



CONSTRUCTION TRAFFIC MANAGEMENT OFFICER CTMO

PROGRAM CURRICULUM
AS OF JUNE 2020

**CONSTRUCTION TRAFFIC MANAGEMENT
OFFICER, CTMO**

PROGRAM CURRICULUM

By:
CIDB MALAYSIA

Table 1: The number of days for each Learning Package and Knowledge Assessment.

NO	LEARNING PACKAGE (LP)	LEARNING PACKAGE NAME	DAYS	KNOWLEDGEN ASSESSMENT (KA)
1	Learning Package 1 (LP01)	Introduction to Construction Traffic Management Officer	1	1
2	Learning Package 2 (LP02)	Understanding Construction Traffic Management Plan	1	1
3	Learning Package 3 (LP03)	Propose and Prepare Construction Traffic Management Control Plan and Organize Resources	2	1
4	Learning Package 4 (LP04)	Method of Statement	1	1
5	Learning Package 5 (LP05)	Organize Construction Traffic Management Control System at Work Zone	1	1
6	Learning Package 6 (LP06)	Monitoring and Control	1	1
7	Learning Package 7 (LP07)	Assessment and Statistics	1	1
8	Learning Package 8 (LP08)	Report	1	1
9	Learning Package 9 (LP09)	Emergency Response Plan (ERP)	1	1
10	Learning Package 10 (LP10)	Leadership, Communication and Liaison	1	1
TOTAL			11	10

PO vs LP Mapping Chart

PO NO	PROGRAM OUTCOME (PO) FOR CONSTRUCTION TRAFFIC MANAGEMENT OFFICER, CTMO (CIDB)	Domain and Taxonomy Levels K, S, A Domain	LP 01	LP 02	LP 03	LP 04	LP 05	LP 06	LP 07	LP 08	LP 09	LP 10
			INT	CTMP	P&P CTMP	MOS	ORG	M&C	AS & ST	R	ERP	L, COM, L
1	Construction Traffic Management Officer who has extensive Knowledge and Competent assisting his Project Manager in analysing, evaluating, planning, scheduling, organizing, preparing TMCP drawing, implementing, monitoring, control and reporting of assigned traffic management work according to Acts, Laws, Best Industry Practices, Guidelines, Rules and Regulations and Code of Conducts.	K, C C5 K, A	√	√	√				√			
2	Construction Traffic Management Officer who upholds and demonstrates the importance of Professional Ethics, Environment, Safety and Health work culture at the work zones area and prioritize the sustainable approach in his management and delivering his services using established Traffic Management methodologies such as Construction Traffic Risk Management (CTRM), RSA, TIA, ERP, TMCP, MOS etc.	PE, E, SH C5 K, A				√					√	
3	Construction Traffic Management Officer who able to contractually prepare and propose CTMCP, understand CTMP and project management documentations with ability to perform quantity take off, BQ costing estimation and preparation, contract document, CTMSR and all other records and reports , required from his services efficiently in his work zones area.	CON, R&R C5 K, S					√			√		
4	Construction Traffic Management Officer who excel in effective communication with his employer and lead the team able to translate the needs into exemplary Traffic Management services in coordinate, organize, liaise, present, obtain approvals with the internal and external stakeholders and multi-disciplinary Project Team for compliance with all needs, technical and commercial requirements including satisfactory Entrepreneurship mindset for the sustainability of his profession.	COM, L, TW, E C5 S, A						√				√
5	Construction Traffic Management Officer who ensuring a Quality deliverable from his team services through the efficient Planning, Monitoring, Control and Closing activities with establishment of Traffic Management procedures using modern and effective traffic management tools for satisfactory and quality Construction Traffic Management.	Q, PMC C5 S							√	√		

**PROGRAM OUTCOME CERTIFIED TRAFFIC MANAGEMENT OFFICER, CTMO
CONSTRUCTION INDUSTRY DEVELOPMENT BOARD MALAYSIA**

PO	SPECIFIC CRITERIA	PROGRAM OUTCOME STATEMENT
PO1	Knowledge and Competent	Construction Traffic Management Officer who has extensive Knowledge and Competent assisting his Project Manager in analysing, evaluating, planning, scheduling, organizing, preparing TCP drawing, implementating, monitoring, control and reporting of assigned traffic management work according to Acts, Laws, Best Industry Practices, Guidelines, Rules and Regulations and Code of Conducts.
PO2	Professional Ethics, Environment, Safety and Health	Construction Traffic Management Officer who upholds and demonstrates the importance of Professional Ethics, Environment, Safety and Health work culture at the work zones area and prioritize the sustainable approach in his management and delivering his services using established Traffic Management methodologies such as Hirarc Document ,RSA, TIA, ERP, TCP, MOS etc.
PO3	Contract, Records and Report	Construction Traffic Management Officer who able to contractually prepare and propose TMCP, understand TMP and project management documentations with ability to perform quantity take off, BQ costing estimation and preparation, contract document, TMSR and all other records and reports , required from his services efficiently in his work zones area.
PO4	Communication, Leadership, Teamwork and Entrepreneurship	Construction Traffic Management Officer who excel in effective communication with his employer and lead the team able to translate the needs into exemplary Traffic Management services in coordinate, organize, liaise, present, obtain approvals with the internal and external stakeholders and multi-disciplinary Project Team for compliance with all needs, technical and commercial requirements including satisfactory Entrepreneurship mindset for the sustainability of his profession.
PO5	Quality, Planning, Monitoring and Control	Construction Traffic Management Officer who ensuring a Quality deliverable from his team services through the efficient Planning, Monitoring, Control and Closing activities with establishment of Traffic Management procedures using modern and effective traffic management tools for satisfactory and quality Construction Traffic Management.

