Environmental Monitoring Report

Semi-annual Environmental Monitoring Report No. 2
April 2020 – September 2020
September 2020

Philippines: Malolos-Clark Railway Project (PFR 1)

Prepared by the Project Management Office (PMO) of the Department of Transportation (DOTr) for the Government of the Republic of the Philippines and the Asian Development Bank.

CURRENCY EQUIVALENTS

(as of 30 March 2020)

Currency unit	–	Philippine Peso (PHP)
PHP1.00	=	$0.02
$1.00	=	PHP50.96

ABBREVIATIONS

ADB	–	Asian Development Bank
BMB	–	Biodiversity Management Bureau
Brgy	–	Barangay
CCA	–	Climate Change Adaptation
CCC	–	Climate Change Commission
CDC	–	Clark Development Corporation
CEMP	–	Contractor's Environmental Management Plan
CENRO	–	City/Community Environment and Natural Resources Office
CIA	–	Clark International Airport
CIAC	–	Clark International Airport Corporation
CLLEx	–	Central Luzon Link Expressway
CLUP	–	Comprehensive Land Use Plan
CMR	–	Compliance Monitoring Report
CMVR	–	Compliance Monitoring and Validation Report
CNO	–	Certificate of No Objection
CPDO	–	City Planning and Development Office
DAO	–	DENR Administrative Order
DD / DED	–	Detailed Design Stage / Detailed Engineering Design Stage
DENR	–	Department of Environment and Natural Resources
DepEd	–	Department of Education
DIA	–	Direct Impact Area
DILG	–	Department of Interior and Local Government
DOH	–	Department of Health
DOST	–	Department of Science and Technology
DOTr	–	Department of Transportation
DPWH	–	Department of Public Works and Highways
DSWD	–	Department of Social Welfare and Development
DTI	–	Department of Trade and Industry
EA	–	Executing Agency
ECA	–	Environmentally Critical Area
ECC	–	Environmental Compliance Certificate
ECP	–	Environmentally Critical Project
EGF	–	Environmental Guarantee Fund
EHS	–	Environmental Health and Safety
EIA	–	Environmental Impact Assessment
EIS	–	Environmental Impact Statement
EISR	–	Environmental Impact Statement Report
EMA	–	External Monitoring Agency
EMB	–	Environmental Management Bureau
EMF	–	Environmental Monitoring Fund
EMoP	–	Environmental Monitoring Plan

EMP	–	Environmental Management Plan
ENRO	–	Environment and Natural Resources Officer
EQPL	–	Environmental Quality Performance Level
ERA	–	Environmental Risk Assessment
ERP	–	Emergency Response Plan
ESRD	–	Environment, Social and ROW Division
EU	–	Environmental Unit
FAM	–	Facility Administration Manual
FMB	–	Forest Management Bureau
GAF	–	Grievance Action Form
GCR	–	Greater Capital Region
GPS	–	Global Positioning System
GRM	–	Grievance Redress Mechanism
IEC	–	Information Education and Communication
IEE	–	Initial Environmental Examination
IFC	–	International Finance Corporation
IIA	–	Indirect Impact Area
IRR	–	Implementing Rules and Regulations
ISF	–	Informal Settler Families
JDT	–	JICA Design Team
JICA	–	Japan International Cooperation Agency
LGU	–	Local Government Unit
LIAC	–	Local Inter-Agency Committee
LRT	–	Light Rail Transit
LRTA	–	Light Rail Transit Authority
MCLUPZO	–	Manila City Comprehensive Land Use Plan and Zoning Ordinance
MCRP	–	Malolos Clark Railway Project
MCRRS	–	Manila-Clark Rapid Railways System
MENRO	–	Municipal Environment and Natural Resources Office
MGB	–	Mines and Geosciences Bureau
MMDA	–	Metro Manila Development Authority
MMSP	–	Metro Manila Subway Project
MMT	–	Multipartite Monitoring Team
MNTC	–	Manila North Tollways Corporation
MOA	–	Memorandum of Agreement
MPDO	–	Municipal Planning and Development Office
MRT	–	Metro Rail Transit
NAMRIA	–	National Mapping and Resource Information Authority
NCCA	–	National Commission for Culture and the Arts
NCR	–	National Capital Region
NECP	–	Non-Environmentally Critical Project
NGO	–	Non-Government Organization
NHA	–	National Housing Authority
NHCP	–	National Historical Commission of the Philippines
NLEX	–	North Luzon Expressway
NLRC	–	North Luzon Railways Corporation
NM	–	National Museum
NSCR	–	North South Commuter Railway Project

NSCR EX	–	North South Commuter Railway Extension Project
NTP	–	Notice to Proceed
ODA	–	Overseas Development Assistance
OSH	–	Occupational Safety and Health
PAF	–	Project Affected Families
PAP	–	Project Affected Persons
PD	–	Presidential Decree
PEISS	–	Philippine Environmental Impact Statement System
PEMAPS	–	Project Environmental Monitoring and Audit Prioritization Scheme
PENRO	–	Provincial Environment and Natural Resources Office
PEPRMP	–	Programmatic Environmental Performance Report and Management Plan
PH	–	Public Hearing
PMO	–	Project Management Office
PNP	–	Philippine National Police
PNR	–	Philippine National Railways
PNSC	–	Philippine National Structural Code
PO	–	People Organizations
PPE	–	Personal Protective Equipment
PRI	–	Philippine Railway Institute
RA	–	Republic Act
RAP	–	Resettlement Action Plan
RHU	–	Rural Health Unit
RIC	–	RAP Implementation Committee
ROW	–	Right-of-Way
SB	–	Sangguniang Bayan
SCPW	–	Society for the Conservation of Philippine Wetlands Inc.
SCTEX	–	Subic-Clark-Tarlac Expressway
SDP	–	Social Development Plan
SMR	–	Self-Monitoring Report
SPS	–	Safeguard Policy Statement
STPP	–	Sucat Thermal Power Plant
SWMP	–	Solid Waste Management Plan
TIA	–	Traffic Impact Assessment
TMS	–	Train Management System
TOR	–	Terms of Reference
TPA	–	Third-Party Auditor
UNDP	–	United Nations Development Program
UNESCO	–	United Nations Educational, Scientific and Cultural Organization

NOTE{S}

(i) In this report, "$" refers to United States dollars

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ADB	

Reference Documents

ADB. (2015, February). Operations Manual Section D14/BP.

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DOTr. (2020). *Environmental Impact Statement for North-South Commuter Railway (NSCR) Calamba Extension Project (Updated Report).*

DOTr. (2020). *Environmental Impact Statement for North-South Commuter Railway (NSCR) Clark Extension Project (Updated Report).*

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Executive Summary

1. This report is the 2nd semi-annual report on environmental safeguard compliance for the North South Commuter Railway Clark Extension (NSCR Clark Extension) Project also known as Malolos-Clark Railway Project (MCRP; Loan 3796-PHI: Malolos-Clark Railway Project) covering the period from April 2020 to September 2020.

2. This report is divided into two parts: Section 1) Project Details that merely presents the key project information focusing on environmental compliance requirements (i.e., EMP, ECC and loan covenants), implementation arrangements and structure, coordination and reporting requirements, and information disclosure; and Section 2) Project Updates on the Environmental Performance Monitoring covered in Section 1.

Project Details

3. The NSCR Clark Extension Project is part of the government's flagship North-South Commuter Railway (NSCR) Project, a 163.6 km suburban railway network connecting New Clark City (NCC), Clark and Clark International Airport (CIA) with Manila and Calamba by 2025. The network comprises the (i) 37.6-km section Malolos–Solis–Tutuban, which began construction in early 2019 and is expected to start operation in 2022, (ii) the 52.4-km NSCR Clark Extension Project (the proposed Project), which was slated to commence construction in 2020 and start partial operation in 2022, and (iii) the 55.6-km North South Commuter Railway Calamba Extension (NSCR Calamba Extension) Project also known as South Commuter Railway Project from Blumentritt to Calamba, which is expected to commence construction in 2021 and start operation by 2024. The extension to NCC is expected to commence construction by 2022 and start operation by 2025. An extension for long-haul services to Batangas and Southern Luzon is planned beyond 2025 (ADB, 2019).

4. The NSCR Clark Extension Project will be co-financed by the Japan International Cooperation Agency (JICA) and the Asian Development Bank (ADB) on a parallel collaborative basis. JICA is financing the core system and consulting services. ADB is financing civil works through a Multi-tranche Financing Facility (MFF) with three tranches adopting the time-slicing approach for large-scale stand-alone projects. Each tranche will finance slices of a group of contracts for civil works or consulting services. The amount of each tranche will be requested according to the disbursement progress and projection. To date, construction contracts have been awarded for Contract Packages (CPs) N-01 to N-05.

5. The Environmental Compliance Certificates (ECC) for the NSCR Clark Extension Project (ECC-CO-1807-0017) and the NSCR Calamba Extension Project (ECC-CO-1807-0018) were both issued on 13 August 2018.

Project Updates

6. The first phase will extend the NSCR railway line to the south from a junction point between Solis Station and Tutuban Station to a newly constructed station in Blumentritt in Sta. Cruz District of the City of Manila. However, due to the ongoing NLEx/SLEx Connector Road Project of the Department of Public Works and Highways (DPWH), which was designed to utilize the PNR ROW from Sta. Mesa to Solis, Manila, the Project will traverse private lands adjacent to the PNR ROW from Solis Station to Sta. Mesa Station. DOTr will exercise the power of eminent domain of the government for the acquisition of the private lands in this section, which has an estimated length of 8.0 km. The second phase is from Blumentritt Station to Calamba Station including access going to the Calamba Depot.

7. However, there were changes on the project scope from feasibility study (FS) to detailed design (DD) stage that required supplementary documentation. Updated EIS reports for both Clark and Calamba Extension Projects incorporating the changes in the DD stage have been submitted to the Environmental Management Bureau (EMB) on 16 January 2020. Requests for amendment of both ECCs dated 20

February 2020 (with summary of changes from Feasibility Study EIS to Detailed Design EIS and other relevant annexes) were received by the EMB Central Office (EMB-CO) on 4 March 2020. In a letter dated 12 May 2020, by EMB-CO approved the Proponent to replace the MMT with a Third-Party Auditor (TPA, **Annex A** and **Annex G**). The bidding process on the selection of a Contractor for TPA is in progress and is projected be completed within the coming quarter. Further amendments to the ECC are for the inclusion of river improvement sub-components and COVID-19 risk management measures in the Environmental Management and Monitoring Plan (EMMoP). An updated EIS report, which incorporates these most recent changes has been submitted to the EMB on 7 September 2020 (**Annex B**).

8. Pre-construction activities such as continuing stakeholder consultation meetings (SCMs), Information, Education and Communication (IEC) campaigns, and tree inventories related to the preparation of the Resettlement Action Plan (RAP) and land acquisition are being conducted.

Meanwhile, compliance with pre-construction requirements are being undertaken by DOTr.

Project Number and Title:	52083-002: Malolos-Clark Railway Project (PFR 1)[1]	
Loan Number and Title	Loan 3796-PHI: Malolos-Clark Railway Project - Tranche 1	
Loan Agreement Signing	11 July 2019	
Loan Effectivity	26 September 2019	
Safeguards Category	Environment	A
Reporting period:	September 2020	
Last report date:	March 2020	
Key sub-project activities since last report:	This is the second SEMR since loan effectivity. • Contract awards: a) Civil Works Contractors – Contract Packages (CPs) N-01 to N-05 have been awarded (Please see **Annex C**, **Annex D** and **Annex E**) Rolling Stock Provider – No awards made as of the reporting period b) Strengthening of Institutional Capacity - No awards made as of the reporting period • Progress of Work (% physical completion): No construction activities yetError! Reference source not found.Error! Reference source not found.Error! Reference source not found.Error! Reference source not found.Error! Reference source not found.	
Report prepared by:	Project Management Office, NSCR Extension Project Department of Transportation (DOTr) Office of the Undersecretary for Railways	

[1] ADB.2015. *Operations Manual Section D14 Bank Policies.* Manila.

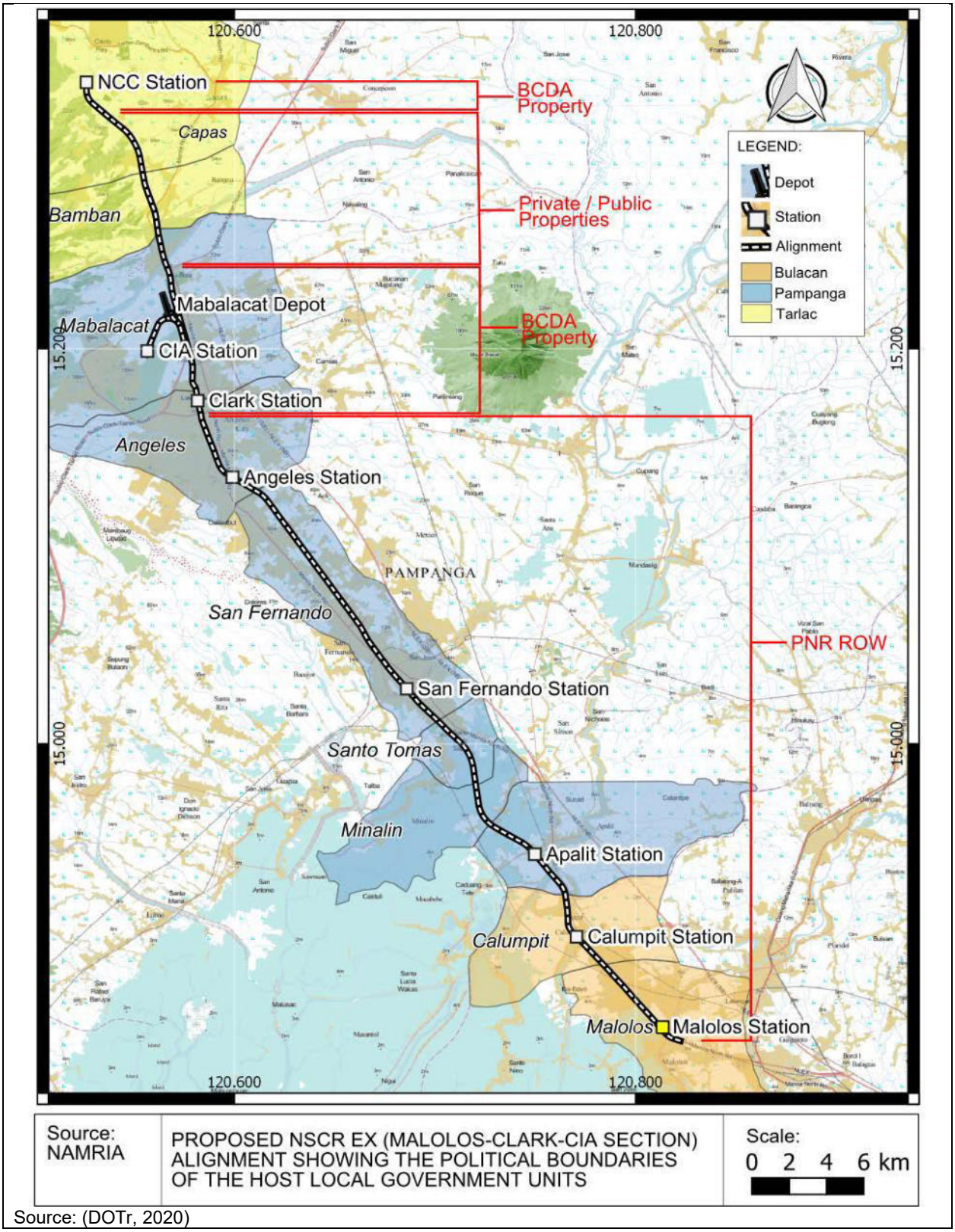
1 Project Details

1.1 Project Overview

9. The proposed NSCR Extension Project will include two sections of new railway services namely: 1) NSCR Clark Extension (Malolos-Clark); and 2) NSCR Calamba Extension (Solis-Calamba). The NSCR Extension Project will connect to the NSCR Project, a 37.6-km section of railway from Tutuban to Malolos that is financed by JICA and is currently under construction. The ADB loan includes contract packages N-01, N-02, N-03, N-04 and N-05 of the Clark Extension and S-01 of the Calamba Extension. The description of each contract package is given in **Table 1**. The Department of Transportation (DOTr) is the Executing Agency (EA) with Philippine National Railways (PNR), a government-owned railway company under DOTr, as Co-End-user.

10. The NSCR Clark Extension Project alignment (**Figure 1**) traverses the municipalities/cities of Malolos and Calumpit in the Province of Bulacan; Apalit, Minalin, Sto. Tomas, San Fernando, Angeles and Mabalacat in the Province of Pampanga; and Bamban and Capas in Province of Tarlac. It will be developed in two phases. The first phase is a 52.4-km railway line that will primarily utilize the existing Right-of-Way (ROW) of PNR commencing at Malolos and ending at the Clark International Airport (CIA) Complex including a 1.5-km access rail to the 0.33 km^2 (33 ha) Mabalacat depot within the Clark Special Economic Zone (CSEZ). The second phase will cover the extended section of 18 km from Clark to NCC traversing privately owned land and properties of the Bases Conservation and Development Authority (BCDA) within Capas and Bamban in the Province of Tarlac.

11. The NSCR Calamba Extension will be approximately 55.6 km traversing the cities of Manila, Makati, Taguig, Parañaque, and Muntinlupa in the National Capital Region (NCR); and San Pedro, Biñan, Santa Rosa, Cabuyao, and Calamba in the Province of Laguna. Contract package S-01 is from a junction point between Solis Station and Tutuban Station to a newly constructed station in Blumentritt in Sta. Cruz District of the City of Manila (**Figure 2**).



