

Seminar on Interfacing Street Works with Development Proposals



Jointly Organised by:

LTA ACADEMY
Singapore

**Development & Building
Control Division**

Land Transport Authority

Date:

18 January 2007
(Thursday)

Time:

9.00am – 4.00pm
(Registration starts at 8.00am)

Venue:

Grand Copthorne
Waterfront Hotel

Fee:

\$180.00 nett per participants
(inclusive of lunch / refreshments
& thumb drive containing
seminar materials)

Seminar on Interfacing Street Works with Development Proposals



For Whom:

Architects, Engineers, Developers, Land Surveyors, Project Managers and Contractors

**PDU points and CPD points
will be awarded**

**Seats Available
200**

Please call the following officers if
you have any enquiries:

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Seminar on **Interfacing Street Works with Development Proposals**

The Objective

This seminar aims to update the civil and structural engineers, M&E engineers, contractors, and to share their experience and lessons learned in handling challenges faced in the development adjacent to road reserves.

The Speakers

Professional Engineers, specialists and consultants from well known companies in the industry and Land Transport Authority.

The Topics

- Collaborative Traffic Planning - The Vivo City Experience.
- Traffic Impact Assessment.
- Architectural Design Criteria - Commuter Facilities.
- Control of Engineering Activities within Public Streets.
- Traffic Diversion at City Centre Areas.
- Good Practice for Road Design.
- Construction of The Cathay Building & Handy Road Apartment Next to Steep Slopes of Mount Sophia.
- Range-Based Car Parking Standard.
- Preparation of As-Built GIS Data for Completed Street Works.

Interfacing Street Works with Development Proposals

Collaborative Traffic Planning - The VivoCity Experience

Abstract:

The presentation covers the following points:

1. Conceptual Planning Stage.
 - Challenges of Planning for a transportation hub in mega shopping mall.
 - Projection of traffic and impact analysis of new mega mart and new Sentosa development.
 - Collaborative Process 1 – Preconsultation on planning.
2. Submission & Implementation Stage
 - Collaborative Process 2 - Preconsultation on Design Development.
 - Collaborative Process 3 - Assistance rendered during construction stage.
3. Post Completion Stage
 - Collaborative process 4 - Active participation by LTA in monitoring and suggestion of improvement.

Presenter: Mr Teoh Hai Pin, DP Architects

Mr Teoh Hai Pin graduated from the University of Sheffield, UK in 1985 with a Diploma in Architecture RIBA II (commendation in Design). In the subsequent year, the University conferred the Master of Arts in Architecture degree on him. Upon his graduation in 1985, he served with the Housing Development Board, Singapore as an Architect for 3 years prior to embarking on a new career with a firm in Hong Kong. He was a Senior Architect at the time of his departure from Hong Kong in 1991.

On his return to Singapore, he joined the DP Architect as Senior Architect in charge of the Pontiac Marina mixed development. As the Project Architect for this development, Hai Pin is responsible for the overall management of the whole development that consists of 2 luxury hotels, 2 premier office towers and a retail complex. The Project was successfully completed in 1998 and such exposure has provided him with experience in mega project procurement. Upon completion of the Pontiac Marina development, he became a Director in 1996.

Traffic Impact Assessment

Abstract:

CPG Consultants Pte Ltd provide consultancy services in transportation planning, traffic management, road safety audits and Traffic Impact Assessment (TIA) in Singapore and overseas, in addition to other professional services for the construction industry. After the Land Transport Authority (LTA) has published the requirement for TIA for new developments in 2003, CPG has been appointed by various authorities and private companies to conduct many TIAs. Examples are for the Singapore Botanic Gardens, Singapore Prisons Headquarters, Tiong Bahru Food Centre/Market, Changi Airport Budget Terminal, Sentosa Coach Park, One-North and the new Alexandra Hospital

CPG's presentation will provide an appreciation of the LTA's TIA guidelines and an overview of CPG's TIA project approach, CPG will share relevant experiences that it has gained from TIA project work.

Presenter : Mr Yian Xing Long

Mr. Yian is a Senior Transportation Engineer with of CPG Consultants. He has extensive experience in the areas of transport planning, traffic engineering and highway / rail alignment design. He has been involved in transport planning projects from the initial data collection stages to data analysis, scheme development and report writing. He has undertaken assessment of existing transport networks, forecasting of future transport demand, planning and design for car park facilities, transport hubs, bus routes and dedicated bus lanes.

He is also well versed with transport planning, design and simulation programs such as VISUM, VISSIM, aaSIDRA, INROADS, INRAILS, AUTOTURN and AUTOTRACK. He was the lead modeler for CPG microsimulation projects and has applied the aaSIDRA analysis program for many Singapore and overseas TIA Studies.

Interfacing Street Works with Development Proposals

Architectural Design Criteria - Commuter Facilities

Abstract

The Regulatory Team in Architecture Division supports the Development & Building Control (DBC) Division of the LTA to review commuter facilities associated with development proposals submitted by Qualified Persons (QPs). Commuter facilities (CF) comprises covered linkways, covered walkways, bus shelters, taxi shelters, pedestrian overhead bridges and underpasses. The paper covers revisions made to the CF Architectural Design Criteria (ADC), highlights the salient points and some of the common oversights by QPs in their submissions.