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LEARNING PACKAGE – 01

LP01

INTRODUCTION TO CONSTRUCTION
TRAFFIC MANAGEMENT OFFICER

LEARNING PACKAGE NAME AND CODE		INTRODUCTION TO CONSTRUCTION TRAFFIC MANAGEMENT OFFICER (LP01)				
NUMBER OF DAY(s)		1	NUMBER OF ASSESSMENT	1	TRAINER	CIDB CERTIFIED TRAINER
LECTURE TIME	SUBJECT'S NAME	LECTURE COMPONENTS / ELEMENTS			REFERENCE DOCUMENTS PROPOSED	
8:30 - 10:30am	Introduction to Construction Traffic Management Officer	<p>[An Ice Breaking Intro] - Brief explanation on what is the fundamental of Construction Traffic Management Officer (CTMO), the characteristics of Construction Traffic Management Officer, emphasize on description of the construction definition (refer ACT 520), emphasize on description of the Construction Traffic Management Officer definition (refer Act 520)</p> <p>Content of the Introduction will cover the entire scope of 10 Learning Packages (Comprehensive Executive Summary)</p>			Act 520. Review and share Act 520. Construction Industry Competency Standard (CICS). Jabatan Keselamatan dan Kesihatan Pekerjaan (JKKP). JKR ATJ 2017	
10:45 - 12:45 am	Introduction to Construction Traffic Management Officer	Introduction. Background. Construction traffic management objectives. Safety at construction traffic management work zone. Factors contributing to accidents. Identifying solutions to mitigate accidents. Hazard identification, risk assessment and risk control (HIRARC). Hazard classification. Identify work activities that has potential hazards.			Act 520. Review and share Act 520. Construction Industry Competency Standard (CICS). Jabatan Keselamatan dan Kesihatan Pekerjaan (JKKP). JKR ATJ 2017	
1:00 - 2:30 pm	LUNCH / REST					
2:30 – 4:30pm	Introduction to Construction Traffic Management Officer	<p>Hazard identification. Risk assessment. Terms and definition. Construction traffic management plan (CTMP). Construction traffic management work scope. Construction traffic management legal requirements and regulations. Gazetting road diversion works exceeding 30 days.</p> <p>Definition of construction Traffic Control Plan, (CTCP). Taking Off, Bill of Quantity (BQ) and Estimating. Procedure in executing estimate. Executing estimate as per item in Bill of Quantity</p>			Act 520. Review and share Act 520. Construction Industry Competency Standard (CICS). Jabatan Keselamatan dan Kesihatan Pekerjaan (JKKP). JKR ATJ 2017	
4:30 - 5:30 pm	KNOWLEDGE ASSESSMENT (KA)	Assessment for LP01				

LEARNING PACKAGE NAME AND CODE	INTRODUCTION TO CONSTRUCTION TRAFFIC MANAGEMENT OFFICER (LP01)				
NUMBER OF DAY(s)	1	NUMBER OF ASSESSMENT	1	TRAINER	CIDB CERTIFIED TRAINER
PACKAGE OUTCOME (PO)	PO1	Construction Traffic Management Officer who has extensive Knowledge and Competent assisting his Project Manager in analysing, evaluating, planning, scheduling, organizing, preparing TMCP drawing, implementating, monitoring, control and reporting of assigned traffic management work according to Acts, Laws, Best Industry Practices, Guidelines, Rules and Regulations and Code of Conduct.			
LEARNING OUTCOME (LO)	LO1	Able to understand general knowledge on the background and objective of construction traffic management works.			
	LO2	Able to obtain knowledge on basic methodology for handling hazard identification, risk assessment and risk control.			
	LO3	Able to obtain the knowledge on scope of work of a CTMO.			
	LO4	Able to take-off, prepares BQ and costing			
TRAINING NOTES	Training notes endorsed by CIDB.				
KNOWLEDGE ASSESSMENT (KA)	<ul style="list-style-type: none"> • The assessment is a closed-book assessment. • To be done after lecture is covered and completed. • Passing mark is 70% • Candidate need to answer on the question paper. 				

LEARNING PACKAGE – 02

LP02

UNDERSTANDING CONSTRUCTION TRAFFIC MANAGEMENT PLAN

LEARNING PACKAGE NAME AND CODE		UNDERSTANDING CONSTRUCTION TRAFFIC MANAGEMENT PLAN (LP02)				
NUMBER OF DAY(s)		1	NUMBER OF ASSESSMENT	1	TRAINER	CIDB CERTIFIED TRAINER
LECTURE TIME	SUBJECT'S NAME	LECTURE COMPONENTS / ELEMENTS				REFERENCE DOCUMENTS PROPOSED
8:30 - 10:30am	Managing Construction Traffic Management Plan and Resources	Managing Construction Traffic Management Plan and Resources. Overall Work Programme Endorsed. Understanding the needs of project management. Objectives of construction management. Resources management (Materials, Manpower, Machine, Finance, Time). Project, management. Study and Understand the Overall Work Programme. Steps to be taken during planning & scheduling process for traffic construction management. Identification of works zones and types of work zone.				Act 520, Jabatan Keselamatan dan Kesihatan Pekerjaan (JKKP). JKR ATJ 2017
10:45 - 12:45 am	Managing Construction Traffic Management Plan and Resources	Understanding relating to site condition. Purpose of traffic management at work site. Ability to identify differences between traffic management plan and site condition. Proposed changes to construction traffic management plan based on site condition. Work zone area potential hazard. Submit for approval the modifications to CTMP. Factor contributing to CTMCP modifications.				
1:00 - 2:30 pm	LUNCH / REST					
2:30 – 4:30pm	CTMP and Overall Work Programme Integration	CTMP and Overall Work Programme Integration. Study the overall work programme. Prepare integration of overall work programme and CTMP. Study overall work programme. Study CTMP. Review for modification works planning. Traffic impact assessment report (TIA).				Act 520, Jabatan Keselamatan dan Kesihatan Pekerjaan (JKKP). JKR ATJ 2017
4:30 - 5:30 pm	KNOWLEDGE ASSESSMENT (KA)	Assessment for LP02				

