



Forming Collaborative Supply Chain

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INTRODUCTION







CONTRACT + COLLABORATION?

• Collaboration is...

"...two or more people working together to create or achieve the same thing."

- Cambridge dictionary





CONTRACT + COLLABORATION?

• NEC3 Clause 10.1:

"...shall act as stated in this contract and in a spirit of mutual trust and co-operation."

Is collaboration an obligation?





THE PARTNERSHIP

- The Arup-Mott MacDonald Joint Venture (AMMJV):
 - Unincorporated joint venture arrangement
 - We both share a collaborative culture







THE OPPORTUNITY

Central Kowloon Route (CKR) project



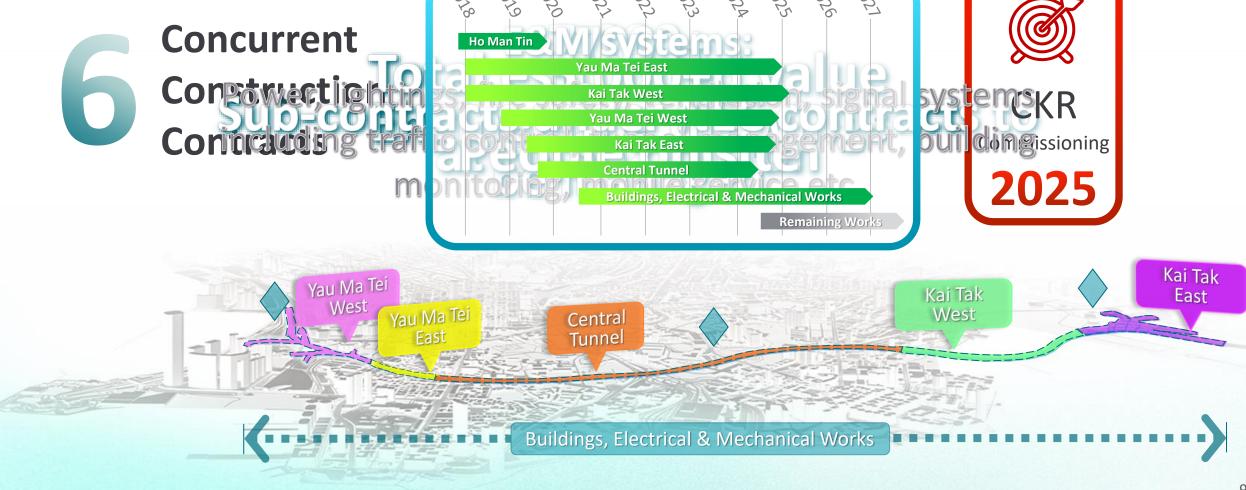
- 4.7km dual 3-lane urban highway
- Highways Department of Hong Kong SAR Government
- D&C Consultancy started in 2011
- Construction started in 2017
- Target road commissioning in 2025







CENTRAL KOWLOON ROUTE









CENTRAL KOWLOON ROUTE

Major Interfaces and Existing Facilities









CENTRAL KOWLOON ROUTE

Major Interfaces and Existing Facilities





















AMMJV'S COMMON OBJECTIVES

- Quality delivery and technical excellence
- Commercial performance and cost-effectiveness
- Reputations and positive influences





TIME TO CHANGE

- Initiatives to enhance project performance by collaborative and risk-sharing approaches → NEC way of working
- With Arup's and Mott MacDonald's respective experiences in NEC projects
 - → organised experience sharing sessions for CKR project teams







DRIVING THE CHANGE

- AMMJV facilitated the decision to change from GCC to NEC ECC Option C for the remaining works contracts
- Explored and proposed amendments to address local policies and industry's requirements, which became the basis of updates and enhancement in government standard library for contracts.







FOSTER TRUST & TEAM SPIRIT

- Encourage communications to gain mutual understanding
- Effective use of Early Warnings
- Project Champion Group workshops to include senior management and relevant stakeholders to tackle project-wide and common issues
- Joint effort to identify solutions to problems
 - → sort it out now!
 - → decisions made are honoured!





SUCCESSFUL SHOWCASES

- ✓ 1:- Joint efforts across contracts to develop acceleration measures
- ✓ 2:- Develop technical solutions to address unforeseen ground conditions
- ✓ 3:- Route-wide coordinated Interface Management Taskforce to lead the multiparty collaboration
- √ 4:- Contractor's cost saving proposals







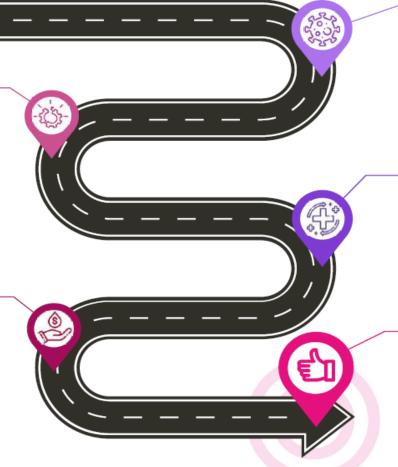
ADVERSITY MAKES RESILIENT TEAM

Unprecedented Challenges

- Supply chain disruptions
- Labour shortages
- Site shutdowns
- Delays in works progress

Value Engineering Proposals

- Replacement of pile foundation of a ventilation building with raft footing
- Downsizing of tunnel adit cavern
- Optimisation of tunnel linings



COVID-19

Long-lasting and wide-ranging pandemic has hit the construction industry hard since 2020

Delay Recovery Measures

- Injection of additional resources
- Changes in construction methods

Project Team continue to strive with full commitment towards the goal of commissioning CKR in 2025





CONTINUOUS IMPROVEMENTS

- Webpage and helpdesk for information sharing
- KPIs for continuous review of compliance
- Experience sharing sessions
- Feedbacks



01 Above Ground 上天



Demolition of Yau Ma Tei Carpark Building



Construction of flyover bridge in Yau Ma Tei West

02 Tunneling 入地



Assembly of TBM inside the Tunnel



Drilling blast holes on blasting face



Ho Man Tin Vertical Shaft

03 Works over Water 出海



Construction of temporary marine platform and cofferdam for underwater tunnel



Kai Tak River temporary platform for bridge construction









WE JOINTLY "VENTURE" FOR SUCCESS THANK YOU!









