REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS (DPWH)

PREPARATORY SURVEY FOR EXPRESSWAY PROJECTS IN MEGA MANILA REGION

NAIA EXPRESSWAY PROJECT (Phase II)

FINAL REPORT APPENDIX-I DRAFT BID DOCUMNTS

NOVEMBER 2012

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

CTI ENGINEERING INTERNATIONAL CO., LTD MITSUBISHI RESEARCH INSTITUTE, INC. ORIENTAL CONSULTANTS CO., LTD METROPOLITAN EXPRESSWAY CO., LTD

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INTRODUCTION

1 BRIEF HISTORY OF BID DOCUMENTS PREPARATION

Preparation of bid documents for the selection of the concessionaire started at the last quarter of 2010, which has prior to the start of this Study.

Joint work force composed of the following was organized for the preparation of bid documents;

- Department of Public Works and Highways (DPWH)
- Department of Finance (DOF)
- National Economic Development Authority (NEDA)
- Public-Private Partnership Center (PPP Center)
- Office of the Solicitor General (OSG)
- Development Bank of the Philippines (DBP)
- International Finance Corporation (IFC)
- JICA Study Team

In the process of preparation of bid documents, NEDA Board turned down this project, which resulted to the suspension of the preparation of bid documents. Thus, the bids document presented here is not the final one and is incomplete. However, these documents may be useful to know what the major issues for preparation of bid documents were.

2 COMPOSITION OF BID DOCUMENTS

Draft bid documents are composed of the following parts;

Part I:Invitation to BidPart II:Instruction to BiddersPart III:Minimum Performance Standards and SpecificationsPart IV:Draft Concession Agreement

Republic of the Philippines Department of Public Works and Highways

BIDDING DOCUMENTS NAIA Expressway Project

PART I: INVITATION TO BID

12 March 2011

INVITATION TO BID FOR NAIA EXPRESSWAY PROJECT

The Department of Public Works and Highways (DPWH), through its Bids and Awards Committee (BAC) invites interested firms to bid for the NAIA Expressway Project under the Public-Private Partnership (PPP) scheme, using the Build-Transfer-Operate (BTO) modality, according to the Build-Operate-Transfer (BOT) Law under R.A. No. 6957, as amended by R.A. No. 7718, and its Implementing Rules and Regulations.

Brief Scope of Work:

- a. Financing, Design, and Construction of Phase II of NAIA Expressway 5.2 km of 4-lane viaduct from NAIA Terminal 3 to Diosdado Macapagal Boulevard, including at least 9 on- and off-ramps, interchange, and toll operating equipment.
- b. Operation and Maintenance (O&M) as a toll facility of the entire NAIA Expressway covering the previously constructed Phase I (from Skyway to Terminal 3) and Phase II.

DPWH – Estimated Construction Cost (DECC): Php 12.238 billion Government Financial Support of GFS (Viability Gap Funding): Php 4.283 billion Concession Period: 35 years including Design and Construction Period of not more than 3 years.

To be qualified for this Project, the Bidder must, among other things, (a) be at least 60% Filipino-owned corporation/consortium, (b) have constructed a similar Project costing at least 50% of the DECC and operated a similar facility, (c) have equity amounting to at least(excluding GFS and Government supervision) and access to Project loans for the balance of the net DECC.

Award will be made to the Bidder which offers the lowest Bid Toll Rate for the Opening Year.

The following are the indicative timelines for procurement:

Issuance of Bidding Documents	Starting <u>date</u> (first day of publication of this Invitation)
Pre-Bid Conference	Date (1 month after last day of publication of this Invitation)
Deadline for Receipt of Bids	10 am, <u>date (4 months after last day of publication of this Invitation)</u>
Opening of Bids	2pm, <u>date</u> (same day as Deadline for Receipt of Bids)
Notice of Award	Date (1 month after Opening of Bids)

Prospective bidders may download the Bidding Documents (BDs) – including Instructions to Bidders, Minimum Performance Standards and Specifications, and Draft Concession Agreement – from the DPWH website <u>www.dpwh.gov.ph</u>. The BAC will issue hard copies of the BDs at the BAC Secretariat, 4th Floor, DPWH Bldg., Bonifacio Drive, Port Area, Manila, upon payment of a non-refundable fee of Php _____.

The DPWH reserves the right to accept or reject any bid and to annul the bidding process anytime before contract award, without incurring any liability to the affected bidders.

Name and Signature of BAC Chairman

Dates of Publication:	
Name	

Newspaper: _____

Republic of the Philippines Department of Public Works and Highways

BIDDING DOCUMENTS NAIA Expressway Project

PART II: INSTRUCTIONS TO BIDDERS

PART 11: INSTYRUCTION TO BIDDER

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Republic of the Philippines DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS

NAIA Expressway Project INSTRUCTIONS TO PROSPECTIVE BIDDERS

1. Introduction

The Department of Public Works and Highways (DPWH) invites Prospective Bidders to apply to pre-qualify to bid to finance, design, construct, operate, and maintain the Ninoy Aquino International Airport (NAIA) Expressway Project. The Project consists of:

- a. The financing, design, and construction of:
 - (i) Adjustment works on the 0.7 km six-lane viaduct from the Metro Manila Skyway along Sales Road to NAIA Terminal 3.
 - (ii) A 4.6 km 4-lane viaduct extension from NAIA Terminal 3 to Roxas Boulevard, over the existing roads of Sales Road, Andrews Avenue, Domestic Road, and NAIA Road, including on-and off ramps, toll plazas, and toll operating equipment.
- b. The Operation and Maintenance of the viaduct consisting of these two sections from the Metro Manila Skyway to Roxas Boulevard as a single toll expressway.

The documents which describe the Project and govern the process to be followed for prequalification are:

- a. The Invitation to Pre-Qualify to Bid
- b. These Instructions to Prospective Bidders and its Annexes
- c. The Information Memorandum

References to "Invitation Documents" shall mean these three documents collectively, and any supplemental notices and bid bulletins issued by the SBAC from the date of the first publication of the Invitation to Pre-Qualify to Bid until the Qualification Document Submission Date

2. The Special Bids and Awards Committee

The Special Bids and Awards Committee for Public Private Partnership Projects of the DPWH (SBAC) created by DPWH Special Order No. 68 dated 28 March 2011 shall administer the process of pre-qualification and bidding for the project.

3. Transaction Advisors

The Development Bank of the Philippines (DBP) and the International Finance Corporation (IFC), the private sector arm of the World Bank Group, have been appointed by the DPWH to act as its Transaction Advisors for the international competitive public bidding for the Project. As Transaction Advisors, the DBP and IFC have been engaged to assist the DPWH in undertaking and ensuring a fair, transparent and competitive selection process that will mobilize private sector participation in the implementation of the Project. The assistance of the DBP and IFC covers all Project pre-investment activities including due diligence review, transaction structuring, marketing and promotion, contract preparation, development of documents for the Bidding Process, bidding and evaluation, and transaction award. Supporting the DBP and IFC in their advisory work are a team of international legal and technical services firms composed of Hogan Lovells Lee & Lee and Leigh Fisher respectively, and individual local legal consultants.

4. Outline of the Bidding Process

The international competitive public bidding for the Project will be conducted in accordance with the procurement rules and procedures for public bidding set under the Philippine BOT Law (Republic Act No. 6957, as amended by Republic Act No. 7718) and its 2006 Revised Implementing Rules and Regulations (Revised IRR), the applicable provisions of which are incorporated herein by reference.

The general procedure for the Bidding will be as follows:

- a. DPWH will conduct Pre-Qualification of Prospective Bidders. Prospective Bidders will be asked to apply to pre-qualify to bid by submitting their Qualification Documents, as described in greater detail in this document, on 13 September 2011, the Qualification Documents Submission Date. After reviewing the documents, the SBAC will determine which Prospective Bidders fulfill the requirements to pre-qualify, and inform all Prospective Bidders who are pre-qualified. Only Pre-Qualified Bidders will be invited and allowed to submit a Bid for the Project.
- b. After Pre-Qualification is completed, the SBAC will announce the Bid Proposals Submission Date, which will be no less than 120 days after Prospective Bidders are notified of their pre-qualification. Pre-Qualified Bidders will be asked to bid for the Project by submitting their Bid Proposals- which will include both Technical and Financial Proposals, a Bid Security, as well as other supporting documents- on this date. The SBAC shall issue the Instructions to Bidders to all Pre-Qualified Bidders. The Instructions to Bidders shall provide in detail the form and required contents of the Bid Proposals the detailed procedures to be followed for submission, bid evaluation, and post-bid requirements. The draft Concession Agreement shall likewise be provided to all Pre-Qualified Bidders to give each the opportunity to comment on the draft. DPWH may consider these comments in refining the draft Concession Agreement leading up to the issuance of the final Concession Agreement on which the Pre-Qualified Bidders must base their bids. This will ensure that binding unconditional bids are submitted on the basis of the final Concession Agreement.

- c. After submission of Bid Proposals, the SBAC will first review Bidders' Technical Proposals and evaluate them on a pass/fail basis. Bidders will be informed as to whether their Technical Proposals were passed. The SBAC will return the Financial Proposals and Bid Securities of Prospective Bidders whose Technical Proposals did not pass.
- d. Financial proposals of Bidders whose Technical Proposals were passed will be opened and evaluated at a later date. The Pre-Qualified Bidder whose Technical Proposal is passed and who submits a Bid with the lowest required Government Financial Support- an amount that DPWH will contribute to the Project's construction costs- will be subject to a post-qualification process. If it passes the post-qualification process, it will be designated the Winning Bidder, and the SBAC will recommend to the DPWH Secretary that the Winning Bidder be issued a Notice of Award. Within seven (7) days from the SBAC recommendation, the DPWH Secretary shall approve the award and issue the Notice of Award to the Winning Bidder. This Notice of Award shall indicate the requirements that have to be submitted before the signing of the Concession Agreement.
- e. The Winning Bidder will have to provide proof of incorporation, capitalization, and availability of debt financing and post a Construction Performance Security within thirty (30) days of receipt of the Notice of Award., Failure to submit the requirements of the Notice of Award within the prescribed 30 day period will result in the forfeiture of the Bid Security and the cancellation of the Notice of Award. Within seven (7) days from the receipt by DPWH of all the requirements of the Notice of Award, the DPWH Secretary shall determine and notify the Winning Bidder of its compliance with all the requirements of the Notice of Award. Immediately thereafter, the Winning Bidder will have to enter into the Concession Agreement with DPWH. Failure to enter into the Concession Agreement will result in the forfeiture of the Bid Security and the cancellation of the Notice of Award.

5. Responsibility of Prospective Bidders

Notwithstanding any information given in the Invitation Documents and any additional communication from the DPWH, the SBAC, the Transaction Advisors, or any other party, including supplemental notices and bid bulletins, it is the sole responsibility of any interested party and Prospective Bidder to:

- a. Be fully acquainted with the laws, requirements, terms, and conditions of the Bidding Process.
- b. Examine all the Invitation Documents, including all instructions, forms, schedules, terms, specifications, and drawings.

- c. Familiarize itself with all existing laws, decrees, acts, rules, and ordinances of the Philippines, whether national or local, which may affect the Project.
- d. Determine and satisfy itself, at its own cost and risk, and by such means as it considers necessary and desirable, as to all matters pertaining to the execution of the Project, including but not limited to the location and nature of the Project; the terrain, geological, meteorological, and hydrological conditions; the requirement and availability of labor, materials, equipment, aggregate sources, water, power, roads, communications and other relevant factors; resource requirements; and risks and contingencies that may affect the cost, duration, execution and completion of the Project.

By submitting Qualification Documents, a Prospective Bidder shall be presumed to have fully examined and accepted all the terms and conditions in all of the Invitation Documents.

6. Costs and Expenses of Participation

Interested parties and Prospective Bidders shall bear all costs associated with their participation in the Bidding Process including the preparation and submission of their Qualification Documents, and all possible losses or damages resulting thereto. The DPWH shall not be held responsible or liable in any way for such costs regardless of the results of the Bidding Process.

7. Queries and Supplemental Notices

All parties who purchase the Invitation Documents may send any queries on any aspect of these documents in writing, by personal delivery, e-mail or fax, to the Chairman of the SBAC, and copied to the DPWH Built-Operate-Transfer Project Management Office (BOT-PMO), Public-Private Partnership Center (PPP Center), DBP and IFC, at the following addresses, e-mail addresses and fax numbers:

DPWH Special	Bids and	Awards	Committee	for PPF	Project

Attention:	The ChairmanAddress:	DPWH-SBAC
	Department of Public Wor	ks and Highways
	5 th Floor, DPWH Building	
	Bonifacio Drive, Port Area	a
	Manila	
E-mail:		
Fax:		

DPWH Build-Operate-Transfer Project Management Office (BOT-PMO)

Attention:	Rebecca T. Garsuta
Address:	BOT-PMO, DPWH
	2 nd Street, NCR Compound
	Port Area, Manila 1018
E-mail:	garsuta.rebecca@dpwh.gov.ph
Fax:	(+63 2) 304 3824

Public-Private Partnership Center

Attention:	Cosette V. Canilao
Address:	Public-Private Partnership Center
	NEDA Complex
	Diliman, Quezon City
E-mail:	<u>cvcanilao@ppp.gov.ph</u>
Fax:	(+63 2) 929 8593

Development Bank of the Philippines

Attention:	Francis Nicolas M. Chua
Address:	Development Bank of the Philippines
	Sen. Gil Puyat Avenue corner Makati Avenue
	Makati 1200
E-mail:	fnmchua@dbp.ph
Fax:	(+63 2)893 4748

International Finance Corporation

Attention:	Lulu S. Baclagon
Address:	11 th Floor, Tower One
	Ayala Triangle, Ayala Avenue
	Makati 1200
E-mail:	mbaclagon@ifc.org
Fax:	(+63 2) 848 7339

While the SBAC will attempt to respond to all reasonable queries received up to ten (10) days before the Qualification Documents Submission Date, it is under no obligation to do so. Responses to queries and any modifications to the Invitation Documents will be done in writing through supplemental notices or bid bulletins issued by the SBAC, and sent to all parties which purchase the Invitation Documents.

8. Ownership of Documents

All documents submitted in response to the Invitation to Pre-Qualify to Bid, including Qualification Documents and their attachments, shall become the property of the DPWH.

9. Language and Foreign Documents

The Qualification Documents, and all correspondence and documents relating to the Invitation Documents and the Bid, shall be prepared and written in the English language. Any printed literature or document furnished by Prospective Bidders written in another foreign language shall be accompanied by an English translation authenticated by a Philippine consular official. In case of conflict, the English translation shall prevail.

All documents or certifications issued by foreign authorities shall also be duly notarized and authenticated before a Philippine consular official at the Philippine Consulate nearest the place of issue.

10. Pre-Qualification Conference

The DPWH will conduct a Pre-Qualification Conference for any interested parties and Prospective Bidders to clarify any part of the Invitation Documents and to answer any relevant questions from interested parties and Prospective Bidders. Details of the Pre-Qualification Conference are:

Date:	2 August 201	1
Time:	<mark>2:00 p.m.</mark>	
Location:		

11. Qualification Requirements

Prospective Bidders must fulfill all the Legal, Technical, and Financial Capability Requirements listed below.

11.1. Legal Requirements

The Prospective Bidder must be:

- a. A partnership or corporation registered with the Philippine Securities and Exchange Commission (SEC) or in case of a foreign entity, the appropriate government agency equivalent to the SEC in the foreign country where the foreign entity was registered for recognition or creation of its juridical personality or capacity. The Prospective Bidder must certify that it and its Affiliates whose projects and experience are being submitted as evidence of fulfillment of the requirements in Section 11.2 have no unsatisfactory performance record; or
- b. A Consortium. All Consortium Members must certify that they and their Affiliates whose projects and experience are being submitted as evidence of fulfillment of the requirements in Section 11.2 have no unsatisfactory performance record. If the Prospective Bidder is a Consortium and becomes the Winning Bidder, it will have to show proof of incorporation prior to signing the Concession Agreement.

11.2. Technical Requirements

To qualify to bid for the Project, the Prospective Bidder must meet the following technical requirements:

b. <u>Construction Experience</u>

The Prospective Bidder or a related entity, as described below, must have satisfactorily completed, within the last ten (10) years, the construction of expressways/viaducts/ flyovers/bridges or similar projects with a cumulative cost of at least Six Billion Philippine Pesos (PhP6,000,000,000.00), including at least one completed horizontal segment or single structure project of at least One Billion Philippine Pesos (PhP1,000,000,000.00).

The related entity which fulfills this requirement may be:

- (i) If the Prospective Bidder is a partnership or corporation:
 - 1. The Prospective Bidder itself
 - 2. A Construction Contractor
- (ii) If the Prospective Bidder is a Consortium:
 - 1. A Consortium Member with at least ten percent (10%) interest in the Consortium
 - 2. A Construction Contractor

If this requirement is to be fulfilled by a Construction Contractor, the Prospective Bidder must propose at least one, and up to five, Construction Contractors, each of which must have the relevant experience. In addition, any Construction Contractor so proposed must possess the following:

- A valid license issued by the Philippine Contractors Accreditation Board (PCAB) for Large B Classification/License Category AAA, in the case of a Filipino Construction Contractor, or by an equivalent accreditation institution in the Construction Contractor's country of origin, in the case of a foreign Construction Contractor, provided that such foreign Construction Contractor must secure a license and accreditation from the PCAB after the Bidder is awarded the Project.
- (ii) A valid International Organization for Standardization (ISO) 9001:2000 certification.

For the purpose of counting and calculating the value of projects completed by the Prospective Bidder, a Consortium Member, or a Construction Contractor, the SBAC will count projects completed by an Affiliate of the Prospective Bidder as if it had been completed by the Prospective Bidder, projects completed by an Affiliate of a Consortium Member with at least ten percent (10%) interest in the Consortium as if it had been completed by that Consortium Member, and projects completed by an Affiliate of a Construction Contractor as if it had been completed by that Construction Contractor. However, projects completed by a Prospective Bidder (along with its Affiliates) and a Construction Contractor (along with its Affiliates) will not be counted together: either the Prospective Bidder and its Affiliates must have sufficient construction experience on their own, or a Construction Contractor and its Affiliates have sufficient construction experience on their own. Similarly, projects completed by different Consortium Members (along with their Affiliates) and Construction Contractors (along with their Affiliates) will not be counted together: each of these entities and their Affiliaites must have sufficient construction experience on their own.

The entity whose completed projects are being submitted in fulfillment of this requirement- whether the Prospective Bidder, a Consortium Member, or a Construction Contractor- and any Affiliates of any of these entities whose completed projects are being submitted in fulfillment of this requirement, must certify that they have no unsatisfactory performance record. Any proposed Construction Contractor must also provide a statement of willingness to participate in, and capacity to undertake, the requirements of the Project. After pre-qualifying, Construction Contractors may be asked to reiterate their willingness to participate in, and capacity to undertake, the Project at the time that Bid Proposals are submitted.

Under the terms of the Concession Agreement, the Winning Bidder will be required to use only Construction Contractors which fulfill this Construction Experience Requirement and have the necessary PCAB license and ISO certification. If the Prospective Bidder fulfills this requirement by proposing a Construction Contractor or Construction Contractors, and these Construction Contractors are pre-qualified as described in Section 16, then the Concession Agreement will identify the pre-qualified Construction Contractors and the Concessionaire will be allowed to use any of them without need for further consent from DPWH. The use of any Construction Contractors not pre-qualified during the Bidding Process will require prior written consent of DPWH, and will be subject to the Concessionaire's demonstration that the proposed Construction Contractor meets the requirements in this Section.

b. Operation and Maintenance Experience

The Prospective Bidder or a related entity, as described below, must have experience in the operation and maintenance of a toll expressway of at least three years in the past ten (10) years.

The related entity which fulfills this requirement may be:

- (i) If the Prospective Bidder is a partnership or corporation:
 - 1. The Prospective Bidder itself
 - 2. An O&M Contractor
- (ii) If the Prospective Bidder is a Consortium:
 - 1. A Consortium Member with at least ten percent (10%) interest in the Consortium
 - 2. An O&M Contractor

If this requirement is to be fulfilled by an O&M Contractor, the Prospective Bidder must propose at least one, and up to five, O&M Contractors, each of which must have the relevant experience.

For purposes of determining whether an entity has the relevant Operation and Maintenance Experience, the SBAC will count the experience of an Affiliate of the Prospective Bidder as the experience of the Prospective Bidder, the experience of an Affiliate of a Consortium Member with at least ten percent (10%) interest in the Consortium as the experience of that Consortium Member, and the experience of an Affiliate of an O&M Contractor as the experience of that O&M Contractor.

The entity whose completed projects are being submitted in fulfillment of this requirement- whether the Prospective Bidder, a Consortium Member, or a Construction Contractor- and any Affiliates of any of these entities whose completed projects are being submitted in fulfillment of this requirement, must certify that they have no unsatisfactory performance record. Any proposed O&M Contractor must also provide a statement of willingness to participate in, and capacity to undertake, the requirements of the Project. After pre-qualifying, O&M Contractors may be asked to reiterate their willingness to participate in, and capacity to undertake, the Project at the time that Bid Proposals are submitted.

Under the terms of the Concession Agreement, the Operation and Maintenance of the NAIA Expressway will have to be undertaken by a Facility Operator. The Concession Agreement will further require the following:

- (i) The Facility Operator must be at least sixty percent (60%) Filipino-owned and controlled.
- (ii) The voting power of foreign investors on the governing board of the Facility Operator shall be proportionate to their share in the share capital of the Facility Operator;
- (iii) The Facility Operator's executive and managing officers must be Philippine citizens.
- (iv) The Facility Operator must have experience in the operation and maintenance of toll expressways of at least three years in the past ten (10) years, or be at least twenty percent (20%) owned by an entity which has such experience, as provided below.

If the Winning Bidder (or if it is a Consortium, the corporation it shall form after being issued the Notice of Award) fulfills these requirements itself, then it may designate itself as the Facility Operator. If it does not, then the entity, or one of the entities proposed by the Bidder to fulfill the Operation and Maintenance Experience requirement must be designated as Facility Operator or own at least twenty percent (20%) of the Facility

Operator. In case of the latter, the entity owning at least twenty percent (20%) of the Facility Operator must maintain such interest for at least five years starting from issuance of the Toll Operation Certificate for the Project, unless it obtains prior written consent from the DPWH.

c. <u>Qualified Key Personnel</u>

The Prospective Bidder, its Consortium Members, proposed Construction Contractors, or proposed O&M Contractors, must have, among their and their Affiliates' collective personnel, individuals with the following required qualifications and experience:

Position	Minimum Qualifications and Type of Experience Required	Min. Years of Experience
1. Project Manager	Registered Civil Engineer and must have been the Project Manager of expressways/viaducts/ flyovers/ bridges/similar projects.	20
2. Manager, Design	Registered Civil Engineer and must have been the Designer of expressways/viaducts/ flyovers/ bridges/similar projects.	15
3. Manager, Operation and Maintenance	Must have been the General or Operations Manager of at least one project involving the operation and maintenance of expressways/ tollways during the past 10 years.	5

11.3. Financial Capability Requirements

To qualify to bid for the Project, the Prospective Bidder or a related entity, as described below, must meet the following Financial Capability requirements:

- a. Have net worth of at least One Billion Two Hundred Million Philippine Pesos (PhP1,200,000,000.00) or its equivalent as of its latest audited financial statements, which must be dated not earlier than 31 December 2010.
- b. Have total taxable income for the taxable year 2010 or later of at least Five Hundred Eighty Million Philippine Pesos (PhP580,000,000.00) or its equivalent.
- c. Provide evidence that it has the capability to raise loans of at least Four Billion Eight Hundred Million Philippine Pesos (PhP 4,800,000,000.00) for the Project. This amount can be reduced by the excess of the Prospective Bidder or related entity's net worth over One Billion Two Hundred Million Philippine Pesos (PhP1,200,000,000.00).

The entity which fulfills this requirement may be:

- (i) If the Prospective Bidder is a partnership or corporation:
 - 1. The Prospective Bidder itself
 - 2. An Affiliate of the Prospective Bidder
- (ii) If the Prospective Bidder is a Consortium:
 - 1. the Lead Member of the Consortium
 - 2. an Affiliate of the Lead Member of the Consortium

A single entity- whether the Prospective Bidder, Lead Member, or an Affiliate of either, must meet each of the the financial capability requirements in their entirety. For example: either the Prospective Bidder or its Affiliate, or the Lead Member or its Affiliate must, by itself and not along with any other entity, fulfill the net worth and taxable income requirements and provide evidence of capability to raise loans.

12. Qualification Documents

On the Qualification Documents Submission Date, the Prospective Bidder must submit its Application to Pre-Qualify to Bid. The Application to Pre-Qualify to Bid consists of the following Qualification Documents, using the relevant forms in the Annexes:

- a. Business Plan (Using the form in Annex QD-1A for partnerships or corporations, or Annex QD-1B for Consortiums). For Consortiums, this document must show the Lead Member and all Consortium Members, and the total percentage interest of all Consortium Members must be one hundred percent (100%). The Business Plan must also indicate the entities which fulfill the Qualification Requirements in Sections 11.2 and 11.3, and any Affiliates of these entities whose projects, experience, or financial capability are being submitted to comply with the Qualification Requirements.
 - (i) Required attachments: If the Prospective Bidder will use an Affiliate or Affiliate of the Lead Member to comply with the Financial Capability Requirements in Section 11.3, attach evidence of such affiliation.
- b. Basic Information Sheet- using the form in Annex QD-2
 - (i) To be submitted by all entities listed in all sections of the Business Plan (Form QD-1A or QD-1B).
 - (ii) Required attachment: For all entities submitting this form, a certified true copy of its latest General Information Sheet, stamped "received" by the SEC or for a foreign entity, the equivalent document submitted to and acknowledged by the appropriate government agency equivalent to the SEC in the foreign country where the foreign entity was registered for recognition or creation of its juridical personality or capacity.

- c. Certified True Copy of SEC Certificate of Incorporation, Articles of Incorporation, and By-Laws, or for a foreign entity, the equivalent document submitted to and acknowledged by the appropriate government agency equivalent to the SEC in the foreign country where the foreign entity was registered for recognition or creation of its juridical personality or capacity Annex QD-3
 - (i) To be submitted by all entities identified in the Business Plan (Form QD-1A or QD-1B).
- d. Notarized Certification of Absence of Unsatisfactory Performance Record- using the form in Annex QD-4.
 - (i) To be submitted by all entities listed in all sections of the Business Plan (Form QD-1A or QD-1B).
- e. Construction Experience- using the form in Annex QD-5
 - To be submitted by the entity or entities which fulfill the Construction Experience requirement in Section 11.2 a, as identified in the Business Plan (Form QD-1A or QD-1B), item 3.
 - (ii) Required attachment for each project
 - (a) Certificate of Project Completion from the project's owner.
 - (b) If the project was completed by an Affiliate of the entity which fulfills the Construction Experience requirement, evidence of such affiliation.
- f. Construction Contractor's Notarized Statement of Willingness to Participate In, and Capacity to Undertake the Requirements of, the Project using the form in Annex QD-6.
 - To be submitted by any Construction Contractors proposed by the Prospective Bidder to fulfill the Construction Experience requirement in Section 11.2 a, as identified in the Business Plan (Form QD-1A or Form QD-1B), item 3.
- g. Certified True Copy of Proposed Contractor's License from PCAB for Large B Classification/License Category AAA- Annex QD-7.
 - To be submitted by any Construction Contractors proposed by the Prospective Bidder to fulfill the Construction Experience requirement in Section 11.2 a, as identified in the Business Plan (Form QD-1A or Form QD-1B), item 3.
- h. Certified True Copy of Valid ISO 9001:2000 Certification Annex QD-8.
 - (i) To be submitted by any Construction Contractors proposed by the Prospective Bidder to fulfill the Construction Experience requirement in

Section 11.2 a, as identified in the Business Plan (Form QD-1A or Form QD-1B), item 3.

- i. Operation and Maintenance Experience using the form in Annex QD-9.
 - (i) To be submitted by the entity which fulfills the Operation and Maintenance Experience requirement in Section 11.2 b, as identified in the Business Plan (Form QD-1A or Form QD-1B), item 5.
 - (ii) Required attachment for each project:
 - (a) Certificate of Project Completion or Ongoing Project from Owner.
 - (b) If the project was or is being undertaken by an Affiliate of the entity which fufills the Operation and Maintenance Experience requirement, evidence of such affiliation.
- j. O&M Contractor's Notarized Statement of Willingness to Participate In, and Capacity to Undertake the Requirements of, the Project- using the form in Annex QD-10.
 - To be submitted by any O&M Contractors proposed by the Prospective Bidder to fulfill the Operation and Maintenance Experience requirement in Section 11.2 b, as identified in the Business Plan (Form QD-1A or Form QD-1B), item 4.
- k. Key Personnel- list of qualified key personnel who fulfill the requirements of Section 11.2 c using the form in Annex QD-11
 - (i) To be submitted by the Prospective Bidder.
 - (ii) More than one name can be submitted for each position; however, at least one must be submitted.
- 1. Notarized Statement of Financial Capability- using the form in Annex QD-12
 - (i) To be submitted by the entity which fulfills the Financial Capability requirement in Section 11.3, as identified in the Business Plan (Form QD-1A or Form QD-1B), item 7.
 - (ii) Required attachments:
 - 1. Certified True Copy of latest audited financial statements which must be dated not earlier than 31 December 2010, stamped "received" by the Bureau of Internal Revenue or for foreign entities, the appropriate government agency equivalent to the Bureau of Internal Revenue in the foreign country where the foreign entity was registered for recognition or creation of its juridical personality or capacity.
 - 2. Certified True Copy of Annual Income Tax Return for 2010 (Bureau of Internal Revenue Form 1702 stamped "received" by the Bureau of Internal Revenue, or for foreign entities, the appropriate

government agency equivalent to the Bureau of Internal Revenue in the foreign country where the foreign entity was registered for recognition or creation of its juridical personality or capacity.

- 3. Letters from the Prospective Bidder or Lead Member's banks or potential lenders expressing their willingness to lend it, or the entity it will form if it becomes the Winning Bidder, at least Four Billion Eight Hundred Million Philippine Pesos (Php4,800,000,000.00). This amount can be reduced by the excess of the Prospective Bidder or related entity's net worth over One Billion Two Hundred Million Philippine Pesos (PhP1,200,000,000.00).
- m. Notarized Application to Pre-Qualify to Bid, in the form of Annex QD-13.
 - (i) To be submitted by the Prospective Bidder.
- n. Notarized Corporate Authorizations and Designation of Authorized Representative:
 - (i) For Partnerships or Corporations: Authority to Apply to Pre-Qualify and Designation of Authorized Representative, using the form in Annex QD-14A.
 - 1. To be submitted by the Prospective Bidder.
 - (ii) For Consortiums: Consortium Member's Authority to Participate in Consortium and Apply to Pre-Qualify, and Designation of Lead Member and Authorized Representative of Consortium, using the form in Annex QD-14B.
 - 1. To be submitted by each Consortium Member

13. One Bidder, One Submission

Each Prospective Bidder mays submit only one Application to Pre-Qualify to Bid.A Prospective Bidder may not be a member of another Consortium, nor have an Affiliate which is a member of another Consortium. No Consortium Member may be a member of more than one Consortium, nor have an Affiliate which is a member of another Consortium.

To ensure a level playing field and a competitive Bidding Process, there are restrictions on the extent of affiliation and ownership between Prospective Bidders and members of different Consortiums. These are described in greater detail in Section 23.

These restrictions do not limit the participation of proposed Construction Contractors and O&M Contractors, which may be proposed by more than one Prospective Bidder.

14. Format of Submission of Qualification Documents

Each page of each Qualification Document, including any required attachments, shall be initialed on the right margin by the Prospective Bidder's authorized representative as identified in the form in Annex QD-14A or QD-14B.

Qualification Documents must be printed either in standard A4 or letter size (8 $\frac{1}{2}$ " x 11") paper and bound together in ring binders or folders of appropriate size. Documents must be paginated and text must be at least of 12-font size.

Prospective Bidders shall submit the Qualification Documents in the following form:

- One complete original set, clearly marked on each page as "ORIGINAL"
- Nine Certified True Copies, clearly marked on each page as "COPY NO. __"
- A readable compact disc containing an electronic copy of each Qualification Document, in either Microsoft Word (.doc) or Portable Document Format (.pdf) format.

Each set of the Qualification Documents must be placed in an envelope. Each of the ten (10) envelopes containing the Qualification Documents must be sealed and appropriately addressed and marked as follows:

DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS NAIA EXPRESSWAY PROJECT QUALIFICATION DOCUMENTS

[NAME AND ADDRESS OF PROSPECTIVE BIDDER]

All ten (10) sets of the Qualification Documents and the CD shall be placed in one outer envelope

If any of the envelopes are not properly sealed and/or marked as instructed above, the SBAC shall not assume any responsibility for the loss of the Qualification Documents.

15. Procedures for Submission and Opening of Qualification Documents on the Qualification Documents Submission Date

On the Qualification Documents Submission Date, Prospective Bidders are required to submit their Qualification Documents to:

Special Bids and Awards Committee for Public-Private Partnership Projects of the DPWH

NAIA Expressway Project 5th Floor, DPWH, Bonifacio Drive, Port Area Manila, Philippines

The Qualification Documents must be submitted between 8:30 a.m. and 10:00 a.m. on the Qualification Documents Submission Date. The date and time of submission shall be recorded through the use of an official clock designated by the SBAC for that purpose. Each set of the Qualification Documents submitted shall be numbered in the order received and stamped with the time of receipt. In addition, the receipt of each set of Qualification Documents will be recorded in a register in the order of receipt specifying the date, time and name of the Prospective Bidder submitting the same.

Qualification Documents submitted after 10:00 a.m. on the Qualification Documents Submission Date shall not be accepted.

Immediately after 10:00 a.m. on the Qualification Documents Submission Date, the SBAC will begin the opening proceedings by announcing the names of the Prospective Bidders who have submitted Qualification Documents and any such other details as the SBAC may consider appropriate. The SBAC will then proceed with opening the envelopes of each Prospective Bidder, one at a time, in the order in which the same were received. The duly authorized representatives for each Prospective Bidder who attend the opening proceedings shall sign the register confirming their attendance.

16. Evaluation of Qualification Documents

The SBAC shall examine the Qualification Documents over a period of not longer than ten (10) days after the Qualification Documents Submission Date. The detailed evaluation of the compliance by the Prospective Bidder with the Legal, Technical and Financial Capability Requirements for the Project shall be based solely upon the Qualification Documents submitted. The SBAC reserves the right to seek clarification from Prospective Bidders on the form and contents of their Qualification Documents. The SBAC also reserves the right to make inquiries with any person, government authority, client organization, consortium member, officer, director, employee or other agent of any Prospective Bidder for the purpose of clarifying any matter included in its Qualification Documents.

All submitted information and any clarifications requested by the DPWH shall be assessed against the criteria for qualification as set out in Section 11 and the documents required in Section 12 and rated on a "pass-or-fail" basis. The overall rating for the evaluation will be "qualified" if each criterion is rated "passed" and each required Qualification Document and attachment is completely submitted. The overall rating will be "disqualified" if any criterion is rated "failed" or if any required Qualification Document and attachment is missing. In reviewing the Prospective Bidder's compliance with the Construction Experience requirement in Section 11.2 a, if a Prospective Bidder submits the name of more than one Construction Contractor to fulfill this requirement, then as long as at least one Construction Contractor is "passed," then the Prospective Bidder will be rated "passed" for that criterion. Similarly, in reviewing the Prospective Bidder's compliance with the Operation and Maintenance requirement in Section

11.2 b, if a Prospective Bidder submits the name of more than one O&M Contractor to fulfill this requirement, then as long as at least one O&M Contractor is "passed," then the Prospective Bidder will be rated "passed" for that criterion.

A Prospective Bidder may also be disqualified for the following reasons:

- Failure to comply with any terms, conditions, and instructions of the Invitation Documents;
- Material misrepresentation in any Qualification Documents or other communication with the DPWH and SBAC;
- Illegal conduct or attempt to influence the DPWH and SBAC's evaluation of the Qualification Documents or the results of the Pre-Qualification process; or
- Other grounds for disqualification of Bidders under the BOT Law and all applicable laws.

17. Notification of Results of Evaluation of Qualification Documents

The BAC will notify all Prospective Bidders as to whether they passed the qualification stage no later than ten (10) days after the Qualification Documents Submission Date ("Notice of Pre-Qualification"). All Prospective Bidders which pass the qualification stage shall be known as Pre-Qualified Bidders.

If the Prospective Bidder proposed more than one Construction Contractor to fulfill the Construction Experience requirement in Section 11.2 a, the BAC shall also notify each Prospective Bidders as to which of the Construction Contractors they proposed were passed. Similarly, if the Prospective Bidder proposed more than one O&M Contractor to fulfill the Operation and Maintenance Experience requirement in Section 11.3 b, the BAC shall also notify each Prospective Bidders as to which O&M Contractors they proposed were passed.

Pre-Qualified Bidders will be allowed to purchase the following Bidding Documents immediately upon notification that they have been pre-qualified:

- Instructions to Bidders, which will give detailed information about the requirements for the preparation of Bid Proposals;
- The Draft Concession Agreement;
- The Minimum Performance Standards and Specifications, which will set out technical requirements for design, construction, operation, and maintenance of the project through the life of the concession period; and
- Other technical documents prepared by or on behalf of DPWH.

18. Restrictions on Changes in the Composition of Pre-Qualified Bidders

Once a Consortium is pre-qualified to bid, the Consortium's Lead Member, and any Consortium Members which fulfill the requirements in Sections 11.2 a and 11.2 b may not withdraw from the Consortium, nor reduce their percentage interests in the Consortium as submitted in the Consortium's Qualification Documents.

Except for the Lead Member and any Consortium Members which fulfill the requirements in Sections 11.2 a and 11.2 b, other members of the Consortium may withdraw from the Consortium prior to the Bid Proposals Submission Date. New members may, but need not, be substituted for Consortium Members who are permitted to withdraw from the Consortium prior to the Bid Proposals Submission Date. Consortium Members who withdraw from a Consortium, and their Affiliates, cannot be part of any other Consortium that has pre-qualified and is eligible to bid for the Project.

Consortium Members may increase their percentage interest in the Consortium between the submission of Qualification Documents and Bid Proposals.

Notwithstanding the withdrawal of any Consortium Member, whether or not any Consortium Member which withdraws is replaced by a new Consortium Member, and whether or not any Consortium Members increase their percentage interest in the Consortium between the submission of Qualification Documents and Bid Proposals, the Lead Member must still have the largest percentage interest in the Consortium and must have at least a thirty three percent (33%) interest in the Consortium at all times, and any Consortium Members which fulfill the requirements in 11.2 a and 11.2 b must have the required minimum percentage interests in those sections at all times.

A Consortium which submits a Bid Proposal but is found to have violated the provisions of this Section will be disqualified.

19. Failure of Qualification Process

If only one Prospective Bidder submits its Qualification Documents, or if there is only one Pre-Qualified Bidder after the evaluation of Qualification Documents, the Pre-Qualification Process may be declared a failure, and the Bidding Process may be cancelled.

20. Right to Reject Qualification Documents, Waive Minor Defects, and Not Proceed with the Bidding

The DPWH reserves the right to accept or reject all or any Application to Pre-Qualify to Bid without assigning any reason whatsoever.

The DPWH reserves the right to waive any minor defects in the bids, and accept the offer it deems most advantageous to government.

At any time, the DPWH reserves the right not to proceed with the Bidding Process and the execution of the Concession Agreement without prior notice or liability, and without any obligation to give any reason not to proceed.

21. General Conditions and Prohibitions

By submitting Qualification Documents and participating in the pre-qualification process, the Prospective Bidder acknowledges and agrees that:

- a. It, including all Consortium Members, proposed Construction and O&M Contractors, their Affiliates, and their respective officers, employees, agents and advisers shall observe the highest standard of ethics during the Bidding Process.
- b. It, including all Consortium Members, proposed Construction and O&M Contractors, their Affiliates, and their respective officers, employees, agents and advisers shall not commit any Corrupt Fraudulent, Coercive, Undesirable and Restrictive Practices.
- c. It, including all Consortium Members, Proposed Construction and O&M Contractors, their Affiliates, and their respective officers, employees, agents and advisers, will not engage in any form of political or other lobbying with respect to the Project or attempt to influence the outcome of the Bidding Process; and
- d. It accepts all the terms and conditions of the Invitation Documents.

22. Corrupt, Fraudulent, Coercive, Undesirable, and Restrictive Practices

Notwithstanding anything to the contrary contained herein, or in the Notice of Award, the DPWH shall reject or disqualify an Application to Pre-Qualify to Bid, a Bid or withdraw the Notice of Award, without being liable in any manner whatsoever to the Prospective Bidder, Bidder, or any Consortium Member, if it determines that the Prospective Bidder, Bidder any Consortium Member, any Proposed Construction Contractor, any proposed O&M Contractor, or any Affiliate of any of these entities has, directly or indirectly or through an agent, engaged in any Corrupt, Fraudulent, Coercive, Undesirable, or Restrictive practice in the Bidding Process. In such an event, the DPWH shall forfeit and appropriate any Bid Security without prejudice to any other right or remedy that may be available to the DPWH. The DPWH will also seek to impose the maximum penalties for civil and criminal liability available under the applicable law on individuals and organizations deemed to be involved in any Corrupt, Fraudulent, Coercive, Undesirable, or Restrictive practice.

Without prejudice to the rights and remedies of the DPWH as provided in these Instructions to Prospective Bidders and the Concession Agreement, if a Prospective Bidder, Bidder, any Consortium Member, any Proposed Construction Contractor, any proposed O&M Contractor, or any Affiliate of any of these entities, is found by the DPWH to have directly or indirectly or through an agent, engaged or indulged in any Corrupt, Fraudulent, Coercive, Undesirable, or Restrictive Practices during the Bidding Process, or after the issuance of the Notice of Award or the execution of the Concession Agreement, such Prospective Bidder, Bidder, Consortium Member, or Concessionaire shall not be eligible to participate in any bidding of the DPWH from the date it is found to have directly engaged or indulged in any such practices.

For the purposes of this Section, the following terms shall have the meaning hereinafter respectively assigned to them:

- a. *"Corrupt Practice"* means (i) any of the prohibited acts under Republic Act No. 3019, otherwise known as the Anti-Graft and Corrupt Practices Act, including the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the actions of any person connected with the Bidding Process or the implementation of the Project.
- b. *"Fraudulent Practice"* means any hoax, delusion, falsification, scheme, artifice, dishonesty, trickery, deceit, cheating and the like, especially when involving misrepresentation, omission, concealment, suppression, non-disclosure or disclosure of incomplete facts, whether in fact or equity, in order to influence the Bidding Process or implementation of the Concession Agreement.
- c. *"Coercive Practice"* means impairing or harming, or threatening to impair or harm, directly or indirectly, or exercising undue influence upon any person or property to influence any person's participation or action in the Bidding Process or the implementation of the Concession Agreement.
- d. *"Undesirable Practice"* means (i) establishing contact with any person connected with or employed or engaged by the DPWH with the objective of canvassing, lobbying or (ii) in any manner influencing or attempting to influence the Bidding Process, the evaluation of Qualification Documents or Bids, or the implementation of the Concession Agreement
- e. *"Restrictive Practice"* means any act, scheme, plan or agreement such as forming a group, clique, cartel, trust, syndicate, combine, pool and the like or arriving at any understanding or arrangement among Prospective Bidders, Consortium Members, Construction Contractors, O&M Contractors, or Bidders with the objective of restricting, subverting or manipulating a full and fair competition in the Bidding Process.

23. Conflict of Interest

Prospective Bidders and Consortium Members, including their Affiliates, must not have any Conflicts of Interest. Without limiting the generality of Conflict of Interest, any of the following will be considered a Conflict of Interest:

- a. A Prospective Bidder, any of its Consortium Members, or any of their Affiliates (of either a Prospective Bidder or any of its Consortium Members) is a member of another Consortium, or an Affiliate of a member of another Consortium.
- b. A Prospective Bidder, any of its Consortium Members, or any of their Affiliates (of either a Prospective Bidder or any of its Consortium Members) is proposed as a Construction Contractor or O&M Contractor of another Prospective Bidder.

- c. A Prospective Bidder, any of its Consortium Members, or any of their Affiliates (of either a Prospective Bidder or any of its Consortium Members) has ownership interest of at least 20% in any other Prospective Bidder, any Consortium Member of any other Prospective Bidder, or any of their Affiliates (of either the other Prospective Bidder or any of its Consortium Members).
- d. Another Prospective Bidder, any Consortium Member of another Prospective Bidder, or any of their Affiliates (of either the other Prospective Bidder or any of its Consortium Members) has ownership interest of at least 20% in a Prospective Bidder, any of its Consortium Members, or any of their Affiliates (of either the Prospective Bidder or any of its Consortium Members).
- e. A member of the board of directors, partner, officer, employee, professional advisor or agent of a Prospective Bidder, any Consortium Member, or any of their Affiliates (of either the Prospective Bidder or any of its Consortium Members), is also directly involved in any capacity related to the Bidding Process for the Project for another Prospective Bidder, any Consortium Member of any other Prospective Bidder, or any of their Affiliates (of either the Prospective Bidder, or any of their Affiliates (of either the Prospective Bidder, or any of their Affiliates (of either the Prospective Bidder or any of its Consortium Members).
- f. A Prospective Bidder, any of its Consortium Members, any of its proposed Construction Contractors or O&M Contractors, or any Affiliate of any of these, has participated as a consultant to the DPWH in the preparation of any documents, design, or technical specifications of the Project or in connection with the Bidding Process.
- g. A Prospective Bidder, any of its Consortium Members, any of its proposed Construction Contractors or O&M Contractors, or any Affiliate of any of these, engages any legal, financial, or technical adviser of DPWH in relation to the project, or anyone who is or was an employee of DPWH less than one year before his or her engagement by the Prospective Bidder, any of its Consortium member, any of its proposed Construction Contractors or O&M Contractors, or any Affiliate of any of these.
- h. A member of the board of directors, partner, officer, professional advisor, or agent of a Prospective Bidder, any Consortium Member, or any of their Affiliates (of either the Prospective Bidder or any of its Consortium Members) is related by consanguinity or affinity up to the third civil degree to the Secretary of the DPWH or other DPWH officers who have direct access to information that may substantially affect the result of the Bidding.

If at any time prior to the signing of the Concession Agreement, any Prospective Bidder or Bidder, Consortium Member, Proposed Construction Contractor or O&M Contractor, or any Affiliate of any of these, is found to have a Conflict of Interest as defined in this Section , it shall be disqualified from further participating in the Bidding Process. If the Conflict of Interest involves another Prospective Bidder or Bidder, then both Prospective Bidders or Bidders shall be disqualified.

24. Governing Law and Rules

The provisions of the BOT Law and other applicable Philippine laws shall govern all matters not specifically covered by the Instructions to Prospective Bidders and other Invitation Documents.

25. Definitions

The following words or terms shall have the following meanings in these Instructions to Prospective Bidders and other Invitation Documents

- a. *"Affiliate"* means a corporation or entity effectively Controlled by or Controlling the Bidder or associated with the Bidder under common ownership and Control.
- b. *"Bid"* means a valid offer to undertake the Project to be submitted by a Bidder.
- c. *"Bid Proposal"* means the Bid Letter, Bid Security, and Additional Requirements for Consortiums with New Members, Technical Proposal and Financial Proposal to be submitted by the Bidders pursuant to the Instructions to Bidders that will be released by DPWH after Pre-Qualification.
- d. *"Bid Proposals Submission Date"* means the day to be set by the DPWH for the submission of the Bid Proposals.
- e. *"Bid Security"* means the instrument provided by the Bidder to guarantee that it shall comply with all its obligations under the Instructions to Bidders that will be released by DPWH after Pre-Qualification.
- f. *"Bidder"* means any partnership, corporation, or Consortium which participates in the Bidding Process by submitting an Application to Pre-Qualify to Bid, passing Pre-Qualification process, and submitting a Bid Proposal on the Bid Proposal Submission Date.
- g. *"Bidding Documents"* means the documents enumerated in Section 17 which may be purchased by Pre-Qualified Bidders.
- h. *"Bidding Process"* means the process beginning from the publication of the Invitation to Pre-Qualify to Bid until the signing of the Concession Agreement, as described in Section 4.
- i. **"BOT Law"** means Republic Act No. 6957, as amended by Republic Act No. 7718, and the "Revised Implementing Rules and Regulations of Republic Act No. 6957, "An Act Authorizing the Financing, Construction, Operation and Maintenance of Infrastructure Projects by the Private Sector and for Other
Purposes", as amended by Republic Act No. 7718."

- j. *"Concession Agreement"* means the contract to be executed between the DPWH and the Winning Bidder or a legal entity formed by the Winning Bidder.
- k. *"Conflict of Interest"* is defined in Section 23.
- 1. *"Consortium"* means an unincorporated association of natural or juridical persons bound by contract or law, solidarily undertaking by mutual written agreement a common enterprise which is to submit a Bid in accordance with the Bidding Documents.
- m. *"Consortium Member"* means any of the natural or juridical persons or group of persons comprising a Consortium, each having a definite interest in the common undertaking, solidarily liable in the Bid and whose interest will be converted into an equivalent equity participation in the corporation that will become the Concessionaire if the Consortium is awarded and accepts the Project.
- n. *"Construction"* means all aspects of construction work and activities relating to the Project, as provided in the Concession Agreement.
- o. *"Construction Contractor"* means an entity which may be engaged by the Concessionaire to undertake the Construction, in accordance with the Concession Agreement.
- p. "*Control*" means, for purposes of defining an Affiliate, the power to direct or cause the direction of the management policies of a body corporate whether through: (i) ownership of at least fifty one percent (51%) of the outstanding voting shares or (ii) ownership of at least twenty percent (20%) of the outstanding voting shares and possession of at least fifty one percent (51%) of the voting rights through voting trust or other voting agreements entered into at least one year before the Qualification Documents Submission Date.
- q. *"Corrupt, Fraudulent, Coercive, Undesirable, and Restrictive Practices"* are each defined in Section 22.
- r. **"Design"** means the preparation by the Concessionaire of the Detailed Engineering Design in accordance with the Concession Agreement.
- s. *"Detailed Engineering Design"* means the detailed engineering design, including plans, drawings, specifications, and design computations for Phase II and the Phase I_Adjustment Works, prepared by the Concessionaire in accordance with the Concession Agreement.
- t. *"DPWH"* means the Department of Public Works and Highways.

