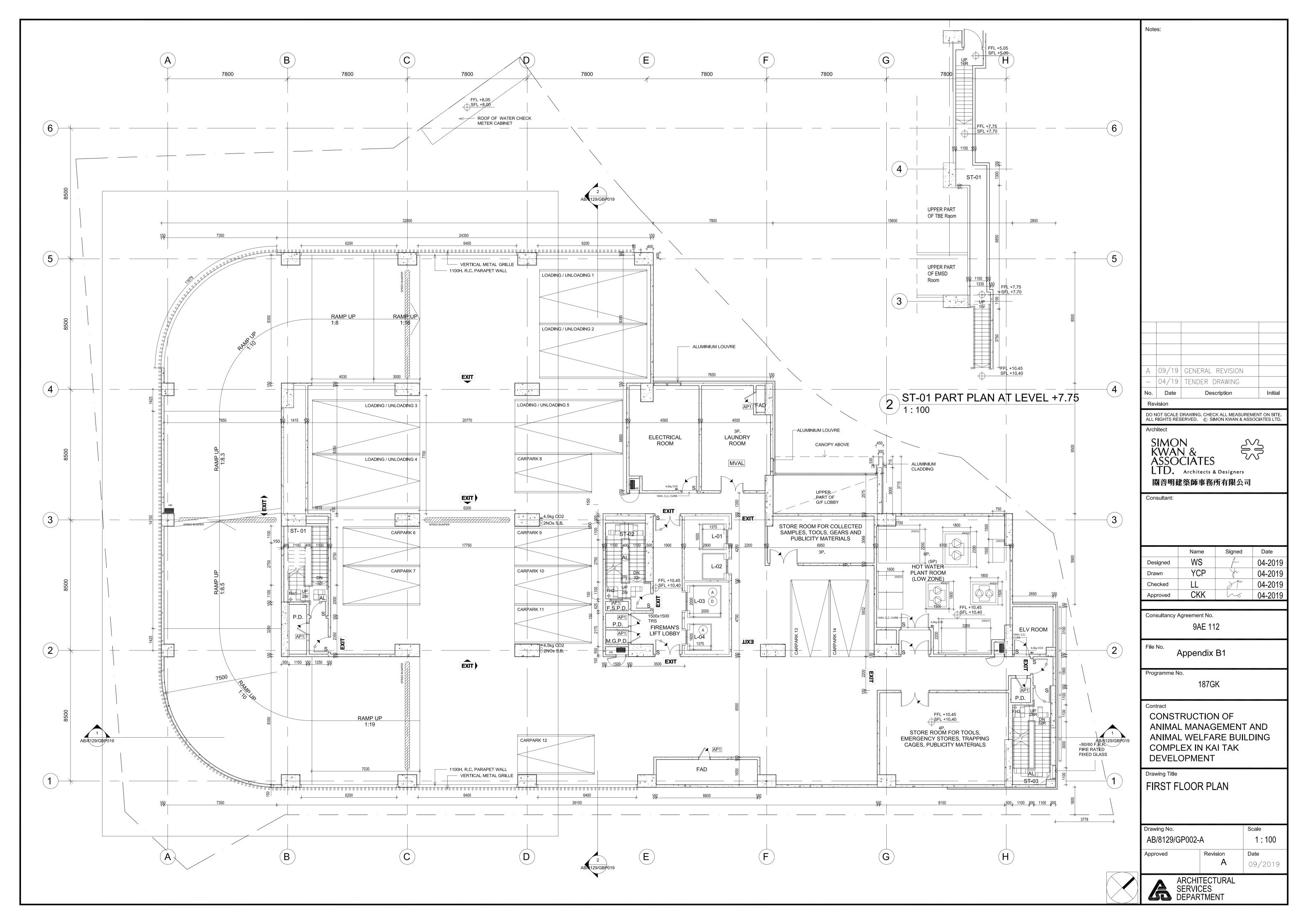
Appendix A Location of the ASRs

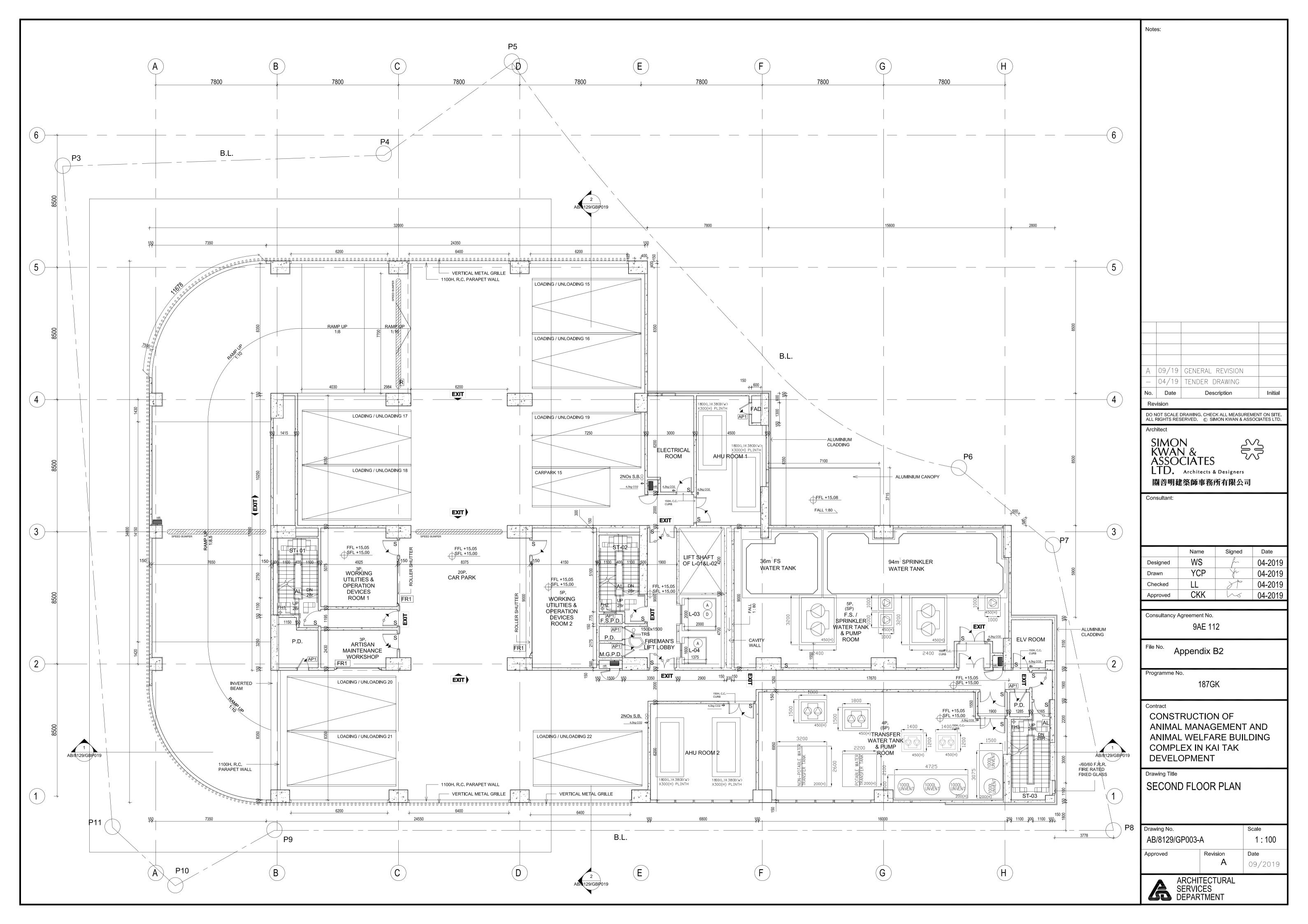


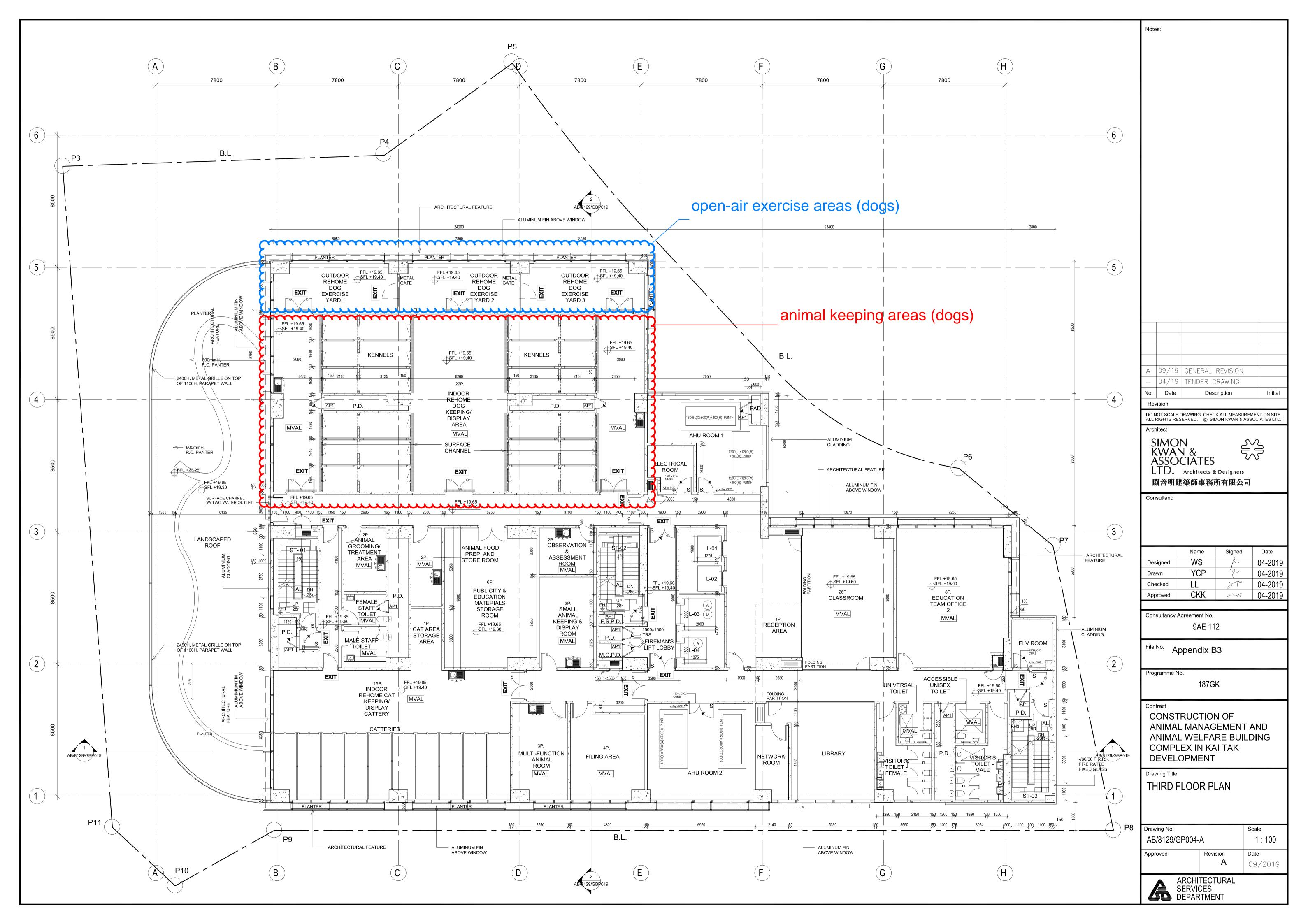
