付属 資料

- 1. 協議議事録 (M/M)
- 2. DPWH 現行組織図
- 3. DPWH 組織合理化計画案
- 4. **DPWH** リージョン/ディストリクト・エンジニアリング事務所の 基礎データ(組織・予算)
- 5. 施工・維持管理の現状
- 6. 収集資料リスト
- 7. 各訪問先面談記録
- 8. 日程表
- 9. **DPWH** 作成・プロジェクト **TOR** (案)

MINUTES OF MEETINGS BETWEEN JAPANESE 2nd PREPARATORY STUDY TEAM AND AUTHORITIES CONCERNED OF THE GOVERNMENT OF THE REPUBLIC OF THE PHILIPPINES ON JAPANESE TECHNICAL COOPERATION FOR

IMPROVEMENT OF QUALITY MANAGEMENT FOR HIGHWAY AND BRIDGE CONSTRUCTION AND MAINTENANCE PROJECT

In response to the request from the Government of the Republic of the Philippines, the 2nd Preparatory Study Team (hereinafter referred to as "the Team") organized by Japan International Cooperation Agency (hereinafter referred to as "JICA") and headed by Mr. Nobuhiro KOYAMA, visited the Republic of the Philippines from March 13 to 29, 2006, for the purpose of identifying request background and discussing rough framework of Improvement of Quality Management for Highway and Bridge Construction and Maintenance Project in the Republic of the Philippines (hereinafter referred to as "the Project").

During its stay in the Republic of the Philippines, the Team conducted field surveys and had a series of discussions with the authorities concerned of the Republic of the Philippines.

As a result of the surveys and the discussions, the Team and the authorities concerned of the Republic of the Philippines confirmed and generally agreed on the matters referred to the document attached hereto with some reservations for further discussion on 3.(4) on page 3.

Manila, March 28, 2006

Nobuhiro KOYAMA

Leader

Preparatory Study Team

Japan International Cooperation Agency

Japan

Wander In The

Undersecretary

Department of

Public Works and Highways

The Republic of the Philippines

1. Background of the Project

- 1-1 Request from the Department of Public Works and Highways (hereinafter referred to as "DPWH") for JICA Technical Cooperation: "The Project" is to be initiated based on the request of DPWH for JICA Technical Cooperation submitted by the Government of the Republic of the Philippines to the Government of Japan in March 2004.
- 1-2 The 1st Preparatory Study of the Project: In response to the request of DPWH, the 1st Preparatory Study Team visited the country in December 2005 to confirm the background and objectives of the Project through discussions with DPWH. At that time, DPWH informed the Study Team that DPWH was preparing a "Reorganization Plan" following the Executive Order No. 366. The possibility of establishment of the Highway Research Institute, proposed by the request of DPWH for JICA Technical Cooperation, seemed low in the context of the reorganization. Accordingly, JICA Philippine Office requested DPWH to revise the Terms of Reference (TOR) by taking account of the proposed Rationalization Plan.
- 1-3 The 2nd Preparatory Study of the Project: In response to the request of JICA, DPWH submitted the revised TOR dated March 10, 2006 to JICA Philippines Office. The 2nd Preparatory Study Team (hereinafter referred to as "the Team") visited the country for the period from March 13 to 29, 2006 with a view to discussing and agreeing on the general framework of the Project. The Team had a series of discussions with DPWH Headquarters on the general framework of the Project and visited five Regional Offices (RO) to understand the quality improvement issues that the ROs have. The five ROs visited are: (a) CAR, (b) Region II, (c) Region VII, (d) Region VIII, and (e) Region X I.
- 1-4 Coordination among JICA Cooperation Programs with DPWH: On top of the Project, there are three other ongoing/planned JICA cooperation programs with DPWH as mentioned below. The Project needs to have proper coordination to produce synergy effects for better quality management:
 - (1) Technical Cooperation Project "Improvement of Quality Management for Highways and Bridge Construction and Maintenance" (the Project);
 - (2) Development Study "Risk Management for Sediment-Related Disaster on Selected National Highways" (to be started on March 2006);
 - (3) Expert "Road Planning and Management Advisor" (June 2003-June 2006); and
 - (4) Expert "Bridge Planning and Management Advisor" (February 2005-February 2007).
- 1-5 Coordination with Road Projects supported by the World Bank (WB) and the Asian Development Bank (ADB): WB has been implementing "The National Roads Improvement and Management Program (NRIMP)" which places an importance on: (a) rehabilitation and upgrading of national road network; (b) preventive maintenance; (c) long-term performance based maintenance contract;

y, de

(d) technical support to road planning, designing and construction; and (e) capacity development. ADB has been implementing "The 6th Road Project" which includes "Bridge Management System (BMS) and Pavement Management System (PMS)". As these cooperation has close relevance with the Project, it is necessary to coordinate not only for avoiding duplication but also for complementing each other.