- u. *"Facility Operator"* means the entity designated by the Concessionaire that will undertake Operation and Maintenance of the NAIA Expressway, in accordance with the Concession Agreement.
- v. *"Government Financial Support"* means the amount to be provided by the DPWH to the Concessionaire to finance part of the construction cost of the NAIA Expressway, as provided in the Concession Agreement.
- w. "Invitation Documents" means the Invitation to Pre-Qualify to Bid, these Instructions to Prospective Bidders, including its Annexes, the Information Memorandum, and any supplemental notices and bid bulletins issued by the SBAC from the date of first publication of the Invitation to Pre-Qualify to Bid until the Qualification Document Submission Date.
- x. *"Lead Member"* means, for a Bidder which bids as a Consortium, the Consortium Member having the most significant interest in the Consortium, which should not be less than thirty three percent (33%), and which should be designated in writing as such by the other Consortium Members.
- y. *"Maintenance"* means the day to day upkeep and repair of the NAIA Expressway necessary or required for its safe and proper operation, including the provision of labor, materials, equipment, and supervision, in accordance with the Concession Agreement.
- z. *"Minimum Performance Standards and Specifications"* means the set of minimum performance or functional standards and specifications that the Concessionaire must comply with in undertaking the Design, Construction, Operation and Maintenance of the Project.
- aa. *"NAIA Expressway"* means all the physical attributes of civil, mechanical, structural and architectural works of the Project, more particularly described in the Concession Agreement.
- bb. **"O&M Contractor"** means an entity identified by a Prospective Bidder to establish Operation and Maintenance Experience under this Instructions to Bidder, and which entity may eventually be engaged as Facility Operator or have at least twenty percent (20%) interest in the Facility Operator.
- cc. *"Operation"* means the day-to-day administration and management of the NAIA Expressway for its use by motorists, including the collection of authorized tolls from users of the NAIA Expressway and the utilization of necessary manpower, equipment and materials, in accordance with the Concession Agreement.
- dd. *"Pre-Qualification"* means the first stage of the Bidding Process involving the submission, opening and evaluation of the Qualification Documents submitted by the Prospective Bidders.

- ee. *"Pre-Qualified Bidder"* means a Prospective Bidder which passed Pre-Qualification.
- ff. *"Project"* is defined in Section 1.
- gg. *"Prospective Bidder"* any partnership, corporation, or Consortium which participates in the Bidding Process by applying to pre-qualify to Bid.
- hh. *"Qualification Documents"* mean the documents required to be submitted by the Bidder during the Pre-Qualification stage as provided in Section 12.
- ii. *"Qualification Documents Submission Date"* means 13 September 2011.
- jj. *"SBAC"* means the Special Bids and Awards Committee for Public-Private Partnership Projects of the DPWH constituted under Special Order No. 68, dated 28 March 2011, pursuant to the BOT Law.
- kk. *"Winning Bidder"* means the Bidder determined by the DPWH as having the lowest complying post-qualified Bid and issued a Notice of Award as described in Section 4 d.

ANNEX QD-1A: Business Plan (for a Prospective Bidder which is a partnership or corporation)

- 1. Name of Prospective Bidder:
- 2. Contact Information of Prospective Bidder

a.	Address	
b.	Website	
с.	Contact Person	
	i. Telephone	
	ii. Fax	
	iii. E-mail	

3. Entity which fulfills the Construction Experience Requirement

a.	Name of Entity	
b.	Relationship to	
	Prospective Bidder	
c.	Address	
d.	Website	
e.	Contact Person	
	i. Telephone	
	ii. Fax	
	iii. E-mail	

Note:

- a. If this requirement is fulfilled by the Prospective Bidder proposing a Construction Contractor or Construction Contractors, list at least one and up to five Construction Contractors and provide the information above for each of them.
- 4. Affiliates, if any, of the Entity which fulfills the Construction Experience Requirement, whose completed projects are being submitted as evidence of that entity's construction experience.

Name	Address	Contact Person	Telephone Number	E-mail

5. Entity which fulfills the Operation and Maintenance Experience Requirement

a.	Name of Entity	
b.	Relationship to	
	Prospective Bidder	
c.	Address	
d.	Website	
e.	Contact Person	
	i. Telephone	
	ii. Fax	
	iii. E-mail	

Note:

- a. If this requirement is fulfilled by the Prospective Bidder proposing an O&M Contractor or O&M Contractors, list at least one and up to five O&M Contractors and provide the information above for each of them.
- 6. Affiliate, if any, of the Entity which fulfills the Operation and Maintenance Experience Requirement whose experience is being submitted as evidence of that entity's operation and maintenance experience.

Name	
Address	
Contact Person	
Telephone Number	
E-mail	

7. Entity which fulfills the Financial Capability Requirement

a.	Name of Entity	
b.	Relationship to	
	Prospective Bidder	
с.	Address	
d.	Website	
e.	Contact Person	
	i. Telephone	
	ii. Fax	
	iii. E-mail	

Note:

a. If this requirement is fulfilled by an Affiliate of the Prospective Bidder, attach evidence of such affiliation.

For and on behalf of (Name of Prospective Bidder/if Consortium, Name of Consortium and Lead Member)

(Signature of Authorized Representative)

(Name, Title, and Date)

ANNEX QD-1B: Business Plan (for a Prospective Bidder which is a Consortium)

Name of Consortium: _____

1. Consortium Members

	Lead Member	Other Member	Other Member	Other Member
Name				
Percentage Interest				
in the Consortium				
Type of Legal				
Entity				
(corporation/				
partnership)				

2. Contact Information of Consortium Members

a. Lead Member	
b. Address	
c. Website	
d. Contact Person	
i. Telephone	
ii. Fax	
iii. E-mail	

a.	Conse	ortium Member	
b.	Addre	ess	
с.	Webs	ite	
d.	Conta	ct Person	
	i.	Telephone	
	ii.	Fax	
	iii.	E-mail	

a.	Conse	ortium Member	
b.	Addre	ess	
с.	Webs	ite	
d.	Conta	act Person	
	i.	Telephone	
	ii.	Fax	
	iii.	E-mail	

a.	Consortium Member	
b.	Address	
с.	Website	
d.	Contact Person	

i.	Telephone	
ii.	Fax	
iii.	E-mail	

a.	Consortium Member	
b.	Address	
с.	Website	
d.	Contact Person	
	i. Telephone	
	ii. Fax	
	iii. E-mail	

3. Entity which fulfills the Construction Experience Requirement

a.	Name of Entity	
b.	Consortium	
	Member to which	
	this entity is related	
с.	Relationship to	
	Consortium	
	Member	
d.	Address	
e.	Website	
f.	Contact Person	
	i. Telephone	
	ii. Fax	
	iii. E-mail	

Note:

- a. If this requirement is fulfilled by the Prospective Bidder proposing a Construction Contractor or Construction Contractors, list at least one and up to five Construction Contractors and provide the information above for each of them.
- 4. Affiliates, if any, of the entity which fulfills the Construction Experience Requirement, whose completed projects are being submitted as evidence of that entity's construction experience.

Name	Address	Contact Person	Telephone Number	E-mail

5. Entity which fulfils the Operation and Maintenance Experience Requirement

a.	Name of Entity	
	Consortium	
	Member to which	
	this entity is related	
с.	Relationship to	
	Consortium	
	Member	
d.	Address	
e.	Website	
f.	Contact Person	
	Telephone	
	Fax	
	E-mail	

Note:

- a. If this requirement is fulfilled by the Prospective Bidder proposing an O&M Contractor or O&M Contractors, list at least one and up to five O&M Contractors and provide the information above for each of them.
- 6. Affiliate, if any, of the entity which fulfills the Operation and Maintenance Experience Requirement, whose experience is being submitted as evidence of that entity's operation and maintenance experience.

Name	
Address	
Contact Person	
Telephone Number	
E-mail	

7. Entity which fulfils the Financial Capability Requirement

a.	Name of Entity	
b.	Relationship to	
	Lead Member	
c.	Address	
d.	Website	
e.	Contact Person	
	Telephone	
	Fax	
	E-mail	

Note:

a. If this requirement is fulfilled by an Affiliate of the Lead Member, please provide evidence of such affiliation.

For and on behalf of (Name of Prospective Bidder/if Consortium, Name of Consortium and Lead Member)

(Signature of Authorized Representative)

(Name, Title, and Date)

ANNEX QD-2: Basic Information Sheet

- a. To be submitted by all entities listed in all sections of the Business Plan (Form QD-1A or QD-1B).
- b. Required attachment: For all entities submitting this form, a certified true copy of its latest General Information Sheet, stamped "received" by the Securities and Exchange Commission (SEC) or for a foreign entity, the equivalent document submitted to and acknowledged by the appropriate government agency equivalent to the SEC in the foreign country where the foreign entity was registered for recognition or creation of its juridical personality or capacity.

1.	Name of Entity	
2.	Type of entity	Partnership
	(please check one)	Corporation
3.	Consortium Member	Yes
	or not? (please check	No
	one)	
4.	Construction	Yes
	Contractor or not?	No
	(please check one)	
5.	O&M Contractor or	Yes
	not?	No
	(please check one)	
6.	Affiliate of an entity	Yes, Affiliate of
	listed in QD-1A or	No
	QD-1B?	
7.	Place of	
	Incorporation or	
	Registration	
8.	Year of	
	Incorporation or	
	Registration	
9.	Principal Purposes	
	or Businesses	

10. Shareholder or Partner Information

Name of Shareholder or	Nationality	Percentage total of shareholding or partnership
Partner		interest

(Insert rows as necessary)

11. Information on Beneficial Owners who own more than 5% Beneficial Interest

Name of Beneficial Owner	Nationality	Percentage total of Beneficial Ownership

(Insert rows as necessary)

For and on behalf of (Name of Entity)	For and on behalf of (Name of Prospective Bidder/if Consortium, Name of Consortium and Lead Member)
(Signature of Authorized Representative)	(Signature of Authorized Depresentative)
(Name, Title, and Date)	(Signature of Authorized Representative)
	(Name, Title, and Date)

- ANNEX QD-3: Certified True Copy of SEC Certificate of Incorporation, Articles of Incorporation, and By-Laws (or for a foreign entity, the equivalent document submitted to and acknowledged by the appropriate government agency equivalent to the SEC in the foreign country where the foreign entity was registered for recognition or creation of its juridical personality or capacity
- a. To be submitted by all entities listed in all sections of the Business Plan (Form QD-1A or QD-1B)

ANNEX QD-4: Notarized Certification of Absence of Unsatisfactory Performance Record

a. To be accomplished by the authorized representative of each of the Prospective Bidder and the entities listed in all sections of the Business Plan (Form QD-1A or QD-1B).

Prospective Bidder:	
Entity which fulfils a	
Qualification	
Requirement:	
Relationship to	
Prospective Bidder:	

Republic of the Philippines)

) s.s.

Certification of Absence of Unsatisfactory Performance Record

I, (insert *name*),(*insert citizenship*), of legal age, with office address at (*insert address*), as the (*insert position/designation*) of (*insert name of company represented*), a (*corporation/partnership*) organized and existing under and by virtue of the laws of (*insert place of incorporation/registration*) hereby certify, for and on behalf of (*name of company represented*), that (*insert name of company represented*) does not have any record of unsatisfactory performance on any of its projects and contracts. "Unsatisfactory Performance" means any of the following:

- 1. Failure to satisfactorily perform any of our obligations on any contract, as evidenced by imposition of a judicial pronouncement or arbitration award;
- 2. Expulsion from any project or contract;
- 3. Termination any of its contracts due to breach of its obligations thereunder;
- 4. Inclusion in a blacklist issued by any governmental agency;
- 5. Involvement in any Corrupt, Fraudulent, Coercive, Undesirable, or Restrictive Practice or having Conflicts of Interest.

Date and Place of Execution.

For and on behalf of (Name of Entity)

(Signature of Authorized Representative)

(Name) (Designation) SUBSCRIBED AND SWORN TO before me this (____) day of (<u>month and year</u>) at (<u>place</u>), affiant exhibiting to me his/her (*proof of identity acceptable under Philippine notarial regulations*), issued at (*city*) on (*date*).

Notary Public

Doc. No.: _____ Page No.: _____ Book No.: _____ Series of 2011. ANNEX QD-5: Construction Experience

- a. To be submitted by the entity or entities which fulfill the Construction Experience requirement in Section 11.2 a as identified in the Business Plan (Form QD-1A or QD-1B), item 3.
- b. Required attachment for each project:
 - (i) Certificate of Project Completion from the project's owner.
 - (ii) If the project was completed by an Affiliate of the entity which fulfills the Construction Experience requirement, evidence of such affiliation.
- 1. Entity which fulfils the Construction Experience Requirement in Section 3.2 a, as identified in item 3 of the Business Plan (Form QD-1A or QD-1B).

Prospective Bidder:	
Entity which fulfils the	
requirement:	
Relationship to	(Prospective Bidder / Consortium Member / Construction Contractor)
Prospective Bidder:	

2. Project Completed with Value of at least One Billion Philippine Pesos (PhP1,000,000,000.00)

Name of Project	
Location	
Description	
Date of Contract	
Nature of Involvement	
Client*	
Cost of Contract	
Name of Entity which**	
Completed the Project	

*Please attach Certificate of Project Completion

**Must be the Entity identified in #1 or an Affiliate. If an Affiliate, please attach evidence of such affiliation.

3. Other Projects

(a) Name of Project:

(u) 1 tuille 01 1 10 jeet.	
Location	
Description	
Date of Contract	
Nature of Involvement	
Client*	
Cost of Contract	
Name of Entity which**	
Completed the Project	

*Please attach Certificate of Project Completion

**Must be the Entity identified in #1 or an Affiliate. If an Affiliate, please attach evidence of such affiliation.

(b) Name of Project:

Location	
Description	
Date of Contract	
Nature of Involvement	
Client*	
Cost of Contract	
Name of Entity which**	
Completed the Project	

*Please attach Certificate of Project Completion

**Must be the Entity identified in #1 or an Affiliate. If an Affiliate, please attach evidence of such affiliation.

(c) Name of Project:

()	
Location	
Description	
Date of Contract	
Nature of Involvement	
Client*	
Cost of Contract	
Name of Entity which**	
Completed the Project	

*Please attach Certificate of Project Completion

**Must be the Entity identified in #1 or an Affiliate. If an Affiliate, please attach evidence of such affiliation.

(d) Name of Project

Location	
Description	
Date of Contract	
Nature of Involvement	
Client*	
Cost of Contract	
Name of Entity which**	
Completed the Project	

*Please attach Certificate of Project Completion

**Must be the Entity identified in #1 or an Affiliate. If an Affiliate, please attach evidence of such affiliation.

(e) Name of Project

Location

Description	
Date of Contract	
Nature of Involvement	
Client*	
Cost of Contract	
Name of Entity which**	
Completed the Project	

*Please attach Certificate of Project Completion

**Must be the Entity identified in #1 or an Affiliate. If an Affiliate, please attach evidence of such affiliation.

(f) Name of Project

· · · · · · · · · · · · · · · · · · ·	
Location	
Description	
Date of Contract	
Nature of Involvement	
Client*	
Cost of Contract	
Name of Entity which**	
Completed the Project	

*Please attach Certificate of Project Completion

**Must be the Entity identified in #1 or an Affiliate. If an Affiliate, please attach evidence of such affiliation.

For and on behalf of (Name of Entity)	For and on behalf of (Name of Prospective Bidder/if Consortium, Name of Consortium and Lead Member)
(Signature of Authorized Representative)	(Signature of Authorized Representative)
(Name, Title, and Date)	(Name, Title, and Date)

ANNEX QD-6: Construction Contractor's Notarized Statement of Willingness to Participate In, and Capacity to Undertake the Requirements of, the Project

a. To be submitted by any Construction Contractors proposed by the Prospective Bidder to fulfill the Construction Experience requirement in Section 11.2 a, as identified in the Business Plan (Form QD-1A or Form QD-1B), item 3.

Prospective Bidder:	
Entity which fulfils the	
requirement:	
Relationship to	
Prospective Bidder:	

Republic of the Philippines)

) s.s.

Notarized Statement of Willingness to Participate in, and Capacity to Undertake the Requirements of, the Project

I, (*insert name*),(*insert citizenship*), of legal age, with office address at (*insert address*), as the (*insert position/designation*) of (*insert name of Construction Contractor*), a (*corporation/partnership*) organized and existing under and by virtue of the laws of (*insert place of incorporation/registration*) hereby declare for and on behalf of (*name of Construction Contractor*) that:

- 1. (*Name of Construction Contractor*) is willing to participate, through the (<u>Name of Prospective Bidder</u>) in the Pre-Qualification for the NAIA Expressway Project in accordance with the Instructions to Prospective Bidders.
- 2. (*Name of Construction Contractor*) has the required experience and capacity to undertake the requirements for its services in the Project in accordance with the provisions of the Invitation Documents.
- 3. Based on my personal knowledge or authentic documents, that the information provided in form QD-4 to QD-5 are true and correct.
- 4. If selected by (*Name of Prospective Bidder*), (*name of Construction Contractor*) shall formally enter into a contract with the Concessionaire to perform the obligations and assume the attendant liabilities as Construction Contractor for the NAIA Expressway Project.

Date and Place of Execution.

For and on behalf of (Name of Entity)

(Signature of Authorized Representative)

(Name) (Designation)

SUBSCRIBED AND SWORN TO before me this (____) day of (<u>month and year</u>) at (<u>place</u>), affiant exhibiting to me his/her (*proof of identity acceptable under Philippine notarial regulations*), issued at (*city*) on (*date*).

Notary Public

Doc. No.: ______ Page No.: ______ Book No.: _____ Series of 2011. ANNEX QD-7: Certified True Copy of Proposed Construction Contractor's License from PCAB for Large B Classification/License Category AAA

a. To be submitted by any Construction Contractors proposed by the Prospective Bidder to fulfill the Construction Experience requirement in Section 11.2 a, as identified in item 3 of the Business Plan (Form QD-1A or Form QD-1B).

Prospective Bidder:	
Entity which fulfils the	
requirement:	
Relationship to	
Prospective Bidder:	

ANNEX QD-8: Certified True Copy of Valid ISO 9001:2000 Certification

a. To be submitted by any Construction Contractors proposed by the Prospective Bidder to fulfill the Construction Experience requirement in Section 11.2 a, as identified in item 3 of the Business Plan (Form QD-1A or Form QD-1B).

Prospective Bidder:	
Entity which fulfils the	
requirement:	
Relationship to	
Prospective Bidder:	

ANNEX QD-9: Operation and Maintenance Experience

- a. To be submitted by the entity which fulfills the Operation and Maintenance Experience requirement in Section 11.2 b, as identified in the Business Plan (Form QD-1A or Form QD-1B), item 5.
- b. Required attachments for each project:
 - (i) Certificate of Project Completion or Ongoing Project from Owner.
 - (ii) If the project was or is being undertaken by an Affiliate of the entity which fufills the Operation and Maintenance Experience requirement, evidence of such affiliation.

Prospective Bidder:	
Entity which fulfils the	
requirement:	
Relationship to	
Prospective Bidder:	

Name of Project	
Location	
Description	
Start Date of Operation	
Period	
End Date of Operation	
Period	
Nature of Involvement	
Client*	
Cost of Contract	
Name of Entity	
which** Completed the	
Project	

*Please attach Certificate of Project Completion or Ongoing project from Owner **Must be the Entity identified in #1 or an Affiliate. If an Affiliate, please attach evidence of such affiliation.

For and on behalf of (Name of Entity)	For and on behalf of (Name of Prospective Bidder/if Consortium, Name of Consortium and Lead Member)
(Signature of Authorized Representative)	(Signature of Authorized Representative)
(Name) (Designation)	(Name) (Designation)

ANNEX QD-10: O&M Contractor's Notarized Statement of Willingness to Participate In, and Capacity to Undertake the Requirements of, the Project

a. To be submitted by any O&M Contractors proposed by the Prospective Bidder to fulfill the Operation and Maintenance Experience requirement in Section 11.2 b, as identified in the Business Plan (Form QD-1A or Form QD-1B), item 5.

Prospective Bidder:	
Entity which fulfils the	
requirement:	
Relationship to	
Prospective Bidder:	

Republic of the Philippines)

) s.s.

Notarized Statement of Willingness to Participate in, and Capacity to Undertake the Requirements of, the Project

I, (*insert name*),(*insert citizenship*), of legal age, with office address at (*insert address*), as the (*insert position/designation*) of (*insert name of O&M Contractor*), a (*corporation/partnership*) organized and existing under and by virtue of the laws of (*insert place of incorporation/registration*), after having been duly sworn according to law, hereby declare for and on behalf of (*name of O&M Contractor*), that:

- 1. (*Name of O&M Contractor*) is willing to participate, through the (*Name of Prospective Bidder*), in the Bid for the NAIA Expressway Project in accordance with the Instructions to Prospective Bidders.
- 2. (*Name of O&M Contractor*) has the required experience and capacity to participate in the Project in accordance with the provisions of the Invitation Documents.
- 3. Based on my personal knowledge or authentic documents, that the information provided in form QD-4 and QD-9 are true and correct.
- 4. If selected by (*Name of Prospective Bidder*), (*Name of O&M Contractor*) shall formally enter into a contract with the Concessionaire to perform the obligations and assume the attendant liabilities as Facility Operator for the NAIA Expressway Project, or own at least twenty percent (20%) of the Facility Operator which will be engaged by Concessionaire, for at least five years starting from issuance of the Toll Operation Certificate for the NAIA Expressway Project.

Date and Place of Execution.

For and on behalf of (*Name of O&M Contractor*)

(Signature of Authorized Representative)

(Name) (Designation)

SUBSCRIBED AND SWORN TO before me this (____) day of (<u>month and year</u>) at (<u>place</u>), affiant exhibiting to me his/her (*proof of identity acceptable under Philippine notarial regulations*), issued at (*city*) on (*date*).

Notary Public

Doc. No.: _____ Page No.: _____ Book No.: _____ Series of 2011.

ANNEX QD-11: Key Personnel

Name of Prospective Bidder:

1. Proposed Project Manager

a.	Name	
b.	Employer	
с.	Position	
d.	Nationality	
e.	Date of Birth	

f. Key Experience (add columns as necessary)

Employer		
Position		
Start Date		
End Date		
Description of Projects		
Undertaken		

g. Educational Background

College Degree:	School:	Year Graduated:
Graduate Studies:	School:	Year Graduated:
Professional License:	Year:	

2. Proposed Manager, Design

a. Nam	e	
b. Emp	loyer	
c. Posit	tion	
d. Natio	onality	
e. Date	of Birth	

f. Key Experience (add columns as necessary)

Employer		
Position		
Start Date		
End Date		
Description of Projects		
Undertaken		

g. Educational Background

College Degree:	School:	Year Graduated:
Graduate Studies:	School:	Year Graduated:
Professional License:	Year:	

3. Manager, Operation and Maintenance

a.	Name	
b.	Employer	
c.	Position	
d.	Nationality	
e.	Date of Birth	

f. Key Experience (add columns as necessary)

Employer		
Position		
Start Date		
End Date		
Description of Projects Undertaken		

g. Educational Background

College Degree:	School:	Year Graduated:
Graduate Studies:	School:	Year Graduated:
Professional License:	Year:	

For and on behalf of (Name of Prospective Bidder/if Consortium, Name of Consortium and Lead Member)

(Signature of Authorized Representative)

(Name, Title, and Date)

ANNEX QD-12: Notarized Statement of Financial Capability

- a. To be submitted by the entity which fulfills the financial capability requirement in Section 11.3, as identified in the Business Plan (Form QD-1A or Form QD-1B), item 7.
- b. Required attachments:
 - (i) Certified True Copy of audited financial statements for 2010, stamped "received" by the Bureau of Internal Revenue or for foreign entities, the appropriate government agency equivalent to the Bureau of Internal Revenue in the foreign country where the foreign entity was registered for recognition or creation of its juridical personality or capacity.
 - (ii) Certified True Copy of Annual Income Tax Return for 2010 (Bureau of Internal Revenue Form 1702 stamped "received" by the Bureau of Internal Revenue, or for foreign entities, the appropriate government agency equivalent to the Bureau of Internal Revenue in the foreign country where the foreign entity was registered for recognition or creation of its juridical personality or capacity.
 - (iii) Letters from the Prospective Bidder or Lead Member's banks or potential lenders expressing their willingness to lend it, or the entity it will form if it becomes the Winning Bidder, at least Four Billion Eight Hundred Million Philippine Pesos (PhP 4,800,000,000.00). This amount can be reduced by the excess of the Prospective Bidder or related entity's net worth over One Billion Two Hundred Million Philippine Pesos (PhP 1,200,000,000.00).

Prospective Bidder:	
Entity which fulfils the	
requirement:	
Relationship to	
Prospective Bidder:	

Republic of the Philippines)) s.s.

Notarized Statement of Financial Capability

I, (*insert name*),(*insert citizenship*), of legal age, with office address at (*insert address*), as the (*insert position/designation*) of (*insert name of entity*), a (*corporation/partnership*) organized and existing under and by virtue of the laws of (*insert place of incorporation/registration*), after having been duly sworn according to law, hereby certify for and on behalf of (*name of entity*) that the information stated in this Notarized Statement of Financial Capability is true and that the attached documents are genuine and true copies of the original.

1. The Financial Summary of (Name of Entity) from 2008-2010 is as follows:

Financial Information	2010	2009	2008
(indicate last day of			

accounting year)		
1. Total Assets		
2. Total Liabilities		
3.Total Net Worth		
4. Profits before Taxes		
5. Profits after Taxes		

2. The Prospective Bidder or Lead Member is a customer in good standing in the following banks (provide the names of at least two banks):

Name of Bank	
Address	
Contact Person	

Date and Place of Execution.

For and on behalf of (Name of Entity)

(Signature of Authorized Representative)

(Name) (Designation)

SUBSCRIBED AND SWORN TO before me this (____) day of (*month and year*) at (*place*), each affiant exhibiting to me his/her (*proof of identity acceptable under Philippine notarial regulations*), issued at (*city*) on (*date*).

Notary Public

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Series of 2011.	

ANNEX QD-13: Notarized Application to Pre-Qualify to Bid

a. To be submitted by the Prospective Bidder.

[Letterhead]

Republic of the Philippines)

) s.s.

Notarized Application to Pre-Qualify to Bid for NAIA Expressway Project

I, (*insert name*),(*insert citizenship*), of legal age, with office address at (*insert address*), after having been duly sworn according to law, hereby declare for and on behalf of (*name of Prospective Bidder*) that:

I, (*insert name*),(*insert citizenship*), of legal age, with office address at (*insert address*), as the authorized representative of (*insert name of Prospective Bidder*), a (*corporation/partnership or* <u>*Consortium*) (*organized and existing under and by virtue of the laws of* [*insert place of* <u>*incorporation/registration*] or organized by agreement among its Consortium Members), as indicated by the authorization certificate attached as [Annex QD-12A (for a partnership or corporation): Authority to Apply to Pre-Qualify and Designation of Authorized Representative] or Annex QD-12B (for a Consortium Prospective Bidder, to be submitted by each Consortium Member): Consortium Member's Authority to Participate in Consortium and Apply to Pre-Qualify, and Designation of Lead Member and Authorized Representative of Consortium], after having been duly sworn according to law, hereby certify for and on behalf of (*name of Prospective Bidder*) that:</u></u>

- 1. In accordance with the Bidding Documents for the NAIA Expressway Project (hereinafter referred to as the "Project"), the <u>Name of Prospective Bidder</u>, a <u>partnership/</u> <u>corporation/Consortium</u> with business address at ______, is applying to pre-qualify to bid for the NAIA Expressway Project and submit its Qualification Documents.
- 2. <u>(Name of Prospective Bidder)</u> confirms that all statements made and the information and documents provided in its Qualification Documents, including statements made by all Consortium Members, their Affiliates, proposed Construction Contractors, and proposed O&M Contractors in any of the Qualification Documents are true and correct, and any misrepresentation or false statement made therein shall be a ground for its disqualification.
- 3. (*Name of Prospective Bidder*) authorizes the DPWH to conduct any inquiries or investigations to verify the statements, documents, and information submitted in its Qualification Documents, and to seek clarification from its clients and bankers regarding any technical and financial aspects. (*Name of Prospective Bidder*) also permits third parties to supply information required to verify statements and information submitted in its Qualification Documents.

- 4. <u>(Name of Prospective Bidder)</u> acknowledges the right of the DPWH to reject its Qualification Documents without assigning any reason and to cancel the Bidding Process at any time, without incurring any liability, and accepts all the terms and conditions of the Instructions to Prospective Bidders and other Invitation Documents.
- 5. <u>(Name of Prospective Bidder)</u>, including the entities it has identified to comply with the Qualification Requirements under the Instructions to prospective Bidders, have not at any time engaged in any Corrupt, Fraudulent, Coercive, Undesirable, or Restrictive Practices, nor have a Conflict of Interest.
- 6. <u>(Name of Prospective Bidder)</u> waives any right to and shall not seek or obtain any restraining order, writ of injunction or prohibition or any other form of coercive judicial, quasi-judicial or administrative writ, process or issuance against the DPWH to restrain, prevent, suspend, or in any manner forestall, hinder or render inconvenient the Bidding Process. <u>(Name of Prospective Bidder)</u> acknowledges that the DPWH is undertaking this Bidding Process in the performance of its functions to ensure the provision of a critical basic necessity and that, therefore, the Project is of paramount public interest and importance and that the DPWH will suffer serious and irreparable damage on account of any breach by <u>(Name of Prospective Bidder)</u> of these undertakings, and agree that the breach of these undertakings shall result in <u>(Name of Prospective Bidder)</u>'s automatic disqualification to bid for the Project.

For and on behalf of (<u>Name of Prospective</u> <u>Bidder/Name of Consortium / List of</u> <u>Consortium Members</u>)

(Signature of Authorized Representative)

(Name) (Designation)

SUBSCRIBED AND SWORN TO before me this (____) day of (<u>month and year</u>) at (<u>place</u>), each affiant exhibiting to me his/her (*proof of identity acceptable under Philippine notarial regulations*), issued at (*city*) on (*date*).

Notary Public

Doc. No.:
Page No.:
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ANNEX QD-14A: Authority to Apply to Pre-Qualify and Designation of Authorized Representative

a. To be submitted by a Prospective Bidder which is a partnership or corporation

[Letterhead]

Republic of the Philippines)

) s.s.

I, <u>Corporate Secretary or equivalent officer</u>, after having been duly sworn according to law, hereby depose and state that:

1. I am a *Filipino* citizen, of legal age and a resident of [•];

2. I am the duly elected <u>Corporate Secretary or equivalent officer</u> of <u>name of</u> <u>Prospective Bidder</u> (the "Prospective Bidder"), a <u>corporation/partnership</u> organized and existing under and by virtue of the laws of <u>the Philippines</u>;

3. At a regular/special meeting of the Board of Directors/Partners of the Firm, held on *date* at *place*, in which meeting a quorum was present and acting throughout, the following Resolutions were unanimously passed and approved:

RESOLVED, AS IT IS HEREBY RESOLVED, that <u>name of Prospective</u> <u>Bidder</u> (the "Proponent") be, and is, authorized to participate in the Bidding Process for the financing, design, construction, operation and maintenance of the NAIA Expressway ("Project") (hereinafter called the "Project") and to apply for Pre-Qualification as Bidder for the Project;

RESOLVED FURTHER, that <u>Name of Representative</u> be and is hereby appointed as the authorized representative of the Prospective Bidder during Pre-Qualification, authorized to execute, sign, and receive documents for, and otherwise act in the name of, the Prospective Bidder;

RESOLVED, FINALLY, that any and all acts done and/or performed by <u>Name of Representative</u> under and by virtue of this resolution be, as they are hereby, confirmed and ratified.

4. These resolutions have not been revoked, amended or modified and remain valid and binding on the Prospective Bidder;

5. That the above resolutions are in accordance with the records of the Prospective Bidder.

Place, Date of Execution.

[Corporate Secretary or Equivalent Officer]

SUBSCRIBED AND SWORN TO before me this (____) day of (*month and year*) at (*place*), each affiant exhibiting to me his/her (*proof of identity acceptable under Philippine notarial regulations*), issued at (*city*) on (*date*).

Doc. No.: _____ Page No.: _____ Book No.: _____ Series of 2011. ANNEX QD-14B: Consortium Member's Authority to Participate in Consortium and Apply to Pre-Qualify, and Designation of Lead Member and Authorized Representative of Consortium

a. For a Prospective Bidder which is a Consortium, to be submitted by each Consortium Member

[Letterhead of Prospective Bidder]

Republic of the Philippines)

) s.s.

I, <u>Corporate Secretary or equivalent officer</u>, after having been duly sworn according to law, hereby depose and state that:

1. I am a *Filipino* citizen, of legal age and a resident of [•];

2. I am the duly elected <u>Corporate Secretary or equivalent officer</u> of <u>Consortium</u> <u>Member</u> (the "Firm"), a <u>corporation/partnership</u> organized and existing under and by virtue of the laws of <u>the Philippines;</u>

3. At a regular/special meeting of the Board of Directors/Partners of the Firm, held on *date* at *place*, in which meeting a quorum was present and acting throughout, the following Resolutions were unanimously passed and approved:

RESOLVED, AS IT IS HEREBY RESOLVED, that the Firm be, and is, authorized to participate, through a Consortium consisting of the following Members and their respective nationalities and percentage interests in the Consortium, in the Bidding Process for the financing, design, construction, operation and maintenance of the NAIA Expressway ("Project") (hereinafter called the "Project") and to apply for Pre-Qualification of Prospective Bidders for the Project;

Name of Consortium Member	Nationality	% Interest

RESOLVED FURTHER, that <u>Name of Firm's Representative</u> be and is hereby appointed as the authorized representative of the Firm, authorized to execute, sign, and receive documents for, and otherwise act in the name of, the Firm;

RESOLVED FURTHER, that the Firm in the exercise of its interest in the Consortium hereby:

- (a) designates <u>Name of Lead Member of Consortium</u> as Lead Member of the Consortium with the authority to represent Consortium during the Pre-Qualification of Prospective Bidders for the Project;
- (b) authorizes <u>Name of Authorized Representative of Name of Lead</u> <u>Member of Consortium</u> as representative of the Consortium during the Pre-Qualification of Bidders for the Project, and for such purpose shall have the authority to execute, sign and receive documents for, and otherwise act in the name of the Consortium.

RESOLVED, FINALLY, that any and all acts done and/or performed by <u>Name of</u> <u>Lead Member of Consortium</u> and <u>Name of Authorized Representative</u> under and by virtue of this resolution be, as they are hereby, confirmed and ratified.

4. These resolutions have not been revoked, amended or modified and remain valid and binding on the Firm;

5. That the above resolutions are in accordance with the records of the Firm.

Place, Date of Execution.

[Corporate Secretary or Equivalent Officer]

SUBSCRIBED AND SWORN TO before me this (____) day of (<u>month and year</u>) at (<u>place</u>), each affiant exhibiting to me his/her (*proof of identity acceptable under Philippine notarial regulations*), issued at (*city*) on (*date*).

Notary Public

Doc. No.: _____ Page No.: _____ Book No.: _____ Series of 2011.
Republic of the Philippines Department of Public Works and Highways

BIDDING DOCUMENTS NAIA Expressway Project

PART III: MINIMUM PERFORMANCE STANDARDS AND SPECIFICATIONS

MAIN TEXT, WITHOUT ANNEXES

WITH JICA UPDATE, 05 AUGUST 2011

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PART III: MINIMUM PERFORMANCE STANDARDS AND SPECIFICATIONS

The purpose of the Minimum Performance Standards and Specifications ("MPSS") is to:

- establish the minimum requirements that the Concessionaire must comply with to design, construct, operate and maintain the NAIA Expressway;
- create certainty for both the DPWH and the Concessionaire in the standards of performance expected of the Concessionaire; and
- implement a system of Key Performance Indicators for the Concessionaire and a liquidated damages system for non-compliance with those Key Performance Indicators.

This MPSS forms part of the Concession Agreement for the NAIA Expressway, and the Concessionaire is required to comply with all the MPSS provisions. These standards and specifications apply to Phase I and Phase II of the NAIA Expressway.

SECTION 1.0 MINIMUM EXPRESSWAY CONFIGURATION

The Concessionaire shall comply with the Minimum Expressway Configuration, as described in this Section 1.0.

The NAIA Expressway is an "Open System."

1.1 Expressway Alignment

Phase I commences at the Skyway junction with Sales Street, runs along Sales Street and ends at Coordinates: North = 1605866.31486, East 502268.99378).

Phase II starts at the end point of Phase I (Coordinates: North = 1605866.31486, East 502268.99378), runs on Sales Avenue, Andrews Avenue, Domestic Road, NAIA (MIA) Road and ends at Roxas Boulevard/Manila-Cavite Coastal Expressway, as shown in **Figure 1.**



Figure 1. Minimum Expressway Configuration



Figure 2 is a diagram which shows the point at which Phase I and Phase II commences.

Figure 2. Interface Between Phase I and Phase II

1.2 Ramp Layout

Five new on-ramps and five new off-ramps and one existing off-ramp shall be provided as shown in **Figure 1**.

- a. One on-ramp (No. 1) for traffic from NAIA Terminal 3, bound for the Skyway, and one existing off-ramp (No. 11) for traffic from the Skyway, bound for NAIA Terminal 3.
- b. One off-ramp (No. 3) for traffic from Paranaque, bound for NAIA Terminal 3.
- c. One on-ramp (No. 2) along Andrews Ave. to collect traffic from NAIA Terminal 3 traffic and traffic on Andrews Ave.
- d. One off-ramp (No. 4) for access to NAIA Terminal 1 and one off-ramp (No. 5) for access to NAIA Terminal 2.
- e. One on-ramp (No. 6) to collect traffic from NAIA Terminal 1 and NAIA Terminal 2.
- f. One on-ramp (No. 7) and one off-ramp (No. 8) from/to the Manila-Cavite Coastal Expressway.
- g. One on-ramp (No. 9) and one off-ramp (No. 10) from/to Roxas Boulevard.

The one existing on-ramp of Phase I is to be removed.

One emergency exit for overloaded trucks shall be provided in the direction of the Skywaybound traffic after the weighbridge at the main toll plaza in front of NAIA Terminal 3.

The existing toll plaza (A) built under Phase I near the Skyway will be maintained.

1.3 Number of Traffic Lanes of Main Expressway and Ramps

The number of traffic lanes of the main expressway shall be four (4) - i.e., 2 lanes x 2 directions.

The number of traffic lanes of each ramp shall be one (1).

1.4 Number of Traffic Lanes During and After Construction

a. For Phase II, the number of traffic lanes of at-grade roads during and after construction shall be as shown in **Table 1** and **Figure 3**.

Table 1. Number of frame Lanes of At-Graue Roads for Flase fr					
At-grade Road		Existing No. of	No. of Traffic	No. of Traffic	
	Traffic Lanes	Lanes During	Lanes After		
			Construction	Construction	
Sales Avenue	East Bound	3 (Before on-ramp)	2	3	
		2 (After on-ramp)			
	West Bound	3 (Under off-ramp)	2	3	
		2 (Under off-ramp)			
Andrews Avenue	East Bound	3-4	3	3-4	
(Sales Ave.–Roundabout)	West Bound	3	3	3	
Andrews Avenue (Round-	East Bound	3	3	3	
about-Domestic Road)	West Bound	3	3	3	
Domestic Road	North Bound	3	2	3	
	South Bound	3	2	3	
NAIA (MIA) Road	East Bound	4	2	4	
(Domestic Road–Quirino	West Bound	4	2	4	
Avenue)					
NAIA (MIA) Road (Quirino	East Bound	4	2	4	
Avenue – Roxas Boulevard) West Bound		3	2	3	

Table 1. Number of Traffic Lanes of At-Grade Roads for Phase II



Number of Lane of At-grade Road NAIA Expressway (Phase II)

At-grade Road Name	Existing	During Const.	After Const.
Sales Ave	4 - 6	4	6
Andrews Ave (Sales Ave to Roundabout)	6-7	6	6-7
Andrews Ave (Roundabout to Domestic Rd)	6	6	6
Domestic Road	6	4	6
NAIA Road (Domestic Rd - Quirino Ave)	8	4	8
NAIA Road (Quirino Ave - Roxas Blvd)	7	4	7

Figure 3. Number of Traffic Lanes of At-Grade Roads

b. During the implementation of the Phase I Adjustment Works, at least two lanes of the Phase I segment in each direction of the main expressway and at least one lane in each direction of the ramps in the Phase I segment shall be kept open at all times.

1.5 Vertical Clearance

The vertical clearance for the expressway and at-grade roads shall be as follows;

Desirable Vertical Clearance: 5.00 m Absolute Minimum Vertical Clearance: 4.88 m – This is applicable only to the section controlled by the NAIA Navigational Height Limitations as indicated in **Figure 4**.

1.6 NAIA Navigational Height Limitations

The NAIA Expressway Project shall comply with the Maximum Allowable Top Elevation (MATE) or Height Limitation at critical points along the alignment of the Project, as stated in the letter dated May 30, 2011 of the Director General of the Civil Aviation Authority of the Philippines (CAAP) given in **Annex A** and shown in **Figure 4**.



Maximum Allowable Top
Elevation (MATE)

Point No.	MATE (meters
	above mean sea level)
1	14.9940
2	15.3500
3	16.0500
4	15.4400
5	12.4700
6	10.1886
7	11.1500
8	25.6000

Figure 4. Navigational Height Limitations Along Andrews Avenue and Domestic Road

1.7 Pedestrian Overpass Bridges

Existing pedestrian overpass bridges shall be treated as follows;

Pedestrian Overpass Bridge across Andrews Avenue:	To be removed and replaced with new one near the existing location.
Pedestrian Overpass Bridge across Domestic Road:	To be removed and converted to pedestrian crossing with traffic light.
Pedestrian Overpass Bridge near the Intersection between Domestic Road and NAIA Road:	To be removed and replaced with new one near the intersection.
Pedestrian Overpass Bridge at the Intersection between NAIA Road and Roxas Boulevard:	To remain as is.

The minimum vertical clearance on the pedestrian overpass bridge shall be 2.00 m.

1.8 Basic Right-of-Way

The Maps of the Basic Right-of-Way corresponding to the Minimum Configuration described above are shown in **Annex B**.

The Concessionaire may locate the center line of the NAIA Expressway within the Basic Right of Way.

The Concessionaire shall be responsible for and bear the costs of acquiring any Additional Right-of-Way which it needs for the NAIA Expressway Project and is not included in the Basic Right-of-Way.

1.9 Environmental Compliance Certificate Requirements

The requirements of the Environmental Compliance Certificate ("ECC") for the Project issued in 2002 shown in Annex C shall be complied with and set out in the Detailed Engineering Design. The Director of the Environmental Management Bureau ("EMB"), Department of Environment and Natural Resources (DENR), in his letter dated June 17, 2011 (also shown in Annex C), informed the Department of Public Works and Highways ("DPWH") that the issued ECC, which covers both Phase I and Phase II, is still valid.

In case the Concessionaire decides to adopt a design which has features that are beyond the Minimum Configuration described in this MPSS – e.g., additional ramps outside the Basic Right-of-Way - the Concessionaire shall be responsible for and bear the cost of securing a new or amended ECC, after complying with the requirements of the Philippine Environmental Impact Statement System ("PEISS") as prescribed in Presidential Decree No. 1151 and Presidential Decree No. 1586 and the implementing guidelines of the DENR, specifically Department Administrative Order No. 2003-30.

1.10 Noise Barrier and Security Fence

The location and type of noise barrier and security fence shall be determined in due consultation with the Villamor Air Base Headquarters and the Manila International Airport Authority ("MIAA").

1.11 Road Network Development

The following expressway and national road development projects of the Government shall be considered by the Concessionaire in preparing the design of the Phase I Adjustment Works and Phase II:

Table 2. Road Network Development 1 Tojeets			
Project Name	Opening Year for Traffic		
1. North Luzon Expressway–South Luzon Expressway Connector	2017		
2. C-5 Extension	2017		
3. Cavite-Laguna Expressway, Cavite Section	2017		
4. Cavite-Laguna Expressway, Laguna Section	2020		

Table 2. Road Network Development Projects

5. Cavite-Laguna Expresswa, Cavite Section	2020
6. Cavite-Laguna Expressway, Laguna Section	2020

1.12 Indicative Minimum Requirements for Phase I Adjustments Works

- a. The following are <u>indicative</u> minimum requirements for the Phase I Adjustment Works based on the Review and Update of the Feasibility Study of NAIA Expressway Phase II, May 2011, prepared by the Japan International Cooperation Agency (JICA) Study Team:
 - (1) Replacement of longitudinal expansion joints between the Skyway and Phase I, approximately 150 m.
 - (2) Replacement of expansion joints between spans of Phase I, approximately (20 m x 2) + (6 m x 4).
 - (3) Repair of the pavement, approximately 10% of the pavement area of 20,000 sq. m
 - (4) Miscellaneous repairs.
- b. As the abovementioned works are indicative only, the Concessionaire shall be solely responsible for evaluating and determining, by itself, the scope of the Phase I Adjustment Works so as to ensure that the existing Phase I facilities conform to the DPWH-approved original plans and specifications for such Phase, as shown in Annex D. The Concessionaire shall propose its own Phase I Adjustment Works in the Detailed Engineering Design.

SECTION 2.0 DESIGN

2.1 Scope of Design

Under the Concession Agreement, the Concessionaire shall prepare the Detailed Engineering Design ("DED") covering the Construction of Phase II and the Phase I Adjustment Works and submit its DED to the Independent Consultant for review and certification prior to the execution of the Construction works.

The Concessionaire shall prepare the DED (a) based on its Conceptual Engineering Design ("CED") submitted in the Technical Proposal, and (b) in accordance with these MPSS. The DED shall be undertaken with a degree of accuracy that will allow estimates to be made within approximately plus or minus five percent (+/-5%) of the final quantities.

Once certified by the Independent Consultant, the Concessionaire's DED shall form part of these MPSS. The DED, as certified by the Independent Consultant, together with the MPSS provisions on Construction under Section 3.0, shall govern the actual Construction of Phase II and the Phase I Adjustment Works to be undertaken by the Concessionaire.

The DED shall be compliant with the Minimum Expressway Configuration described in Section 1.0.

As shown in **Figure 5**, the MPSS shall govern the preparation of the DED. In addition, the CED submitted by the Concessionaire, which is accepted by the DPWH, shall serve as a basis of the DED to be prepared by the Concessionaire.



Figure 5. Scope of Design

2.2 Outputs of Detailed Engineering Design by Concessionaire

The DED, which the Concessionaire shall prepare and submit to the Independent Consultant for certification, shall include the following outputs:

a. <u>Phase II DED</u>

- (1) Detailed design of the expressway, on and off ramps, Phase I-II interconnection, atgrade roads, and appurtenant structures, including the following:
 - (a) Layout plan of the expressway, including location of on and off ramps, other major structures, and foundation of the expressway and ramps, at a scale of 1:1,000.
 - (b) Profile for the expressway in relation to the existing ground and structures, at a scale of Horizontal-1:1,000 and Vertical-1:100.
 - (c) Cross-sections of the expressway at a scale of 1:100, at intervals of 20 m, and where there are major changes in sectional areas.
 - (d) Plans and profiles of on and off ramps, at a scale of Horizontal 1:1,000 and Vertical 1:100 and typical cross sections of on and off ramps at a scale of 1:200.

- (e) Plans, elevations, and typical cross-sections of at-grade roads to be improved and other structures. Plans and elevations at a scale of Horizontal – 1:1,000 and Vertical – 1:100 and typical cross-sections at a scale of 1:200.
- (f) At-grade intersection improvement plans at a scale of 1:500 showing number of lanes of each approach, channelization and traffic lighs layout plan.
- (g) Plans, elevations, and typical cross-sections of drainage and other structures at a scale of 1:1,000, 1:100, and 1:100, respectively.
- (h) Detailed design analyses and computations for the expressway and structures.
- (i) Quantity estimates for the main expressway and structures.
- (2) Detailed design of the viaduct structures
 - (a) Detailed design drawings of superstructure at a scale of 1:100.
 - (b) Detailed design drawings of substructure at a scale of 1:100.
 - (c) Detailed design drawings of foundation at a scale of 1:100.
 - (d) Detailed design drawings, at a scale of 1:100, of the interconnection of Phase II with Phase I, and other components of the viaduct structure, including expansion joints, bearing shoes, viaduct drainage, lighting, warning/guide signs, and like components.

(3) Detailed design of the toll facilities

- (a) Layout plan, at a scale of 1:1000, showing the location of the toll facilities, including toll plazas, and traffic safety devices.
- (b) Detailed design of the toll plazas at a scale of 1:100
 - i. Layout plan indicating the elements of the toll plazas, including carriageway tapers, platform, lighting, inspection tunnel, control building and parking areas; longitudinal section on the corner line of the plaza.
 - ii. Toll platform indicating the layout of the lane area.
 - iii, Toll islands indicating the toll booths and protection structures.
 - iv. Toll lanes, both entry and exit.
 - v. Canopy showing the minimum clearance, shape, form, material and signs.

- vi. Toll plaza building, indicating the layout with approximate areas of each room and elevations of at least two sides.
- vii. Technical gallery for power and data cables.
- viii. Road signs.
- ix. Overhead sign and lighting.
- x. Water drainage.
- xi. Water supply.
- xii. Fences.
- xiii.Power.
- xiv. Lighting.
- xv. Tolling systems/equipment including testing and commissioning plans
- (4) Detailed design of expressway traffic safety devices at a scale of 1:100
 - (a) Pavement markings.
 - (b) Traffic signs, including regulatory signs, warning signs, guide or informative signs, and signs for road works.
 - (c) Crash cushions.

b. Phase I Adjustment Works DED

Plans and elevations at a scale of Horizontal -1:1,000 and Vertical -1:100, and typical cross-sections at a scale of 1:200.

- c. Supporting data for Sections 2.2 -a and b
 - (1) Topographic survey plans
 - (1) Geotechnical/geological investigation report
 - (2) Hydrology, hydraulic and drainage design report
 - (3) Highway/geometric and pavement design report

- (5) Structural analysis and calculations for bridges, culverts and other structures
- (6) Detailed specifications of materials.
- (7) Road safety audit report, prepared in accordance with the DPWH Road Safety Manual, 2004. This manual defines road safety audit as a formal process where an independent and qualified audit team examines and reports on the traffic accident potential and safety performance of, among other things, a future road project through design plans.
- (8) Value engineering report, prepared by a certified value engineer, following existing DPWH guidelines, which analyzes alternative schemes of achieving the Project objectives to delete/reduce non-essential features and lessen life-cycle costs of the NAIA Expressway, without sacrificing its structural quality and integrity, while attaining its essential function, performance and safety.
- d. <u>Detailed Construction Plan</u>, including updated Construction Schedule, milestones, and S-curve, and Traffic Management Plan.

