



桃園國際機場

Taoyuan International Airport

臺灣桃園國際機場第三航站區旅客運輸系統工程 廠商說明會 (僅供參考)

桃園國際機場股份有限公司

114年3月11日

簡報大綱

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一. 簡介-旅客運輸系統

Introduction - the People Mover System (PMS)

- ❑ PMS工程原已於112年底發包設計施工，惟於113年12月19日終止契約，爰再依原工程範圍檢討後，再次辦理統包工程招標作業。

The PMS was originally awarded for design and construction at the end of 2023. However, the contract was terminated on December 19, 2024. The Entity again launched the turnkey project tendering process on the original scope of the project.

- ❑ 採智慧運輸巴士，初期提供T3-T2航廈間之旅客運輸服務，系統路線需能於未來延伸至 T1航廈。

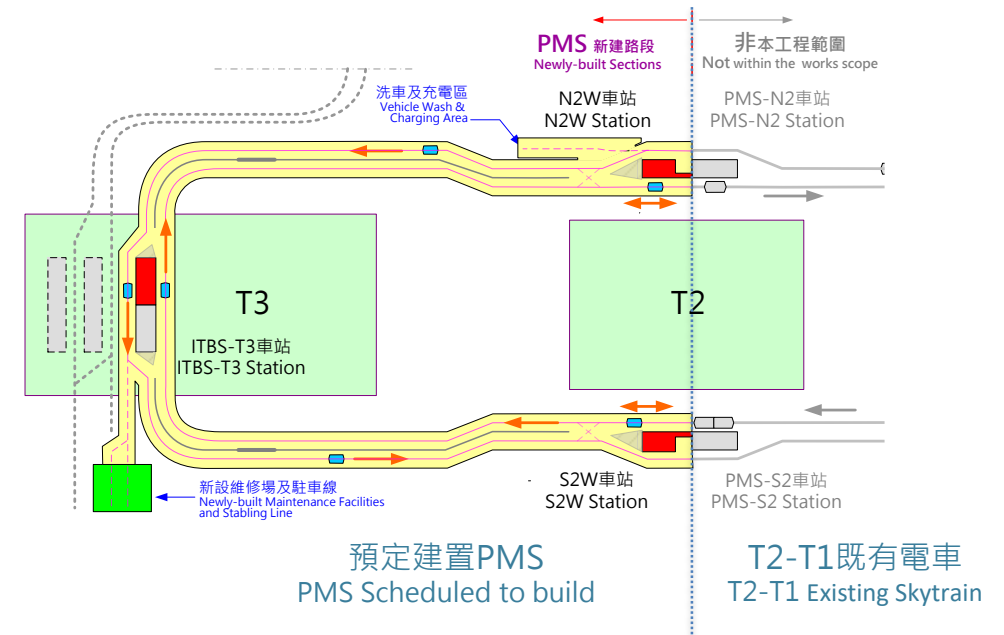
Intelligent Transportation Bus will be adopted and initially provide PAXs transport services between T3-T2 terminals, and the system route shall be extended to T1 Terminal in the future.

- ❑ PMS應包含旅客運輸服務及維修全部設備。包括電動車輛、配電、通訊、道旁裝置、車站月台門、車輛行車管理系統、及維修與貯存設施、設備及供應品

PMS shall comprise all elements necessary for the operation and maintenance of PAXs transit service in TTIA. including vehicles, electrical power distribution, communications, roadway side mounted equipment, platform doors, vehicle traffic management system, maintenance and storage facilities, equipment and supplies.