Source: (DOTr, 2020)

Figure 1: North South Commuter Railway Clark Extension Project Alignment

12. The Project has been further divided into six contract packages[2]. The details of projects and sub-projects (construction packages) and their locations are presented in **Table 1** and **Figure 2** below:

Table 1: List of Contract Packages[3]

Contract Package	Contract Package Location	Station Number and Section (Length)	Civil Works Description	Contract Type
NSCR Clark Extension (N2)				
CP N-01	Calumpit and Malolos in Bulacan, and Apalit and Minalin in Pampanga	Civil 1 Station: 2 34.749 km – 51.679 km (L = 16 km 930 m)	Building and Civil Engineering Works for approximately 17 km of Railway viaduct including four balanced cantilever bridges and two elevated steel framed station buildings.	ADB SBD Procurement of Works (FIDIC MDB Harmonized Construction Contract) *1
CP N-02	San Fernando and Minalin, Pampanga	Civil 2 Station: 1 51.679 – 67.449 km (L = 15 km 770 m)	Building and Civil Engineering Works for approximately 16 km of Railway viaduct, including one extra-dosed suspension bridge and one balanced cantilever bridge, and one elevated station building.	ADB SBD Procurement of Works (FIDIC MDB Harmonized Construction Contract) *1
CP N-03	Angeles, Clark, San Fernando, and Mabalacat, Pampanga	Civil 3 Station: 2 67.449 – 83.170 km (L = 15 km 721 m)	Building and Civil Engineering Works for approximately 16 km of Railway viaduct, including one extra-dosed suspension bridge and one balanced cantilever bridge. Diversions and training are required for an approximately 1 km stretch of the Sapang Balen river. Two elevated steel framed station buildings, and approximately 0.6 km of depot access line are also included.	ADB SBD Procurement of Works (FIDIC MDB Harmonized Construction Contract) *1

[2] Appendix A: Procurement Plan of the Facility Administration Manual, Project Number: 52093-001, 2019
[3] Contract packages N-01, N-02, N-03, N-04, N-05 and S-01 are covered by Loan Agreement No. 3796-PHI.

Contract Package	Contract Package Location	Station Number and Section (Length)	Civil Works Description	Contract Type
CP N-04	CIAC/BCDA and Mabalacat, Pampanga	Underground railway and approach to CIA + Access railway to Mabalacat Depot Station: 1 (L = 3 km 22 m)	Building and Civil Engineering Works for approximately 3 km of Railway track comprising of at-grate, u-shaped semi-underground structure and open-cut tunnel, including the construction of an underground station serving CIA, and approximately 0.5 km of depot access line.	ADB SBD Procurement of Works (FIDIC MDB Harmonized Construction Contract) *1
CP N-05	CIAC/BCDA and Mabalacat, Pampanga	Mabalacat Depot	Civil Engineering and Building works for the Mabalacat Depot, covering an area of approximately 33 ha., including construction of the Operations Control Center, Stabling Yard, Workshops, Training Center and other Ancillary Buildings. Approximately 0.4 km of depot access line is also included.	ADB SBD Procurement of Works (FIDIC MDB Harmonized Construction Contract) *1
NSCR Calamba Extension (SC)				
CP S-01	Manila, NCR	Civil 1 Station: 1 1.329 km – 2.405 km (L = 1 km 076 m)	Building and Civil Engineering Works for five balanced cantilever bridges approximately 1.1 km of Railway viaduct including two steel box girder bridges and one elevated steel framed station building.	ADB SBD Procurement of Works (FIDIC MDB Harmonized Construction Contract) *1

(*1) The Standard Bidding Document (SBD) for the Procurement of Works (SBD Works) issued by the Asian Development Bank (ADB) dated June 2018. The General Conditions of ADB' SBD Works shall be the Conditions of Contract for Construction for Building and Engineering Works Designed by the Employer, Multilateral Development Bank Harmonized Edition, prepared by the FIDIC (FIDIC MDB Harmonized Construction Contract), Edition June 2010 (FIDIC Pink Book).

Notes for Information Only: The Standard Bidding Document (SBD) for Procurement of Electrical and Mechanical Plant and for Building and Engineering Works, designed by the Contractor-Trial Version (SBD Design Build) have been prepared and issued by Japan International Cooperation Agency (JICA) in July 2015. The General Conditions of JICA' SBD Design Build (standard GC) are prepared based on Conditions of Contract for Plant and Design Build prepared by FIDIC, Edition FIDIC 1999 (FIDIC Yellow Book).

Source: (ADB, 2019)

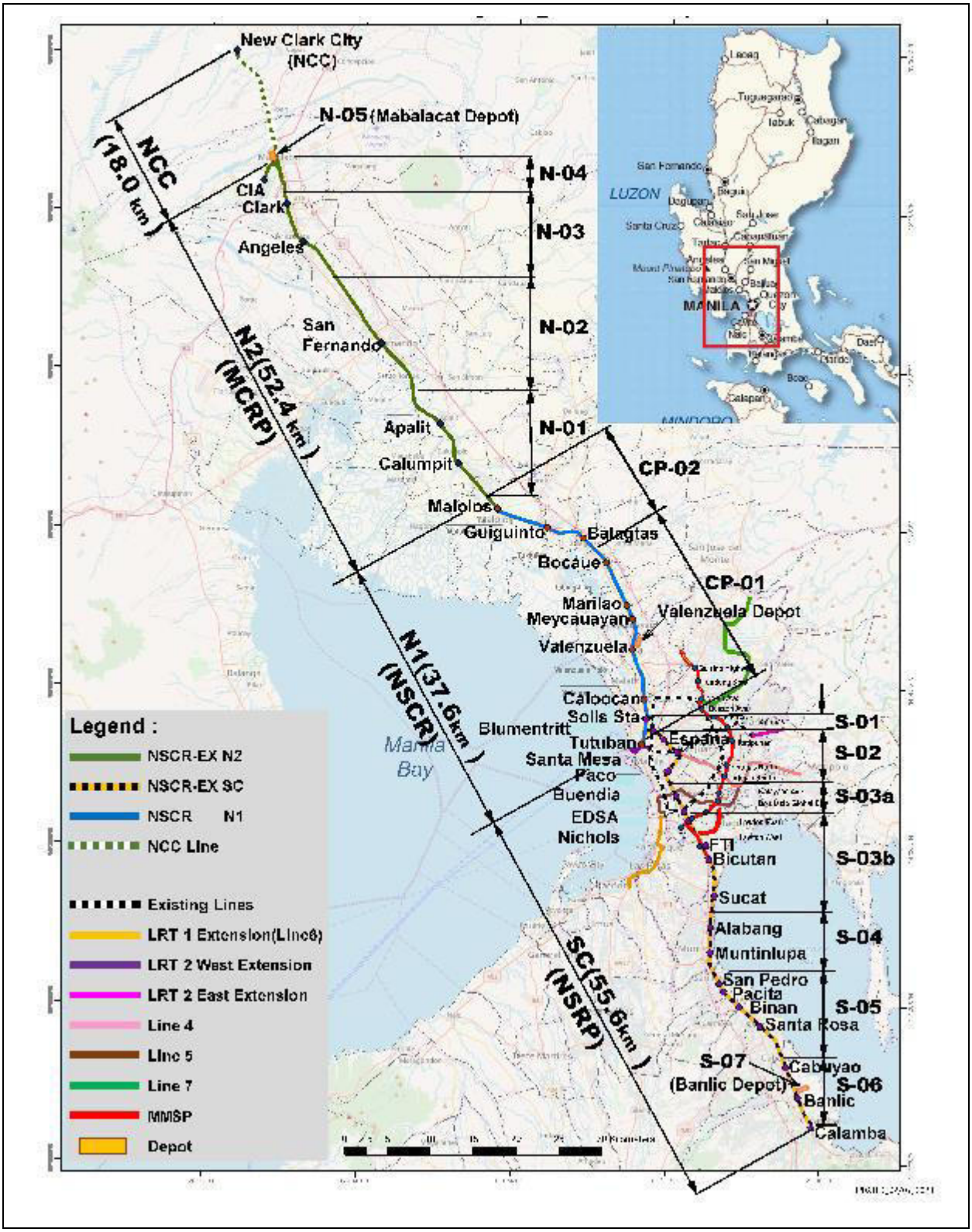


Figure 2: NSCR Alignment Map showing Contract Packages

1.2 Safeguards Plans Implementation Arrangements

13. The loan covenants are primarily the obligations to be performed by the borrowers / guarantors / executing agencies of ADB-financed projects. The Loan Agreement between the Republic of the Philippines and ADB dated 11 July 2019[4] specifies the safeguards obligations that the borrower and DOTr shall perform. It also states that the borrower and DOTr shall take all actions, including provision of funds, facilities, services and other resources necessary to enable DOTr to perform its obligations under the said Loan Agreement, including without limitation, any funds required to mitigate unforeseen environmental and social impacts, among others.

14. The main thrust of the Environmental Management Plan (EMP) is to ensure that environmental, socio-economic, political, and public health issues within all contract packages are properly addressed in a timely manner. It details the prevention, mitigation, compensation, contingency and monitoring measures to enhance positive impacts and minimize negative impacts and risks of a proposed project or undertaking. It also provides a necessary mechanism that will strengthen the organizational relationship of DOTr with the host communities, concerned government agencies, and other stakeholders. To ensure compliance with the EMP during the detailed design phase, DOTr has initiated addressing several requirements of the Environmental Compliance Certificates (ECC) issued by the DENR-EMB.

15. The ECC for the NSCR Clark Extension Project (ECC-CO-1807-0017), which covers the Malolos to Clark alignment and the depot CP N-01 to CP N-05), and the NSCR Calamba Extension Project (ECC-CO-1807-0018), which covers the 1-km viaduct and one elevated station in Blumentritt in Manila, NCR (CP S-01), were both issued on 13 August 2018. Both ECCs have exactly the same conditions that both projects shall comply with separately. The ECC conditions are the commitments of the proponent which are necessary for the project to comply with existing environmental regulations or to operate within best environmental practice that are not currently covered by the existing laws.

16. The Environmental Management clauses to be complied with by the Contractors are contained in GS 118 of Volume 2 Part II – Requirements Section 6 – The Employer's Requirements Part I – The Specifications: A General Specification (GS) Book 1: GS 100 General Specification; which form part of the bidding documents. The supporting documents were included in Appendix 7 of the bidding documents. A Pre-Construction Conference shall be held between DOTr the GC and the winning bidder in order to clarify and confirm the Environmental Management clauses under GS 118 with emphasis on the CEMMP. The updates on the EIS, ECC, EMP and EMoP shall also be discussed with the Contractors.

17. Table 2 briefly presents the contents of the safeguards plans that guide the environmental compliance of this Project.

Table 2: The NSCR Clark Extension Project Safeguards Implementation Arrangement Plans

Safeguards Plans	Contents/Compliance Requirement
ADB covenants	Schedule 4: Execution of Project; Financial Matters (Safeguards Paras. 6 to 15) • Environment • Land Acquisition and Involuntary Resettlement • Indigenous Peoples

[4] Loan Agreement (Ordinary Operations) for Loan 3796-PHI: Malolos-Clark Railway Project - Tranche 1

Safeguards Plans	Contents/Compliance Requirement
	• Human and Financial Resources to Implement Safeguard Requirements • Safeguards-related Provisions in Bidding Documents and Works Contracts • Safeguards Monitoring and Reporting • Prohibited List of Investments Schedule 4: Execution of Project; Financial Matters (Safeguards Paras. 16 to 17) • Labor Standards, Health and Safety
EMP	Environmental compliance requirements during Pre-construction, Construction and Operations Phases of the Project: • PD 1152: Philippine Environment Code (1977) • PD 1586 (1978): Establishing an Environmental Impact Statement System including other environmental management related measures and for other purposes • PD 2146 (1981): Proclaiming certain areas and types of projects as environmentally critical and within the scope of the Environmental Impact Statement System established under PD 1586 • DENR Administrative Order No. 30 Series of 2003 (DAO 03-30): Implementing rules and regulations for the PEISS of PD 1586 • EMB Memorandum Circular (MC) 2007-002: Revised procedural manual for DAO 03-30 • RA 6969: Toxic Substances and Hazardous and Nuclear Wastes Control Act of 1990 • RA 9003: The Ecological Solid Waste Management Act of 2000 • RA 8749: Clean Air Act of 1999 • RA 9275: Philippine Clean Water Act of 2004 • PD 984: National Pollution Control Decree of 1976 • PD 442: Labor Code of the Philippines, as amended (including Occupational Safety and Health Standards) • PD 856: Sanitation Code of the Philippines • Implementation of Emergency Response Plan and Health and Safety Management Plan
ECC conditions	1. Conduct an effective and continuing Information, Education and Communication (IEC) Program through the use of most effective media to inform and educate all stakeholders, especially the contractors, workers, LGUs, businesses and local residents 2. Implement a comprehensive Social Development Program (SDP) and submit a separate report together with the Compliance Monitoring Report (CMR) to the EMB Central Office using CMR Online on a semi-annual basis pursuant to EMB MC 2016-01. 3. Submit detailed waste management program (WMP) for proper handling, collection and disposal of solid, hazardous and liquid wastes to EMB Central Office (CO) and EMB Region III within **six (6) months prior to project construction**. Proof of implementation shall be submitted together with the CMR. 4. Ensure that all the existing waterways affected by the proposed project construction are maintained and not obstructed 5. Submit a detailed construction environmental management program, including mobilization and demobilization plans, for the construction yards one (1) month prior to project implementation. The plan should include the coordination with concerned LGUs to promote compatibility of adjoining land uses with the intended project stations including its exit and entrance. 6. Submit a detailed plan for earth balling and replanting of mature native/endemic trees within three (3) months prior to project construction.

Safeguards Plans	Contents/Compliance Requirement
	7. Implement a greening program in line with the DENR's thrust for GHG Emission Reduction Program. The program shall be submitted to EMB sixty (60) days prior to the project implementation. 8. Submit an approved Resettlement Action Plan (RAP) of the affected communities within two (2) months prior to project construction. 9. Conduct a detailed Traffic Impact Assessment (TIA) in coordination with the concerned LGUs for every proposed station prior to project construction integrating proposed road expansion projects of the concerned government agencies. Transport of heavy structures shall be scheduled during the period that may not cause traffic in the area. 10. The Proponent shall set-up the Environmental Guarantee Fund (EGF), the Multipartite Monitoring Team (MMT), and the replenishable Environmental Monitoring Fund (EMF). The amount and mechanics of EGF, EMF and the establishment of the MMT shall be determined by the EMB Central Office and the proponent through a Memorandum of Agreement (MOA) which shall be submitted in the sixty (60) days prior to construction. 11. Establish an Environmental Unit (EU) in sixty (60) days prior to construction that shall competently handle the environment-related aspects of the project. 12. The Proponent shall ensure that its contractors and sub-contractors are provided with copies of this ECC, including the EMP, and that they will strictly comply with the relevant conditions of the ECC. 13. No activities shall be undertaken other than what were stipulated in the final EIS. Any expansion and/ or modification of the Project beyond the Project description or change in alignment/ route that will cause significant impacts to the environment shall be subjected to a new Environmental Impact Assessment. 14. In case of transfer of ownership of this Project, the same conditions and restrictions shall apply to the transferee or grantee who shall secure in writing the corresponding amendment of this ECC from the EMB-CO within fifteen (15) working days reflecting such transfer.
Contractual arrangements	Contractor's Environmental Management and Monitoring Plan (CEMMP) Within 60 days after the Commencement Date, the Contractor shall submit, in accordance with the procedure given under GS 120, a CEMMP for the review and consent of the Engineer (the General Consultant, GCR). Limits should be stated using the Environmental Quality Performance Levels (EQPL): • Alert or "Red Flag" Level (early warning), • Action Level (The point at which management measures are needed to prevent escalation of impact to the regulated limit). • Limit Level (The limit level, which is the regulatory standard that must not be exceeded and for which emergency response actions must be employed). CEMMP minimum contents: **Part I Administration of Environmental Management** a) Company Environmental Policy b) Contractor's Organization for Environmental Management c) Environmental Management Roles and Responsibilities of Personnel d) Communication and Reporting Schedule e) Employee Environmental Training and Site Induction Outline f) Environmental Emergency Procedures g) Sub-Contractor Environmental Management and Enforcement Procedures **Part II Environmental Impacts Management** <u>Natural Environment Preservation</u> a) Soil Management Plan;

Safeguards Plans	Contents/Compliance Requirement
	b) Waste Management Plan; c) Surface Water and Groundwater Quality Management Plan. d) Re-vegetation Plan e) Environmental Rehabilitation <u>Pollution Prevention and Control</u> f) Air Quality, Dust, Smoke and Airborne Pollution Management. g) Noise and Vibration Management. h) Environmental Risk Management. <u>Social Environment Management and Mitigation</u> i) Traffic Management Plan; j) Addressing Disabled and Gender Requirements; k) Occupational Health and Safety Management; l) Addressing Temporary Employment Generation Requirements for Affected Communities. m) Supporting the Information, Education and Communication (IEC) Program n) Archeology: Chance Find Procedure o) Archeology: Accidental Discovery of National Importance **Part III Environmental Impacts Monitoring** a) Environmental Management Monthly Monitoring Report; b) Water Quality Monitoring Report; c) Air Quality Monitoring Report; d) Noise and Vibration Monitoring Report. **Part IV Special Provisions** a) Preservation of Old PNR Stations and Structures and other Historic Structures; b) Protection, Reinstatement and Remedial Works c) Complaints Handling d) Environmental Guarantee Fund; e) Temporary Facilities.

