

REPUBLIC OF THE PHILIPPINES 097.12 DPWH DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS OFFICE OF THE SECRETARY MANILA

AUG 26 2005

SPECIAL ORDER	र		
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Series of 2005	\$9.05		
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SUBJECT: CREAT WORK OF	ION OF STEERIN ING GROUP FOR ROAD CONSTI	G COMMITTEE THE "STUDY OI RUCTION MAN	AND TECHNICAL N THE ANALYSIS IAGEMENT/ROAD
MAINT PHASE	ENANCE REGUL	ATION IN TH	E PHILIPPINES"

The Government of Japan (GOJ) through the Japan International Cooperation Agency (JICA) extended technical assistance for the conduct of the "Study on the Analysis of Road Construction Management/Road Maintenance Regulation in the Philippines".

To ensure the effectiveness and coordinated undertaking in the conduct of the study a Steering Committee is hereby created, composed of the following:

STEERING COMMITTEE:

1.	RAUL C. ASIS	Chairman
	Assistant Secretary	
2.	LUIS A. MAMITAG	Vice Chairman
	OIC-Director, BOM	
3.	LINDA M. TEMPLO	Member
	Director III, Planning Service	
4.	WALTER R. OCAMPO	Member
	OIC-Director, BOC	
5.	VIRGILIO A. ARPAFO	Member
	Director, BOE	
6.	DANILO C. MANALANG	Member
	Director, BOD	
7.	JUDY SESE	Member
	OIC-Director, BRS	
8.	RAMON P. AQUINO	Member
	Director, DPWH, III	
9.	BONIFACIO SEGUIT	Member
	Director, DPWH, Reg. IV-A	
10.	MARIANO R. ALQUIZA	Member
	Director, DPWH-CAR	

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The main function of the Steering Committee is to monitor the progress of the study, provide guidance, resources and support in all the activities to be undertaken during the conduct of the study. The Steering Committee will hold meetings during the Presentation of Status Reports and as may be requested by the JICA Study Team.

A Technical Working Group (TWG) is likewise created to assist the Steering Committee, composed of the following:

1.	REBECCA T. GARSUTA	Head
	Engineer V, DPD, Planning Service	
2.	Bureau of Construction (BOC) representative	Member
3.	Bureau of Maintenance (BOM) representative	Member
4.	Bureau of Equipment (BOE) representative	Member
5.	Bureau of Design (BOD) representative	Member
6.	Bureau of Research & Standards (BRS) representative -	Member
7.	DPWH Reg. III representative	Member
8.	DPWH Reg. IV-A representative	Member
9.	DPWH CAR representative	Member

This order takes effect immediately.

HERMOGENES E EBOANE, JR. Acting Secretary



Attachment - 1 The Analysis on the Actual Condition of Road Construction and Maintenance Management in the Philippines Scope of Work

I. Introduction and Background

In the Philippines deterioration of the road conditions due to damages on road structures such as pavement and bridge, including traffic disruptions caused by natural disasters, hinders road users from efficiently traveling and transporting their goods. The observed rapid deterioration of the road system may be attributed to unsuitable design, faulty construction, poor quality of construction materials, poor maintenance, and over loading, among others.

As part of the countermeasures the Department of Public Works and Highways (DPWH) established various standards and guidelines on road design, construction and maintenance, quality control; and conducted surveys and established several weigh bridge stations to regulate overloading on the roads.

However, the damage on road still continues to exist. The inappropriate regulation about construction management and maintenance, and absence of appropriate manual can be considered as the causes. Besides the reduction of overloading, it is necessary to conduct further efforts to reduce the original defects on the road facilities, and to maintain the road well with regular inspection and repair work. In order to solve these issues and reduce the damage on road caused by inappropriate road construction and maintenance, DPWH has requested a Technical Cooperation Project, and Japan government has already approved it, and it is planed to start on the year 2006.

In order to formulate the project master plan, it is significant to identify and recognize the issues regarding road construction management and maintenance, to be improved through the project.

Therefore JICA and DPWH conducted the Study-"Analysis of Road Construction Management/Road Maintenance Regulations in the Philippines" in 2004, and surveyed on the lack and inappropriateness of regulations regarding road construction management and maintenance. The study showed that DPWH has very poor regulations on construction supervising though it has plenty of Department Orders on quality of construction materials. Besides, DPWH has many regulations on road maintenance but there might be some inappropriateness of applicable laws and regulations including inadequate manuals.

And also the study found that there are big issues on inadequate or insufficient implementation of regulations on construction supervision, road inspection, including non-compliance to the manuals, as apparent causes of the continuing poor condition of the road facilities, which was not included in the Scope of Work of the former study.