2.3 Phase II Design Criteria and Standards: Expressway Structures

- a. Design Speed
 - (1) Main Alignment

Considering the characteristics of the NAIA Expressway setting and those of the existing road alignment, the main alignment shall have a maximum design speed of 60 kph, and a reduced speed of 50 kph for the short section from Sales Avenue to Andrews Avenue.

(2) On and Off Ramps

Considering that travel along the ramp's alignment is controlled due to the required transition from a local low speed road to a higher speed road and vice versa, the design speed shall be 40 kph.

b. Crossfall of Travelway

Based on the AASHTO's "A Policy on Geometric Design of Highways and Streets, 2004" a maximum transverse slope or crossfall of 2% shall be applied to the main carriageway and on ramp and off ramp travelways.

c. <u>Maximum Super-elevation</u>

Based on the AASHTO's "A Policy on Geometric Design of Highways and Streets, 2004," the main carriageway shall be designed with a maximum super-elevation (e) of 6%. Alignment of on ramps and off ramps shall be designed with a maximum super-elevation of 8%.

g. <u>Vertical Clearance and Navigational Height Limitations</u>

The design shall comply with the vertical clearance and the navigational height limitations stated in Sections 1.5 and 1.6, respectively.

h. Design Life of Pavement and Bridge Structures

The minimum design life of the NAIA Expressway shall be as follows:

	Table 3. Design Life Standards						
	Design Parameter	Minimum Value					
А	Viaduct/Bridge Structures	50 years					
В	Road Pavement:						
	Cement Concrete Rigid Pavement: for Toll Road and At-Grade Road	20 years					
	Asphalt Concrete Pavement: for Toll Road and At-Grade Road	10 years					
С	Wearing Surface/Overlay	10 years					

i. Minimum Widening

Pavement widening shall be applied where required on spiral and simple curves and placed equally on the inside and outside edges of the pavement. The widening is transitioned within the length of the super-elevation run-off and attained linearly.

j. <u>Stopping Site Distances</u>

Stopping sight distances at least equal to those stipulated by the AASHTO requirements shall be incorporated in the design. The vertical alignment of the proposed NAIA Expressway shall be designed with all intersections of grade tangents connected by parabolic vertical curves. Minimum length of vertical curve shall be 60 meters. Design length of other vertical curves shall be computed based on the formula:

 $L = K^*A$

where:

- L = Length of crest or sag vertical curve
- K = Rate of vertical curvature

A = Algebraic difference in grade

The required length of parabolic curves for sag and crest vertical alignment based on AASHTO's "A Policy on Geometric Design of Highway and Streets" is presented in **Table 4**.

on Stopping Signt Distance									
Design Speed	30	40	50	60					
Stopping Sight Distance (SSD)	35	50	65	85					
Passing Sight Distance (PSD)	200	270	345	410					
Crest Curve									
Crest K – Value (SSD)	2	4	7	11					
Crest K – Value (PSD)	46	84	138	195					
Sag Curve									
Sag K – Value	6	9	13	18					

Table 4. K Values for Sag and Crest Vertical Curves Basedon Stopping Sight Distance

k. Minimum Shoulder and Median Widths

Width shall be 0.50 meter for the inner shoulder and 1.50 meters for the outer shoulder.

1. Minimum Lengths for Speed Change Lanes

The deceleration and acceleration length requirements shall be based on the recommendations of the AASHTO's "A Policy on Geometric Design of Highway and Streets" as presented in **Tables 5** and **6**. The figures shown on these tables represent values or speed transition lane lengths required for vertical grades up to 2%.

Highway	Speed	Stop Condition	20	30	40	50	60
Design Speed,	Reached,	For Average Running Speed on Exit Curve,					Curve,
V (kph)	Va (kph)	V'a (kph)					
		0	20	28	35	42	51
50	47	75	70	60	45	-	
60	55	95	90	80	65	55	-
70	63	110	105	95	85	70	55
80	70	130	125	115	100	90	80
90	77	145	140	135	120	110	100
100	85	170	165	155	145	135	120
110	91	180	180	170	160	150	140
120	98	200	195	185	175	170	155

Table 5. Deceleration Length, L (m) for Design Speed of Exit Curve, V (kph)

where:

V	=	Design Speed of Tollway (kph)
Va	=	Average Running Speed on Tollway (kph)
V'	=	Design Speed of Exit (kph)

V'a = Average Running Speed on Exit Curve (kph)

Highway	Speed	Stop Condition	20	30	40	50	60		
Design Speed, V (kph)	Reached,		Initial Speed, V'a (kph)						
v (kpii)	Va (kph)	0	20	28	35	42	51		
50	37	60	50	30	-	-			
60	45	95	80	65	45	-	-		
70	53	150	130	110	90	65	-		
80	60	200	180	165	145	115	65		
90	67	260	245	225	205	175	125		
100	74	345	325	305	285	255	205		
110	81	430	410	390	370	340	290		
120	88	545	530	515	490	460	410		

Table 6. Acceleration Length, L (m) for Design Speed of Exit Curve, V (kph)

where:

V	=	Design Speed of Tollway (kph)
Va	=	Average Running Speed on Tollway (kph)
V'	=	Design Speed of Entrance Curve (kph)
V'a	=	Initial Speed on Entrance Curve (kph)

When the main alignment has vertical grades greater than 2%, the guidelines suggest the application of an adjustment factor to compensate for eventual reduction and increase in speed due to the said changes in gradient. The recommended adjustment factors for the deceleration lane length and acceleration lane length are presented in **Tables 7** and **8**.

Table 7. Adjustment Factors for Deceleration Lane Length on Gradein Relation to Design Speed						
Highway Design Speed, V (kph)Ratio of Length on Grade to Length on Level for Design Speed of Turning Curve (kph)						
All Speeds	3 to 4% Upgrade 0.90	3 to 4% Downgrade 1.2				
All Speeds	5 to 6% Upgrade 0.80	5 to 6 % Downgrade 1.35				

The ratio from **Table 7** multiplied by the length in **Table 5** gives the length of speed change lane on grade.

Table 8. Adjustment Factors for Acceleration Lane Length on Grade								
	in Relation to Design Speed							
Highway Design Speed, V (kph)	Ratio of	Ratio of Length on Grade to Length on Level for Design Speed of Turning Curve (kph)						
	40	50	60	70	80	All Speeds		
	3	to 4 % Up	grade			3 to 4 % Downgrade		
60	1.3	1.4	1.4			0.70		
70	1.3	1.4	1.4	1.5		0.65		
80	1.4	1.5	1.5	1.5	1.6	0.65		
90	1.4	1.5	1.5	1.5	1.6	0.6		
100	1.5	1.6	1.7	1.7	1.8	0.6		
110	1.5	1.6	1.7	1.7	1.8	0.6		
120	1.5	1.6	1.7	1.7	1.8	0.6		
	5 to 6 % Upgrade							
60	1.5	1.5				0.6		
70	1.5	1.6	1.7			0.6		
80	1.5	1.7	1.9	1.8		0.55		
90	1.6	1.8	2.0	2.1	2.2	0.55		
100	1.7	1.9	2.2	2.4	2.5	0.5		
110	2.0	2.2	2.6	2.8	3.0	0.5		
120	2.3	2.5	3.0	3.2	3.5	0.5		

The ratio from **Table 8** multiplied by the length in **Table 6** gives the length of speed change lane on grade.

The adjustment factors are applied because the tendency of vehicles traversing an upgrade alignment would be to slow down once the driver gradually releases the accelerator. On the other hand, when a vehicle is running on a downgrade alignment, there is an additional effort to slow down the speed of the vehicle such that it will travel longer before it could reach the posted speed for the transition lane.

m. Highway Safety Requirements

The Concessionaire shall comply with the highway safety requirements set out in the DPWH Highway Safety Design Standards, Parts 1 and 2, 2004, which establish the standards for the necessary safety devices such as traffic signs, pavement markings, median barriers and crash cushions where required.

n. <u>Geometric Design Standards</u>

Based on the results of previous studies and on the latest published versions of design manuals and other references, the geometric design standards for the NAIA

Table 9. Geometric Design Standards (NAIA Expressway Phase II) Remarks **Elements of Design** Criteria **Design Speed**, V Flat Terrain, Urban Desired 60 kph Setting Flat Terrain, Urban Minimum 50 kph Setting Flat Terrain, Urban Ramps 40 kph Setting **Stopping Sight Distance** V = 60 kph2004 Ed. AASHTO 85 meters V = 50 kph65 meters 2004 Ed. AASHTO V = 40 kph50 meters 2004 Ed. AASHTO **Typical Section** Travel Lane Width Urban Setting 3.50 meters Inner Shoulder Width/Median Strip 0.50 meter Urban Setting Normal Crown Cross Slope 2004 Ed. AASHTO 2% Normal Crown Outside Shoulder Cross 2% 2004 Ed. AASHTO Slope Maximum Super-elevation 2004 Ed. AASHTO 6% Ramp Shoulder Width (Left) 0.50 meter Width varies depending on traffic case condition, 2.00 meters Ramp Shoulder Width (Right) with refuge bay for disabled vehicles **Horizontal Alignment** Minimum Radius (for e = 6%) V = 60 kph123 meters 2004 Ed. AASHTO's A Policy on Geometric V = 50 kph79 meters Design of Highways and V = 40 kph43 meters Streets Minimum Curve Length V = 60 kph100 meters V = 40 kph70 meters Vertical Alignment Maximum Grade 4% Ramps (Typical) 6% Minimum Grade 0.30% A level grade is permissible in level terrain, uncurbed roadways and at toll facilities. Minimum Radius of Curvature

Expressway shall be as presented in Table 9.

Crest Curve, $V = 60$ kph	1,500 meters	
Sag Curve, $V = 60$ kph	2,000 meters	
Minimum Length of Vertical Curve	60 meters	DPWH Design Guide
Super-elevation Transition		
Super-elevation Runoff (Maximum		
Relative Gradient)		
V = 60 kph	1 / 167	2004 Ed. AASHTO
V = 40 kph	1 / 143	2004 Ed. AASHTO
For Simple Curve, 2/3 of super-elevation		
runoff shall be on the tangent and $1/3$		
within the curve.		

o. Horizontal Alignment

(1) Main Carriageway Alignment

The designed horizontal alignment shall basically follow that of the existing road sections along Sales Avenue, Andrews Avenue, Domestic Road, MIA Road, and Roxas Boulevard.

(2) On and Off Ramps

The alignment of each ramp follows the alignment along the edge of the main carriageway alignment as it merges to and diverges from it and connects with the alignment of the existing road.

There shall be at least ten new on-ramps and off-ramps to be located at the following sites (see also **Figure 1**):

Ramp	Ramp Location	Type of	Remarks	Requirement
No.		Ramp		
1	Intersection of Sales Avenue with Andrews Avenue	On-Ramp	Skyway Bound from NAIA Terminal 3	Follow the alignment of the main carriageway
2	Near the Roundabout with the MMDA Monument	On-Ramp	Paranaque Bound from NAIA Terminal 3	Follow the alignment of the main carriageway
3	Near NAIA Terminal 3	Off-Ramp	Bound for NAIA NAIA Terminal 3	Go down through a curve towards the main entrance of the NAIA Terminal 3.
4	MIA Road near Domestic Road Intersection	Off-Ramp	Bound for NAIA Terminal 1 from Skyway	Turn at the third level above the expressway main alignment and connect with the alignment of the existing at–grade road.

Table 10. Location of On- and Off-Ramps

5	MIA Road near	Off-Ramp	Bound for NAIA	Turn at the third level above the
	Domestic Road		Terminal 2 from	expressway main alignment and
	Intersection		Skyway	connect with the alignment of the
				existing at-grade road
6	MIA Road near	On-Ramp	From NAIA Terminal	Go up from at-grade road to the
	Domestic Road		1 and NAIA Terminal	expressway main alignment
	Intersection		2	
7	Manila-Cavite Toll	On-Ramp	Bound for Skyway	Follow the alignment of MCTE on
	Expressway (MCTE)		from MCTE	the east side and turn east to connect
	А			with the main carriageway.
8	MCTE B	Off-Ramp	Bound for MCTE	Turn from the main carriageway to
				the south and follow the alignment
				of MCTE on the west side.
9	Roxas Blvd A	On-Ramp	Bound for Skyway	Follow the alignment of Roxas Blvd
			from North Roxas	on the west side and turn east to
			Blvd	connect with the main carriageway.
10	Roxas Blvd B	Off-Ramp	Bound for North	Turn from the main carriageway to
			Roxas Blvd.	the north and follow the alignment
				of Roxas Blvd on the east side.

The existing off-ramp – No. 11 - for traffic from the Skyway bound for NAIA Terminal 3 will be maintained.

One existing on-ramp of Phase I shall be removed.

One emergency exit for overloaded vehicles shall be provided in the direction of the Skyway-bound traffic after the weighbridge at the main toll plaza fronting NAIA Terminal 3.

p. Vertical Alignment

(1) Main Carriageway

The vertical alignment of the main expressway shall be designed with a minimum gradient of 0.30% to allow the flow of surface run-off towards the elevated expressway drainage system.

A maximum vertical gradient of 4% shall be adopted.

All vertical intersections shall be provided with vertical curves having a minimum length of 200 meters to provide a smooth vertical grade transition along the main expressway alignment.

(2) On- and Off-Ramps

For o-ramps and off-ramps with low design speed, the maximum vertical gradient shall be 6%.

All vertical alignment intersections shall be provided with vertical curves of sufficient length corresponding to the design speed of the ramp.

q. Pavement Structure Design

The scope of the pavement structure design for this Project involves (i) the construction or widening of at-grade pavements, and (ii) the restoration of affected pavement components that will be damaged during Construction.

All existing Portland cement concrete pavements affected/damaged during construction shall be restored with the same material and thickness. All asphalt concrete pavements similarly affected/damaged shall be replaced by the same pavement components.

r. <u>Structure Design Standards</u>

The structure design standards shall be in accordance with the following codes and guidelines:

- (1) AASHTO Standard Specifications for Highway Bridges, 17th edition, 2002 ("AASHTO Code").
- (2) Design Guidelines, Criteria and Standards for Department of Public Works and Highways, 1982.
- (3) DPWH Standard Specifications for Highways, Bridges and Airports, 2004 ("Blue Book").
- s. Loading Specifications

The structure shall be designed to carry the following loads and forces:

- (1) Dead Load
- (2) Live Load Live Load shall be MS18 (HS-20-44)
- (3) Impact Load I = 15.24/(L+38)
- (4) Sidewalk Live Load4.07 KPa of sidewalk area

- (5) Earthquake Load A = 0.5g, Seismic Performance Category = D
- (6) Earth Pressure Coulomb's Formula
- (7) Wind Load

For the superstructure design, 2,394 Pa of wind load shall be applied horizontally at right angle to the longitudinal axis of girders and beams.

- (8) Thermal Forces
 The range of temperature shall be as follows:
 17.8 °C to 48.9 °C
 16.7 °C temperature rise
 22.2 °C temperature fall
- t. Seismic Design

Seismic design shall be in accordance with AASHTO Standard Specifications Division I-A. An acceleration coefficient of 0.50g shall be adopted to consider the importance classification and past/recent experiences in the Philippines.

u. Materials

All materials to be used in the Project shall conform to the Blue Book and the AASHTO Code.

	Table 11. Waterial Requirements for Concrete									
	Description	<u>fc' (Min.)</u> MPa	Maximum Size of Concrete Aggregates (mm)	Minimum Concrete Cover (mm)						
a.	Superstructure									
-	Deck slabs, Diaphragms	28	20	Deck slab with BWS Top: 50 Bottom: 50 Others: 35						
-	Sidewalk, railings, parapets, medians	21	20							
-	PSC I-Girders	38	20	PSC I-Girders: 35						
b.	Substructure									
-	PC Pier copings, columns, footings	28	20	Pier Copings, RC & PSC: 50						

(1) Concrete

Table 11. Material Requirements for Concrete

-	PSC Pier copings, rotating pier head	38	20	PSC Hammerheads: 40
-	RC Abutment walls, footings	28	20	RC columns: 50 Footing and Bored
-	Bored piles	28	20	Piles: 75 Abutment Walls: 50
c.	Earth covered RC Box structures	28	20	Earth covered Box structures: 50
d.	Other concrete (normal use)	21	20	
e.	Lean concrete (for leveling)	17	25	
f.	Non shrink grout	41	40	

(2) Reinforcement Steel

All pre-stressing steel shall be high strength stress relieved wires or strands with an ultimate stress, fs'=1,860 MPa.

Pre-stressing steel shall be free from kinks, notches and other imperfections that will tend to weaken its strength or its bonding properties with concrete

(3) Pre-stressing

All pre-stressing steel shall be high strength stress relieved wires or strands with an ultimate stress, fs'=1,860 MPa.

Pre-stressing steel shall be free from kinks, notches and other imperfections that will tend to weaken its strength or its bonding properties with concrete.

(4) Structural Steel

All structural steel shall conform to the requirements of AASHTO and the American Standards for Testing and Materials ("ASTM") Designations as follows:

- (a) Structural Steel Shapes AASHTO M 270 (ASTM A 36) Gr 36 and (ASTM A572) Gr 50.
- (b) Steel Sheet Pile AASHTO M 202 (ASTM A 328)
- (c) Bridge Bearing AASHTO M 270 (ASTM A 36), AASHTO M 106 (ASTM B 100), AASHTO M 103 (ASTM A 27) (Copper Alloy Bearing Expansion Plates Grade 70 36 of Steel and Sheets)

- (d) Deck Drain AASHTO M 105 (ASTM A 46) Class No. 30 (Gray Iron Casting)
- (e) Bridge Railing Sch. 40 Galvanized Steel Pipe
- (5) Elastomeric Bearing Pads

Elastomeric bearing pads shall be 100% virgin chlorophene (neoprene) pads with durometer hardness 60. Unless otherwise specified in the plans, bearing pads shall be laminated type bearing pads consisting of layer of elastomer, restrained at their interfaces by bonded laminations as required in the plans. Laminated plates shall be non-corrosive mild steel sheet.

(6) Joint Filler

Joint filler, hot poured elastic type, used for expansion joint shall conform to AASHTO M 213.

(7) Bituminous Wearing Course

Bituminous wearing course to be used as surface overlay shall conform to the requirements of DPWH Standard Item 307 with minimum dry compressive strength of 1.4 MPa (200 pal). The wearing course may be used to adjust elevations on the vertical grade by varying the thickness from 50 mm (minimum.) to 75 mm (maximum).

If any materials proposed by the Concessionaire are not covered by the Blue Book and the AASHTO Code, these materials must first be approved by the DPWH before they are used in the Project and shall always be required to represent materials that would be used by a contractor employing Prudent Industry Practice.

v. <u>Hydrology</u>

Design rainfall frequency:

Drainage at viaduct superstructure: 5 years Drainage at at-grade roads: 3 years Pipe culvert: 15 years Box culvert: 30 years Bridge: 50 years

2.4 Phase II Design Criteria and Standards: Tolling Facilities

a. General

Design criteria to be used for the design of the toll system for the NAIA Expressway shall cover the following:

- (1) Type of Toll System
- (2) Level of Service: Waiting Time at Toll Plazas
- (3) Categories of Vehicles
- (4) Means of Payment
- (5) Level of Automation
- (6) Description of Toll Plazas

b. <u>Type of Toll System</u>

The "open system" shall be used in which motorists pay the following flat toll rates:

- (1) A fixed toll rate for the appropriate vehicle class, for motorists travelling on the NAIA Expressway between the Skyway and NAIA Terminal 3 particularly (a) from the existing Toll Plaza A to Off-Ramp No. 11, and (b) from On-Ramp No. 1 to Toll Plaza A, as shown in Figure 1 and Section 2.3-o(2).
- (2) A fixed toll rate for the appropriate vehicle class, for motorists travelling on the NAIA Expressway, other than those covered by Section 2.4-b-(1) above.

Toll booths shall be located along strategic locations of the carriageway.

The toll collection systems for Phase I and Phase II of the NAIA Expressway must be compatible with each other. The toll collection system of the entire NAIA Expressway must be inter-operable with those of the Skyway and the Manila-Cavite Toll Expressway.

c. Level of Service: Waiting Time at Toll Plazas

The average queuing and transaction time for the NAIA Expressway shall not exceed 20 seconds. The NAIA Expressway capacity or throughput in terms of number of transactions shall be 400 vehicles per hour per lane (toll booth) using a combination of manual and E-pass toll collection systems. The NAIA Expressway capacity shall be 900 vehicles per hour per lane using the E-pass system.

d. Means of Payment

The established method of payment is "stop and pay." New methods of toll collection where applicable shall be adopted in preparing the DED, where the driver is not required to stop; instead, the vehicle is identified by a remote control system as it passes, with or without stopping, through a special lane. The transaction is automatically recorded and the toll is debited from the subscriber's account.

The following forms of payment may then be adopted for the Project:

- (1) Cash payment.
- (2) Magnetic cards Such cards include national or foreign bank cards, credit cards, and private cards such as vehicle fuel company cards or automobile club cards.
- (3) For subscribers, specific payment systems stored-value magnetic cards (chips or stripe), automatic vehicle identification (AVI) systems, etc. could be used.

The provision for toll collection equipment should conform to Section 2.4 -h.

e. Categories of Vehicles

The NAIA Expressway shall be open to the following classes of vehicles:

- (1) Vehicle Class 1 Car, Jeep, Passenger Van/ Pickup, Taxi, Mega-Taxi, Jeepney, Mini-Bus
- (2) Vehicle Class 2 Aircon and Non Aircon Bus, Goods Van/Pickup, 2-Axle Truck, Dump Truck, Tanker, Mixer
- (3) Vehicle Class 3 Rigid Truck with 3 or more Axles, Trailer (Articulated)
- f. Level of Automation

Automated toll collection systems shall be used at the toll plazas. The level of automation shall be designed based on the type of traffic and volume at the toll plazas. The technology used for automation of the toll plazas shall generally be scalable and adaptable to the changing requirements. It shall also help create an audit trail for reconciliation of revenue collections and in achieving efficiency in the manpower required at the toll plazas.

g. <u>Description of Toll Plazas</u>

Figure 6 gives the layout of a typical toll plaza.



Figure 6. Layout of Typical Toll Plaza

(1) Overall Dimensions

Toll plazas can be constructed either across the NAIA Expressway ("Main Line Toll Plaza") or on the on ramps and off ramps ("Off/On-Ramp Toll Plaza"). The overall dimension of a typical toll plaza platform depends on the number of lanes and type of toll collection equipment. The platform must provide for a queue of at least five (5) Class 1 vehicles from the end of the toll island.

(2) Description of Toll Installation

The toll installation of each toll plaza should include a toll platform, toll islands, a canopy, a toll plaza building (or maxi booth for On-Ramp Toll Plazas), parking areas, cable conducts, approach signing, canopy signaling, water drainage, water supply, fences, power supply, access for staff and lighting.

(a) Toll Platform

The toll platform shall be partly constituted of a concrete slab to support the toll islands, the toll lanes, the canopy, and the queuing traffic. The concrete slab shall have minimum thickness of 0.25 meter and its length shall be 30 meters on the On-Ramp Toll Plazas and 50 meters on the Main Line Toll Plaza.

On the Main Line Toll Plazas, the two traffic flows in each direction shall be separated on the platform by a mobile guide-rail in order to give the Facility Operator the flexibility to open more lanes (central reversible lanes) in one direction to accommodate traffic flows. Generally, each toll lane shall be 3 meters wide, but on the extremity, the toll lanes shall have a width of 6 meters to add an adjacent service lane and, if necessary, to use it as a lane for vehicles carrying extra wide loads and access to the Facility Operator's staff.

The final design of the platforms on the Main Line Toll Plazas shall take into account different pedestrian movements towards the building such as toll collectors going to/ coming from the booths, police and emergency forces.

(b) Toll Island

In the case of On-Ramp Toll Plazas, specific toll islands shall be designed for a maxi booth to allow parking of maintenance cars, cash and transit vans, as well as apprehended or broken-down vehicles of users, behind the maxi booth.

The minimum characteristics of a toll island shall be as follows:

- i. Length = 30 meters
- ii. Width = 1.80 to 5 meters
- iii. Height over pavement of toll lanes = 0.16 meter

Position lights shall be installed in the ends of toll islands and an electrical cabinet shall be installed on each toll island with necessary power supply (secured by a generator set) for the toll equipment.

(c) Toll Lane

The width of the entry toll lanes shall be 3.00 meters with a booth or an automatic ticket distributor located on the left hand side of the toll island vis-à-vis the traffic direction.

The width of the exit lane shall be 3.00 meters with a control room or a toll booth erected on the left hand side vis-à-vis the traffic direction.

(d) Canopy

To protect the toll equipment and toll collectors, a canopy shall be provided and must have a height clearance of at least 4.90 meters and the following characteristics:

- i. Resistance to corrosion
- ii. Clear undersurface to take direct lighting

- iii. Easy evacuation of rain water
- iv. Provision for cables
- v. Earth connection
- vi. Adequate supporting structure location in order not to obstruct the toll equipment, the toll collector's view or traffic safety.
- (e) Toll Plaza Building

Each Main Line Toll Plaza shall be provided with a specific building alongside the toll plaza including a toll operations center, cash counting room, public reception area, police room, rooms for staff use, a fund transfer garage and technical areas.

For security reasons, zones inside the building shall be well-defined and provided with security doors and windows, closed circuit TV, and related facilities to restrict access to unauthorized staff and other persons.

Off-Ramp and On-Ramp Toll Plazas shall be provided with an integrated maxi booth located on the main toll island that will offer the same functionalities as a toll plaza building.

(g) Technical Gallery

A service culvert, deep and wide enough for a person to circulate, shall be built at the Main Line Toll Plazas to provide the power and data cables needed for the canopy lighting and the toll equipment and ventilation ducts, providing fresh air to the booths.

At On-Ramp Toll Plazas, the cables shall be installed underground, but the booth ventilation will be placed at roof level.

(h) Road Signs

Road signs shall be provided to alert drivers to the presence of the toll barrier. Signs shall follow the standards and guidelines specified in the DPWH Highway Safety Design Standards, Part 2: Road Signs and Pavement Markings, 2004.

(i) Overhead Sign and Lighting

Overhead signs shall be fixed on the canopy and shall indicate the status of the lanes (closed or open). The lights shall be luminous, visible both day and night, relatively non-directional in order to be visible from different angles. The overall dimension of basic lighting elements (green arrow and red cross) shall be 400 mm x 400 mm.

(j) Water Drainage

On toll platforms, design solutions (slopes, position of manholes, etc.) shall be implemented to avoid water stagnation. Gutters with bars placed perpendicular to the platform axis shall not be allowed.

(k) Water Supply

Water supply shall be provided to each toll plaza (toll plaza building, toll islands, integrated maxi booth) and toilets for parking areas, a hydrant shall be installed at every toll island. Water pipes shall be placed in the service culvert.

(l) Fences

The toll plaza area located at grade shall be enclosed with 2.00-meter high fence with protection on top, sloped to the exterior of the expressway. Fences shall be square mesh netting and narrowed at the bottom.

(m) Power

One generator set shall be supplied in order to back up the power supply network.

(n) Lighting

The lighting system shall be provided in accordance with the Philippine Electrical Code, 2000, published by the Institute of Integrated Electrical Engineers of the Philippines, Inc. While ensuring that safety and security standards are met at the toll plazas, the lighting design shall be focused to prevent adverse impact on neighboring properties and road users.

- (3) Design Standards
 - (a) **Building Design**

Buildings shall be designed according to the National Structural Code of the Philippines (Volume 1: Building Towers and other Vertical Structures, 2010, published by the Association of Structural Engineers of the Philippines.

(b) <u>Electrical Design Standards</u>

The standards of the Philippine Electrical Code, 2000, shall be followed.

(c) Road Lighting

The design procedure for toll road lighting shall be in accordance with the Philippine Electrical Code, 2000.

Continuous lighting of the main carriageway shall be provided, designed at an average maintained horizontal luminaire of 9 to 12 lux on the travelway being lighted. The point of least luminaire on the road surface shall not be less than 4 lux. Ramps shall be lighted beyond the toll plazas, up to a point where the ramps merge with other major highways or local roads. Toll plazas shall be provided with lighting designed for an average maintained horizontal luminaire of 24 lux.

Light-emitting diode ("LED") lamps shall be used for the toll road lighting.

h. Operating Equipment for Toll Collection

- (1) Lane Equipment
 - (a) Equipment located on the canopy shall include lights to indicate the availability of the lane (green arrow/red cross and specific signing equipment for lanes dedicated to a specific means of signing equipment for lanes dedicated to a specific means of payment). The introduction of new methods of payment which will enable self-service and automatic payment, shall require installation of relevant signs which are visible and easy to understand.
 - (b) A toll island requires at least the following equipment: a manual barrier to close a lane when unattended, a toll booth designated for toll operation, toll lane processor equipment, an automatic barrier operating in not more than six-tenth (0.6) second or a manual barrier operating in not more than nine-tenth (0.9) second (from horizontal to vertical position of barrier), and associated vehicle detector loop, a traffic light, a vehicle class display on the roof of the booth to enable the supervisor to check the classification made by the toll collector, a siren and an amber flashing light to indicate the lane where the violation has occurred, and a patron fare display visible to all users.
 - (c) To minimize the transaction time and increase the level of service, the design of the toll equipment must incorporate (1) safety aspects: resistance to minor collisions and fail safe behavior in case of major impacts, use of non-flamable material, and reinforced glass windows; (2) maintenance aspects: stainless steel

structure or other anti-corrosion material, easily replaced modular panels, locally available spares and easy access to equipment.

- (d) The following equipment shall, as a minimum requirement, be installed in the booth: a toll collector's desk, a toll lane processor and associated peripherals, a hand-free interphone unit, an electrical supply switchboard, an air conditioner, a console including the air conditioner control unit and an auto radio set.
- (e) The minimum equipment for the toll <u>entry</u> lanes at the on-ramp toll plaza along Andrews Avenue for the traffic from NAIA Terminal 3 bound for the Skyway and the on-ramp toll plaza along Andrews Avenue for the traffic from NAIA Terminal 3 bound for Paranaque - shall be as follows:
 - i. Automatic ticket dispenser.
 - ii. Automatic vehicle classification ("AVC") system.
 - iii. Lane traffic light
 - iv. System reset loop
 - v. Lane closed barrier
 - vi. Overhead traffic light (lane indicator)
 - vii. Lane controller and data link (fibre optic)
 - viii.Lane monitoring camera
 - ix. Automatic lane barrier
- (f) The minimum equipment for the toll <u>exit</u> lanes shall be as follows:
 - i. Toll collection computer (electronic)
 - ii. Toll collection terminal
 - iii. High-speed receipt/printer (impact printer)
 - iv. Swipe card reader (ISO standard cards) or proximity card
 - v. Cash box with security ID
 - vi. Patron fare display (variable message)

- vii. Overhead lane sign (fibre optic-cross, lane indicator)
- viii.Violation alarm
- ix. Lane closed barrier
- x. AVC system.
- xi. Lane traffic light
- xii. Lane monitoring camera
- xiii.Toll collection monitoring camera

xiv.Closed circuit television ("CCTV") recording system

- xv. Access control system
- xvi.Automatic lane barrier

xvii.Emergency/security foot switch.

- (2) Toll Plaza Equipment
 - (a) Equipment to be installed in and operated by the supervisor from the toll plaza control room shall include the following:
 - (1) Micro-computer
 - (2) Incident printer
 - (3) Intercom unit to communicate with the booths
 - (4) Video surveillance system
 - (5) Console for controlling ancillary equipment
 - (b) All software packages shall allow real time interaction with each toll lane.

The AVC systems in Sections 2.4-h(1)(e)ii and 2.4-h(1)(f)x above shall be configured qnd calibrated to the 12 vehicle types used in the DPWH Road Traffic Information Application ("RTIA") database for all national/major roads in the entire country, as shown in **Table 12**. These AVC systems should generate traffic count data that will be compatible with and can be incorporated into the RTIA. The AVC systems shall be

checked and recalibrated every six (6) months by the Concessionaire with the concurrence of an authorized representative of the DPWH.

Vehicle Type	Vehicle Description	
1. Motorcycles	Motorcycles and Motor-tricycles	
2. Passenger Cars	Passenger Cars	
	Taxis	
	Owner Jeeps	
3. Passenger Utilities	PUJ/Privae Jeepneys (small and medium size)	
	Mega-taxis	
4. Mixed Passenger and Goods	Pick-ups	
Utilities	Sports utility Vehicles (SUV)	
	Delivery and Passenger Vans	
	Station Wagons, Ambulances	
	Small Trucks (maximum 4 tons GVW)	
5. Small Buses	Small Buses	
	Large Jeepneys (PUJ/Private)	
6. Large Buses	Buses (more than 30 seats)	
7. Rigid Trucks, 2 axles	Trucks, 2 axles (above 4 tons GVW)	
8. Rigid Trucks, 3+ axles	Rigid trucks, 3 axles	
	Rigid trucks, 4 axles	
9. Truck Semi-Trailer,	Truck Semi-Trailer, 3 axles	
3 and 4 axles	Truck Semi-Trailer, 4 axles	
10.Truck Semi-Trailer, 5+ axles	Truck Semi-Trailer, 5 axles	
	Truck Semi-Trailer, 6 axles	
11.Truck Trailers, 4 axles	Truck Trailers, 4 axles	
12.Truck Trailers, 5+ axles	Truck Trailers, 5 axles	
	Truck Trailers, 6 axles	

Table 12. DPWH Vehicle Types Used in DPWH RTIA

2.5 Phase II Design Criteria and Standards: Traffic Safety and Related Devices

a. <u>Pavement Markings</u>

Pavement markings shall be provided to delineate the carriageway and guide motorists traveling along the NAIA Expressway.

Pavement markings shall be designed in accordance with the guidelines specified in the DPWH Highway Safety Design Standards, Part 2: Road Signs and Pavement Markings, 2004, and consist of the following:

(1) Longitudinal lines, either white or yellow, which show the delineation of the travelway from the shoulders and of one lane from the other.
- (a) Solid White Line delineates the edges of the roadway and shall be provided at pavement edges adjacent to the shoulders and at interface of the interchange ramps with the main expressway lanes.
- (c) Broken White Line divides lanes in the same direction and shall be provided at merging and diverging lanes and between the adjacent lanes of the expressway.
- (2) Transverse lines, which are laid across the direction of travel and provide guidance for the location of yield and stop areas.
- (3) Reflectorized/thermoplastic pavement markings, which shall provide visibility of the travelway at night.
- b. Traffic Signs

Traffic signs shall be provided to guide the safe and orderly movement along the NAIA Expressway. The signs shall comply with the standards and guidelines specified in the DPWH Highway Safety Design Standards, Part 2: Road Signs and Pavement Markings, 2004.

The traffic signs to be adopted for the NAIA Expressway shall include the following:

- (1) Regulatory Signs to inform motorists of traffic laws or regulations. The regulatory signs for the Project shall consist of the following:
 - (a) Priority Series (R1), specifically the "Yield Sign," at ramp terminals to give priority to the main carriageway traffic.
 - (b) Direction Series (R2) to preclude wrong entry along channelized intersections, especially along locations of merging and diverging areas.
 - (c) Prohibitive or Restrictive Series (R3), specifically the prohibition of overtaking at areas where it is not allowed. These are specified at locations of merging areas and along the main carriageway alignment since the same consist of two (2) lanes bi-directional travelway only.
- (2) Warning Signs (Type W) to warn motorists of conditions ahead which may be unexpected or hazardous, like merging and diverging areas, and reduction in pavement or shoulder width. These are specified along horizontal curves of the interchange ramps and main expressway alignment.
- (3) Guide Signs or Informative Signs (Type G) to guide motorists of the destinations along the expressway route, directions, and distances of points of interest. These are specified at approaches to interchange sites or locations, toll plazas and at areas prior to entering the expressway.

- (4) Signs for Road Works and Special Purposes (Type T) to warn and advise of temporary hazardous conditions, which could endanger motorists or road users or workers engaged on road works. These are specified to guide contractors for the installation of the traffic safety requirements during the execution of the road works.
- c. Crash Cushions

In the detailed design of the crash cushions, the first consideration shall be to remove, relocate or modify the identified roadside hazard so as to eliminate the need to shield with a crash cushion. If the obstacle must remain, the crash cushion shall only be installed if it is considered less of a hazard than the obstacle. Where a crash cushion must be provided, the installation location shall be designed to be level and free of curbs.

Crash cushions are most often warranted at fixed-point locations. Typical highway features that may warrant an installation are the following:

- (a) Exit gate areas, particularly on structures.
- (b) Bridge rail ends, piers or abutments.
- (c) Non-breakaway sign and signal supports.
- (d) Retaining wall ends or culvert head walls.
- (e) Median barrier exposed ends.
- d. Security and Noise Abatement Facilities

At the southern side of the NAIA Expressway, from the property of the Philippine Air Force up to NAIA Terminal 3, security walls/noise barriers shall be provided. The walls shall be at least 3.0 meters high and provide for a noise abatement level by at least 5 A-weighted decibels (dBA).

e. Truck Weighing System

The Concessionaire shall provide dynamic weighbridges or weigh-in-motion machines (WIMs) on the NAIA Expressway, near NAIA Terminal 3, to weigh all heavy vehicles and determine whether or not they meet the allowable maximum axle load of 13.5 tons and authorized gross vehicle weight. A weighing bay must be provided into which the heavy vehicles shall be directed and weighed by the machines without disrupting the normal flow of traffic. The weighbridges shall be calibrated and tested in the presence of officials from the DPWH using DPWH standard test weights. The weighbridges

should generate axle load data that will be compatible with and can be incorporated into the RTIA.

2.6 Phase I Adjustment Works Design Standards

As stated in Section 1.12, the design standards for the DED of the Phase I Adjustment Works on Phase I shall be those used in the original plans and specifications for Phase I approved by the DPWH which are shown in **Annex D**.

SECTION 3.0 CONSTRUCTION

3.1 Scope of Construction

The Concessionaire shall undertake the Construction Works for the Project, which include the following:

- a. Phase I Adjustment Works.
- a. Phase II Works on the main carriageway, on-ramps and off-ramps, Phase I-Phase II interconnection, widened at-grade roads, drainage, toll plazas, buildings, other facilities, and traffic safety devices.

3.2 Standards and Specifications for Construction

- a. Phase I Adjustment Works shall be implemented according to the DED for Phase I Adjustment Works prepared by the Concessionaire and certified by the Independent Consultant.
- b. Phase II Works shall be implemented according to the DED for Phase II prepared by the Concessionaire and certified by Independent Consultant.
- c. Construction of both the Phase I Adjustment Works and Phase II shall also comply with the MPSS for Construction herein prescribed. The said MPSS for Construction includes conformance to the provisions pertaining to highways under the DPWH Blue Book. An electronic copy of the Blue Book is appended to these MPSS as **Annex E**.

The Blue Book prescribes, among other things, the material requirements and construction requirements for different items of work, including the tests to be conducted during Construction by the Concessionaire or its designated Contractor. The Blue Book incorporates provisions of the AASHTO, ASTM, and American Concrete Institute, pertaining to construction. Attention shall be given to the relevant items of work in the following Parts of the Blue Book:

Part C - Earthwork

Part D - Subbase and Base Course

Part E – Surface Courses

Part F - Bridge Construction

Part G – Drainage and Slope Protection

Part H – Miscellaneous Structures

Part I – Materials Details

3.3 Detailed Construction Plan

The Concessionaire shall submit to the Independent Consultant for certification, as part of the Detailed Engineering Design (DED), a construction implementation plan - based on the preliminary Construction Plan submitted in the Technical Proposal of the Concessionaire's Bid - as updated and detailed to fit the elements of the DED ("Detailed Construction Plan"). The Detailed Construction Plan must identify the procedures, processes and management systems that the Concessionaire will apply to ensure the implementation of the Construction Works in accordance with the Concession Agreement. As a minimum, the Detailed Construction Plan must define the following:

- a. Construction organization and management structures for the Construction Works, identifying key personnel and positions, Contractors, and sub-contractors.
- b. Construction methodology and procedures.
- c. Quality control and assurance system for all Works.
- d. Construction schedule, milestones, and S-curve covering all Construction packages.
- e. Major construction equipment to be used.
- f. Updated traffic management plan during construction.
- g. Health, safety, and security program in accordance with Department Order No. 13, series of 1998, of the Department of Labor and Employment.
- h. Proposed system of work types and locations that will be used to identify each Construction package.
- i. All of the public utilities affected by the Construction Works within the Right of Way, and their owners and the scheduled activities for their relocation.

- j. Processes that will ensure effective consultation with public utility authorities and utility infrastructure owners, to ensure progressive execution and efficient completion of the Works.
- k. Measures and procedures for:
 - (1) control and monitoring of the Construction schedule as against actual Construction works;
 - (2) supervision and monitoring of the quality control and assurance system for the Works, including the integrity of tests conducted;
 - (3) monthly updating of the Construction Plan and the monthly progress reports;
 - (4) development and approval of Construction documentation; and
 - (4) survey and condition monitoring;
- 1. Strategies for:
 - (1) managing risks;
 - (2) obtaining all necessary Approvals; and
 - (3) details of records management and indexing protocols that will enable referencing of all design and construction records back to the Construction packages, and Construction Packages to work type and location.

The Detailed Construction Plan complying with these provisions shall form part of the DED to be submitted to the Independent Consultant for review and certification within twelve (12) months after the signing date of the Concession Agreement.

3.4 Relocation of Public Utilities

The DPWH shall cause the removal and relocation of underground public utilities within the Basic Right-of-Way in a manner consistent with the Construction Schedule in the Concessionaire's Detailed Construction Plan which is part of its DED certified by the Independent Consultant.

The arrangements for the removal and relocation of the pubic utilities are to be incorporated in a Tripartite Agreement among the Concessionaire, the DPWH, and the Public Utility Owner. The Tripartite Agreement shall include the following:

a. A directive by the DPWH to the Public Utility Owner to remove and relocate the public utilities in accordance with the Construction Schedule in the Detailed Construction Plan.

- b. The Detailed Construction Plan itself, which includes when public utilities are to be removed and relocated.
- c. The estimated costs of the removal and relocation of the public utilities.
- d. A provision that the removal and relocation of the public utilities can be undertaken by either the Public Utility Owner or the Concessionaire. The Public Utility Owner shall reimburse the Concessionaire if it undertakes the removal and relocation works.
- e. An indemnity/hold harmless arrangement by the Public Utility Owner on behalf of the DPWH for any delay in completing the removal and relocation work in accordance with the Detailed Construction Plan.
- f. A provision that the Concessionaire can only take liquidated damages or termination action against the DPWH under the Concession Agreement if the Public Utility Owner fails to meet timeframes when actually undertaking the work itself. When the Concessionaire undertakes the removal and relocation work, it has no right of action for any failure to meet timeframes.

3.5 Traffic Management During Construction

a. Obligations to Minimize Disruption

The Concessionaire shall carry out the following obligations during Construction to ensure that traffic disruption is minimized in the area in which Construction is carried out ("Construction Area") and its immediate surrounding area, while providing a safe environment for all vehicles, pedestrians, public transport users and construction personnel, with clear and accurate information for all users:

- (1) Safe, efficient and continuous passage of vehicles is provided.
- (2) The traffic carrying capacity of the immediate surrounding roads is maintained.
- (3) Traffic congestion and disruption to public transport is minimized.
- (4) Pedestrian safety and, as required, alternative means of walking within or near the Construction Area are provided.

b. Traffic Management Plan for Construction

The Concessionaire's updated Traffic Management Plan must provide the following:

- (1) Demonstrate how the Concessionaire will stage the Works, and manage traffic throughout the Construction period to ensure that the obligations to minimize disruption prescribed in Section 3.5-a are achieved; and
- (2) Include plans for:
 - (a) the proposed traffic management arrangements for each toll plaza, ramp, or other location where vehicles, pedestrians, and public transport will be affected; and
 - (b) the use of roads in and around the Construction Area, supported by traffic data and analysis, to demonstrate that traffic impacts will be minimized during the Expressway Construction, and showing the proposed provisions for the following:
 - i. Temporary or alternate detour routes for vehicles and pedestrians, including arrangements for the clearing of obstructions and repair of pavements on the alternate routes and at-grade roads, to be undertaken in coordination with the DPWH, Metropolitan Manila Development Authority ("MMDA"), and local government units ("LGUs").
 - ii. Timing of road or lane closure and managing restricted lane widths, seeing to it that, during the Construction of Phase II, the minimum number of lanes on the at-grade roads shown in **Table 1** under Section 1.4-a hereof is kept open and passable, and that, during the Phase I Adjustment Works, the minimum number of lanes stated in Section 1.4-b is kept open and passable. Construction activities shall be so scheduled as to cause the least congestion during peak hours.
 - iii. Construction clear zones.
 - iv. Property access arrangements.
 - v. Setting up of directional and informative signs leading to and along the alternate routes to aid motorists and pedestrians. Maps of the alternate routes shall be provided to the LGUs, including barangays, and the communities affected.
 - vi. Consultations and coordination with the traffic management group of MMDA, the Police, LGUs, community leaders, residential and business establishments affected. Before the updated Traffic Management Plan is finalized, the consultations will inform them of the Project and the proposed updated Traffic Management Plan including the alternate routes and arrangements for clearing and repairing them, obtain their suggestions as inputs in finalizing the Plan, and seek their cooperation to effectively carry it

out. The updated Traffic Management Plan shall include arrangements for the agencies mentioned to deploy additional traffic enforcers as needed.

- vii. Information, education and communication program to advise the motorists, residents, businesses, and the general public on the above. This shall involve the use of media print, radio, TV, and internet including flyers and billboards to inform the public on the updated Traffic Management Plan before and during Construction. It shall include a mechanism to give updates on the traffic situation, to receive complaints on traffic and road conditions, accidents, and emergencies, and to respond to these incidents so as to ease traffic congestion in the Construction Area and on the alternate routes.
- (3) Include procedures and responsibilities for:
 - (a) reviewing and further updating, as needed, the Traffic Management Plan to reflect any changes to the proposed arrangements for staging the Works and managing traffic;
 - (b) development and implementation of communications requirements;
 - (c) training and orientation to ensure that relevant personnel, including Contractors, sub-contractors and traffic enforcers, are aware of the requirements of the updated Traffic Management Plan; and
 - (d) managing and reporting traffic accidents and incidents.

The updated Traffic Management Plan shall be a component of the Detailed Construction Plan which is part of the DED to be submitted to the Independent Consultant for review and certification within twelve (12) months after the signing date of the Concession Agreement.

The Concessionaire shall implement the updated Traffic Management Plan once the DED is certified by the Independent Consultant.

3.6 Test Requirements

The Concessionaire shall undertake tests during Construction in accordance with the schedule of minimum testing requirements for items of work and materials covered by the Blue Book, as shown in **Annex E**.

If any new Construction materials proposed by the Concessionaire are not covered by the Blue Book, these materials shall first be reviewed and, if found technically appropriate for the Project and in compliance with Prudent Industry Practice, be certified by the Independent Consultant and approved by the DPWH, before the new materials are used in the Project.

3.7 Completion of Construction

- a. The Independent Consultant shall be required to determine and certify that the Concessionaire has fully complied with the following requirements for the completion of Construction and, if so, shall notify the DPWH which shall then issue the Certificate of Final Completion to the Concessionaire in accordance with the Concession Agreement:
 - (1) All Tests for Construction comply with the pertinent provisions of the Blue Book and other test requirements of the MPSS for Construction.
 - (2) All parts of Phase II and the Phase I Adjustment Works have been completed in accordance with the DED, as certified by the Independent Consultant, and the MPSS for Construction, including the rectification of all defects.
 - (3) The NAIA Expressway can be safely and reliably placed in commercial operations.
 - (4) The required O&M Manuals have been submitted by the Concessionaire, certified by the Independent Consultant as meeting the MPSS, and approved by the DPWH.
 - (5) The toll collection equipment and personnel are in place.
- b. The Concessionaire must submit as-built drawings, an updated Asset Register to include a description of all assets constructed for the Phase I Adjustment Works and Phase II (and such other documents required pursuant to Section 4.5-e), and the Construction Completion Report to the DPWH not later than six (6) months after the date of the Certificate of Final Completion.

SECTION 4.0 OPERATION AND MAINTENANCE

4.1 General Obligations

a. <u>Performance Requirements</u>

This section of the MPSS sets out Operation and Maintenance performance standards that the Concessionaire must meet for the entire NAIA Expressway – from the date of issuance of the Toll Operation Certificate up to the end of the Concession Period. This MPSS section also sets out Key Performance Indicators for Operation and Maintenance that measure the Concessionaire's performance and imposes liquidated damages for non-performance.

The entire NAIA Expressway is a 24-hour operation every day of the year and the Concessionaire is obliged to have management and systems in place to deliver the 24-hour service to motorists who pay a toll to use the NAIA Expressway. The performance requirements are categorized as follows:

- (1) Operation Requirements
 - (a) Toll collection system.
 - (b) Traffic safety and control system.
 - (c) Power and water supply.
- (2) Maintenance Requirements
 - (a) Maintenance of Expressway structures.
 - (b) Maintenance of toll plazas and buildings.
 - (c) Maintenance of operating equipment and utilities.

b. Coordination with Other Toll Roads.

The Concessionaire shall cooperate with the DPWH in case the Government authorities decide on a policy that will require physical interconnection and inter-operability of the toll collection system of the NAIA Expressway with those of the Manila-Cavite Toll Expressway, the Metro Manila Skyway, and other existing and future toll roads.

While the minimum design standards prescribed herein can accommodate all Class III vehicles within the legal load limits, the Concessionaire shall ensure that specific categories of vehicles are prevented from travelling on the NAIA Expressway which may have access to the Skyway toll road and other adjoining toll roads and for which those toll roads have a restriction or prohibition in place.

c. <u>Uninterrupted Operations</u>

Once authorized to operate the NAIA Expressway, the Concessionaire shall keep the NAIA Expressway open to users continuously and without interruption and shall not close any part of the NAIA Expressway without the prior authorization of the DPWH. The Concessionaire may, however, order the closure of parts or the whole of the NAIA Expressway without prior authorization if the Concessionaire determines that the use of the NAIA Expressway is unsafe in the light of the relevant provisions of the Approved O&M Manuals and there is no time to obtain prior authorization. The Concessionaire shall, however, give due notice thereof to the DPWH within 24 hours from the emergency closure of the NAIA Expressway.

d. Upgrade and Improvement of O&M

In undertaking its operation and maintenance obligations, the Concessionaire shall apply the principle of continuous improvement and continually improve the standards and quality of the operation, maintenance and repair of the NAIA Expressway, including adopting advancements in technology no later than the time when the relevant component of the NAIA Expressway is due to be replaced.

4.2 Expressway Operation: Toll Collection System

a. Performance Standards.