- ❑ PMS行駛專用道路，須可全自動操作(無人駕駛)並有供不正常時或在(洗車、維修)場內操作時之手動操作。

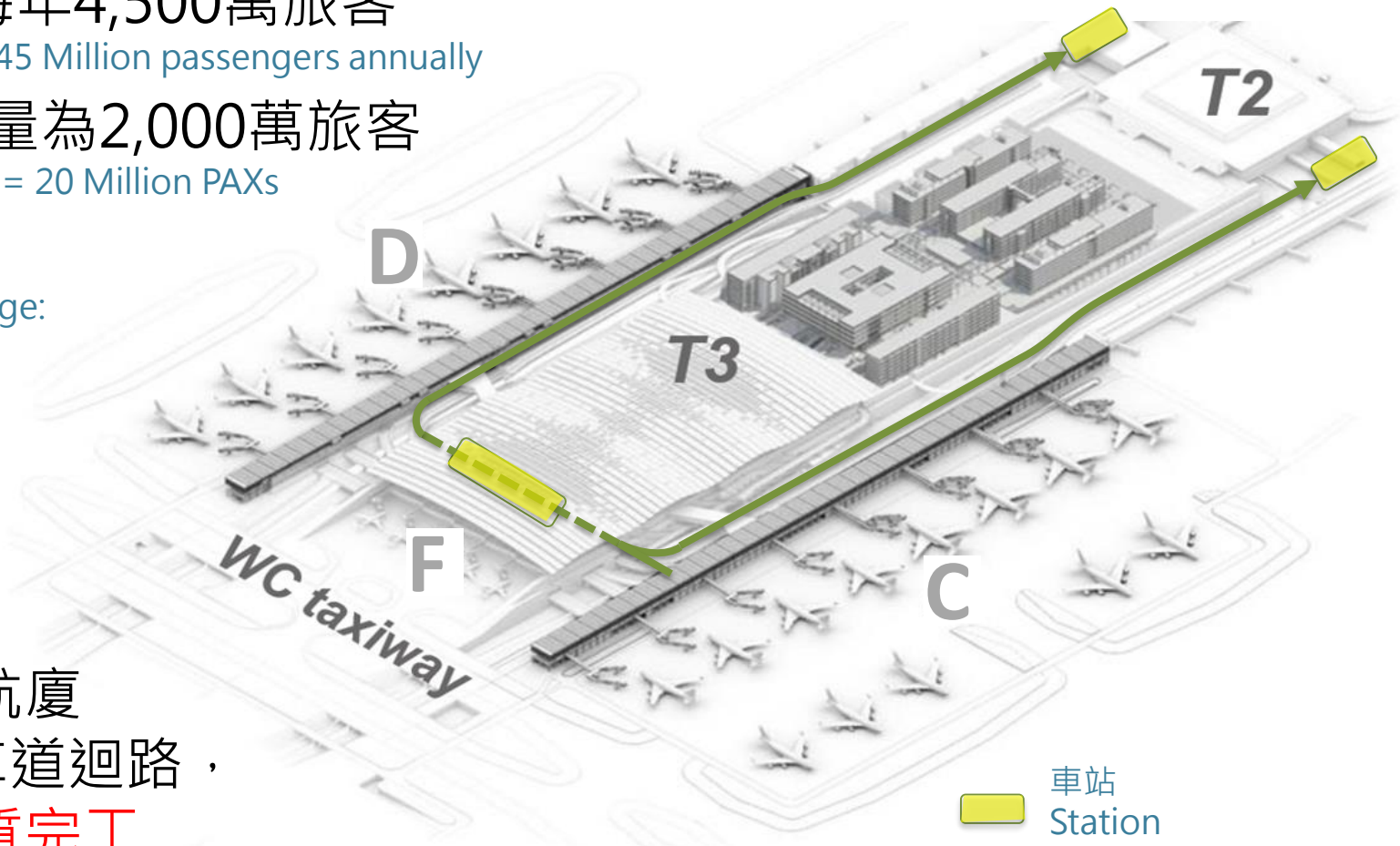
PMS runs on a dedicated roadway and must be able to operate fully automatically (unmanned driving) and have manual operation for abnormal or in-field operations (car wash, maintenance)



二. 第三航廈專案背景

T3 Project background

- 第三航廈計畫的旅客容量達每年4,500萬旅客
T3 Terminal Project, the capable of handling is 45 Million passengers annually
- 主要服務登機門C+D+F，容量為2,000萬旅客
Service boarding gate C+D+F mainly, capacity = 20 Million PAXs
- 整個T3計畫將分三階段完工：
The entire T3 Project will be completed in 3 stage:
 - 北登機廊廳
North Concourse
 - 主體航廈
Terminal Building
 - 南登機廊廳
South Concourse
- 新建之旅客運輸系統連接T3航廈與T2航廈，路線呈一U形雙車道迴路，
工期配合T3整體計畫時程實質完工
The newly-built PMS connects T3 and T2 Terminals, and the route form a U-shaped two-lane pinch-loop, PMS will cooperate with the overall T3 project schedule;



車站
Station

三. 工程招標構想 – 招標方式

Idea of Project Tendering - Tendering Method

- 統包工程：包含細部設計、施工等工作

“Turnkey Project” , the work of PMS project include detail design, construction, installation.