LEARNING PACKAGE NAME AND CODE		UNDERSTANDING CONSTRUCTION TRAFFIC MANAGEMENT PLAN (LP02)			
NUMBER OF DAY(s)	1	NUMBER OF ASSESSMENT	1	TRAINER	CIDB CERTIFIED TRAINER
PACKAGE OUTCOME (PO)	PO1	Construction Traffic Management Officer who has extensive Knowledge and Competent assisting his Project Manager in analysing, evaluating, planning, scheduling, organizing, preparing TMCP drawing, implementating, monitoring, control and reporting of assigned traffic management work according to Acts, Laws, Best Industry Practices, Guidelines, Rules and Regulations and Code of Conducts.			
LEARNING OUTCOME (LO)	LO1	Able to understand and managing Construction traffic management plan and resources			
	LO2	Able to understand site conditions			
	LO3	Able to understand the purpose of traffic management at work zones			
	LO4	Able to identify the differences between CTMP and site conditions.			
	LO5	Able to understand the road construction traffic management stage/sectional plan (scheme).			
	LO6	Able to amend the CTMP based on site conditions			
	LO7	Able to understand and preparing the integration of overall work programme and CTMCP			
	LO8	Able to obtain knowledge on effects of traffic Impact assessment report (TIA)			
TRAINING NOTES	Training notes endorsed by CIDB.				
KNOWLEDGE ASSESSMENT (KA)	<ul style="list-style-type: none"> • The assessment is a closed-book assessment. • To be done after lecture is covered and completed. • Passing mark is 70% • Candidate need to answer on the question paper. 				

LEARNING PACKAGE – 03

LP03

PROPOSE AND PREPARE CONSTRUCTION TRAFFIC MANAGEMENT CONTROL PLAN AND ORGANIZE RESOURCES

LEARNING PACKAGE NAME AND CODE		PROPOSE AND PREPARE CONSTRUCTION TRAFFIC MANAGEMENT CONTROL PLAN AND ORGANIZE RESOURCES (LP03)				
NUMBER OF DAY(s)		2	NUMBER OF ASSESSMENT	1	TRAINER	CIDB CERTIFIED TRAINER
LECTURE TIME / DAY	SUBJECT'S NAME	LECTURE COMPONENTS / ELEMENTS				REFERENCE DOCUMENTS PROPOSED
Day 1	Planning construction traffic management control plan (CTMCP) and Role and Responsibilities of Team Member	<p>Planning construction traffic management control plan (CTMCP). Planning process. Relationship between planning and proposal to propose CTMCP. Construction traffic management control plan. Role and responsibilities of team members. Project director / Superintending Officer. Project director/ Superintending officer. Construction traffic management officer (CTMO). Road safety auditor. Main contractor. Construction project manager. Construction traffic management supervisor. Traffic Controller. Flagman. Construction worker. To organize and form a work team.</p>				JKR Standard Specification 2014 (JKR20800-0183-14)
Day 2	Understanding Site Condition	<p>Works program. Integration between work program and CTMP. Visit to construction site and traffic data analysis. Sketch/line diagram for construction traffic management control plan. Overall layout of project site condition. Data analysis. Review of construction site area with construction drawing and bill of quantities. Preparation of sketches / line diagram for construction traffic management control plan. Entry / exit to and from work zone area. Consideration for sketches/line diagram modifications. Proposed construction work program. Definition of work zone area and hazard. Work Zone Area.</p>				Guidelines for Hazard Identification, Risk Assessment and Risk Control (HIRARC), 2008
	Understanding Site Activity	<p>Preparation of CTMC. Understanding the requirements of CTMCP. Proposed road closure activity during construction. Road closure activity. Closure of tolled highway. Closure of non-tolled highway. Type of highway lane closure. To study and identify traffic risk management for road construction</p>				Federal Roads Ordinance (1959) (Road Category). Malaysian Highway Authority (MHA)
4:30 - 5:30 pm	KNOWLEDGE ASSESSMENT (KA)	Assessment for LP03				