The Concessionaire, through its Facility Operator, must ensure that the design standards set out in Section 2.4 are achieved and that the following are met:

- (1) The electronic toll collection and control equipment is operational 24 hours every day.
- (2) The waiting/transaction time at toll plazas does not exceed an average of 20 seconds per user from 6 am to 8 pm daily.
- (3) The transaction capacity at toll plazas is not less than 400 vehicles/hour/lane for mixed manual/e-pass system and 900 vehicles/lane/hour for the E-pass system.
- (4) There is to be no interruption to normal traffic, except during major repairs and accidents. Interruption means hampering smooth and seamless traffic flow.
- b. The Concessionaire shall implement the following operational activities which shall be included in the O&M Manuals (in accordance with Section 4.9):
 - (1) Supervision of shifts, lanes and toll plazas.
 - (1) General items of responsibility during operating and non-operating toll lanes.
 - (2) Operation of E-pass and manual toll lanes.
 - (3) Lane closing and opening procedures.
 - (4) Traffic queue supervision and management.
 - (5) Vehicle classification.
 - (6) Transaction receipts operation.
 - (7) User toll display operation.

- (8) Traffic control gate operation.
- (9) Lane status gate operation.
- (10) Toll collection system administration, including database.
- (11) Toll accounting and reporting.

4.3 Expressway Operation: Traffic Safety and Control System

a. Performance Standards

The Concessionaire/Facility Operator shall attain the following operating performance standards for the traffic safety and control system:

- (1) The Concessionaire/Facility Operator shall operate a patrol system on the expressway 24 hours every day. The patrol shall observe the traffic situation and road conditions at all times, undertake emergency aid for toll road users with broken down vehicles, and perform emergency handling of traffic accidents.
- (2) The toll operations center shall be operational and permanently staffed 24 hours daily.
- (3) The emergency telephone network and surveillance camera network linked to the toll operations center shall be operational 24 hours a day.
- (4) The response time between the receipt of emergency call for accidents/vehicle breakdown and arrival on the site shall not exceed 30 minutes.
- (5) The time from the receipt of emergency call to clear the accident/vehicle breakdown site and restore normal traffic flow shall not exceed 60 minutes.
- (6) Temporary safety equipment shall be deployed at the accident/vehicle breakdown sites within a maximum time of 10 minutes after the notification of the incident. Such safety equipment shall include flexible barriers, warning sign boards, lighting equipment, and similar equipment.
- (7) The average accident rate shall not be more than one (1) per day.
- (8) At least one (1) lane for one direction shall be kept open for vehicles, except at ramps, within the maintenance period.
- (9) Announcement of ramp closure shall be made at least five (5) days in advance.

- (10)Dynamic weighbridges/weigh-in-motion machines shall operate 24 hours a day to weigh and detect vehicles that exceed the maximum allowable axle load of 13.5 tons and gross vehicle weight. Overloaded trucks detected at the weighbridges shall not be allowed to continue their travel on the NAIA Expressway and shall be required to take the emergency exit located at the main toll plaza in front of NAIA Terminal 3.
- (11)Variable message signs shall be operating 24 hours daily, providing information on(i) accidents and road works, (ii) traffic conditions, (iii) dangerous weather conditions warning, and (iv) toll rate changes.
- (12)Noted defects in DPWH's inspection reports shall be remedied within 30 days.
- (13)Monthly reports on traffic counts and axle load data on the NAIA Expressway shall be accurate and submitted to the DPWH RTIA on time.
- (14) Monthly financial and operating reports shall be accurate and submitted to the DPWH on time.
- b. The Concessionaire's, and as appropriate the Facility Operator's, personnel assigned to enforce traffic regulations and safety measures in the NAIA Expressway, including anti-overloading rules, must have been duly deputized by the Land Transportation Office.
- c. The Concessionaire shall establish and maintain a Traffic Database for the NAIA Expressway, which shall be linked to, and provide inputs into, the overall DPWH Road Traffic Information Application ("RTIA") database for national/major roads of the Philippines. The Traffic Database shall include the following data:
 - (1) Traffic counts, broken down into the 12 vehicle types used in the DPWH RTIA, per direction, per hour, between entries and exits of the NAIA Expressway, as generated by the AVC systems of the Expressway.
 - (2) Loads per axle, per tuck, per direction, as recorded in and generated by the weighbridges/weigh-in-motion machines of the NAIA Expressway.

The Concessionaire shall regularly submit to the DPWH, every seventh day of each month, reports to the DPWH which contain the abovementioned data on traffic counts and loads per axle on the NAIA Expressway during the preceding month, using the prescribed DPWH formats, for DPWH processing and inclusion in the RTIA. The DPWH has the right to conduct technical audits of the traffic counts and axle load data submitted by the Concessionaire before processing them and including them in the RTIA.

4.4 Expressway Operation: Power and Other Utilities

As performance standards in respect to the operation of power supply and other utilities, the Concessionaire shall ensure that the following utility systems constantly remain functional, are tested on an established schedule, are evaluated for functionality and operation, and perform as designed and intended to support the 24-hour operation of the NAIA Expressway:

- a. Supply of power for the toll plazas and all other parts of the NAIA Expressway. A standby generator set shall be operated as needed to provide the base load while an uninterruptible power supply ("UPS") system shall be employed to eliminate switching surges and blackouts.
- b. Water supply and plumbing.
- c. Mechanical systems including ventilation and air conditioning systems.
- d. Communication systems, including intercoms, telephones, radios and mobile communications.
- e. Fire suppression and precaution systems, including fire alarms, sprinkler systems, and heat sensors.

4.5 Expressway Maintenance: Expressway Structures

- a. Principles
 - (1) The goal of the Maintenance program of the entire NAIA Expressway is to:
 - (a) preserve the asset so it is handed back to the DPWH in a manner that complies with the pavement performance standards specified in Section 2.0;
 - (b) be able to operate the NAIA Expressway in a manner that provides an efficient service for the motorists that use it and the service is optimal; and
 - (c) preserve the asset so that all the buildings and equipment necessary to operate the NAIA Expressway are and remain functional and in good condition in a manner that is equivalent to Prudent Industry Practice.
 - (2) There are two categories of maintenance:
 - (a) <u>Routine maintenance</u> which comprises day-to-day activities to maintain or restore the NAIA Expressway to its normal condition as designed and built. Examples are patching of pavement, sealing of cracks in the concrete deck, repair of guardrails, replacement of lighting lamps, repair of electrical and plant installation, cleaning of drainage, repair of viaduct members, repaining of lane

markings, repair of signs, and road cleaning. Routine maintenance shall not disrupt or interfere with the Operation of the NAIA Expressway.

(b) <u>Periodic maintenance</u> which comprises activities that include preventive maintenance before major defects on the NAIA Expressway occur in order to prolong its design life and retard future deterioration due to wear, tear, and weathering, and thus prevent the need for early major reconstruction. Periodic maintenance also includes major repair and rehabilitation to restore damaged roads to their original condition as designed and constructed. Examples of periodic maintenance activities include pavement overlay, major repair of deteriorated viaduct members, and lighting.

b. Routine Maintenance

- (1) Routine Maintenance shall be undertaken at three levels:
 - (a) <u>Level 1</u>: Repairs must start 30 minutes after the damage has been reported. Damage must be repaired within 24 hours. The following are Level 1 repairs:
 - i. For concrete pavements: local damage or depression.
 - ii. For asphalt pavements/decks: pothole.
 - iii. Cracks and other deficiencies.
 - iv. Damaged portions or openings in the fences/guardrails/parapet walls within the right-of-way which present an immediate danger to traffic.
 - v. Breakdown of emergency telephone network.
 - vi. .Collapsed or vandalized traffic signs.
 - (b) <u>Level 2</u>: Repairs must start within 24 hours and be completed within five (5) days. The following are Level 2 repairs:
 - i. For concrete pavements/decks: Failed slabs/bocks shall be repaired within five (5) days.
 - ii. For concrete pavements/decks: Joints/cracks shall be sufficiently sealed within five (5) days.
 - iii. For asphalt pavements/decks: Pavement damage cracking, raveling, rutting and shoving shall be repaired within two (2) days.

- iv. Disruption of free flow of water into the drainage systems shall be repaired in two (2) days.
- v. Signage road signs, traffic regulatory signs, warning signs, informative signs, and road works and special purpose signs shall at all times be clear of obstruction, clean and readable. Noted defects shall be corrected within two (2) days.
- vi. Correction of noted maintenance defects or replacement of damaged guardrails at the sides and center median of the expressway shall be done within five (5) days.
- vii. Correction of noted maintenance defects of expansion joints shall be done within five (5) days.
- (c) <u>Level 3</u>: Other repair and maintenance works are undertaken on a continuing basis as necessary. The following are Level 3 repairs:
 - i. Regular replacement of high-mast lighting luminaries shall be done to keep them operational 365 days a year.
 - ii. Correction shall be done on maintenance defects noted in the DPWH's inspection reports not of a type listed for Level 1 or Level 2 maintenance.
 - iii. Repair or replacement of structurally deficient superstructure and substructure elements, to meet the MPSS design standards, shall be completed within two (2) months or such period as may be agreed with the DPWH.
 - iv. At least 90% of pavement markings shall at all times be in good condition complying with the approved design standards.
- c. <u>Periodic Maintenance</u>

Periodic maintenance should entail a preventive maintenance and rehabilitation program based on the life of the structure as specified in Section 2.3-h of the MPSS – i.e., 10 years for asphalt concrete pavements, 10 years for wearing surface overlay, etc. Overlay must be based on structural road analysis, using the DPWH Pavement Management System ("PMS")/Highway Development and Management ("HDM") Program as described in the DPWH Highway Planning Manual, 2004, and undertaken every 10 years or less. The standards applicable at the time of the periodic maintenance, e.g., 10 years hence, should be used in the maintenance works.

d. Inspections

The following inspections shall be undertaken to detect any defects/damages and signs of defects/damages to be reflected in the routine maintenance and periodic maintenance plans:

- (1) Visual observation of the NAIA Expressway condition to be made from a patrol car: Daily.
- (2) Visual inspection by walking along the NAIA Expressway surface: Every other month.
- (3) Visual inspection by walking beneath the viaduct to check its structural condition: two (2) times a year.
- (4) Drainage condition inspection: Before the start of the rainy season; and once a month during the rainy season.
- (5) Detailed structural soundness survey of the viaduct: Once in five (5) years.
- (6) Emergency Inspection: as soon as reasonably practicable after an earthquake, a typhoon or any other natural calamity/event.
- (7) Survey to determine the International Roughness Index ("IRI"): Every three (3) months.

e. Asset Register

Within six (6) months after the issuance of the Certificate of Final Completion, the Concessionaire shall update the Asset Register (which shall already include the inventory database established for Phase I) to include all assets for the entire NAIA Expressway and provide a copy to the DPWH. The Concessionaire shall update the Asset Register annually. The Asset Register shall also include all as-built drawings, and the record of all inspection operations, tests, and repair and maintenance works. The Asset Register shall be linked to and provide inputs into the overall DPWH Road and Bridge Information Application ("RBIA") database for national/major roads in the Philippines.

f. Maintenance Budget

Based on the Approved O&M Manuals, the Concessionaire shall prepare the annual routine and periodic maintenance programs and budgets, indicating the funds needed to carry out the routine and periodic maintenance activities on a quarterly basis.

4.6 Expressway Maintenance: Toll Plazas and Buildings

Maintenance at toll plazas and buildings shall include the following minimum performance requirements:

- a. Cleaning of toll lanes and toll islands.
- b. Routine repair and maintenance of buildings.
- c. Cleaning and disinfecting of sanitary installations.
- d. Cleaning of litter and bins collection.

4.7 Expressway Maintenance: Equipment and Utilities

Maintenance of equipment and utilities shall include the following minimum performance requirements:

- a. Replacement of high-mast lighting luminaries.
- g. Maintenance of electronic toll collection and control systems including preventive actions related to the toll lanes, especially the automatic vehicle classification control system.
- h. Systematic detailed inspection and maintenance of electronic and low voltage equipment, e.g., toll equipment, cable, closed circuit television, on a yearly basis.
- d. Routine maintenance of power and water supply systems.
- e. Preventive and restorative maintenance of other fixed equipment, e.g., emergency telephone network, SOS communication system, MIS support for hardware and software, and air conditioning system in the toll booths and control center.

4.8 Customer Service and Satisfaction

The Concessionaire shall implement a customer service plan which shall provide for handling of complaints and communications with users on the NAIA Expressway condition, Operation and Maintenance in order to improve customer satisfaction and responsiveness. This shall include the following:

- a. Procedure for handling customer complaints and inquiries. This shall include a customer service log used to receive and record comments and concerns about the NAIA Expressway.
- b. Complaint prioritization procedures. These shall provide the system and criteria for responding to concerns based on priority, degree of deficiency, and schedule to correct them.

- c. Complaint reconciliation procedures. These shall ensure an adequate response to complaints and comments received in the customer service log. They shall include the customer service database requirements and procedures, follow-up procedures and actions, and requirements for a formal plan for long-term improvements.
- d. Dissemination of comments and concerns. This shall provide the procedures to ensure that all comments and concerns from the DPWH and agencies outside the Concessionaire are obtained, recorded and reconciled.
- e. Complaints and actions database. All complaints and corrective actions shall be recorded in a database providing a summary of the complaint, date of complaint, date underlying occurrence, date action taken, summary of action taken, and date of notification to the complainant. The database and logs shall be reviewed monthly to reconcile complaints with actions taken. The database statistics shall be reviewed quarterly to compare performance of the current quarter versus the prior period and the current year versus the prior year. A formal plan for improvement shall be developed and implemented if there is a significant increase in the number of complaints received and/or delays in actions taken.

The DPWH shall conduct a customer satisfaction survey, at least once a quarter, to determine the degree of satisfaction of the users on the Operation and Maintenance performance of the NAIA Expressway. Levels of satisfaction to be used shall be from 1 to 5: level 1 means highly satisfied, while level 5 means highly unsatisfied. The Concessionaire must meet a level of satisfaction which is not more than 3.

4.9 Expressway Operation and Maintenance Manuals

The Concessionaire shall prepare the O&M Manuals for the entire NAIA Expressway which shall provide the detailed operating procedures for (a) toll collection system, (b) traffic safety and control system, and (c) power and related utilities at the NAIA Expressway, based on the requirements in Sections 4.2 to 4.4.

The O&M Manuals shall also provide the detailed procedures, including inspections, routine and periodic maintenance works, and recording for (a) NAIA Expressway structures, (b) toll plazas and buildings, and (c) equipment and utilities at the NAIA Expressway, based on the requirements in Sections 4.5 to 4.7, in order to keep the NAIA Expressway in good condition in accordance with the MPSS for Maintenance.

Within 18 months after the issuance of the Notice to Proceed, the Concessionaire shall submit the proposed O&M Manuals for the entire NAIA Expressway, through the Independent Consultant for review and certification as complying with these MPSS, to the DPWH for approval prior to their use in the NAIA Expressway.

The Approved O&M Manuals for the entire NAIA Expressway shall form part of these MPSS and shall govern the Concessionaire's Operation and Maintenance of the NAIA Expressway.

The Concessionaire shall be required to update the Approved O&M Manuals, as reasonably required by the DPWH, on an annual basis for the duration of the Operation Period.

4.10 Key Performance Indicators for Operation and Maintenance of the NAIA Expressway with Liquidated Damages

a. Key Performance Indicators (KPIs) for NAIA Expressway Operation

The Concessionaire shall comply with the minimum KPIs for Operation of the entire NAIA Expressway and shall be subject to the corresponding liquidated damages to be imposed by the DPWH for non-compliance therewith, as shown in **Table 13**.

The liquidated damages are expressed in Toll Equivalent Units ("TEUs"), i.e., a multiple of the authorized – including approved adjustments – flat end-to-end Toll Rate (Roxas Blvd.-Skyway), expressed in Philippine Pesos, for a Class I vehicle at the time that the liquidated damages are imposed.

Item	Standards/Requirements	Amount of Liquidated	Remarks
	-	Damages for Non-Compliance	
Toll Collection System			
Electronic Toll Collection and Control Systems	Operational 24 hours every day per Approved O&M Manuals.	500 TEUs/non-compliance event.	Basis is DPWH's inspection reports.
Waiting/Queuing and Transaction Time at Toll Plazas	Average for the month, measured from 6 am to 8 pm, not exceeding 20 seconds per user, except in unusual circumstances such as major accidents or repair/ maintenance works.	2,500 TEUs/every month which exceeds average of 20 seconds.	-do
Transaction Capacity or Throughput at Toll Plazas	Not less than 400 vehicles/hour/ lane for mixed manual/E-pass systems and 900 vehicles/hour/lane for E-pass system	2,500 TEUs/day when capacity falls below the standard.	-do
Interruption [*] to Traffic Flow	Only in exceptional events, e.g., major repairs and accidents.	500 TEUs/every time when interrupted traffic flow lasting more than 5 minutes.	-do "Interruption" means hampering smooth and seamless traffic flow.
Traffic Safety and			
Control System			
Patrol System	Permanently on duty 24 hours daily.	500 TEUs/non-compliance event.	Basis is DPWH's inspection reports.
Toll Operations Center	Operational and permanently staffed 24 hours every day of the year.	500 TEUs/non-compliance event.	-do-

Table 13. Key Performance Indicators for Operation of NAIA Expressway and Liquidated Damages for Non-Compliance

Item	Standards/Requirements	Amount of Liquidated Damages for Non-Compliance	Remarks
Emergency Telephone Network and Surveillance Camera Network	Operational 24 hours every day, linked to Toll Operations Center.	500 TEUs/non-compliance event.	-do-
Response Time for Accidents/Vehicle Breakdown	Response time between receipt of emergency call and arrival on site not exceeding 30 minutes.	1,250 TEUs/non-compliance event.	-do- and police reports.
Clearance Time for Traffic Accidents/ Vehicle Breakdown	Not more than 60 minutes after receipt of the emergency call to clear the site and restore normal traffic flow.	1,250 TEUs/non-compliance event.	-do-
Temporary Safety Equipment at Accident/Vehicle Breakdown Sites.	Installed 10 minutes after notification of incident.	500 TEUs/non-compliance event.	-do-
Accident Rates	Not more than average of 1 per day.	1,250 TEUs/every accident in excess of 1/day threshold.	-do-
Lane availability within Maintenance Period	At least one lane for one direction shall be kept for vehicles except ramp section.	500 TEUs/non-compliance event.	Basis is DPWH's inspection reports.
Ramp closure	Announcement of the ramp closure shall be made at least 5 days in advance.	500 TEUs/non-compliance event.	-do-
Variable Message Signs	Operational 24hours daily, giving information on (i) place of acci- dents, (ii) event, place and period of maintenance works, (iii) traffic conditions, (iv) dangerous weather warning, and (v) toll rate changes.	500 TEUs/non-compliance event.	-do-
Brightness of Road Surface	Ave. brightness of road surface not less than 9 lux. Point of least luminaire on road surface not less than 4 lux. Toll plazas with ave. luminaire of not less than 24 lux.	500 TEUs/non-compliance event.	-do- Standards from Philippine Electrical Code, Part 2, Appendix G, Street Lighting Guide, 2000.
Vehicle Weighing System	Operational 24 hours every day with monthly reports, with no truck exceeding load limit allowed.	500 TEUs/non-compliance event.	Basis is DPWH's inspection reports.
Power and Water Supply	Continuous 24-hour supply of power and water.	500 TEUs/non-compliance event.	-do-
Compliance with DPWH's Inspection Reports on Operations	Remedy of noted defects, other than above, within 30 days.	500 TEUs/non-compliance event.	-do-
Submission of Traffic Data to DPWH RTIA	Accurate monthly reports of traffic counts and axle load data submitted on time.	500 TEUs/violation.	-do-
Submission of Financial and Operating Reports	Accurate monthly reports submitted on time per Approved O&M Manuals, including toll collections.	500 TEUs/violation.	Basis is Approved O&M Manuals.
Other Key Operations Reqts of Approved O&M Manuals	Strict compliance.	500 TEUs/event of violation of key requirements.	Other key requirements as defined in Approved O&M Manuals.

Item	Standards/Requirements	Amount of Liquidated	Remarks
		Damages for Non-Compliance	
Customers' Satisfaction	Level of customers' satisfaction on	2,500 TEUs/when average level	Basis is quarterly DPWH's
on Operations	operations not more than 3.	of customers' satisfaction is more	customer satisfaction survey,
		than 3.	cross-referred to
			Concessionaire's customer
			service database.

b. KPIs for NAIA Expressway Maintenance

The Concessionaire shall comply with the minimum KPIs for Maintenance of the entire NAIA Expressway and shall be subject to the corresponding liquidated damages to be imposed by the DPWH for non-compliance therewith, as shown in **Table 14**.

Similarly, the liquidated damages are expressed in TEUs, as defined in Section 4.10-a above.

Table 14. Key Performance Indicators for Maintenance of NAIA Expressway
and Liquidated Damages for Non-Compliance

Type of Feature	Standards/Requirements	Amount of Liquidated	Remarks
	-	Damages for Non-Compliance	
Surface Roughness	International Roughness Index (IRI) shall not be more than 1.5 for the entire NAIA Expressway.	5,000 TEUs/day if IRI is more than 1.5.	IRI will be measured once every 3 months. Also, basis is Concessionaire's monthly operations report and DPWH's inspection reports. Any liquidated damages shall be imposed at the time of the survey.
Concrete Pavement/ Deck			
Local Damage or Depression (LD/D)	To be repaired within 24 hours.	1,250 TEUs per LD/D not repaired per day.	LD/D is a hole or depression >15x15cm, but < one slab, and deeper than 5 cm. Basis is Concessionaire's monthly operations report and DPWH's inspection reports.
Failed Slabs (Blocks)	Repair to be completed in 5 days.	2,500 TEUs/concrete slab not repaired per 5 days.	Failed slab is any slab w/ >8m cracks or w/ parts not in level w/ adjacent slabs. Basis is Concessionaire's monthly operations report and DPWH's inspection reports.
Joints/Cracks	90% of joints/cracks sufficiently sealed within 5 days.	2,500 TEUs/km with joints/cracks not sealed within 5 days	Joints/cracks are sufficiently sealed when filled w/ sealant to pavement surface level. Basis is Concessionaire's monthly operations report and DPWH's inspection reports.
Pavement	90% of PM in good condition at all	2,000 TEUs/km not remedied	PM is in good condition if

Type of Feature	Standards/Requirements	Amount of Liquidated Damages for Non-Compliance	Remarks
Markings (PM)	times.	within 2 days.	required % of markings is clearly visible day & night.
Asphalt Pavement/ Deck			
Potholes	Repair work to start in 30 minutes and completed within 24 hours.	1,250 TEUs/pothole not repaired per 24 hours.	Pothole is a hole or depression >15cmx15cmx 15 cm. Basis is Concessionaire's monthly operations report and DPWH's inspection reports
Pavement Damage (PD) - cracking, raveling, rutting and shoving	To be repaired within 2 days.	2,000 TEUs per PD not repaired per 2 days	PD is 100 sq. m of alligator cracks, or 400 lm of cracks, or combination, w/ crack width of 25 mm; or 100 m of raveling, or 10 m of rutting/ shoving, w/ width of 1.5 m. Basis is Concessionaire's monthly operations report and DPWH's inspection reports.
Pavement Markings (PM)	90% of PM in good condition at all times.	2,000 TEUs/km not remedied per 2 days.	PM is in good condition if required % of markings is clearly visible day & night. Basis is Concessionaire's monthly operations report and DPWH's inspection reports.
Asphalt overlay	Overlay for preventive maintenance must be based on structural road analysis, using the DPWH PMS/HDM program, and undertaken every 10 years or less.	5,000 TEUs/every event of non- compliance with requirements of the PMS/HDM program.	Basis is Concessionaire's monthly operations report and DPWH's inspection reports.
Superstructure and Substructure Elements	Repair or replacement of structurally deficient elements within 2 months or as agreed with DPWH.	2,500 TEUs/every event of failure to do such repair or replacement within the prescribed period.	Basis is Concessionaire's monthly operations report and DPWH's inspection reports. Repair/ replacement must meet MPSS for design.
Drainage	Disruption of free flow of water to be remedied in 2 days.	1,250 TEUs/location not remedied per 2 days.	Free flow is disrupted if capacity of drainage is reduced by > 25%. Basis is Concessionaire's monthly operations report and DPWH's inspection reports.
Signage	Road/traffic regulatory/warning/ informative/road works/special purpose signs shall at all times be clear of obstructions, clean and readable.	1,250 TEUs/defective sign not remedied per 2 days.	Basis is Concessionaire's monthly operations report and DPWH's inspection reports.
Guardrails at Sides and Center Median	Correction of noted maintenance defects or replacement shall be done within 2 days.	1,250 TEUs/location not remedied per 2 days.	Basis is Concessionaire's monthly operations report and/ DPWH's inspection reports.

Type of Feature	Standards/Requirements	Amount of Liquidated	Remarks
	_	Damages for Non-Compliance	
Expansion Joints	Correction of noted maintenance defects shall be done within 5 days.	2,500 TEUs/location not remedied per 5 days.	Basis is Concessionaire's monthly operations report and DPWH's inspection reports.
High-Mast Lighting Luminaries	Regular replacement to make them operational at night 365 days/year.	1,250 TEUs/broken light not operating per night.	Basis is Concessionaire's monthly operations report and DPWH's inspection reports.
Compliance with DPWH's Inspection Reports on Maintenance	Correction of noted maintenance defects, other than above, done within 30 days.	1,250 TEUs/day for defect not corrected beyond 30 days.	Basis is Concessionaire's monthly operations report and DPWH's inspection reports
Other Key Maintenance Requirements of Approved O&M Manuals	Strict compliance.	500 TEUs/violation of other key requirements.	Basis is Concessionaire's monthly operations report and DPWH's inspection reports. Other key requirements are defined in Approved O&M Manuals.

SECTION 5.0 ASSET CONDITION AT END OF CONCESSION TURNOVER

Section 2.3 of the MPSS specifies a design life of the key assets. Based on that design life, the Concessionaire must manage the maintenance of the assets listed in this Section so that there is a residual asset life that complies with **Table 15** at the end of the Concession Period:

	Table 15. Residual Life Standards		
Asset Design Parameter		Residual Life Value at the End of the Concession Period	
А	Viaduct/Bridge Structures	18 years	
В	Road Pavement:		
	Cement Concrete Rigid Pavement	8 years	
	Asphalt Concrete Pavement	8 years	
С	Wearing Surface/Overlay	8 years	
D	Tolling Equipment	5 years	
Е	Tolling Buildings	10 years	
F	Toll Plaza	10 years	
G	Computer Equipment	2 years	

Republic of the Philippines Department of Public Works and Highways

BIDDING DOCUMENTS NAIA Expressway Project

PART III: MINIMUM PERFORMANCE STANDARDS AND SPECIFICATIONS

ANNEXES

JICA Update, 05 July 2011

ANNEX A

CAAP LETTER DATED MAY 30, 2011, ON MAXIMUM ALLOWABLE TOP ELEVATION AT NAIA EXPRESSWAY PHASE II



Republic of the Philippines Department of Transportation and Communications CIVIL AVIATION AUTHORITY OF THE PHILIPPINES Office of the Director General

May 30, 2011

Ms. REBECCA T. GARSUTA

OIC – Project Director Project Management Office (PMO) Build-Operate-Transfer (BOT) Office Department of Public Works and Highways DPWH Compound, 2nd Street Port Area, Manila



Dear Ms. Garsuta:

This is with reference to your letter dated April 27, 2011, requesting the Maximum Allowable Top Elevation (MATE) or Height Limitations at the critical points of the proposed Ninoy Aquino International Airport (NAIA) Expressway Phase 2.

The following is the result of our International Civil Aviation Organization (ICAO) Obstacle Limitation Surfaces (OLS) evaluation:

NO.	COORDINATES		MATE
	LATITUDE	LONGITUDE	(meters above mean sea level)
1	14° 31' 41.57"	121° 00' 08.68"	14.9940
2	14° 31' 40.81"	121° 00' 05.36"	15.3500
3	14° 31' 38.39"	121° 00' 01.27"	16.0500
4	14° 31' 35.63"	120° 59' 59.96"	15.4400
5	14° 31' 30.51"	121° 00' 01.85"	12.4700
6	14° 31' 27.07"	121° 00' 03.09"	10.1886
7	14° 31' 26.84"	121° 00' 03.01"	11.1500
8	14° 31' 22.08"	121° 00' 03.14"	25.6000

Please be informed that the existing 14.50-meter high poles at the Domestic Road were constructed / erected without the requisite Height Clearance Permit. In view of this, said height should not be used as basis for the height of the proposed expressway.

We hope to have provided you sufficient data/information needed by the bidders of the proposed project.

Very truly yours,

RAMON S. GUTIERREZ Director General

MIA Road corner Ninoy Aquino Avenue, Pasay City, Metro Manila, Philippines, 1300, Tel: (+632) 879-9286



Republic of the Philippines DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS Project Management Office (PMO) **BUILD-OPERATE-TRANSFER (BOT) OFFICE** DPWH Compound, 2nd Street, Port Area, Manila Tel, No. 304-3762, Fax No. 304-3824

mm. 000 5 80 43 Mar

27 April 2011

NOTE : along Dometric Rd. along Domestic Rd.

Mr. RAMON S. GUTIERREZ

Director General Civil Aviation Authority of the Philippines (CAAP) MIA Road, Pasay City

Subject : NAIA Expressway Phase 2

Dear Mr. Gutierrez:

This has reference to your letter dated 18 March 2011 requesting us to accomplish the application form for the Height Clearance Permit in response to our letter dated 01 March 2011 relative to the proposed NAIA Expressway Phase 2 which will be implemented under the Public-Private Partnership (PPP) Scheme.

Per coordination with your staff, the application form for the necessary Height Clearance Permit shall be applied/obtained by the winning bidder/concessionaire.

However, there is a need to inform the bidders regarding the Height Limit Elevation (HLE) from the Mean Sea Level (MSL). We would appreciate it very much if you could provide us the HLE of the critical points of the expressway as shown in the attached figure/table.

Furthermore, we would clarify the possibility of the expressway to be allowed up to the height of the existing lighting poles along Domestic Airport Road which have a height of 14.5 meters as shown in the attached picture.

We greatly appreciate if you could submit to us the said data/information soonest.

Very truly yours,

REBECC **OIC-Project** Dire

MC1/4/0: File2011/ CAAP TO HILE

ANNEX B

MAPS OF BASIC RIGHT OF WAY





ROW Requirement -1 (1/10)



ROW Requirement-2 (2/10)



ROW Requirement-3 (3/10)





ROW Requirement-5 (5/10)





ROW Requirement-7 (7/10)


ROW Requirement-7a (8/10)



ROW Requirement-8 (9/10)



ROW Requirement-9 (10/10)

ANNEX C ENVIRONMENTAL COMPLIANCE CERTIFICATE FOR NAIA EXPRESSWAY PROJECT, 2002



Reput. 1 the Fullippines DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

JUN 2 6 2002

ENVIRONMENTAL COMPLIANCE CERTIFICATE 0201-067-208

The Department of Environment and Natural Resources (DENR), through the Environmental Management Bureau (EMB), hereby grants this Environmental Compliance Certificate (ECC) to the proposed MANILA INTERNATIONAL AIRPORT ACCESS IMPROVEMENT PROJECT of the Department of Public Works and Highways to be located at Paranaque, Taguig and Pasay City, after complying with the requirements of the Philippine Environmental Impact Assessment (EIA) as prescribed in the promulgated guidelines implementing Section 3 (b) of P.D. 1121 and P.D. 1586.

This Certificate is being issued subject to the following conditions:

- This Certificate covers only the construction and operation of the Manila International Airport Access Improvement Project to include the following components:
 - 1.1 A 5.7 km elevated road from the Reclamation Area beside Roxas Boulevard (Boulevard 2000) through Sunset Drive to the corner of Domestic Road and MIA Road, passing through Domestic Road to Airport Avenue, and from Airport Avenue to Andrews Avenue, until Sales Street going to South Luzon Skyway;

4 11	Dand	6 Aliality
1.2	1/080	Width

Villamor Airbase Section	12	26.20 mts
Other Sections	-	20.00 mts.

- 1.3 Height (average) 7.5 mts.
- 1.4 An interchange system at Boulevard 2000, Roxas Boulevard, Manila, a ramp at the corner of Domestic road and MIA road, an interchange at the NAIA Terminal III and an interchange to connect Sales Street to South Luzon Skyway,
- 1.5 Toll Plaza

10 booth per tall

- The project must strictly adopt the alignment as proposed and as stated in the EIS. Any modification from the original plan and design of the approved alignment should be subject to review, evaluation and approval of this Office;
- The detailed structural and foundation design of the whole project must conform to the National Structural Code of the Philippines (NSCP) and the American Association of State Highways and Transportation Officials (AASHTO) codes;
- A detailed seismic risk analysis must be conducted using the deterministic approach and considering the presence of the West Valley Fault which is

Visuas Avenue, Dilimm, Quence City, Philippines 1100 Description of Vischerode 21/2 Machine 29, (5/23/500-6250, 5/26-70-63/50/26/929-66-31 to 35 Action to Index Costs 70(5)-167-208 Apr 6/25/20/22/Add 40(5)-167-208 located east of the project site. Results of such analysis should be used in detailed structural and foundation design:

- 5. The detailed engineering design of Segment 6 and 7 of the project must consider the results of the following studies:
 - 5.1 Detailed liquefaction analysis considering the results of detailed seismic risk analysis
 - 5.2 Detailed seismic and consolidation settlement analysis
 - 5.3 Bearing capacity determination which include among others the effect of negative skin friction on the integrity of the pile
- 6. A detailed flood frequency analysis must be conducted along critical locations (i.e. Brgy 183, 184 and 185, Intersection of Tramo Road and Andrews Avenue and along Segment 6 and 7 of the project) and results of such analysis should be used in the detailed design of hydraulic structures and in the development of a comprehensive drainage maintenance program;
- Cargo trucks carrying hazardous materials which include among others toxic and flammable substances must not be allowed to use the elevated road.
- Noise barriers should be installed along critical residential areas in Barangays 193, 184 and 185, school zones in Villamor Airbase and Paranague, and commercial areas and offices along the Domestic Road;
 - 9 A revised Environmental Management Plan (EMP) should be submitted Ninety (90) days upon receipt of the ECC but prior to actual earth-moving, demolition and other substantial physical alteration of the project site that must be addressed among others the following plans and measures:
 - 9.1 Compensation plan including the commitment to repeir or replace the structures that will be affected within Villamor Air Base Elementary School
 - 9.2 The effectiveness of the traffic re-routing plan should be evaluated every two weeks for the first quarter
 - 9.3 Plan on the tree cutting and bailing-cut activities, which will be undertaken along Sales Street and other affected areas prior to the start of the project. The plan shall include the exact inventory of trees to be affected and the corresponding replacement plan.
 - 9.4 Drainage system rehabilitation plan
 - Environment friendly location of stockyard, equipment yard, temporary construction facilities/office
 - B.6 Measures to prevent clogging of community drainage systems
 - 9.7 Measures to stabilize construction spoils to prevent emsion and dust generation

Department of Patrice Works and Hinforenze's Namila International Attean Acera Bood Propert Reference Index Cade: 4261-667-268 RQE/026/2022/MIA Acuas Improvement (BCC)

- 9.8 Proper scheduling of transportation/hauling of construction materials to minimize traffic
- 9.9 Measures focusing on localized creep, lateral spread/side and seismic settlement or liquefaction that can cause structural damage to residential, commercial and existing utilities (pipelines, drainage structures) proximal to the project site
- 9.10 Measures to minimize occupational risk and health hazards to workers, residents and passers
- 9.11 A Quick Response Plan to address vehicular accidents and those involving chemicals, gasoline (along with other flammable substances)
- An appropriate and acceptable relocation and compensation package for all affected communities within the project site shall be implemented. The plan should be governed by the provisions of existing Philippine laws on relocation and resettlement such as the Urban Development and Rousing Act (UDHA) of 1992;
- Proper handling, collection and disposal of solid and liquid wastes and construction spoils should be implemented in coordination with the appropriate local and relevant national government agencies;
- Loss of vegetation cover and wildlife habitats shall be prevented or minimized by limiting tree-cutting activities. An approved tree-cutting permit shall be secured by the proponent from the concerned DENR NCR Office. Every tree cut shall be replaced with twenty (20) saplings of endemic species;
- 13. The proponent must set up the following:
 - 13.1 A readily available Contractor's All Risk Insurance (CARI) to cover the following: compensation/indemnification for whatever damages to life and property that may be caused by the project: rehabilitation and/or restoration of areas affected by the project's implementation; and abandonment end/or decommissioning of the project facilities related to the prevention of possible negative impacts and a Quick Response Fund (QRF) to supplement CARI to address accidents during construction;
 - 13.2 A Multipartite Monitoring Team (MMT) composed of representative from the proponent, DENR, local environmental NGOs, the surrounding stakeholder-communities and the LGUs shall be organized. The MMT shall primarily oversee the compliance of the proponent with the EMP and the ECC conditions during construction; and
 - 13.3 A replenishable Environmental Monitoring Fund (EMF) to cover all costs attendant to the operation of the MMT.

The proponent must submit a CARI, ERF and EMF proposal based on existing relevant guidelines within thirty (30) days from the receipt of this Certificate. The said amounts must be incorporated in the CARI-EMF-MMT MOA to be discussed among the signatories and the final down shall be submitted within sixty (80) days from receipt of this ECC;

Decomment of Public Works and Histowers / Manila International August Access Road Propert Reference Index Coast, 9201–987–298 20/2/E/022020/MLA Access Improvement (BCC)

- The result of the Socio Economic Survey and endorsement from the Local Non-Governmental Organizations (NGOs) and People's Organizations (POs) should be submitted to EMB, ninety (90) days upon receipt of the ECC;
- The proponent must ensure that conditions of this Certificate relevant to the work of its commissioned contractors and/or operators are properly complied with;
- All other permits and requirements from pertinent government agencies must be secured and complied with;
- Any modification of the currently approved plans and designs shall be subject to the Environmental Impact Assessment (EIA) requirements; and
- The transfer of ownership of this project carries the same conditions in this ECC for which written notification to the EMB shall be made within fifteen (16) days from such transfer.

Non-compliance with any of the abovementioned stipulations will be sufficient cause for the suspension/cancellation of this Certificate and/or imposition of fine in the amount not to exceed Fifty Thousand Pesos (Php 50,000.00) for every violation thereof, at the discretion of the EMB (section 9 of P.D. 1586).

Granted this JUN 2 6 2052

HEHERSON T. ALVAREZ Secretary Regional Director cc: DENR-NCR

Department of Hubble Works and Hogineset / Manda International Attyout Acetta Rood Proyect Reference (wine Code: 0207-067-198 REFERENCEDEDRAM Assess Improvement (RDCG



Republic of the Philippines Department of Environment and Natural Resources ENVIRONMENTAL MANAGEMENT BUREAU DENR Compound, Visayas Avenue, Diliman, Quezon City 1116 Telephone Nos.: 927-15-17, 928-20-96 Email : emb@emb.gov.ph Visit us at http://www.emb.gov.ph

JUN 1 7 2011 MS. REBECCA T. GARSUTA OIC – Project Director DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS (DPWH) DPWH Compound, 2nd Street, Port Area, Manila

Subject: Request for Extension of Validity of ECC (ECC Reference No. 0201-067-208)

Dear Ms. Garsuta:

This is to acknowledge receipt of your letter regarding the above-mentioned subject of the Manila International Airport Access Improvement Project located at Parañaque, Taguig and Pasay City with Environmental Compliance Certificate (ECC) Reference No. 0201-067-208 issued on 26 June 2002.

Please be informed that the issued ECC is still valid since the project construction and implementation began within five (5) years from its issuance. Likewise, considering that both construction phases (Phase I and Phase II) are under the same ECC thus, there is no need to extend its validity. You only need to comply with all the conditions stipulated in the above-mentioned ECC.

Very truly yours, **IGUEL T. CUNA** ATTY. J Directo

cc: Engr. Roberto Sheen Regional Director Environmental Management Bureau - NCR

Staffdocs\Jayr\Communications 2011\MIA Access Improvement Project

ANNEX D

ORIGINAL PLANS AND SPECIFICATIONS FOR PHASE I AS APPROVED BY DPWH

Provided in compact disc

ANNEX E

DPWH STANDARD SPECIFICATIONS FOR PUBLIC WORKS AND HIGHWAYS, 2004 EDITION, VOLUME II – HIGHWAYS, BRIDGES AND AIRPORTS OR "BLUE BOOK"

Provided in compact disc

ANNEX F

SCHEDULE OF MINIMUM TEST REQUIREMENTS FOR CONSTRUCTION

The table below is the schedule of minimum test requirements of the DPWH Bureau of Research and Standards based on the DPWH Standard Specifications for Highways, Bridges and Airports, Volume II, 2004, otherwise known as the Blue Book. These test requirements will be used for the applicable items of work and materials in the Concessionaire's Construction works under the Project.

If any Construction items of work or materials proposed by the Concessionaire are not covered by the Blue Book, these items of work or materials, together with the corresponding technical test requirements, shall be compliant with Prudent Industry Practice and must first be certified by the Independent Consultant and approved by the DPWH before they are used in the Project.

ITEMS OF WORK	MINIMUM TEST REQUIREMENTS
PART C – EARTHWORK	
Item 100 – Clearing and Grubbing	None
Item 101 – Removal of Structures and	None
Obstruction	
Item 103 – Structure Excavation	
If excavated materials are	If excavated materials are incorporated into the work:
wasted, the volume involved	For every 1,500 cu. m or fraction thereof:
shall be reported so that Quality	1-G, Grading Test
control requirements may be	1-P, Plasticity Test
adjusted accordingly.	1-C, Laboratory Compaction Test
Submit Project Engineer's	For every 150 mm layer in uncompacted depth:
Certificate of Waste	1-D, Field Density
Item 104 - Embankment	
Item 105 – Sub-grade Preparation	Same tests as for Item 104.
Item 106 – Compaction Equipment and	Same tests as for Item 104, 105, 200, 201, 202, 203, 204,
Density Control Strips	205, 206 and 300.
Item 107 - Overhaul	None
PART D – SUBBASE AND BASE COURSE	
Item 200 – Aggregate Subbase Course	For every 300 cu. m or fraction thereof:
	1-G, Grading Test
	1-P, Plasticity Test
	For every 1,500 cu. m or fraction thereof:
	1-C, Laboratory Compaction Test
	For every 2,500 cu. m or fraction thereof:
	1-CBR, California Bearing Ratio Test
	For every layer of 150 mm of compacted depth/based on the results of compaction trials:
	At least one group of three in-situ density tests for each 500 sq. m or fraction thereof.

