

**Construction Industry Council**  
**2<sup>nd</sup> Progress Report of Committee on Construction Site Safety**

**Purpose**

This paper outlines the main points discussed at the 2<sup>nd</sup> meeting of the Committee on Construction Site Safety held on 13 July 2007. The record of attendance is at Annex.

**Issues Discussed**

2. Members discussed the following items –
- Provision of reversing safety devices for heavy site vehicles/mobile plants;
  - Measures for enhancing safety of demolition works;
  - An initial study on safety of renovation, maintenance, alteration and addition (RMAA) works; and
  - Provision of devices in new buildings to enhance safety of repair and maintenance works.

**Progress on Matters Arising from 1<sup>st</sup> Meeting on 28 May 2007**

3. Members noted the following –

Paragraph 9(a)

Co-opted members and Government's Representatives had been invited to join the Committee.

Paragraphs 9(b) and (b)

The matters recorded in these paragraphs would be discussed in subsequent discussion items.

## **Provision of Reversing Safety Devices for Heavy Site Vehicles/Mobile Plants**

4. LD's study of accidents resulting from site vehicles or mobile plants indicated that installation of reversing safety devices, such as closed-circuit television (CCTV), ultrasonic sensors and audible signaling devices, could help avoid accidents resulting from reversing. Leading local contractors were generally positive towards their adoption and had installed or planned to install such devices on their vehicles. On the other hand, there could be difficulties in imposing this as a general requirement for all heavy site vehicles since a substantial proportion of them were owned by self-employed persons who would be reluctant to shoulder additional expenditures. Although the provision of CCTV was not mandatory, contractors were expected to implement safe working systems to protect workers from site vehicles and mobile plants and could be prosecuted for failing in such duties.

5. Members generally supported the installation of reversing safety devices in particular CCTV but considered that banksmen should be assigned to guide the operation site vehicles and mobile plants under poor visibility conditions (such as on tunnelling sites). It was also suggested that the provision of subsidy could help overcome the possible reluctance in installing CCTV. Members agreed to form an informal task force led by LD and HKCA to formulate a set of recommendations for dealing with the safety issues arising from site vehicles and mobile plants.

## **Measures for Enhancing Safety of Demolition Works**

6. BD described the measures for assuring the safety of demolition works in private buildings in particular statutory requirements for application for approval of demolition plans and application for consent to commence such works. BD planned to introduce a Minor Works Control System (MWCS) for building works of small scale and simple in nature and a new register of Registered Minor Works Contractors (RMWC) for carrying out such works. Upon enactment of the new control system, certain types of demolition works, mainly relating to the demolition of components or parts of buildings (e.g. demolition of canopy and unauthorized structures) could be carried out by RMWC thus facilitating more effective control. The current target was to introduce the enabling legislation in late 2007. Members generally supported the introduction of the MWCS but urged BD to educate building owners, contractors and workers on the procedures for executing minor works.

7. Members discussed the safety of tower cranes in view of a serious accident that occurred on a demolition site in mid-July 2007 and were advised that while CITA offered training courses on tower crane operation, there were no formal training courses for workers engaged in raising and lowering tower cranes. A Member stressed the need for proper maintenance of tower cranes and rigorous examination of critical components. In the light of the concerns over the safety of tower cranes, an informal task force led by Mr Thomas Ho would be formed to deliberate on the subject.

## **An Initial Study on Safety of RMAA Works**

### ***(A) Introduction***

8. In view of the growing proportion of accidents taken up by RMAA works, the Working Group on Construction Site Safety and Employees' Compensation Insurance of the former PCICB had conducted extensive discussions on possible solutions. The Secretariat had taken stock of these discussions and identified several improvement areas, namely legislation and enforcement; safety devices; training; publication; as well as publicity and promotion. Discussion papers would be provided to help Members examine the issues in individual areas and determine the improvement measures. These would be consolidated into an action checklist with recommended implementation timeframes and implementing parties for submission to CIC for endorsement.

9. On legislation and enforcement, the safety of RMAA works were governed by the Buildings Ordinance (Cap. 123) administered by BD and the Construction Sites (Safety) Regulations (CSSR) of the Factories and Industrial Undertakings Ordinance (Cap. 59) administered by LD. The meeting would discuss the CSSR while Buildings Ordinance and other improvement areas would be considered in future meetings.