LEARNING PACKAGE NAME AND CODE		PROPOSE AND PREPARE CONSTRUCTION TRAFFIC MANAGEMENT CONTROL PLAN AND ORGANIZE RESOURCES (LP03)			
NUMBER OF DAY(s)	2	NUMBER OF ASSESSMENT	1	TRAINER	CIDB CERTIFIED TRAINER
PACKAGE OUTCOME (PO)	PO1	Construction Traffic Management Officer who has extensive Knowledge and Competent assisting his Project Manager in analysing, evaluating, planning, scheduling, organizing, preparing TMCP drawing, implementing, monitoring, control and reporting of assigned traffic management work according to Acts, Laws, Best Industry Practices, Guidelines, Rules and Regulations and Code of Conducts.			
LEARNING OUTCOME (LO)	LO1	Able to execute the scope of work as a CTMO			
	LO2	Able to study and understand CTMP			
	LO3	Able to execute the job based on objective of CTMCP			
	LO4	Able to collect data for the preparation of CTMCP			
	LO5	Able to conduct planning, scheduling, organizing, executing, monitoring and control of CTMCP			
	LO6	Able to prepare cost estimates for construction traffic control devices			
	LO7	Able to conduct the preparation of bill of quantities (BQ)			
	LO8	Able to handle hazard identification, risk assessment and risk control (HIRARC)			
	LO9	Able to execute the works and implementing emergency response plan"(ERP)			
TRAINING NOTES	Training notes endorsed by CIDB.				
KNOWLEDGE ASSESSMENT (KA)	<ul style="list-style-type: none"> • The assessment is a closed-book assessment. • To be done after lecture is covered and completed. • Passing mark is 70% • Candidate need to answer on the question paper. 				

LEARNING PACKAGE – 04
LP04
METHOD OF STATEMENT

LEARNING PACKAGE NAME AND CODE		METHOD OF STATEMENT (LP04)				
NUMBER OF DAY(s)		1	NUMBER OF ASSESSMENT	1	TRAINER	CIDB CERTIFIED TRAINER
LECTURE TIME	SUBJECT'S NAME	LECTURE COMPONENTS / ELEMENTS				REFERENCE DOCUMENTS PROPOSED
8:30 - 10:30am	Method of Statement	Development of traffic management method of statement. Risk assessment during preparation of Method of Statement (MOS) for traffic management works/traffic management. Steps in preparing the MOS for construction traffic management control plan. Example: MOS for construction traffic management control plan at the work zones. Overall construction traffic management plan (CTMP). Content in the MOS. Steps in the preparation of construction traffic management method of statement. Example: Method of statement for road diversion in construction traffic management.				ATJ JKR 2017, LLM, standards, relevant Acts,
10:45 - 12:45 am	Understanding Construction Traffic Management Plan and Specification	Understanding and complying with ATJ JKR 2017, LLM, standards, relevant Acts, rules and guidelines, accurately scaled sketches for all traffic controlled work zones that will not confuse road users passing the area. To list traffic devices that are to be installed at the work site into the traffic devices inventory. All specification in the standard must be covered.				
1:00 - 2:30 pm	LUNCH / REST					
2:30 - 4:30 pm	Understanding Acts, Laws and Regulations	There are several acts, by laws and regulations that need to be understood and complied when implementing the construction traffic management plan such as: Act 520 Construction industry development board 1994. Road transport Act 333. OSH Act 1994. Factory and machinery Act 1967. Guidelines for implementation of traffic management T6-16 LLM. Local government council. Road, drainage and building Act 133. Uniform Building by Law. ATJ JKR 2017. Nota Teknik Jalan 26/08 Pindaan 2016. REAM Guideline. Environmental Quality Act 1974 and the Regulations. Department of drainage and irrigation Act. Engineer's registration Act 1967 (Akta 138). Akta 302, Petroleum Act (Safety rules) 1984				Road transport Act 333. OSH Act 1994. Factory and machinery Act 1967. T6-16 LLM Road. Drainage and Building Act 133. Uniform Building by Law. ATJ JKR 2017. Nota Teknik Jalan 26/08 Pindaan 2016. REAM Guideline. EQA 1974 and regulation. Akta 302 Petroleum Act 1984
4:30 - 5:30 pm	KNOWLEDGE ASSESSMENT (KA)	Assessment for LP04				

LEARNING PACKAGE NAME AND CODE	METHOD OF STATEMENT (LP04)				
NUMBER OF DAY(s)	1	NUMBER OF ASSESSMENT	1	TRAINER	CIDB CERTIFIED TRAINER
PACKAGE OUTCOME (PO)	PO2	Construction Traffic Management Officer who upholds and demonstrates the importance of Professional Ethics, Environment, Safety and Health work culture at the work zones area and prioritize the sustainable approach in his management and delivering his services using established Traffic Management methodologies such as Construction Traffic Risk Management (CTRM), RSA, TIA, ERP, TMCP, MOS etc.			
	PO3	Construction Traffic Management Officer who able to contractually prepare and propose CTMCP, understand CTMP and project management documentations with ability to perform quantity take off, BQ costing estimation and preparation, contract document, CTMSR and all other records and reports , required from his services efficiently in his work zones area.			
LEARNING OUTCOME (LO)	LO1	Able to understand Method of Statement (MOS)			
	LO2	Able to understand and comply construction traffic management plan and specification			
	LO3	Able to understand the Acts, Laws and Regulations involving in MOS			
TRAINING NOTES	Training notes endorsed by CIDB.				
KNOWLEDGE ASSESSMENT (KA)	<ul style="list-style-type: none"> • The assessment is a closed-book assessment. • To be done after lecture is covered and completed. • Passing mark is 70% • Candidate need to answer on the question paper. 				