Item 201 – Aggregate Base CourseFor every 300 cu. m or fraction thereof: 1-G, Grading Test 1-P, Plasticity Test (LL, PL, PI) For every 1,500 cu. m or fraction thereof: 1-Q, Quality Test for Grading, Plasticity and Abrasion 1-C, Laboratory Compaction Test For every 1,200 cu. m or fraction thereof: 1-CBR, California Bearing Ratio Test For every 1ayer of 150 mm of compacted depth/based on the results of compaction trials: At least one group of three in-situ density tests for each 500 sq. m or fraction thereof?Item 202 – Crushed Aggregate Base CourseSame tests as for Item 201. For every 1,500 cu. m or fraction thereof? 1-F, Fractured FaceItem 203 – Lime Stabilized Road Mix Base CourseA. Soil Aggregate For every 3,00 cu. m or fraction thereof: 1-G, Grading Test 1-P, Plasticity Test (LL, PL, PI) For every 300 cu. m or fraction thereof: 1-G, Grading Test 1-P, Plasticity Test (LL, PL, PI) For every 300 cu. m or fraction thereof: 1-Q, Quality Test for Grading, Plasticity and Abrasion B. Mix For every 300 cu. m or fraction thereof: 1-Q, Quality Test for Grading, Plasticity and Abrasion B. Mix For every 300 cu. m or fraction thereof: 1-C, Laboratory Compaction Test 1-UC, Unconfined Compression Test 1-UC, Unconfined Compression Test 1-UC, Unconfined Compression Test 1-UC, Unconfined Compression Test 1-D, Field Density Test For every 100 toms or fraction thereof 1-D, Field Density TestItem 204 – Portland Cement Stabilized Road Mix Base Course Amount of Cement to be added: 6 to 10 mass % of dry soil aggregateA. Soil Aggregate: Same tests as for Item 203. B. Cement: 1-Q, Quality Test for every 2,000 bags or fraction thereof. C. Water	ITEMS OF WORK	MINIMUM TEST REQUIREMENTS
1-G, Grading Test 1-P, Plasticity Test (LL, PL, PI)For every 1,500 cu. m or fraction thereof: 1-Q, Quality Test for Grading, Plasticity and Abrasion 1-C. Laboratory Compaction Test For every 1,200 cu. m or fraction thereof: 1-CBR, California Bearing Ratio Test For every layer of 150 mm of compacted depth/based on the results of compaction trials: At least one group of three in-situ density tests for each 500 sq. m or fraction thereof?Item 202 - Crushed Aggregate Base CourseSame tests as for Item 201. For every 1,500 cu. m or fraction thereof? 1-F, Fractured FaceItem 203 - Lime Stabilized Road Mix Base CourseA. Soil Aggregate For every 1,500 cu. m or fraction thereof? 1-G, Grading Test 1-Q, Quality Test for Grading, Plasticity and Abrasion B. MixFor every 1,500 cu. m or fraction thereof: 1-Q, Quality Test for Grading, Plasticity and Abrasion B. MixFor every 300 cu. m or fraction thereof: 1-Q, Quality Test for Grading, Plasticity and Abrasion B. MixFor every 300 cu. m or fraction thereof: 1-Q, Cuality Test for Grading, Plasticity and Abrasion B. MixFor every 300 cu. m or fraction thereof: 1-Q, Cuality Test for Grading, Plasticity and Abrasion B. MixFor every 300 cu. m or fraction thereof: 1-Q, Cuality Test for Grading, Plasticity and Abrasion B. MixFor every 300 cu. m or fraction thereof: 1-Q, Laboratory Compacted Test 1-UC, Unconfined Compression Test 1-UC, Unconfined Compression Test 1-UC, Unconfined Compression Test 1-UC, Unconfined Compression Test 1-Q, Quality Test for every 150 m or fraction thereof. 1-Q, Quality Test for every 150 m or fraction thereof.Item 204 - Portland Cement Stabilized Road Mix Base Course Amount of Cement to be added: 6 t	Item 201 – Aggregate Base Course	
For every 1,500 cu. m or fraction thereof: 1-Q, Quality Test for Grading, Plasticity and Abrasion 1-C, Laboratory Compaction Test For every 2,500 cu. m or fraction thereof: 1-CBR, California Bearing Ratio Test For every layer of 150 mm of compacted depth/based on the results of compaction trials: At least one group of three in-situ density tests for each 500 sq. m or fraction thereof.Item 202 - Crushed Aggregate Base CourseSame tests as for Item 201. For every 1,500 cu. m or fraction thereof" 1-F, Fractured FaceItem 203 - Lime Stabilized Road Mix Base CourseA. Soil Aggregate For every 1,500 cu. m or fraction thereof: 1-G, Grading Test 1-P, Plasticity Test (LL, PL, PI) For every 1,500 cu. m or fraction thereof: 1-Q, Quality Test for Grading, Plasticity and Abrasion B. Mix For every 300 cu. m or fraction thereof: 1-Q, Quality Test for every 300 cu. m or fraction thereof: 1-Q, Quality Test fr every 150 m or fraction thereof. 1-C, Laboratory Compaction Test 1-CBR, California Bearing Ratio Test 1-CBR, California Bearing Ratio Test 1-CBR, California Bearing Ratio Test 1-CBR, California Bearing Ratio Test 1-C, Quality Test fr every 150 m or fraction thereof. 1-D, Field Density Test fr every 150 m or fraction thereof. 1-Q, Quality Test for every 100 m or fraction thereof. 1-Q, Quality Test for every 2,000 bags or fraction thereof. 1-Q, Quality Test for every 2,000 bags or fraction thereof.Item 204 - Portland Cement Stabilized Road Mix Base Course Amount of Cement to be added: 6 to 10 mass % of dry soil aggregateA. Soil Aggregate: Same tests as for Item 203. B. Cement: 1-Q, Quality Test for every 2,000 bags or fraction thereof.		1-G, Grading Test
1-Q, Quality Test for Grading, Plasticity and Abrasion 1-C, Laboratory Compaction Test For every 2,500 cu. m or fraction thereof: 1-CBR, California Bearing Ratio Test For every layer of 150 mm of compacted depth/based on the results of compaction trials: At least one group of three in-situ density tests for each 500 sq. m or fraction thereof.Item 202 - Crushed Aggregate Base CourseSame tests as for Item 201. For every 1,500 cu. m or fraction thereof" 1-F. Fractured FaceItem 203 - Lime Stabilized Road Mix Base CourseA. Soil Aggregate For every 300 cu. m or fraction thereof: 1-G, Grading Test 1-P, Plasticity Test (LL, PL, PI) For every 1,500 cu. m or fraction thereof: 1-Q, Quality Test for Grading, Plasticity and Abrasion B. Mix For every 300 cu. m or fraction thereof: 1-Q, Quality Test for Grading, Plasticity and Abrasion B. Mix For every 300 cu. m or fraction thereof: 1-Q, Quality Test for Grading, Plasticity and Abrasion B. Mix For every 300 cu. m or fraction thereof: 1-Q, Quality Test for Grading, Plasticity and Abrasion B. Mix For every 300 cu. m or fraction thereof: 1-Q, Cultity Test for Grading, Plasticity and Abrasion B. Mix For every 300 cu. m or fraction thereof: 1-Q, Cultity Test for Grading, Plasticity and Abrasion B. Mix For every 300 cu. m or fraction thereof: 1-Q, Cultity Test for Grading, Plasticity and Abrasion B. Mix For every 300 cu. m or fraction thereof: 1-Q, Quality Test for Grading, Plasticity and Abrasion B. Mix For every 100 coms or fraction thereof: 1-Q, Quality Test for every 150 m or fraction thereof. D. Hydrated Lime For every 100 toms or fraction thereof 1-Q, Quality Test for every 2,000 bags or fraction thereof. Soil AggregateItem 204 - Portland Cement Stabilized Road Mix Base Course Amount of Cement to be <b< th=""><th></th><th>1-P, Plasticity Test (LL, PL, PI)</th></b<>		1-P, Plasticity Test (LL, PL, PI)
1-C, Laboratory Compaction Test For every 2,500 cu. m or fraction thereof: 1-CBR, California Bearing Ratio Test For every layer of 150 mm of compacted depth/based on the results of compaction trials: At least one group of three in-situ density tests for each 500 sq. m or fraction thereof.Item 202 - Crushed Aggregate Base CourseSame tests as for Item 201. For every 1,500 cu. m or fraction thereof" 1-F, Fractured FaceItem 203 - Lime Stabilized Road Mix Base CourseSame tests as for Item 201. For every 300 cu. m or fraction thereof: 1-G, Grading Test 1-P, Plasticity Test (LL, PL, PI) For every 300 cu. m or fraction thereof: 1-Q, Quality Test for Grading, Plasticity and Abrasion B. Mix For every 300 cu. m or fraction thereof: 1-C, Laboratory Compaction Test 1-CR, California Bearing Ratio Test 1-CBR, California Bearing Ratio Test 1-D, Field Density Test fr every 150 m or fraction thereof.Item 204 - Portland Cement Stabilized Road Mix Base Course Amount of Cement to be added: 6 to 10 mass % of dry soil aggregateA. Soil Aggregate: Same tests as for Item 203. B. Cement: 1-Q, Quality Test for every 2,000 bags or fraction thereof.		
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1-CBR, California Bearing Ratio TestFor every layer of 150 mm of compacted depth/based on the results of compaction trials: At least one group of three in-situ density tests for each 500 sq. m or fraction thereof.Item 202 - Crushed Aggregate Base CourseSame tests as for Item 201. For every 1,500 cu. m or fraction thereof" 1-F, Fractured FaceItem 203 - Lime Stabilized Road Mix Base CourseA. Soil Aggregate For every 300 cu. m or fraction thereof: 1-G, Grading Test 1-P, Plasticity Test (LL, PL, PI) For every 1,500 cu. m or fraction thereof: 1-Q, Quality Test for Grading, Plasticity and Abrasion B. Mix For every 300 cu. m or fraction thereof: 1-Q, Quality Test for Grading, Plasticity and Abrasion B. Mix For every 1-C, Laboratory Compaction Test 1-UC, Unconfined Compression Test 1-CBR, California Bearing Ratio Test C. Compacted Base Course For every 150 mm of compacted depth: 1-D, Field Density Test fr every 150 m or fraction thereof.Item 204 - Portland Cement Stabilized Road Mix Base Course Amount of Cement to be added: 6 to 10 mass % of dry soil aggregateA. Soil Aggregate: Same tests as for Item 203. B. Cement: 1-Q, Quality Test for every 2,000 bags or fraction thereof.		1-C, Laboratory Compaction Test
For every layer of 150 mm of compacted depth/based on the results of compaction trials: At least one group of three in-situ density tests for each 500 sq. m or fraction thereof.Item 202 - Crushed Aggregate Base CourseSame tests as for Item 201. For every 1,500 cu. m or fraction thereof" 1-F, Fractured FaceItem 203 - Lime Stabilized Road Mix Base CourseA. Soil Aggregate For every 300 cu. m or fraction thereof: 1-G, Grading Test 1-P, Plasticity Test (LL, PL, PI) For every 1,500 cu. m or fraction thereof: 1-Q, Quality Test for Grading, Plasticity and Abrasion B. Mix For every 300 cu. m or fraction thereof: 1-C, Laboratory Compaction Test 1-UC, Unconfined Compression Test 1-CBR, California Bearing Ratio Test C. Compacted Base Course For every 150 m or fraction thereof.Item 204 - Portland Cement Stabilized Road Mix Base Course Amount of Cement to be added: 6 to 10 mass % of dry soil aggregateA. Soil Aggregate: Same tests as for Item 203. B. Cement: 1-Q, Quality Test for every 2,000 bags or fraction thereof. C. Water		For every 2,500 cu. m or fraction thereof:
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At least one group of three in-situ density tests for each 500 sq. m or fraction thereof.Item 202 - Crushed Aggregate Base CourseSame tests as for Item 201.For every 1,500 cu. m or fraction thereof" I-F, Fractured Pace-Item 203 - Lime Stabilized Road Mix Base CourseA. Soil AggregateFor every 300 cu. m or fraction thereof: I-P, Plasticity Test (LL, PL, PI) For every 1,500 cu. m or fraction thereof: I-Q, Quality Test for Grading, Plasticity and Abrasion B. MixBase Course-For every 300 cu. m or fraction thereof: I-Q, Quality Test for Grading, Plasticity and Abrasion B. MixFor every 300 cu. m or fraction thereof: I-Q, Quality Test for Grading, Plasticity and Abrasion B. MixFor every 300 cu. m or fraction thereof: I-C, Laboratory Compaction Test I-CR, California Bearing Ratio Test I-D, Field Density Test fr every 150 m or fraction thereof.Item 204 - Portland Cement Stabilized Road Mix Base Course Amount of Cement Stabilized Road Mix Base Course Amount of Cement to be added: 6 to 10 mass % of dry soil aggregateA. Soil AggregateC. WaterC. Water		For every layer of 150 mm of compacted depth/based on
Solo sq. m or fraction thereof.Item 202 - Crushed Aggregate Base CourseSame tests as for Item 201. For every 1,500 cu. m or fraction thereof" 1-F, Fractured FaceItem 203 - Lime Stabilized Road Mix Base CourseA. Soil Aggregate For every 300 cu. m or fraction thereof: 1-G, Grading Test 1-P, Plasticity Test (LL, PL, PI) For every 1,500 cu. m or fraction thereof: 1-Q, Quality Test for Grading, Plasticity and Abrasion B. Mix For every 300 cu. m or fraction thereof: 1-Q, Quality Test for Grading, Plasticity and Abrasion B. Mix For every 300 cu. m or fraction thereof: 1-C, Laboratory Compaction Test 1-UC, Unconfined Compression Test 1-UC, Unconfined Compression Test 1-CBR, California Bearing Ratio Test C. Compacted Base Course For every 100 toms or fraction thereof 1-D, Field Density Test fr every 150 m or fraction thereof.Item 204 - Portland Cement Stabilized Road Mix Base Course Amount of Cement to be added: 6 to 10 mass % of dry soil aggregateA. Soil Aggregate: Same tests as for Item 203. B. Cement: 1-Q, Quality Test for every 2,000 bags or fraction thereof. C. Water		the results of compaction trials:
Item 202 - Crushed Aggregate Base CourseSame tests as for Item 201. For every 1,500 cu. m or fraction thereof" 1-F, Fractured FaceItem 203 - Lime Stabilized Road Mix Base CourseA. Soil Aggregate For every 300 cu. m or fraction thereof: 1-G, Grading Test 1-P, Plasticity Test (LL, PL, PI) For every 1,500 cu. m or fraction thereof: 1-Q, Quality Test for Grading, Plasticity and Abrasion B. Mix For every 300 cu. m or fraction thereof: 1-Q, Quality Test for Grading, Plasticity and Abrasion B. Mix For every 300 cu. m or fraction thereof: 1-Q, Quality Test for Grading, Plasticity and Abrasion B. Mix For every 300 cu. m or fraction thereof: 1-C, Laboratory Compaction Test 1-UC, Unconfined Compression Test 1-UC, Unconfined Compression Test 1-CBR, California Bearing Ratio Test 1-D, Field Density Test fr every 150 m or fraction thereof. D. Hydrated Lime For every 100 toms or fraction thereof 1-Q, Quality TestItem 204 - Portland Cement Stabilized Road Mix Base Course Amount of Cement to be added: 6 to 10 mass % of dry soil aggregateA. Soil Aggregate: Same tests as for Item 203. B. Cement: 1-Q, Quality Test for every 2,000 bags or fraction thereof. C. Water		At least one group of three in-situ density tests for each
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1-F, Fractured FaceItem 203 – Lime Stabilized Road Mix Base CourseA. Soil AggregateFor every 300 cu. m or fraction thereof: 1-G, Grading Test 1-P, Plasticity Test (LL, PL, PI) For every 1,500 cu. m or fraction thereof: 1-Q, Quality Test for Grading, Plasticity and Abrasion B. Mix For every 300 cu. m or fraction thereof: 1-Q, Quality Test for Grading, Plasticity and Abrasion B. Mix For every 300 cu. m or fraction thereof: 1-C, Laboratory Compaction Test 1-UC, Unconfined Compression Test 1-UC, Unconfined Compression Test 1-UC, Unconfined Bearing Ratio Test C. Compacted Base Course For every 120 m or fraction thereof.Item 204 – Portland Cement Stabilized Road Mix Base Course Amount of Cement to be added: 6 to 10 mass % of dry soil aggregateA. Soil Aggregate C. Water	Item 202 – Crushed Aggregate Base	Same tests as for Item 201.
Item 203 – Lime Stabilized Road Mix Base CourseA. Soil Aggregate For every 300 cu. m or fraction thereof: 1-G, Grading Test 1-P, Plasticity Test (LL, PL, PI) For every 1,500 cu. m or fraction thereof: 1-Q, Quality Test for Grading, Plasticity and Abrasion B. Mix For every 300 cu. m or fraction thereof: 1-Q, Quality Test for Grading, Plasticity and Abrasion B. Mix For every 300 cu. m or fraction thereof: 1-C, Laboratory Compaction Test 1-UC, Unconfined Compression Test 1-UC, Unconfined Compression Test 1-CBR, California Bearing Ratio Test C. Compacted Base Course For every layer of 150 mm of compacted depth: 1-D, Field Density Test fr every 150 m or fraction thereof. D. Hydrated Lime For every 100 toms or fraction thereof 1-Q, Quality TestItem 204 – Portland Cement Stabilized Road Mix Base Course Amount of Cement to be added: 6 to 10 mass % of dry soil aggregateA. Soil AggregateItem 204 – Sortiand Cement Stabilized Road Mix Base Course Amount of Cement to be added: 6 to 10 mass % of dry soil aggregateA. Soil Aggregate	Course	For every 1,500 cu. m or fraction thereof"
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1-G, Grading Test1-P, Plasticity Test (LL, PL, PI)For every 1,500 cu. m or fraction thereof:1-Q, Quality Test for Grading, Plasticity and AbrasionB. MixFor every 300 cu. m or fraction thereof:1-C, Laboratory Compaction Test1-UC, Unconfined Compression Test1-UC, Unconfined Compression Test1-CBR, California Bearing Ratio Test1-CBR, California Bearing Ratio Test1-D, Field Base CourseFor every layer of 150 mm of compacted depth:1-D, Field Density Test fr every 150 m or fractionthereof.D. Hydrated LimeFor every 100 toms or fraction thereof1-Q, Quality TestItem 204 - Portland Cement Stabilized Amount of Cement to be added: 6 to 10 mass % of dry soil aggregateKoad Mix Base CourseAmount of Cement to be added: 6 to 10 mass % of dry soil aggregateKoad Mix Base CourseC. Water	Item 203 – Lime Stabilized Road Mix	A. Soil Aggregate
1-P, Plasticity Test (LL, PL, PI)For every 1,500 cu. m or fraction thereof:1-Q, Quality Test for Grading, Plasticity and AbrasionB. MixFor every 300 cu. m or fraction thereof:1-C, Laboratory Compaction Test1-UC, Unconfined Compression Test1-UC, Unconfined Compression Test1-CBR, California Bearing Ratio TestC. Compacted Base CourseFor every layer of 150 mm of compacted depth:1-D, Field Density Test fr every 150 m or fractionthereof.D. Hydrated LimeFor every 100 toms or fraction thereof1-Q, Quality TestItem 204 - Portland Cement Stabilized Road Mix Base CourseAmount of Cement to be added: 6 to 10 mass % of dry soil aggregateSoil aggregateC. Water	Base Course	For every 300 cu. m or fraction thereof:
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Item 204 – Portland Cement Stabilized Road Mix Base Course Amount of Cement to be added: 6 to 10 mass % of dry soil aggregateA. Soil Aggregate: Same tests as for Item 203.B. Cement: 1-Q, Quality Test for every 2,000 bags or fraction thereof.C. Water		-
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soil aggregate C. Water		
	-	
1-() Quality Test/Project Engineer's Certificate	son aggregate	1-Q, Quality Test/Project Engineer's Certificate
D. Mix		
For every 300 cu. m or fraction thereof:		
1-C, Laboratory Compaction Test		-
1-UC, Unconfined Compression Test		· ·
1-CBR, California Bearing Ratio Test		

ITEMS OF WORK	MINIMUM TEST REQUIREMENTS
	C. Compacted Base Course
	For every layer of 150 mm of compacted depth:
	1-D, Field Density Test fr every 150 m or fraction
	thereof.
	1-T, thickness determination for every 150 m or fraction
	thereof.
Item 205 – Asphalt Stabilized Road Mix	A. Soil Aggregate: Same tests as for Item 203.
Base Course	B. Emulsified Asphalt:
	1-Q, Quality Test for every 40 to 200 drums or fraction
	thereof.
	C. Mix: same tests as for Item 203.
	D. Compacted Base Course: Same tests as for Item 203.
Item 206 – Portland Cement Treated	A. Soil Aggregate: Same tests as for Item 203.
Plant Mix Base Course	B. Cement:
	For every 2,000 bags or fraction thereof.
	1-Q, Quality Test
	C. Water
	1-Q, Quality Test/Project Engineer's Certificate
	D. Mix: Same tests as for Item 204/
	C. Compacted Base Course
	For every layer of 150 mm of compacted depth:
	1-D, Field Density Test fr every 150 m or fraction
	thereof.
	1-T, thickness determination for every 150 m or fraction
	thereof.
Item 207 – Aggregate Stockpile	Same tests as specified I Item No. of the Specs.
PART E – SURFACE COURSE	
Item 300 – Aggregate Surface Course	For every 300 cu. m or fraction thereof:
	1-G, Grading Test
	1-P, Plasticity Test (LL, PL, PI)
	For every 1,500 cu. m or fraction thereof:
	1-C, Compaction Test for Grading, Plasticity and
	Abrasion
	For every layer of 150 mm of compacted depth/based on
	the results of compaction trials:
	At least one group of three in-situ density tests for each
	500
	sq. m or fraction thereof.
	For Crushed Gravel or Crushed Stone, 1,500 cu. m of
	fraction thereof:
	1-F, Fractured Face
Item 301 – Bituminous Prime Coat	Quantity: 1 to 2 liters/sq. m
	1-Q, Quality Test for every 40 tons or 200 drums

ITEMS OF WORK	MINIMUM TEST REQUIREMENTS
Item 302 – Bituminous Tack Coat	Quantity: 0.2 to 0.7 liter/sq. m
	1-Q, Quality Test for every 40 tons or 200 drums
Item 303 – Bituminous Seal Coat	A. Bituminous Materials
	Quantity: 0.2 to 1.5 liters/sq. m
	1-Q, quality Test for every 40 tons or 200 drums
	B. Cover Aggregates
	Quantity: From 5 to 14 kg/sq. m
	For every 75 cu. m/200 kg or fraction thereof:
	1-G, Grading Test
Item 304 – Bituminous Surface	A. Aggregates
Treatment	Quantity:
	Using Cut-Back Asphalt or Asphalt Cement – 13.6 to
	38.0 kg/sq. m
	Using Emulsified Asphalt – 13.6 to 19.04 kg/sq. m
	For every 75 cu. m/200 kg or fraction thereof:
	1-G, Grading Test
	1-P, Plasticity Test (PL, LL, PI)
	For every 1,500 cu. m or fraction thereof;
	1-Q, Quality Test for Grading, Plasticity, Abrasion,
	Stripping and Bulk Specific Gravity
	1-F, Fractured Face
	B. Bituminous Materials
	Quantity:
	Using Cut-Back Asphalt or Asphalt Cement – 1.58 to
	2.04 liters/sq. m
	Using Emulsified Asphalt – 1.58 to 2.04 liters/sq. m.
	Same test as for Item 301.
Item 305 – Bituminous Penetration	A. Aggregates
Macadam Pavement	Quantity:
	1. Using Asphalt Cement or Rapid Curing
	Course (Crushed) -90 kg/sq. m
	Key (Crushed) – $(13 \& 11) - 24 \text{ kg/sq. m}$
	Cover (Crushed & Screened) $- 8$ kg/sq. m
	2. Using Emulsified Asphalt – 13.6 to 19.04 kg/sq. m
	Course (Crushed) -90 kg/sq. m
	Choker (Crushed) $- 10$ kg/sq. m
	Key (Crushed) $- 18$ kg/sq. m
	Cover (Crushed & Screened) – 8 kg/sq. m
	Same test as for Item 304
	B. Bituminous Materials
	Quantity: 7.2 to 11 liters/sq. m
$1 + 206 = D_{1} + 1 + 1 = 0 = 0$	Same test as for Item 301
Item 306 – Bituminous Road Mix Surface	A. Aggregates
Course	Same tests as for Item 304

ITEMS OF WORK	MINIMUM TEST REQUIREMENTS
	B. Bituminous Materials
	Quantity:
	1. Using Cut-Back Asphalt – 4.5 to 7.0 mass % of total
	dry aggregate
	2. Using Emulsified Asphalt – 6.0 to 10.0 mass % of
	total dry aggregate.
	Same test as for Item 301
	C. Mix
	Tests: For every 75 cu. m/130 tons or fraction thereof:
	1-G, Grading Test
	1-Extr., Extraction
	1-Sty., Stability
	1-C, Laboratory Compaction
	D. Hydrated Lime
	For every 100 tons or fraction thereof:
	Tests: 1-Q, Quality Test
	E. Compacted Pavement
	For each full day's operation:
	Tests: D & T, Density and Thickness Tests – at least 1
	but not more than 3 samples shall be taken.
Item 307 – Bituminous Plant Mix Surface	A. Aggregates
Course General	For every 75 cu. m/200 tons or fraction thereof:
	1-G & P, Grading and Plasticity Tests
	For every 1,500 cu. m or fraction thereof: 1-Q, Quality Test for Grading, Plasticity, Abrasion,
	Stripping and Bulk Specific Gravity
	1-F, Fractured Face
	B. Bituminous Materials
	Quantity: 5.0 to 8.0 mass % of total dry aggregate
	Tests: 1-Q, Quality Test for each 40 tons or fraction
	thereof.
	C. Mix
	For every 75 cu. m/130 tons or fraction thereof:
	1-G, Grading Test
	1-Extr., Extraction
	1-Sty., Stability
	1-C, Laboratory Compaction
	D. Hydrated Lime
	For every 100 tons or fraction thereof:
	Tests: 1-Q, Quality Test
	E. Mineral Filler
	For every 75 cu. m or fraction thereof:
	1-G & P, Grading and Plasticity Tests (LL, PL, PI)
	For each full day's operation:

ITEMS OF WORK	MINIMUM TEST REQUIREMENTS
	D & T, Density and Thickness Tests – at least 1 but not
	more than 3 samples shall be taken.
Item 308 – Cold Asphalt Plant Mix	A. Aggregates
	Same tests as for Item 307
	B. Bituminous Materials
	Quantity:
	Using Cut-Back Asphalt – 4.5 to 7.0 mass % of total
	dry aggregate
	Using Emulsified Asphalt – 6.0 to 10.0 mass % of total
	dry aggregate.
	Tests: 1-Q, Quality Test for each 40 tons or 200 drums
	or fraction thereof.
	C. Mix
	Same tests as for item 307
	D. Hydrated Lime Same tests as for item 307
	E. Mineral Filler
	For every 75 cu. m or fraction thereof:
	1-G & P, Grading and Plasticity Tests (LL, PL, PI)
	F. Compacted Pavement
	Same tests as for item 307
Item 309 – Bituminous Plant Mix	A. Aggregates
(Stockpile Maintenance	Same tests as for Item 307
Mixture)	B. Bituminous Materials
	Quantity: 4 to 10 mass % of total mix
	Tests: 1-Q, Quality Test for each 40 tons or 200 drums
	or fraction thereof.
	C. Mix
	Same tests as for item 307
	D. Hydrated Lime
	Same tests as for item 307 E. Mineral Filler
	Same tests as for item 307
	F. Compacted Pavement
	Same tests as for item 307
Item 310 – Bituminous Concrete Surface	A. Aggregates
Course, Hot Laid	Same tests as for Item 307
· ·	B. Bituminous Materials
	Quantity: 5 to 8 mass % of total dry aggregates
	Tests: 1-Q, Quality Test for each 40 tons or 200 drums
	or fraction thereof.
	C. Mix
	Same tests as for item 307
	D. Hydrated Lime

ITEMS OF WORK	MINIMUM TEST REQUIREMENTS
	Same tests as for item 307
	E. Mineral Filler
	Same tests as for item 307
	F. Compacted Pavement
	Same tests as for item 307
Item 311 – Portland Cement Concrete	A. Cement
Pavement	Quantity: 9.00 bags/cu. m (40 kg/bag)
	Tests: for every 2,000 bags or fraction thereof
	1-Q, Quality Test
	B. Fine Aggregate
	Quantity:
	1. 0.5 cu. m/cu. m of concrete if rounded coarse
	aggregate is used.
	2. 0.54 cu. m/cu. m of concrete if angular coarse
	aggregate is used.
	Tests: for every 1,500 cu. m or fraction thereof
	(1) For a source not yet tested or that failed
	in previous
	quality tests:
	1-Q, Quality Test for Grading, Elutriation (Wash),
	Bulk Specific Gravity, Absorption, Mortar Strength,
	Soundness, Organic Impurities, Unit Weight, %Clay
	Lumps and Shale
	b. For a source previously tested and that passed
	quality test:
	1-Q, Quality Test for Grading, Elutriation (Wash),
	Bulk Specific Gravity, Absorption, and Mortar Strength.
	For every 75 cu. m or fraction thereof:
	1-G, Grading Test
	C. Coarse Aggregate
	Quantity:
	1. 0.77 cu. m/cu. m of concrete if rounded coarse
	aggregate is used.
	2. 0.68 cu. m/cu. m of concrete if angular coarse
	aggregate is used.
	Tests: for every 1,500 cu. m or fraction thereof
	a. For a source not yet tested or that failed in previous
	quality test:
	1-Q, Quality Test for Grading, Bulk Specific
	Gravity, Absorption, Abrasion, and Unit Weight.
	b. For a source previously tested and that passed
	quality test:
	1-Q, Quality Test for Grading, Absorption, Bulk
	Specific Gravity, and Abrasion.

ITEMS OF WORK	MINIMUM TEST REQUIREMENTS
	For every 75 cu. m or fraction thereof:
	1-G, Grading Test
	D. Water
	Tests:
	1-Certificate from Project Engineer
	1-Q, Quality Test, if source is questionable.
	E. Joint Filler
	1. Poured Joint Filler
	1-Q, Quality Test on each type of ingredient for each
	shipment.
	2. Premolded Joint Filler
	1-Q, Quality Test on each thickness of filler for each shipment.
	F. Special Curing Agents
	1-Q, Quality Test for each shipment
	G. Steel Bars
	For every 10,000 kg or fraction thereof for each size:
	1-Q, Quality Test for Bending, Tension and
	Chemical Analysis.
	G. Concrete
	Flexular Strength Test on Concrete Beam Sample
	1-set consisting of 3 beam samples shall represent a 330
	sq. m of pavement, 230 mm depth or fraction thereof
	placed each day. Volume of concrete not more than 75
	cu. m.
	I. Completed Pavement
	Thickness determination by concrete core drilling on a
	lot basis.
	5 holes per km per lane or 5 holes per 500 m when 2
	lanes are poured concurrently.
PART F – BRIDGE CONSTRUCTION	
Item 400 - Piling	A. Concrete Piles
	1. Concrete: Same tests as for Item 405.
	2. Reinforcing Steel: Same tests as for Item 404.
	B. Structural Piles
	1-Q, Quality Test/Mill Test Certificate
	1-IR, Inspection Report
Item 401 - Railings	A. Concrete: same tests as for Item, 405, Class C
_	B. Reinforcing Steel: same tests as for Item 404.
Item 403 – Metal Structures	1-Q, Quality Test/Mill Test Certificate for each type of
	material used
	1-IR, Inspection Report for each type and shipment of
	Metal used

ITEMS OF WORK	MINIMUM TEST REQUIREMENTS
Item 404 – Reinforcing Steel	A. Bar Reinforcement for Concrete for every 10,000 kg or
	fraction thereof for each size:
	1-Q, Quality Test for Bending, Tension and Chemical
	Analysis
	B. Wire and Wire Mesh
	1-Q, Quality Test
Item 405 – Structural Concrete	A. Cement
	Quantity: (40 kg/bag)
	Class A 9.0 bags/cu. m of concrete
	Class B 8.0 bags/cu. m of concrete
	Class C 9.5 bags/cu. m of concrete
	Class P 11.0 bags/cu. m of concrete
	Tests: for every 2,000 bags or fraction thereof
	1-Q, Quality Test
	B. Fine Aggregate
	Quantity: cu. m/cu. m of concrete
	For Rounded For Angular
	Class A 0.50 0.54
	Class B 0.45 0.52
	Class C 0.53 0.50
	Class P 0.44 0.47
	Tests: for every 1,500 cu. m or fraction thereof
	(2) For a source not yet tested or that failed
	in previous
	quality tests:
	1-Q, Quality Test for Grading, Elutriation (Wash),
	Bulk Specific Gravity, Absorption, Mortar Strength,
	Soundness, Organic Impurities, Unit Weight, %
	Clay Lumps and Shale
	b. For a source previously tested and that passed
	quality test:
	1-Q, Quality Test for Grading, Elutriation (Wash),
	Bulk Specific Gravity, Absorption, and Mortar
	Strength.
	For every 75 cu. m or fraction thereof:
	1-G, Grading Test
	C. Coarse Aggregate
	Quantity: cu. m/cu. m of concrete
	For Rounded For Angular
	Class A 0.77 0.68
	Class B 0.82 0.73
	Class C 0.70 0.68
	Class P 0.68 0.65
	Tests: for every 1,500 cu. m or fraction thereof

ITEMS OF WORK	MINIMUM TEST REQUIREMENTS
	b. For a source not yet tested or that failed in previous
	quality test:
	1-Q, Quality Test for Grading, Bulk Specific
	Gravity, Absorption, Abrasion, and Unit Weight.
	b. For a source previously tested and that passed
	quality test:
	1-Q, Quality Test for Grading, Absorption, Bulk
	Specific Gravity, and Abrasion.
	For every 75 cu. m or fraction thereof:
	1-G, Grading Test
	D. Water
	1-Certificate from Project Engineer
	1-Q, Quality Test, if source is questionable.
	E. Premolded Filler for expansion joints
	1-Q, Quality Test on each thickness of filler for each
	shipment.
	F. Steel Reinforcement
	1-Q, Quality Test for every 10,000 kg or fraction
	thereof.
	G. Concrete
	Compressive strength on concrete cylinder samples. 1
	set consisting of 3 concrete cylinder samples shall be
	taken from each day's pouring and to represent not
	more than 75 cu. m or fraction thereof.
Item 406 – Prestressed Concrete	A. Concrete: Same tests as for Item 405, Class P
Structures	B. Reinforcing Steel: Same tests as for Item 404.
	C. Wire Strand
	1-Q, for every 20 tons or fraction thereof.
Item 407 – Concrete Structures	Same tests as for Items 403, 404, 405 and 411.
	Elastomeric Bearing Pad will be tested to determine its
	quality.
Item 408 – Steel Bridges	Same tests as for Items 403 and 411.
	Painting:
	1-Q, One 20-liter can for every 100 cans or fraction
	thereof, or
	1-Q, One 4-liter can for every 100 cans or fraction thereof.
Item 409 – Welded Structural Steel	Same tests as for Item 403 and Inspection Report.
Item 411 - Paint	1-Q, One 20-liter can for every 100 cans or fraction
	thereof, or
	1-Q, One 4-liter can for every 100 cans or fraction thereof.
PART G – DRAINAGE AND SLOPE	
PROTECTION	
Item 500 – Pipe Culverts and Storm	A. Pipes
	11. 1 pos

ITEMS OF WORK	MINIMUM TEST REQUIREMENTS
Drains	Pipe for every 50 pieces: Strength, Absorption and
	Dimension.
	Alternative Requirements:
	1-set consisting of 3 concrete cylinder samples for not
	more than 25 pipes cast in the field and 1-Inspection
	Report for each size for not more than 25 pipes cast in
	the field.
	B. Mortar for Joint
	Cement, Fine Aggregates and Water – Same tests as for
	Item 405.
Item 501 – Underdrains	A. Concrete Pipe (Non-Reinforced)
	0.5% of the number of pies of each size but not less
	than 2, for Strength, Absorption and Dimension.
	Alternative Requirements:
	1-set consisting of 3 concrete cylinder samples for not
	more than 25 pipes cast in the field and 1-Inspection
	Report for each size for not more than 25 pipes cast in
	the field.
	B. Clay Pipe
	1-Pipe for every 200 pieces each size, with a minimum
	of 2 specimens for Strength, Absorption and
	Dimension.
Item 502 – Manholes, Inlets and Catch	A. Concrete
Basins	Same tests as for Item 405, Class A.
	B. Lids, Cast Iron Frames and Grating
Itam 502 Cleaning and Desan ditioning	Inspection Report
Item 503 - Cleaning and Reconditioning	Inspection Report
Existing Drainage Structures Item 504 – Riprap and Grouted Riprap	Same tests as for Item 505
	A. Cement
Item 505 – Stone Masonry	Quantity: 2 bags/cu. m of concrete
	Tests: For every 2,000 bags or fraction thereof
	1-Q, Quality Tests
	B. Fine Aggregate
	Quantity: 0.17 cu. m/cu. m of concrete.
	Tests: For every 2,000 bags or fraction thereof
	1-Q, Quality Test - same as for Item 405.
	For every 75 cu. m or fraction thereof/
	C. Stone
	Inspection Report
	D. Water
	1-Certificate from Project Engineer
	1-Q, Quality Test, if source is questionable.
Item 506 – Hand-Laid Rock	Inspection Report

ITEMS OF WORK	MINIMUM TEST REQUIREMENTS
Embankment	
Item 507 – Sheet Piles	A. Concrete Sheet Piles
	Same tests as for Item 404.
	B. Steel Sheet Piles
	Same tests as for Item 403.
Item 508 – Concrete Slope Protection	A. Bed Course
I	Same tests as for Item 200.
	B. Steel Reinforcement
	Same tests as for Item 404.
	C. Concrete
	Same tests as for Item 404.
Item 509 – Gabions	1-Q, Quality Test for each shipment
item 505 Gubions	
PART H – MISCELLANEOUS	
STRUCTURES	
Item 600 – Curb and Gutter	A. Concrete
item 600 – Curb and Outler	
	Quantity:
	0.078 cu. m/m (Curb only)
	0.092 cu. m/m (Curb and Gutter, Type A)
	0.149 cu. m/m (Curb and Gutter, Type B)
	0.074 cu. m/m (Curb and Gutter, Type C)
	Same tests as for Item 405.
	B. Joint Filler
	Same tests as for Item 311.
Item 601 - Sidewalk	A. Concrete
	Same tests as for Item 405, Class A.
	B. Premolded Expansion Joint Filler
	Same tests as for Item 311.
Item 602 – Monuments, Markers and	A. Concrete
Guide Posts	Same tests as for Item 405.
	B. Reinforcing Steel
	Same tests as for Item 404.
	C. Paint
	Same tests as for Item 411.
Item 604 - Fencing	A. Barbed Wire, Chain Link Fabric
	1-Q, Quality Test
	B. Concrete Post
	Same tests as for Item 405.
	Steel Reinforcement: Same tests as for item 404.
Item 605 – Road Sign	Inspection Report
Item 606 - Pavement Markings	Inspection Report
Item 607 – Reflective Pavement Studs	Inspection Report
Item 608 - Topsoil	Inspection Report
Item 609 - Sprigging	Inspection Report
nem 007 - Sprigging	

ITEMS OF WORK	MINIMUM TEST REQUIREMENTS
Item 610 - Sodding	Inspection Report
Item 611 – Tree Planting	Inspection Report
PART I – MATERIAL DETAILS	
Item 700 – Hydraulic Cement	Same tests as for Item 405.
Item 701 – Construction Lime (Hydrated)	1-Q, Quality Test for every 100 tons or fraction thereof.
Item 702 – Bituminous Materials	Same tests as for Items 301, 302, 303, 306, 307, 308,
	309 and 310.
Item 703 – Aggregates	Same tests as for Items of work specified in the Bill of
	Quantities.
Item 703A–Mineral Filter	Same tests as for Item 405.
Item 704 – Masonry Units	1-Q, Quality Test for every 10,000 units or fraction
	thereof.
Item 705 – Joint Materials	Same tests as for Items 311 and 500.
Item 706 – Concrete, Clay, Plastic and	A. Concrete Pipes
Fiber Materials	Same tests as for Item 500.
	B. Clay and Other Types of Pipes
	Refer to applicable requirements of AASHTO Tests and
	Specifications.
Item 707 – Metal Pipe	Same tests as for Item 400.
Item 708 – Chemical Admixtures for \vec{a}	1-Q, Quality Test for each shipment.
Concrete	
Item 709 – Paints	Same tests as for Item 411.
Item 710 – Reinforcing Steel and Wire	A. Reinforcing Steel
Rope	Same tests as for Item 404.
	B. Wire Rope
Kens 711 Easter and Creating'i	Same tests as for Item 406.
Item 711 – Fence and Guardrail	A. Fence
	Same tests as for Item 604. B. Guardrail
Item 712 – Structural Metal	Same tests as for Item 603.Same tests as for Items 403 and 409.
Item 712 – Structural Metal Item 713 – Water	
item /15 – Water	1-Certificate from Project Engineer
	1-Q, Quality Test, if source is questionable.

Republic of the Philippines Department of Public Works and Highways

BIDDING DOCUMENTS NAIA Expressway Project

PART IV: DRAFT CONCESSION AGREEMENT

[Hogan Lovells ("HL") work-in-progress draft mark-up dated 24<u>01/0608</u>/2011]

CONCESSION AGREEMENT NAIA EXPRESSWAY PROJECT

This **Concession Agreement** entered into this [•] day of *[month]*, *[year]*, in *[place of signing]*, by and among:

The **GOVERNMENT OF THE REPUBLIC OF THE PHILIPPINES**, acting through its **DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS**, hereinafter referred to as the "**DPWH**," with office address at DPWH Building, Bonifacio Drive, Port Area, Manila, represented herein by its Secretary, [•].

- and -

[•], a corporation duly organized and existing under and by virtue of the laws of [•], with office address at [•], represented herein by its duly authorized representative,
 [•], and hereinafter referred to as the "Concessionaire;"

(collectively, the "**Parties**")

WITNESSETH, THAT:

WHEREAS, the DPWH, as the main agency of the Government of the Republic of the Philippines mandated to develop national roads including expressways in the Philippines, has decided to implement the NAIA Expressway Project in order to respond to the transport requirements of the area;

WHEREAS, on *[date]*, the DPWH obtained the approval of the Investment Coordination Committee of the National Economic and Development Authority to develop and implement the Project under a Build-Transfer-Operate contractual arrangement pursuant to Republic Act No. 6957, as amended, and its Implementing Rules and Regulations (the "**BOT Law**");

WHEREAS, the Concessionaire has been <u>formed by the winning bidder that was</u> selected by the DPWH to undertake the Project on the terms and conditions set forth in this Concession Agreement as the result of a competitive public bidding process conducted by the DPWH under the applicable provisions of the BOT LawBOT Law and the Concessionaire has duly acceded to undertake the Project.

NOW THEREFORE, for and in consideration of these premises and the mutual commitments, obligations and undertakings assumed and accepted hereunder, the Parties have agreed as follows:

SECTION 1.0 DEFINITIONS AND RULES OF INTERPRETATION

1.1 Definitions

In this Concession Agreement, each of the following terms has the meaning stated below, unless its context as used in this Concession Agreement clearly indicates otherwise:

"Additional Right of Way" means the land or land rights required for the Project that the Concessionaire shall provide at its own cost, as provided in Section 8.2.

"Affiliate" means, a corporation or entity that, directly or indirectly, Controls the Concessionaire or is associated with the Concessionaire under common ownership and Control.

"Approved O&M Manuals" means the O&M Manuals as approved by the DPWH, as provided in Section 12.3 (a).

"Asset Register" means the inventory initially prepared by the DPWH set out in Annex A describing all of the assets comprising Phase I and their condition and capacity, as updated by the Concessionaire to include a description of all assets comprising the NAIA Expressway in accordance with Sections 10.10(h) and 12.4(d) and such other documents and information as required in Section 4.5-e of the Minimum Performance Standards and Specifications.

"Basic Right of Way" means the land or land rights required for the Project as set out in Annex A of the Minimum Performance Standards and Specifications

"Bid" means the offer submitted by the Concessionaire during the public bidding conducted by DPWH for the Project, consisting of the bid letter including the bid security, qualification documents, Technical Proposal, and financial proposal.

"*Bidding Process*" means the public tender held in accordance with the BOT Law for the award of the Project and this Concession Agreement.

"Blue Book" refers to the DPWH Standard Specifications for Public Works and Highways, 2004 Edition, Volume II (Highways, Bridges and Airports)

"BOT Law" means Republic Act No. 6957, as amended by Republic Act No.7718, and its Implementing Rules and Regulations.

"Certificate of Final Completion" or *"CFC"* means the document issued by the DPWH after the Independent Consultant certifies that all the conditions in Section 10.10 (c) have been fulfilled.

"Certified DED" means the Detailed Engineering Design as certified by the Independent Consultant pursuant to Section 11.5 (b)(i)

"Change in Law" means any repeal, amendment, modification, change, addition to, deletion from, any applicable law, regulation, order, decision or judgment of any Government Authority, or the enactment or issuance of any new law or regulation by any Government Authority, in each case which (i) occurs after the Signing Date, (ii) the Concessionaire is legally obliged to comply with, and (iii) the Concessionaire had no knowledge of, or could not reasonably be expected to have had knowledge of, prior to the date of this Concession Agreement.

IFC - NAIA Expressway - TCA mark-up following 15 June 11 meeting-96745V6 and IFC - NAIA Expressway - TCA - DOF mark-up 290711 (clean copy)-97813V5 8/1/2011 8:42:55 PM

"Coercive Practice" means impairing or harming, or threatening to impair or harm, directly or indirectly, or exercising undue influence upon any person or property to influence any person's participation or action in the Bidding Process or the implementation of the Concession Agreement.

"Conceptual Engineering Design" means the conceptual engineering design relating to the Project provided by the Concessionaire in its Technical Proposal, a copy of which is attached as part of Annex E.

"Concessionaire" means the stock corporation which is a Party to this Concession Agreement.

"Concessionaire Default" means any of the events of default for which the Concessionaire is responsible as described in Section 17.2.

"Concessionaire Proposal" has the meaning given in Section 10.7.

"Concession Agreement" means this agreement, including its Annexes, as may be, from time to time, amended, revised, modified or supplemented.

"Concession Period" has the meaning given in Section 4.0.

"Conflict of Interest" means an actual or potential conflict situation due to a member of the board of directors, partner, officer, professional advisor, or agent of the Concessionaire or any of the shareholders of the Concessionaire (as of the Signing Date) or any of their Affiliates being related by consanguity or affinity up to the third civil degree to any officially designated member of the SBAC (including the technical working group of the SBAC and their advisers) or employee of DPWH involved in the Project.¹

"Consent" means any permit, license, approval, concession, right, award, registration, certification, waiver, exemption, or other authorization, including any amendments thereto, that is required under the terms of or in connection with this Concession Agreement, [but which, for the avoidance of doubt, shall exclude Consents required for the Basic Right of Way and the Toll Operation Certificate.]¹.

"Construction" means all aspects of construction work and activities relating to the Project, as provided in Section 10.0.

"Construction Completion Deadline" means the date that is twenty four (24) months after the issuance of the Notice to Proceed, as the same may be extended in accordance with the Concession Agreement.

"Construction Completion Report" means the report to be issued by the Concessionaire pursuant to Section 10.10 (h) in the form contained in Annex $[...]^2$ and containing the

¹NOTE: SHOULD THIS EXTEND TO OTHER GOVERNMENT AGENCIES WHO ARE INFORMALLY/UNOFFICIALLY INVOLVED IN THE DEVELOPMENT AND AWARD OF THE PROJECT? ⁴HL NOTE: DPWH/DOF TO CONFIRM THIS CARVE OUT IS AGREEABLE.

²HL NOTE: DOF"S "OUTSTANDING ISSUES" INTRODUCES THE CONSTRUCTION COMPLETION REPORT AS A REQUIREMENT POST-CONSTRUCTION COMPLETION. DPWH/DOF TO PROVIDE A

contents as may be reasonably required by the DPWH.

"Construction Contractor" means the entity engaged by the Concessionaire to undertake the Construction for the Project.

"Construction Dispute" means any dispute over which the Construction Industry Arbitration Commission ("CIAC") has exclusive and original jurisdiction as provided by the CIAC charter and by applicable decisions of the Supreme Court of the Philippines.

"Construction Long-stop Date" means the date that is five (5) months after the Construction Completion Deadline.

"Construction Performance Security" means the security posted by the Concessionaire to guarantee its faithful performance of its obligations from the Signing Date until the date that is one (1) year after the date of the issuance of the Toll Operation Certificate, as provided in Section 6.0.

"Construction Period" means the period from the date of issuance of the Notice to Proceed until the date of issuance of the Certificate of Final Completion.

"Construction Schedule" means the schedule for Construction set out in the Certified DED.

"Contractor" means the entity engaged by the Concessionaire to undertake the Construction for the Project.

"Control" means the power to direct or cause the direction of the management policies of a body corporate whether through: (i) ownership of at least fifty one percent (51%) of the outstanding voting shares or (ii) ownership of at least twenty percent (20%) of the outstanding voting shares and possession of at least fifty one percent (51%) of the voting rights through voting trust or other voting agreements.

"Corrupt Practice" means (a) any of the prohibited acts under Republic Act 3019 otherwise known as the Anti-Graft and Corrupt Practices Act and section 7 of Republic Act 6713 including the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the actions of any person connected with the bidding process or the implementation of the Concession Agreement; and/or (b) engaging or hiring in any manner whatsoever any natural person in respect of any matter relating to the NAIA Expressway or the Concession Agreement, who, at any time was a legal, financial or technical adviser or employee of the DPWH in relation to or involved in any matter concerning the Project, save where such person's engagement or employment by DPWH has been terminated for a period of not less than one (1) year; for the avoidance of doubt, this excludes the institutions engaged by DPWH as legal, financial or technical advisers, but includes the specific persons handling the transaction in these institutions.

"Debt" means the aggregate of all outstanding amounts of all indebtedness and other liabilities of any nature of the Concessionaire, including accrued interest, other charges, and preferred shares (provided that such preferred shares rank above the common shares of stock of the Concessionaire with regard to payment).

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TEMPLATE CONSTRUCTION COMPLETION REPORT TO ANNEX TO THE AGREEMENT.

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"Defects Performance Security" means the security to be posted by the Concessionaire to guarantee its faithful performance of its obligations contained in Section 19.0.

"Delay Interest" is defined in Section 13.3 (a).

"Design" means the preparation by the Concessionaire of the Detailed Engineering Design in accordance with Section 9.0.

"Detailed Engineering Design" or "DED" means the detailed engineering design, including plans, drawings, specifications, and design computations for Phase II and the Phase I Adjustment Works, prepared by the Concessionaire in accordance with the Concession Agreement including the Minimum Performance Standards and Specifications and the Conceptual Engineering Design, as required to be submitted in Section 9.2.

"Dispute" is defined in Section 21.1.

"DPWH" means the Department of Public Works and Highways.

"DPWH Default" means any of the events of default for which the DPWH is responsible as described in Section 17.3.

"DPWH Termination Payment" means the payment payable by DPWH to the Concessionaire under Section 17.4 and calculated in accordance with Annex J.

"Equity" means the total <u>nominal audited book</u> value of all <u>of the common shares of stock of the Concessionaire which are issued and outstanding³, plus current retained earnings of the Concessionaire.</u>

"Expressway Toll" means the <u>feeamount of toll to be</u> charged to the and collected from users of Phase I and Phase II together, or Phase II only (as applicable), as authorized or the NAIA Expressway at the fixed toll rate specified in Section 13.1 for the appropriate vehicle class for motorists travelling on the NAIA Expressway, save for those whose use of the NAIA Expressway is covered by the Terminal 3 Toll, as adjusted in accordance with Section 13.0.

"Expressway Toll Rate" means the amount of Expressway Toll charged per vehicle type.

"Facility Operator" means the entity engaged by the Concessionaire in accordance with <u>Sections 12.2</u> to undertake the Operation and Maintenance of the NAIA Expressway.

"Financing Agreements" mean the agreements or instruments that make available or extend loans, credit, notes, bonds, subordinated debt, letters of credit, credit security, swaps, derivatives, hedging instruments, and other documents relating to the financing or refinancing of the Project provided by any Lender, including any amendments, supplements,

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³ IFC NOTE TO DPWH/DOF: SHOULD EQUITY ALSO INCLUDE RETAINED EARNINGS? EQUITY REPRESENTS A RESIDUAL CLAIM AFTER LIABILITIES, WHICH SHOULD ACCRUE TO SHAREHOLDERS, THUS SHOULD INCLUDE RETAINED EARNINGS. NOTE THAT IF A COMPANY IS NOT PROFITABLE, RETAINED EARNINGS COULD BE NEGATIVE WHICH WILL THEN DEPRESS THE TOTAL AMOUNT OF EQUITY AND LEAD TO A HIGHER GEARING RATIO THIS WILL NOT BE CAPTURED IF RETAINED EARNINGS ARE NOT INCLUDED IN THE DEFINITION OF "EQUITY".

extensions, and renewals of that financing or refinancing, original copies of which shall be certified and submitted by the Concessionaire to DPWH.

"Financial Closure" means the achievement of the requirements described in Section 7.2 (b).

"Force Majeure" or "Force Majeure Event" is defined in Section 15.0.

"Foregone Toll Income" or "FTI" is defined in Section 13.3.

"Fraudulent Practice" any hoax, delusion, falsification, scheme, artifice, dishonesty, trickery, deceit, cheating and the like, especially when involving misrepresentation, omission, concealment, suppression, non-disclosure or disclosure of incomplete facts, whether in fact or equity, in order to influence the bidding process or implementation of the Concession Agreement.

"Government Authority" means any national or local agency, instrumentality, body, official, employee or agent of the Republic of the Philippines exercising executive, legislative, judicial, or administrative powers and having jurisdiction or authority over the matter in question.

"Government Financial Support" or *"GFS"* means the funds provided by the DPWH to finance part of the costs for Construction of the NAIA Expressway, as provided in Section 7.4.

"Incident" means any event that causes a delay in Construction, not due to the fault or negligence of the Concessionaire or any subcontractor(s), as enumerated in Section 10.8 (b).

"Independent Consultant" means the person or firm appointed by the Parties to provide independent advice to the Parties for the Design and Construction of the Phase I Adjustment Works and Phase II, as provided in Section 11.0.

"Independent Consultant Contract" means the contract of appointment of the Independent Consultant by the DPWH and the Concessionaire.

"Independent Expert" means the person to whom Disputes involving Termination Payment are referred, as provided in Section [$\frac{21.3}{21.2}$].

"Inspection Reports" means the reports prepared by the Concessionaire after it conducts its periodic inspection of the NAIA Expressway to determine its condition during the Operation Period, as provided in Section 12.4 (b).

"Instructions to Bidders" refers to the instructions to bidders issued by the DPWH during the Bidding Process including any supplemental notices and bid bulletins issued by the <u>SBAC</u>.

"Key Performance Indicator" refers to the standards or requirements for major aspects of the Operation and Maintenance of the NAIA Expressway, as defined in Section 4.10 of the Minimum Performance Standards and Specifications.

"Lead Member" means the shareholder of the Concessionaire identified in Annex K as the lead member.

"*Lender(s)*" means any person(s), providing loans or other financing or refinancing to the Concessionaire under the Financing Agreements, including its successors, assignees, agents and trustees, but not including the shareholders of the Concessionaire and their affiliates.

"Leverage Ratio" means Debt / (Debt + Equity) x 100, expressed as a percentage.

"Liquidated Damages" is defined in Section 10.11 (a).

"Maintenance" means the day-to-day upkeep and repair of the NAIA Expressway, necessary or required for its safe and proper operation, including the provision of labor, materials, equipment, and supervision, in accordance with Section 12.0.

"Material Adverse Government Action" is defined in Section 16.1.

"Milestones" means specific key events in the implementation of the Concession Agreement as enumerated in Section 5.0.

"Minimum Performance Standards and Specifications" mean the minimum performance or functional standards and specifications that the Concessionaire must comply with in undertaking the Design, Construction, Operation and Maintenance of the Project, as provided in Annex B.

"Monthly Report on Operation and Maintenance" means the report in the format set out in Annex I to be issued by the Concessionaire to the DPWH in relation to the Operation and Maintenance in each relevant month as further provided in Section 12.4 (c).

"NAIA Expressway" means Phase I and Phase II.

"Notice to Proceed" means the notice issued by the DPWH to the Concessionaire authorizing the commencement of the Construction, as provided in Section 10.3.

"*Notice of Default*" means a written notice of default issued by a non-defaulting Party to a defaulting Party in accordance with Section 17.0.

"Notice of Termination" means a written notice issued by a Party to the other Party terminating the Concession Agreement as of the date stated therein (without prejudice to the rights of the Lenders to appoint a Substitute Concessionaire in accordance with Section 17.2(e)).

"O&M Experience Requirements" means the level of experience and expertise required for the Operation and Maintenance of the Project as specified in Section $[...]^{43}$ of the Instructions to Bidders.

"O&M Liquidated Damages" is defined in Section 12.3 (d).

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⁴³ TO BE INSERTED ON FINALISATION OF ITB.

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"O&M Manuals" mean the manuals detailing the standards, guidelines, procedures and requirements of the DPWH in respect of the Operation and Maintenance of the NAIA Expressway that shall be prepared and submitted by the Concessionaire in accordance with Section $\frac{12.310.4}{12.310.4}$ (ae).

"O&M Performance Security" means the security posted by the Concessionaire in favour of the DPWH to guarantee the faithful performance of its obligations pursuant to the Concession Agreement during the Operation Period, as required in Section 12.5.

"Operation" means the day-to-day administration and management of the NAIA Expressway for its use by motorists, including the collection of Tolls from users of the NAIA Expressway and the utilization of necessary manpower, equipment and materials, in accordance with Section 12.0.

"Operation Period" means the period from the date of issuance of the Toll Operation Certificate until the end of the Concession Period or the termination of the Concession Agreement, whichever comes earlier.

"Party" or *"Parties"* means the Concessionaire and/or the DPWH, individually or collectively, as may be applicable.

"Permitted <u>Debt-to-EquityLeverage</u> Ratio" is defined in Section 7.1.