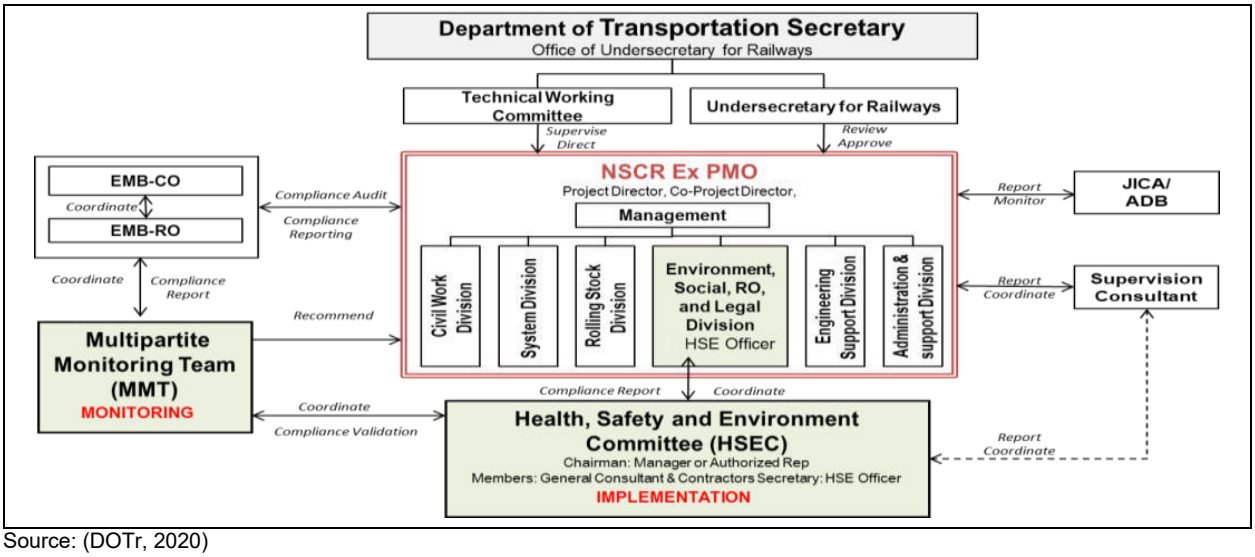
1.3 Implementing Structure

18. Source:

19. Figure 3 presents the simplified institutional chart for the EMP implementation and the relationship among the entities, while **Table 3** presents the main roles and responsibilities of the EMP implementing entities to ensure compliance with the EMP, the EMoP and other conditions stipulated under the ECC, and manage grievances, if any, arise during construction.

1.3.1 The Department of Transportation

20. The Undersecretary for Railways will directly supervise the NSCR EX PMO and will make critical decisions regarding the implementation of the Project. Under the NSCR EX PMO, the HSEC will be established to implement the EMP during pre-construction and construction phases of the Project.



Source: (DOTr, 2020)

Figure 3: Simplified Institutional Plan for Implementing the EMP

Table 3: Roles and Responsibilities for the EMP Implementation

Responsibility / Entity	DOTr Railway office	NSCR EX PMO (Project Management Office)	PMO-ESRL (Environment Social, ROW division and Legal Division)	HSEC Health, Safety and Environment Committee)/PCO (Pollution Control Officer)	MMT (Multipartite Monitoring Team)	Contractors	GC (General Consultant)
Establish the NSCR EX PMO	◎	○					
Establish the PMO-ESRL	◎	○					
Appoint the Health, Safety and Environment Officer (HSEO) and Pollution Control Officer (PCO)		◎	○				
Establish the MMT	◎	○	○				
Establish the EGF and the EMF	◎	○	○	○	○		
Secure fund for the EMP implementation (for the operation of the EGF, the EMF and the PMO-ESRL)	◎	○	○				
Ensure the Project's compliance to the ECC, the EMP and the EMoP		◎	○	○		○	○
Ensure the Project's compliance to JICA and ADB guidelines		◎	○	○			○
Handle grievances			◎	○	○	○	○

Responsibility \ Entity	DOTr Railway office	NSCR EX PMO (Project Management Office)	PMO-ESRL (Environment Social, ROW division and Legal Division)	HSEC Health, Safety and Environment Committee)/PCO (Pollution Control Officer)	MMT (Multipartite Monitoring Team)	Contractors	GC (General Consultant)
Implement mitigation measures in compliance with the EMP				○		◎	○
Implement the EMoP in compliance with the EMP				○		◎	○
Monitor and assess the effectiveness of mitigation measures		◎	○	○	○		○
Revise the EMP as necessary		◎	○	○			○
Audit compliance					◎		

Note: ◎ = leading party, ○ = assisting party
Source: (DOTr, 2020)

1.3.2 NSCR Clark and Calamba Extension Project Management Office (NSCR-EX PMO)

21. The NSCR-EX PMO is established as the representative of DOTr and PNR for all activities pertaining to the planning, design review, and implementation of the Project.

22. The Project Director, the Co-Project Director, and the Management Director are responsible for the decision-making, planning, and the implementation of the overall Project activities, while the Project Manager and the Deputy Project Manager are in charge of the management of the Project (Table 4).

Table 4: Composition of the NSCR-EX PMO (Provisional)

No.	Position	Member
1	Oversight functions	Project Director: DOTr Undersecretary for Railways Co-Project director: PNR General Manager
2	Manager	Project Manager: Representative from DOTr Deputy Project Manager: Representative from DOTr
3	Division (a total of 450 staff)	Six divisions headed by division chiefs, supervised by the Management. 1) Civil Works Division 2) System Division 3) Rolling Stock Division (RS Division) 4) Engineering Support Division (ES Division) 5) Environment Social, ROW division and Legal Division (PMO-ESRL) 6) Administration and Support Division (PCS Division)

Source: (DOTr, 2020)

1.3.3 Multi-partite Monitoring Team

23. The MMT is an independent third-party entity that will be established after the issuance of the ECC to encourage participation of the Project's various local stakeholders and monitor the Project's compliance with the ECC conditions as well as the EMP and EMoP during pre-construction, construction, and operation. The MMT's compliance validation monitoring reports (CMVRs) as prescribed in the Revised Procedural Manual of DAO 03-30 will be submitted to the DENR-EMB, and will be reported in the environmental monitoring reports required by ADB and JICA.

Roles and Responsibilities of the MMT

24. The specific functions of the MMT include the followings:

- Conduct a quarterly ocular site visit to validate the proponent's compliance with the ECC conditions and the environmental management and monitoring plan (EMMoP) including requirements for self-monitoring and submit the corresponding reports regularly;
- Observe sampling activities conducted by the EA;
- Prepare and submit its report to the EMB-Central Office, the EMB-Region 3, JICA and ADB using EMB-prescribed formats at least semi-annually, no later than July 31 for the first-term report and January 30 for the second-term report; and
- Institute an environmental emergency and grievance management mechanism which is expected to provide recommendations for necessary regulatory actions to the EMB in a timely manner to prevent adverse environmental impacts.

1.3.4 Contractors

25. The Contractors are bound by contracts to implement the EMP during construction. The environmental compliance monitoring will be undertaken by the MMT, which monitors the Contractors' and the NSCR-EX PMO's performance with respect to the ECC conditions, the EMP and the EMoP, evaluating compliance with the guidelines of DAO 2003-30[5], DAO 2017-15[6], ADB Safeguard Policy Statement, JICA Environmental Policy and JICA Environmental Guidelines.

26. The Contractors will primarily implement the EMP and comply with the measures, requirements, and other relevant provisions set forth in the EMP and any corrective or preventative actions set out in the safeguard monitoring report[7]. The Contractors shall be held liable for any penalty sanctioned to the NSCR-EX PMO due to non-compliance with the conditions in the ECC. The Contractors will allocate funding for the successful implementation of the EMP as stated in the Environmental Protection Clauses. Along with DOTr, the Contractors shall ensure that all engineering interventions in the approved EMP, RAP, and the ECC are implemented and shall document and report them to the DENR-EMB, JICA, and ADB through the

[5] DENR Administrative Order No. 30, Series of 2003: Implementing rules and regulations for the Philippine Environmental Impact Statement System (PEISS) of Presidential Decree (PD) No. 1586

[6] DENR Administrative Order No. 15, Series of 2017: Guidelines on public participation under the PEISS

[7] The Semi-annual Environmental Monitoring Report

prescribed formats and channels. The Contractors will notify the NSCR EX PMO, JICA, and ADB of any environmental risks or impacts not considered in the EIS, the EMP and the RAP or the Ancestral Domain Sustainable and Protection Plan (ADSDPP) that arise during construction.

1.3.5 General Consultant

27. DOTr has engaged the services of Greater Capital Railway Consortium (GCR[8]) as the general consultant to support the Project implementation and the overall responsibility for supervising, monitoring and reporting the EMP implementation[9]. GCR includes international environmental specialists and local environmental specialists who are responsible for supporting the PMO-ESRL and providing training and capacity building programs as required. GCR is tasked to assist DOTr and the NSCR-EX PMO.

28. GCR's roles and responsibilities are itemized in the GC's Terms of Reference detailed in Table 15 of Section 2.3.5.

1.3.6 Third Party Monitor - External Environmental Monitoring Agency (EMA)

29. In addition, an External Environmental Monitoring Agency (EMA) shall be engaged to report directly to the NSCR-EX PMO and shall provide independent periodic reviews and assessments of Resettlement Action Plan (RAP) and EMP implementation performance of the General Consultant, and the Contractors.

30. External Monitoring Agency (EMA). As required by ADB SPS 2009, for projects with significant impacts on IR an independent EMA will be recruited to monitor the implementation of RAPs and indigenous peoples plan (IPP) (if required) in the project areas. The EMA is to be recruited by the DOTr using counterpart funds. The DOTR should ensure the EMA is recruited in a timely manner and that the funds are secured. The EMA will prepare a periodical report for submission to MCR- PMO and ADB for review and disclosure. The PMO, LGUs, and KSAs will facilitate and provide the needed assistance to the EMA to conduct its monitoring and evaluation of the project. The Terms of Reference (TOR) of EMA is in Appendix F of this FAM

1.4 Meetings

31. Project understanding shall remain consistent among Project parties and shall be updated altogether. **Table 5** presents the types of meetings that each party implements in their respective organizations to keep track of Project progress.

Table 5: Regular Meetings

Requiring Party	Meeting Type	Description	Frequency
Internal Agencies			
DOTr	Coordination Meeting	• Attended by DOTr, PNR, ADB, JICA, and GCR Top Management	Monthly

[8] Joint Venture consisting of Oriental Consultants Global Co., Ltd., Katahira & Engineers International, Pacific Consultants Co., Ltd., Tonichi Engineering Consultants, Inc, and Nippon Koei in association with DCCD Engineering Corporation, Engineering and Development Corporation of the Philippines, J.F. Cancio & Associates, Oriental Consultants Philippines, Inc., Schema Konsult, Inc., and TCGI Engineers

[9] Contract between DOTr and GCR was signed on 2 September 2019

Requiring Party	Meeting Type	Description	Frequency
	Bi-weekly Environment Coordination Meeting	• Bi-weekly updating between DOTr, PNR and GCR Environment Teams on all environment-related subjects	Bi-weekly
NSCR-EX PMO	HSEC Weekly Meeting	• Discuss and resolve issues and complaints received from GRM helpdesks and hotlines	Weekly
External Agencies			
ADB	Safeguards Mission	• Discussion of issues on environment, involuntary resettlement, and indigenous peoples	At least annually or as necessary
	Review Mission	• The status of safeguards implementation will be discussed at each ADB review mission with necessary issues and agreed actions recorded in Aide Memoires or MOU (FAM Para. 102)	At least annually and as necessary
	Special Loan Administration missions and a Midterm Review Mission	• To ensure policy compliance (FAM Para. 102) • When any changes in scope or implementation arrangement may be required to ensure achievement of project objectives (FAM Para. 105)	As necessary
	Environment Coordination Meeting	• Updating on status of ongoing/outstanding environmental compliance	As necessary
DENR EMB (Central and Regional Offices)	Consultation Meeting	• Discuss potential amendment/s and other changes to the ECC or project scope, environment-related issues that require DENR EMB's guidance, etc.	As necessary
Department of Agriculture	Coordination Meeting	• Discuss validation activities and valuation of trees and crops	As necessary

1.5 Reporting Requirements

32. The NSCR-EX PMO is required to submit internal and external monitoring reports to the DENR-EMB, ADB, and JICA during pre-construction and construction until the Project completion. Additionally, the results of public consultation and information disclosure are likewise submitted as attachments. The said reports are disclosed to the public.

33. The Contractors are required to submit monthly environmental compliance progress reports through the GCR to the NSCR EX PMO throughout the pre-construction and construction phases. The Contractors should highlight the summary of the construction progress and activities undertaken to implement measures outlined in the EMP and EMoP, recording any received community complaints and their resolution.

34. GCR consolidates the results of monthly environmental monitoring into quarterly and semi-annual internal monitoring reports for submission to NSCR EX PMO and then to ADB and JICA. The significant findings and measures undertaken to address any adverse environmental impacts during construction are summarized, and any unforeseen environmental impacts and recommended remedial actions for the next monitoring period are presented in these reports.

35. Once the internal environmental monitoring reports are received by NSCR EX PMO, the Project's compliance with the ECC and EMP is reviewed. After thorough review, the semi-annual internal reports are submitted to ADB and JICA.

36. During operation, EMP monitoring is undertaken by NSCR EX PMO. Semi-annual external environmental monitoring reports are prepared by the third-party environmental auditors (EMA) who are commissioned by NSCR EX PMO. NSCR EX PMO conducts a review of semi-annual external environmental monitoring reports and verifies conformity of the Project with the EMP and semi-annual progress reports, which are subsequently submitted to ADB and JICA.

37. Under the PEISS, quarterly Self-Monitoring Reports (SMRs) and semi-annual Compliance Monitoring Reports (CMRs) will be submitted by NSCR EX PMO to the DENR-EMB by using prescribed formats. DENR-EMB has confirmed that self-monitoring reports shall be prepared and submitted during the construction phase following the Procedural and Reference Manual for DAO 2003-27 (Self-Monitoring Report System) when the required permits have been acquired and when actual Project impacts are taking place. Further, semi-annual Compliance Monitoring Verification Reports (CMVRs) will be also submitted by the MMT to the DENR-EMB.

38. The monitoring reports to be prepared are summarized in Table 6.

Table 6: Types of Monitoring Reports

Type of Report		Frequency	Responsible Party	Preparation and Submission Route
Pre-Construction and Construction Phase				
1	Monthly environmental compliance progress report	Monthly	Contractors	Contractors ⇒ GC ⇒ DOTr
2	Quarterly Environmental Monitoring Report (QEMR)[10]	Quarterly	GC	GC ⇒ DOTr ⇒ ADB/JICA
3	Semi-annual monitoring Report (SEMR)[11]	Semi-annual[12]	GC	GC ⇒ DOTr ⇒ ADB/JICA
4	Environmental Safeguard Evaluation Report	End of the Project	GC	GC ⇒ DOTr ⇒ ADB/JICA
5	Semi-annual External Monitoring Report	Every six (6) months until loan closing	GC	EMA ⇒ DOTr, ADB and JICA

[10] To be submitted at every quarter after the commencement of the services, presenting the environmental impacts and implementation of environmental mitigation measures during the construction stage, including proposed solutions and suggested revisions. Environmental monitoring forms will be filled and attached to the Report.

[11] To be submitted semi-annually after the commencement of the services, up to two (2) years after the completion of the Project, presenting the environmental impacts and implementation of environmental mitigation measures during the construction stage, including proposed solutions and suggested revisions. Environmental monitoring forms will be filled and attached to the Report.

[12] The results of monthly environmental compliance progress reports are compiled into a semi-annual monitoring report.

	Type of Report	Frequency	Responsible Party	Preparation and Submission Route
6	Environmental Audit/Evaluation Report/Project Completion Report	6-12 months after project completion or loan closing	EMA	EMA ⇒ DOTr, ADB and JICA
7	SMR	Quarterly online submission	NSCR-EX PMO	NSCR EX PMO ⇒ EMB-Central Office, EMB-NCR, EMB-Region 3
8	CMR	Semi-annual using EMB-prescribed formats (no later than July 31 for the first term and January 30 for the second term)	NSCR EX PMO	NSCR EX PMO ⇒ EMB-Central Office, EMB-NCR, EMB-Region 3
9	CMVR	Semi-annual using EMB-prescribed formats (MMT report form)	MMT	NSCR EX PMO ⇒ EMB-Central Office, EMB-NCR, EMB-Region 3
Operational Phase				
1	Compliance monitoring report	Semi-annual	Environmental auditors under NSCR EX PMO	Environmental auditors ⇒ NSCR EX PMO ⇒ ADB/JICA
2	SMR	Quarterly online submission	NSCR EX PMO	NSCR EX PMO ⇒ EMB-Central Office, EMB-NCR, EMB-Region
3	CMR	Semi-annual using EMB-prescribed formats (no later than July 31 for the first term and January 30 for the second term)	NSCR EX PMO	NSCR EX PMO ⇒ EMB-Central Office, EMB-NCR, EMB-Region 3
4	CMVR	Semi-annual using EMB-prescribed formats (MMT report form)	MMT	NSCR EX PMO ⇒ EMB-Central Office, EMB-NCR, EMB-Region 3

Source: (DOTr, 2020)

1.6 Information Disclosure

39. DOTr will disclose relevant information including the potential impacts of the Project and the corresponding mitigating measures to the stakeholders in line with the EIS submitted to DENR EMB, ADB Safeguard Policy Statement and Public Communication Policy (2011), JICA Environmental Policy, and JICA Environmental Guidelines. Information disclosure aims to achieve the following objectives:

- Inform stakeholders on the progress of the project, potential impacts on environment and mitigation measures in place, and obtain issues and concerns through various social groups near the project area to determine their perception of the recent trends, existing problems and potential solutions;
- Determine potential social, economic, and cultural impacts not always foreseen in survey based socio-economic studies;

- Enhance the sustainability of projects by ensuring that interventions are relevant to the people of the area;
- Collect local knowledge, information, and ideas about the technical implications and impacts of project design and apply the collected information in the formulation of mitigation measures against negative social and environmental impacts of the Projects; and
- Inform stakeholders of foreseeable health, natural, social and economic environment risks and ensure that the mitigation measures will minimize negative impacts of the project on surrounding social and natural environments on time; and
- Learn from the various social groups living in a project area how they perceive the existing situation, recent trends, existing problems, and potential solutions.