The inadequate or insufficient implementation of regulations could be attributed to the deficient situation of human resources, their capabilities, equipment availability and budgets in the implementing Project Management Offices (PMOs), Regional Offices (ROs) and District Engineering Offices (DEOs) are not up to the requirements of the issued manuals, rules and regulations.

Since the improvement of such situation on inadequate or insufficient implementation of rules/regulations through capacity building for DPWH staff will be the most important activities of the Technical Cooperation Project, it is necessary to identify the actual situation and existing problems of the road construction management and road maintenance activity of DPWH.

And also to maximize the efficiency of the project, it is important and necessary for DPWH to recognize that the issues can be improved with capacity building of DPWH staff.

II. Objectives of the Project

The main objectives of the Study are to:

- Observe the road construction conducted by DPWH, assess the causes of original defect which leads the rapid deterioration of the road facilities, and identify the issues regarding road construction management.
- Observe the road inspection and repair work by DPWH, assess the reasons why DPWH can not find or why DPWH leave the damages on the road facilities in their early stage not appropriately treated, and identify the issues regarding road maintenance.
- Make DPWH staff understand the severity of the issues identified and necessity of activities to improve them through a series of workshop.
- Together with DPWH, make action plan to improve the issues above, and provide technical advises to establish the organization to conduct the project.

III. Study Area

The Study include DPWH Head Office and Project Management Offices(PMOs) regarding road construction such as PMO-PJHL or PMO-RRDP, two (2) Regional Officess and its corresponding District Engineering Offices.

IV. Scope of Work

The framework of the Study to achieve its objectives is as follows :

(1) Analysis of actual implementation of quality control on road construction work.

Through the field survey and data analysis following, identify the issues regarding quality control on road construction work of DPWH, which causes the original defects that leads the rapid deterioration of the road facilities

a) Field survey on actual road construction management work by DPWH

In the construction sites, observe the work of construction work and management work in order to identify faults in construction work, to evaluate the road construction management activities (supervision of construction work and quality examination of construction materials) on road construction work by DPWH whether it is appropriately conducted with regulations.

The number of samples targeted in the survey shall be at least ten (10), on the following types of work.

- Earthwork(sub base)
- Asphalt Pavement Work
- Concrete Pavement Work
- Painting
- Deck Slab Construction

- Retaining Wall Construction
- Others (*)

(*) The bidder shall propose other types of work to be observed in the technical proposal, if any.-->OK

The bidder shall propose the method to evaluate the appropriateness of road construction work by contractor and road construction management activities by DPWH.

b) Analysis of road construction management record:

When some faults or problems are identified through the field survey, collect the corresponding construction management records, and evaluate whether DPWH supervised the construction work and examined the construction materials appropriately following with the regulations, and determine how DPWH acted on the identified faults in construction work. The kind of materials to be evaluated under quality control should be indicated in the proposal.

- c) Identification of problems on construction management Identify the issues on construction management (supervision of construction work and examination of construction materials) on road construction work, which causes the original defects that leads the rapid deterioration of the road facilities.
- d) Interview survey regarding supervision and quality control on road construction work.
 Conduct interview survey on the staffs of two DPWH ROs to determine extent of their awareness of the problems regarding road construction management activities previously identified in the survey, and collect their opinions on the countermeasures to solve the problems.
- (2) Analysis of actual implementation of road inspection for maintenance Through the field survey and data analysis as followings, identify the issues regarding road inspection relative to maintenance work of DPWH, which causes the neglect of damages on road facilities.
 - a) Field survey on actual road inspection by DPWH Accompany the inspector of DPWH Regional office, and assess the inspection work on pavement and bridge if the inspection work is conducted with the regulation appropriately, and if the damages on pavement and bridge are inspected and recorded.

In the proposal, the bidder should indicate the method how to evaluate the appropriateness of the inspection activities of DPWH.

The number of sample targeted in the survey is at follows:

• Concrete bridge - Three (3)

Steel Bridge - Three (3)
Pavement - Three (3) sections of ten kilometers or longer

b. Analysis of road inspection records

Where damages are found through the field survey, collect the corresponding inspection records to evaluate appropriateness of methods and frequency of inspection comparing with the regulations on road inspection, including its relevance in identifying and repairing road damages.

c. Field survey on actual road repair work

Evaluate the road repair work, and asses whether the repair work is necessary and urgent, whether the repair work is not too late, and whether the method of repair is appropriate.