- 招決標方式：公開招標最有利標決標

Tendering method: Open tender, Most Favorable tender.

- 預算金額：約新臺幣18億餘元

Project Budget: about 1.8 billion NTD.

- 預定期程：

Project Schedule:

- 2025年3月底招標文件公開閱覽

RFI starting before the end of Mar. 2025

- 2025年4月公告招標(等標期30日)

Announcement of tendering in April 2025
(30 days period of waiting proposal)

- 2025年6月完成招標

Complete the tendering in Jun 2025

- 細部設計作業期程預定7個月；

The detailed design is scheduled for 7 months;

- 開工日起540日內完成系統設計驗證，

The System Design Verification shall be completed within 540 days from the date of NTP.

- 工程包括製造、施工、場域測試、現場整合測試等，實質完工配合整體計畫時程。

The works includes Manufacturing, construction, field testing, on-site integration testing, etc., and Substantial Completion shall in line with T3 Project overall schedule.

三. 工程招標構想 - 廠商資格

Idea of Project Tendering - Possible Contractor Consociate

- 允許廠商共同投標以3家為限，廠商得單獨投標。

A maximum of 3 Joint Tenderers ; single vender may tender individually..

(1) 基本資格(營業項目類別證明文件)：

Basic qualifications(Supporting document for the classification of business):

「汽車及其零件製造業」(CD01030)或「資訊軟體服務業」(I301010)

"Automobile and Other Equipment Manufacturing Industry (CD01030) " or "Information Software Service Industry (I301010)"

(2)特定資格：

Manufacturer-specific qualifications:

- 具有相當經驗或實績者(國內外業績均可計入)：

1)車輛製造廠商：提供公共運輸車輛底盤或整車，及

2)車輛行車管理系統整合供應廠商：提供車輛控制、
車隊管理與行車監控系統等整合建置經驗

Having certain level of experience or work performance (both the local and international work performance is counted):

1) Vehicle manufacturers: provided public transport vehicle chassis or complete vehicles, and

2) Vehicle traffic management system integration suppliers: provided construction experience in the integration and construction of vehicle control, fleet management and vehicle monitoring systems etc..

- 得檢附工程分包(合作)協議書，就資格之一部分，以分包廠商就其分包部分所具有者代之

tenderers may attach a Cooperation Agreement to substitute for the part of qualifications with the subcontractor has for its subcontracted part.

四. 建置旅客運輸系統 - 系統要求

Delivering a People Mover System - System Requirements

- 在桃園國際機場內各航廈之間提供穩固、可靠且安全之旅客轉運。
Provide a durable, reliable and safe connection for passengers between Terminals at TTIA
- 自動駕駛、電動、雙向車輛。
Autonomous, Electrical, Bi-directional Vehicles
- 設計運量：每小時單方向最少1,000人次，本工程採購每小時單方向最少500人次
Design capacity: min. 1,000 pphpd as general design requirement, and the Project purchases min. 500 pphpd.
- 實質完工配合整體計畫時程。
Substantial Completed shall in line with T3 Project overall schedule.
- 整合車輛停站、月台門操作、旅客資訊顯示、車站及車上影音監視及通訊成為一完整系統操作。
Integrate functions of vehicle dwell, platform door operation, passenger information display, stations and on-board CCTV and communication, into a complete system operation.
- 交付範疇
Scope of delivery
 - 根據規範和運量需求提供車輛、配電、通訊、行車管理系統、場站設備、維護及管理設備及設施
According to specification and capacity requirement, provide vehicles, electrical power distribution, communications, vehicle traffic management system, maintenance and storage facilities, equipment and supplies
 - 系統營運示範6個月、保留擴充採購2.5年。(保固 3年)。
SRD 6 months, , retain expanded procurement for 2.5 years. (Warranty 3 years)