40. DOTr will provide the following documents to ADB and JICA for disclosure in their respective websites:

- Draft EISR to be posted on ADB's website no later than 120 calendar days before Board consideration;
- Final EISR;
- A new/updated EISR and corrective action plan prepared during Project implementation if any; and
- Environment monitoring reports to be posted by ADB on ADB's website within two weeks after receipt by ADB.

41. In addition, DOTr will disclose key information to the project-affected persons (PAPs) and other stakeholders in plain and understandable Philippine language and dialects through suitable communication methods.

42. Key Information includes Project outlines and activities, implementation schedule, Project location, duration and potential impact/risks to be affected and corresponding mitigation measures, consultation process, and GRM.

43. Media that will be used are public consultations, brochures, leaflet, booklet, poster, radio, website, info-graphics, among others.

44. Table 7 presents the EIS-based proposed information disclosure framework.

Table 7: Information Disclosure Framework

Methods	Information	Participants	Media	Frequency
Group Meetings	• Project status • Environmental impacts and its proposed mitigation • GRM	Project-affected communities Concerned agencies	Face-to-face discussion with at least 20 participants	As necessary, monthly at a minimum
Stakeholder Consultation Meetings	• Project status • Environmental impacts and its proposed mitigation • GRM	Project-affected LGUs and communities	Face-to-face discussion with at least 30 participants	As necessary
Focus Group Discussions	• Specific environmental impacts and mitigation • GRM	Directly affected persons by environmental (i.e., women, elders, youth,	Face-to-face discussion with specific groups	As necessary, quarterly at a minimum

Methods	Information	Participants	Media	Frequency
		farmers, businesses, etc.)		
Distribution of printed materials	• Project status • Environmental impacts and its proposed mitigation • GRM	Project-affected LGUs and communities	Printed materials	As necessary, monthly at a minimum
Online disclosure	• Project status • Environmental impacts and its proposed mitigation • GRM	Persons with access to the Internet	• Social media platforms • Online project articles and videos • Project website/links	As necessary, monthly at a minimum
Media release/press briefing	• Project status • Environmental impacts and its proposed mitigation • GRM	Project-affected persons Nation	Online Television Printed materials	As necessary

1.7 Assistance to Tree-related Compensation

45. The Project's RAP Team takes the lead in identifying and defining the eligible project-affected assets/properties to be compensated by the Project, including the eligible project-affected trees of the duly project-affected persons. To fully accomplish this, a re-validation of the inventoried trees was carried out during the last semester and DOTr and GCR Environment Teams have been providing assistance.

46. Key foresters of both teams have been taking the lead on re-validating and documenting of the previously inventoried trees during the FS stage. Coordination with the project-affected farmers and private owners, the project-affected LGUs, and the Department of Agriculture on identifying trees and crops valuation have also been carried out. This assistance shall carry on until the DOTr and GCR RAP Teams require.

1.8 Grievance Redress Mechanism

47. The DOTr has dedicated Grievance Redress (GR) Officers for the Project, whose tasks and responsibilities are focused entirely on the GRM. GR Officers are either assigned to the Local GRM Team of each local government unit (LGU) helpdesk, or to the Central GRM Team of the DOTr Project Management Office (PMO). The GRM will cover the whole NSCR Clark Extension. Roles and responsibilities as well as the composition of the team are described in the following sections.

48. The Local GRM Team is assigned to a specific city/municipality affected by the Project and is composed of trained officers who are 1) DOTr's dedicated staff and 2) an LGU representative. The officers serve as the first in-person contact point for legal AS and ISFs, and to receive the grievances filed in their city/municipality.

2 Project Updates

2.1 Project Overview

49. Contract packages (CPs) N-01, N-02, N-03, N-04 and N-05 of the Clark Extension have been awarded while CP S-01 of the Calamba Extension is still in the bidding process. The details of projects and sub-projects (construction packages) and their locations are presented in **Table 8**:

Table 8: List of Contract Packages

Contract Package	Contract Package Location	Station Number and Section (Length)	Civil Works Description	Contract Type	Status as of this Reporting Period
NSCR Clark Extension (N2)					
CP N-01	Calumpit and Malolos in Bulacan, and Apalit and Minalin in Pampanga	Civil 1 Station: 2 34.749 km – 51.679 km (L = 16 km 930 m)	Building and Civil Engineering Works for approximately 17 km of Railway viaduct including four balanced cantilever bridges and two elevated steel framed station buildings.	ADB SBD Procurement of Works (FIDIC MDB Harmonized Construction Contract) *1	Contract awarded to Megawide Construction Corp., Hyundai Engineering & Construction Co. Ltd. and Dong-ah Geological Engineering Company Ltd. on 18 September 2020. Notice to Proceed to be issued tentatively in November 2020.
CP N-02	San Fernando and Minalin, Pampanga	Civil 2 Station: 1 51.679 – 67.449 km (L = 15 km 770 m)	Building and Civil Engineering Works for approximately 16 km of Railway viaduct, including one extra-dosed suspension bridge and one balanced cantilever bridge, and one elevated station building.	ADB SBD Procurement of Works (FIDIC MDB Harmonized Construction Contract) *1	Contract awarded to Acciona-Daelim Joint Venture (ADJV) on 18 September 2020. Notice to Proceed to be issued tentatively in November 2020.

Contract Package	Contract Package Location	Station Number and Section (Length)	Civil Works Description	Contract Type	Status as of this Reporting Period
CP N-03	Angeles, Clark, San Fernando, and Mabalacat, Pampanga	Civil 3 Station: 2 67.449 – 83.170 km (L = 15 km 721 m)	Building and Civil Engineering Works for approximately 16 km of Railway viaduct, including one extra-dosed suspension bridge and one balanced cantilever bridge. Diversions and training are required for an approximately 1 km stretch of the Sapang Balen river. Two elevated steel framed station buildings, and approximately 0.6 km of depot access line are also included.	ADB SBD Procurement of Works (FIDIC MDB Harmonized Construction Contract) *1	Contract awarded to Italian Thai Development Company on 18 September 2020. Notice to Proceed to be issued tentatively in November 2020.
CP N-04	CIAC/BCDA and Mabalacat, Pampanga	Underground railway and approach to CIA + Access railway to Mabalacat Depot Station: 1 (L = 3 km 22 m)	Building and Civil Engineering Works for approximately 3 km of Railway track comprising of at-grate, u-shaped semi-underground structure and open-cut tunnel, including the construction of an underground station serving CIA, and approximately 0.5 km of depot access line.	ADB SBD Procurement of Works (FIDIC MDB Harmonized Construction Contract) *1	Contract awarded to Acciona-EEI Joint Venture (AEJV) on 08 July 2020. Notice to Proceed to be issued tentatively End September/ Begininng October 2020 (waiting for confirmation on "Access to and Possession of Site" (GCC 2.1))

Contract Package	Contract Package Location	Station Number and Section (Length)	Civil Works Description	Contract Type	Status as of this Reporting Period
CP N-05	CIAC/BCDA and Mabalacat, Pampanga	Mabalacat Depot	Civil Engineering and Building works for the Mabalacat Depot, covering an area of approximately 33 ha., including construction of the Operations Control Center, Stabling Yard, Workshops, Training Center and other Ancillary Buildings. Approximately 0.4 km of depot access line is also included.	ADB SBD Procurement of Works (FIDIC MDB Harmonized Construction Contract) *1	Contract awarded to POSCO E&C on 08 July 2020. Notice to Proceed to be issued tentatively End September/ Beginning October 2020 (waiting for confirmation on "Access to and Possession of Site" (GCC 2.1))
NSCR Calamba Extension (SC)					
CP S-01	Manila, NCR	Civil 1 Station: 1 1.329 km – 2.405 km (L = 1 km 076 m)	Building and Civil Engineering Works for five balanced cantilever bridges approximately 1.1 km of Railway viaduct including two steel box girder bridges and one elevated steel framed station building.	ADB SBD Procurement of Works (FIDIC MDB Harmonized Construction Contract) *1	Contract not yet awarded.
(*1) The Standard Bidding Document (SBD) for the Procurement of Works (SBD Works) issued by the Asian Development Bank (ADB) dated June 2018. The General Conditions of ADB' SBD Works shall be the Conditions of Contract for Construction for Building and Engineering Works Designed by the Employer, Multilateral Development Bank Harmonized Edition, prepared by the FIDIC (FIDIC MDB Harmonized Construction Contract), Edition June 2010 (FIDIC Pink Book). Notes for Information Only: The Standard Bidding Document (SBD) for Procurement of Electrical and Mechanical Plant and for Building and Engineering Works, designed by the Contractor-Trial Version (SBD Design Build) have been prepared and issued by Japan International Cooperation Agency (JICA) in July 2015. The General Conditions of JICA' SBD Design Build (standard GC) are prepared based on Conditions of Contract for Plant and Design Build prepared by FIDIC, Edition FIDIC 1999 (FIDIC Yellow Book).					

2.1.1 Amendments to the ECC

50. Since the issuance of the ECC on 13 August 2018 in the FS stage, there have been changes in the design and approaches during the detailed design stage that affected the ECC conditions initially set. Table 9 presents the summary of amendments that occurred during this reporting period.

Table 9: Summary of ECC Amendments

Original ECC Condition	Proposed Amendment	Date Requested	Date Approved	Remarks
6. Submit a detailed plan for earth	• Consideration for the replacement	February 2020 (Coordination and	Coordination in progress	• Amendment was not formally

Original ECC Condition	Proposed Amendment	Date Requested	Date Approved	Remarks
balling and replanting of mature native/endemic trees within three (3) months prior to project construction. 7. Implement a greening program in line with the DENR's thrust for GHG Emission Reduction Program. The program shall be submitted to EMB sixty (60) days prior to the project implementation.	seedlings required by the TCP/EP, and required by the ECC Condition No.6 as equivalent compliance to ECC Condition No. 7, requiring greening program compliance.	meetings commencement)		requested prior to coordination with DENR Region 3. • DOTr and DENR Region 3 have progressed since last semester in drafting a MOA for the proposed arrangement, visited prospective planting sites in Bulacan and Pampanga, and continuous coordination on MOA signing.
10. The Proponent shall set-up the Environmental Guarantee Fund (EGF), the Multipartite Monitoring Team (MMT), and the replenishable Environmental Monitoring Fund (EMF). The amount and mechanics of EGF, EMF and the establishment of the MMT shall be determined by the EMB Central Office and the proponent through a Memorandum of Agreement (MOA) which shall be submitted in the sixty (60) days prior to construction.	• Engagement of a TPA in lieu of the MMT • EGF to be established by Civil Works Contractors, instead of the Proponent	TPA: 17 Mar 2020	TPA: 12 May 2020	• Consultation meeting with DENR EMB CO on EGF establishment was held on 29 Sep 2020 • EGF establishment is still in deliberation.
Change in project methodology	• Include river improvements in Sapang Balen,	11 Sep 2020	Review in progress	Continuous coordination between DOTr and

Original ECC Condition	Proposed Amendment	Date Requested	Date Approved	Remarks
	Quitanguil and Dolores Rivers			DENR EMB CO is in progress

2.1.2 Changes to the EIS

51. Table 10 summarizes the changes made to the EIS, including its environmental impacts and mitigation measures, that was submitted to DENR EMB CO for their review and approval. The approval will be in the form of an amended ECC.

Table 10: Summary of Changes to the EIS

Change	Description / Environmental Impacts	Impact Mitigation Measures / Remarks
Alignment	Section from 34+749 to 35+700 in Malolos, Bulacan	The alignment was shifted due to relocation of Freight line.
	Section from 38+525 to 43+200 in Calumpit, Bulacan	The alignment was shifted because of station location adjustment to avoid industrial area.
	Section from 55+375 to 56+200 in Santo Tomas, Pampanga	The alignment was shifted to avoid Bondoc Ville (NHA).
	Section from 57+500 to 69+500 in San Fernando, Pampanga	The alignment was revised to avoid public facilities such as school, water treatment facilities and also adjusted the cross over in MacArthur highway.
	Section from 75+250 to 77+600 in Angeles, Pampanga	The alignment is revised to maximize use of PNR ROW and to avoid a school.
Depot	The North Depot was initially planned to be located north-east of Clark International Airport between Prince Balagtas Avenue and Sacobia River (Option 1). However, it was later concluded to relocate the North Depot from its initial location (Option 1) to an area between Prince Balagtas Avenue and Gil Puyat Avenue (Option 3).	The results of the flood analysis after the depot construction showed that the depot increased the flooding level at the depot location and its surrounding localities. The site survey showed that many houses are residents in the original depot location proposal (Option 1).
Location of Stations	The proposed Calumpit Station was moved approximately 1,330 m south from the basic design (BD).	The shift will result in lower impact in land acquisition, project- affected families (PAFs), traffic, and sensitive receptors; but there will also be a slight increase in number of trees affected.
	The proposed Apalit Station was moved 80 m southeast to avoid the Old Apalit PNR Station.	The shift will result in avoidance of impact to historical structure, lower impact to PAFs, and number of trees affected.
	The proposed San Fernando Station was moved further north of the alignment to have more distance from the Old San Fernando PNR Station and to avoid the existing road.	The shift will result in lower impact to land acquisition, PAFs, protected area, and trees affected.
	The proposed Angeles Station has been moved 150 m southeast of the BD Station.	The shift will result in lower impact to traffic and trees affected.
	The Clark Station has been moved 300 m south of the proposed BD station.	The shift was to consider future plans in the area as coordinated with Clark Development Corporation (CDC).

<table>
<tr><th>Change</th><th>Description / Environmental Impacts</th><th>Impact Mitigation Measures / Remarks</th></tr>
<tr><td></td><td>The proposed Clark International Airport Station was moved approximately 250 m southwest.</td><td>The shift was to accommodate the future Airport Terminal in coordination with CDC and Clark International Airport Corporation (CIAC).</td></tr>
<tr><td>Design of Stations</td><td>All stations have increased the platform width and are now 3.5m wider. This takes place within the 60 m station ROW.</td><td>The additional impact of this is negligible.</td></tr>
<tr><td>Distance between stations</td><td>
<table>
<tr><th colspan="2" rowspan="2">Station</th><th colspan="2">Distance (km)</th></tr>
<tr><th>FS</th><th>DD</th></tr>
<tr><td></td><td>Malolos (NSCR Project)</td><td rowspan="2">7.7</td><td rowspan="2">6.4</td></tr>
<tr><td rowspan="2">1</td><td rowspan="2">Calumpit</td></tr>
<tr><td rowspan="2">4.0</td><td rowspan="2">5.3</td></tr>
<tr><td rowspan="2">2</td><td rowspan="2">Apalit</td></tr>
<tr><td rowspan="2">12.0</td><td rowspan="2">12.2</td></tr>
<tr><td rowspan="2">3</td><td rowspan="2">San Fernando</td></tr>
<tr><td rowspan="2">15.3</td><td rowspan="2">15.0</td></tr>
<tr><td rowspan="2">4</td><td rowspan="2">Angeles</td></tr>
<tr><td rowspan="2">5.0</td><td rowspan="2">5.0</td></tr>
<tr><td rowspan="2">5</td><td rowspan="2">Clark</td></tr>
<tr><td rowspan="2">7.0</td><td rowspan="2">7.5</td></tr>
<tr><td rowspan="2">6</td><td rowspan="2">CIA</td></tr>
<tr><td rowspan="2">18.2</td><td rowspan="2"></td></tr>
<tr><td>7</td><td>Clark - NCC</td></tr>
<tr><td></td><td>CIA-Clark</td><td></td><td>1.5</td></tr>
<tr><td colspan="2">Total</td><td>72.5</td><td>52.9</td></tr>
</table>
</td><td>Not presented in the FS EIS and DD EIS, but it was presented in the summary of modifications submitted to DENR EMB CO, together with the revised DD EIS.</td></tr>
<tr><td>River Improvement</td><td>The Dolores River will be diverted by an open channel using steel sheet pile. Protection works are also included in the design in order to prevent riverbed washing. A bridge connecting the north and south portions of the North Depot will be installed at the locations of roads and railway tracks crossing the river.</td><td>This will ensure the safe passage of the water from and to the sides of the depot.</td></tr>
</table>

Change	Description / Environmental Impacts	Impact Mitigation Measures / Remarks
	The Sapang Balen River is between San Fernando and Angeles (70.000 km to 70.900 km), located about 2.5 km south from New Angeles Station. The alignment runs very close to the river at this point and the river is in an active meander. Bank erosion has resulted in the destruction of nearby roads and DPWH has already implemented similar works downstream. The river will be straightened and bank reinforcement will be added. DPWH design standards will be used which consist of concrete bank reinforcement and gabion mattresses on the river bed.	This is to avoid future erosion problems.
	Quitanguil River Branch Line Diversion There is a section of about 400 m where the Quitanguil River Branch Line and the NSCR-EX Alignment overlap each other. In this section, many piers are installed which affect and complicate the flow of the river. Plans have been made to offset the river along the railway alignment and perform diversion. The section parallel to the railway is designed with a trapezoidal cross section. A U-shaped waterway is placed at the railway intersection to ensure clearance. *CIA Patrol Road Diversion* The CIA patrol road crosses the NSCR-EX Project alignment at two locations. The first location intersects at a small angle of intersection with each other, making it difficult to secure enough space for patrol roads between NSCR-EX piers. The second location has close alignment with each other, making it difficult to secure enough space for patrol roads under the NSCR-EX girders. The diversion of the patrol road is also planned together with the Quitanguil River diversion plan	This is to avoid disruption in the river flow.
Applied Environmental Standards	As recommended by ADB the Project should adopt the more stringent WB – IFC standards, such as the following: • IFC Indicative Guideline Values for Treated Sanitary Sewage Discharges (2007) • World Bank-International Finance Corporation's (WB-IFC) Environment, Health and Safety (EHS) Guidelines of 2007 • U.S. Federal Transit Administration Noise and Vibration Manual 2006 (FTA-VA-90-1003-06)	More stringent standards will be adopted to ensure environmental compliance on sewage discharges, environment, health, safety, noise and vibration.