LEARNING PACKAGE – 05

LP05

ORGANIZE CONSTRUCTION TRAFFIC MANAGEMENT CONTROL SYSTEM AT WORK ZONE

LEARNING PACKAGE NAME AND CODE		ORGANIZE CONSTRUCTION TRAFFIC MANAGEMENT CONTROL SYSTEM AT WORK ZONE (LP05)				
NUMBER OF DAY(s)		1	NUMBER OF ASSESSMENT	1	TRAINER	CIDB CERTIFIED TRAINER
LECTURE TIME / DAY	SUBJECT'S NAME	LECTURE COMPONENTS / ELEMENTS			REFERENCE DOCUMENTS PROPOSED	
8:30 - 10:30am	Placement, Installation, Maintenance and Removal / Relocation Traffic Control Devices	<p>Proposing traffic management plan. Construction traffic management plan. Construction traffic control zones. Placement of signage for Single Lane. Placement of signage for Total Lane Closure. Formula to calculate Taper. Implementation of construction traffic management works (traffic).</p> <p>Procedure for placement process. Installation. Modification and relocation. Maintenance of traffic control zones. Example of good and not good implementation of construction traffic plan.</p> <p>Implementation of overall construction traffic management plan. Design stage. Pre-construction stage.</p>			Malaysian Highway Authority (MHA). Federal Roads Ordinance (1959) (Road Category).	
10:45 - 12:45 am	Approval from Relevant Authority to Implement Construction Traffic Management Control Works	<p>Conveying information to road users. Emergency Response Plan (www.ready.gov). Assessment of construction traffic control. Documentation. Preparation for construction traffic management control plan. Requirements for proposed construction traffic management plan at work zone.</p>			Emergency Response Plan (www.ready.gov)	
1:00 - 2:30 pm	LUNCH / REST					
2:30 - 4:30 pm	Plan Coordination or Construction Traffic Management in Stages/ Scheduled	<p>Understanding the requirement of CTMP. Audit. Understanding road Safety Audit process (RSA). Understanding traffic impact assessment process (TIA). Proposing and organizing resources.</p>			Federal Roads Ordinance (1959) (Road Category). Malaysian Highway Authority (MHA). Guidelines for the Safety Audit of Roads in Malaysia, Public Works Dept. (Roads Branch), 1997.	
4:30 - 5:30 pm	KNOWLEDGE ASSESSMENT (KA)	Assessment for LP05				

LEARNING PACKAGE NAME AND CODE	ORGANIZE CONSTRUCTION TRAFFIC MANAGEMENT CONTROL SYSTEM AT WORK ZONE (LP05)				
NUMBER OF DAY(s)	1	NUMBER OF ASSESSMENT	1	TRAINER	CIDB CERTIFIED TRAINER
PACKAGE OUTCOME (PO)	PO4	Construction Traffic Management Officer who excel in effective communication with his employer and lead the team able to translate the needs into exemplary Traffic Management services in coordinate, organize, liaise, present, obtain approvals with the internal and external stakeholders and multi-disciplinary Project Team for compliance with all needs, technical and commercial requirements including satisfactory Entrepreneurship mindset for the sustainability of his profession.			
LEARNING OUTCOME (LO)	LO1	Able to understand the activities involved in Placement, Installation, Maintenance and Removal / Relocation Traffic Control Devices			
	LO2	Able to perform and apply approval from relevant authority to implement construction traffic management control works			
	LO3	Able to plan coordination or construction traffic management in stages/ scheduled			
TRAINING NOTES	Training notes endorsed by CIDB.				
KNOWLEDGE ASSESSMENT (KA)	<ul style="list-style-type: none"> • The assessment is a closed-book assessment. • To be done after lecture is covered and completed. • Passing mark is 70% • Candidate need to answer on the question paper. 				

LEARNING PACKAGE – 06

LP06

MONITORING AND CONTROL

LEARNING PACKAGE NAME AND CODE		MONITORING AND CONTROL (LP06)				
NUMBER OF DAY(s)		1	NUMBER OF ASSESSMENT	1	TRAINER	CIDB CERTIFIED TRAINER
LECTURE TIME	SUBJECT'S NAME	LECTURE COMPONENTS / ELEMENTS				REFERENCE DOCUMENTS PROPOSED
8:30 - 10:30am	Placement and Removals of Traffic Control Devices Monitoring Works	Introduction. Monitoring and control concept. The importance of monitoring. Effectiveness of the Construction Traffic Management Control Plans (CTMCP). Report Writing.				
10:45 - 12:45 pm	Operation of Traffic Control Devices and Equipment Monitoring Works	Monitoring and controlling on placement, maintenance and removal of traffic control devices. Potential hazard in that resources or situations that can be hazardous to anyone, dangerous environment and damage to property. Monitoring and controlling of machineries operations, vehicles, equipments and traffic control devices. Schedule of Inspection Traffic Control Devices. Routine and Non-Routine Inspection. Methodology of Inspections. Checklist and Forms (sample). Report Writing. Schedule of Monitoring Traffic Control Devices and Equipment. Statutory laws, Acts, regulations and guidelines. Local authority. Environmental Procedure. QA/QC procedure. Insurance. Traffic Impact Assessment requirements. Road safety audit requirements (RSA).				Guidelines for the Safety Audit of Roads in Malaysia, Public Works Dept. (Roads Branch), 1997. Refer to website for roles function and responsibilities of local authority.
1:00 - 2:30 pm	LUNCH / REST					
2:30 - 4:30 pm	Operation of Traffic Control Devices and Equipment Monitoring Works	Risk management. Factors contributing to hazard. Fundamental concept of risk. Planning and implementing HIRARC. Planning HIRARC activities. HIRARC process. Hazard Classification. Physical Hazard. Chemical Hazard. Ergonomic Hazard. Psychosocial Hazard. Biological Hazard. Technique to identify hazard. Methodology for identification and assessment of hazard. Steps and period to identify and assess hazard. Record keeping for hazard. The period for checking and if necessary, change the methodology. Risk anticipation and analysis. Qualitative analysis use words to describe level of severity that may happen and probability that the severity will happen. Probability of incident happening. Hazard severity. Hazard control. Choosing the most suitable control. Control type. Responsibility and accountability to document HIRARC. Documentation process. Job hazard analysis (JHA).				Guidelines for Hazard Identification, Risk Assessment and Risk Control (HIRARC), 2008. Occupational Safety and Health Act 1994 (OSHA Act 1994).
4:30 - 5:30 pm	KNOWLEDGE ASSESSMENT (KA)	Assessment for LP06				