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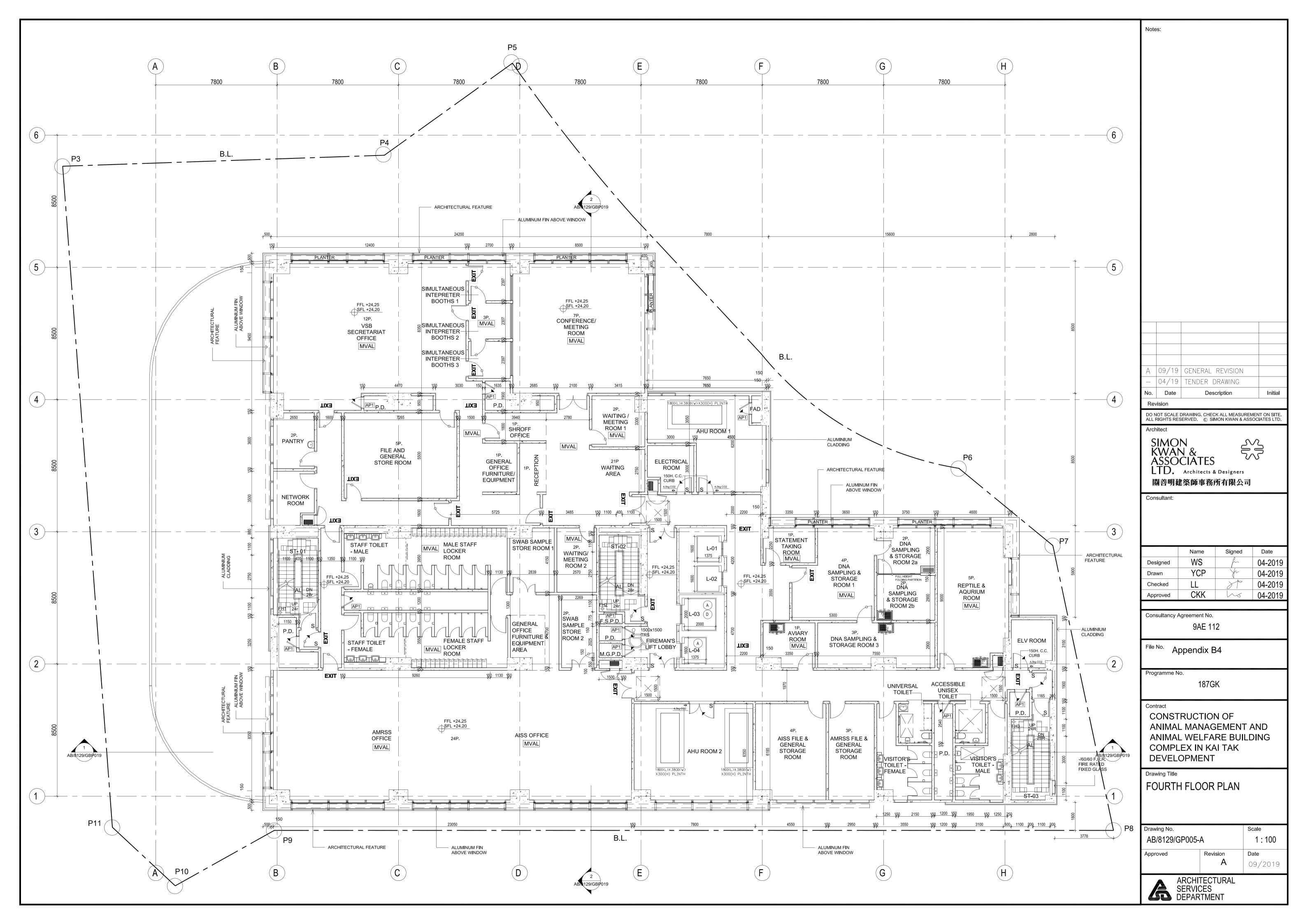
Appendix B General Layout Plan