### ***(B) Provisions of CSSR***

10. The Secretariat walked through Part VA of CSSR on scaffolds, working platforms and ladders imposing obligations on the contractor responsible for any construction site or any contractor who has direct control of any construction works to identify the hazardous conditions of persons working at a height, rectify any such conditions and safeguard any persons against such conditions and take adequate steps to prevent any person from falling from a height of 2m or more. Where it was

impractical to comply with these requirements, contractors should provide suitable safety nets or where the provision of safety nets were not practicable the contractor should provide suitable and adequate safety belts and take all reasonable steps to ensure their proper use by workers. Part VA imposed a duty on every person who had been provided with a safety belt to wear it and keep it attached to a secure anchorage whenever this was necessary for his own or any other person's safety. Part VA also made provisions for assuring the safety of scaffolds through mandating erection of scaffolds by trained workers under competent supervision and inspection of scaffolds by competent persons.

11. Members generally agreed that the provisions in Part VA of CSSR were robust and comprehensive and were effective in imposing appropriate obligations on both contractors and workers to adopt proper measures for assuring safety of working at height. Members noted, however, that the average fine imposed by the court for offences related to RMAA works was only \$8,051 in 2005 and \$7,532 in 2006 which was low in comparison to the maximum fines stipulated in Part VA but accepted that imposition of fines were within the jurisdiction of the courts.

12. On specific enhancements, Members agreed not to pursue imposition of fixed penalty for some straightforward offences (such as not wearing safety belts) in view of LD's explanation that fixed penalty might induce confrontational or dangerous behaviour if workers attempted to escape from being fined and would not be appropriate for the offences in Part VA since they were not based on strict liability.

### ***(C) Enforcement of CSSR***

13. LD enforced the provisions of CSSR through inspections, accident and complaint investigations and prosecution. Inspection was the proactive part of enforcement. For large-scale works, sites for inspection were identified through notifications submitted in accordance with regulation 56 of CSSR and information provided by BD on Co-ordinated Maintenance of Building Schemes. For minor RMAA works, sites for inspection were identified through area patrols, periodic survey of shopping malls and the voluntary referral mechanism introduced in March 2004 through collaboration with Hong Kong Property Management Companies (HKAPMC).

14. Accident and complaint investigation forms part of the reactive monitoring and aimed to ascertain the causes of accidents or validity of

complaints. LD also took out prosecutions to deter against the breaches of statutory provisions. In deciding whether to do so, LD gave due consideration to the gravity of the offence, the attitude of the offenders and the prospect of securing a conviction.

15. Members were satisfied with the existing arrangements for identifying inspection sites. There was scope for improving the effectiveness of the voluntary referral mechanism by asking property management companies to make more contributions through measures such as requiring owners to submit applications for executing RMAA works; requiring contractors involved in undertaking these works to take out appropriate insurance for workers and third parties; providing safety devices for use by workers on pool basis; and mandating use of these devices. An informal task force led by LD and BD would be formed to formulate measures for enhancing the collaboration with property management companies in enhancing the safety of RMAA works.

16. On the level of inspections, in 2006, LD made 48,550 site inspections of which 29,803 (or 61%) were on RMAA works. BD advised that the number of buildings inspected by the department would be increased from 1,000 to 2,000 after the implementation of the Mandatory Building Inspection Scheme thus giving rise to more RMAA jobs. As more RMAA jobs could also result from the ageing of buildings, LD was urged to consider strengthening its staff establishment so as to cope with the additional workload.

17. Members were generally satisfied with LD's criteria in determining whether to take out prosecutions but requested LD to consider adjusting the evidential threshold for taking out prosecutions so as to strengthen the deterrent effects. Responding to the suggestion that the prosecution of workers could help in promoting site safety, LD clarified that, where contractors had fully discharged their legal responsibilities and offences were committed by workers through their wilful acts or omissions, LD would consider prosecuting the workers concerned.

18. As most of the fatal accidents associated with fall from height, where the provision of proper working platform or safety net was not practicable, could have been avoided if suitable safety belts and anchorage had been provided by the contractor and the workers involved had worn safety belts attached to secure anchorages, LD should step up enforcement efforts on this area. Training on the proper use of safety belts should also be strengthened.