2. Findings by the Team

Through interviews with concerned authorities of DPWH and related organizations and field visits, the Team observed following matters:

- 2-1 Rationalization of DPWH: Regarding rationalization of the Philippine Government which was issued by Executive Order No. 366, DPWH will submit their rationalization plan to the Department of Budget and Management (DBM) by the middle of May, 2006. In the draft plan, major changes might include the increase of outsourcing maintenance works and reduction of staff personnel both at central and regional levels. After Bureau of Maintenance (BOM) transfers its planning function to Planning Service, inspection and monitoring of regional offices for quality improvement will be their main roles.
- 2-2 Progress of cooperation by WB and ADB: NRIMP Phase 1 is supposed to be completed by the end of this year, and preparation for Phase 2 Project is supported by Japanese Government through Policy and Human Resources Development Fund. Although contents of the Phase 2 Project are still being in consultation among stakeholders, it may include rehabilitation, upgrading and maintenance of national highways. Furthermore, WB suggests that DPWH establishes Road Maintenance Authority (RMA) in order to separate implementation from policy making. DPWH mentioned that the proposal might be discussed in a long-term point of view. For ADB 7th Road Project, its commencement and contents are not defined yet.

2-3 Current challenges in roads and bridges sector

(1) Roads

For construction, Quality Assurance Units (QAU) both at central and regional levels consist mainly bureaus/divisions, respectively, Bureau of Research and Standards (BRS), Bureau of Design (BOD), Bureau of Construction (BOC) and BOM. They inspect/assess the recently completed and on-going projects in terms of quality based on approved plans and specifications in addition to daily check by ROs and District Engineering Offices (DEOs), however, more efficient and effective supervision needs to be secured. Even lack of equipment is one of issues for maintenance works, improvement of technical capability of area maintenance engineers and managerial capability of ROs and DEOs are the key issues to be addressed.

(2) Bridges

Since bridges have been constructed mainly by foreign assistance, ROs and DEOs have less experience in this area. For maintenance works, as well as roads, both technical and managerial



capacity at implementation stage needs to be enhanced.

3. Tentative Outline of the Project

- (1) Title of the Project: Title of the Project is "Improvement of Quality Management for Highway and Bridge Construction and Maintenance".
- (2) Purpose of the Project: Purpose of the Project is "To attain good road transport functions throughout the project life of roads and bridges by way of improving quality management of their construction and maintenance." To attain the Purpose, the following three outcomes need to be accomplished: (a) to improve supervision and inspection capability of construction works; (b) to improve inspection and implementation capability of maintenance and repair works; and (c) to develop a system effectively spreading the capability improvement nationwide. Capacity Development (CD) would be the most important determinant to attain the objective.
- (3) Crucial Factors for Successful Implementation of the Project: There seems to be three crucial factors for successful implementation of the Project: (a) the Project needs to be promoted under the ownership or leading initiative of DPWH, with technical support provided by JICA; (b) the Project needs to be programmed in such a way as to secure long term sustainability, even after the completion of the Project; and (c) in parallel with the Project, DPWH needs to continue to make efforts to reduce external interventions as much as possible.
- (4) Selection of Priority Regional Offices (ROs): The Project places a greater importance on quality improvement at the level of RO including some of DEOs. The counterpart to work on a daily basis together with the JICA Experts will be the selected priority ROs. In consideration of local project funds, accessibility and security as well as coordination with "the Study on Risk Management for Sediment-Related Disaster on Selected National Highways", the Team has a tentative priority as follows: the Cebu RO of first priority; the Davao RO of second priority; and the Baguio RO of third priority. While an integrated approach for quality improvement will be applied to the first priority RO, a specific issue oriented approach will be applied to the second and third priority ROs
- (5) Technical Cooperation Scheme and Duration of the Project: The Project comprises a combination of three technical cooperation schemes including (a) dispatch of experts; (b) provision of small equipment for capacity development; and (c) training program either in Japan, the Philippines or the third countries. The period for cooperation will be three years, although it depends, to some extent, on intermediate and completion evaluation on the achievements and future sustainability of the Project.
- (6) Information Exchange with Various Stakeholders for Quality Improvement: There are various kinds of stakeholders who are working for quality improvement of road and bridge works other



than DPWH, including, for instance, local government units, universities and associations of private companies. It is very important to raise awareness and technical level for quality improvement of as many stakeholders as possible. For this purpose, the Project will organize workshops and seminars for information dissemination.