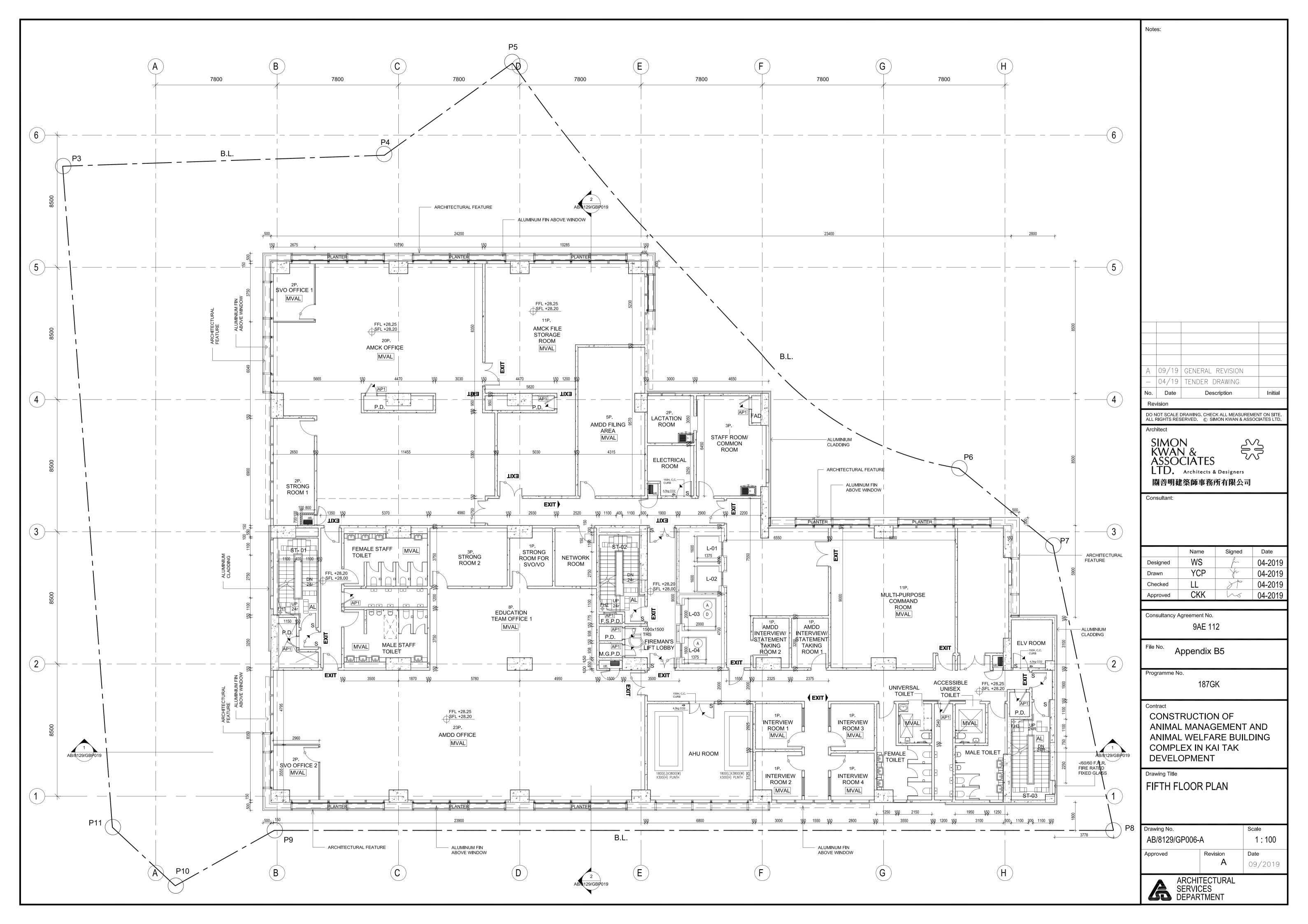


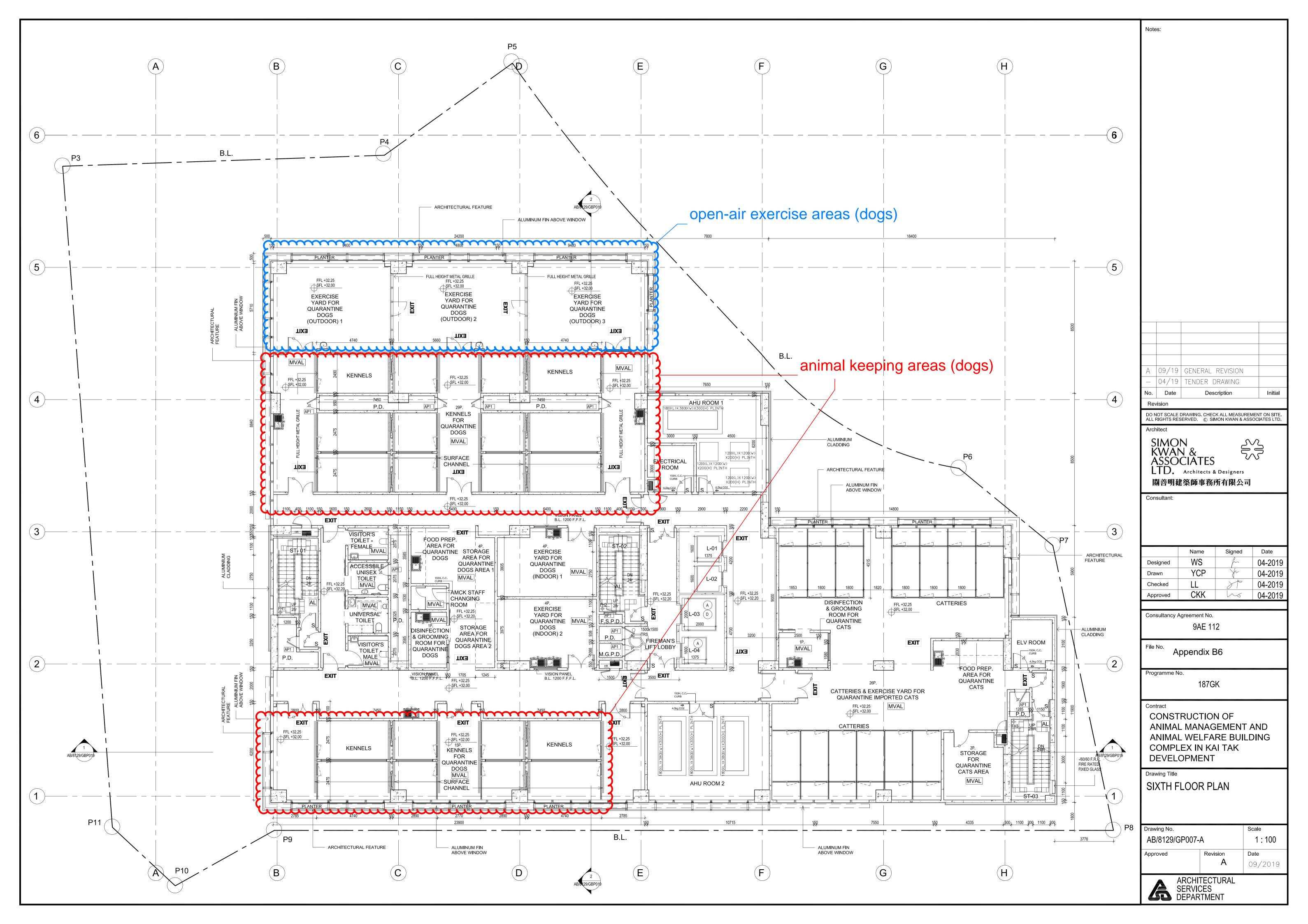