Change	Description / Environmental Impacts	Impact Mitigation Measures / Remarks
UXO	Incorporation of UXO protocols and management in the Project's public health and safety, and emergency response programs.	UXO investigation survey was conducted in CIA during the DD stage. Incorporate recommendations and implementation strategies in the CEMMP to be submitted by the Contractors.
Supplementary Baseline Survey and Impact Statement	Given the modifications in some sections of the alignment from the FS to DD stage, there are some expected impacts.	Additional baseline surveys and studies were conducted during the DD stage. Contractors will also conduct their own baseline surveys prior to commencement of any construction activities.

2.2 Safeguards Plans Implementation Arrangements

52. This section presents status of compliance of the Project with all the requirements presented in Table 2 of Section 1.2, safeguards plans separated into sub-sections.

2.2.1 Status of Compliance with ADB Safeguards Covenants

53. Table 11 presents the details of the and the Project's environment safeguards covenants and the status of its compliance.

Table 11: Status and Updates on the NSCR Clark Extension Project's Compliance with ADB Safeguards Covenants

Schedule	Para No.	Covenant	Remarks/Issues (Status of Compliance)	Remarks/Further Actions
Schedule 4	Environment			
	6	The Borrower shall, through DOTr, ensure that the preparation, design, construction, implementation, operation and decommissioning of the Project and Project Facilities comply with (a) all applicable laws and regulations of Borrower including relating to environment, health, and safety; (b) the Environmental Safeguards; (c) the EARF; and (d) all measures and requirements set forth in the respective EIA and EMP, and any corrective or preventative actions with respect to environment set forth in a safeguards monitoring report.	Provisions provided in General Specifications (GS) 118 of the Standard Bidding Document (SBD). Ongoing compliance.	Close coordination with the design and construction teams, and the contractors to ensure environmental compliance are considered prior to finalizing the changes.
	7	The Borrower shall, through DOTr, ensure that works do not commence until and unless environmental clearance, satisfactory in substance and form to ADB, in respect of the relevant site has been received from the Department of Environment and Natural Resources.	Complied.	Close coordination on and monitor commencement of works to remain compliant.
	Human and Financial Resources to Implement Safeguard Requirements			
	12	The Borrower shall, through DOTr, ensure that all necessary budgetary and human	Complied. EMA/TPA is undergoing	Close coordination with EMA for necessary support.

Schedule	Para No.	Covenant	Remarks/Issues (Status of Compliance)	Remarks/Further Actions
		resources to fully implement the EMP and RAPs are made available.	procurement process.	
	Safeguards – Related Provisions in Bidding Documents and Works Contracts			
	13	The Borrower shall; through DOTr, ensure that all bidding documents and contracts for Works contain provisions that require contractors to:		
		(a) Comply with the measures and requirements relevant to the contractor set forth in the EIAs, the EMPs and the RAPs (to the extent they concern impacts on affected people during construction), and any corrective or preventative actions set out in a Safeguards Monitoring Report;	Complied.	Close coordination with and monitor the contractors' environmental compliance.
		(b) Make available a budget for all such environmental and social measures;	Partial compliance. Budget will be continuously adjusted based on actual requirements.	Close coordination with the Management to ensure budget allotment.
		(c) Provide the Borrower with a written notice of any unanticipated environmental, resettlement or indigenous peoples risks or impacts that arise during construction, implementation or operation of the Project that were not considered in the EIAs, the EMPs, or the RAPs.	Not applicable, to date no construction activity	Close coordination with and monitor the contractors' environmental compliance.
		(d) Adequately record the condition of roads, agricultural land and other infrastructure prior to the starting to transport materials and construction; and	Not complied.	Recording to be requested from civil works/construction team.
		(e) Fully reinstate pathways, other local infrastructure; and agricultural land to at least their pre-project condition upon the completion of the construction.	Not applicable, to date no construction activity	Close coordination with civil works/construction team and the contractors to ensure reinstatement.
	Safeguards Monitoring and Reporting			
	14	The Borrower shall, through DOTr, ensure the following;		
		(a) Submit semi-annual Safeguards Monitoring Report to ADB and disclose relevant information from such reports to affected persons promptly upon submission;	Partial compliance. First semi-annual environmental monitoring report submitted and posted on ADB website, but not	Plan on information disclosure, especially for those who do not have access to computers/internet.

Schedule	Para No.	Covenant	Remarks/Issues (Status of Compliance)	Remarks/Further Actions
			disseminated to all affected persons.	
		(b) If any unanticipated environmental and/or social risks and impacts arise during construction, implementation or operation of the Project that were not considered in the EIAs, the EMPs or the RAPs, promptly inform ADB of the occurrence of such risks or impacts with detailed description of the event and proposed corrective action plan;	Not applicable, to date no construction activity	Close coordination with and monitor the contractors' environmental compliance. Promptly inform ADB when it occurs.
		(c) No later than the date of award of Works contract, engage qualified and experienced external expect or qualified NGO under a selection process and terms of refence acceptable to ADB, to verify information produced through the Project Monitoring process, and facilitate the carrying out of any verification activities by such external experts; and	Not applicable, to date no construction activity Procurement process of EMA is ongoing.	Close coordination with EMA for necessary support.
		(d) Report any actual or potential breach of compliance with the measures and requirements set forth in the EMP or the RAP promptly after becoming aware of the breach.	Not applicable, to date no construction activity	Close coordination with civil works/construction team and the contractors to ensure environmental compliance.
	Prohibited List of Investment			
	15	The Borrower shall, through DOTr, ensure that no proceeds of the Loan under the Project are used to finance any activity included in the list of prohibited investment activities provided in Appendix 5 of the SPS. Appendix 5: ADB Prohibited Investment Activities LIst The following do not qualify for Asian Development Bank financing: (i) production or activities involving harmful or exploitative forms of forced labor or child labor; (ii) production of or trade in any product or activity deemed illegal under host country laws or regulations or international conventions and agreements or subject to international phaseouts or bans, such as (a) pharmaceuticals, pesticides, and herbicides, (b) ozone-depleting	Complied.	Close coordination with civil works/construction team and the contractors to ensure continuous compliance.

Schedule	Para No.	Covenant	Remarks/Issues (Status of Compliance)	Remarks/Further Actions
		substances, (c) polychlorinated biphenyls and other hazardous chemicals, (d) wildlife or wildlife products regulated under the Convention on International Trade in Endangered Species of Wild Fauna and Flora, and (e) transboundary trade in waste or waste products; (iii) production of or trade in weapons and munitions, including paramilitary materials; (iv) production of or trade in alcoholic beverages, excluding beer and wine; (v) production of or trade in tobacco; (vi) gambling, casinos, and equivalent enterprises; (vii) production of or trade in radioactive materials, including nuclear reactors and components thereof; (viii) production of, trade in, or use of unbonded asbestos fibers; (ix) commercial logging operations or the purchase of logging equipment for use in primary tropical moist forests or old-growth forests; and (x) marine and coastal fishing practices, such as large-scale pelagic drift net fishing and fine mesh net fishing, harmful to vulnerable and protected species in large numbers and damaging to marine biodiversity and habitats.		
	Labor Standards, Health and Safety			
	16	The Borrower shall, through DOTr, ensure that the core labor standards and the Borrower's applicable laws and regulations are complied with during Project implementation. The DOTr shall include specific provisions in the bidding documents and contracts financed by ADB under the Project requiring that the contractors, among other things: (a) comply with the Borrower's applicable labor law and regulations and incorporate applicable workplace occupational safety norms; (b) do not use child labor; (c) do not discriminate workers in respect of employment and occupation; (d) do not use forced labor; (e) allow freedom of association and effectively recognize the right to collective bargaining; and (f) disseminate, or engage appropriate service providers to disseminate, information on the risks of sexually transmitted diseases,	Provisions provided in General Specifications (GS) 117 of the Standard Bidding Document (SBD). Ongoing compliance. Not currently applicable for this reporting period. There are no construction activities yet to be reported for this period.	Close coordination with civil works/construction team and the contractors to ensure environmental compliance.

Schedule	Para No.	Covenant	Remarks/Issues (Status of Compliance)	Remarks/Further Actions
		including HIV/AIDS, to the employees of contractors engaged under the Project and to members of the local communities surrounding the Project area, particularly women.		
	17	The Borrower shall, through DOTr, strictly monitor compliance with the requirements set forth in paragraph 16 above and provide ADB with regular reports.	Not currently applicable for this reporting period. There are no construction activities yet to be reported for this period.	Close coordination with civil works/construction team and the contractors to ensure environmental compliance.

Sources: Loan Agreement (Loan Number 3796-PH) dated 11 July 2019. (ADB 2019), ADB SPS (2009).

2.2.2 Status of EMP Implementation (Mitigation Measures)

54. For this reporting period, there are no EMP implementation issues to report because construction activities have not commenced.

Table 12: Compliance with EMP Requirements (Environmental Performance)

EMP Requirements[13]	Compliance Status (Yes, No, Partial)	Comment or Reasons for Non-Compliance	Issues for Further Action
Current Issues			
Not currently applicable for this reporting period because there are no construction activities yet.	No action required	Contractors responsibility as per General Specification (GS) 118, and referenced to the EMP and EMoP.	Not currently applicable for this reporting period. There are no construction activities yet to be reported for this period.
Old Issues from Previous Reports			
Not currently applicable for this reporting period because there are no construction activities yet.	No action required	Contractors responsibility as per General Specification (GS) 118, and referenced to the EMP and EMoP.	Not currently applicable for this reporting period. There are no construction activities yet to be reported for this period.

2.2.3 Status of Compliance with ECC Conditions

55. DOTr requested for an ECC amendment to engage an TPA (Third-Party Auditor) in lieu of the MMT. EMB-CO approved the requested amendment in their letter to DOTr dated 12 May 2020. There was a need

[13] To be submitted at every quarter after the commencement of the services, presenting the environmental impacts and implementation of environmental mitigation measures during the construction stage, including proposed solutions and suggested revisions. Environmental monitoring forms will be filled and attached to the Report.

to update the Project Description (PD) to include the river improvement sub-components within CPs N-01, N-04 and N-05 and to incorporate COVID-19 risk management measures in the EMMoP. The updated EIS and corresponding request for ECC amendment was submitted to the Environmental Management Bureau Central Office (EMB-CO) on 7 September 2020 (**Annex B**).

Table 13: Compliance with EMP Requirements (Environmental Performance)

	Description	Status	Remarks/Further Actions Required
I.	**General Conditions. Environmental Management.**		
1	Conduct an effective and continuing Information, Education and Communication (IEC) Program through the use of most effective media to inform and educate all stakeholders, especially the contractors, workers, LGUs, businesses and local residents about the following: a. Project impacts and mitigating measures embodied in its EIS; b. Conditions stipulated in the ECC; c. Environmental and human safety features of the project; and d. Health consciousness alerts for any project-induced discomfort (from dust, smell, noise, vibration) as the project progresses throughout the whole route.	Ongoing progress	Led by the RAP Team, conduct of Stakeholders Consultation Meetings (SCMs) with Project-Affected Persons to update them on the progress of the project is ongoing. Summary of past meetings can be found in the updated Section 6.2 of the EIS. The Proponent is continuously working on the design and development of flyers/brochures for information dissemination. Coordination meetings with Local Government Units (both Municipal and Barangay Level) including some of their constituents and activist groups within their jurisdiction have been actively undertaken. This is in view of the acquisition of Certificate of No Objection (CNO), specifically for the cutting of project affected trees. In the said activity, the stakeholders are apprised about the project, how many trees are needed to be cleared and the proposed mitigation activities thereon (I.e. Greening Program and Earth-balling)
2	Implement a comprehensive Social Development Program (SDP) and submit a separate report together with the Compliance Monitoring Report (CMR) to the EMB Central Office using CMR Online on a semi-annual basis pursuant to EMB MC 2016-01.	Ongoing progress.	Sit-down workshop meetings with LGUs have been conducted in order to plan the appropriate SDPs to be implemented. Attached as **Appendix A** in the 1st SEMR is the output from the workshops conducted so far. From the gathered data, the Proponent will propose appropriate SDPs, and a manual will also be created to monitor the implementation of SDPs and to serve as a guide for future projects of the Proponent. **Annex F** presents the CMRs submitted through DENR website (https://online.emb.gov.ph/cmr/)
3	Submit detailed waste management program (WMP) for proper handling, collection and disposal of solid, hazardous and liquid wastes to EMB Central Office (CO) and EMB Region III within six months prior to project construction. Proof of implementation	Ongoing progress	The Proponent submitted the Project Waste Management Plan (WMP) to DENR EMB CO on 6 July 2020. This WMP will be the basis for the detailed WMP to be developed by the Contractors as part of the Contractors Environmental Management and Monitoring Plan (CEMMP).

	Description	Status	Remarks/Further Actions Required
	shall be submitted together with the CMR.		Please refer to **Appendix B** in the 1st SEMR. Similar plans would be required for the site clearance activities (Pre-Construction) and the railway operation (Operations).
4	Ensure that all the existing waterways affected by the proposed project construction are maintained and not obstructed.	Ongoing progress	Certificate of No Objections have been secured (Pease see **Appendix C** in the 1st SEMR) Coordination to secure certificate of no objections from other DPWH Region III and NCR Offices, LGUs, MMDA, and NIA Region III is also ongoing.
5	Submit a detailed construction environmental management program, including mobilization and demobilization plans, for the construction yards one month prior to project implementation. The plan should include the coordination with concerned LGUs to promote compatibility of adjoining land uses with the intended project stations including its exit and entrance.	Ongoing preparation of plans. Contracts for CPs N-01 to N-05 have been awarded.	No construction works as of submission of the 2nd SEMR. The Proponent, through the GC, will brief the civil works contractors with their commitments in the implementation of the EMP. The Construction Environmental Management and Monitoring Plan (CEMMP), which will be submitted by the construction contractors, will be reviewed before Project construction. The CEMMP must be aligned with the EMP of the Project. The civil works contractors must observe the measures or mitigations stated in the CEMMP. Contractors Acciona-EEI JV (CP N-04) and POSCO E&C (CP N-05) have submitted their respective CEMMP Outlines and the same have been reviewed and commented on by the GC to assess their quality and hence to guide the Contractors in the formulation of CEMMP of acceptable quality.
6	Submit a detailed plan for earth balling and replanting of mature native/endemic trees within three months prior to project construction. The plan should include the following: a. Specific recipient sites which have already been prepared and conditioned; b. Ensure high degree of survival; and c. Provision for regular maintenance until trees have re-establish in their new environment.	Ongoing coordination	The Proponent has coordinated with DENR FMB for the matter. Accordingly, the DENR will conduct validation of the inventoried trees which will further enable them to identify specific trees that are to be earth balled. Moreover, earth balling shall be subject to the following conditions: 1. Only healthy trees shall be earth-balled; 2. Indigenous species shall be prioritized; 3. The surrounding of the tree shall be free from impediments to support digging/moving operations; and 4. A suitable area for transplanting shall be pre-identified The area for the transplanting shall be identified by the DENR. The Proponent on the other hand, shall maintain and protect

	Description	Status	Remarks/Further Actions Required
			the earth-balled trees for a period of at least one year. Validation by DENR-PENRO is on-going for CP N-04 while the application of Tree Cutting and/or Earth Balling permit for CP N-05 has been submitted. Tree validation activities have been scheduled for October 5-16, 2020 for a period of ten (10) days.
7	Implement a greening program in line with the DENR's thrust for GHG Emission Reduction Program. The program shall be submitted to EMB 60 days prior to the project implementation.	Ongoing coordination	Tentative location indicated in the previous section for Buffer Zone and GHG Program is the Mabalacat Depot area. The coordinates will be updated once location is finalized. The Proponent will participate in the "adopt a site" as part of the Enhanced National Greening Program - a flagship program of the DENR. Planting sites within the province of Bulacan and Pampanga will be finalized by DENR Region 3. DOTr will also engage a registered People's Organization living within or adjacent to the proposed area who will be our partner in the maintenance and protection of the developed site. A tripartite MOA between the DOTr, PNR and DENR Region III is already drafted and will be signed soon. DOTr, together with the DENR Field Staff have already conducted a site visit to the proposed greening sites of DENR in Bulacan and Pampanga, respectively. The teams gathered as much information in the proposed NGP site.
8	Submit an approved Resettlement Action Plan (RAP) of the affected communities within two months prior to project construction.	Ongoing progress	The RAP is divided into the following: 1. Mabalacat RAP (CP N-04 and N-05) – MOA with Land Bank of the Philippines signed by DOTr on 7 September 2020 Status: Submitted to DENR EMB CO on 6 July 2020 2. Landowner RAP (CP N-01, N-02, N-03) Status: Ongoing finalization 3. Non-Landowner RAP (CP N0-1, N-02, N-03) Status: Ongoing finalization
9	Conduct a detailed Traffic Impact Assessment (TIA) in coordination with the concerned LGUs for every proposed station prior to project construction integrating proposed road expansion projects of the concerned government agencies. Transport of heavy structures	Ongoing coordination	The initial draft TIA, has been discussed with LGUs and DPWH Region III. The TIA report has been revised per LGUs and DPWH Region III's inputs. The updated version of the TIA is attached as **Appendix D** in the 1st SEMR.