"Phase I" means all the physical attributes of civil, mechanical, structural and architectural works in the first phase of the NAIA Expressway constructed by the government, consisting of a 0.60.7 kilometer six-lane viaduct from the Metro Manila Skyway along Sales StreetRoad to NAIA Terminal 3, an interchange at the junction with the Skyway, ramps with a total length of 2.0 kmsramps, toll plazasbooths, and toll equipment. The assets comprising Phase I as of the Signing Date are-described more particularly in the Asset Register.

"Phase I Adjustment Works" means corrective the adjustment works on Phase I to be undertaken by the Concessionaire in accordance with the this Concession Agreement including the original plans and specifications for Phase I which are set out in <u>Certified DED</u> and Annex C of the Minimum Performance Standards and Specifications.

"Phase II" means all physical attributes of the civil, mechanical, structural and architectural works in the second phase of the NAIA Expressway to be constructed by the Concessionaire pursuant to and in accordance with this Concession Agreement, including construction the <u>Certified DED and</u> the Minimum Performance Standards and Specifications and consisting of:

- (a) 4.6 km of 4-lane viaduct from NAIA Terminal 3 to Roxas Boulevard, over the existing roads of Sales <u>AvenueRoad</u>, Andrews Avenue, Domestic Airport Road and <u>MIANAIA</u> Road;
- (b) on and off ramps at strategic locations;
- (c) toll plazas; and
- (d) toll operating equipment.

"Project" is defined in Section 3.0.

"Project Dispute Resolution Board" means the dispute board resolution board composed of such members as are appointed in accordance with Section $\frac{21.221.1}{c}$ to resolve the disputes and disagreements described in Section $\frac{21.221.1}{b}$.

["Prudent Industry Practice" f^{54} means applying, in relation to the manner in which the construction obligations and the performance of services are rendered under this Concession Agreement, the standards, practices, methods and procedures conforming to all laws and regulations, and exercising that degree of skill, care, diligence, prudence and foresight that would reasonably and ordinarily be expected from a skilled and experienced person engaged in a similar type of undertaking under similar circumstances, including taking reasonable steps to ensure that:

- (a) adequate materials, resources, and supplies are available to meet the facilities' needs under normal conditions and reasonably anticipated abnormal conditions;
- (b) sufficient and duly licensed operating personnel (i) are available, (ii) are adequately experienced and trained to operate the facilities properly and efficiently, and (iii) are capable of responding to abnormal conditions;
- (c) preventive, routine, and non-routine maintenance and repairs (i) are performed on a basis that ensures reliable long-term and safe operation and (ii) are performed by knowledgeable, trained, and experienced personnel who are duly licensed and are using proper equipment, tools, and procedures;
- (d) appropriate monitoring and testing is done to ensure that the facility is functioning as designed and to provide assurance that infrastructure and equipment will function properly under both normal and abnormal conditions; and
- (e) equipment is operated in a manner safe to workers, the general public, and the environment.

"Quarterly Report on Construction" means the report on Construction referred to in Section 10.4(d) and in the form contained in Annex G.

⁵ HL NOTE: TECHNICAL CONSULTANT PROPOSED REQUIRING THE CONCESSIONAIRE TO OPERATE ISO 9001 OR EQUIVALENT MANAGEMENT SYSTEMS. DOES DPWH/DOF WANT TO INCLUDE SUCH A REQUIREMENT, EITHER AS A SEPARATE CLAUSE OR PERHAPS IN THIS DEFINITION WHICH LINKS TO SECTIONS 10.4(e) AND 12.3(f) ON THE CONCESSIONAIRE'S CONSTRUCTION AND O&M OBLIGATIONS?⁴ REQUIRING ISO CERTIFICATION RAISES THE PROJECT TO INTERNATIONAL STANDARDS AND MORE EXPLICITLY DEFINES THE STANDARD TO WHICH CONSTRUCTION AND O&M OBLIGATIONS ARE DELIVERED. IT IS NOTED THAT THE ITPB REQUIRES THE CONSTRUCTION CONTRACTOR TO BE ISO CERTIFIED. LF CAN DISCUSS ISO CERTIFICATIONS WITH DOF/DPWH.

"Restrictive Practice" means any act, scheme, plan or agreement such as forming a group, clique, cartel, trust, syndicate, combine, pool and the like or arriving at any understanding or arrangement among bidders with the objective of restricting, subverting or manipulating a full and fair competition in the bidding process.

"SBAC" means the "Special Bids and Awards Committee" for Public-Private Partnership Projects of the DPWH constituted under Special Order No. 68, dated 28 March 2011, pursuant to the BOT Law.

"Signing Date" means the date of the signing of this Concession Agreement.

"Subcontractor" means the person or entity engaged by the <u>Construction</u> Contractor or Facility Operator to undertake a part, but not the whole, of the Construction or the Operation and Maintenance of the NAIA Expressway.

"Substitute Concessionaire" means the entity nominated by the Lenders to take over the rights and obligations of the Concessionaire under this Concession Agreement in accordance with Section 17.2(e), who satisfies the conditions set out at Section 17.2(e)(ii).

"*Technical Proposal*" means the documents submitted by the Concessionaire as part of its bid, in compliance with Section $[4.5]^6$ of the Instructions to Biddersduring the Bidding Process, as set out in Annex E.

"Terminal 3 Toll" means the feeamount of toll to be charged to the and collected from users of Phase I only as authorized or the NAIA Expressway at the fixed toll rate specified in Section 13.1 for the appropriate vehicle class for motorists travelling on the NAIA Expressway between the Skyway and NAIA Terminal 3, and more particularly (a) from the existing "Toll Plaza A" to "Off-Ramp No. 11", and (b) from "On-Ramp No. 1" to "Toll Plaza A", as shown in Figure 1 and Section 2.3-o(2) of the Minimum Performance Standards and Specifications, as adjusted in accordance with Section 13.0.

"Terminal 3 Toll Rate" means the amount of Terminal 3 Toll charged per vehicle type.

"*Termination Date*" means the date on which the Concession Agreement is terminated in accordance with Section 17.0.

"Tests" mean the tests which the Concessionaire is required to conduct on the Construction, as provided in Sections 10.9 and 10.10.

"Toll" means the Terminal 3 Toll and/or the Expressway Toll as the context may require.

"*Toll Equivalent Unit*" has the meaning given in Section 4.10 of the Minimummeans the unit of measure used to define the monetary amount that may be imposed by DPWH for breach of a Key Performance Standards and SpecificationsIndicator.

"Toll Rate" means the Terminal 3 Toll Rate and/or the Expressway Toll Rate as the context may require.

⁶ TO BE CONFIRMED ON FINALISATION OF ITB.

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"Toll Rate Adjustments" is defined in Section 13.2.

"Toll Operation Certificate" means the certificate issued by the TRB to the Concessionaire or, as applicable, to the entity designated by the Concessionaire as the Facility Operator, authorizing the operation of the NAIA Expressway as a public utility, including the collection of Tolls.

"TRB" means the Toll Regulatory Board, an agency attached to the Department of Transportation and Communications.

"Undesirable Practice" means any other act, event or condition not otherwise considered as Corrupt, Fraudulent, Coercive, Restrictive or a Conflict of Interest but reasonably considered as wrongful, unethical or improper in public contract bidding, such as establishing contact with any person connected with or employed or engaged by the DPWH with the objective of canvassing, lobbying or in any manner influencing or attempting to influence the bidding process, the evaluation of bids, or the implementation of the Concession Agreement.

"Variation" means a change in the Minimum Performance Standards and Specifications for Design or Construction or the scope of the Project which, in the opinion of the DPWH, is necessary to comply with a Change in Law occurring during the Construction Period or to ensure the safety of the general public or the Project, and which does not arise from the breach, fault or negligence of the Concessionaire.

"Works Completion Status Statement" means a statement to be provided by the Concessionaire that the relevant percentage of Construction works contained in the table at Section 7.4 (b) have been completed by the Concessionaire.

"Works in Progress" means (at the date of issuance of a Notice of Termination pursuant to Section 17.2(e)) the permanent and temporary works including materials, goods, plant and equipment (other than constructional plant and equipment belonging to or which is the responsibility of the Concessionaire or the Concessionaire's sub-contractors or the Facility Operator or the Facility Operator's sub-contractors) for incorporation in the Construction works.

1.2 Rules of Interpretation

In this Concession Agreement, unless the context otherwise requires:

- (a) "Include," "includes," and "including" are deemed to be followed by "without limitation" or "but not limited to," whether or not actually followed by such words or words of like import.
- (b) References to any document or agreement shall be deemed to include references to such document or agreement as amended, supplemented, novated, varied or replaced from time to time.
- (c) References to a person include his successors and permitted assigns.
- (d) References to any gender include all genders, and references to the singular include the plural, and vice versa.
- (e) References to Sections and Annexes are references to Sections and Annexes of this Concession Agreement.
- (f) References to Annexes are references to Annexes of this Concession Agreement, including any annexes to the Annexes.
- (g) (f) Annexes are integral parts of this Concession Agreement.
- (h) (g)-Headings are for convenience only and shall not affect the interpretation or construction of any provision of this Concession Agreement.
- (i) (h) References to a "day" refers to a calendar day; reference to a "month" refers to calendar month, and a "year" as a period of time commencing on a particular date and ending on the day before the anniversary of such date
- (j) (i)-References to "Phase I Adjustment Works" and "Phase II" include such works in progress as may be completed by the Concessionaire in the corresponding segment of the NAIA Expressway during the Construction Period.
- (k) (i)-References to the Concessionaire in respect of its obligations and responsibilities Operation of the Project shall be construed as a requirement on the in the Concessionaire to procure its Facility Operator carry out the relevant operational obligations, if one has been appointed by the Concessionaire. Where a Facility Operator has been duly designated, it is understood that the Parties intend to fully comply with the requirement of Art. XII, Section 11 of the Constitution of the Republic of the Philippines and the Parties shall avoid and reject any interpretation of this Concession Agreement that would result in the violation thereof. In case of ambiguity, the Parties shall meet and agree on an interpretation consistent with the Constitution and the intent of this Concession Agreement. For the avoidance of doubt, notwithstanding the appointment of a Facility Operator, the Concessionaire shall remain responsible and liable to DPWH, in all cases, as provided in Section 12.2 (e). Likewise, for the avoidance of doubt, the Facility Operator and any Subcontractor shall in no case have any direct recourse or action against DPWH under this Concession Agreement except through the Concessionaire. For the latter purpose, the Concessionaire shall hold DPWH free and harmless against any such direct recourse by the Facility Operator or any Subcontractor.

SECTION 2.0 DOCUMENTS COMPRISING THE CONCESSION AGREEMENT

The following documents hereby comprise, and shall be read and construed as integral parts of, this Concession Agreement:

- (a) this Concession Agreement and
- (b) all of its Annexes, namely
 - Annex A: Asset Register
 - Annex B: Minimum Performance Standards and Specifications

- Annex C: TRB Board Resolution Providing for the Process and Requirements for the Application and Issuance of a Toll Operation Certificate and Toll Rate Adjustments
- Annex D: Copy of Construction Performance Security
- Annex E: Technical Proposal
- Annex F: Designated <u>Construction</u> Contractor, and Entity which Fulfills the O&M Experience Requirements.
- Annex H: Form of Quarterly Report on Construction
- Annex H: Concessionaire's Estimated Project Cost
- Annex I: Form of Monthly Report on Operation and Maintenance
- Annex J: Termination Payments
- Annex K: Shareholders of Concessionaire

SECTION 3.0 PROJECT DESCRIPTION

The Project shall consist of all aspects and activities pursuant to, in pursuance of, in relation to and/or in anticipation of the following: The Project consists of:

- (a) The financing, Design and Construction of:
 - (i) (a) Finance, Design and Construction by the Concessionaire of the Phase I Adjustment Works-and
 (ii) Phase II;
- (b) <u>The</u> Operation and Maintenance by the Concessionaire of the NAIA Expressway-as a toll facility.

SECTION 4.0 CONCESSION PERIOD

The Concession Period shall commence on the date of issuance of the Notice to Proceed and shall end on the date that is 35 years thereafter, unless otherwise extended in accordance with this Concession Agreement. Notwithstanding any other term of this Concession Agreement, the Parties acknowledge and agree that the Concession Period shall in no event be extended beyond the date that is fifty (50) years after the date of issuance of the Notice to Proceed.

SECTION 5.0 MILESTONES

The Parties shall cooperate, coordinate and work together to achieve the timely completion of the Project in accordance with the following Milestones (as may adjusted in accordance with Section 10.8):

<u>Section</u> Reference	Milestone	<u>Responsibility</u>	Deadline
<u>8.1</u>	Delivery of Basic Right of Way, as certified by the Independent Consultant	DPWH_	Twelve (12) months afterSigning Date
<u>9.2(c)</u>	Delivery of the Certified DED	Concessionaire	Twelve (12) months after Signing Date
7.2	Financial Closure	Concessionaire	Three (3) months afterissuance of Notice toProceed

Section-	Milestone	Responsibility	Deadline
Reference	Delivery of Pasia Dight of Way	DPWH-	Twolve (12) months
8.1	Delivery of Basic Right of Way, as certified by the Independent Consultant	DPWH	Twelve (12) months after Signing Date
9.2(c)	Delivery of the Certified DED-	Concessionaire-	Twelve (12) months after- Signing Date
7.2	Financial Closure	Concessionaire	Three (3) months after delivery of Basic Right of Way
10.3(b)	Issuance of Notice to Proceed	DPWH	Five (5) days after the later of delivery of Basic Right of Way (as certified by the Independent Consultant) and delivery of the Certified DED
12.3 <u>10.4</u> (ae)	Submission of O&M Manuals	Concessionaire	Eighteen (18) months after issuance of Notice to Proceed
10.3(c)	Construction Completion Deadline	Concessionaire	Twenty-four (24) months after issuance of Notice to Proceed, or as may be otherwise extended in accordance with Section 10.8
12.5(a)	Delivery of O&M Performance Security	Concessionaire	On or before the date that is two (2) days after Concessionaire's receipt of the Independent Consultant's notice that the conditions of Section 10.10 (c) have been satisfied.
10.10(f)	Issuance of Certificate of Final Completion	DPWH	Seven (7) days after receipt of the Independent Consultant's notice pursuant to Section 10.10 (e) and delivery of the O&M Performance Security

12.3(b)	Application with TRB and submission of all requirements for	Concessionaire	Seven (7) days after issuance of Certificate of
	Toll Operation Certificate		Final Completion
12.3(b)	Issuance of Toll Operation	TRB	Ten (10) days after
	Certificate	DPWH	submission to TRB of application and all requirements for issuance of Toll Operation Certificate
12.3(c)	Start of Operation Period	Concessionaire	Immediately upon issuance of Toll Operation Certificate
19.1(a)	Turnover of NAIA Expressway- to DPWH	Concessionaire	At the end of Concession- Period

<u>19.1(a)</u>	Turnover of NAIA Expressway	Concessionaire	At the end of Concession
	to DPWH		Period

SECTION 6.0 CONSTRUCTION PERFORMANCE SECURITY

- The Construction Performance Security shall secure the faithful performance by the (a) Concessionaire of its obligations under this Concession Agreement from Signing Date until one (1) year after the issuance of the Toll Operation Certificate.
- (b) The Concessionaire shall ensure that the Construction Performance Security in the amount of Three Hundred and Forty Two Million Pesos (PhP342,000,000) is at all times in full force and effect on and from the Signing Date until one (1) year after issuance of the Toll Operation Certificate. If for any reason, the Construction Performance Security is set to expire before the date that is one year after the issuance of the Toll Operation Certificate, the Concessionaire shall deliver to the DPWH a new standby letter of credit in the required amount issued by a universal bank or commercial bank licensed by the Bangko Sentral ng Pilipinas² and in a form which is acceptable to the DPWH no later than fifteen (15) days prior to the expiry of the existing Construction Performance Security. The replacement Construction Performance Security shall be effective from the day after the expiration date of the previous Construction Performance Security.
- If any amounts are drawn from the Construction Performance Security by the (c) DPWH, the Concessionaire shall, on or before the date that is ten (10) days after the date of drawing, deliver an additional standby letter of credit issued by a universal bank or commercial bank licensed by the Bangko Sentral ng Pilipinas⁶ and in a form acceptable to the DPWH and in an amount equivalent to the amount drawn by the DPWH, such that the amount of the Construction Performance Security should not fall below Three Hundred and Forty Two Million Pesos (PhP342,000,000) for a period longer than ten (10) days.
- (d) Without limiting the coverage of the Construction Performance Security as provided in Section 6.0 (a), the DPWH shall have the right to draw upon or forfeit the **Construction Performance Security:**
 - (i) for Liquidated Damages in the event that that Construction is not completed on or before the Construction Completion Deadline, including any extensions permitted under this Concession Agreement, as provided in Section 10.8;
 - (ii) for defects in or damages to the Phase I Adjustment Works and/or Phase II for a period of one (1) year after the issuance of the Toll Operation Certificate.

WE HAVE PROPOSED TO REMOVE THE WORDING RELATING TO DPWH'S ACCEPTANCE OF THE ISSUING BANK ON THE BASIS THAT (I) BSP'S LICENSING OF THE ISSUING BANK SHOULD PROVIDE SUFFICIENT PROTECTION TO DPWH, AND (II) BIDDERS WILL LIKELY REQUIRE AN EXPLANATION OF DPWH'S CRITERIA FOR DETERMINING THE "ACCEPTABILITY" OF THE ISSUING BANK OVER AND ABOVE BSP'S CRITERIA. SAME COMMENT AS ABOVE.

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- (iii) for any Concessionaire Default as described in Sections 17.2 (a), 17.2 (b), 17.2 (dc) (iiv), and 17.2 (d)(viii), 17.2 (d) (vi) to (xviiixix) upon issuance by the DPWH of the Notice of Default described in Section 17.2 (e)(i).
- (iv) for the costs of procuring and maintaining any insurances which the Concessionaire has failed to procure and maintain in accordance with Section 14.1 (a), in the event the Concessionaire has failed to reimburse such costs to the DPWH in accordance with Section 14.1 (e).
- (e) The DPWH shall release the Construction Performance Security on the date that is one (1) year after the issuance of the Toll Operation Certificate.
- (f) The Parties acknowledge that the right of the DPWH to call upon the Construction Performance Security in accordance with Section 6.0(d) shall not be exclusive of any other rights or remedies provided by applicable law or otherwise.

SECTION 7.0 FINANCING

7.1.Permitted **Debt-Equity**Leverage Ratio

The Concessionaire shall at all times during the Concession Period maintain a Debt-EquityLeverage Ratio not exceeding 80:20% (the "Permitted Leverage Ratio").

7.2.Financial Closure

- (a) The Concessionaire shall achieve Financial Closure not later than three (3) months after certification by the Independent Consultant of delivery of the Basic Right of Way by the DPWH in accordance with Section 8.1 (b)the issuance of the Notice to Proceed.
- (b) As evidence of Financial Closure, the Concessionaire shall submit to the DPWH the following documents:
 - (i) a certificate, in a form and substance reasonably satisfactory to the DPWH, issued and addressed by the Lenders to the DPWH confirming that the Financing Agreements are in full force and effect; and
 - (ii) a certificate, in a form and substance reasonably satisfactory to the DPWH, issued and addressed by the Concessionaire to the DPWH, confirming that (1) its paid-in capital is no less than [•] Pesos (PhP[•]) ⁷ and (2) the total amount of its paid-in capital and Financing Agreements is no less than the Concessionaire's estimated project costs set out in Annex H.

⁷ SUGGEST THAT IT SHOULD BE 20% OF THE PROJECT COST (LESS GFS) AS PER THE WINNING BIDDER'S FINANCIAL PROPOSAL TO BE FILLED IN AFTER THE BID.

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- (iii) an original copy of all of the Concessionaire's Financing Agreements which have been duly authorized and validly executed and which are in full force and effect; and
- (iv) an original copy of the shareholders' agreement and the equity subscription agreements of the Concessionaire's shareholders evidencing Equity and shareholding arrangements which have been duly authorized and validly executed and which are in full force and effect, and in respect of which all conditions precedent required under them have been fully satisfied.

7.3.Project-Related Costs

The DPWH-shall bear the following costs:

- (a) Government Financial Support of [•] Pesos (PhP[•]), as provided in Section 7.4;
- (b) cost of the Basic Right of Way, including the activities described in Section 8.1 (b); and
- (c) one-half of the costs for the Independent Consultant, as provided in Section 11.0.

Unless expressly stated elsewhere in this Concession Agreement, the Concessionaire shall be responsible for all other costs, losses and expenses arising as a result the exercise of its rights and the performance of its obligations under this Concession Agreement.

7.4. Government Financial Support

- (a) The DPWH shall provide Government Financial Support for the Project in the amount of [amount to be filled in after the bid- it will be the amount of the Winning Bidder's Bid Amount]•] Pesos (PhP[•]) which shall be used exclusively by the Concessionaire to finance part of the costs for Construction.
- (b) The DPWH shall release the Government Financial Support to the Concessionaire on or before the date that is thirty (30) days after its receipt of Concessionaire's Works Completion Status Statement as certified by the Independent Consultant, in accordance with the following terms and conditions:

Tranche	Amount to be Released	Percentage value of Construction work carried out based on the Construction Schedule
1^{st}	PhP [•]	Upon completion of 30% of Construction as
	(30% of GFS)	certified by the Independent Consultant
2^{nd}	PhP <mark>[●]</mark>	Upon completion of 70% of Construction as
	(40% of GFS)	certified by the Independent Consultant
3 rd	PhP <mark>[•]</mark>	Upon the issuance of the Certificate of Final
	(30% of GFS)	Completion

SECTION 8.0 RIGHT-OF-WAY

8.1. Basic Right of Way

- (a) The DPWH shall be responsible for obtaining the Basic Right of Way necessary for the Project.
- (b) The Basic Right of Way shall be made available by the DPWH to the Concessionaire on or before the date that is twelve (12) months after the Signing Date, free and clear from mortgages, pledges, liens, security interests, option agreements, claims, charges, or encumbrances of any kind, occupants (including informal settlers), and other structures, but excluding utilities (the relocation of which shall be conducted in accordance with Section 8.1 (d) below), so as to ensure that the Concessionaire can carry out the Project and perform all of its obligations under this Concession Agreement. Delivery of the Basic Right of Way in this manner shall be effective upon certification by the Independent Consultant as further referred to in Section 11.5(b)(ii)(2). In the event there is any current or pending adverse litigation with respect to the Basic Right of Way upon its delivery to the Concessionaire, the Independent Consultant shall be entitled to certify that the Basic Right of Way is delivered by the DPWH free and clear if the DPWH obtains a permit to enter, writ of possession, injunction or mandatory order allowing the DPWH and the Concessionaire to possess and occupy the Basic Right of Way for the purpose of commencing Construction and implementing this Concession Agreement, or when there is no legal or physical impediment for the Concessionaire to do so, provided that the DPWH shall keep the Concessionaire free and harmless from any suit or disturbance in the performance of its obligations under the Concession Agreement and to eliminate or resolve all litigated adverse claims.
- (c) The Basic Right of Way shall be made available by the DPWH to the Concessionaire at no cost to the Concessionaire.
- (d) Following delivery of the Basic Right of Way, as certified by Independent Consultant, the DPWH shall ensure that any necessary relocation of utilities shall be undertaken in a manner consistent with the Construction Schedule. The Concessionaire shall use its best endeavours to assist the DPWH as necessary in coordinating the relocation of utilities with its Construction Schedule. Any delay to the Construction in accordance with the Construction Schedule directly and solely arising from a failure or delay in the relocation of utilities by the DPWH (that is not attributable to any failure by the Concessionaire to coordinate its Construction Schedule with such relocation) shall, if so certified by the Independent Consultant, be deemed to be an Incident for the purposes of Section 10.8.
- (e) If the DPWH fails to deliver to the Concessionaire the Basic Right of Way, as certified by the Independent Consultant, on or before the date that is twelve (12) months after the Signing Date, and the Concessionaire has delivered the Certified DED on or before the date that is twelve (12) months after the Signing Date, the DPWH or Concessionaire shall have the right to terminate this Concession Agreement⁸ and in such circumstances the Concessionaire shall be entitled to

⁸ DOF/DPWH MAY WANT TO CONSIDER SIMPLY INCLUDING A 4 MONTH CURING PERIOD FOR DPWH TO DELIVER THE ROW. FURTHER, IT WOULD BE DIFFICULT TO DETERMINE WHAT WOULD BE A REASONABLE RATE TO COVER LOSSES (PRINCIPLE OF LDS). MAYBE WE CAN JUST PUT IN A PROVISION THAT ALLOWS PARTIES TO DISCUSS ON HOW TO PROCEED AND AGREE ON RELIEF TO BE APPLIED BY END OF CURING PERIOD CONCESSIONAIRE STILL OPTS TO CONTINUE. RELIEF COULD POTENTIALLY BE BASED ON (I) THE WINNING BIDDER'S PROJECTED REVENUES

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reimbursement for its actual costs directly and reasonably incurred in relation to the Project at the date of termination, subject to an overall monetary cap of [---One] Hundred and Thirty Six Millions Pesos (PhP136,000,000)]⁷⁹.

8.2. Additional Right of Way

The Concessionaire shall be responsible for and bear the cost of acquiring any Additional Right of Way which it needs for the Project and is not included in the Basic Right of Way. The DPWH shall use all reasonable endeavours to exercise its power of eminent domain in the Concessionaire's acquisition of such Additional Right of Way, provided that:

- (a) the Concessionaire has given to the DPWH not less than fifteen (15) days' notice of its request;
- (b) such Additional Right of Way is necessary for the Project and there are no feasible alternatives which do not require the use of the DPWH's powers of eminent domain;
- (c) the Concessionaire has undertaken, in form and substance satisfactory to the DPWH, to pay any and all of the DPWH's costs in the exercise of its powers of eminent domain for the acquisition of the Additional Right of Way
- (d) the DPWH shall own any Additional Right of Way so acquired;
- (e) the Concessionaire shall be entitled to the exclusive use and access to such Additional Right of Way in the period beginning on the date the DPWH becomes legally entitled to enter the land and ending upon the termination of the Concession Agreement or the expiry of the Concession Period, whichever comes first;
- (f) the DPWH does not make any undertaking, representation, or warranty that the institution of expropriation proceedings will result in a favorable judgment or outcome and the Concessionaire acknowledges that there is no legal certainty as to how a court may consider and rule upon the right of the DPWH to take possession of the Additional Right of Way, the possible defenses or objections that owners of the Additional Right of Way may raise, and the amount of just compensation for the property so taken; and
- (g) notwithstanding the DPWH's exercise of any right of eminent domain and the institution and pendency of any expropriation proceedings for the Additional Right of Way, the Concessionaire shall not be relieved from its obligations under this Concession Agreement and shall still be held to be responsible for any breach, delay

AS PER THE FINANCIAL MODEL (ALTHOUGH THIS RISKS INFLATED PROJECTIONS), (II) USE THE JICA PROJECTIONS, OR (III) USE THE NPV OF PROJECTED FREE CASHFLOWS, DISCOUNTED AT THE WACC BASED ON FINANCING COSTS AND INVESTOR'S COST OF EQUITY AS PER THEIR FINANCIAL MODEL.

⁴ HL NOTE: DPWH/DOF TO ADVISE THE AMOUNT TO BE INSERTED HERE.⁹ THIS FIGURE REPRESENTS 2% OF THE PROJECTED EFFECTIVE COST TO THE CONCESSIONAIRE (I.E., TOTAL PROJECT COST, LESS GFS, LESS ROW, LESS 50% IC COSTS, LESS IDC). THE CAP SHOULD BE SET SO AS TO AVOID A GOVERNMENT "INCENTIVE" TO TERMINATE IF ROW BECOMES DIFFICULT, AND SHOULD COMPENSATE THE CONCESSIONAIRE'S REASONABLE COSTS INCURRED TO DATE, BUT SHOULD ALSO NOT BE AN AMOUNT THAT WOULD BE A "BONUS" FOR THE CONCESSIONAIRE.

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or a-failure to meet any required Milestone or other requirement of this Concession Agreement.

SECTION 9.0 DESIGN

9.1. Standards and Specifications for Design

(a)—The Detailed Engineering Design must conform to the Minimum Performance Standards and Specifications and the Concessionaire's Conceptual Engineering Design.

(b) [The Concessionaire shall follow the minimum configuration for Phase II, including the alignment and location of the main expressway, ramps and toll plazas, as provided in Section 1.1 of the Minimum Performance Standards and Specifications]⁸.-

9.2. Obligations for Design

- (a) The Concessionaire shall prepare the DED in conformity with the requirements of the Concession Agreement and submit it to the <u>DPWH and the</u> Independent Consultant not later than $[nineten (910)]^{910}$ months after the Signing Date.
- (b) The Independent Consultant shall review the DED submitted by the Concessionaire and, on or before the date that is thirty fifteen (3015) days after delivery of the DED pursuant to Section 9.2(a) above, the DPWH may provide comments to the Independent Consultant if, in its reasonable opinion, the DED or any part of it does not conform to its submission, either certify its conformity with the requirements of the Concession Agreement including the Minimum Performance Standards and Specifications and the Conceptual Engineering Design, or notify the Concessionaire and the DPWH that the submitted DED does not conform with these requirements, citing the specific aspects that require revision. During the Independent Consultant, and, under the Independent Consultant Contract, the Independent Consultant shall be required to consider such comments.]¹⁰

The Concessionaire shall, on or before the date that is thirty

(b<u>30</u>) If the Independent Consultant concludes that the days after any notification that the submitted DED, or any part of it, does not conform with the requirements of this the Concession Agreement, the Concessionaire shall prepare and submit a revised DED. Upon such submission of a revised DED, the Independent Consultant shall review the revised DED submitted by the Concessionaire and, on or before the date that is fifteen (15) days after receipt of the Independent Consultant's notice of rejection of its submission, either certify its conformity with the requirements of the Concession Agreement or notify the Concessionaire and the DPWH that the revised DED does

⁸ HL NOTE TO DPWH/DOF: SHOULD THERE BE SOME REFERENCE TO THE PHASE I ADJUSTMENT-WORKS HERE? IS THERE ANY PARTICULAR REQUIREMENT TO KEEP THIS CLAUSE?-

⁹ HL NOTE:¹⁰ TIME PERIOD TO BE CONFIRMED. POSSIBLY SUBJECT TO CHANGE DEPENDING ON WHETHER DPWH/DOF WISH TO INCLUDE TH E PROVISION BELOW <u>BY DPWH PLEASE</u>.

¹⁰ HL NOTE TO DPWH/DOF: WE HAVE INSERTED THIS AS WE ASSUME DPWH WILL WANT THE ABILITY TO COMMENT ON THE DED TO THE IC, EVEN THOUGH THE IC ULTIMATELY CERTIFIES THE DED ITSELF. IF DPWH DOES REQUIRE AN ABILITY TO COMMENT ON THE DED, THE SUGGESTED TIME LINES FOR DED SUBMISSION/REVIEW MAY NEED ADJUSTMENT.

not conform with these requirements, citing the specific requirements with which it does not conform. This process shall be repeated by the Concessionaire until the Independent Consultant is satisfied that the DED is in conformity with the requirements of the Concession Agreement and certifies the same in accordance with Section 11.5(b)(i)(2).

- The Concessionaire shall deliver the Certified DED to the DPWH (in such quantities (c) and format as reasonably required by the DPWH) on or before the date that is twelve (12) months after the Signing Date.
- [Neither comments provided by the DPWH, nor] [c]ertification certification of the (d) DED by the Independent Consultant shall diminish the responsibility of the Concessionaire for the integrity of the DED, or transfer any part of such responsibility to the DPWH.

SECTION 10.0 CONSTRUCTION

10.1. Grant of Construction

Subject to the terms and conditions of this Concession Agreement, the DPWH grants to the Concessionaire the exclusive right, privilege, responsibility and obligation to undertake Construction for the Project which involves all work and activities necessary to construct the Phase I Adjustment Works and Phase II, as described in the Certified DED and the Minimum Performance Standards and Specifications.

Minimum Performance Standards and Specifications for Construction 10.2.

The Concessionaire shall carry out the Construction at all times in accordance with the requirements of this Concession Agreement including the Certified DED and the Minimum Performance Standards and Specifications for Construction.

Construction Period 10.3.

- The Concessionaire shall commence the Construction immediately¹¹ after the (a) issuance by the DPWH of the Notice to Proceed.
- (b) The DPWH shall issue the Notice to Proceed on or before the date that is five (5) days after the later of the following dates:
 - (i) date of delivery by the DPWH to the Concessionaire of the Basic Right of Way, as certified by the Independent Consultant, as provided in Section 8.1 (b); and
 - date of delivery by the Concessionaire to the DPWH of the Certified DED, as (ii) provided in Section 9.2.

¹¹ SHOULD A REASONABLE PERIOD BE ALLOWED, EG 30 DAYS?

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(c) The Construction and other requirements for the issuance of the Certificate of Final Completion shall be completed no later than the Construction Completion Deadline (as may be extended in accordance with Section 10.8).

10.4. Obligations for Construction

- (a) The Concessionaire shall be solely responsible for and shall bear all costs relating to the Construction.
- (b) ContractorsConstruction Contractor
 - (i) If the Concessionaire intends to subcontract out Construction activities it shall engage the services of any of the entityentities identified in Annex F as qualified to be engaged as the Construction Contractor. If the Concessionaire wants to use a Construction Contractor other than any of the entityentities identified in Annex F, it shall propose another Construction Contractor (with an equivalent or better level of experience, qualification, licensing and expertise than the existingany of the entities identified in Annex F as qualified to be engaged as the Construction Contractor), to DPWH and provide evidence of its qualifications and experience, and shall engage it only upon receipt of DPWH's written consent.
 - (ii) The <u>Construction</u> Contractor may engage Subcontractors to undertake specific parts, but not the whole, of the Construction. Each Subcontractor must be at least as well qualified as the <u>Construction</u> Contractor in respect of the tasks delegated to it.
 - (iii) The Concessionaire shall remain fully responsible and accountable for all of the actions and activities of its <u>Construction</u> Contractor and any Subcontractors, and for the quality of their works and services. The engagement of a <u>Construction</u> Contractor and any Subcontractors shall not diminish the responsibility of the Concessionaire for its Construction obligations as provided in this Concession Agreement.
- (c) The Concessionaire shall assume the responsibility for and shall bear the cost of securing all the necessary Consents required for the Construction. If requested by the Concessionaire, the DPWH shall provide reasonable assistance in securing Consents required from the relevant national government agencies.
- (d) On or before the date that is fifteen (15) days after the end of every calendar quarter, starting on the date of the Notice to Proceed until the issuance of the Toll Operation Certificate, and in addition forthwith upon completion of the Tests in Section 10.9 of this Concession Agreement, the Concessionaire shall submit to the DPWH a Quarterly Report on Construction, using the format in Annex G. The DPWH may, at any time, modify the form of the Quarterly Report on Construction by deleting or requiring additional information. The DPWH may also increase the frequency of submission of the required report, at any time.
- (e) The Concessionaire shall prepare manuals detailing the standards, guidelines, procedures and requirements of the DPWH in respect of the Operation and

Maintenance of the NAIA Expressway. The O&M Manuals shall be in accordance with the relevant standards and requirements in the Minimum Performance Standards and Specifications ("**O&M Manuals**"). The Concessionaire must submit the O&M Manuals to the DPWH for approval on or before the date that is eighteen (18) months after issuance of the Notice to Proceed.

(f) (e) The Concessionaire shall carry out the Construction of Phase II and the Phase I Adjustment Works at all times in accordance with <u>the requirements of any applicable Consent</u>, Prudent Industry Practice and any applicable law, regulation, order, decision or judgment of any Government Authority.

10.5. Supervision and Monitoring of Construction

- (a) Throughout the Construction Period, the DPWH has the right to monitor, inspect, evaluate and check the progress and quality of the activities and works undertaken by the Concessionaire to ensure that Phase II and the Phase I Adjustment Works are designed, constructed and equipped in accordance with this Concession Agreement including the Certified DED. Any such acts of the DPWH shall neither diminish the responsibility of the Concessionaire for the proper implementation of the Construction, nor transfer any part of that responsibility to the DPWH.
- (b) Should the DPWH discover any deviation from, or non-compliance with, this Concession Agreement including the Certified DED, it may require the Concessionaire to remedy any defects, deviations or lapses identified within a reasonable period. The Concessionaire shall be entitled, pursuant to Section 11.5(b)(iii)(76), to request the Independent Consultant to verify the nature and extent of the defect, deviation or lapse, and the consequent remedial works required, provided that the Concessionaire shall not delay any remedial works identified as necessary by the DPWH whilst the Independent Consultant considers its request.
- (c) If, following notice from the Independent Consultant pursuant to Section 11.5(b)(iii)(§7), the DPWH determines that the rate of progress of the Construction is significantly behind the Construction Schedule such that the Construction Completion Deadline is not likely to be met, and such delay is not due to an Incident, the DPWH shall, by written notice, inform the Concessionaire regarding the same. On or before the date that is fifteen (15) days after its receipt of notice, the Concessionaire shall, by written notice, advise the DPWH and the Independent Consultant of the measures which it proposes to take in order to expedite the progress of the Construction.
- (d) The DPWH may, by written notice, require the Concessionaire to suspend the whole or any part of the Construction if, in the reasonable opinion of the DPWH or the Independent Consultant, such works are being carried out in a manner which threatens the safety of the general public or <u>the safety and/or integrity of</u> the Project. The Concessionaire shall then suspend the Construction or any part thereof for such time and in such manner as may be specified by the DPWH. If the suspension is a result of the fault or negligence of the Concessionaire, the preservation costs incurred during such suspension in order to properly protect and secure the NAIA Expressway, or any part thereof, shall be borne by the Concessionaire. Any

disagreement between the DPWH and the Concessionaire concerning such suspension shall be referred to the Independent Consultant for resolution.

10.6. Variations^{11<u>12</u>}

- (a) The DPWH may initiate a Variation by sending a written notice ("**Variation Notice**") to the Concessionaire describing such Variation and requesting the Concessionaire to prepare a proposal setting out the necessary construction details and the <u>additional</u> cost estimates (with supporting particulars), including how such <u>additional costs are proposed to be recovered pursuant Section 10.6(e)</u>, for such Variation ("**Variation Proposal**").
- (b) The Concessionaire shall submit a Variation Proposal in conformance with the Variation Notice and the requirements of the Concession Agreement, to the extent such requirements do not conflict with the Variation Notice, on or before the date that is fifteen (15) days after issuance of the Variation Notice. The DPWH shall as soon as practicable after receiving the Variation Proposal respond with approval or comments. In the event the DPWH has made comments on the Variation Proposal, the Concessionaire shall submit a revised Variation Proposal that conforms with the DPWH's comments on or before the date that is five (5) days after receipt of DPWH's comments.
- (c) Upon receiving notice of approval of its Variation Proposal from DPWH, the Concessionaire shall promptly execute the Variation in accordance with the approved Variation Proposal and the requirements of the Concession Agreement, to the extent such requirements do not conflict with the approved Variation Proposal.
- (d) Should the Concessionaire have any objections to the Variation Notice, it shall provide the DPWH with a written notice explaining its objections on or before the date that is fifteen (15) days after its receipt of the Variation Notice. Otherwise, the Concessionaire shall be deemed to have no objections to the DPWH's request for a Variation. The Concessionaire's objections to a Variation shall be referred to the Independent Consultant for appropriate recommendations if the Variation Notice is issued during the Construction Period. The Concessionaire shall thereafter submit a Variation Proposal to the DPWH that conforms with the Independent Consultant's recommendations on or before the date that is five (5) days after receipt of such recommendations. If the Variation Notice is issued during the Operation Period, the Parties shall meet to discuss in good faith and agree a mutually acceptable solution to the Concessionaire's objections.

¹¹ HL NOTE: DOES DPWH/DOF REQUIRE THE ABILITY TO INSTRUCT VARIATIONS (AND/OR ALLOW CONCESSIONAIRE PROPOSED VARIATIONS) DURING THE OPERATION PERIOD, RELATING TO MODIFIED SERVICES AND/OR ADDITIONAL CONSTRUCTION WORKS? IF SO, WE COULD PERHAPS AMEND SECTIONS 10.6 AND 10.7 ACCORDINGLY.¹² TO DOF/DPWH: DOF REQUESTED US TO TWEAK THIS VARIATION PROVISION SO THAT DPWH COULD INSTRUCT VARIATIONS DURING THE OPERATION PERIOD. IF DOF PREFERS, WE CAN ADDRESS OPERATION PERIOD VARIATION SEPARATELY IN SECTION 12, THOUGH THE PRESENT DRAFTING SIMPLY ADDRESSES THE ISSUE HERE.

- (e) The Parties shall agree in writing on how the additional costs resulting from a Variation will be recovered. The additional costs from such arising from a Variation may be recovered through any or a combination of the following methods:
 - (i) direct payment from the DPWH;
 - (ii) adjustments of the Toll Rate;
 - (iii) extension of the Concession Period; or
 - (iv) other methods to be mutually agreed upon by the Parties.

Either Party shall be entitled to request the Independent Consultant to verify the amount of additional cost incurred (or to be incurred) as a result of a Variation during the Construction Period.

(f) Notwithstanding Section 8.2, if a Variation necessitates the acquisition of rights of way not included in the Basic Right of Way, or any additional Consents not already obtained by the Concessionaire, the DPWH shall be solely responsible for procuring the same.

10.7. Value Engineering¹²13

- (a) The Concessionaire may, at any time after delivery <u>of</u> the Certified DED in accordance with Section 9.2, submit to the DPWH a written proposal (in sufficient detail to enable the DPWH to evaluate it in full) ("**Concessionaire Proposal**"), which (in the Concessionaire's opinion) will, if adopted:
 - (i) accelerate Construction completion;
 - (ii) improve the efficiency, utility or value to the DPWH of the NAIA Expressway; or
 - (iv) otherwise be of benefit to the DPWH and/or users of the NAIA Expressway.
- (b) The Concessionaire Proposal must conform with the Minimum Performance Standards and Specifications.
- (c) On or before the date that is fifteen (15) days after receipt by the DPWH of the Concessionaire Proposal, the Parties shall meet to discuss the Concessionaire Proposal. During such discussions the DPWH may propose modifications to, or approve or reject the Concessionaire Proposal in its sole discretion. If the

¹²—HL¹³ NOTE TO DPWH/DOF: IS IT ENVISAGED THAT A CONCESSIONAIRE PROPOSAL WILL NECESSARILY ENTAIL A DEVIATION FROM THE CERTIFIED DED OR COULD IT BE IMPLEMENTED WITHOUT DEVIATION FROM THE CERTIFIED DED (I.E. ONLY MINOR WORKS THAT DO NOT AFFECT THE OVERALL DESIGN AS CERTIFIED)? IF THE FORMER, THE CERTIFIED DED WILL PRESUMABLY HAVE TO BE AMENDED ACCORDINGLY AND RE-CERTIFIED BY THE IC. IN THIS EVENT WE WOULD NEED TO INSERT ADDITIONAL WORDING TO THIS EFFECT.

Concessionaire Proposal (as may be modified) is (by written notice) approved by the DPWH, and certified by the Independent Consultant as conforming with the Minimum Performance Standards and Specifications, the Concessionaire shall forthwith implement the matter referred to therein at its sole cost and risk.

10.8. Excusable Delays in Construction

- (a) If any of the Incidents enumerated in Section 10.8 (b) below causes delay in Construction, the Construction Completion Deadline and the relevant Milestones shall be extended by a reasonable amount of time necessary to address or remedy the Incident as mutually agreed by the Parties.
- (b) The said Incidents are:
 - (i) a Variation;
 - (ii) delay in the issuance of any of the Consents required from the relevant national government agencies for any component of the Construction, not due to a failure by the Concessionaire to comply with any requirements for the issuance of any Consent or to the breach, delay, fault or negligence of the Concessionaire;
 - (iii) failure by the DPWH to perform its obligations under Sections [7.4 or and 8.1]¹³¹⁴ of this Concession Agreement; or
 - (iv) any Force Majeure Event.

10.9. Tests During Construction

- (a) At any time during the progress of the Construction, the Concessionaire shall conduct the Tests to determine whether the Construction and resulting works comply with the Certified DED and the Minimum Performance Standards and Specifications for Construction. The Tests shall be conducted in accordance with the testing requirements specified in Annex E of the Minimum Performance Standards and Specifications.
- (b) The Concessionaire shall give the Independent Consultant and the DPWH at least seven (7) days prior notice of the actual date on which it intends to commence each Test.

¹³HL NOTE TO DPWH/DOF: THIS CLAUSE PREVIOUSLY REFERRED TO THE GENERAL "DPWH OBLIGATIONS" PROVISION, WHICH HAS NOW BEEN DELETED. DPWH'S MAIN OBLIGATIONS PRIOR TO CONSTRUCTION COMPLETION ARE TO DISBURSE THE GFS (SECTION 7.4) AND TO DELIVER THE ROW AND ENSURE RELOCATION OF UTILITIES IN ACCORDANCE WITH THE CONCESSIONAIRE'S CONSTRUCTION SCHEDULE. THIS AMENDED PROVISION SHOULD COVER THESE DPWH FAILURES, AS APPEARS TO HAVE BEEN THE INTENTION OF THE ORIGINAL WORDING. ¹⁴ WHILST DPWH'S BREACH OF 7.4 AND 8.1 MIGHT RESULT IN A DEFAULT/TERMINATION, THE PARTIES MAY WISH TO AGREE AN EXTENSION OF TIME INSTEAD SO THIS IS INCLUDED AS AN OPTION. NOTE ALSO THAT DPWH'S BREACH OF 8.1(d) ON THE RELOCATION OF UTILITIES IS NOT AN E^oD BUT SHOULD RESULT, IN OUR VIEW, IN TIME RELIEF, AS APPLICABLE (SINCE CONCESSIONAIRE CAN WAIVE 100% RELOCATION AND START WORK ON SECTIONS ALREADY CLEARED) TO THE CONCESSIONAIRE.

- (c) The Independent Consultant and a representative from the DPWH shall witness the Tests and monitor recording of the results. The DPWH may suspend or delay any Test if it is reasonably anticipated or determined during the course of the Test that the subject of the Test does not meet or comply with the applicable testing requirements.
- (d) The Concessionaire shall provide the Independent Consultant and the DPWH with copies of all Test data and results.
- (e) The Concessionaire shall bear all the expenses incurred for the Tests.

10.10. Completion of Construction

- (a) At least thirty (30) days prior to the expected completion of Construction, the Concessionaire shall provide written notice to the Independent Consultant and the DPWH indicating the date it will complete Construction and conduct the final Tests to ensure that the NAIA Expressway complies with the Certified DED and Minimum Performance Standards and Specifications for Construction. The final Tests shall likewise be conducted in accordance with the testing requirements specified in Annex E of the Minimum Performance Standards and Specifications.
- (b) The Independent Consultant and a representative from the DPWH shall witness the final Tests and monitor recording of the results.
- (c) On or before the date that is five (5) days after the completion of Tests, the Independent Consultant shall be required to determine and certify in writing to the Parties whether the following requirements are met:
 - (i) all Tests comply with the prescribed testing requirements;
 - (ii) the NAIA Expressway is completed in accordance with the Certified DED and Minimum Performance Standards and Specifications for Construction,, including the rectification of all defects;
 - (iii) the NAIA Expressway can be safely and reliably placed in commercial operations;
 - (iv) the O&M Manuals required under Section <u>12.310.4</u> (ac) have been submitted by the Concessionaire, certified by the Independent Consultant as meeting the Minimum Performance Standards and Specifications for Operation and Maintenance, and approved by the DPWH;
 - (v) the toll collection equipment and personnel are in place; and
 - (vi) all other requirements with respect to Construction as set out in this Concession Agreement have been complied with.
- (d) If the Concessionaire failed to comply completely with the requirements in Section 10.10 (c), the Independent Consultant shall be required to issue a report to the

Concessionaire and the DPWH specifying the defects and deficiencies and the actions that the Concessionaire must take in order to comply with the said requirements. The Concessionaire shall promptly carry out such remedial measures and additional Tests as may be necessary to cure the defects and deficiencies and furnish a report to the Independent Consultant and the DPWH on this matter. This procedure shall be repeated as often as necessary until the Independent Consultant certifies that the requirements in Section 10.10 (c) have been fully satisfied.

- (e) Once the Independent Consultant determines and certifies that the requirements under Section 10.10 (c) have been fully satisfied, it shall be required to notify the Concessionaire and the DPWH in writing accordingly.
- (f) The DPWH shall issue the Certificate of Final Completion to the Concessionaire on or before the date that is seven (7) days after its receipt of the Independent Consultant's notice in 10.10 (e) and the O&M Performance Security.
- (g) The issuance of the Certificate of Final Completion does not diminish the responsibility of the Concessionaire for the structural integrity and performance of the Phase I Adjustment Works and Phase II during the Concession Period, or transfer any part of that responsibility to the DPWH.
- (h) The Concessionaire shall submit the following documents for the Phase I Adjustment Works and Phase II to the DPWH not later than six (6) months after the issuance of the Certificate of Final Completion:
 - i. Asset Register updated by the Concessionaire to include a description of all assets constructed for the Phase I Adjustment Works and Phase II and such other documents and information required pursuant to the Minimum Performance Standards and Specifications
 - ii. As-built drawings (at least two copies)
 - iii. Construction Completion Report⁴⁴.

10.11. Consequences of Non-Completion

(a) If by the Construction Completion Deadline (as may be extended in accordance with Section 10.8), the Independent Consultant has not issued written notice pursuant Section 10.10 (e) that all conditions of Section 10.10 (c) have been fulfilled, the Concessionaire shall be liable to the DPWH for the payment of, and shall pay on or before the date that is ten (10) days after issuance of a written demand for payment by the DWPH, liquidated damages in the amount of [amount to be filled in after the bid- it will be the higher of 0.1% of Government Financial Support and PhP5,000,000] ("Liquidated Damages") for every day of delay beyond the Construction Completion Deadline (as may be extended in accordance with Section 10.8).

¹⁴ HL NOTE: DPWH TO CONFIRM THIS SHOULD BE HERE. WHY IS THIS DOCUMENT ONLY DELIVERED 6 MONTHS AFTER COMPLETION?

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- (b) Any Liquidated Damages not paid on or before the date that is ten (10) days after issuance of a written demand for payment by the DPWH pursuant to Section 10.11
 (a) may be drawn by the DPWH against the Construction Performance Security.
- (c) If by the Construction Long-stop Date, the Independent Consultant has not issued written notice pursuant Section 10.10 (e) that all conditions of Section 10.10 (c) have been fulfilled, the DPWH may declare the Concessionaire in default, call on the entire amount of the Construction Performance Security and terminate the Concession Agreement in accordance with Section 17.0.
- (d) The Liquidated Damages referred to in this Concession Agreement which have not been paid (or drawn by the DPWH under the Construction Performance Security) shall be deducted from whatever amounts the Concessionaire may receive pursuant to a DPWH Termination Payment under Section 17.4.