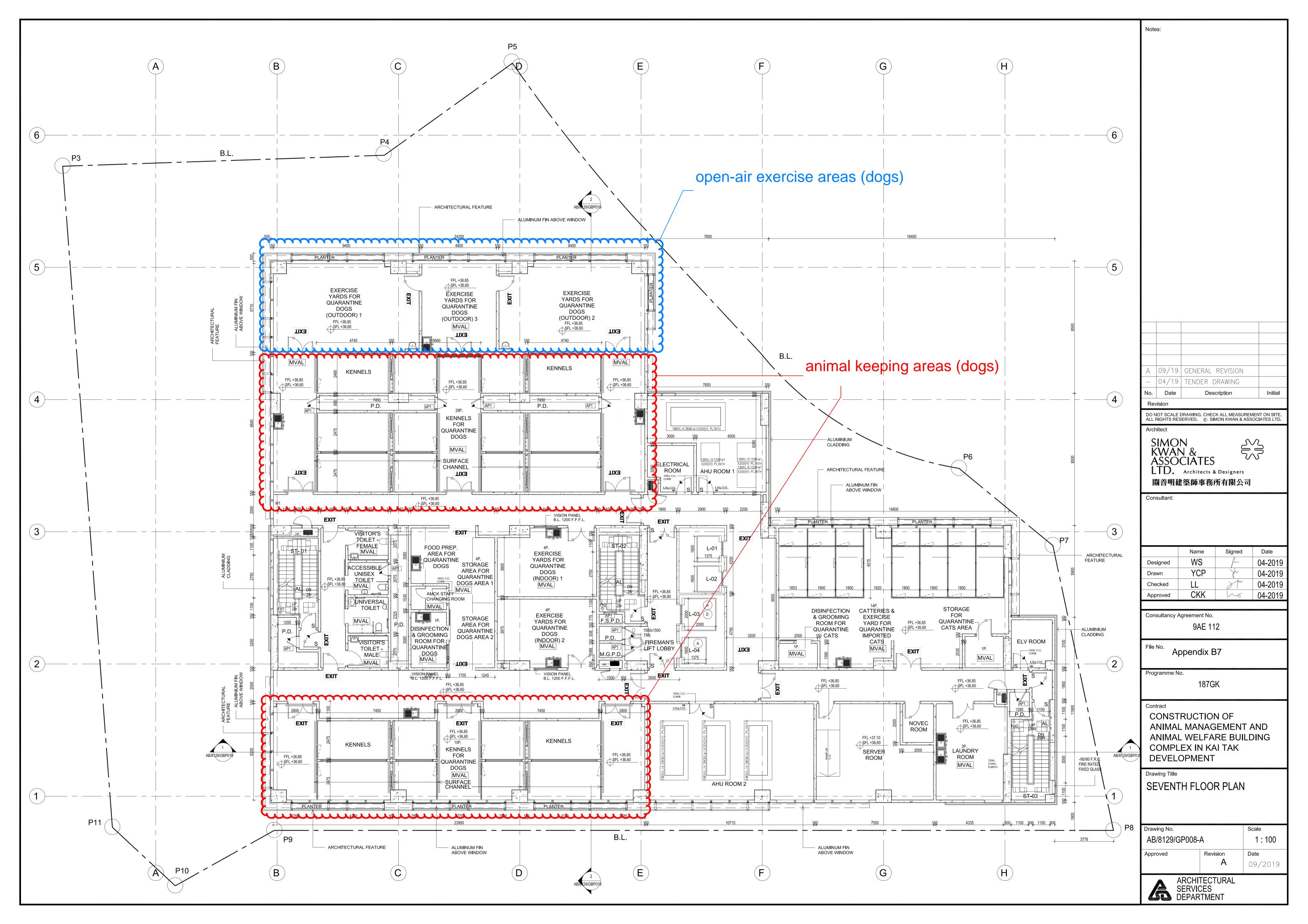


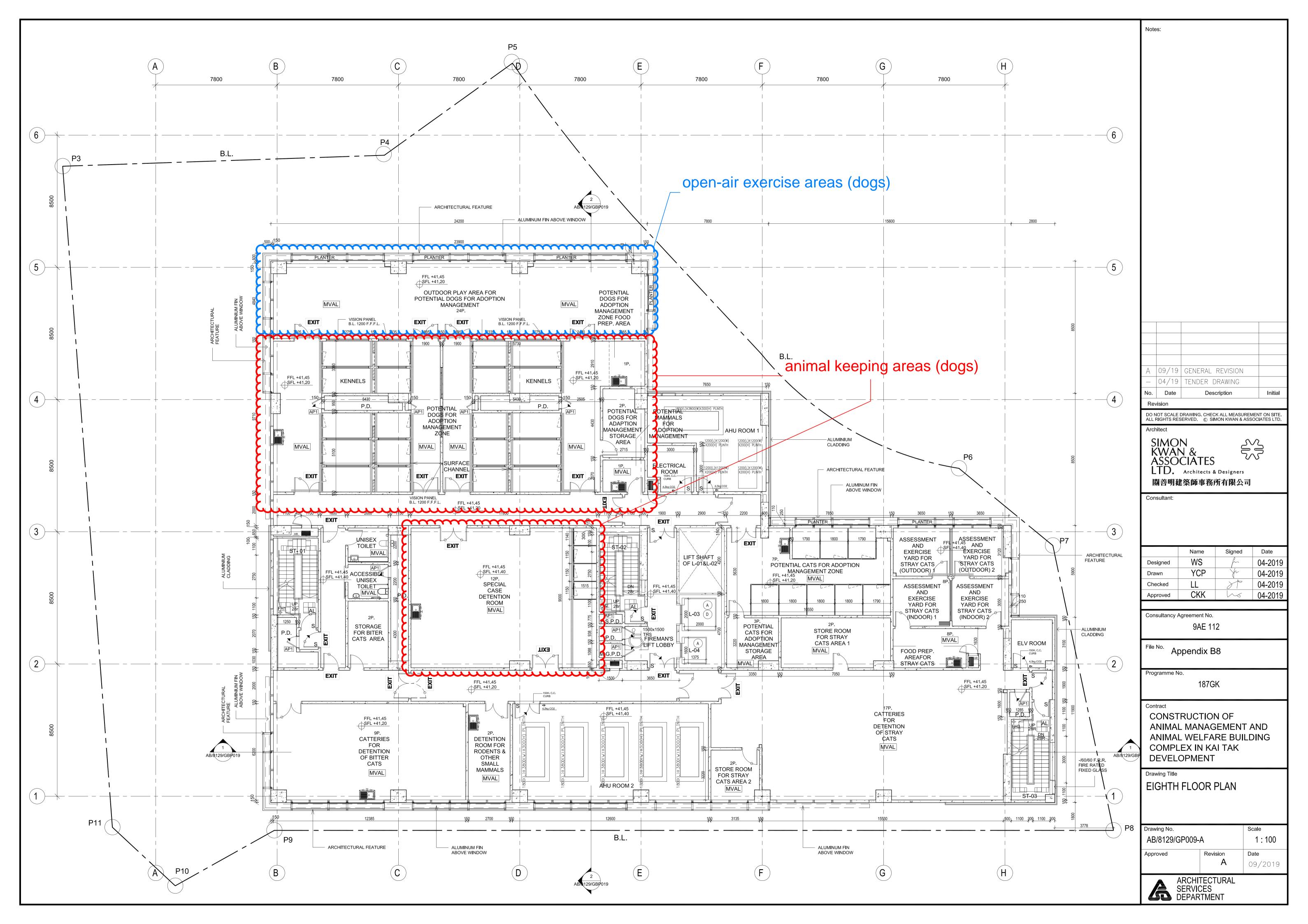