	Description	Status	Remarks/Further Actions Required
	shall be scheduled during the period that may not cause traffic in the area.		
II.	**Conditions. General Conditions.**		
10	The Proponent shall set-up the following:		
10.1	A readily available and replenishable Environmental Guarantee Fund (EGF) to cover the following expenses: a. for further environmental assessments, compensations/indemnification for whatever damages to life and property that may be caused by the project; b. rehabilitation and/or restoration of areas affected by the project's implementation; and c. abandonment/decommissioning of the project facilities related to the prevention of possible negative impacts; and as a source of fund for contingency and clean-up activities	Ongoing progress	EGF is part of contractors' budget. The project is still in the procurement stage. Requirement will be reiterated to contractors when they are on board.
10.2	Establish an MMT composed of representative(s) from the local environmental Non-Government Organization/s (NGOs), People's Organization/s (POs) and the Local Government Units per DAO 2017-15. The MMT shall primarily oversee the compliance of the Proponent with the Environmental Management and Monitoring Plan (EMMoP) and the ECC conditions.	Ongoing progress	The Proponent is permitted to replace MMT with TPA (Third-Party Auditor) by EMB-CO as per letter dated 12 May 2020 (**Annex A**). External monitoring agency (EMA) is a contractual requirement of the project. The bidding process on the selection of the Contractor for EMA is in progress and the selection of the Contractor will be done within the coming quarter.
10.3	A replenishable Environmental Monitoring Fund (EMF) to cover all costs attendant to the operation of the MMT such as training, hiring of technical experts and resource persons, fieldwork and transportation. The amount and mechanics of EGF, EMF and the establishment of the MMT shall be determined by the EMB Central Office and the proponent through a Memorandum of Agreement (MOA) which shall be submitted in the 60 days prior to construction.	Ongoing progress	The Proponent has requested a budget of PhP 2,000,000.00 for the EMF from the DOTr, and is currently working on securing the budget.
11	Establish an Environmental Unit (EU) in 60 days prior to construction that shall competently handle the environment-related aspects of the project. In addition to the monitoring requirements as specified in the EMMoP, the EU shall have the following responsibilities:	Established	The Proponent has submitted the organizational chart (**Appendix E** in the 1st SEMR) of the Project's EU to DENR EMB CO on December 23, 2019. Designated staff have undergone the 40-hour Basic Pollution Control Officer Training last November 18-22, 2019, and the Project Managers have undergone the

	Description	Status	Remarks/Further Actions Required
	Monitor actual project impacts vis-à-vis the predicted impacts and management measures in the EIS; Recommend revisions to the EMMoP, whenever necessary subject to the approval of the EMB-CO; Ensure that data gathered during monitoring activities are properly documented, assessed, evaluated, and reported in accordance with the standard formats; and Ensure that monitoring and submission of reports to EMB-CO are carried out as required.		8-hour Environmental Training for Managing Heads on January 21, 2020. The Proponent will work on the accreditation of the PCOs on the first half of 2020.
12	The Proponent shall ensure that its contractors and sub-contractors are provided with copies of this ECC, including the EMP, and that they will strictly comply with the relevant conditions of the ECC.	Ongoing progress	The General Consultant (GC) has onboarded and has been provided with the copy of the ECC. Civil works contractors for CPs N-01 to N-05 have been selected. The civil works contractors will be briefed of their obligations in the implementation of the EMP once they are onboard. The relevant documents shall be transmitted to the GC and to the civil works contractors.
III. Restrictions			
13	No activities shall be undertaken other than what were stipulated in the final EIS. Any expansion and/ or modification of the Project beyond the Project description or change in alignment/ route that will cause significant impacts to the environment shall be subjected to a new Environmental Impact Assessment.	Ongoing progress	The updated EIS has been transmitted to EMB-CO on 7 September 2020 for further review and will undergo the required process if found with any significant modifications or changes.
14	In case of transfer of ownership of this Project, the same conditions and restrictions shall apply to the transferee or grantee who shall secure in writing the corresponding amendment of this ECC from the EMB-CO within 15 working days reflecting such transfer.	Not applicable	Not applicable

2.2.4 Status of Compliance with Contractual Arrangements

56. Implementation of contractual agreements specified in the General Specification 118 has not fully occurred during this reporting period. The contractors have recently been awarded their contracts, but not the Notices to Proceed (NTPs). Hence, submission of the full-blown CEMMP has not occurred during this reporting period. Only outline CEMMPs were submitted in September 2020 for GCR's review.

2.3 Implementing Structure

2.3.1 The Department of Transportation

57. The Undersecretary for Railways directly supervises the NSCR-EX PMO and makes the critical decisions regarding the implementation of the Project. Under the NSCR-EX PMO, the HSEC is ongoing recruitment and establishment to implement the EMP during pre-construction and construction phases of the Project. However, construction activities did not commence during this reporting period.

2.3.2 NSCR Clark and Calamba Extension Project Management Office (NSCR-EX PMO)

58. The NSCR-EX PMO has since provided seven staff members to comprise the Environmental Unit (EU) of the HSEC, as required by the ECC, to manage the environmental management requirements of the Project and has provided the required trainings to three staff members to serve as Pollution Control Officer(s) (PCOs) for the Project.

59. Main roles and responsibilities of the EMP implementing entities (**Table 14**) are to ensure compliance with the EMP, the EMoP and other conditions stipulated under the ECC, and manage grievances, if any, arise during construction.

2.3.3 Third-Party Auditor

60. DOTr has sought approval from the DENR-EMB to replace MMT with a Third-Party Auditor (TPA) or EMA citing Section 9.2 of DAO 03-30 and the approval of the Metro Manila Subway Project's similar request as a precedent case. The request was approved per DENR-EMB's letter dated 12 May 2020 (**Annex A**). TPA or the EMA is expected to onboard within the next reporting period.

Roles and Responsibilities of the TPA

61. The specific functions of the TPA include the followings:

- Conduct a quarterly ocular site visit to validate the proponent's compliance with the ECC conditions and the EMMoP including requirements for self-monitoring and submit the corresponding reports regularly;
- Observe sampling activities conducted by the EA;
- Prepare and submit its report to the EMB-Central Office, the EMB-Region 3, JICA and ADB using EMB-prescribed formats at least semi-annually, no later than July 31 for the first-term report and January 30 for the second-term report; and
- Institute an environmental emergency and grievance management mechanism which is expected to provide recommendations for necessary regulatory actions to the EMB in a timely manner to prevent adverse environmental impacts.

Table 14: Roles and Responsibilities for the EMP Implementation

Responsibility \ Entity	DOTr Railway office	NSCR EX PMO (Project Management Office)	PMO-ESRL (Environment Social, ROW division and Legal Division)	HSEC Health, Safety and Environment Committee)/PCO (Pollution Control Officer)	Third Party Auditor (TPA)	Contractors	GC (General Consultant)
Establish the NSCR EX PMO	◎	○					
Establish the PMO-ESRL	◎	○					
Appoint the Health, Safety and Environment Officer (HSEO) and Pollution Control Officer (PCO)		◎	○				
Establish the TPA	◎	○	○				○
Establish the EGF and the EMF	◎	○	○	○	○		○
Secure fund for the EMP implementation (for the operation of the EGF, the EMF and the PMO-ESRL)	◎	○	○				
Ensure the Project's compliance to the ECC, the EMP and the EMoP		◎	○	○		○	○
Ensure the Project's compliance to JICA and ADB guidelines		◎	○	○			○
Handle grievances			◎	○	○	○	○
Implement mitigation measures in compliance with the EMP				○		◎	○
Implement the EMoP in compliance with the EMP				○		◎	○
Monitor and assess the effectiveness of mitigation measures		◎	○	○	○		○
Revise the EMP as necessary		◎	○	○			○
Audit compliance					◎		

Note: ◎ = leading party, ○ = assisting party
Source: (DOTr, 2020)

2.3.4 Contractors

62. The CEMMP Outlines of Contractors Acciona-EEI Joint Venture (AEJV) (CP N-04) and POSCO E&C (CP N-05), as contained in their respective bids, were made available and the same were reviewed and commented on by GCR to assess their quality and hence to guide the Contractors in the formulation of CEMMP of acceptable quality. So far, AEJV has requested for a meeting with GCR to seek guidance and to clarify some points on the preparation of the CEMMP. A similar approach is intended for the remaining Contractors of CPs N-01 to N-03.

63. Even before the Notice to Proceed (NTP) has been awarded, AEJV initiated a preliminary discussion on the establishment of the EGF that was held between GCR and AEJV on 4 September 2020. The discussion focused on the EGF establishment guidelines under DENR Administrative Order (DAO) 03-30 recommended the following components: (1) Trust Fund – insurance, Letters of Credit, other similar guarantees; and (2) Environmental Guarantee Cash Fund. Surety or performance bonds are not acceptable

forms of EGF trust fund. A copy of the DAO and Annex 3-6 detailing the procedures of EGF establishment were earlier emailed to AEJV for reference. AEJV indicated that they need to discuss the requirements with their financial managers and conduct a thorough study/review of the provisions in the tender document and the DAO 03-30 guidelines. AEJV was encouraged to prepare their questions and clarifications that will be raised during the meeting with DENR-EMB being organized by DOTr with GCR assistance to discuss and seek further guidance on EGF establishment. AEJV expressed their commitment to comply with the requirements and closely coordinate with the GCR/DOTr for guidance.

64. Following the preliminary discussion/meeting, AEJV scheduled another meeting with GCR to discuss the following: 1) Deliverables and timeframe, clarify documents and expectations, a) Impact Management Plan (IMP), b) Contractor's Environmental Management Plan (CEMP), and c) Contractor´s Environmental Management and Monitoring Plan (CEMMP); 2) Structure and Agenda of the CEMMP according to GS118; 3) Any Input from GCR to AEJV on the meeting for the EGF; 4) Environmental Monitoring Plan clarifications; 5) Environmental Risk Management clarifications; 6) Procedure (Archaeology); and 7) Baseline monitoring testing and Report.

65. As for POSCO, meetings or any online exchanges on environment-related concerns have not occurred as of this reporting period.

2.3.5 General Consultant

66. During this reporting period, GCR has provided support on environment-related concerns to the Project as listed in **Table 15**.

Table 15: GCR Environment Support to NSCR-EX Project

GCR Terms of Reference	Status (Apr-Sep 2020)
a) **Update** the Environmental Impact Statement (EIS), the EMP, and the EMoP as appropriate if any unanticipated environmental risks and impacts arise and/or if there are any changes to project design that would cause environmental risks or impacts not within the scope of the EIS and submit such updated EIS to the Employer, ADB and JICA for review, clearance and public disclosure prior to the implementation of such changes; incorporate necessary technical specifications with design and contract documentation;	• The Project has not commenced construction activities during this reporting period. • No unanticipated environmental risks and impacts at this point. • EIS, including EMP and EMoP, were updated in August 2020 due to changes identified during the detailed design stage (Table 10), and was submitted by DOTr to DENR EMB CO in September 2020. • Prepared the ECC/CNC application documentation options (Project Description Report and IEE Checklist) for CNO application for the Quitanguil River Branch Line Diversion and Patrol Road Diversion in N2 CP N-04. • Added inputs to the EIS, EMP and EMoP on COVID-19 Risk Assessment to Project activities. • Review of the updated EIS is in the process of DENR EMB CO review.
b) **Update** the EMP and the EMoP or **prepare** a new EMP and EMoP when unanticipated environmental impacts become apparent during project implementation to assess those impacts, evaluate the alternatives, and outline mitigation measures and resources addressing those impacts, in line with all applicable environmental laws, policies, and regulations of the Philippines, ADB Safeguard	• The Project has not commenced construction activities during this reporting period. • No unanticipated environmental risks and impacts at this point. • EIS, including EMP and EMoP, were updated in August 2020 due to changes identified during the detailed design stage (Table 10), and was

GCR Terms of Reference	Status (Apr-Sep 2020)
Policy Statement, and JICA Environmental Guidelines;	submitted by DOTr to DENR EMB CO in September 2020. • Prepared the ECC/CNC application documentation options (Project Description Report and IEE Checklist) for CNO application for the Quitanguil River Branch Line Diversion and Patrol Road Diversion in N2 CP N-04 • Added inputs to the EIS, EMP and EMoP on COVID-19 Risk Assessment to Project activities. • Review of the updated EIS is in the process of DENR EMB CO review.
c) **Update** the EMP and the EMoP should there be changes in the Project during implementation such as, but not limited to, the alignment, construction methodology, and other components that shall result to adverse environmental impacts not identified and addressed in the current EIS, EMP, and EMoP;	• The Project has not commenced construction activities during this reporting period. • EIS, including EMP and EMoP, were updated in August 2020 due to changes identified during the detailed design stage (Table 10), and was submitted by DOTr to DENR EMB CO in September 2020. • Prepared the ECC/CNC application documentation options (Project Description Report and IEE Checklist) for CNO application for the Quitanguil River Branch Line Diversion and Patrol Road Diversion in CP N-04. • Added inputs to the EIS, EMP and EMoP on COVID-19 Risk Assessment to Project activities. • Review of the updated EIS is in the process of DENR EMB CO review.
d) **Ensure** that the Project is constructed and monitored in strict conformity with all applicable environmental laws, policies, and regulations of the Philippines, ADB Safeguard Policy Statement, and JICA Environmental Guidelines;	• The Project has not commenced construction activities during this reporting period. • Monitoring reports for DENR EMB CO, ADB and JICA were prepared/reviewed for DOTr submission.
e) **Assist** the Employer in the following as fulfillment of the conditions stated in the ECC as well as in the JICA Environmental Guidelines, ADB Safeguard Policy Statement, and other environment-related requirements of the Project: i. Survey and preparation of inventory of trees affected by the Project, ii. Decontamination of toxic sites of the Project as required, iii. Survey of archaeological sites and preparation of the Archaeological Impact Statement (AIS), iv. Survey and documentation of affected heritage, historical, and/or cultural structures, sites, and/or markers, v. Protection of affected heritage, historical, and/or cultural structures, sites, and/or markers as required by national and international laws, standards, and guidelines, vi. Provision of an IEC Plan to advise stakeholders of the implementation of the	• The Project has not commenced construction activities during this reporting period. • Assisted in finalizing the tree ownership validation report (covering SAMANAKA farmers only; CP N-05) to be submitted to the Department of Agriculture (DA). • Assisted in updating the schedule for tree-related activities, including CNO and LNO acquisition, submission of permit application for CP N-04 trees, and follow-up activities for the appraisal of trees in CP N-05. • Prepared documents and data required for the tree cutting/earth balling permit application for CP N-01 to CP N-03 in line with the revised guidelines released by the DENR. • Generated a table summarizing the RCS results for affected trees in N2 and SC in May 2020. • Assisted in tree valuation and appraisal activities in September 2020.

GCR Terms of Reference	Status (Apr-Sep 2020)
Project, its impacts, and measures to mitigate the effects of the Project;	• Continued assistance to DOTr and PNR in the encoding of information required in the Letter of No Objection (LNO) acquisition from Private landowners with affected trees for use in Tree Cutting/Earthballing Permit Applications. • Prepared alternative proposal (telephonic engagement and stakeholder consultation meetings) to acquire LNO from affected landowners with affected trees in CPN-01 to CPN-03. • Assisted in contacting private land owners via phone call to verify tree ownership for LNO acquisition purposes. • Assisted in the preparation of information and potential measures/actions for project-affected historical, cultural, and/or heritage sites/structures, including a Due Diligence Report in June 2020. • Continued preparation of draft bi-lingual IEC brochure on project environmental aspects. • Assisted in gathering information on approaches to establishing the Environmental Guarantee Fund (EGF) and preparing of the draft EGF Memorandum of Agreement (MOA) for the Project. • CP N-04 contractor has initiated discussion/consultation on EGF establishment in September 2020, prior to issuance of their NTP. • Continued assistance to DOTr in complying with greening program ECC condition. • Initiated the establishment and implementation of a waste segregation program in GCR's Main Office in September 2020.
f) **Assist** the Employer in the implementation of the measures identified in the EMP;	• The Project has not commenced construction activities during this reporting period. • Preparation of the environmental monitoring manual, and monitoring inspection checklists for application in all contract packages
g) **Monitor** the effectiveness of the EMP and **recommend** measures and solutions to address identified gaps and mitigate negative impacts of the construction works on the environment;	• The Project has not commenced construction activities and monitoring of EMP measures during this reporting period.
h) **Clearly define** to the contractors their responsibilities in the implementation of the said EMP;	• The Project has not commenced construction activities during this reporting period. • Generated information regarding Permit Application processes to provide guidance to the contractors. • Prepared and continuous updating of induction training design and PowerPoint presentation materials for Contractor' Environmental Management Plan (CEMMP) preparation. • Preparation of GCR environment site procedures (in line with GCR QA-QC procedures) to be used in monitoring the contractors' environmental compliance of their construction activities.