**(D) Other improvement areas**

19. Members took the opportunity to express views on the other improvement areas. On training, a suggestion was put forward for a licensing system under which only workers who had received proper training would be allowed to erect, alter and dismantle or work on truss-out scaffolds. On education and promotion, building owners should be educated on their duties in relation to safety of works executed on their premises and the possible consequences of breaching these duties.

**Provision of Devices in New Buildings to Enhance Safety of Repair and Maintenance Works**

20. One of the priority tasks of the Committee was to recommend devices to be provided in new buildings to enhance the safety of repair and maintenance works. It was suggested that gondolas would be suitable for commercial buildings. However, given their high operating cost, alternatives such as provision of permanent anchorages for safety belts on external walls could be more appropriate for residential buildings. An informal task force led by Prof. J M Ko would be formed to formulate detailed proposals for consideration. A Member also suggested according higher priority to the related task of reducing site accidents through improving the design of permanent works.

**Any Other Business**

21. Members learned that 38 sites belonging to six developers had joined the Safety Partnering Programme launched jointly by REDA and HKCA in June 2005 that aims to improve safety performance of private sector projects through adoption of the Pay-for-Safety Scheme. While such response was below the initial target, the average accident rate for participating sites was 18/1,000 workers and was significantly lower than the industry average of about 60/1,000 workers. Given such track records, Members agreed that further efforts should be made to promote the Safety Partnering Programme.

22. In view of the unusual hot weather in this summer, HKCA was discussing with labour unions on possible adjustments to working hours of construction sites to reduce the exposure of workers to the summer heat. The meeting agreed that guidelines should be issued to reduce the risks of heat stroke and other heat induced accidents to workers working

in hot environment. LD agreed to prepare such guidelines for consideration of CIC.

### **Further Actions**

23. The following further actions were agreed –
- (a) An informal task force led by LD and HKCA would be formed to deliberate on the safety measures for site vehicles and mobile plants;
  - (b) An informal task force led by Mr Thomas Ho would be formed to deliberate on the safety of tower cranes;
  - (c) An informal task force led by BD and LD would be formed to deliberate on the ways for seeking further co-operation from property management companies in enforcing the safety provisions for RMAA works;
  - (d) An informal task force led by Prof. J M Ko would be formed to recommend design features to be incorporated into new buildings to enhance the safety of repair and maintenance operations;
  - (e) The Secretariat would submit working documents for the remaining improvement areas on the safety of RMAA works; and
  - (f) LD would prepare guidelines on working in hot weather so that CIC could consider promoting their adoption by the industry.

**CIC Secretariat**  
**July 2007**

**Committee on Construction Site Safety**

**2<sup>nd</sup> Meeting held at 2:30 pm on 13 July 2007  
in Conference Room 1201, Murray Building**

**Record of Attendance**

**Present**

Mr Thomas Kwok	Chairman
Mr CHOI Chun-wa	
Mr Thomas Ho	
Prof KO Jan-ming	
Mr WAN Koon-sun	
Mr H W Cheung	Director of Buildings
Mr NG Kwok-kwan	Hong Kong Construction Industry Employees' General Union
Mr Anthony Chan	Hong Kong Construction Association
Mr Philip Chan	Hong Kong Institute of Architects
Mr PANG Long	Hong Kong Construction Site Workers General Union
Mr William Sui	Hong Kong Bar-Bending Contractors Association
Mr Y L Chu	Construction Industry Training Authority
Mr TANG Wah-sing	Occupational Safety and Health Council
Mr Dominic Lam	Hong Kong Federation of Insurers
Ms Ada Fung	Housing Department

**Absent with apologies**

Mr James Blake  
Mr Edgar Kwan



**In attendance**

**Government's Representatives**

Mr Enoch Lam           ) Development Bureau  
Mr Philip Chung       )  
Mr S H Tso                Labour Department  
Mr C C Chan               Buildings Department

**Construction Industry Council Secretariat**

Ms Janet Wong           Deputy Secretary for Development (Works) 1  
Mr K H Tao                Chief Assistant Secretary for Development  
                                  (Works) 1  
Mr Solomon Wong         Assistant Secretary for Development (Works)  
                                  Public Works Systems Administration 1