Presenter: Ms Hilda Tay

Ms Hilda Tay is a Professional Architect registered with the Board of Architects and a member of the Singapore Institute of Architects. She holds a Bachelor of Architecture degree from the Royal Melbourne Institute of Technology.

As an architect in the private sector, Hilda has an extensive work experience in handling residential housing, local shopping and institutional buildings. She is also conversant in the field of planning as she was involved in the development of the Master Plan for the Sentosa Cove waterfront housing under Sentosa Development Corporation and Sentosa Cove Private Limited working closely with both the Australian & American Planners.

She has been working in the Land Transport Authority for nine (9) years. She first started as part of the architectural team managing the Design & Build contracts of the North East Line, and design managing the consultants for the design of Dover MRT Station. She is now Unit Head in the Architecture Division who leads the team that oversees the implementation of commuter facilities projects from inception, execution to completion.

Her current scope of works also includes overseeing and review of new retail spaces, addition & alteration works in existing MRT stations, division quality management, regulatory and handling of customer feedback.

Interfacing Street Works with Development Proposals

Control of Engineering Activities within Public Streets

Abstract :

The Land Transport Authority of Singapore (LTA) manages engineering activities within public streets with the focus in ensuring public streets are safe and free-flowing for all road users. With the rapid increase in demand for utility services by new developments, road-openings are often needed in heavily built-up environment with high traffic flow. The use of skip bins arising from works within public streets is also common source of obstruction and safety hazards to the road users. LTA road management's policies and guidelines aim to enhance the effective of control of road-opening works and minimize inconvenience to public.

This paper outlines the various regulatory roles and responsibilities of the Authority in controlling engineering activities on public streets. Examples and case studies will be used to demonstrate good works practice that should be adopted in development and building works.

Presenter: Mr Foo Say Yaw

Mr Foo Say Yaw is the Deputy Manager (Road Opening) of Road Infrastructure Management Division, Land Transport Authority. He graduated from Nanyang Technological University in 1995. He has worked in Civil and Structural Consulting firm from 1995 to 1999 involving in design and construction of many major building developments and civil infra-structures before joining LTA.

He has vast experience in safeguarding of rapid transit systems and was involved in reviewing several mega projects that includes the Singapore Management University-City Campus, Changi Airport Terminal Building 3 and National Library project which are within close proximity to the existing MRT tunnels and structures.

He is currently overseeing the road opening regulatory section of the Road Infrastructure Management division that manage the road-opening works and engineering activities within the public streets.

Interfacing Street Works with Development Proposals

Traffic Diversion at City Centre Areas

Abstract

This presentation highlights the challenges of traffic diversions at city centre areas. Based on the practical experience, a framework is devised to systematically deal with these difficult problems to obtain the best desirable results. This management tool provides a comprehensive coverage of consideration from collecting technical data, handling below & above ground services, design of traffic schemes, soil investigation, choice of temporary works methods, instrumentation & monitoring, risk assessment, liaison of relevant authorities & utility agencies, railway protection & safety zone consideration, and public relation liaison. Examples of actual cases are used to demonstrate the effectiveness of the framework.

Presenter : Mr. Chiang Heung Chin

Mr. Chiang gained his Bachelor in Civil Engineering from National University of Singapore in 1984. He is a member of Institute of Engineers in Singapore. Mr Chiang is currently holding the position of Senior Project Manager in Gammon Pte Ltd. With over 20-year experience in the local construction industry, he participated in various technically challenging projects such as Marina Bay Station AIA Tower One Raffles Link, China Town Station as well as One Raffles Quay. Some of these are award winning projects which had involved extensive traffic diversions at the most congested & busy traffic junctions & carriageways in the city centre areas.

Interfacing Street Works with Development Proposals

Good Practice for Road Design

Abstract:

The presentation is to give the audience a general view of the important factors to be considered in the roadway design as well as the update of the design guide. Illustration on how design parameters to be applied correctly according to circumstances. It will also cover on some design issues where road designer tends to overlook such as inadequate turning radius for special needs of vehicle, road width, development of superelevations and crossfalls, setting out the road facilities outside the road reserve. Safety review of the road design, which form part of the design process will be included in the briefing.

Presenter: Mr Hum Wee Long

Mr Hum Wee Long has been working with the Design Development Division for over 30 years. Ever since, he has accumulated a wealth of experience in road design and will share with us his experience from a practical viewpoint.

Some major projects that Mr Hum has deigned are:

- Buangkok Drive
- Extension of Dairy Farm Road
- Proposed Serangoon Viaduct
- Extension of Queensway to Ayer Rajah Expressway
- Kranji Expressway
- Seletar Expressway from Upper Thomson Road to Woodlands South Avenue 2

Construction of The Cathay Building & Handy Road Apartment Next to Steep Slopes of Mount Sophia

Abstract:

Mt Sophia Road is a public road access meandering around a hill side up towards Mt Emily Park in an urban area. Construction of The Cathay Building and Handy Rd Apartment next to Mt Sophia Rd involved vertical cuts of up to 21-25m into the hillside. The geological condition of the surrounding ground is reported to be underlain with Jurong and Kallang Formation. Ground anchor tiebacks with contiguous bored piles, steel plates and arched gunite walls were deployed in combination as the excavation support system.