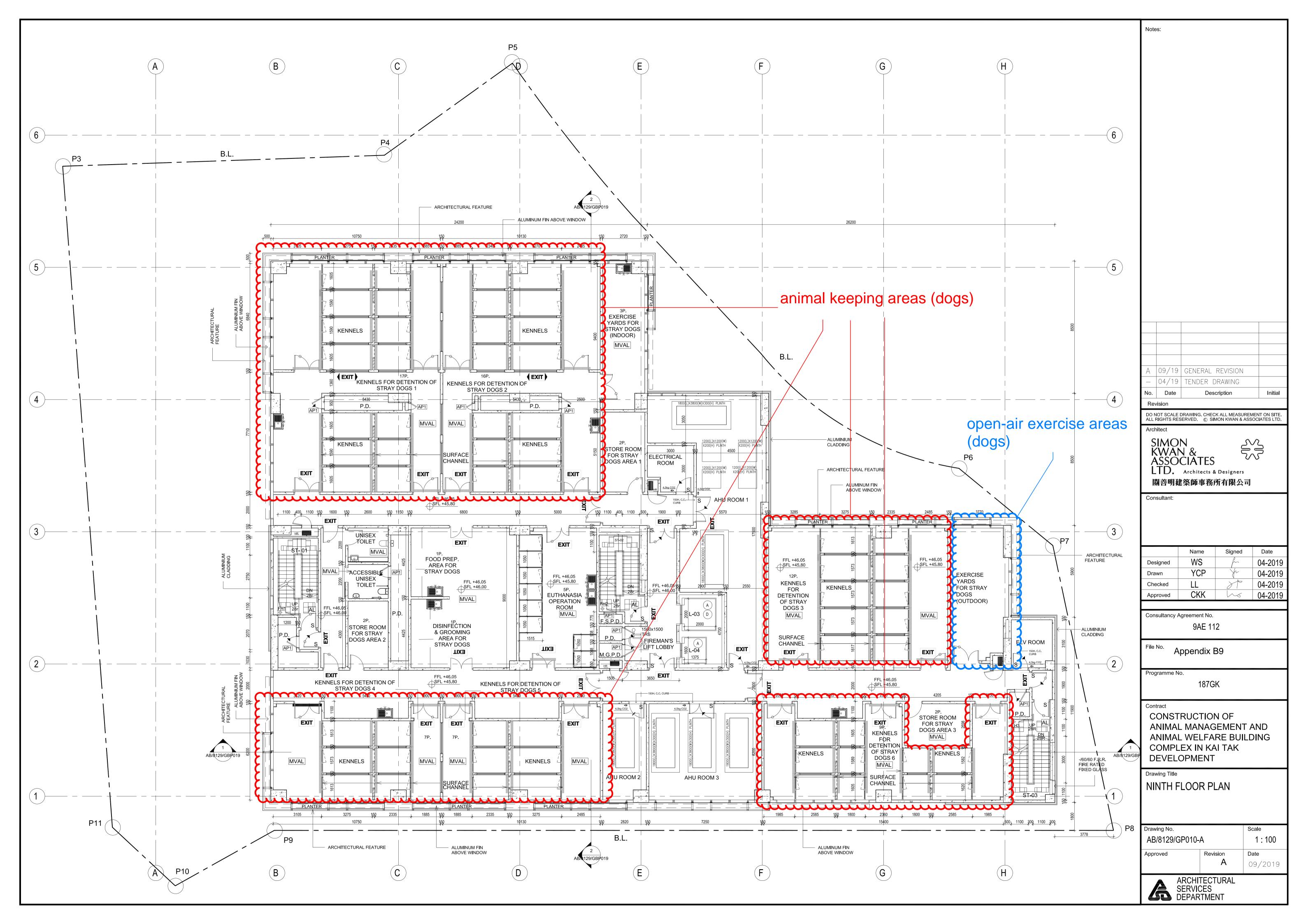


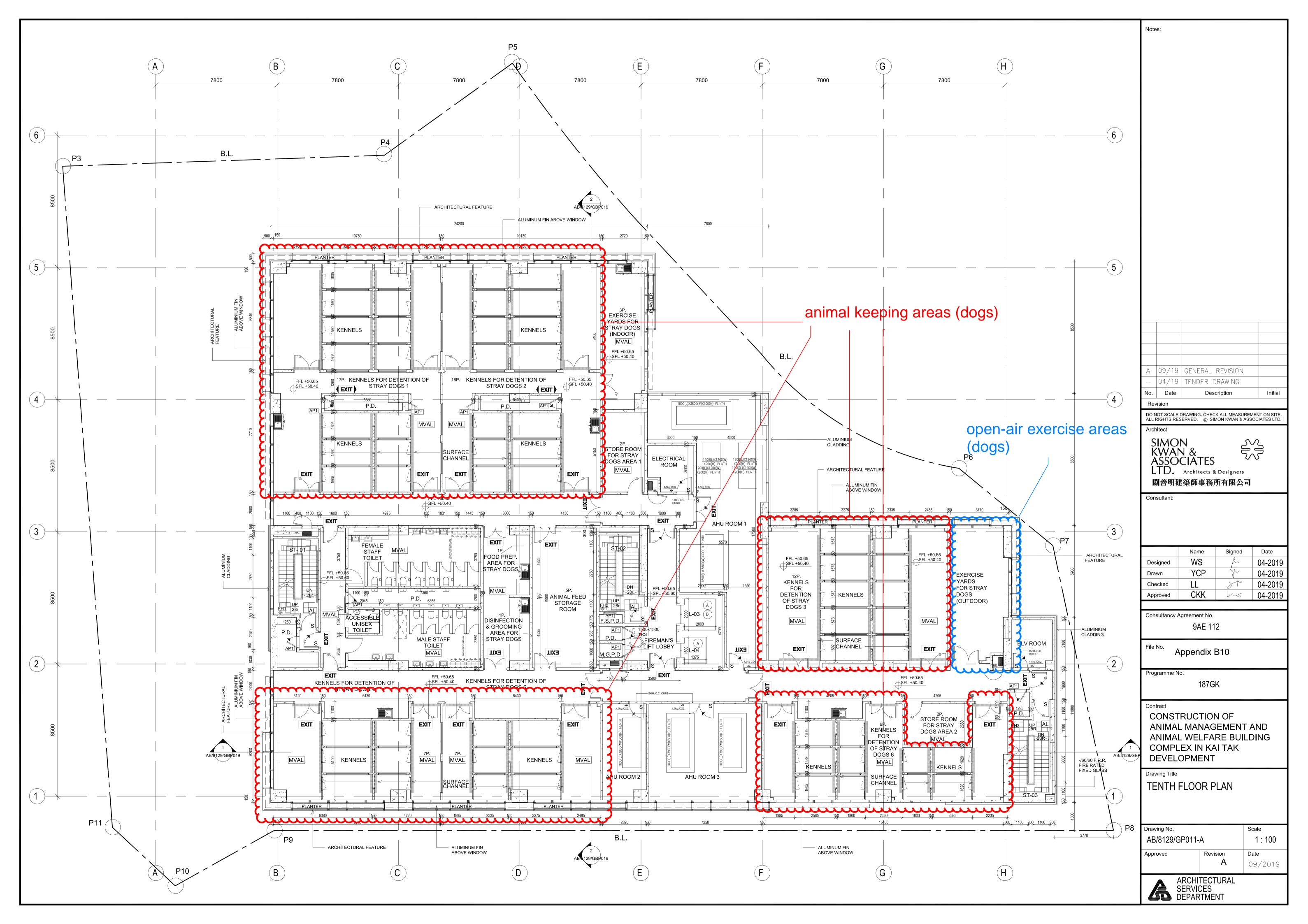