四. 建置旅客運輸系統-車輛主要規格

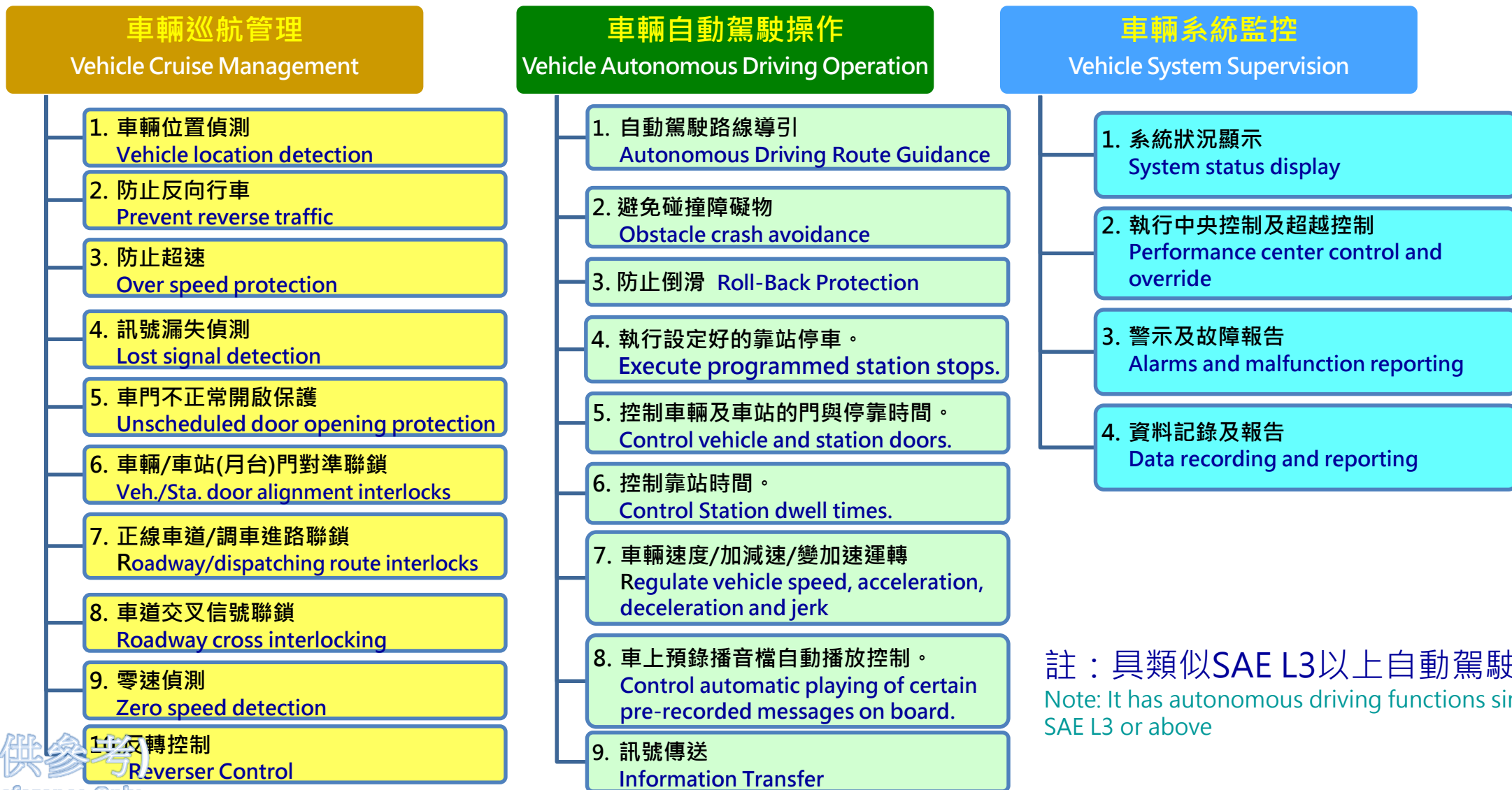
Delivering a People Mover System - Vehicle Specification