4. Implementation of the Project

- (1) Focus on Priority Issues for Improvement of Quality Management: The major factors for improvement of quality management could be classified into four groups: (a) Construction Management Roads; (b) Construction Management Bridges; (c) Maintenance Management Roads; and (d) Maintenance Management Bridges. It will be necessary to identify the priority group for quality improvement in view of minimizing project costs throughout the project life. Currently, lax construction management tends to produce a number of construction defects that make maintenance work ineffective.
- (2) Training through Actual Construction/ Maintenance Works: The Project focuses on capacity development (CD), training as the most important means. The Project will make good use of ongoing/planned project sites of RO/DEO.
- (3) Wide Diffusion and Application of the Results of the Project: The results of the Project obtained from the selected ROs will be analyzed and summarized for nationwide application for quality improvement.

5. Institutions for the Project Implementation

- (1) Institutions of the Philippine Side: DPWH will organize the institutions in view of the following:
 (a) the selected ROs are requested to make every arrangement for smooth implementation of the Project, including assignment of counterpart team and preparation of office space for collaboration; and (b) they are also requested to identify possible stakeholders for the Project with a view to dissemination and exchange of information.
- (2) Institutions of the Japanese Side: The Project will be under the jurisdiction of JICA Philippine Office with a view to flexible correspondence to the progress of the Project in which DPWH has ownership or leading initiative to propel the Project.
- (3) Joint Coordination Committee (JCC) for Policy Guidance: The JCC comprising some representatives from the Philippine and Japanese sides will be organized for guiding the Project properly with a view to attaining the objectives of the Project. It will meet regularly, for instance, twice a year to fulfill its mandate.

6. Steps forward for Initiating the Project

(1) Immediate Assignment of Liaison Officer/Organization in DPWH Headquarters: Immediate assignment of liaison personnel/ organization in the headquarters is requested for continued preparation of the Project. Based on the general framework of the Project agreed in the Minutes of Meeting, detailed contents as well as implementation arrangements need to be worked out

1, 4

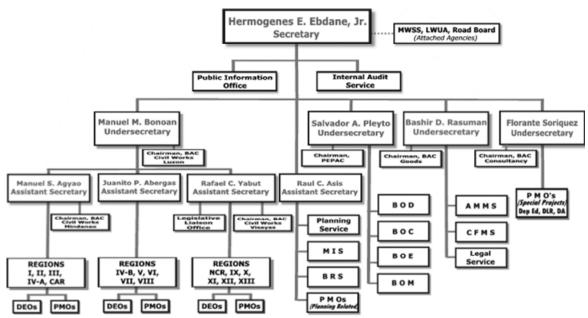
through repeated discussions between DPWH and JICA.

- (2) The 3rd Preparatory Mission of the Project: After the agreement on the general framework of the Project, the 3rd Mission will visit the Philippines to prepare a draft "Record of Discussions (R/D)". The 3rd Mission will finalize the general framework including selection of the priority ROs as well as confirmation of the priority issues for improvement of quality management. At the same time, the Mission will work together with DPWH including both headquarters and ROs on the Project Design Matrix (PDM) to clarify, for instance, (a) goals of the Project, (b) expected output of the Project, (c) expected input by DPWH and JICA, etc.
- (3) Discussion and Signing on "Record of Discussion (R/D)": The R/D will be finalized and signed through discussions between DPWH and JICA. The R/D is the official document required for the implementation of JICA technical cooperation project.
- (4) Initiation of the Project: Based on the R/D agreed between DPWH and JICA, the JICA Experts will be organized in Japan, and be mobilized to the Philippines to initiate the Project with close collaboration with DPWH.