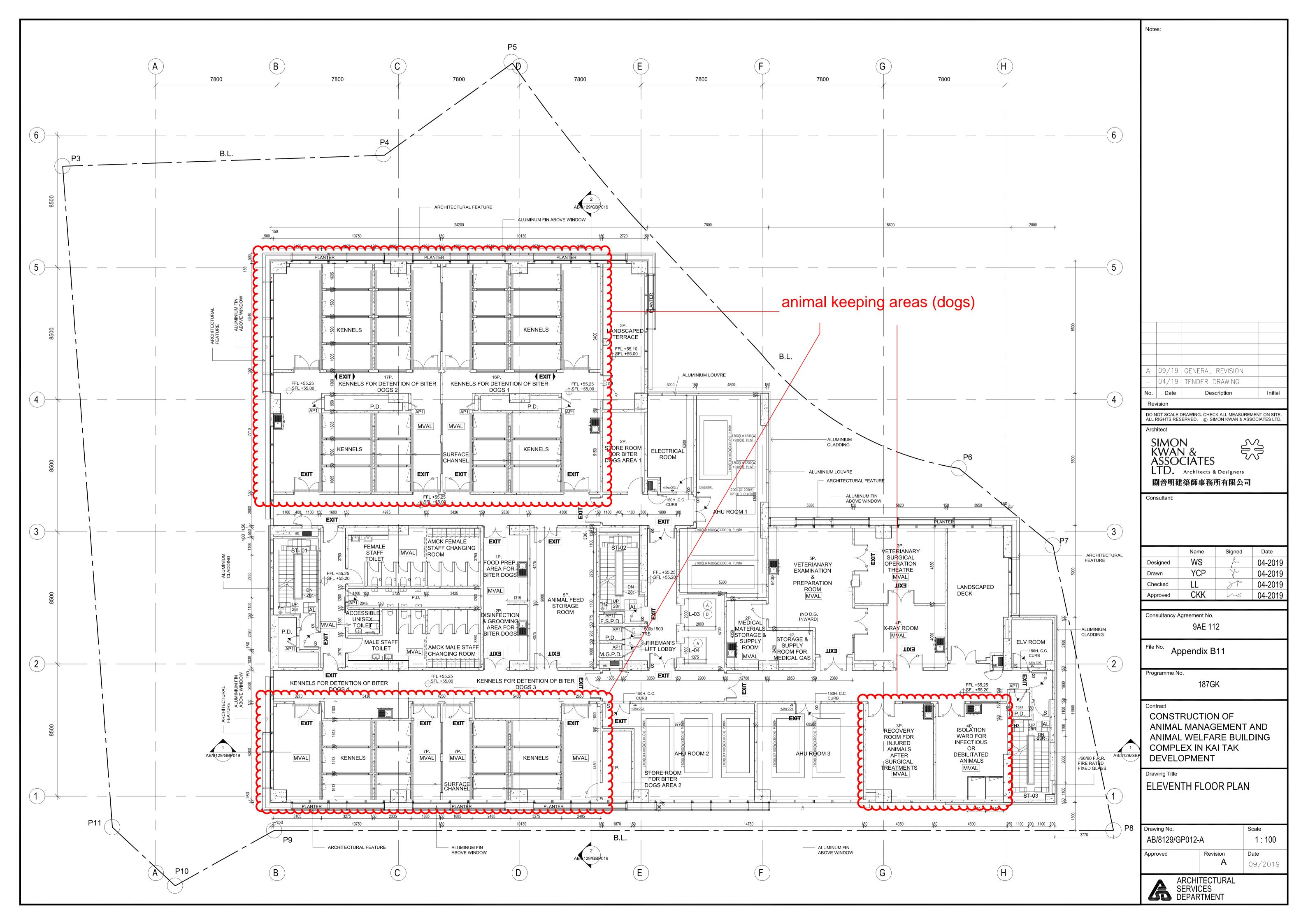


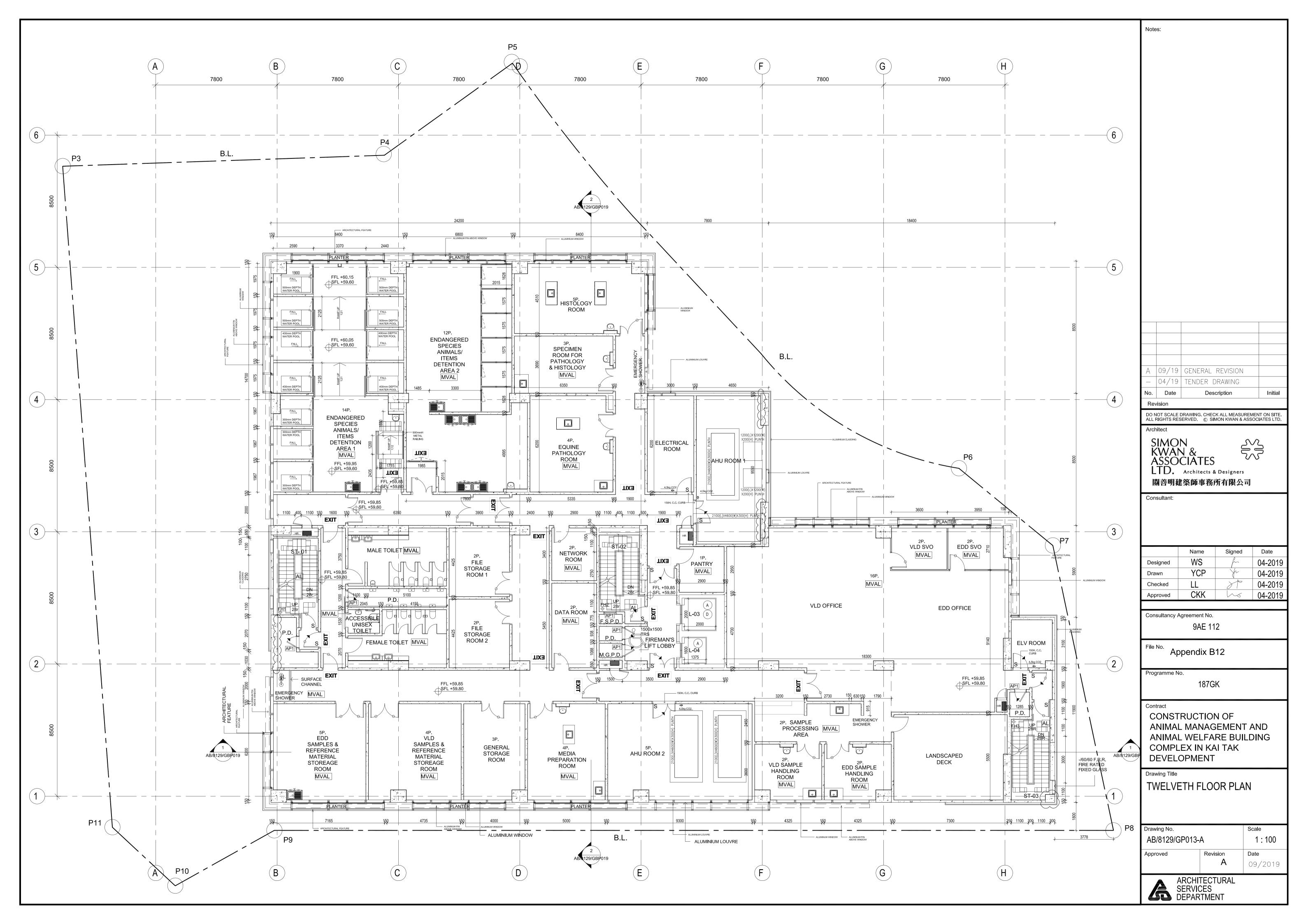