10.12. Ownership of the NAIA Expressway

- (a) Phase I is owned by the DPWH, without prejudice to rights of the Concessionaire as may be provided under this Concession Agreement.
- (b) Without prejudice to any of the <u>rights and</u> obligations of the <u>ConcessionaireParties</u> under this Concession Agreement, immediately upon issue of the Certificate of Final Completion, ownership of all works comprising the Phase I Adjustment Works and Phase II shall vest in the DPWH.

SECTION 11.0 INDEPENDENT CONSULTANT

11.1. Appointment of Independent Consultant and Parties General Obligations

- (a) There shall be an Independent Consultant appointed by DPWH. The Independent Consultant's role is to provide independent adviceservices to the Parties for the financing, defined in this Section 11 and in the Independent Consultant Contract for the Design, and Construction phases of the Phase I Adjustment Works and Phase HProject.
- (b) The Independent Consultant shall have sufficient skill and experience in the design construction and operation of toll roads to perform the obligations set out in this Section 11.0.
- (c) The Parties agree not to <u>exercise any improper unduly pressure</u>, <u>deceive</u>, <u>intimidate</u>, <u>unduly</u> influence <u>over the Independent Consultant in order to maintainor commit</u> <u>similar acts that would adversely impact</u> the integrity and the independence of the Independent Consultant.
- (d) The Parties agree to provide all the assistance necessary to allow the Independent Consultant to perform the roles and functions set out in this Section 11.0 and in the Independent Consultant Contract.

11.2. Process of Appointment

- (a) The DPWH shall procure the services of the Independent Consultant in accordance with its own internal guidelines.
- (b) Upon signing of this Concession Agreement, the DPWH shall provide the Concessionaire a short-list of three candidates for the Independent Consultant. The DPWH shall prepare the short-list in accordance with its guidelines for selecting consultants. If the Concessionaire objects to any one of the names in the short-list of names, the DPWH and the Concessionaire shall meet on or before the date that is five (5) business days after notice of such objection to resolve the issue and finalize the short-list of three candidates.
- (c) On or before the date that is five (5) days after finalizing the short-list of candidates, the DPWH shall proceed with the procurement of the Independent Consultant by inviting proposals from the short-listed names. The DPWH shall then evaluate the proposals and choose the Independent Consultant. The DPWH shall complete the procurement on or before the date that is [three (3) months after the Signing Date]¹⁵.
- (d) Upon identifyingchoosing the Independent Consultant, the DPWH shall notify the Concessionaire of its proposed award of the contract and the Concessionaire shall forthwith send written acknowledgement of the proposed award to the DPWH. Upon receipt of the notice from the DPWH and issue of its acknowledgement, the Concessionaire shall sign the Independent Consultant Contract to acknowledge the appointment and the terms and conditions of the appointment of the Independent Consultant.
- (e) The terms and conditions provided in the Independent Consultant Contract must be consistent with the provisions of this Concession Agreement. In addition to the responsibilities provided in Section 11.5, the Independent Consultant Contract shall require that both Parties be provided with copies of all documents produced by the Independent Consultant during the period of appointment of said Independent Consultant, as indicated in Section 11.3 (a).

11.3. Period of Appointment

(a) The period of appointment of the Independent Consultant shall commence from the date of signing the Independent Consultant Contract [until fifteen (15) days after the Certificate of Final Completion is issued by the DPWH]¹⁶.

 ¹⁵ HL NOTE: SINCE EARLY PHASE I MAINTENANCE IS NO LONGER TAKING PLACE, IS THERE A NEED TO APPOINT THE INDEPENDENT CONSULTANT WITHIN 3 MONTHS OF SIGNING? PRE-CONSTRUCTION, THE IC'S DUTIES UNDER THE TCA WILL BE LIMITED TO CERTIFYING THE DED AND ROW. ¹⁵ THE IC IS INTENDED TO HAVE OBLIGATIONS TO MONITOR PROGRESS OF THE ACQUISITION OF THE ROW, SO IF THE APPOINTMENT DATE IS GOING TO BE MOVED BACK THEN PERHAPS THIS OBLIGATION SHOULD BE REMOVED FROM SECTION 11.5(b)(ii)(1)? FOR DPWH CONSIDERATION. THE OTHER POINT TO NOTE IS THAT SOME PROSPECTIVE BIDDERS HAVE INDICATED THEY MIGHT BE ABLE TO SUBMIT THE DED EARLIER THAN 10 MONTHS SO AS TO ACCELERATE THE CONSTRUCTION AND MAXIMISE COMMERCIAL OPERATIONS PERIOD.
 ¹⁶ HL NOTE TO DRWILLOGE SHOULD THE IC APPOINTMENT CONTINUE FOR SAY, ONE YEAR POST

¹⁶ <u>HL NOTE TO DPWH/DOF:</u> SHOULD THE IC APPOINTMENT CONTINUE FOR, SAY, ONE YEAR POST-CONSTRUCTION COMPLETION TO ALLOW FOR DEFECTS RECTIFICATION OVERSIGHT?

- (b) If the DPWH or the Concessionaire have reasonable grounds to believe that the Independent Consultant is not acting professionally <u>andor</u> independently of the Parties and their respective <u>contractorsConstruction Contractor</u>, suppliers and consultants <u>andor</u> exercising the standard of care, skill and diligence which would be expected of an expert professional service provider, either Party may make a written representation to the other seeking termination of the appointment.
- (c) The DPWH must advise the Independent Consultant within one (1) business day of the representation and hold a tripartite meeting within five (5) business days to resolve the issue. If there is no resolution at that meeting, the matter will be resolved in accordance with Section 21.0 on Dispute Resolution.

11.4. Remuneration of the Independent Consultant

- (a) The Independent Consultant Contract shall specify the remuneration of the Independent Consultant and the terms and conditions of payment.
- (b) The Parties agree that they will share the cost of the remuneration of the Independent Consultant on an equal basis and will establish arrangements where the payment of the remuneration will be made by each on the same day each month, based on the invoice received from the Independent Consultant.
- (c) The Independent Consultant will be required to invoice monthly for services provided under the Independent Consultant Contract.

11.5. Responsibilities of the Independent Consultant

The functions and duties of the Independent Consultant shall be set out in the Independent Consultant Contract, however, the Parties acknowledge and agree that such functions and duties shall include the following matters:

- (a) The Independent Consultant shall be required to owe a duty of care to each of the Parties and to act professionally and independently of the Parties and their respective contractors<u>Construction Contractor</u>, suppliers and consultants and exercise the standard of care, skill and diligence which would be expected of an expert professional service provider.
- (b) For the Design and Construction of the Phase I Adjustment Works and Phase II:
 - (i) For the Detailed Engineering Design:
 - (1) Review the Concessionaire's DED and determine whether it conforms to the requirements of the Concession Agreement including the Minimum Performance Standards and Specifications and the Conceptual Engineering Design. On or before the date that is thirtyfifteen (3015) days after receipt of the DED, the Independent Consultant shall be required to send written notice to the Concessionaire stating the results of its review of the DED, as set out in Sections 11.5(b)(i)(2) or 11.5(b)(i)(3) below.

- (2) If the DED is found to conform to the requirements of the Concession Agreement including the Minimum Performance Standards and Specifications and the Conceptual Engineering Design, the Independent Consultant shall be required to send written noticecertification to the Concessionaire that it has reviewed the DED and found the same to be conforming. The Independent Consultant shall simultaneously stamp the DED as conforming and send the original stamped document to the Concessionaire. The Independent Consultant shall additionally send copies to the DPWH and shall confirm in writing that a prerequisite to the Notice to Proceed has been fulfilled.
- (3) If the DED is found not to conform to the requirements of the Concession Agreement including the Minimum Performance Standards and Specifications and the Conceptual Engineering Design, the Independent Consultant shall be required to send to the Concessionaire written notice of its rejection of the DED, stating the specific aspects that require revision.
- (4) If the Independent Consultant finds a revised DED submitted by the Concessionaire to be compliant with the requirements of the Concession Agreement, it shall, on or before the date that is fifteen (15) days after receipt of the revised DED, issue the written notices described in Section 11.5(b)(i)(2) above. If the Independent Consultant finds a revised DED not to be compliant with the requirements of the Concession Agreement, it shall, on or before the date that is fifteen (15) days after receipt of the revised DED, provide written notice of such fact to the Concessionaire and requiring a further revised DED to be submitted by the Concessionaire. This process shall be repeated until the Independent Consultant is able to issue the written notices described in Section 11.5(b)(i)(2) above, or until the Concession Agreement is terminated by the DPWH pursuant to Section 17.2(a).
- (ii) For the Right of Way:
 - (1) Monitor the progress of DPWH in acquiring the Basic Right of Way and determine whether it will be delivered in accordance with Section 8.1.
 - (2) Verify and certify to both Parties that the Basic Right of Way is clear of all liens, occupants (including informal settlers) and structures and ready for the Concessionaire to carry out the Construction. In verifying and certifying that the Basic Right of Way is clear, the Independent Consultant will advise the DPWH that a prerequisite to the Notice to Proceed has been fulfilled.
 - (3) If requested by the Parties, verify and certify that a delay to the Construction in accordance with the Construction Schedule has arisen

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directly and solely from a failure or delay in the relocation of utilities by the DPWH.

- (iii) For Monitoring During Construction
 - (1) Undertake periodic inspections to monitor compliance of the Construction with the Certified DED and the Minimum Performance Standards and Specifications and to advise the DPWH of any aspect of the Construction that does not conform to the Certified DED and the Minimum Performance Standards and Specifications.
 - (2) Attend all Tests required during Construction and certify and verify to DPWH that the Tests have been carried out according to the testing requirements in Sections 10.9 and 10.10, and the Minimum Performance Standards and Specifications, as may be applicable.
 - (3) Determine if additional tests are required, and recommend to the DPWH that such additional tests be carried out on the Construction, the procedure and timing for such tests and stating the reasons for requiring the same. A copy of the recommendation must be provided to the Concessionaire at the same time.
 - (4) Recommend that the Concessionaire suspend or <u>deferdelay</u> any Test where<u>if</u> the Independent Consultant <u>is of the reasonable</u> opinion<u>anticipates or determines</u> during the <u>conductcourse</u> of the Test that the <u>Construction will notsubject of the Test shall not or does not</u> <u>meet or comply with the Certified DED and/or the Minimum</u> <u>Performance Standards and Specificationsapplicable testing</u> requirements.
 - (5) Advise the DPWH on Concessionaire's requests for extensions of time to complete the Construction and whether such requests are acceptable.
 - (5) (6) Monitor costs relating to Construction and to advise the DPWH of the Concessionaire compliance or non-compliance with the Concessionaire's estimated project costs specified in Annex H.
 - (6) (7)-Advise on any matter or issue that a Party has requested the Independent Consultant to consider, and to make recommendations in relation to a Variation, a Concessionaire Proposal (if required), a Test or the mitigation of a delay.
 - (7) (8)—Notify DPWH if in its view, the rate of progress of the Construction is significantly behind the Construction Schedule such that the Construction Completion Deadline (as may be extended in accordance with Section 10.8) is not likely to be met.
 - (8) (9)-Notify DPWH if in its view, the Construction is being carried out in a manner which threatens the safety of the Project or the general public.

- (9) (10) Advise DPWH and the Concessionaire, in the event of an Incident as enumerated in Section 10.8 (b), the Independent Consultant shall advise DPWH and the Concessionaire on the reasonable amount of time necessary to address or remedy the Incident.
- (10) (11)-Provide the DPWH and the Concessionaire with monthly reports that deal with the stage of Construction, the conformance or nonconformance of the Construction to the Certified DED and the Minimum Performance Standards and Specifications, observations about the Construction meeting the Construction Completion Deadline and the potential for slippage, the actual construction costs, the activities of Independent Consultant during the relevant month and the planned activities of the Independent Consultant for the next three (3) months.
- (iv) For Government Financial Support

Verify and certify the Concessionaire's Works Completion <u>Status</u> Statement in the event Construction meets the requirements for release by DPWH of the Government Financial Support to the Concessionaire as set out in Section 7.4.

- (v) For Construction Completion
 - (1) Verify and certify that Construction has been completed in accordance with the Certified DED and issue to DPWH a report that advises that any non-conformance has been remedied to the satisfaction of the Independent Consultant, that all required tests have been properly carried out, and that the NAIA Expressway may be safely and reliably placed into operation.
 - (2) Advise the DPWH and the Concessionaire if the Construction does not conform to the Certified DED and specify the defect and deficiencies and the actions that the Concessionaire must take to comply without specifying how to deliver a conforming Construction.
 - (3) Verify and certify to DPWH that the O&M Manuals have been prepared and such manuals comply with the Minimum Performance Standards and Specifications.
 - (4) Verify that the toll collection equipment and personnel are in place.
 - (5) Advise the DPWH that a Certificate of Final Completion may be issued.

11.6. Assistance from DPWH and the Concessionaire

- (a) The Independent Consultant has, at any time, the right to enter, inspect and test the NAIA Expressway and its Construction after giving the DPWH and the Concessionaire written notice of at least one (1) day prior to the inspection and test.
- (b) The Parties are required to give all the assistance necessary to the Independent Consultant to enable the Independent Consultant to carry out its functions and duties.

SECTION 12.0 OPERATION AND MAINTENANCE

12.1. Grant of Operation and Maintenance

- (a) Subject to the terms and conditions of this Concession Agreement, the Concessionaire shall have the exclusive right and corresponding obligation to undertake the Operation and Maintenance of the NAIA Expressway and to exclusively impose and collect Tolls therefrom during the Operation Period. The Operation Period shall commence immediately upon issuance of a Toll Operation Certificate to the Concessionaire or, as applicable, to its duly appointed Facility Operator.
- (b) Except as expressly provided in this Concession Agreement, the Concessionaire shall not be entitled to any right for the extension of the Concession Period or the extension or expansion of the NAIA Expressway.
- Operation (c) Immediately upon issuance of the Toll Certificate. the DPWHConcessionaire shall turnovertake possession of Phase I tofrom the ConcessionaireDPWH for the performance of its Operation and Maintenance obligations in respect thereof. The Concessionaire acknowledges and agrees that it has inspected Phase 1 as of the Signing Date (and has thereafter continuously monitored its condition) and it agrees that it shall accept the assets comprising Phase I turned over by the DPWH on an "as is, where is" basis and shall be responsible for and shall hold the DPWH harmless against any adverse effects arising from the condition of Phase I whether known or unknown, foreseeable or unforeseeable. DPWH, however, shall assume any risk of damage or deterioration of the Phase I assets identified in the Asset Register at the Signing Date, save normal wear and tear, between the Signing Date and the date when Phase 1 is turned over to the Concessionaire. The Concessionaire shall notify DPWH of any such damage or deterioration prior to it taking possession and any damage or deterioration not identified shall be conclusively deemed to have been assumed by the Concessionaire.¹⁷

12.2. Designation and Approval of the Facility Operator

(a) The Concessionaire, if it satisfies the requirements for the issuance of the Toll Operation Certificate, may by itself or through its appointed Facility Operator undertake the Operation of the NAIA Expressway. Otherwise, it shall undertake such Operation only through a Facility Operator that it shall be exclusively entitled to appoint and

¹⁷ SHOULD THE IC HAVE ANY ROLE IN ASSESSING ANY DISPUTES RE CONDITION?

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that satisfies the requirements for the issuance of the Toll Operation Certificate. The Concessionaire shall ensure that the Facility Operator shall be required to act in accordance with applicable law and must satisfy the following conditions:

- (a) The Concessionaire shall operate and maintain the NAIA Expressway through a Facility Operator which meets the following requirements:
 - (i) The Facility Operator shall be at least sixty percent (60%) owned and controlled by Philippine citizens;
 - (ii) The voting power of foreign investors on the governing board of the Facility Operator shall be proportionate to their share in the share capital of the Facility Operator;
 - (iii) All executive and managing officers of the Facility Operator shall be Philippines citizens; and
 - (iv) The Facility Operator shall be at least twenty percent (20%) owned by <u>one of</u> the <u>entityentities</u> identified in Annex F as <u>the entityentities</u> which <u>fulfillsfulfill</u> the O&M Experience <u>Requirements;Requirement</u>. This requirement shall be deemed fulfilled if the Facility Operator is one of the entities identified in Annex F as entities which fulfill the O&M Experience Requirement. (*Note: if the corporation formed by the Winning Bidder to sign the Concession Agreement itself fulfills the requirements of Section 12.2 (a) (i) to (iii) and itself has five years of experience in operations and management of toll expressways in the last ten years, it will also be identified in Annex F as such.)*

If there is a change in law in the Philippines that has the effect of reducing the foreign ownership requirements outlined in this Clause 12.2, the DPWH shall act reasonably in granting permission to the Concessionaire if it wishes to adjust its ownership structure (including board representation) accordingly.

If the Concessionaire itself fulfills the requirements of Section 12.2 (a) (i) to (iii) and itself has five years of experience in operations and management of toll expressways in the last ten years, it may designate itself as the Facility Operator.

The Concessionaire shall have the exclusive right to appoint the Facility Operator, and shall ensure that it acts in accordance with applicable law and the provisions of the Concession Agreement.

The <u>requirement that the Facility Operator be at least</u> twenty percent (20%) ownership requirement in the Facility Operator shall be retained by the entity soowned by the one of the entities identified in Annex F for a period of at leastshall last until five (5) years from the issuance of the Toll Operation Certificate.

- (b) On or before the date that is <u>tenthree</u> (103) <u>daysmonths</u> after the <u>issuance of the</u> Notice to Proceed<u>Signing Date¹⁸</u>, the Concessionaire shall:
 - (i) Notify DPWH of the identity of its proposed Facility Operator;
 - (ii) Provide evidence that it has been incorporated and fulfills the requirements specified in Section 12.2 (a); and
 - (iii) Request DPWH's written approval of such designation.
- (c) The DPWH may disapprove such designation only if it determines that the proposed Facility Operator does not meet the requirements in Section 12.2 (a). If the DPWH disapproves the designation, the Concessionaire shall propose to DPWH, on or before the date that is thirty (30) days after said disapproval, another candidate for Facility Operator which meets the requirements in Section 12.2 (a).
- (d) The Facility Operator may engage Subcontractors to undertake specific parts of the Operation and Maintenance of the NAIA Expressway. The Concessionaire shall ensure that each Subcontractor must be at least as well qualified as the Facility Operator in respect of the tasks delegated to it.
- (e) Notwithstanding the engagement of a Facility Operator and any Subcontractors, the Concessionaire shall remain directly responsible and liable to DPWH for all obligations under the Concession Agreement and in the event of breach by the Facility Operator or any Subcontractor of any of the Operation and Maintenance obligations under the Concession Agreement, such breach shall be deemed to be a breach by the Concessionaire for which the DPWH may hold the Concessionaire responsible and liable.
- (f) If the Concessionaire wishes to replace the Facility Operator at any time it shall propose a replacement Facility Operator to the DPWH that meets the requirements of Section 12.2(a)(i)-(iii) above and has an equivalent or better level of experience, qualification and expertise than the original Facility Operator, and it shall only engage such replacement Facility Operator with the prior written consent of the DPWH.

12.3. Obligations for Operation and for Maintenance

(a) The Concessionaire shall prepare manuals detailing the standards, guidelines, procedures and requirements of the DPWH in respect of the Operation and Maintenance of the NAIA Expressway. The O&M Manuals shall be in accordance with the relevant standards and requirements in the Minimum Performance Standards and Specifications ("O&M Manuals"). The Concessionaire must submit the O&M Manuals to the DPWH for approval on or before the date that is eighteen (18) months after issuance of the Notice to Proceed. The Approved O&M Manuals shall be updated, as reasonably required by the DPWH, by the Concessionaire from

¹⁸ THE DATE FOR APPOINTMENT OF THE FACILITY OPERATOR IS PROPOSED TO BE BROUGHT FORWARD SO THAT THE FACILITY OPERATOR CAN PARTICIPATE IN THE DEVELOPMENT OF THE DESIGN OF THE FACILITY AND O&M MANUALS.

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time to time, and at least once every year of the Operation Period, in accordance with Prudent Industry Practice.

- (b) On or before the date that is seven (7) days after the <u>dateissuance</u> of the Certificate of Final Completion, the Concessionaire shall apply for, or, as applicable, shall cause the Facility Operator to apply for the issuance of the Toll Operation Certificate with the TRB, following the requirements set out in Annex C. The DPWH shall provide reasonable assistance to the Concessionaire in this application and, provided that the Concessionaire complies with the procedures and requirements set out in Annex C or, as applicable, causes the Facility Operator to comply with such procedures and requirements, the DPWH shall ensure that the TRB issues the Toll Operation Certificate on or before the date that is ten (10) days after the application is made.
- (c) Upon issuance of the Toll Operation Certificate by the TRB, the Concessionaire shall carry out the Operation and Maintenance of the NAIA Expressway in accordance with the requirements of this Concession Agreement including in particular the Approved O&M Manuals and the Minimum Performance Standards and Specifications for Operation and Maintenance.
- (d) The Concessionaire shall strictly comply with the minimum Key Performance Indicators for Operation and Maintenance provided in Section 4.10 of the Minimum Performance Standards and Specifications, and shall be subject to the corresponding payment obligations prescribed in the Minimum Performance Standards and Specifications to be imposed for non-compliance therewith ("O&M Liquidated Damages"). The Concessionaire shall on or before the date that is seven (7) days after receipt of written payment demand from the DPWH for O&M Liquidated Damages, pay the O&M Liquidated Damages prescribed in such payment demand. The incurrence by the Concessionaire of O&M Liquidated Damages in excess of 25,000 Toll Equivalent Units in any calendar quarter shall be a Concessionaire Default and the provisions of Section 17.0 shall apply.
- (e) Without prejudice to any other provisions of this Concession Agreement, all costs and expenses in respect of the Operation and Maintenance, including, without limitation, taxes and other payment obligations to Government Authorities in connection with the Operation and Maintenance, which may accrue at any time during the Concession Period, shall be the responsibility and liability of the Concessionaire.
- (f) The Concessionaire shall carry out the Operation and Maintenance at all times in accordance with <u>the requirements of any applicable Consents</u>, Prudent Industry Practice and any applicable law, regulation, order, decision or judgment of any Government Authority.

12.4. Supervision and Monitoring of Operation and Maintenance

(a) The DPWH shall have the right, to inspect any part of the NAIA Expressway and the toll collection system and facilities, taking into account at all times the flow of traffic and level of service in order to determine the Concessionaire's compliance with all its obligations under this Concession Agreement.

- (b) The Concessionaire shall undertake periodic at least once every month inspection of the NAIA Expressway to determine its condition, including its compliance or otherwise with the Approved O&M Manuals and the Minimum Performance Standards and Specifications, and shall prepare monthly Inspection Reports for submission to DPWH.
- (c) On or before the date that is fifteen (15) days after the end of every month, from the issuance of the Toll Operation Certificate until the end of the Concession Period, the Concessionaire shall submit a Monthly Report on Operation and Maintenance to DPWH, using the format in Annex I. This report shall also contain the Inspection Reports required pursuant to Section 12.4 (b) above. DPWH may, at any time, modify the form of the Monthly Report on Operation and Maintenance by deleting or requiring additional information. The DPWH may also increase the frequency of submission of the required report, at any time.
- (d) On or before the date that is thirty (30) days after the beginning of every calendar year, the Concessionaire shall submit updates to the following documents:
 - i. Asset Register updated by the Concessionaire to include a description of all assets comprising the NAIA Expressway and such other documents or information required pursuant to the Minimum Performance Standards and Specifications
 - ii. As-built drawings, as applicable
 - iii. Updated O&M Manuals

12.5. Performance Security for Operation and Maintenance

- (a) On or before the date that is two (2) days after the Concessionaire's receipt of the Independent Consultant's notice as provided in Section 10.10 (e), the Concessionaire shall issue to the DPWH, and keep in force and effect until the end of the Operation Period, the O&M Performance Security. The O&M Performance Security shall be an irrevocable standby letter of credit in the amount of <u>[a] Pesos (PhP[a])Forty Million Pesos (Php40,000,000)</u> issued by a universal bank or commercial bank licensed by the Bangko Sentral ng Pilipinas¹⁹ and in a form that is acceptable to the DPWH.
- (b) The amount required of the O&M Performance Security will be adjusted upwards every time Toll Rates are adjusted upwards, by the same proportion as the Toll Rate Adjustment. The Concessionaire shall, no later than fifteen (15) days prior to the expiry of any O&M Performance Security, deliver to DPWH a replacement O&M Performance Security valid for at least an additional year in the same form and in the required amount. If any amounts are drawn from the O&M Performance Security, the Concessionaire shall on or before the date that is ten (10) days after such drawdown deliver an additional O&M Performance Security in the same form as the existing O&M Performance Security, for the amount drawn, such that the amount of O&M Performance Security should not fall below the required amount for a period longer than ten (10) days.

¹⁹ SEE COMMENT ABOVE AT SECTION 6.0(b).

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- (c) The DPWH may forfeit the O&M Performance Security in case of termination during the Operation Period by reason of the Concessionaire's default in any of the cases defined in Sections 17.2 (c) and (d) hereof.
- (d) The DPWH may also draw against the O&M Performance Security if the Concessionaire fails to pay any O&M Liquidated Damages imposed by DPWH on the Concessionaire pursuant to Section 12.3 (d), or fails to comply with the Approved O&M Manuals and other provisions of the Minimum Performance Standards and Specifications for Operation and Maintenance for a period longer than seven (7) consecutive days from written demand to comply, or such longer period as the Parties may agree upon in writing. The DPWH may also draw on the O&M Performance Security in accordance with Section 14.1(e).

SECTION 13.0 TOLLS

13.1. Toll Rates and Toll Collection

(a) During the Operation Period, the Concessionaire is authorized to impose and collect Tolls from the users of the NAIA Expressway at the initial Toll Rates for the first year of the Operation Period as specified below, subject to any Toll Rate Adjustments authorized under Section 13.2:

Vehicle Class	Initial Terminal	Initial
	3 Toll Rate	Expressway
		Toll <mark>Rate</mark>
Class I: Light Vehicles - Car, Jeep, Passenger Van/	<mark>[insert figure]</mark>	<mark>[insert figure]</mark>
Pickup, Taxi, Mega-Taxi, Jeepney, Mini-Bus		
Class II: Medium Weight Vehicles - Aircon& Non	[insert figure]<u>2</u> x_	<mark>{insert figure]</mark> 2 x
Aircon Bus, Goods Van/Pickup, 2-Axle Truck, Dump	the Class 1 toll rate	the Class 1 toll rate
Truck, Tanker, Mixer		
Class III: Heavy Vehicles – Rigid Truck with 3 or	[insert figure]<mark>3 x</mark>	[<i>insert figure</i>] <u>3 x</u>
more Axles, Trailer (Articulated)	the Class 1 toll rate	the Class 1 toll rate

Table <u>-313</u>. Initial Tolls

- (b) The Concessionaire shall publish the schedule of <u>Toll Rates</u> for the first year of the Operation Period in a newspaper of general circulation at least once a week for three (3) consecutive weeks before the start of Operation. The Concessionaire shall also publish the schedule of <u>Tolls Rates</u> as adjusted, in accordance with Section 13.2, in a newspaper of general circulation at least once a week for three (3) consecutive weeks before the effectivity date of each Toll Rate Adjustment.
- (c) The Concessionaire shall issue toll tickets or its functional equivalent to users of the NAIA Expressway at toll plazas provided for such purpose at the entries and/or exits of the NAIA Expressway.
- (d) The Toll revenues collected from the operation of the NAIA Expressway are the property of the Concessionaire. The Concessionaire has the right to assign or to enter

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into such agreements with regard to the Toll revenues and their collection, custody, security and safekeeping.

(e) Toll Rates may be rounded off to the nearest Peso, provided that the effects of the rounding off shall be considered in the next periodic adjustment, as provided in Section 13.2 (a).

13.2. Toll Rate Adjustments

(a) <u>Periodic Adjustment.</u> Within the scope of the Project as defined herein, and upon receipt of written approval of adjustment from the TRB, the Concessionaire is authorized to adjust the Toll Rates once every year¹⁷ in accordance with the following formula, and to collect from the NAIA Expressway users the Toll Rates so adjusted:

$$TR_{n} = TR_{o} \left[(CPI_{n}/CPI_{o}) \right]^{\frac{18}{2}} \times (1 + R)$$

where:

 TR_n = new Toll Rate as adjusted

 TR_{o} = old Toll Rate as of the last adjustment (for the purposes of this calculation any adjustment of the Toll Rate imposed by a Government Authority below the properly adjusted Toll Rate under this Concession Agreement shall be disregarded, and, for the avoidance of doubt, the old Toll Rate shall be calculated based on such properly adjusted Toll Rate)

 CPI_n = Consumer Price Index for month of the new review date issued by the National Statistics Office

 CPI_{o} = Consumer Price Index for the month of the last review date issued by the National Statistics Office

<u>R</u> = the real increase which, at the option of the Concessionaire, shall be between 0% and 3%. After the end of the tenth year of the Operation Period, R shall always equal $0\%^{20}$.

During the Operation Period, the Concessionaire shall be entitled to the first Toll Rate Adjustment at any time prior to the expiry of a period of two years after the issuance of the Toll Operation Certificate.

¹⁷ THIS AMENDMENT HAS BEEN MADE BASED ON DISCUSSIONS SECRETARY OF DPWH AND UNDERSECARTY DOF ON THE AFTERNOON OF 24 JUNE.

¹⁸ IFC NOTE TO DPWH/DOF: DPWH/DOF TO CONSIDER/CONFIRM WHETHER TO INCLUDE AN ADDITIONAL COMPONENT REPRESENTING THE REAL INCREASE IN TOLLS, WHICH MEANS THAT A MULTIPLIER HAS TO BE ADDED TO THE CPI FACTOR TO REFLECT REAL INCREASES, AS SET OUT IN THE FORMULA.

²⁰ WE UNDERSTAND THE PROPOSED ADDITIONAL COMPONENT TO THE FORMULA WAS DECIDED TO BE ADOPTED BY THE DPWH SECRETARY FOLLOWING THE INVESTORS BRIEFING. FOR DOF CONSIDERATION.

(b) <u>Extraordinary Adjustment.</u> If following any of the events contemplated under Section 16.0 on Material Adverse Government Action, Section 15.1 (d) or Section 15.3 (e) (i) on Force Majeure, both Parties agree on compensation or remedies to the Concessionaire which will involve an extraordinary adjustment of the Toll Rates, then the Concessionaire shall be entitled to apply with the TRB for and, if warranted, to be granted an extraordinary adjustment of the Toll Rates.

The DPWH shall verify the materiality, bases and justifications for the application for extraordinary adjustment of the Toll Rates under any of the events mentioned above and shall submit its findings to the TRB with appropriate recommendations.

Once the extraordinary adjustment of the Toll Rates is approved by the TRB the Concessionaire is authorized to immediately collect the increment corresponding to the approved extraordinary adjustment as part of the authorized total Toll Rates, subject to publication as required in Section 13.1 (b). [Thereafter, for future periodic adjustments of the Toll Rates, the new toll rates will take into consideration the pre-extraordinary adjustment Toll Rates and Consumer Price Index movements during the period that the pre-extraordinary adjustment Toll Rates and Consumer Price Index movements during the period that post-extraordinary adjustment Toll Rates and Consumer Price Index movements during the period that post-extraordinary adjustment Toll Rates and Consumer Price Index movements during the period that post-extraordinary adjustment Toll Rates and Consumer Price Index movements during the period that post-extraordinary adjustment Toll Rates and Consumer Price Index movements during the period that post-extraordinary adjustment Toll Rates were in force.]⁴⁹²¹

- (c) <u>Decrease in Toll Rates.</u> Without prejudice to the provisions of Section 13.2 (a), at any time during the Operation Period, the Concessionaire is obliged and the DPWH may require the Concessionaire to apply for the approval of a corresponding decrease in the Toll Rates in the event of any of the following circumstances:
 - (i) a decrease in the rate of any national or local taxes which are imposed on the Concessionaire after the Signing Date; or
 - (ii) any exemption from liability to pay any tax, duty or other levy imposed by a Government Authority and/or any costs savings following any favourable Change in Law availed of by Concessionaire that became available after the Signing Date.

Once the decrease in the Toll Rates is approved by the TRB, the Concessionaire is authorized to immediately collect the revised decreased Toll Rates, subject to publication as required in Section 13.1(b).

13.3. Remedies for Disallowance of Authorized Toll Rates

If, for any reason, a Government Authority <u>disallows[prevents]²²</u> the Concessionaire from charging and collecting from users of the NAIA Expressway the authorized amounts of the Toll Rates provided under Section 13.1 as adjusted under Section 13.2 at the prescribed

⁴⁹ HL NOTE TO DPWH/DOF: WOULD THIS LAST SENTENCE BE CLEARER IF EXPRESSED AS A FORMULA?²¹ SEE SIDE DOCUMENT FOR DOF/DPWH CONFIRMATION. IF ACCEPTED, WE CAN INSERT HEREIN OR MAKE ADJUSTMENTS SO ONLY FORMULA IS USED TO COVER BOTH WITH AND WITHOUT EXTRAORDINARY ADJUSTMENT SITUATIONS.
²² INDEPENDENT OF THE DEPENDENT OF MAXIMUM AND COMPANIES ADDRESS ADDRE

²² "PREVENTS" MAY COVER TRO/INJUNCTIONS, MAKING THE REMEDIES UNWORKABLE. SUGGEST REVERTING TO "DISALLOWS".

time, the Concessionaire shall be entitled to either of the following alternative remedies, whichever is mutually agreed upon by the DPWH and the Concessionaire:

(a) Compensation from the DPWH of the foregone toll income ("FTI")foregone by the Concessionaire as a direct result of a Government Authority's prevention of the Concessionaire from charging and collecting Toll Rates ("Forgeone Toll Income"), which shall be calculated by month as follows:

 $FTI = (TR_n - TR_P) \times NU$

where:

- TR_n = new Toll Rate as authorized to be adjusted in accordance with Section 13.2,
- TR_P = Toll Rate actually permitted by the TRB for the month, and
- NU = Number of users of the NAIA Expressway during the same month, as shown by the audited statement of the Concessionaire, as verified, if necessary, by DPWH

The **FTI** Forgone Toll Income shall be calculated for every vehicle class and paid monthly.

The DPWH shall pay the FTI (from available legally appropriated funds)seek the allocation or appropriation of necessary funds and pay the Forgone Toll Income to the Concessionaire on or before the date that is forty five (45) days after its receipt of the audited statement from the Concessionaire. Should there be a delay in the payment of the FTIForgone Toll Income beyond the said forty five (45)-day period, the DPWH shall pay interest to the Concessionaire on the amount of that payment at the rate equivalent to the three (3) month Philippine Dealing System Treasury Fixing ("PDST-F") reference rate per annum (the "Delay Interest"), and that interest shall accrue from the date the relevant payment became due until the date of actual payment.

(b) Extension of the Concession Period to compensate the Concessionaire for the FTIForgone Toll Income calculated in Section 13.3 (a). The length of the extension shall be mutually agreed upon by the Parties.

(c) If DPWH fails to pay the FTIForgone Toll Income with Delay Interest to the Concessionaire and both Parties acting reasonably fail to agree on the extension in Section 13.3 (b) on or before the date that is two (2) years after the Concessionaire is disallowed from charging and collecting authorized Toll Rates from users of the NAIA Expressway, this shall be considered a DPWH Default in accordance with Section 17.3 (a)(iii).

SECTION 14.0 INSURANCE

14.1. Coverage

(a) From issuance of the Notice to Proceed until the issuance of the Toll Operation Certificate, the Concessionaire shall maintain at all times:

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- (i) <u>Contractors'Construction Contractor's</u> All Risks Insurance, at least to the extent of Four Billion Nine Million Pesos (PhP 4,900,000,000).²³
- (ii) Third party liability insurance
- (iii) Worker's compensation insurance
- (iv) Any other insurance that may be necessary to protect the Concessionaire, its employees and its assets against loss, damage or destruction, including as a result of any Force Majeure Event that is insurable and not otherwise covered by the insurances at Sections 14.1(a)(i)-(iii) provided the same is available in the worldwide insurance market on reasonable terms
- (b) From the issuance of the Toll Operation Certificate until the end of the Concession Period or the termination of this Concession Agreement, whichever comes earlier, the Concessionaire shall maintain at all times:
 - (i) Property damage insurance, at least to the extent of fifty percent (50%) of the book value of the NAIA Expressway.
 - (ii) Third party liability insurance
 - (iii) Workers' compensation insurance
 - (iv) Any other insurance that may be necessary to protect the Concessionaire, its employees and its assets against loss, damage or destruction, including as a result of any Force Majeure Event that is insurable and not otherwise covered by the insurances at Sections 14.1(b)(i)-(iii) provided the same is available in the worldwide insurance market on reasonable terms
- (c) All insurance policies shall be secured from the Government Service Insurance System or any reputable insurance companies licensed by the Insurance Commission.
- (d) The Concessionaire shall submit to the DPWH certified copies of the insurance policies and all renewal certificates upon receipt thereof from the insurer.
- (e) Each insurance policy required under this Section 14.1 shall provide that the same shall not be cancelled or terminated unless ten (10) days' written notice of cancellation is provided to the DPWH. If at any time the Concessionaire fails to purchase and maintain in full force and effect any and all insurances required under this Concession Agreement, the DPWH may at its option purchase and maintain such insurance, and all sums incurred by the DPWH therefor shall be reimbursed by the Concessionaire immediately on demand. Should the Concessionaire fail to reimburse the costs of procuring and maintaining any required insurance policies to the DPWH, the DPWH shall be entitled to call on the Construction Performance

²³ INTERNATIONAL PRACTICE IS FOR THE INSURED AMOUNT TO BE AT LEAST EQUAL TO THE VALUE OF THE CONSTRUCTION WORKS. WE CONSIDER THIS FIGURE SHOULD NOT <u>BE LIMITED</u> TO THE GFS. DOF/DPWH TO ADVISE.

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Security and/or the O&M Performance Security (as applicable) up to the value of such amounts.

14.2. Insurance Beneficiaries-

The insurance policies taken by the Concessionaire for the Project under Section 14.1 shall name the Concessionaire and the DPWH as co-insured parties of the insurance policies. The proceeds of insurance policies arising from damage to or destruction of any of the assets comprising the NAIA Expressway shall be used to complete, repair, rehabilitate or reconstruct such assets, and the balance remaining, if any, shall be applied to payment of Concessionaire's other liabilities incurred by virtue of the Project.

SECTION 15.0 FORCE MAJEURE

15.1. Events of Force Majeure

(a) "Force Majeure" or "Force Majeure Event" refers to an event or a circumstance which cannot be foreseen or even though foreseen is beyond the reasonable control of a Party or is unavoidable despite the exercise of due diligence, the cause of which event is not due to the fault of a Party, and which wholly or partially prevents or delays such Party from performing and fulfilling its obligations under this Concession Agreement. Except when otherwise expressly provided by law or stated in this Concession Agreement, no failure or omission to carry out or observe any of the terms, provisions or conditions of this Concession Agreement shall give rise to any claim by any party against another party or be deemed to be a breach or default of this Concession Agreement if the same shall be caused by or arise directly out of Force Majeure. Force Majeure shall in no event include any pre-existing condition in the site of the Project.

Force Majeure Events include without limitation the following:

- any war, declared or not
- hostilities,
- blockade,
- embargo,
- revolution,
- insurrection,
- riot,
- public disorder,
- export or import restrictions,
- closing of harbors, docks, canals or other assistance to or adjuncts of shipping or navigation of or within any place,
- rationing or allocation, whether imposed by law, decree or regulation by, or by compliance of industry at the insistence of, any Government Authority, in each of the above cases,
- fire,
- unusual flood,
- drought,
- earthquake,
- volcanic eruption,
- storm,
- lightning,
- tide (other than normal tide),
- tsunami,
- air crash,
- archeological finds,
- hazardous materials,
- unexploded ordnance,
- nuclear contamination,
- epidemic,
- quarantine,
- any instance analogous to the foregoing, or any event, matter or thing, wherever occurring.
- (b) Notwithstanding the foregoing, the occurrence of any Force Majeure Event shall not release any Party from its monetary obligations.
- (c) The burden of proof for a Force Majeure Event and its effect on the performance of obligations or the delivery of services under this Concession Agreement lies with the Party that issued the notice of Force Majeure under Section 15.2.
- (d) If as a result of a Force Majeure Event, the Project or any part thereof or the operations of Concessionaire or any part thereof, become the subject matter of or are included in any notice, notification, or declaration concerning or relating to temporary takeover by the Republic of the Philippines in times of war, hostilities or national emergency when public interest requires, DPWH may, by written notice to Concessionaire, immediately take over the operations of the NAIA Expressway. During such take over by the Republic of the Philippines, the Concession Period shall be suspended; provided, that upon termination of war, hostilities or national emergency, the operations shall be returned to Concessionaire, at which time, the Concession Period shall resume. The Parties shall meet to agree on how to enable the Concessionaire to recover from the adverse financial effects, if any, of the temporary takeover, through:
 - (i) an extraordinary Toll Rate adjustment;
 - (ii) an extension of the Concession Period;
 - (iii) other methods consistent to be mutually agreed by both Parties.

15.2. Notification of Force Majeure

The Party invoking a Force Majeure Event shall, upon knowledge of such event and in any case within two (2) days from the time it is practicable for such Party to serve notice to the other Party, shall immediately notify the other Party of the occurrence or cessation of the Force Majeure Event and the extent to which such Force Majeure Event affects the notifying Party's obligations under this Concession Agreement.

15.3. Obligation of Each Party in the Event of Force Majeure

- (a) If a Force Majeure Event or a direct consequence thereof, prevents or delays a Party from performing its obligations hereunder or, in the opinion of such Party, adversely affects any of its rights or benefits under this Concession Agreement, such Party shall be responsible for taking such actions and precautions as may be reasonably necessary to mitigate the adverse effects of the Force Majeure Event acting in accordance with Prudent Industry Practice. To the extent the Force Majeure Event and the adverse effects thereof could not be so mitigated, the Party invoking a Force Majeure Event shall be excused from performance of those obligations that are directly affected by the Force Majeure Event.
- (b) The Parties will consult with each other and take all reasonable steps to minimize the losses of either Party resulting from a Force Majeure Event.
- (c) All insurance proceeds received by or payable under any insurance policy covering force majeure shall be utilized to repair or reconstruct the NAIA Expressway. The Concessionaire shall be responsible for any repairs or reconstruction to the NAIA Expressway caused by the Force Majeure Event as soon as possible.
- (d) Provided the insurance policies required under Section 14.1 are in force at the time of the Force Majeure Event, if the Concessionaire serves notice to the DPWH that the insurance proceeds received or to be received or payable by reason of any such damage will be insufficient to cover the costs of the required reconstruction of repair work on the damage to the NAIA Expressway, the Concessionaire and DPWH shall meet to discuss how the Concessionaire can be compensated for the difference between these costs and the insurance proceeds received or to be received (the "FM Notwithstanding the ongoing nature of any discussions Shortfall Amount"). between the Parties regarding compensation for the FM Shortfall Amount, the Concessionaire shall be responsible for conducting the necessary repairs and reconstruction work and raising the funds for such purpose, unless the NAIA Expressway is expressly taken over by the DPWH without the fault of the Concessionaire or the DPWH agrees to a recommendation from the Concessionaire to suspend such work.²⁴
- (e) The Parties hereby agree that any FM Shortfall Amount incurred by the Concessionaire pursuant to Section 15.3 (d) shall, provided that fit exceeds an amount equal to Five Hundred Millions Pesos (PhP 500,000,000) $^{20}_{1}$, be repaid by means of any one or a combination of the following at the option of DPWH:
 - (i) an appropriate extraordinary adjustment of Toll Rates, as provided in Section 13.2; and/or
 - (ii) an appropriate extension of the Concession Period, where the length of the extension shall be subject to agreement by the Concessionaire.

 ²⁴ NOTE TO DOF/DPWH – IS CONCESSIONAIRE REQUIRED TO RECONSTRUCTION WORK EVEN
WHEN NO FUNDS FORTHCOMING OR THERE ARE INADEQUATE FUNDS?
²⁰ HL NOTE: DPWH/DOF TO CONFIRM AMOUNT.

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- (iii) direct payment in cash
- (iv) other means as may be mutually agreed by the Parties.

The extraordinary adjustment of Toll Rate contemplated under this Section shall take effect as of the date of the approval thereof as provided in Section 13.2 and the resumption of operation of the NAIA Expressway.

If on or before the date that is six (6) months after the commencement of negotiations between the DPWH and the Concessionaire, the Parties are unable to agree on how to compensate the Concessionaire under this subsection for the FM Shortfall Amount, either Party shall have the right to terminate this Concession Agreement and the provisions under Section 17.4 (ea) shall apply.

- (f) If a Force Majeure Event does not cease on or before the date that is six (6) months after the date of the notice required pursuant to Section 15.2 either party shall have the right to terminate this Concession Agreement through the issuance to the other Party of a Notice of Termination, in which case the provisions under Section 17.4 (ea) shall apply. If the Concessionaire elects not to terminate this Concession Agreement and instead elects to extend the Concession Period, it must give notice to DPWH stating the election it has made and the period (not exceeding the duration of the Force Majeure Event) by which it proposes the Concession Period to be extended. Upon concurrence by the DPWH, the DPWH shall issue or obtain all Consents which may be required or necessary to extend the Concession Period by such period as requested by the Concessionaire.
- (g) Upon the occurrence of any Force Majeure Event during the Operation Period, the Concessionaire shall continue to be responsible for performing such of its obligations relating to Operation and Maintenance as are still possible to be performed, whether wholly or partially. Irrespective of the occurrence of a Force Majeure Event, the Concessionaire shall continue to be responsible for the safety of the NAIA Expressway and its users. Unless otherwise agreed upon by the Parties, the occurrence of a Force Majeure Event affecting the Concessionaire's obligations relating to Operation and Maintenance shall not result in the closure of the damaged portion of the NAIA Expressway. If a temporary closure is unavoidable for safety reasons or so as to make possible the performance of any required reconstruction or repair work, the NAIA Expressway shall be opened to the public as soon as possible by taking the necessary measures and precautions under the circumstances.

SECTION 16.0 MATERIAL ADVERSE GOVERNMENT ACTION

16.1. Definition

Material Adverse Government Action means any national government agency action which has a material adverse effect on any of the rights and privileges of, or on the enjoyment and/or exercise thereof by, the Concessionaire under this Concession Agreement, or which has a material adverse effect on the Construction Schedule or the Concessionaire's ability to comply with its financial and/or other contractual obligations, including but not limited to any of the following:

- (a) a Change in Law;
- (b) the imposition or change in rate of any new national or local tax except value-added tax.

16.2. Consequences of a Material Adverse Government Action

- (a) If a Material Adverse Government Action occurs, the Concessionaire shall provide written notice to the DPWH thereof within thirty (30) days of becoming aware of the same with supporting evidence. The Concessionaire shall have the burden of proving both the existence of any Material Adverse Government Action and the effect (both as to nature and extent) which any such Material Adverse Government Action has on its performance and its costs or losses arising from the Material Adverse Government Action.
- (b) If the Concessionaire is rendered wholly or partly unable to perform its obligations under this Concession Agreement directly as a result of such Material Adverse Government Action, it shall be excused from performance of such obligations to the extent that it is unable to perform on account of such Material Adverse Government Action provided that:
 - (i) the suspension of performance shall be of no greater scope and of no longer duration than is reasonably required by the Material Adverse Government Action;
 - (ii) the Concessionaire shall make all reasonable efforts to mitigate or limit the effects of the Material Adverse Government Action on its performance of the Concession Agreement; and
 - (iii) when the Concessionaire is able to resume performance of its obligations under the Concession Agreement, it shall give to the DPWH written notice to that effect and shall promptly resume performance of such obligations.
- (c) If a Material Adverse Government Action or combination of Material Adverse Government Actions in the aggregate negatively affects the Concessionaire's cash flows by more than Five Hundred Million Pesos (PhP500,000,000) in present value terms over the duration of the Concession (calculated at the time the Concessionaire claims such financial threshold to have been met), and provided that the Concessionaire has taken all reasonable steps to mitigate the effects of such Material Government Action and minimise its costs or losses arising therefrom, the Concessionaire shall immediately notify the DPWH to that effect. On or before the date that is seven (7) days after such notification, the Parties shall meet to discuss in good faith how the Concessionaire shall be compensated by the DPWH for such negative financial effect. Such compensation may include either, or a combination of, an extraordinary adjustment in Toll Rates, extension of the Concession Period, rescheduling of the Construction Schedule or of the Project implementation schedule, and/or such other remedies or compensation as may be agreed by the Parties.

(d) The Parties shall conduct negotiations in good faith for a period not exceeding ninety (90) days from date of the Concessionaire's notification to the DPWH under Section 16.2(c), unless a longer period is specifically provided or agreed among the Parties, after which, if they are unable to reach an agreement within the said period, the matter shall be determined in accordance with Section 21.0.

SECTION 17.0 DEFAULT AND TERMINATION

17.1. General Principles

- (a) This Concession Agreement shall not terminate or be terminated for any reason other than as set forth in this Concession Agreement.
- (b) Any Notice of Termination required hereunder shall state the specific cause(s) for such termination.
- (c) Notwithstanding any Notice of Default and Notice of Termination, the Parties particularly the Concessionaire, are still obliged to perform their respective obligations under this Concession Agreement and in the event of Termination, to extend utmost cooperation and assistance such that the objectives of the Project are not frustrated, the right and convenience of the public to use the NAIA Expressway as well as traffic in surrounding areas are not adversely affected and any adverse effect from the default or termination are generally minimized or avoided altogether.

17.2. Concessionaire Default

The following shall constitute a Concessionaire Default:

(a) Concessionaire Default before Construction

If the Concessionaire fails to deliver the Certified DED to the DPWH on or before the date that is twelve (12) months after the Signing Date in accordance with Section 9.2 (c).

- (b) Concessionaire Default during Construction
 - (i) If the Concessionaire fails to submit to the DPWH the required evidence of Financial Closure for the Project on or before the date that is three (3) months after <u>delivery of the Basic Right of Way by the DPWHDPWH's</u> issuance of the Notice to Proceed, in accordance with Section 7.2.
 - (ii) If the Independent Consultant certifies to the DPWH that the Concessionaire has suspended or abandoned the Construction of the NAIA Expressway. Suspension shall mean that Concessionaire has not accomplished any progress in construction for a period of at least sixty (60) days. Abandonment shall mean that Concessionaire has substantially reduced personnel or removed further required equipment from the Project such that, in the opinion of an experienced construction manager, the Concessionaire would

not be capable of maintaining progress in accordance with the Construction Schedule.