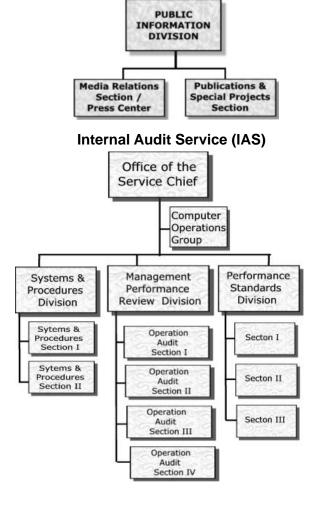
elide

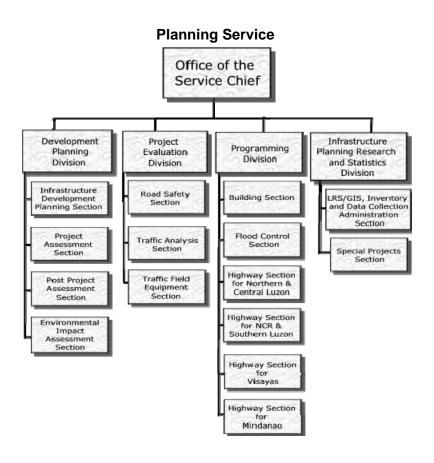
- 2. DPWH 現行組織図
- 2.1 DPWH 全体及び各部組織図

DPWH ORGANIZATIONAL STRUCTURE

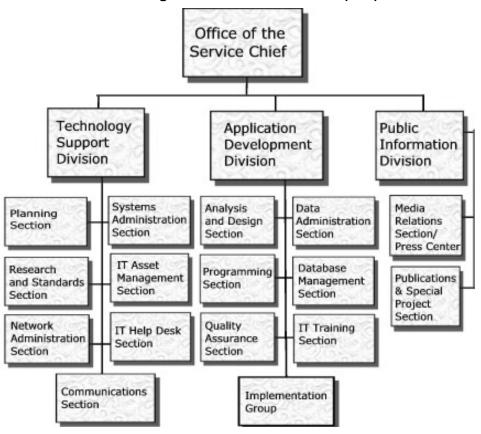


Public Information Division (PID)

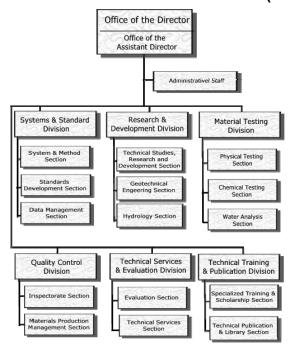




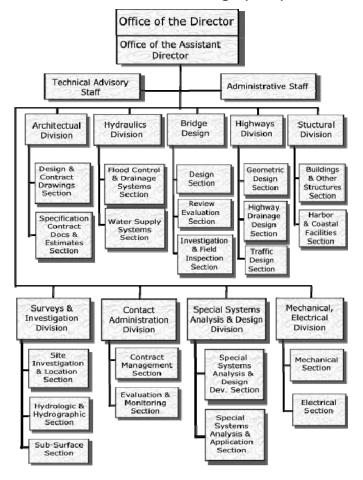
Monitoring and Information Service (MIS)



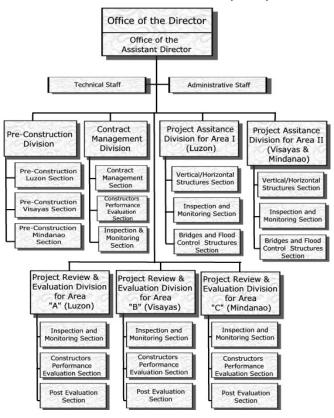
Bureau of Research and Standards (BRS)



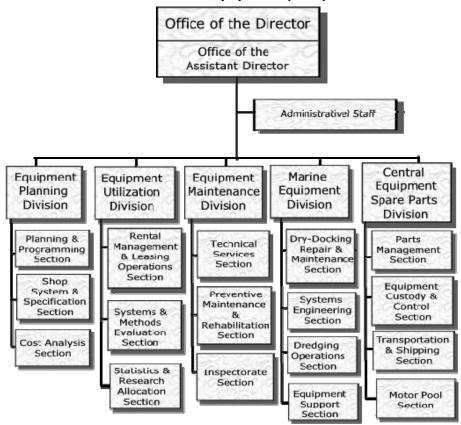
Bureau of Design (BOD)