LEARNING PACKAGE NAME AND CODE	MONITORING AND CONTROL (LP06)			
NUMBER OF DAY(s)	NUMBER OF ASSESSMENT	1	TRAINER	CIDB CERTIFIED TRAINER
PACKAGE OUTCOME (PO)	PO5	Construction Traffic Management Officer who ensuring a Quality deliverable from his team services through the efficient Planning, Monitoring, Control and Closing activities with establishment of Traffic Management procedures using modern and effective traffic management tools for satisfactory and quality Construction Traffic Management.		
LEARNING OUTCOME (LO)	LO1	Able to understand the placement and removals of traffic control devices monitoring works		
	LO2	Able to understand operation of traffic control devices and equipment monitoring works		
	LO3	Able to understand the effectiveness of construction traffic management control plans		
TRAINING NOTES	Training notes endorsed by CIDB.			
KNOWLEDGE ASSESSMENT (KA)	<ul style="list-style-type: none"> • The assessment is a closed-book assessment. • To be done after lecture is covered and completed. • Passing mark is 70% • Candidate need to answer on the question paper. 			

LEARNING PACKAGE – 07

LP07

ASSESSMENT AND STATISTICS

LEARNING PACKAGE NAME AND CODE		ASSESSMENT AND STATISTICS (LP07)				
NUMBER OF DAY(s)		1	NUMBER OF ASSESSMENT	1	TRAINER	CIDB CERTIFIED TRAINER
LECTURE TIME	SUBJECT'S NAME	LECTURE COMPONENTS / ELEMENTS				REFERENCE DOCUMENTS PROPOSED
8:30 - 10:30am	Assessment and statistic for construction traffic management	Occurrence of Road Incidents within the Work Zone Evaluation. Movements of traffic in the traffic control zone area.				
10:45 - 12:45 pm	Visit to construction site	Routine and periodical inspection. Typical organization chart for site supervision team and control at construction work site. Constant communication with operation team. Organization chart for an Emergency Response Team (ERT). Emergency assistance. Keeping update of CTMP based on site progress. Site Diary. Record Plan. Aware with others data such as name of project, project details, contract period, contract sum, details of variation orders (VO), details of work in progress and its location, any arguments regarding quality of workmanship (Quality Control, QC), notes on weather, maximum & minimum temperature, time loop due to inclement weather, name of visitors to site, joint signing of site diary, hours worked, S.I., A.I.,E.I. issued, NCR & RFI issued, details of complaints made by authorities, machineries & equipments used at site, list of workers, list of materials at site, test equipments used, tests carried out, procedures used, method of statement, tests results and as built measurements of completed works.				JKR, LLM, REAM, ATJ JKR 2017.
1:00 - 2:30 pm						
2:30 - 4:30 pm	Statistic and incident assessment	Number of incidents for different classification of incident type. Factors considered for crashes/incident/accident. Recorded the data data of incident/accident at traffic control zone area. Relationship between numbers of incidents/accidents at work versus category/type. Incident duration (how to mitigate traffic congestion). Warning signage.				Federal Roads Ordinance (1959) (Road Category). Malaysian Highway Authority (MHA)
4:30 - 5:30 pm	KNOWLEDGE ASSESSMENT (KA)	Assessment for LP07				

LEARNING PACKAGE NAME AND CODE	ASSESSMENT AND STATISTICS (LP07)				
NUMBER OF DAY(s)	1	NUMBER OF ASSESSMENT	1	TRAINER	CIDB CERTIFIED TRAINER
PACKAGE OUTCOME (PO)	PO1	Construction Traffic Management Officer who has extensive Knowledge and Competent assisting his Project Manager in analysing, evaluating, planning, scheduling, organizing, preparing TMCP drawing, implementing, monitoring, control and reporting of assigned traffic management work according to Acts, Laws, Best Industry Practices, Guidelines, Rules and Regulations and Code of Conduct.			
	PO5	Construction Traffic Management Officer who ensuring a Quality deliverable from his team services through the efficient Planning, Monitoring, Control and Closing activities with establishment of Traffic Management procedures using modern and effective traffic management tools for satisfactory and quality Construction Traffic Management.			
LEARNING OUTCOME (LO)	LO1	Able to formulate the assessment and statistic for construction traffic management control.			
	LO2	Able to understand and analyze” occurrences of road Incidents/accidents within the Work Zone area”.			
	LO3	Able to understand the organization chart for site supervision at the project construction site			
	LO4	Able to understand the emergency response team chart (ERT)			
	LO5	Able to understand and take appropriate action on site visits to work zone			
	LO6	Able to understand on the importance of “Keeping update of CTMP based on site progress”			
	LO7	Able to understand on “different classification of incident type”.			
	LO8	Able to understand on the tabulation used to record data incidents/accidents at the work zone area.			
TRAINING NOTES	Training notes endorsed by CIDB.				
KNOWLEDGE ASSESSMENT (KA)	<ul style="list-style-type: none"> • The assessment is a closed-book assessment. • To be done after lecture is covered and completed. • Passing mark is 70% • Candidate need to answer on the question paper. 				