GCR Terms of Reference	Status (Apr-Sep 2020)
i) **Assist** the Employer, prior to mobilization and project construction, in reviewing the Contractors' Construction Environmental Program/Construction Environmental Management Plan (CEMP) and in ensuring that the Contractors' CEMP comply with the conditions stated in the ECC, the EMP, the applicable environmental laws, policies, and regulations of the Philippines, the ADB Safeguard Policy Statement, and the JICA Environmental Guidelines;	• The Project has not commenced construction activities during this reporting period. • CEMMP Outlines from the CPN-04 and CPN-05 Contractors were submitted to GCR for review in August 2020. After NTPs are awarded to the contractors, full-blown CEMMP is expected to be submitted
j) **Recommend** to the Employer any necessary amendments to the CEMP;	• The Project has not commenced construction activities during this reporting period. • NTPs have not been awarded during this reporting period. • CEMMPs have not been submitted to GCR by the contractors during this reporting period.
k) **Submit** the CEMP to the Employer, ADB, and JICA for review;	• The Project has not commenced construction activities during this reporting period. • NTPs have not been awarded during this reporting period. • CEMMPs have not been submitted to GCR by the contractors during this reporting period. • No CEMMP to submit to Employer, ADB and JICA for review during this reporting period.
l) **Undertake** close supervision, monitoring, and reporting of the Contractor's implementation of the CEMP to ensure timely and satisfactory compliance with the mitigation measures set forth in the EMP and with other conditions in the ADB Safeguard Policy Statement and JICA Environmental Guidelines, and to minimize any adverse environmental impacts arising from the construction and operation of the Project;	• The Project has not commenced construction activities during this reporting period. • NTPs have not been awarded during this reporting period. • CEMMPs have not been submitted to GCR by the contractors during this reporting period. • No CEMMP to be implemented by the contractors and monitored by GCR during this reporting period.
m) **Undertake** close supervision, monitoring, and reporting of the Contractor's environmental baseline sampling and subsequent ambient monitoring (air quality, noise, water quality, etc.) throughout the construction phase;	• The Project has not commenced construction activities during this reporting period. • NTPs have not been awarded during this reporting period. • Environmental baseline sampling and monitoring has not commenced during this reporting period.
n) **Assist** the Employer in conducting regular and/or ongoing consultations with the project-affected families project information (e.g. schedule, activities, impacts, mitigation, etc.) as well as documentation and resolution of concerns related to environmental impacts of the Project;	• The Project has not commenced construction activities during this reporting period. • Consultations with project-affected families are regularly conducted for resettlement and compensation purposes only, including consultations with identified eligible project-affected farmers (CP N-05) and legal landowners with eligible project-affected trees (other CP Ns). • Continued preparation of draft bi-lingual IEC brochure on project environmental aspects.
o) **Assist** the Employer, before project construction, in establishing a grievance redress mechanism	• The Project has not commenced construction activities during this reporting period.

GCR Terms of Reference	Status (Apr-Sep 2020)
including the formation of a Grievance Redress Committee, and **provide** training for the personnel manning the GRM to receive and facilitate resolution of the concerns, complaints, and grievances of the affected people about the Project's environmental performance, make public the existence of this grievance redress mechanism through public awareness campaigns, review and address environmental grievances of stakeholders in relation to the Project, any of the service providers, or any person responsible for carrying out any aspect of the Project, and proactively and constructively respond to such grievances;	• NSCR-EX PMO has established the Project GRM Team. GCR involvement started with resettlement and compensation related concerns. GCR GRM Environment focal persons were assigned in September 2020 to assist in preparation for the approaching environment-related grievances when the construction activities commence. • A proposed list of environment-related grievances categories was provided to DOTr in September 2020.
p) **Undertake** monthly monitoring of EMP implementation from commencement until two (2) years after the completion of the Project, in compliance with conditions stated in the ECC as well as in the requirements under JICA Environmental Guidelines and ADB Safeguard Policy Statement. Results of the monthly monitoring report shall be consolidated into an Environmental Monitoring Report (EMR) which shall be submitted to the Employer every three (3) months after the commencement of the services until the completion of the Project, and semi-annually or annually for two (2) years after the completion of the Project;	• The Project has not commenced construction activities during this reporting period. • No monthly monitoring of EMP Implementation has commenced during this reporting period.
q) **Assist** in submitting the Compliance Monitoring Report (CMR) to the Department of Environment and Natural Resources (DENR) in the prescribed format after its verification by the Employer in compliance with the ECC for the Project. The CMR shall be submitted to DENR every January and July of the year;	• The Project has not commenced construction activities during this reporting period. • Assisted in the preparation of CMR covering January to June 2020 for DOTr submission to DENR EMB CO.
r) **Assist** in submitting the Semi-Annual Environmental Monitoring Report (SEMR) to ADB after the verification of the EMRs by the Employer. SEMRs shall be duly submitted to ADB on the 4th week of January and July (i.e., 30 days from end of each 6-month monitoring period)[14]. The SEMR must include consolidated results of monthly environmental monitoring, environmental monitoring data (baseline and routine), review of the progress of environmental measures detailed in the EMP, details of complaints received, and corresponding actions taken, details of safety issues and corresponding action plans as well as other relevant information, environmental issues and corrective measures implemented;	• The Project has not commenced construction activities during this reporting period. • Prepared first SEMR covering October 2019 to March 2020 in March 2020 and was finalized and submitted to ADB in September 2020.

[14] ADB Loan Effectivity was on 26 September 2019. SEMRs are to be submitted to ADB on the 4th week of March and September, instead of January and July.

GCR Terms of Reference	Status (Apr-Sep 2020)
s) **Assist** in submitting the EMR, after its verification by the Employer, to JICA as part of the Progress Status Report every three (3) months after the commencement of the services until the completion of the Project and semi-annually or annually for two (2) years after the completion of the Project;	• The Project has not commenced construction activities during this reporting period. • Prepared EMR covering October to December 2019, January to March 2020, April to June 2020 and July to September 2020 for DOTr review and submission to JICA.
t) **Engage** an EMA for environmental monitoring, on behalf of the Employer. Ensure that the TOR for the EMA is suitable for the Project needs. Provide available relevant information to the EMA;	• The Project has not commenced construction activities during this reporting period. • Continuous support in the procurement process, including finalization of the TOR, and evaluation of bids.
u) **Assist** the Employer in responding to requests from ADB and JICA's advisory committee for environmental and social considerations if necessary;	• The Project has not commenced construction activities during this reporting period. • Assistance in addressing ADB comments to the first SEMR (Sep 2020) and in investigating approaches on EGF establishment for progress updating to ADB (since Jul 2020).
v) **Assist** the Employer in the capacity building of the Employer's staff on environmental management through on-the-job training on environmental assessment techniques, mitigation measure planning, supervision and monitoring, and reporting;	• The Project has not commenced construction activities during this reporting period. • Prepared induction training design and PowerPoint presentation materials for Contractor' Environmental Management Plan (CEMMP) preparation.
w) Should there be major non-compliance discovered during the review of the Project, **prepare** a time-bound corrective action plan for submission to ADB and JICA;	• The Project has not commenced construction activities during this reporting period. • No major non-compliance has occurred during this reporting period.
x) During ADB processing of subsequent MFF individual tranches, conduct due diligence and prepare a detailed report on: i. Project compliance on the environmental assessment and review framework (EARF) and ADB Safeguard Policy Statement, ii. Status of implementation of various provisions of the EMP, iii. Compliance with the loan covenants between ADB and the GOP regarding environmental safeguards under previous tranches;	• The Project has not commenced construction activities during this reporting period. • No due diligence has been conducted during this reporting period.
y) Prepare a Project Completion Environmental Monitoring Report after completion of construction, detailing the status of EMP implementation, outstanding environmental issues and necessary time-bound corrective action plan; and	• The Project has not commenced construction activities during this reporting period. • Preparation of Project Completion Environmental Monitoring Report is not applicable during this reporting period.
z) Use of Geographic Information System in implementation of the aforementioned scope.	• The Project has not commenced construction activities during this reporting period. • Coordination with GCR GIS Team to develop a GIS-based maps reflecting the locations of the trees to be cut/balled (inventoried and re-validated) and the locations of environmental monitoring sampling

GCR Terms of Reference	Status (Apr-Sep 2020)
	stations (FS and DD EIS, and later on contractors' identified locations based on changes).

Source: GCR Monthly Monitoring Reports (April to September 2020)

2.3.6 Third Party Monitor - External Environmental Monitoring Agency (EMA)

67. The EMA has not been engaged and is still undergoing procurement process during this reporting period.

2.4 Meetings

68. Table 16 summarizes the meetings held during this reporting period, including the highlights of discussions.

Table 16: Environment-related Meetings held from April to September 2020

Date & Venue	Particulars	Participants	Highlights of Discussion
Internal Agencies			
01 April 2020, Teleconference (Skype Meeting)	DOTr-GCR Meeting on LNO Acquisition and TOR Finalization for SC Tree Inventory Survey	• DOTr 1. Jaena Tiongco 2. Ma. Cielo Nana 3. Kristel Alcantara 4. Jake Sabdao 5. Jeff Suya 6. Jeremiah Candolesas • GCR 7. Aldrin Bayangos 8. Joselito Losaria 9. Connie Morga	• Discussion and agreement on the approach for the acquisition of LNOs/Waivers from affected tree owners along N2 • Discussion on DOTr comments and questions about the draft TOR for SC Tree Inventory Survey
13 April 2020, Teleconference (Skype Meeting)	DOTr-GCR Meeting to Address ADB Comments on Draft N2SC SEMR	• DOTr 1. Monica Francisco 2. Rae Cecille Palma • GCR 3. Arnold Mendoza 4. Joselito Losaria 5. Jorge de las Alas 6. Bridgette Lorraine Bautista	• Submission of SMR. • Discussion on the Environmental Unit and HSEC. • Conclusion on the Para.78 improvement. • Draft Directory of Project EMP Implementation Staffing • Restructuring of the N2 and SC organization of DOTr • PCO Accreditation • Discussion on the functions of MMT and TPA • Quarterly Monitoring Reports Requirements
15 April 2020, Teleconference (Skype Meeting)	DOTr-PNR-GCR Internal Coordination Meeting on	• DOTr 1. Monica Francisco 2. Rae Cecille Palma 3. Jaena Tiongco	• Discussion on current work arrangements • Updates and discussion on the ways forward for tree-related activities

Date & Venue	Particulars	Participants	Highlights of Discussion
	Environmental Concerns	4. Ma. Cielo Nana 5. Racil Atutubo 6. Romaeca Joy Pascual • PNR 7. Jojo Valenciano 8. Elaine Igot 9. Gilbert • GCR 10. Joselito Losaria 11. Somasundaram Jayamohan 12. Jorge de las Alas 13. Bridgette Lorraine Bautista 14. Aldrin Bayangos 15. Hyacinth Adao	• Updates on EIS and ECC • Updates and discussion on cultural and heritage sites/structures • Discussion on the External Monitoring Agent (EMA) for the project
13 May 2020, Teleconference (Skype Meeting)	Meeting on Cultural and Heritage Concerns	• DOTr 1. Monica Francisco 2. Rae Cecille Palma 3. Carmela Biag • GCR 4. Arnold Mendoza 5. Joselito Losaria 6. Jorge de las Alas 7. Bridgette Lorraine Bautista	• Discussion on issues and recommended actions for identified heritage structures along CP N-01, CP N-02 and PC N-03 alignment
14 May 2020, Teleconference (Skype Meeting)	DOTr-GCR Internal Coordination Meeting on Environmental Concerns	• DOTr 1. Monica Francisco 2. Rae Cecille Palma 3. Jaena Tiongco 4. Cielo Nana 5. Kristel Alcantara 6. Racil Atutubo 7. Romaeca Joy Pascual • GCR 8. Joselito Losaria 9. Somasundaram Jayamohan 10. Jorge de las Alas 11. Bridgette Lorraine Bautista 12. Aldrin Bayangos 13. Hyacinth Adao	• DOTr concurrence to the EMA and SC Tree Inventory TORs • Letter to DA Region 3 on usage of August 2008 valuation matrix. • USec's Approval on LNO template to be attached to the NoT • Usec's signature on the revised tree-cutting/earth-balling permit application letter for CP N-04 • Continuous coordination with Mabalacat LGU even during ECQ • Proposed Schedule for Tree-related Activities • Draft SDP • Approval of draft SEMR1 response to ADB comments matrix • Comments on draft QMR 1 and QMR 2 • Cultural and Heritage Concerns

Date & Venue	Particulars	Participants	Highlights of Discussion
16 June 2020, Teleconference (Skype Meeting)	Coordination Meeting on DENR-EMB requirements on ECC amendment including Quitanguil River diversion	• DOTr 1. Monica Francisco 2. Rae Cecille Palma 3. Jaena Tiongco 4. Cielo Nana 5. Kristel Alcantara 6. Racil Atutubo 7. Romaeca Joy Pascual 8. Rose Venette Henson 9. Abegail Aquino 10. Marco Nelmida 11. Koreen Hidalgo • GCR 12. Joselito Losaria 13. Somasundaram Jayamohan 14. Jorge de las Alas 15. Bridgette Lorraine Bautista 16. Aldrin Bayangos 17. Hyacinth Adao	• Discussion on appropriate means to facilitate the acquisition of required ECCs from DENR-EMB.
19 June 2020, Teleconference (Skype Meeting)	Coordination Meeting	• DOTr 1. Monica Francisco 2. Rae Cecille Palma 3. Jaena Tiongco 4. Ma. Cielo Nana 5. Kristel Alcantara 6. Racil Atutubo 7. Romaeca Joy Pascual • GCR 8. Joselito Losaria 9. Somasundaram Jayamohan 10. Jorge de las Alas 11. Bridgette Lorraine Bautista 12. Aldrin Bayangos 13. Hyacinth Adao	• Discussion on the CEMMP Induction Training Design and Powerpoint Presentation Materials
24 June 2020, Teleconference (Skype Meeting)	Coordination Meeting	DOTr-GCR Environment Teams • DOTr-GCR RAP Teams	• Discussion on the Mabalacat City CNO Handover

Date & Venue	Particulars	Participants	Highlights of Discussion
26 June 2020, Teleconference (Skype Meeting)	Internal Coordination Meeting on N2, SC EIS review and update aspects including ECC amendment	• DOTr 1. Meg Adonis 2. Monica Francisco 3. Rae Cecille Palma 4. Ma. Cielo Nana 5. Kristel Alcantara 6. Racil Atutubo 7. Romaeca Joy Pascual • JDT 8. Miyakawa 9. Anacleto Suelto 10. Ryosuke Takahashi 11. Sakurai 12. Wako Murohara 13. Joan Salapare • GCR 14. Joselito Losaria 15. Somasundaram Jayamohan 16. Jorge de las Alas 17. Bridgette Lorraine Bautista	• Discussion on N2, SC review works including ECC amendments submitted to EMB
02 July 2020, Teleconference (Skype Meeting)	Internal Coordination Meeting on Environment (GCR Construction and Environment Teams)	• DOTr 1. Monica Francisco 2. Rae Cecille Palma 3. Ma. Cielo Nana 4. Kristel Alcantara 5. Racil Atutubo 6. Romaeca Joy Pascual 7. Abegail Aquino 8. Marco Nelmida 9. Joyce Aquino • JDT 10. Anacleto Suelto • GCR 11. Joselito Losaria 12. Somasundaram Jayamohan 13. Jorge de las Alas 14. Bridgette Lorraine Bautista	• Discussion on the Quitanguil River Diversion • Discussion on update of tree cutting permit requirements, and schedule of permit issuances • Updates on the status of work on cultural and heritage sites/structures
24 July 2020, Teleconference (Skype Meeting)	EGF Consultation Meeting with NSCR (N1)	• DOTr NSCR-EX 1. Monica Francisco 2. Rae Cecille Palma	• Presentation of NSCR on their EGF establishment

Date & Venue	Particulars	Participants	Highlights of Discussion
		3. Racil Atutubo 4. Romaeca Joy Pascual • DOTr NSCR 5. Maria Verlina Tonga 6. Pearly Grace Resano • PNR 7. Niel Peter Bagaygay 8. Sarah Guiambangan • GCR 9. Joselito Losaria 10. Somasundaram Jayamohan 11. Jorge de las Alas 12. Bridgette Lorraine Bautista 13. Aldrin Bayangos 14. Cynthia Britania 15. Benjie Calijan, Jr. 16. Rhea Luna 17. Kevin Christian Dacanay 18. Hyacinth Adao	
11 August 2020, Teleconference (Skype Meeting)	Brainstorming for DENR EMB Consultation Meeting on EGF Establishment	• DOTr 1. Monica Francisco 2. Rae Cecille Palma 3. Racil Atutubo 4. Romaeca Joy Pascual 5. Jake Sabdao 6. N.G. Tatulla • GCR 7. Joselito Losaria 8. Somasundaram Jayamohan 9. Jorge de las Alas 10. Bridgette Lorraine Bautista	• NSCR-EX EGF establishment status • Other DOTr Project EGF arrangement • NSCR-EX proposed actions • Questions/Clarifications for DENR EMB CO
02 September 2020, Teleconference (Skype Meeting)	Preparation for EGF Establishment Meeting with AEJV	• DOTr 1. Monica Francisco 2. Rae Cecille Palma 3. Racil Atutubo 4. Romaeca Joy Pascual • GCR 5. Joselito Losaria	• Run through of the draft presentation based on AEJV's proposed agenda

Date & Venue	Particulars	Participants	Highlights of Discussion
		6. Somasundaram Jayamohan 7. Jorge de las Alas 8. Bridgette Lorraine Bautista 9. Aldrin Bayangos 10. Yevgeny Honrade	
08 September 2020, Teleconference (Skype Meeting)	Environment Team Updating Meeting (tree-related activities)	• DOTr 1. Jaena Tiongco 2. Kristel Alcantara 3. Ma. Cielo Nana • GCR 4. Aldrin Bayangos 5. Benjie Calijan, Jr.	• Tree Validation for CPN 04 • CNO Acquisition and TC/EB Permit Application Updates • Appraisal of Trees in CPN 05 • LNO Acquisition Updates • Application of Cutting Permit for Coconut Trees • Updates on Greening Program
18 September 2020, Teleconference (MS Teams Meeting)	Environment, Gender and Development (GAD) and Grievance Redress Mechanism (GRM)	• DOTr 1. Jennalyn Buising 2. Karen Tillada 3. Lusha Francesca Maderal 4. Koreen Hidalgo 5. Monica Francisco 6. Rae Cecille Palma 7. Racil Atutubo 8. Romaeca Joy Pascual • PNR 9. Elaine Igot 10. Niel Peter Bagaygay • GCR 11. Arnold Mendoza 12. Laarni Palattao 13. Hyemee Nam 14. Nicollo V.A.M. Aragon 15. Joselito Losaria 16. Jorge de las Alas 17. Cynthia Britania 18. Kevin Christian Dacanay 19. Hyacinth Adao 20. Yevgeny Honrade 21. Bridgette Lorraine Bautista	• New comments on the CEMMP induction training materials • NSCR-EX GAD and GRM orientation • Program schedule and other logistics
24 September 2020, Teleconference (Skype Meeting)	GRM Meeting	• DOTr 1. Maria Armine Berdan 2. Karen Tillada	• The contractors' reporting process for grievances received from the site