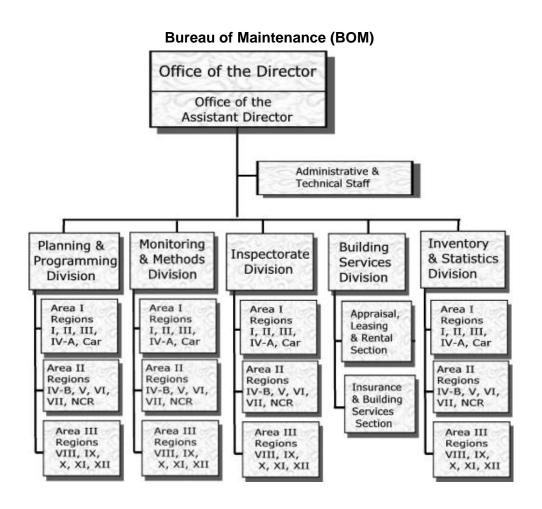


Bureau of Construction (BOC)

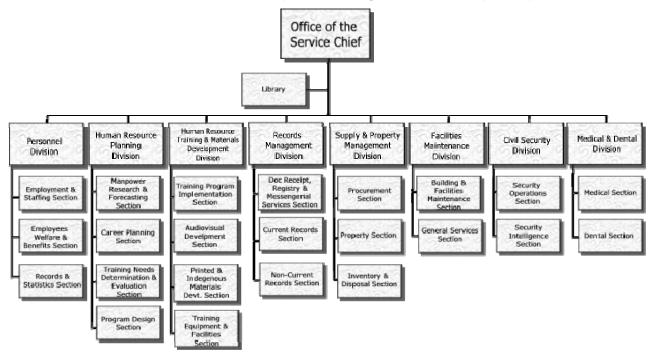


Bureau of Equipment (BOE)

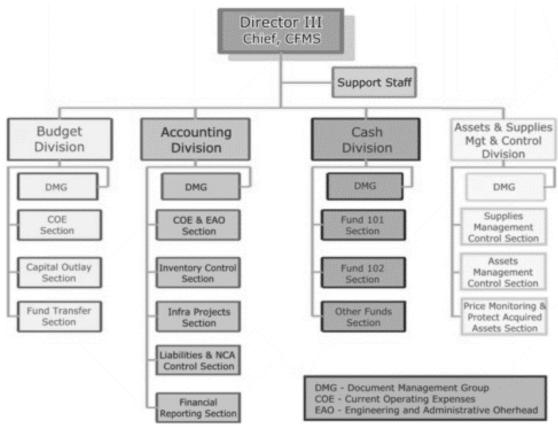




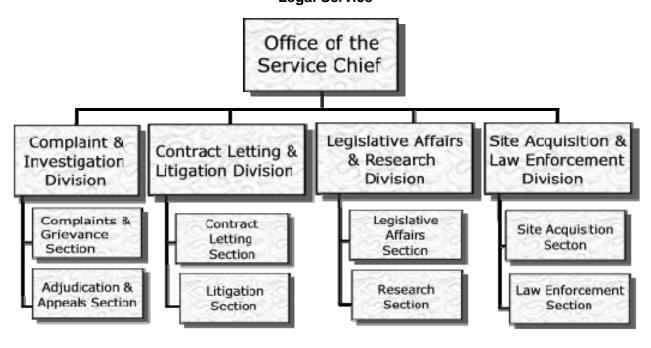
Administrative and Manpower Management Service (AMMS)