- 中等尺寸以上的車輛：不少於16人，具備輪椅位置
Medium size and above: Not less than 16 persons, Wheelchair available,
- 座位數：大於20% 滿載客量
Seat: Great than 20% Full Capacity
- 車長：小於12.2公尺
Vehicle Length shall be less than 12.2m
- 材質：不鏽鋼/鋼材/鋁合金/玻璃纖維
Material: Stainless steel/steel/Al/Glass fiber
- 軸重：不大於10噸(單軸)
Axle Weight: Not greater than 10 ton (single axis)
- 最大爬坡度 $\geq 5.0\%$
Max. Climbing Slope $\geq 5.0\%$
- 設計速率 ≥ 50 公里/小時、最大巡行速度 ≤ 40 公里/小時
Design Speed ≥ 50 kph, Cruise Speed ≤ 40 kmph
- 車輛操作：全自動化無人駕駛
Vehicle Operation: Fully Automatic, Driver Less

- 結構設計壽命
Structure Design Lift
車輛結構組件設計以至少10年壽命
The vehicle structural and assembly shall be designed for a minimum of 10 years life.
- 車門需求
Vehicle Doors
車輛兩邊均須有至少一組電動橫滑雙開門
At least one sets of power-operated, horizontally sliding doors shall be provided on both sides of each vehicle (car) as required.
- 傾覆穩定性-車輛靜止，在空車及滿載下，強風仍能保持穩定
Tipping Stability- For both empty and full load conditions, a static vehicle shall be stable under Strong winds:
 - (1) 側面承受時速160公里的強風。
A side wind of 160 kmph applied against elevated side of a vehicle.
 - (2) 在高架車道上，其正面承受時速215公里強風。
A side wind of 215 kmph applied against elevated side of a vehicle.

四. 建置旅客運輸系統-系統控制功能/行車管理功能

Delivering a People Mover System - System Control Functions/Traffic Management System



註：具類似SAE L3以上自動駕駛功能
Note: It has autonomous driving functions similar to SAE L3 or above

四. 建置旅客運輸系統 - 6個月的系統營運示範

Delivering a People Mover System – 6 Months System Revenue Demonstration

本工程六個月之系統營運示範，包括全責操作維修系統：

6 months of the System Revenue Demonstration of this Project include full responsibility O&M Service:

- ▣ 負責PMS旅客運送、車隊行車管理、系統電力監控、車站設備監控等操作業務。
Responsible for PMS's PAXs transportation, operating fleet traffic management, electricity surveillance and station equipment surveillance of the PMS Project.
- ▣ 對本工程所有設施、設備、輔助裝備、特殊機具，進行檢查、維護、保養及修理
To check, maintain, service and repair all facilities and equipment, operation-assistant equipment, and special machinery of this project.
- ▣ 全責維修，並提供系統營運示範期間所需之所有備品、耗材，落實PMS設備維護及操作安全相關規章要求，達成系統可用率。
Fully responsible to the maintenance work, and achieve system availability by fulfilling the requirements related to the equipment maintenance and operational safety of the PMS through own management training and provision of all spare parts and consumables during the SRD service.
- ▣ 工程期間逐步準備系統營運示範服務人力。
Gradually prepare manpower for SRD services during construction period of the Project.