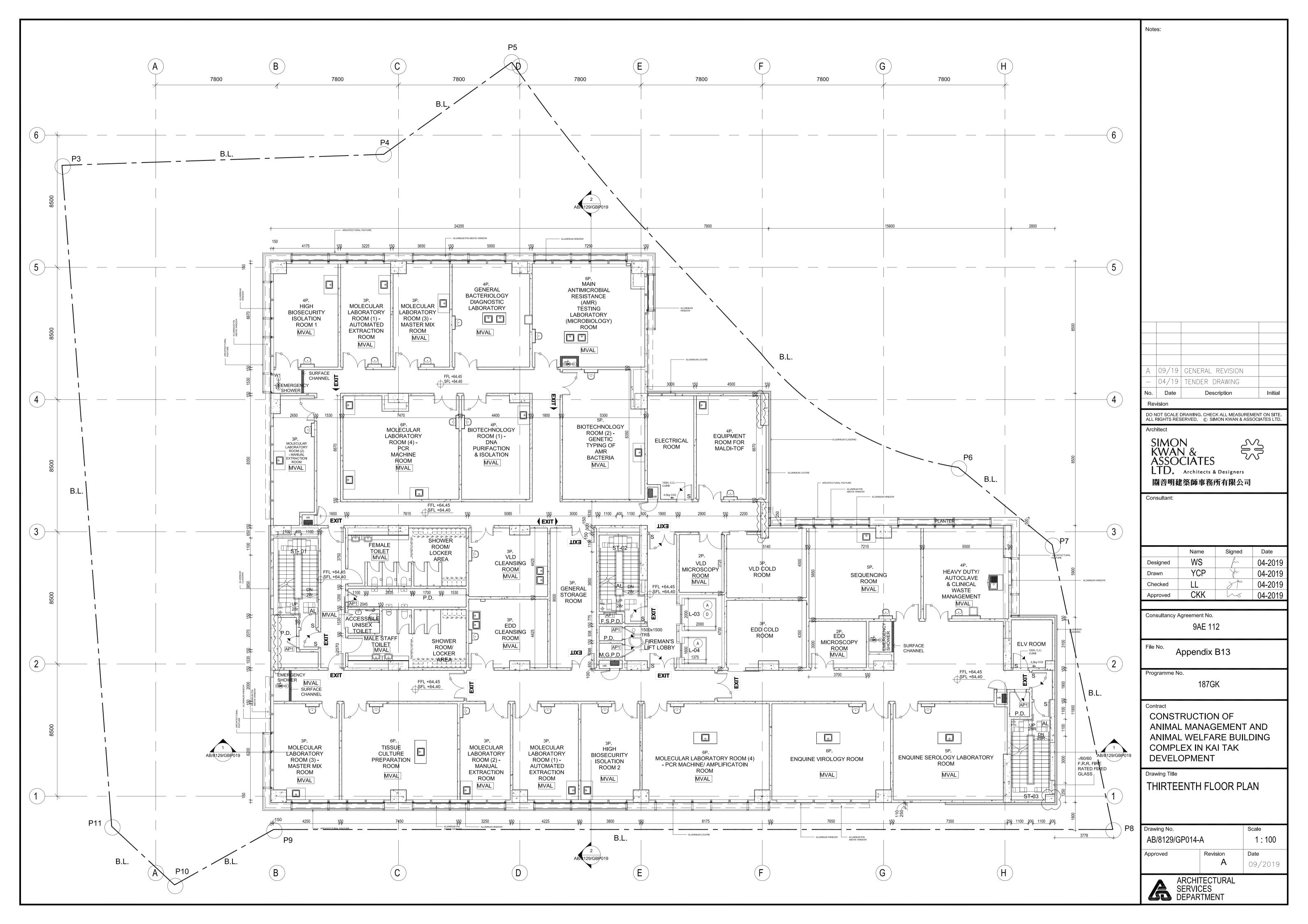


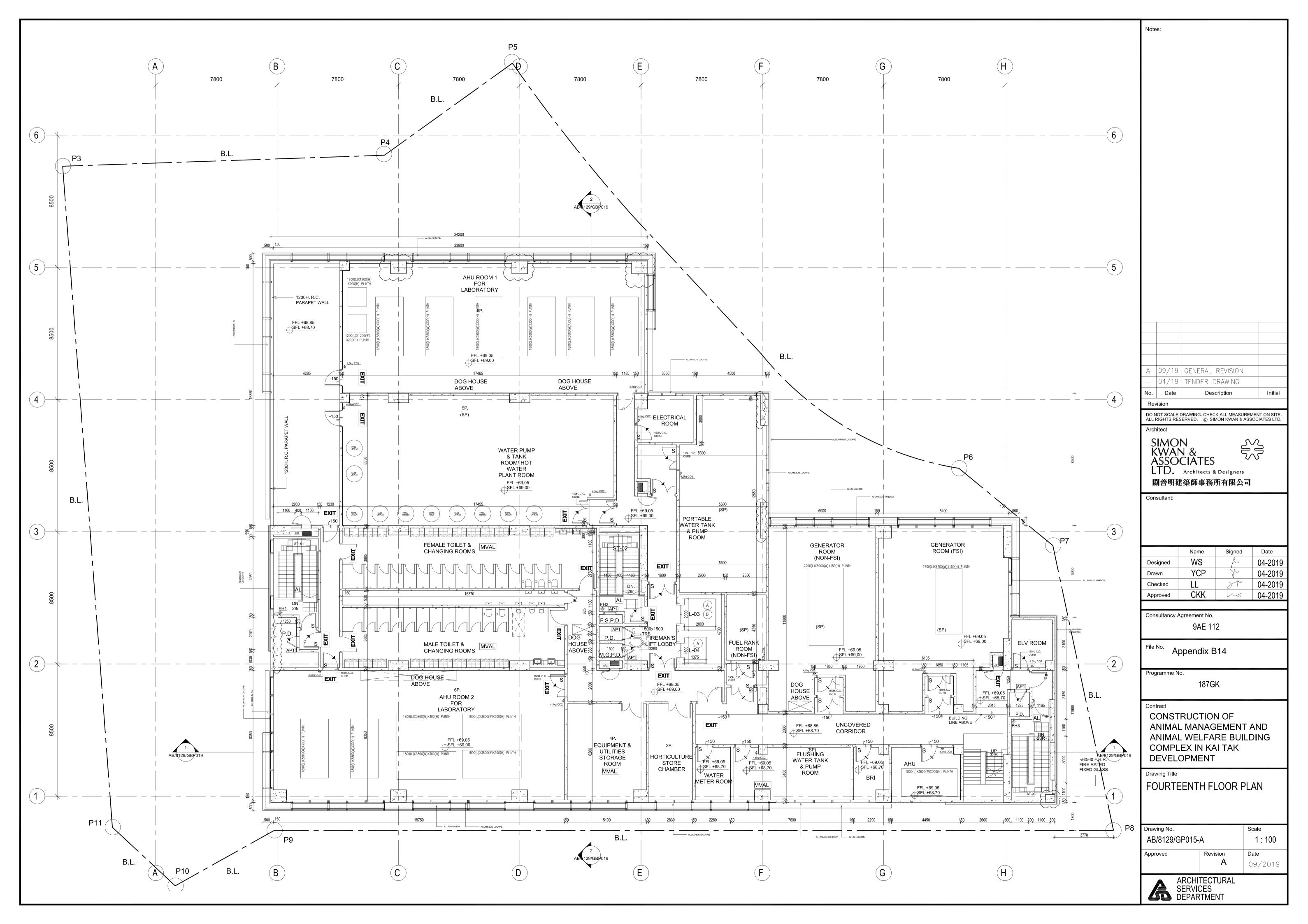