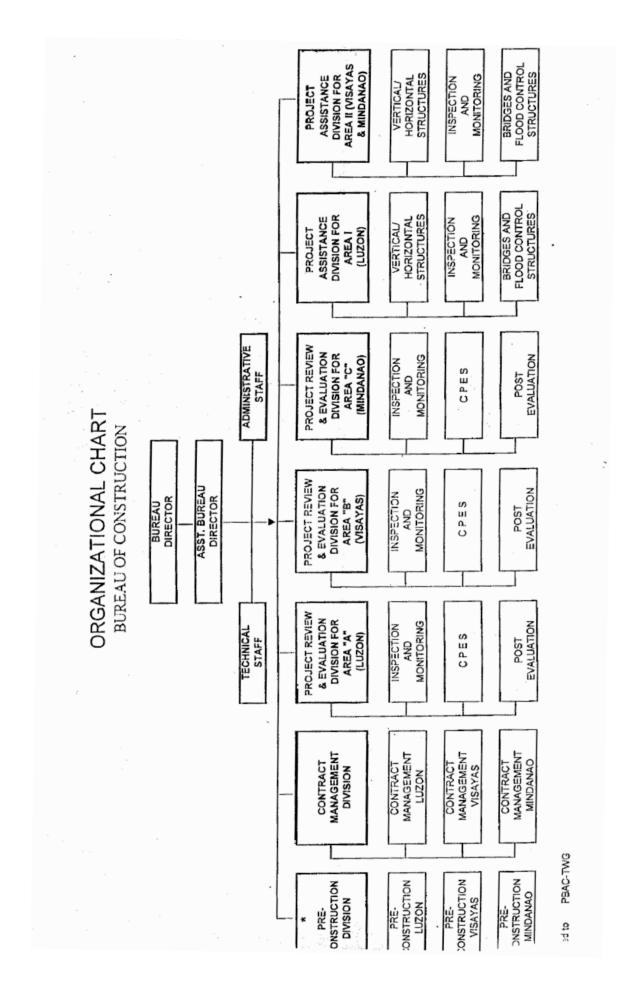


Comptrollership and Financial Management Service (CFMS)