- (iii) Failure by If the Concessionaire fails to submit the O&M Manuals to the DPWH on or before the date that is eighteen (18) months after issuance of the Notice to Proceed in accordance with Section 12.310.4 (ac).
- (iv) If the Concessionaire fails to complete the Construction satisfactorily and obtain a certification from the Independent Consultant that all the requirements in Section 10.10 (c) have been fulfilled prior to the Construction Long-stop Date.
- (v) Failure by If the Concessionaire fails to submit to DPWH the Quarterly Report on Construction required under Section 10.4 (d) within the required deadline.
- (c) Concessionaire Default During the Operation Period
 - (i) [If the Concessionaire fails to commence operation of the NAIA Expressway on or before the date that is thirty (30) days after the effective date of the Toll Operation Certificate.]²¹
 - (ii) Incurrence of If the Concessionaire incurs O&M Liquidated Damages in excess of Twenty Five Thousand (25,000) Toll Equivalent Units in any calendar quarter in accordance with Section 12.3 (d).
 - (iii) Failure If the Concessionaire fails to submit to DPWH a Monthly Report on Operations and Maintenance required under Section 12.4 (c) within the required deadline.
 - (iv) If the Concessionaire does not submit the as-built drawings of the Phase I Adjustment Works and Phase II and/or the updated Asset Register and/or the Construction Completion Report on or before the date that is six (6) months after issuance of the Certificate of Final Completion in accordance with Section 10.10 (h).
- (d) Other Concessionaire Defaults from Signing of Concession Agreement to End of the Concession Period
 - (i) Failure If the Concessionaire fails to maintain the Construction Performance Security as required under Section 6.0.
 - (ii) Failure If the Concessionaire fails to deliver to the DPWH the O&M Performance Security on or before the date that is two (2) days after issuance

²¹ HL NOTE TO DPWH/DOF: CONCESSIONAIRE IS REQUIRED TO PUBLISH FIRST YEAR TOLL ONCE A WEEK FOR THREE WEEKS PRIOR TO OPERATION. WE HAVE THEREFORE CHANGED THE E0D TRIGGER TO THIRTY DAYS. IS THIS AGREEABLE TO DPWH/DOF?

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of the Independent Consultant's notice under Section 10.10 (e) or to maintain the O&M Performance Security as required under Section 12.5.

- (iii) Failure If the Concessionaire fails to deliver the Defects Performance Security no later than one (1) year prior to the end of the Concession Period in accordance with Section 19.4.
- (iv) Failure If the Concessionaire fails to designate a Facility Operator where applicable in accordance with Section 12.2 on or before the date that is (ten days / three months- still open issue) after the issuance of the Certificate of Final Completion.Notice to proceed,
- (v) Replacement of If the Concessionaire replaces the Facility Operator without the DPWH's prior written consent in accordance with Section 12.2 (g).
- (vi) If the Facility Operator ceases to comply with the requirements of Section 12.2 (a), or a replacement Facility Operator ceases to comply with the requirements set out in Section 12.2 (g).
- (vii) Failure If the Concessionaire fails to apply for, or, as applicable, fails to cause the Facility Operator to apply for, as applicable, the Toll Operation Certificate on or before the date that is seven (7) days after issuance of the Certificate of Final Completion in accordance with Section 12.3 (b).
- (viii) If the Concessionaire ceases to prosecute and carry out the Project with no manifest intention of resumption, either in whole or in material part.
- (ix) If the Concessionaire assigns this Concession Agreement to any third party without the prior written consent of DPWH in accordance with Section $\frac{22.123.1}{2.1}$.
- (x) If the required ownership structure in Section $\frac{22.22.0}{22.0}$ is violated by Concessionaire or any of its stockholders.
- (xi) If the Concessionaire is being liquidated and dissolved for reasons other than insolvency, or is declared insolvent and/or if the Concessionaire's Lenders have determined that the Concessionaire is in default or unable to fulfill its obligations to them. Notwithstanding any provisions to the contrary in this Concession Agreement, this Section 17.2 (d)(xi) shall be considered a noncurable default and shall entitle DPWH to exercise its rights to terminate this Concession Agreement under Section 17.2.
- (xii) If the Concessionaire violates any laws and regulations of the Republic of the Philippines, and such violation has a material adverse effect on its ability to perform its obligations under this Concession Agreement and/or has a material adverse effect on DPWH.
- (xiii) If the Concessionaire fails to secure or maintain the required insurance coverage under Section 14.0 of this Concession Agreement.

- (xiv) If the Concessionaire replaces its <u>Construction</u> Contractor identified in Annex F, without the prior written consent of DPWH as required in accordance with Section 10.4 (b)(i).
- (xv) Failure If the Concessionaire fails to pay the DPWH any due amount exceeding Five Million Pesos (PhP5,000,000).
- (xvi) If the Concessionaire's <u>Debt-EquityLeverage</u> Ratio exceeds the Permitted <u>Debt-EquityLeverage</u> Ratio specified at Section 7.1 at any time.
- (xvii) Violation of Section 18.0 of this Concession Agreement.
- (xviii) Otherwise, if the Concessionaire is in material breach of any of its obligations, representations or warranties under this Concession Agreement.
- (xix) If the Concessionaire fails to pay for its share of the remuneration of the Independent Consultant, in accordance with Section 11.4 (b).
- (xx) If the Concessionaire fails to update the Asset Register in accordance with Section 12.4 (d).
- (xxi) If the Concessionaire fails to submit a report listing all entities which own, either directly or indirectly through an Affiliate, 5% or more of the issued common shares of stock of the Concessionaire on or before the date of each anniversary of the Signing Date during the term of the Concession Agreement, in accordance with Section 22.0 (f).²⁵
- (e) Due Process in Case of Concessionaire Default
 - (i) Upon the occurrence of any Concessionaire Default, the DPWH shall serve a written Notice of Default to the Concessionaire, stating the nature of the Concessionaire Default, and shall require the Concessionaire to remedy the Concessionaire Default within a curing period of ninety (90) days from its receipt of such Notice of Default. The DPWH shall furnish copies of such Notice of Default to the Concessionaire's Lenders simultaneously if expressly requested to by the Concessionaire, and if the Concessionaire has previously provided DPWH with the contact information of its Lenders. To expedite the curing process, the DPWH and the Concessionaire shall promptly meet, on or before the date that is seven (7) days after receipt of the Notice of Default, to negotiate in good faith for the purpose of reaching an agreement as to the means, period, and other terms and conditions for the curing of the Concessionaire Default. If the Concessionaire fails to remedy the default within the curing period, the DPWH may issue a Notice of Termination, without prejudice to all other rights or remedies.
 - (ii) From the date the Concessionaire receives a copy of the Notice of Termination, the Lenders shall have a period of ninety (90) days to appoint a

²⁵ DOF TO CLARIFY THE TERM "ECONOMIC INTEREST". WE HAVE DRAFTED THE REQUIREMENT ON THE BASIS OF EQUITY STAKE ONLY, IS THIS AGREEABLE TO DOF/DPWH?

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Substitute Concessionaire and provide DPWH with evidence that the Substitute Concessionaire fulfills the following requirements:

- (1) If the Termination occurs prior to the issuance of the Toll Operation Certificate, the Substitute Concessionaire shall have to fulfill the requirements in <u>Annex</u> [Sections 3.1, 3.2 and 3.3 of the Instructions to Bidders]²². $\frac{26}{2}$
- (2) If the Termination occurs after the issuance of the Toll Operation Certificate, the Substitute Concessionaire shall have to fulfill the requirements in Annex [Sections 3.1, 3.2 (b), 3.2 (e) (5) to (7), and $\frac{3.3 \text{ of the Instructions to Bidders}}{1}^{23}$. It shall also have to have, at the time of the substitution, a Facility Operator who meets the requirements set out in Section 12.2(gf).
- (iii) Provided the Substitute Concessionaire meets these requirements, DPWH shall not unreasonably withhold approval of the Substitute Concessionaire. If a Substitute Concessionaire that meets these requirements is not appointed by the Lenders within the prescribed period of ninety (90) days from the issuance of the Notice of Termination, this Concession Agreement shall automatically be deemed terminated.
- (iv) After the issuance of a Notice of Termination, the DPWH may take over full control of the NAIA Expressway or require the Concessionaire to continue to perform its obligations under this Concession Agreement for a reasonable fee until a turnover to the Substitute Concessionaire or another party can be effected.
- (v) The substitution shall be effective upon concurrence by the DPWH that the Substitute Concessionaire meets the requirements specified in Section 17.2 (e)(ii). The DPWH and Concessionaire shall, during the turnover of the NAIA Expressway, extend all reasonable assistance to the Substitute Concessionaire to enable it to perform its rights and obligations under the Concession Agreement. If necessary, the DPWH shall be obliged to seek the issuance of the Toll Operation Certificate for the Substitute Concessionaire or, as applicable, its Facility Operator from the TRB. DPWH shall give its concurrence or rejection on or before the date that is twenty (20) days after written notice of the proposed appointment of the Substitute Concessionaire by the Lenders. Upon such concurrence by DPWH, this Concession Agreement shall be novated from the Concessionaire to the Substitute Concessionaire and the latter shall be entitled to exercise the rights, privileges, and shall bear all obligations of the Concessionaire under this Concession Agreement. Should DPWH not give its concurrence on or before the date that is twenty (20) days after the notice of the proposed appointment,

²² CONFIRM SECTION NUMBERS ONCE ITB FINALISED. HL'S VIEW IS THAT IT IS PREFERABLE FOR ALL SUCH ITB REQUIREMENTS TO ACTUALLY BE REPLICATED WITHIN THE TCA FOR COMPLETENESS AND SO THE TCA CAN BE CONSIDERED A STANDALONE DOCUMENT.

²⁶ ANNEXES TO INCLUDE ITB CLAUSE 11 PARTICULARLY IN FINAL TCA ISSUED FOR BID.

²³ CONFIRM SECTION NUMBERS ONCE ITB FINALISED.

provided that ninety (90) days have not yet transpired since the Concessionaire's receipt of the Notice of Termination, the Lenders may appoint another Substitute Concessionaire, and the process outlined in this Section will be repeated.

- (vi) If the Concessionaire Default from its occurrence is not capable of being cured, then the DPWH may serve a Notice of Default and, consequently a Notice of Termination to the Concessionaire, specifying therein the nature of the Concessionaire Default and the reasons why in the DPWH's opinion the Concessionaire Default is not capable of being cured, and stating likewise the date on which the Termination shall become effective. In this case, the Lenders may exercise their step-in right by nominating a Substitute Concessionaire within ninety (90) days from the receipt by the Concessionaire of the Notice of Termination.
- (vii) After the issuance of a Notice of Termination, if requested by DPWH, the Concessionaire shall:
 - (1) withdraw from the Project,
 - (2) assign to DPWH (without recourse to Concessionaire) such of Concessionaire's contracts or subcontracts as DPWH may request and shall
 - (3) deliver and make available to DPWH all proprietary information, patents, licenses and other intellectual property rights of Concessionaire related to the Project reasonably necessary to permit DPWH to complete or cause the completion of the Construction or to take over the Operation and Maintenance of the NAIA Expressway;
 - (4) authorize DPWH to use such information in completing or for the Operation and Maintenance of the NAIA Expressway;
 - (5) remove such materials, equipment, tools and instruments, debris or waste materials used or generated by <u>ConcessionareConcessionaire</u> in the performance of the Project as DPWH may direct; and
 - (6) give DPWH any or all designs, drawings and site facilities of the Concessionaire related to the Project necessary for completion of the Construction or the Operation and Maintenance.
- (viii) After the issuance of a Notice of Termination, DPWH, without incurring any liability to Concessionaire, shall have the right (either with or without the use of Concessionaire's materials, equipment, tools, and instruments) to have the Construction of the Project finished whether by enforcing any security given by or for the benefit of Concessionaire for its performance under this Concession Agreement or otherwise, in which case DPWH shall have the right to take possession of and use all equipment, materials, tools, and instruments of Concessionaire necessary for completion of the Construction

of the Project, and Concessionaire shall have no right to remove such items from the Project until such completion.

- (ix) DPWH may, but is not obligated to, make such payments or perform such obligations as are required to cure a Concessionaire Default and charge the cost of such payment or performance to the Concessionaire.
- (x) DPWH may seek damages, including proceeding against any bond, guaranty, letter of credit or other security given by or for the benefit of Concessionaire for its obligations under this Concession Agreement.

17.3. DPWH Default

- (a) The following events shall constitute DPWH Default: $\frac{27}{2}$
 - (i) Failure If the DPWH fails to release Government Financial Support in the amount specified in Section 7.4 on or before the date that is thirty (30) days after receipt of a Works Completion Statement certified by the Independent Consultant confirming completion of the relevant proportion of the Construction in accordance with Section 7.4.
 - (ii) Failure to secure from the TRBIf, after the Concessionaire²⁸ submits all the requirements for the issuance of a-the Toll Operation Certificate to the Toll Regulatory Board as specified in Annex C, the Toll Regulatory Board fails to issue the Toll Operation Certificate on or before the date that is ten (10) days after the submission of complete requirements for its issuance of the application for the Toll Operation Certificate as required under, in accordance with Section 12.3 (b), provided that the required procedures were complied with by the Concessionaire and any delay is not due to any act or omission of the Concessionaire.
 - (iii) Failure to pay the FTI with the If the DPWH fails to compensate the Concessionaire for Foregone Toll Income, with Delay Interest to, and the DPWH and the Concessionaire and failure fail to agree on an extension to the Concession Period on or before the date that is two (2) years after the date the Concessionaire is disallowed from charging and collecting authorized Toll Rates from users of the NAIA Expressway, in accordance with Section 13.3.
 - (iv) Other than in respect of the DPWH's obligations under Section 8.1, material breach of any of DPWH'sif the DPWH materially breaches any of its representations or warranties and non fulfillment of, or fails to fulfill any

²⁷ FAILURE TO DELIVER THE ROW HAS NOT BEEN INCLUDED AS AN E₀D BECAUSE SUCH FAILURE WAS DECIDED EARLIER BY THE GOVERNMENT TEAM TO BE SUBJECT TO A SEPARATE COMPENSATION MECHANISM (WHEREBY THE DPWH TERMINATION PAYMENT IN ANNEX J IS NOT APPLICABLE).

²⁸ DPWH SHOULD PERHAPS NOT BE INCLUDED HERE BECAUSE THIS COMES UNDER DPWH DEFAULT. IF THE CONCESSIONAIRE IS NOT AT FAULT FOR THE NON-ISSUANCE OF THE TOC, THEN IT SHOULD BE A DPWH DEFAULT IRRESPOECTIVE OF WHO OR WHAT ULTIMATELY CAUSED IT.

obligations under this Concession Agreement-that, and such breach or failure has a material adverse effect on the Concessionaire's ability to carry out the Project.

- (v) Taking or seizure of control or ownership of the Concessionaire, and/or of the majority of its shares, which may be issued and outstanding at any time and from time to time, or a taking or expropriation of any of the Concessionaire's assets, as by nationalization, expropriation and/or other legal process, except as provided for in Section 15.1(d).
- (b) Due Process in Case of DPWH Default
 - (i) Upon the occurrence of any of the events of DPWH Default, the Concessionaire shall serve a written Notice of Default to the DPWH, stating therein the nature of the DPWH Default, and shall request that the default be cured by the DPWH within one hundred twenty (120) days from its receipt of the Notice of Default.
 - (ii) To expedite the curing process, the DPWH and the Concessionaire shall promptly meet, on or before the date that is seven (7) days after receipt of the Notice of Default, to negotiate in good faith for the purpose of reaching an agreement as to the means, period, and other terms and conditions for the curing of the DPWH Default.
 - (iii) If the DPWH and the Concessionaire cannot agree as to the means, period, and other terms and conditions for the curing of the DPWH Default, or if the DPWH fails to cure itsa DPWH Default within one hundred twenty (120) days, the Concessionaire may serve a written Notice of Termination to the DPWH terminating this Concession Agreement.

17.4. Consequences of Termination

(a) DPWH Default

If the Concessionaire terminates this Concession Agreement due to a DPWH Default, the Concessionaire shall have the right to a DPWH Termination Payment, as follows:

- (i) If termination occurs prior to the issuance of the Toll Operation Certificate, the DPWH Termination Payment shall be computed in accordance with Annex J, Section A.1.
- (ii) If termination occurs after issuance of the Toll Operation Certificate the DPWH Termination Payment shall be computed in accordance with Annex J, Section A.2.

(b) Concessionaire Default

If DPWH terminates the Concession Agreement due to a Concessionaire Default, no compensation shall be payable to the Concessionaire, without prejudice to the

entitlement of DPWH to damages under Section 17.2 (e)(x). If DPWH terminates the Concession Agreement due to a Concessionaire Default prior to issuance of the Certificate of Final Completion, the DPWH shall have the option to purchase (and upon exercise of such option, the Concessionaire shall be obliged promptly to deliver to the DPWH) the Construction works in progress at the Termination Date relating to Phase II and/or the Phase I Adjustment Works upon payment of a DPWH Termination Payment computed in accordance with Annex J, Section C.

(a) (c) Force Majeure

If either Party terminates this Concession Agreement due to a failure to agree, within a period of six (6) months commencing on the start of negotiations between the Parties, on how to compensate the Concessionaire for FM Shortfall Amounts, in accordance with Section 15.3(e), or due to an extended Force Majeure Event, as contemplated in Section 15.3 (f), the Concessionaire shall have the right to a DPWH Termination Payment, as follows:

- (i) If termination occurs prior to issuance of the Toll Operation Certificate and the Concessionaire restores the NAIA Expressway to its condition prior to the occurrence of the Force Majeure Event, the DPWH Termination Payment shall be computed in accordance with Annex J, Section B.1.a.
- (ii) If termination occurs prior to issuance of the Toll Operation Certificate and the Concessionaire does not restore the NAIA Expressway to its condition prior to the occurrence of the Force Majeure Event, the DPWH Termination Payment shall be computed in accordance with Annex J, Section B.1.b.
- (iii) If termination occurs after issuance of the Toll Operation Certificate and the Concessionaire restores the NAIA Expressway to its condition prior to the occurrence of the Force Majeure Event, the DPWH Termination Payment shall be computed in accordance with Annex J, Section B.2.a.
- (iv) If termination occurs after issuance of the Toll Operation Certificate and the Concessionaire does not restore the NAIA Expressway to its condition prior to the occurrence of the Force Majeure Event, the DPWH Termination Payment shall be computed in accordance with Annex J, Section B.2.b.

(b) Concessionaire Default

If DPWH terminates the Concession Agreement due to a Concessionaire Default, no compensation shall be payable to the Concessionaire, without prejudice to the entitlement of DPWH to damages under Section 17.2 (e)(x). If DPWH terminates the Concession Agreement due to a Concessionaire Default prior to issuance of the Certificate of Final Completion, the DPWH shall have the option to purchase (and upon exercise of such option, the Concessionaire shall be obliged promptly to deliver to the DPWH) the Works in Progress relating to Phase II and/or the Phase I Adjustment Works upon payment of the DPWH Termination Payment²⁹ computed in accordance with Annex J, Section C.

²⁹ WHILST WE UNDERSTAND THE RATIONALE FOR CHANGING THE TERM "DPWH TERMINATION PAYMENT" TO "PAYMENT PRICE FOR WORKS IN PROGRESS", DOING SO DOES NOT HAVE ANY SUBSTANTIVE EFFECT ON THE MEANING AND WILL REQUIRE KNOCK-ON ADDITIONAL

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(c) DPWH Default

If the Concessionaire terminates this Concession Agreement due to a DPWH Default, the Concessionaire shall have the right to a DPWH Termination Payment, as follows:

- (i) If termination occurs prior to the issuance of the Toll Operation Certificate, the DPWH Termination Payment shall be computed in accordance with Annex J, Section A.1.
- (ii) If termination occurs after issuance of the Toll Operation Certificate the DPWH Termination Payment shall be computed in accordance with Annex J, Section A.2.
- (d) Termination Payment
 - (i) Any DPWH Termination Payment under Sections 17.4 (a), (b) and (c) shall be in Philippine Pesos, which may be paid outright in cash deposited with the bank account designated by the Concessionaire or by the issuance of a promissory note from the Republic of the Philippines through the Department of Finance. If the DPWH opts to settle the DPWH Termination Payment by promissory note, DPWH shall cause the issuance by the Republic of the Philippines through the Secretary of Finance of two (2) promissory notes payable by the Republic of the Philippines to the Concessionaire, reflecting two equal amortizations of the total amount owed to Concessionaire, including interest that shall accrue from Termination Date on the outstanding amounts, which shall be based on the two year PDST-F rate and due and payable at the end of the first and second years, respectively, of their date of issuance.
 - (ii) The payment either in cash or the issuance of the promissory notes shall be made not later than one hundred and eighty (180) days after the Termination Date ("DPWH Termination Payment Date"), unless the Parties agree to another period. Unpaid amounts shall accrue interest at the 6-month PDSTF from the DPWH Termination Payment.
 - (iii) Upon receipt of the Notice of Termination, the Parties shall meet within two (2) business days and continue to meet daily to determine the amount of the DPWH Termination Payment. If the Parties cannot agree on the amount of the Termination Payment on or before the date that is thirty (30) days after the time of the receipt by one party of a Notice of Termination from the other, the matter may be referred by any party to an Independent Expert appointed in accordance with Section [21.321.2].
 - (iv) The DPWH Termination Payment shall be computed based on values as of Termination Date, provided that for avoidance of doubt, cash flows

DRAFTING IN 17.4(d) AND ELSEWHERE WHICH ISN'T STRICTLY NECESSARY. WE WOULD THEREFORE PROPOSE TO MAINTAIN TO THE ORIGINAL WORDING "DPWH TERMINATION PAYMENT".

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realized<u>any cashflows earned</u> by the Concessionaire during the intervening period from Termination Date until the actual turnover of the cash collectionscashflow (for tolls imposed and collected) to DPWH, shall be set-off against the Termination Payment-to-avoid double counting of the values.

- (v) The DPWH Termination Payment whether made in cash or promissory note, shall be considered as full payment of all the obligations of DPWH. Its payment, whether in cash or promissory note, shall extinguish any and all rights and obligations of the Parties, their successors-in-interests and assigns under this Concession Agreement. All other claims that were not demanded or referred to arbitration prior to the DPWH Termination Payment Date, shall also be deemed waived or settled by the Termination Payment.
- (vi) For the avoidance of doubt, if the DPWH Termination Payment is made by promissory note, the obligations of DPWH after its issuance shall be limited to discharging its obligation to pay under that promissory note in accordance with its terms.
- (vii) If the DPWH has no further right to Liquidated Damages and/or O&M Liquidated Damages (as applicable) as of the Termination Date, then the DPWH shall return the Construction Performance Security and/ the O&M Performance Security (as applicable), net of any amounts drawn, on the DPWH Termination Payment Date.

17.5. Survival of Obligations after Termination

The respective obligations of the DPWH and the Concessionaire with respect to the termination of this Concession Agreement as set forth in this Section 17.0 shall survive the termination hereof.

SECTION 18.0 CORRUPT, FRAUDULENT, COERCIVE, UNDESIRABLE, AND RESTRICTIVE PRACTICES

- (a) The Concessionaire and its respective officers, employees, agents and advisers shall observe the highest standard of ethics at all times.
- (b) Notwithstanding anything to the contrary contained in the Concession Agreement, the DPWH shallmay terminate the Concession Agreement, as the case may be, without being liable in any manner whatsoever to the Concessionaire if it determines that the Concessionaire has had any Conflict of Interest in the Bidding Process or, directly or indirectly or through an agent, engaged in Corrupt, Fraudulent, Coercive, Undesirable, or Restrictive Practice-in the Bidding Process ³⁰for the Project and/or during the Concession Period. In such an event, the DPWH shall forfeit and appropriate the Construction Performance Security and/or O&M Performance Security, as the case may be, as mutually agreed genuine pre-estimated compensation and damages payable to the DPWH towards, inter alia, time, cost and effort of the DPWH, without prejudice to any other right or remedy that may be

³⁰ DO WE LIMIT CONFLICT OF INTEREST ISSUE IN BIDDING PROCESS OR WOULD THIS BE A CONCERN THROUGHOUT CONCESSION TERM?

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available to the DPWH hereunder or otherwise. <u>The Concessionaire and any of its</u> contractors or any Subcontractors shall be prohibited from engaging any legal, financial or technical advisors of DPWH in relation to the Project or who was an employee of DPWH, save where such engagement or employment has ended or been terminated for a period of not less than one (1) year. For the avoidance of doubt, this prohibition does not apply to the institutions engaged by DPWH as legal, financial or technical advisers, but does apply to the specific persons handling the transactions in these instances.

- (c) Without prejudice to the rights and remedies which the DPWH may have under the Concession Agreement, if the Concessionaire is found by the DPWH to have directly or indirectly or through an agent, engaged or indulged in any Corrupt, Fraudulent, Coercive, Undesirable, or Restrictive Practice during the Concession Period, the Concessionaire shall not be eligible to participate in any bidding of the DPWH from the date the Concessionaire is found to have directly engaged or indulged in any such practices.
- (d) The DPWH shall seek to impose the maximum penalties for civil and criminal liability available under the applicable law on individuals and organizations deemed to be involved in Corrupt, Fraudulent, Coercive, Undesirable, or Restrictive Practice.

SECTION 19.0 TURNOVER

19.1. Mechanics of Turnover

- (a) At the end of the Concession Period, the Concessionaire shall turnover to the DPWH the NAIA Expressway in the condition required for turnover as described in Section 5.0 of the Minimum Performance Standards and Specifications.
- (b) No later than the date that is two years prior to the end of the Concession Period, the DPWH and the Concessionaire shall conduct a joint inspection and survey of the condition of the NAIA Expressway. The Parties shall agree on the following:
 - (i) Assets to be turned over, which, at a minimum, shall include the NAIA Expressway itself and all the assets in the most updated Asset Register.
 - (ii) The maintenance and repair work required to achieve compliance with the requirements of the Minimum Performance Standards and Specifications onfor the condition of the NAIA Expressway at turnover, and the amounts required to undertake such maintenance and repair work.schedule for its completion (the "**Renewal Programme**"). The Concessionaire shall prepare the Renewal Programme and shall submit it to DPWH for its approval. If the DPWH has any comments on the Renewal Programme the Concessionaire shall submit a revised Renewal Programme to the DPWH which addresses such comments.³¹

³¹ <u>NEW WORDING PROPOSED FOR SECTION 19.1(b)(ii), 19.1(c), and 19.2(d) TO CLARIFY THE</u> <u>CONCESSIOANIRE'S OBLIGATIONS WITH RESPECT TO HANDOVER. DOF/DPWH TO CONFIRM IF</u> <u>THIS IS AGREEABLE.</u>

- (iii) The Operation and Maintenance facilities, equipment, spare parts lists and manuals and all instruction books necessary to operate and maintain the Project safely, computer programs, data and files to be turned over to the DPWH.
- (iv) Training of the personnel of the DPWH for the latter's eventual take-over of the Project.
- (v) Requirement that all equipment and facilities turned over pursuant to this Concession Agreement shall meet the standards provided in this Concession Agreement including the O&M Manuals and/or manufacturer's manual as of the time of the turnover.
- (c) Upon receipt of the DPWH's approval under Section 19.2(b)(ii) the Concessionaire shall implement the Renewal Programme. The Concessionaire shall provide DPWH with a monthly report on progress of the maintenance and repair work against the Renewal Programme. Where progress in any month is behind the schedule specified in the Renewal Programme, the next monthly report shall also include the Concessionaire's proposals for recovering such schedule³².
- (d) (c) No later than thirtythree (303) daysmonths nor earlier than six (6) months prior to the end of the Concession Period, the Parties shall conduct a final joint inspection and survey of the NAIA Expressway to confirm that its condition complies with Minimum Performance Standards and Specifications, or to confirm the extent to which it does not so comply. Any non-compliance with the Minimum Performance Standards and Specifications it is own cost and expense.
- (e) (d)-Upon the end of the Concession Period or upon Termination Date in the event of early termination, the Concessionaire if requested by DPWH, shall withdraw from the Project site, assign to DPWH (without recourse to Concessionaire) such Concessionaire's subcontracts as DPWH may request, and deliver and make available to Concessionaire all proprietary information, patents, and licenses of Concessionaire related to the Project reasonably necessary to permit DPWH to complete or cause the completion of the Project. In connection therewith Concessionaire authorizes DPWH to use such information in completing the Project, to remove such materials, equipment, tools and instruments used by any debris or waste materials generated by Concessionaire in the performance of the Project as DPWH may direct and to take possession of any or all designs, drawings and site facilities of Concessionaire related to the Project necessary for completion of the Project.
- (f) (e) The Concessionaire shall assign to the DPWH, and the latter shall be subrogated to, any and all rights and benefits which it is able to subrogate or assign, including any unexpired warranties in respect of the Project, its equipment and systems.

19.2. Cost of Turnover

³² DPWH/DOF MAY WANT TO CONSIDER IMPOSING O&M LIQUIDATED DAMAGES IN SUCH <u>CIRCUMSTANCES. TO BE DISCUSSED.</u>

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The Concessionaire shall bear all costs incurred in the turnover under Section 19.1 and shall, at its own expense, obtain and effect all applicable Government Authority approvals and take such action as may be necessary for the transfer pursuant to this Section 19.0. These costs and expenses shall include the following:

- (a) legal fees;
- (b) all national and local taxes, if any; and
- (c) fees charged by any Government Authority.

19.3 Liability for Defects after Turnover

The Concessionaire shall be liable for all defects and deficiencies in the NAIA Expressway for a period of one year after the end of the Concession Period, and it shall have the obligation to repair or rectify, at its own cost, all defects and deficiencies observed by the DPWH during this period such that the NAIA Expressway conforms with the Minimum Performance Standards and Specifications. In the event the Concessionaire fails to repair or rectify such defect or deficiency on or before the date that is fifteen (15) days after the date the DPWH provides written notification of the defect or deficiency³³, the DPWH shall be entitled to have the same repaired or rectified at the Concessionaire's risk and cost. All costs incurred by the DPWH in this respect shall be reimbursed by the Concessionaire to the DPWH on or before the date that is fifteen (15) days after receipt of demand thereof.

19.4 Defects Performance Security

- (a) As security for the performance of the Concessionaire's obligations under Section 19.3 above, the Concessionaire shall, no later than one (1) year prior to the end of the Concession Period, deliver to the DPWH the Defects Performance Security, and the DPWH shall be entitled to call upon the same immediately upon the Concessionaire's failure to comply with its obligations under Section 19.3 above. The Defects Performance Security shall be in the form of an irrevocable standby letter of credit which must:
 - (i) be issued by a universal or commercial bank licensed by the Bangko Sentral ng Pilipinas;
 - (ii) be for an amount equal to the higher of the amount agreed between the Parties pursuant to Section 19.1(b)(ii) above and 5% of the gross toll revenues of the previous calenarcalendar year;
 - (iii) be valid for a period of one (1) year after the date which is the end of the Concession Period;
 - (iv) be in favour of the DPWH;

<u>SNGLIB01/SINKS/97813.5</u> <u>Hogan Lovells Lee & Lee</u>

³³ OUR UNDERSTANDING WAS THAT THIS CLAUSE WOULD APPLY AFTER TURNOVER. TIMING OF DELIVERY OF THE DEFECTS SECURITY WAS PRESUMABLY TO ENSURE THE CONCESSIONAIRE ACTUALLY DELIVERED IT.

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- (v) constitute an on demand, unconditional commitment to pay by the bank by which it is issued; and
- (vi) be in the form approved by the DPWH.
- (b) If the Defects Performance Security is insufficient to cover the cost of bringing the NAIA Expressway to the conditions required in the Minimum Performance Standards and Specifications upon its turnover, DPWH shall have a residual claim on the Concessionaire for any such amounts in excess of any amounts drawn from the Defects Performance Security.

SECTION 20.0 REPRESENTATIONS, WARRANTIES, AND UNDERTAKINGS

20.1. DPWH's Representations and Warranties

The DPWH hereby represents and warrants the following:

- (a) The DPWH is duly organized and validly existing as a Government Authority and has all the requisite legal power, authority and right to execute and deliver this Concession Agreement and to perform its obligations under this Concession Agreement.
- (b) The DPWH has taken all appropriate legal and/or other actions required and/or appropriate to authorize the execution, delivery, and performance of this Concession Agreement and all other agreements, instruments, or documents contemplated thereunder.
- (c) This Concession Agreement constitutes the legal, valid, direct and binding obligations of the DPWH, enforceable against the DPWH in accordance with the terms of the Concession Agreement. This Concession Agreement is in satisfactory and proper legal form under the laws of the Republic of the Philippines.
- (d) The DPWH is subject to civil and commercial laws with respect to its obligations under this Concession Agreement or any other document contemplated thereunder. The DPWH does not enjoy any rights of immunity from suit, judgment or execution or from any other legal process in respect of its obligations under this Concession Agreement or any other document contemplated thereunder.

20.2. Concessionaire's Representations, Warranties, Undertakings, Acknowledgements and Agreements

The Concessionaire hereby, as the context requires, represents, warrants, undertakes, acknowledges and agrees the following:

(a) The Concessionaire is duly organized and existing and in good standing under the laws of the Republic of the Philippines and has the requisite legal power, authority and right to carry out the business which it now conducts or proposes to conduct.

- (b) The Concessionaire has full legal power, authority and right to execute and deliver this Concession Agreement and to perform its obligations thereunder, and has taken all necessary corporate legal action and approvals to authorize the execution, delivery, and performance of this Concession Agreement.
- (c) This Concession Agreement constitutes the legal, valid, direct and binding obligations of the Concessionaire, enforceable against the Concessionaire in accordance with the terms of the Concession Agreement. This Concession Agreement is in satisfactory and proper legal form under the laws of the Republic of the Philippines.
- (d) The Concessionaire's signatory to this Concession Agreement is of age, has full legal capacity and has been duly authorized by the Board of Directors of the Concessionaire to sign, execute and deliver this Concession Agreement for and on behalf of the Concessionaire.
- (e) It has the required authority, ability, skills and capacity to perform and shall perform its obligations under the Concession Agreement in a manner consistent with Prudent Industry Practice utilizing sound engineering principles, project management procedures and supervisory procedures.
- (f) It is satisfied with and accepts all conditions relating to access to the Project site, the availability of equipment, the availability of <u>electicityelectricity</u> and water, and similar matters that may impact upon the performance by Concessionaire of its obligations under this Concession Agreement.
- (g) It has obtained or will obtain all Consents or required exemptions, on or before the date they are required to enable Concessionaire to perform its obligations under this Concession Agreement in a timely manner.
- (h) There are no actions, suits, proceedings or investigation, pending or to Concessionaire's knowledge threatened against it before any court, executive, legislative or administrative body that could result in any materially adverse effect on the business, properties, or assets or the condition, financial or otherwise, of Concessionaire or in any impairment of its ability to perform its obligations under this Concession Agreement.
- (i) It owns or has the right to use all intellectual property rights or any other rights or intangible properties necessary to perform its obligations under this Concession Agreement.
- (j) The Project can and shall be constructed in conformity with existing laws and permits.
- (k) It-has not, will not, and any of its shareholders at the Signing Date, or any of their Affiliates have not had any Conflict of Interest in the Bidding Process, and have not in the Bidding Process, and will not during the term of this Concession Agreement, and will instruct its employees, contractorsConstruction Contractor, agents, suppliers, vendors, not to engage in any Corrupt, Fraudulent, Coercive, Undesirable,

or Restrictive Practice, and shall immediately notify DPWH of any violation of this undertaking and shall indemnify and hold DPWH harmless for all losses, expenses, damages and liabilities arising out of such violation.

- (1) It recognizes, understands, and acknowledges that DPWH is providing no representation or warranty regarding and specifically disclaims any responsibility for the usefulness, accuracy, completeness, validity or propriety of any or all reports, data, inferences, conclusions and other information provided by or to be provided by DPWH. Concessionaire acknowledges and agrees that it is not relying on DPWH for any information, data, inferences, conclusions, or other information with respect to the required works for the Project.
- (m) It is familiar with the physical requirements of the Project and has inspected and examined the Project site and surrounding locations and the condition of Phase I to the extent it deems necessary in accordance with Prudent Industry Practice for performing its obligations under this Concession Agreement. The Concessionaire further acknowledges and agrees that it is satisfied with and accepts all conditions that exist at the Project site and surrounding areas, including the condition of Phase I, or that may exist in or at the Project site or surrounding areas, or Phase I, for the purposes of fulfilling its obligations with respect to the Project, in any case whether seen or unseen, discovered or undiscovered, unknown or unusual, including climatic, hydrological, geologic, seismic and other conditions at the Project site natural or otherwise, the form and nature of the Project site (including Phase I) and the soil and subsoil, rock and subsurface conditions, and the nature of the material natural or otherwise to be excavated. No information that DPWH has provided or will in the future provide will change this representation.

SECTION 21.0 DISPUTE RESOLUTION²⁴

21.1. Discussion

The Parties agree that in the event that there is any dispute, controversy or claim arising out of or relating to any provision of this Concession Agreement or the interpretation, enforceability, performance, breach, termination or validity thereof (each such dispute, controversy, claim or matter a "**Dispute**"), either Party may give notice in writing of the Dispute to the other Party and both Parties shall meet in an effort to resolve such Dispute by amicable discussion.

21.2. Project Dispute Resolution Board

- (a) The Parties shall meet regularly during the term of this Agreement to discuss the progress of the DED, Construction, and Operation and Maintenance of the Project, to ensure that they are proceeding satisfactorily.
- (b) In the event of a disagreement or dispute among the DPWH, Concessionaire and/or the

²⁴ HL NOTE TO DPWH/DOF: IT MAY BE WORTH DELETING ONE OF SECTIONS 25.1 AND 25.2 ON THE BASIS THAT THEY APPEAR TO ACHIEVE THE SAME ENDS SO INCLUDING BOTH PROVISIONS IS NOT STRICTLY NECESSARY. THE FORMALITY OF THE PDRB PROCESS MAY MILITATE AGAINST RETAINING THIS PROVISION.

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Independent Consultant or within the [O&M Budget Committee]²⁵ in respect of the DED, Construction, Operation and Maintenance, or any provision of this Concession Agreement, the disagreement or dispute shall immediately be referred by way of written notice to the Project Dispute Resolution Board for resolution or amicable settlement. The Project Dispute Resolution Board shall seek to resolve such disagreement or dispute or reach an amicable settlement not later than thirty (30) days from date of the written notice.

- (c) The Project Dispute Resolution Board shall be composed of (a) a representative to be chosen by the DPWH, (b) a representative to be chosen by the Concessionaire, and (c) a representative to be appointed by the two representatives chosen by the DPWH and the Concessionaire. Both Parties shall agree on the selection, term of office and fees of the Project Dispute Resolution Board on or before the date that is thirty (30) days after the Signing Date.
- (d) Construction works based on the Certified DED and Minimum Performance Standards and Specifications shall continue, where such works shall not be affected by the outcome of any pending disagreement or dispute.

<u>21.2.</u> <u>21.3.</u> Referral to Independent Experts

In the case of a Dispute on Termination Payment under Section 17.4 (d) that cannot be resolved amicably between the Parties in accordance with SectionsSection21.1 or 21.2, either Party may, by notice in writing to the other Party, refer the Dispute to an Independent Expert for its decision. Such decision shall be final and binding on the Parties. The Independent Expert shall be internationally recognized for its expertise and experience in resolving disputes involving issues which may arise under Section 17.4 (d). The Independent Expert will be procured by the DPWH in accordance with the Rules for Expertise of the International Chamber of Commerce for the time being in force. The fees and expenses of the Independent Expert shall be borne equally by both Parties. The Disputes to which this Section 21.321.2 apply shall not be referred to arbitration under Section 21.421.3 below unless by mutual agreement of the Parties or if the Dispute relates exclusively to the selection and appointment of the Independent Expert under this Section 21.2.

21.3.

<u>21.3.</u> <u>21.4.</u> Arbitration

- (a) Any Dispute that is not resolved amicably by the Parties on or before the date that is thirty (30) days after the date of the notice of such Dispute or disagreement under Sections 21.1 or 21.2 (as applicable) or decided by an Independent Expert under Section 21.3, shall be finally settled by arbitration as provided under this Section 21.421.3.
- (b) In case of a Construction Dispute, the Dispute shall be referred to and finally settled through arbitration by the CIAC under the Rules of Procedure Governing Construction Arbitration promulgated by the CIAC, pursuant to Executive Order No.

²⁵ HL NOTE TO DPWH/DOF: PLEASE PROVIDE A DEFINITION FOR THIS TERM.

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1008 (Construction Industry Arbitration Law), as amended by Republic Act No. 9285 (Alternative Disputes Resolution Act of 2004). The legal seat of the arbitration shall be the Republic of the Philippines and the venue of the arbitration shall be in Metropolitan Manila.

- (c) All other Disputes that are not Construction Disputes as dealt with under Section 21.421.3(b) shall be finally settled under the Rules of Arbitration of the International Chamber of Commerce (the "ICC Rules") in effect at the time the request for arbitration is submitted in accordance with the ICC Rules, by such number of arbitrators as the parties may agree or, in the absence of such agreement, by a panel of three (3) arbitrators, appointed in accordance with the ICC Rules. The legal seat and venue of the arbitration shall be Singapore. The English language shall be used in the arbitral proceedings, and all documents, exhibits and other evidence shall be in the English language. For the avoidance of doubt, any award made under this Section 21.421.3 (c) shall be deemed to be a Singapore award made in relation to a dispute arising out of a commercial relationship for the purposes of the New York Convention on the Recognition and Enforcement of Foreign Arbitral Awards of 1958.³⁴
- (d) For the avoidance of doubt, the laws of the Republic of the Philippines shall be the governing law of the entire Concession Agreement including this Section 21.0 as well as this arbitration clause.

SECTION 22.0 MISCELLANEOUS PROVISIONSOWNERSHIP OF THE CONCESSIONAIRE

22.1. Assignment

- (a) Subject to prevailing laws on nationality requirements for public utilities, government procurement and all other applicable laws, the Concessionaire has the right to assign any of its rights, title, interest, or obligations under this Concession Agreement, in whole or in part, provided that:-
 - (i) such assignment will not in any way diminish its principal liability under this Concession Agreement; and
 - (ii) the Concessionaire secures prior DPWH written approval of the assignment, which approval shall not be unreasonably withheld.
- (b) The Concessionaire has the right to assign any of its actual or expected income and revenue under this Concession Agreement, in whole or in part, without need of approval from the DPWH provided that the Concessionaire shall give a written notice to the DPWH prior to the assignment.

22.2. Change in Ownership Structure/Share Ownership

³⁴ RELEVANCE OF THE NEW YORK CONVENTION WORDING IS, WE UNDERSTAND, RECOGNITION OF ANY AWARD IN THE PHILIPPINES (WHICH IS A SIGNATORY) AND IN ALL OTHER COUNTRIES THAT ARE SIGNATORIES TO THAT PARTICULAR AWARD RECOGNITION CONVENTION.

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- (a) As a general rule, no change in the ownership of any part of the common shares of stock in the Concessionaire which are issued and outstanding shall be made without the prior approval of the DPWH.
- (b) The Lead Member and other shareholders of the Concessionaire, and their respective shareholdings in the Concessionaire, are shown in Annex K.
- (c) From the Signing Date until the end of the third year of the Operation Period, no shareholder may sell or assign his/its proportion of the common sharesstock or of any right in such common stock in the Concessionaire which are issued and outstanding. The Concessionaire may apply for or cause the increase of its outstanding capital stock during this period; provided that (i) the Lead Member shall remain the single biggest stockholder with at least have thirty three percent (33%) ownership of voting stocks as well as thirty three percent (33%) of total outstanding shares and (ii) all shareholders of the Concessionaire at the time of the Signing Date shall collectively hold at least seventy-five percent (75%) of the outstanding capital stock of the Concessionaire during this period. It is required that the Lead Member, shareholders identified in Annex K either by ownership or by agreement, must collectively have Control over the Concessionaire from the Signing Date until the end of the third year of the Operation Period. For purposes of complying with the control and ownership requirement, preferred shares and similar shares other than common shares under the Corporation Code of the Philippines, shall be treated as debt.
- (d) Beginning the fourth year of the Operation Period and until the end of the seventh year, a shareholder may sell or assign his/its shares to any third person with the prior approval of the DPWH; provided, that the Lead Member shall still be the biggest single stockholder, must retain at least twenty-six percent (26%) of total voting and non-voting shares and all shareholders of the Concessionaire at the time of the Signing Date shall collectively hold at least fifty-one percent (51%) of the outstanding capital stock of the Concessionaire during this period.
- (e) No restrictions shall be imposed from the eighth year of the Operation Period onwards, provided all assignments, transfers, agreements or encumbrance of shares of stocks divesting the then controlling stockholders of control, shall be subject to the approval of DPWH.
- (f) The Concessionaire shall submit a report listing all entities which own, directly or indirectly through an Affiliate, 5% or more of the issued common shares of stock of the Concessionaire on or before the date of each anniversary of the Signing Date during the term of the Concession Agreement.³⁵

SECTION 23.0 GENERAL CONCESSIONAIRE INDEMNITY

The Concessionaire will indemnify, defend, save and hold harmless the DPWH and its officers, servants, agents and any applicable Government Authority ("the DPWH

SNGLIB01/SINKS/97813.5 Hogan Lovells Lee & Lee

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³⁵ SAME COMMENT AS ABOVE REGARDING MEANINING OF "ECONOMIC INTEREST". DOF/DPWH TO CONFIRM DRAFTING.

Indemnified Persons") against any and all writs, proceedings, actions, demands and third party claims for any loss, damage, cost and expense of whatever kind and nature arising out of any breach by or on behalf of the Concessionaire of any of its obligations under this Concessionaire Agreement or on account of any defect or deficiency in the provision of services by the Concessionaire, except to the extent that of such writs, proceedings, actions, demands and claims have arisen due to any negligent act or omission on the part of the DPWH Indemnified Persons.³⁶

SECTION 24.0 MISCELLANEOUS PROVISIONS

24.1. Assignment

- (a) Subject to prevailing laws on nationality requirements for public utilities, government procurement and all other applicable laws, the Concessionaire has the right to assign any of its rights, title, interest, or obligations under this Concession Agreement, in whole or in part, provided that:
 - (i) such assignment will not in any way diminish its principal liability under this Concession Agreement; and
 - (ii) the Concessionaire secures prior DPWH written approval of the assignment, which approval shall not be unreasonably withheld.
- (b) The Concessionaire has the right to assign any of its actual or expected income and revenue under this Concession Agreement, in whole or in part, without need of approval from the DPWH provided that the Concessionaire shall give a written notice to the DPWH prior to the assignment.

24.2. 22.3. Modification and Amendment

- (a) At any time during the term of this Concession Agreement, upon request of the DPWH or the Concessionaire, the DPWH and the Concessionaire shall consult with each other to determine whether in light of relevant circumstances, provisions of this Concession Agreement need revision. Such revision shall ensure that this Concession Agreement operates equitably and without major detriment to the interest of any of the Parties. In reaching agreement on any revision in accordance with this Section <u>22.323.2</u>, the Parties shall ensure that no revision to this Concession Agreement shall prejudice the Concessionaire's financial credibility or its ability to raise funds by borrowing or other means. Any consultation among the Parties pursuant to this Section <u>22.323.2</u> shall be carried out in a spirit of cooperation with due regard to the intent and objectives of this Concession Agreement.
- (b) This Concession Agreement shall not be modified, amended or varied in any manner unless such modification, amendment or variation is in writing and executed by the Parties.

³⁶ WE NOTE THAT THE DRAFT TCA DOES NOT CONTAIN A 3RD PARTY CLAIM INDEMNITY SECTION FOR DPWH/GOVERNMENT SO WE HAVE INSERTED A PROPOSAL HERE FOR DOF/DPWH CONSIDERATION.

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24.3. 22.4. Notices

(a) Any notice or communication required or permitted in, or otherwise issued in connection with, this Concession Agreement shall be in writing and shall be delivered personally, transmitted by facsimile, or scanned and sent by electronic mail, or sent by registered, postage prepaid mail to the following:

DPWH:

PostalAddressPostal Address: Facsimile No.: E-mail address: Attention:

Concessionaire:

PostalAddressPostal Address: Facsimile No.: E-mail address: Attention:

(b) Any such notice or communication shall be deemed given when so delivered personally to, or if transmitted by facsimile or sent by electronic mail or sent by registered mail, upon its receipt, in the respective addresses of the Parties.

<u>24.4.</u> <u>22.5.</u> Waiver

- (a) No waiver of any of the terms or provisions of this Concession Agreement shall be valid unless made in writing and signed by the Parties.
- (b) The waiver by any Party of any breach of any provision of this Concession Agreement shall not be construed as a waiver of a subsequent breach, whether of the same or different provision, unless such waiver is in writing and signed by the Party concerned.
- (c) The failure or delay of any Party to exercise its rights shall not operate as a waiver, nor shall any single or partial exercise of such right preclude any other or future exercise of that right.

<u>24.5.</u> <u>22.6.</u> Governing Law

This Concession Agreement and its interpretation or construction shall be governed by the laws of the Republic of the Philippines.

<u>24.6.</u> <u>22.7.</u> Severability

If any provision of this Concession Agreement is declared void, invalid or unenforceable by any court of competent jurisdiction, the remaining provisions of this Concession Agreement shall remain in full force and effect.

25.8 Entire Agreement

This Concession Agreement comprises the entire agreement of the Parties and replaces and supersedes all prior negotiations, representation and agreements (whether oral or in writing).

IN WITNESS WHEREOF, the Parties have set their hands on the date and at the place first stated above.

DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS

CONCESSIONAIRE

By:

Secretary

By:

Duly Authorized Representative

WITNESSED BY:

ACKNOWLEDGMENT

Republic of the Philippines)) S.S.

BEFORE ME, a Notary Public in and for [•], Philippines, this [•]th day of [•] 2011, personally appeared:

Name	Government Issued ID No.	Date & Place Issued
[•]	[•]	[•]
[•]	[•]	[•]

Having presented to me their above-stated identification and both known to me to be the same persons who executed the foregoing Concession Agreement consisting of [•] pages, including this page on which this Acknowledgment is written and relevant Annexes, signed on each and every page thereof by the Parties and their instrumental witnesses, and acknowledged to me that the same as their free and voluntary act and deed and that of the corporation or entity they respectively represent.

WITNESS MY HAND AND SEAL this [•] day of [•] 2011 at [•], Philippines.

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Original DMS:dm://SNGLIB01/96745/6		
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Changes:		
Add	482	
Delete -	389	
Move From	40	
Move To	40	
Table Insert	2	
Table Delete	5	
Embedded Graphics (Visio, ChemDraw, Images etc.)	0	
Embedded Excel	0	
Total Changes:	958	