LEARNING PACKAGE – 08

LP08

REPORT

LEARNING PACKAGE NAME AND CODE		REPORT (LP08)			
NUMBER OF DAY(s)		NUMBER OF ASSESSMENT	1	TRAINER	CIDB CERTIFIED TRAINER
LECTURE TIME	SUBJECT'S NAME	LECTURE COMPONENTS / ELEMENTS			REFERENCE DOCUMENTS PROPOSED
8:30 - 10:30am	Traffic Management Safety Reports (TMSR)	Report and inspection. Construction traffic management control plan (CTMCP). Traffic management safety report (TMSR). The Occurrence of Road Incidents within the Work Zone Report. Format of report details of accidents for the relevant month. Cumulative data of accidents due to traffic and work as per section. Accident Analysis.			
10:45 - 12:45 am	Traffic Management Safety Reports (TMSR)	Display of Up-to-Date CTMP for Inspection and Audit. Construction traffic management audit flow process. Three Month's Construction Traffic Management Safety report (CTMSR). Detailing of TMSR: Project brief as per project statement. Project background, describing the works to be carried out, value of construction cost, traffic management is an important element for each construction project that involves works near or all along the traffic route where it can increase the safety at the work place and the road users at the construction area. Prepare the TMT organizational chart. Prepare the ERT organizational chart.			Factory & Machinery Act 1967
1:00 - 2:30 pm	LUNCH / REST				
2:30 - 4:30 pm	Traffic Management Safety Reports (TMSR)	List of officer's role and responsibility. Work progress and traffic management scheme. 3 months in advance traffic management planning. Traffic devices inventory and number of traffic workers in the team. Monthly report of vehicles breakdown at project area. Monthly report on accident at project area. Measuring level of service for traffic at project area. Monthly report on public complaints. Summary and proposal. Photos at work site. Relevant attachments. Daily Records/ site diary. Public Complaints.			
4:30 - 5:30 pm	KNOWLEDGE ASSESSMENT (KA)	Assessment for LP08			

LEARNING PACKAGE NAME AND CODE	REPORT (LP08)				
NUMBER OF DAY(s)	1	NUMBER OF ASSESSMENT	1	TRAINER	CIDB CERTIFIED TRAINER
PACKAGE OUTCOME (PO)	PO3	Construction Traffic Management Officer who able to contractually prepare and propose CTMCP, understand CTMP and project management documentations with ability to perform quantity take off, BQ costing estimation and preparation, contract document, CTMSR and all other records and reports , required from his services efficiently in his work zones area.			
LEARNING OUTCOME (LO)	LO1	Able to understand the contractual requirements to prepare and report the progress for construction traffic management control plan systematically.			
	LO2	Able to understand the preparation of the progress report format.			
	LO3	Able to understand the contents of progress report.			
	LO4	Able to understand the contents of progress report for incident/accident at work zone.			
	LO5	Able to understand the site diary for the preparation of daily report.			
TRAINING NOTES	Training notes endorsed by CIDB.				
KNOWLEDGE ASSESSMENT (KA)	<ul style="list-style-type: none"> • The assessment is a closed-book assessment. • To be done after lecture is covered and completed. • Passing mark is 70% • Candidate need to answer on the question paper. 				

LEARNING PACKAGE – 09

LP09

EMERGENCY RESPONSE PLAN (ERP)

LEARNING PACKAGE NAME AND CODE		EMERGENCY RESPONSE PLAN (ERP) (LP09)				
NUMBER OF DAY(s)		1	NUMBER OF ASSESSMENT	1	TRAINER	CIDB CERTIFIED TRAINER
LECTURE TIME	SUBJECT'S NAME	LECTURE COMPONENTS / ELEMENTS				REFERENCE DOCUMENTS PROPOSED
8:30 - 10:30 am	Emergency Response Plan (ERP)	Develop Emergency Response Plan (ERP). Project Scope. Layout and site plan. Location of Operation. Hazard and Risk Assessment. Mitigation Plan. Roles and Responsibility of Each Team Member. Job Scope Based on Hierarchy Organizational Chart.				Guidelines for Hazard Identification, Risk Assessment and Risk Control (HIRARC), 2008
10:45 - 12:45 pm	Organization Chart, Flowchart Action Plan, Emergency Contact and Emergency Line of Communication	Organization Chart, Flowchart Action Plan, Emergency Contact and Emergency Line of Communication. Identify Key Personnel. Flow of Responsibilities. Get the Contact Numbers of Personnel. Get the Contact Numbers of Authorities				Example of each document and explain. Main Org Chart of Construction Personnel
1:00 - 2:30 pm	LUNCH / REST					
2:30 - 4:30 pm	Emergency Response Plan (ERP) Execution and Activation	Emergency Response Plan (ERP) Execution and Activation. General Information About Respective Organization or Project Site. Identified Potential Emergency Incident. Emergency Response Team (ERT) Structure and Roles and Responsibility. Emergency Contact Detail. Procedure to Notify / Report and Emergency. Emergency Evacuation Process. Detail on Emergency. Equipment and Facilities. Emergency Communication Flow. Detailed Search and Rescue Plan on Identify Emergency Incident. Control of Visitors / Contractors. Instructions on Shut Down, Re-Entry and Emergency Termination Process				
4:30 - 5:30 pm	KNOWLEDGE ASSESSMENT (KA)	Assessment for LP09				