Legal Service





FUNCTIONAL CHART BUREAU OF CONSTRUCTION

The the concent sensing of the process of the concent sensing of t				4000000			Par 60 000 100
Review comment portating to interactions are adjusted to the control of power to construct the proper and and and an area of power to construct the control of power to cont	TECHNICA	STAFF		DIRECTOR		ADMINISTRA	LIVE STAFF
PROJECT RAMA GREAT PROJECT RAMA GREAT PROJECT RAMA GREAT PROJECT RAMA GREAT POR AREA 'T' POR AR		restructure & above for clearance stion of GATT- cts. fifteent apercies. on of Constructors on of Constructors ect reports/status of gahip projects.	1. Formulate policies for approval by management and contract admining the contract admining the contract adminishment of the contract of the contract of the preparation of the imports in contract administration and contract administration of the preparation of the imports. 7. Perform other related functions.	y the Secretary regarding construction tistration of DPWH infrastructure projects of mates, contracts, progress reports of truction projects of DPWH implement operance in all projects undertaken offices/agendes on construction man offices/agendes of the page and summary project is maybe assigned or delegated by the	n ects. DPWH projects. Ing offices 1 by the Dept. agement montloring	1 [L	he Bureau in the latest secretarial, latest secretarial, and secretarial, and secretarial, and secretarial, and secretarial se
The CONTRACT MANAGEMENT FROUED REVIEW & PROJECT REVIEW & POR AREA 1 1 1 1 1 1 1 1 1 1							
TONTON CONTRACT MANAGEMENT PROPERTY FOR AREA YE FOR AR			PROJECT REVIEW &	PROJECT REVIEW &	PROJECT REVIEW &	PROJECT ASSISTANCE	PROJECT ASSISTANCE
TURDANO TUR	PRECONSTRUCTION	CONTRACT MANAGEMENT	SVALUATION DIMISION	EVALUATION DIVISION	EVALUATION DIVISION	DIVISION FOR AREA!	DIVISION FOR AREA II
contract of regions and evaluate contracts for projects undertaken by the Director. 2. Undertake evaluation of completed constructor performance constitution projects. 3. Undertake post review and evaluation of completed constructor performance constitution of completed constructor performance constitution of completed constitution of constitution of constitution of projects being implementing of projects be	NOISING	DIVISION	(LUZON)	MSAYAS	(MINDANAO)	(400-004)	
projects studingly the projects the control of constructor performance of constructor of constructor performance of constructor of constructo	1. Prepare programs of work	1. Review and evaluate	1. Inspect, check & monitor	1. Inspect, check & monitor	1. Inspect, check & monitor	1. implement & monitor infra.	1. Implement infrastructure projects in Area II (Regions
replacementing offices. 2. Undertake evaluation of constructor performance statements of works and evaluate or statements of works. 2. Undertake evaluation of constructor performance constructor performance and evaluation of constructor performance and released of works. 3. Undertake post review and evaluation of constructor performance in projects. 4. Undertake evaluation of constructor performance constructor performance in projects. 5. Undertake evaluation of constructor performance constructor performance in projects. 6. Undertake post review and evaluation of completed constructor performance in projects. 7. Undertake post review and evaluation of completed constructor performance in projects. 8. Undertake post review and evaluation of completed constructor performance in projects. 9. Undertake post review and evaluation of completed consolidated & summary project reports of consolidated & summary project reports of Regions IV-A, IV-B, V. V. S. V. V. S. V. V. S. V.	projects undertaken by BOC.	projects submitted by the	BOC and implementing	SOC and implementing	BOC and implementing	1, 11, 111, N-A, N-B, V, CAR	VI. VII. D. X. XI. XII. XIII
2. Review and elegate accomplianment, variation of 2. Undertake evaluation of 2. Undertake evaluation of 2. Undertake evaluation of 3. Undertake post review and evaluation of completed projects. a undertake post review and constructor performance or performance or performance or constructor performance or constructor performance or p		implementing offices.	offices.			& VIII), either by contract or	and NCR), either by contract
Laterness of works a completed by the agencies in projects. Linguistic disconnection of completed accomplishment, variation of completed projects. Linguistic disconnection of completed consolidated & Undertake post review and reseased documents project reports the implementing office. Linguistic disconnection of completed consolidated & Prepare consolidated & Pr	2. Review and evaluate		2. Undertake evaluation of	_		edministration, including	or administration, inouding
accomplishment, variation of completed evaluation of completed orders, and reseased evaluation of completed orders, and reseased orders, and responsed to the implementing office. 3. Undertake post review and orders, and responsibilities as may be assigned by the Director. 3. Undertake post review and order support to some orders and responsibilities as may be assigned by the Director. 3. Undertake post review and order support to some orders and responsibilities as may be assigned by the Director. 4. Perpare consolidated & 3. Undertake post review and order support to some order and responsibilities as may be assigned by the Director. 5. Conduct field verification of projects being implementatives on the responsibilities as may be assigned by the Director. 6. Provide support to and and responsibilities as may be assigned by the Director. 7. Perform other duties are may be assigned by the Director. 8. Undertake post reviews and responsibilities as may be assigned by the Director and responsibilities as may be assigned by the Director and responsibilities as may be assigned by the Director and responsibilities as may be assigned by the Director and responsibilities as may be assigned by the Director assigned by the Director and responsibilities as may be assigned by the Director and responsibilities as may be assigned by the Director assigned by the Director and responsibilities as may be assigned by the Director assigned by the Director assigned by the Director and responsibilities as may be assigned by the Director assi	programs of work and cost	2. Keytow and evaluate statements of works	in proects.	in projects.	in projects.	requested by other agencies	requested by other agencies
orders, and released enduation of completed evaluation	submitted by implementing	accomplishment, variation	3. Undertake post review and			or as directed by higher	or as directed by higher
the imperienting office. 4. Prepare consolidated & summay project reports summay project reports of Regions IV-A, IV-B, V. Or Regions VA-A, IV-B, V. Or	offices.	orders, and released	evaluation of completed	evaluation of compreted	evaluation of completed	2. Provide specialist support	2. Provide specialist support
Summay project reports summary project reports summary project reports of Regions IV-A, IV-B, V. and summary project reports of Regions IV-A, IV-B, V. and summary project reports of Region III. S. Conduct Region III. A. Perform to project being imple— A. Perform of project being	3. Review the evaluation of	the implementing office.	4. Prepare consolidated &		***		