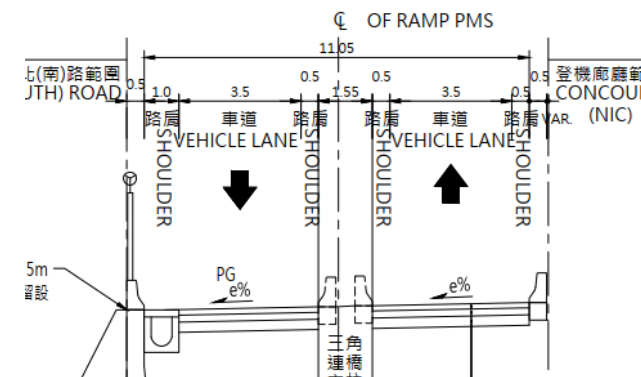
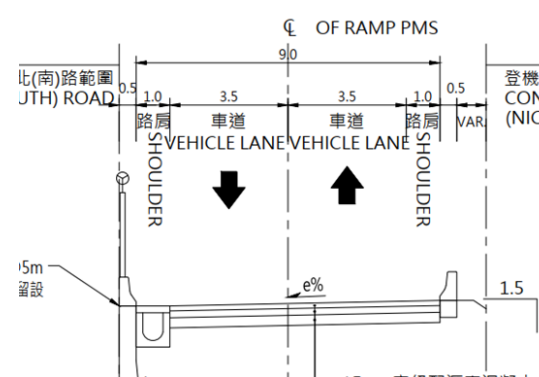
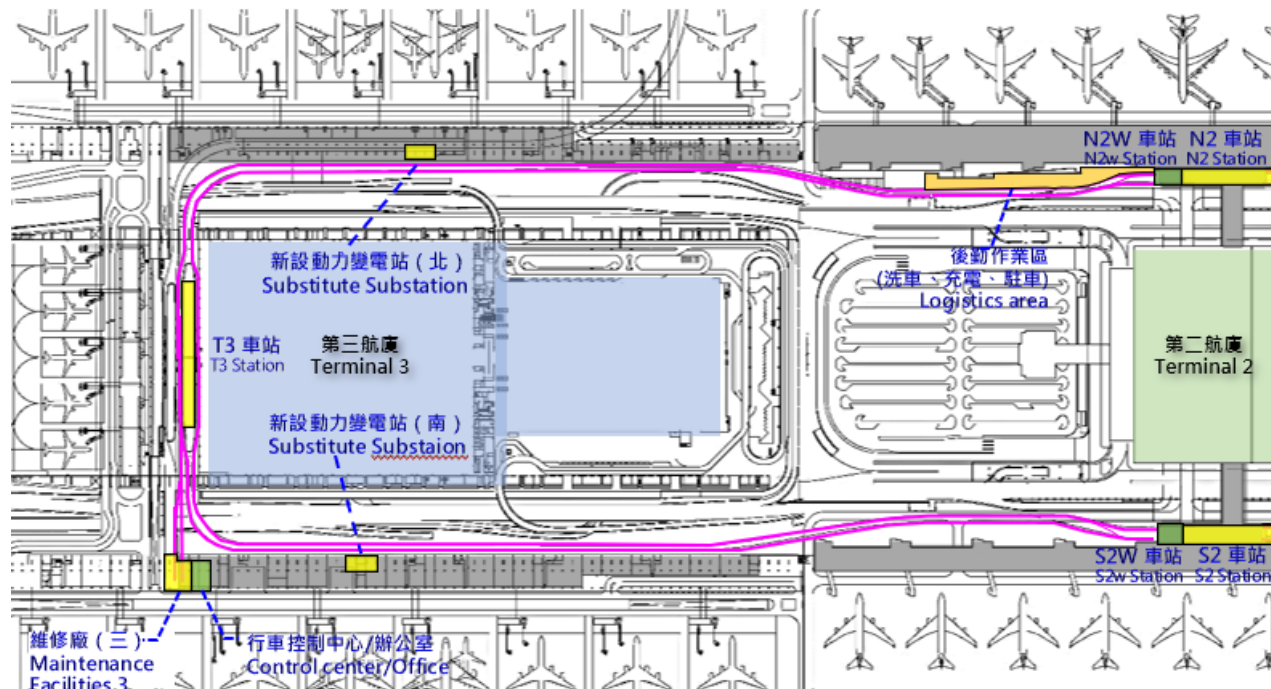
五. 由機場公司提供之土建設施 - 車道配置

Civil and Facility works provided by TIAC – Roadway Layout

T3 計畫專案已規劃之土木設施配置

T3 Project planned civil and facility layout

- C型車道總長度約為2,080公尺
The length of the "C" shape roadway is totally about 2,080 m
- 站間車道為雙線車道，每車道寬3.5m
The roadway between stations is a two-lane road, width 3.5m for each lane
- 鋼橋跨越航站南北路(半徑50m)，車道加寬
Curved steel bridges are designed to cross HangZhan North and South road. (R= 50 m), wider there.
- 提供旅客進出之N2W, S2W及T3三處車站
3 stations N2W, S2W, and T3 station for PAXs access to the new system
- 提供系統營運及後勤所需建築使用空間
Provide use building space required for system operation and logistics



六. 討論及意見回饋

Discussion and Feedback





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簡報結束
恭請指導