This paper presents the experiences encountered, from designing, seeking authority consent, construction, instrumentation and monitoring of actual ground movements during excavation. The design and review processes leading up to obtaining approvals from the authorities will be shared. Correlations to construction activities and comparison with analysis and finite-element studies will be presented. The actual performance of the system deployed at site will be discussed.

Presenter: Mr Lim Kok Kin of T Y Lin International Pte Ltd

Mr Lim Kok Kin is currently the Head of Building Department in TYLin International Pte Ltd. He graduated in 1982 and obtained his Masters in Engineering Science in 1985 from Monash University, Melbourne. Mr Lim has 24 years working experience in private consulting practice in Malaysia, Australia and Singapore and has designed numerous tall buildings and infrastructural works in various development projects in the region. Amongst Mr Lim's past and current achievements in major projects are in the following:

- Involved in the design of numerous tall buildings in Melbourne towering 50-60 storeys during his early days of practice.
- Project Director for Wisma 46, the tallest office building in Jakarta at the time of its completion.
- Project Director for the Keppel Harbour Redevelopment (32Ha) comprising the construction of over 2500 units of prime waterfront condominiums, deep water seawalls, reclamation works, large waterways, breakwaters and a cable-stayed bridge (Singapore).
- Project Director for the Design and Build MRT Contract C812, Punggol Station and Tunnels Singapore.

Interfacing Street Works with Development Proposals

Range-Based Car Parking Standard

Abstract

The Land Transport Authority and Urban Redevelopment Authority implemented the Range-Based Car Parking Standard (RCPS) on 15 December 2005. With this new parking standard, developers can opt to provide up to 20% less car park lots than the prevailing standard. This will enable developers to better match the parking provision with their assessment of demand based on operational and business considerations. This new RCPS applies to all non-residential developments across Singapore and all residential projects within the central business district, Marina Bay and those within a 400m radius of MRT and LRT stations.

Presenter: Mr Ewan Gwee

Mr Ewan Gwee is Deputy Manager with LTA's Planning Division and has been with LTA for 10 yrs. He has a Masters of Science in Transportation Engineering and has vast experience in transport planning for the Northern and Western regions of Singapore. His core portfolio includes:

- Evaluating the transports needs to support the land use developments for these regions
- Formulating and reviewing of planning policy issues such as safeguarding of road and railway reserves.
- Car parking review
- Managing various road and rail feasibility and traffic studies. Some Major projects that Evan has completed includes the launching of RCPS and the planning study for CCL and BLE.

Interfacing Street Works with Development Proposals

Preparation of As-Built GIS data for Completed Street Works

Abstract

What is GIS? Why need GIS? Road Data Hub Data Collection Requirements Avoiding Common Errors.

A GIS is a 'Geographic Information System'. It is a computer system for storing, manipulating, and displaying geographic information, and depicting the spatial relationships of mapped objects. A GIS can be used to do various spatial analysis. For example, one can analyse the effect of introducing crash cushions on the rate of accidents in a certain area. The Road Data Hub is a repository containing road and rail GIS information.

In the LTA, GIS is widely used in inventory maintenance activities, planning of future road and rail system and in studying traffic safety measures. The Road Data Hub Data Collection specification is a document that spells out the standard and quality of as-constructed GIS data for all road features forming the Road Data Hub. We will highlight common errors in GIS data collection.

This topic is useful to surveyors who intend to conduct GIS data collection for the LTA. The Qualified Professionals will also gain some understanding of the LTA's Road Data Hub requirements.

Presenter : Ms Chan Bee Ling

Ms Chan Bee Ling has been with LTA since 2001. She graduated from the National University of Singapore with a Masters in Information Technology. Currently, she is the Deputy Manager with the RIMS Unit of Development & Building Control Division. The major projects completed are:

- Implemented enhanced Road Information System (eRIMS).
- Managed the conversion of the Road Data Hub to SVY21 co-ordinate system.
- Implemented the LTA CORENET interface.
- Currently implementing the interface with SLAs New Generation Land Data Hub

Seminar on
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Seats are available on a first come first serve basis and are subject to availability. Please register early to secure a place. Once application is accepted, there will be no cancellation or refund. Placement will be confirmed only upon receipt of the registration form and payment.

Participant Name			
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* Please fill in if available

+ mandatory field for sending confirmation through email

Signature	Date

Payment

Please fax completed application form to 63328223 and make payment using Credit Cards via <https://onepay.onemotoring.com.sg/onepay/listFees.aspx> by 10 January 2007. Payment may also be made in Cash or Cheque at LTA's Development & Building Control Division Office at 251 North Bridge Road.

If you have any questions, please call:

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