As sequenced by the Director. 1. Perform the designed by the Director. 2. Perform of responsibilities as may be assigned by the Director. 2. Conduct field verification of projects being implementation of projects being implementation. 3. Conduct field verification of projects being implementation of projects being implementation. 4. Perform the dulies are may be assigned by the Director. 5. Conduct field verification of projects being implementatives on projects. 6. Conduct field verification of projects being implementatives on the dulies. 7. Perform of projects being implementatives on the dulies and responsibilities as may be assigned by the Director. 8. Conduct field verification of projects being implementatives on the dulies and responsibilities as may be assigned by the Director. 9. Conduct field verification of projects. 1. Perform of projects being implementatives on the dulies and responsibilities as may be assigned by the Director. 9. Conduct field verification of projects. 1. Perform of projects. 2. Conduct field support to and conduct field support to an and support to an a	bids and recommendations		summary project reports	summary project reports	summery project reports	implementing offices on	implementing offices on
Executed field verification of projects being imple— 4. Perform such other duties 5. Conduct field verification 6. Provide support to and cassigned by the Director. 6. Provide support to and cassigned by the Director. 7. Perform such other duties and responsibilities as may be assigned by the Director. 8. Conduct field verification 9. Provide support to and cassigned by the Director. 10. Perform other duties 10. Description of projects being imple— 11. The Conduct field verification 12. Conduct field verification 13. Overable project supervision 14. Prepare consolidated & nate at the attention of projects being imple— 15. Conduct field verification 16. Provide support to and cassigned by the Director. 17. Perform other duties 18. Provide support to and cassigned by the Director. 19. Perform conduct field verification 19. Provide support to and cassigned by the Director. 10. Description of projects being imple— 10. Provide support to and cassigned by the Director. 10. Perform other duties and cassigned by the Director. 10. Perform other duties and cassigned by the Director. 10. Perform other duties and cassigned by the Director. 10. Perform other duties and cassigned by the Director. 10. Perform other duties and cassigned by the Director. 10. Perform other duties and cassigned by the Director. 10. Perform other duties and cassigned by the Director. 10. Perform other duties and cassigned by the Director. 10. Perform other duties and cassigned by the Director. 10. Perform other duties and cassigned by the Director. 10. Perform other duties and cassigned by the Director. 10. Perform other duties and cassigned by the Director. 10. Perform other duties and cassigned by the Director. 10. Perform other duties and cassigned by the Director.	submitted by implementing		NCR.		DECS.	management in Area I.	management in Area II.
d projects being imple— mented when necessary. 4. Perform such other duties mented when necessary. 5. Provide support to and be assign representatives on cassigned by the Director. Coulty Assurance Units (OUA) for projects. 7. Perform other duties and responsibilities as may be assigned by the Director. A perform the duties and responsibilities as may be assigned by the Director. A perform other duties and responsibilities as may be assigned by the Director. A perform other duties and responsibilities as may be assigned by the Director. A perform other duties and responsibilities as may be assigned by the Director. A perform other duties and responsibilities as may be assigned by the Director. A perform other duties are may be assigned by the Director. A perform other duties are may be assigned by the Director. A perform other duties are may be assigned by the Director. A perform other duties are may be assigned by the Director.		reports of Region III	5. Conduct field verification	of projects being imple-		3. Oversee project supervision/	3. Oversee project supervision/
include many is provide support to and assign representatives on a sergind by the Director. Duality Assurance Units of CQUA) for projects. (QUA) for projects as may be assigned by the Director. (QUA) for projects as may be assigned by the Director. (QUA) for projects. (QUA) fo	4. Prepare, evaluate and review	Section of the second of the s	of projects being imple-		of projects being imple-	Management in Area i.	1. Prepare consolidated 5.
tended by the Director. Duality Assustrance Units assign representatives on Outlify Assustrance Units (QULA) for projects. QULA) for projects. A perform other duties and responsibilities as may be assigned by the Director. B responsibilities as may be assigned by the Director. B responsibilities as may be assigned by the Director. Consideration of Regions 1, il & CAR. COUNTY for projects. A perform other duties and responsibilities as may be assigned by the Director. Consideration of Regions 1, il & CAR. COUNTY for projects. A perform other duties and responsibilities as may be assigned by the Director. Consideration of Regions 1, il & CAR. COUNTY for projects. A projects being implementation of projects. A perform other duties and responsibilities as may be assigned by the Director. County Assigned by the Director.	advertisement & instructions	and responsibilities as may	file Provide support to and	-		summary project reports	summary project reports
COUNTY Assurance Units COUNTY for projects. COUNTY	to bidsers, prior to issuance	be assigned by the Director.	assign representatives on	Quality Assustance Units		of Regions I, II & CAR.	of Regions XII & XIII.
s may 7. Perform other duties and responsibilities as may 8. responsibilities as may 8. responsibilities as may 9. Perform other duties and responsibilities as may 1. Perform other duties and responsibilities as may 1. Perform other duties 3. Perform other duties 4. Perform other duties 5. Perform other duties 6. Perform other duties 7. Perform other duties 8. Perform other duties 8. Perform other duties 8. Perform other duties 9. Per	to prospective bidders.		Quality Assustance Units	(OUA) for projects.	Quality Assustance Units	5. Conduct field Verification of projects being imple-	of projects being imple-
s may and responsibilities as may be assigned by the Director. A responsibilities as may be assigned by the Director. Trector: Description of the Director and trapportabilities as may be assigned by the Director assigne	5. Perform other duties		7. Perform other duties	and responsibilities as may	7. Perform other duties	mented when necessary.	mented when necessary.
be assigned by the Director. De assigned by the Director accidence to the Director accidence by the Director.	and responsibilities as may		and responsibilities as may	be assigned by the Director.	& responsibilities as may		6. Perform other duties
	be assigned by the Director.		be assigned by the Director.		be assigned by the Director	and responsibilities as may	be assigned by the Director

Republic of the Philippines Department of Public Works and Highways Regional Office No. VII ORGANIZATION & POSITION CHART