The number of samples targeted in the survey is at least five (5) including following kinds of work:

- Repainting work
- Repair work of asphalt pavement
- Repair work of concrete pavement
- Others (*)
- (*) The bidder shall propose other types of work to be observed in the technical proposal, if any. (追加)
- d. Identification of problems on road maintenance

Identify the issues on road maintenance activities (road inspection and road repair work) of DPWH, which causes the leave of the damages and the non-appropriate repair work.

e. Interview survey regarding road maintenance

Conduct interview survey on the staffs of two DPWH ROs to determine extent of their awareness of the problems regarding road maintenance previously identified in the survey, and collect their opinions on the countermeasures to solve the problems.

- (3) Report on the Study "The Analysis on the Actual condition of Road Construction and Maintenance Management".
 - a) Categorization of the problems Categorize the problems by type of problems, seriousness and urgency.
 - b) Analysis of causes of the problems, and suggestion of countermeasures Examine the causes of the problems on road construction management and road maintenance in DPWH indicated the causes of problems identified in the survey, and propose the countermeasures needed.

The causes of problems should be categorized in the following groups.

- Legal (Laws and Regulations)
- Manuals and Guidelines
- Organization
- Experience, Technology and Capability of Staff
- Budget
- Equipment
- Others

To identify and categorize the problems on legal matter and manuals, utilize the result of the Study-"Analysis of Road Construction Management/Road Maintenance Regulations in the Philippines" conducted by JICA and DPWH in 2004, and examine the results caused by lack or inappropriateness of regulations and manuals.

(4) Workshop

Hold a series of workshops with concerned staff in DPWH head office {Bureau of Design (DOD), Construction (BOC), Maintenance (BOM), Equipment (BOE), Research and Standard (BRS), and Planning Service (PS)} and ROs in order to identify and clarify the issues on road construction management and road maintenance, to make DPWH staff understand the severity of the issues identified and necessity of activities to improve them, and to make action plan to improve the issues.

and countermeasures suggested in the survey.

The workshop should be held at least three times: at the beginning of the survey, after field survey and on the completion of the survey, with thirty(30) participants in DPWH Head office.

The expense for workshop should be paid by the ****

V. Organizations Related to the Study

Concerned organizations related to the Study is as shown below.



The roles of the organizations are as follows;

The consultant implements the study under the Contract. The Consultant shall consult with the JICA, DPWH and JICA Expert to obtain consensus for the major issues such as methodology, strategy, survey, analysis, recommendation, and to fulfill the requirements in the Study.

JICA supervises and give approvals to the Consultant as a client of the Study. However, JICA designates DPWH and JICA Expert as a member of client group that has a function to guide the Consultant to pursue the effective study, to converge their opinion, and to ensure the study quality.

DPWH, as a member of the client group, takes responsibility in advising and commenting to the Consultant. DPWH is privileged to directly communicate with the Consultant as required.

Mr. Yuji IKEDA, JICA Expert to DPWH, as a member of the client group, takes responsibility in advising and commenting to the Consultant. JICA Expert is privileged to directly communicate with the Consultant as required.

VI. Preparation of Reports

The following reports shall be submitted to JICA Philippines Office.

1. Inception Report

Inception Report shall provide general information explaining the Study such as concept, contents, methodology, expected outputs, schedule. This Report shall be submitted to JICA and within 5days from commencement of this Contract.

2. Draft Reports

Draft Reports including preliminary results and data of the Study shall be submitted to JICA and discussed. The report shall consist of executive summary and main report.

3. Final Report

Final Report shall be made taking all comments and discussion results into account and will be submitted to JICA. The report shall consist of executive summary and main report.

	Title	No. of Copies	Submission date (*2)					
1.	Inception Report (I/R) :	5 copies	Within 5 days after commencing this Contract					
2.	Draft Report (D/R):	5 copies	On or before 15 December, 2005					
3.	Final Report (F/R) *1 (overall):	30 copies	On or before 15 January, 2006					

4. Submission Schedule

Note: *1: 2 sets of CD-R (electrical data) shall also be provided.

Note: *2: Submission date shall be confirmed during the contract negotiation.

Note: *3: The documents shall be written in English.

Improvement of Road Management in the Philippines

Quality Management for Highway and Bridge Construction and Maintenance

Project Type Tech. Coop. Development Study Development Study Grant Aid Grant Aid

: Quality Management for Highway and Bridge Construction and Maintenance

: Risk Management for Sediment-Related Disaster

: Sustainable Bridge Maintenance/Management System

: Rehabilitation of Basic Highway Maintenance Equipment and Depots

: Model Rehabilitation Works of Roads and Bridges Project

for the Enhancement of DPWH Maintenance Capability

July. 28 2005

Yuji IKEDA Hideo NAGAO (JICA Expert on DPWH)

1. Issues on Road Management in the Philippines



No Countermeasures against Damage on Pavement

2. Objective of the Project



3. Scope of the Project



4. Tentative Schedule

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