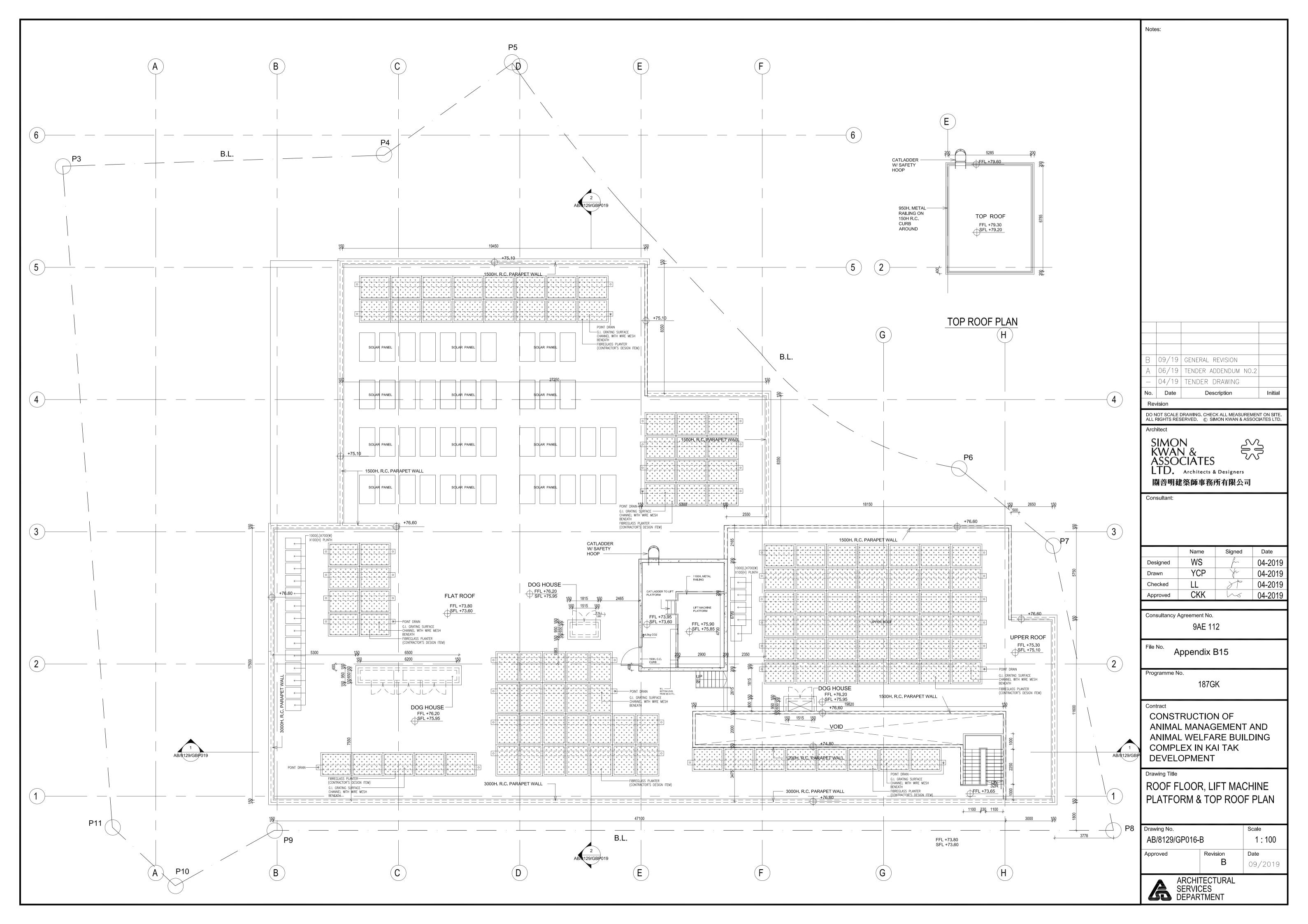












Appendix C

Air Exhaust Locations