LEARNING PACKAGE NAME AND CODE		EMERGENCY RESPONSE PLAN (ERP) (LP09)			
NUMBER OF DAY(s)	1	NUMBER OF DAY(s)	1	NUMBER OF DAY(s)	1
PACKAGE OUTCOME (PO)	PO2	Construction Traffic Management Officer who upholds and demonstrates the importance of Professional Ethics, Environment, Safety and Health work culture at the work zones area and prioritize the sustainable approach in his management and delivering his services using established Traffic Management methodologies such as Construction Traffic Risk Management (CTRM), RSA, TIA, ERP, TMCP, MOS etc.			
LEARNING OUTCOME (LO)	LO1	Able to understand CTMP			
	LO2	Able to understand CTMCP			
	LO3	Able to understand typical work zone areas			
	LO4	Able to understand the scope of work of a CTMO			
	LO5	Able to understand the specification of CTMCP			
	LO6	Able to understand and implement emergency response plan (ERP).			
	LO7	Able to understand mitigation phase			
	LO8	Able to understand roles and responsibility of team members			
	LO9	Able to understand organization chart, flowchart action plan, emergency contact and emergency line of communication.			
TRAINING NOTES	Training notes endorsed by CIDB.				
KNOWLEDGE ASSESSMENT (KA)	<ul style="list-style-type: none"> • The assessment is a closed-book assessment. • To be done after lecture is covered and completed. • Passing mark is 70% • Candidate need to answer on the question paper. 				

LEARNING PACKAGE – 10

LP10

LEADERSHIP, COMMUNICATION AND
LIAISON

LEARNING PACKAGE NAME AND CODE		LEADERSHIP, COMMUNICATION AND LIAISON (LP10)				
NUMBER OF DAY(s)		1	NUMBER OF ASSESSMENT	1	TRAINER	CIDB CERTIFIED TRAINER
LECTURE TIME	SUBJECT'S NAME	LECTURE COMPONENTS / ELEMENTS				REFERENCE DOCUMENTS PROPOSED
8:30 - 10:30 am	Duties of a competent CTMO	Demonstrate effective leadership, communication and liaison. Accreditation of CTMO by CIDB. Duties of a competent CTMO. Duties as stipulated in the letter of appointment. Position in the organization chart. Perform leadership role incorporating ethics and integrity practices. Employ competent, experience and skilful supporting staffs. Employ accredited skilled and unskilled workers by CIDB. Regularly evaluate and assessed performance of staffs and workers. Know the level and line of authority. Obtain the company's organization chart. Obtain the Consultant's organization chart. Obtain the Client's organization chart. Obtain the authorities organization chart				Act 520 CIDB. Example of each document and explain. Main Org Chart of Construction Personnel
10:45 - 12:45 pm	Organize and develop an effective team work	Organize and develop an effective team work. Understand the scope of work for CTMP/CTMCP. Identify the staffs required. Identify the skilled and unskilled workers required. Assign specific tasks to staffs and skilled & unskilled workers. Participate actively in construction project meetings. Communicate & liaise regularly with relevant parties.				
1:00 - 2:30 pm	LUNCH / REST					
2:30 - 4:30 pm	Organize and develop an effective line of communication	Organize and develop an effective line of communication. Understand the scope of work for CTMP/CTMCP. Participate actively in construction project meetings such as management, site, coordination, liaison and staff. Communicate regularly within company's organization and external relevant parties. Participate actively in construction project meetings such as management, site, coordination, liaison and staff. Liaise regularly within company's organization and external relevant parties				Act 520 CIDB. Example of each document and explain. Main Org Chart of Construction Personnel
4:30 - 5:30 pm	KNOWLEDGE ASSESSMENT (KA)	Assessment for LP10				

LEARNING PACKAGE NAME AND CODE	LEADERSHIP, COMMUNICATION AND LIAISON (LP10)				
NUMBER OF DAY(s)	1	NUMBER OF ASSESSMENT	1	TRAINER	CIDB CERTIFIED TRAINER
PACKAGE OUTCOME (PO)	PO4	Construction Traffic Management Officer who excel in effective communication with his employer and lead the team able to translate the needs into exemplary Traffic Management services in coordinate, organize, liaise, present, obtain approvals with the internal and external stakeholders and multi-disciplinary Project Team for compliance with all needs, technical and commercial requirements including satisfactory Entrepreneurship mindset for the sustainability of his profession.			
LEARNING OUTCOME (LO)	LO1	Able to perform duties diligently as per the contract.			
	LO2	Able to lead the project team effectively to ensure project success			
	LO3	Able to report to superior and lead the traffic management team as per organizational chart.			
	LO4	Able to organize the project team to work as a team.			
	LO5	Able to communicate effectively amongst team members and external stakeholders to ensure efficient sharing of information.			
	LO6	Able to liaise effectively with team members and all external stakeholders to mitigate misunderstanding thus probably causing delays.			
TRAINING NOTES	Training notes endorsed by CIDB.				
KNOWLEDGE ASSESSMENT (KA)	<ul style="list-style-type: none"> • The assessment is a closed-book assessment. • To be done after lecture is covered and completed. • Passing mark is 70% • Candidate need to answer on the question paper. 				