Date & Venue	Particulars	Participants	Highlights of Discussion
		3. Jennalyn Buising 4. Jenica Hosingco 5. Lusha Francesca Maderal 6. Romaeca Joy Pascual 7. Guelina Verduz 8. Racil Atutubo 9. John Luis Arellano 10. Koreen Hidalgo • GCR 11. Hyemee Nam 12. Nicollo V.A.M. Aragon 13. Begum Shamsun Nahar 14. Laarni Palattao 15. Joselito Losaria 16. Jorge de las Alas 17. Aldrin Bayangos 18. Benjie Calijan, Jr. 19. Cynthia Britania 20. Kevin Christian Dacanay 21. Yevgeny Honrade 22. Bridgette Lorraine Bautista	• GCR's roles and responsibilities addressing grievances referred by the contractors and community • GCR Envi and GAD Teams' access to the GRM database for the preparation of QEMR and SEMR
External Agencies			
06 July 2020, Teleconference (MS Teams Meeting)	NSCR Clark Extension ECC Amendment Consultation Meeting	• DENR-EMB CO 1. Dexter Tabada 2. Lene Ramboyong 3. Jose Aragoncillo 4. Regina Eugenio 5. Raquel Ortega • DOTr 6. Monica Francisco 7. Rae Cecille Palma 8. Racil Atutubo 9. Romaeca Joy Pascual 10. Jaena Tiongco 11. Ma. Cielo Nana 12. Kristel Alcantara 13. Abegail Aquino 14. Marco Nelmida 15. Rose Henson • JDT	• Status of ECC amendment request (TPA and EIS review status) • Submission of updated EMP and environmental baseline for the NCC Line • Adding Quitanguil River improvement to previously requested ECC amendment • Impact of the additional scope and NCC Line baseline to the target project commencement date

Date & Venue	Particulars	Participants	Highlights of Discussion
		16. Anacleto Suelto 17. Verna Vidal • GCR 18. Joselito Losaria 19. Jorge de las Alas 20. Bridgette Lorraine Bautista	
16 July 2020, Teleconference (Skype Meeting)	EGF Presentation to DOTr and PNR Staff	• ADB 1. Antoine Morel • DOTr 2. Rae Cecille Palma 3. Racil Atutubo 4. Romaeca Joy Pascual 5. Ma. Cielo Nana 6. Kristel Alcantara • PNR 7. Elaine Igot 8. Niel Peter Bagaygay • GCR 9. Joselito Losaria 10. Jorge de las Alas 11. Somasundaram Jayamohan 12. Cynthia Britania 13. Aldrin Bayangos 14. Hyacinth Adao 15. Bridgette Lorraine Bautista	• EGF Administration and Management Guidelines • EGF in the Context of the NSCR Extension Project • Designation of Tasks and Proposed Timeline
13 August 2020, Teleconference (Zoom Video Call)	Greening Program Coordination Meeting	• DENR Region 3 1. Lezette Bernales 2. Thristan Mallari 3. Alyssa Carreon • PENRO Pampanga 4. Aldrin Rimas 5. Lea Rodriguez • DOTr 6. Monica Francisco 7. Jaena Tiongco 8. Kristel Alcantara 9. Ma. Cielo Nana • GCR 10. Aldrin Bayangos 11. Benjie Calijan, Jr. 12. Hyacinth Adao	• Introduction of New Members of Greening Program Team • Recap of Progress in Greening Program Coordination • NSCR-EX Greening Program Plantation Sites • Scheduling of Meeting for Memorandum of Agreement (MOA) Finalization

Date & Venue	Particulars	Participants	Highlights of Discussion
04 September 2020, Teleconference (MS Teams)	EGF Coordination Meeting with CP N-04 Contractor	• Acciona 1. Julio Ruiz Cabrero 2. Maria Antonio Valero Sin 3. Alfonso Vega 4. Ruben Eugenio Camba Garcia • EEI 5. Manuel Payawal • DOTr 6. Monica Francisco 7. Rae Cecille Palma 8. Racil Atutubo 9. Romaeca Joy Pascual 10. Koreen Hidalgo • PNR 11. Elaine Igot 12. Jojo Valenciano • GCR 13. Joselito Losaria 14. Somasundaram Jayamohan 15. Jorge de las Alas 16. Cynthia Britania 17. Yevgeny Honrade 18. Bridgette Lorraine Bautista	• Presentation to CP N-04 Contractor on EGF establishment, including its legal basis and process
08 September 2020, Teleconference (Skype Meeting)	Greening Program Coordination Meeting 1 and 2	• DENR Region 3 1. ARD Arthur Salazar 2. Lezette Bernales 3. Cecil Antonio 4. Thristan Mallari • PENRO Pampanga 5. PENRO Laudemir Salac 6. Aldrin Rimas 7. Ofel Gatchalian • PENRO Bulacan 8. Edmar Gallardo 9. Melvin Masin • CENRO Guiguinto 10. Angelika De Guzman • DOTr 11. Monica Francisco 12. Jaena Tiongco	• Recap of Previous Meetings • Division of Planting Sites between Bulacan and Pampanga • Finalization of Memorandum of Agreement • Tree Cutting Permit • Storage Site for trees to be cut and Planting Site for Earth Balled Trees

Date & Venue	Particulars	Participants	Highlights of Discussion
		13.Kristel Alcantara 14.Ma. Cielo Nana • GCR 15.Aldrin Bayangos 16.Benjie Calijan, Jr.	
16 September 2020, City ENRO-Mabalacat, Pampanga	Coordination Meeting with City Environment and Natural Resources Office (CENRO)-Mabalacat, Pampanga	• Mabalacat CENRO 1. Jesusa Santiago 2. Mackie Martinez • DOTr 3. Jaena Tiongco • GCR 4. Aldrin Bayangos 5. Benjie Calijan, Jr.	• History of Valuation Matrix provided by City ENRO-Mabalacat to previous projects • Request for Valuation Matrix of NSCR-Ex to City ENRO-Mabalacat
21 September 2020, Teleconference (Zoom Meeting)	Greening Program Consultation Meeting	• DENR Region 3 1. ARD Arthur Salazar 2. Lezette Bernales 3. Cecil Antonio 4. Thristan Mallari • PENRO Pampanga 5. PENRO Laudemir Salac 6. Aldrin Rimas 7. Ofel Gatchalian • PENRO Bulacan 8. Edmar Gallardo 9. Melvin Masin • CENRO Guiguinto 10.Angelika De Guzman • DOTr 11.Monica Francisco 12.Jaena Tiongco 13.Kristel Alcantara 14.Ma. Cielo Nana • GCR 15.Aldrin Bayangos 16.Benjie Calijan, Jr.	• Revisited initiatives previously done for the Greening Program and planned for its resumption
29 September 2020, Teleconference (MS Teams)	EGF Consultation Meeting with DENR EMB CO	• DENR-EMB CO 1. Esperanza Sajul 2. Jed Ang 3. Jose Aragoncillo 4. Lene Ramboyong 5. Michico Navaluna 6. Raquel Ortega 7. Therese Gonzales	• NSCR Clark and Calamba Extension EGF Establishment Status • Other DOTr Project EGF Arrangements • GRM and EGF • Questions/Clarifications for DENR EMB

Date & Venue	Particulars	Participants	Highlights of Discussion
		• DOTr 8. Monica Francisco 9. Rae Cecille Palma 10. Racil Atutubo 11. Romaeca Joy Pascual 12. Joyce Aquino • PNR 13. Elaine Igot 14. Sarah Guiambangan 15. Niel Peter Bagaygay • GCR 16. Joselito Losaria 17. Jorge de las Alas 18. Bridgette Lorraine Bautista	
30 September 2020, Teleconference (Zoom Meeting) Mabalacat City Hall-Annex	Mabalacat City's Tree Appraisal Committee Meeting	• PENRO Pampanga 1. Ofel Gatchalian • LGU Mabalacat 2. Ronald Babadilla 3. Francisco Foronda 4. Alex Layson (City Agriculture Office) 5. Rosalinda Gamboa (City Assessor's Office) 6. Jerni Peña (City ENRO) • ADB 7. Leo de Castro • DOTr 8. Jaena Tiongco 9. Kristel Alcantara 10. Ma. Cielo Nana • PNR 11. Niel Peter Bagaygay • GCR 12. Aldrin Bayangos 13. Benjie Calijan, Jr.	• Determine prices for the compensation of project Affected Crops and Trees (PACTs) in CPN 05 • Formation of the Appraisal Committee • Identification of Categories of Trees based on their Uses • Assigning of Value for the Trees

Source: GCR Monthly Progress Reports (April to December 2020)

2.5 Reporting Requirements

69. The NSCR-EX PMO is required to submit internal and external monitoring reports to the DENR-EMB, ADB, and JICA during pre-construction and construction until the Project completion. Additionally, the results of public consultation and information disclosure are likewise submitted as attachments. The said reports are disclosed to the public.

70. The status of monitoring reports prepared and submitted are summarized in Table 17Error! Reference source not found..

Table 17: Monitoring Reports Submitted during this Reporting Period

Type of Report		Frequency	Responsible Party	Place of Submission	Status
Pre-Construction Phase					
1	Quarterly Environmental Monitoring Report (QEMR)[15]	Quarterly	GC	GC ⇒ DOTr ⇒ ADB/JICA	First, second, third and fourth QEMRs submitted to DOTr
2	Semi-annual monitoring Report (SEMR)[16]	Semi-annual (The results of monthly environmental compliance progress reports are compiled into a semi-annual monitoring report.)	GC	GC ⇒ DOTr ⇒ ADB/JICA	First SEMR submitted to ADB in September 2020
3	CMR	Semi-annual using EMB-prescribed formats (no later than July 31 for the first term and January 30 for the second term)	NSCR EX PMO	NSCR EX PMO ⇒ EMB-Central Office, EMB-NCR, EMB-Region 3	2020 First Semester CMR was submitted to DENR-EMB Central Office in July 2020

2.6 Information Disclosure

71. Information disclosure on environmental impacts and mitigation has not been conducted during this reporting period. Ongoing consultations and communication with the project-affected persons mainly focuses on resettlement and compensation. Stakeholder Consultation Meetings and other consultation means are led by the Project's RAP Team. The details of the consultations held for this reporting period are presented in the Semi-annual Social Monitoring Report, also to be submitted to ADB.

2.7 Assistance to Tree-related Compensation

72. As presented in Table 15 and Table 16, several tree-related activities were conducted to assist in the resettlement and compensation activities of the Project. During this reporting period, the following were accomplished.

- Finalization of the tree ownership validation report (covering SAMANAKA farmers only; CP N-05) to be submitted to the DA.

[15] To be submitted at every quarter after the commencement of the services, presenting the environmental impacts and implementation of environmental mitigation measures during the construction stage, including proposed solutions and suggested revisions. Environmental monitoring forms will be filled and attached to the Report.
[16] To be submitted semi-annually after the commencement of the services, up to two (2) years after the completion of the Project, presenting the environmental impacts and implementation of environmental mitigation measures during the construction stage, including proposed solutions and suggested revisions. Environmental monitoring forms will be filled and attached to the Report.

- Updating of the schedule for tree-related activities, including CNO and LNO acquisition, submission of permit application for CP N-04 trees, and follow-up activities for the appraisal of trees in CP N-05.

- Preparation of documents and data required for the tree cutting/earth balling permit application for CP N-01 to CP N-03 in line with the revised guidelines released by the DENR.

- Generation of a table summarizing the RCS results for affected trees in N2 and SC.

- Assistance in tree valuation and appraisal activities.

- Continued assistance in encoding of information required in the LNO acquisition from private landowners with affected trees for use in Tree Cutting/Earth balling Permit Applications.

- Assistance in contacting private land owners via phone call to verify tree ownership for LNO acquisition purposes.

2.8 Grievance Redress Mechanism

73. Among the developments on GRM during this reporting period include, the Project GRM has been established and is ongoing further improvement for an organized management. Focal persons from DOTr, NSCR-EX PMO and the GC have been assigned for both environment and social grievances. A database of all grievances was initially developed and is now undergoing further improvement through the ADB-consultant CID. Initial categories of grievances have been established mainly for resettlement-related concerns, to further improve, a list of environmental grievances was proposed and undergoing discussion (Table 18).

Table 18: Proposed Environmental Grievance Categories

Category	Description
1. Tree claims	a. Additional tree claimants that are not included in the RCS master list for tree owners
2. Tree compensation	a. All concerns related to compensation of project--affected trees owned by identified legal land owners
3. Land Pollution	a. Erosion (and mud) causing damage to properties and obstruction to waterways (ECC condition no. 4) b. Ground subsidence c. Soil contamination/degradation (causing decrease in production)
4. Water Pollution	a. Siltation b. Spills and leaks (oil, bentonite, sewage and other chemicals) c. Solid waste/litter disposal
5. Air Pollution	a. Dust b. Emissions/Fumes/Odor
6. Disturbance to the Public	a. Noise b. Public health and safety (i) Traffic-related accidents (ii) Construction-related accidents (iii) Increase in insect-related diseases (iv) Increase in pollution-related diseases / conditions

Category	Description
	c. Improper waste disposal by the project d. Misconduct/Conflicts caused by project staff in the communities e. Temporary loss of access to properties/sources of income f. Employment issues (i) Biased hiring of locals and non-locals (ii) Unequal/Inadequate salaries/wages and benefits (iii) Inconvenient accommodation (iv) Excessive/Inadequate working hours (v) Gender discrimination (vi) Occupational health and safety g. Visual aesthetic degradation
7. Traffic Disturbance	a. Traffic congestion b. Disturbance to traffic flow c. Disturbance to public transportation operations
8. Utility Disturbance	a. Consumer competition/Interruption in water and power supply, and telecommunications signal b. Damage to water and power supply, and telecommunications networks (pipes and cable lines)
9. Design/Structure Issues	a. Drainage issues (i) Flooding (ii) Clogging (iii) Water stagnation b. Damage to structures due to vibration (roads, buildings, etc.)
10. Construction Management Issues	a. Improper stockpiling of construction materials b. Illegal extraction/ sourcing of aggregates c. Obstruction on drainage d. Inadequate housekeeping e. Construction waste not properly managed f. Uncovered/Unprotected excavated or borrow areas g. Contractor vehicle over speeding in densely populated areas h. Inadequate signages

74. As the Project has not commenced construction activities during this reporting period, grievances received are mainly related to resettlement and compensation concerns. Presented below is a summary of the grievances received from April to September 2020.

Table 19: Grievances Received by the Project from April to September 2020

Summary			Total
Number of new grievances, if any, since last monitoring period			
Number of grievances resolved			
Number of outstanding grievances			
Grievance	**NSCR Clark Extension**	**NSCR Calamba Extension**	**Total**
Compensation	4	9	13

Summary			Total
Demolition concerns	3	5	8
Inquiry appraisal	1	1	2
Inquiry master list	0	11	11
Inquiry resettlement	1	3	4
Inquiry ROW map	10	16	26
Inquiry tax declaration	0	1	1
Inquiry timeline	2	4	6
Meeting request	0	3	3
Ownership validation	6	3	9
Relocation concerns	3	10	13
Relocation extra-judicial settlement	3	1	4
Request for fences	1	0	1
Request for realignment	0	1	1
Request for updates	0	1	1
Survey	4	3	7
Tagging concerns	7	30	37
Total	**45**	**102**	**147**

Source: Grievance Desks of the LGUs

3 Conclusion

75. Although construction contracts have been awarded during the reporting period, the Project is essentially still in its pre-construction and preparatory stage. The safeguard elements to be complied with at this stage include the necessary pre-construction requirements that need to be undertaken to facilitate the implementation of the Project such as, but not limited to, the following:

1) Monitoring and reporting of DOTr's project's environmental compliance requirements to the DENR EMB CO

2) Incorporating the EIS, EMP and EMoP in the tender documentation

3) Review and updating of the EIS, EMP and EMoP considering the changes during the detailed design

4) Preparation of the SDP designed for adequately addressing the requirements of Project stakeholders

5) The continuous conduct of meaningful consultations (Section II.7), wherein stakeholder consultations were undertaken both during the FS and the DD stages

6) Initiation of safeguards capacity building for NSCR EX PMO Staff

76. As construction activities commence, issues on the environment will continue to be given even more further importance and emphasis during stakeholder consultations.

77. When procedural non-compliance and delays occur (especially with ECC conditions and General Specifications indicated in the tender documents), relevant government agencies and offices will be notified and consulted accordingly. DOTr, with the assistance from the GC and EMA, will formally communicate non-compliances and delays, causes, and proposed corrective actions and solutions to comply with mandated requirements.

78. For public information, DOTr, with the assistance from the GC, will initiate dissemination of potential procedural non-compliance and delays to the communities through public consultations, the tri-media, the social media, Project Help Desks, and the GRM, among other means, in coordination with the respective LGUs and the TPA.

79. The DOTr had submitted revised EIS, EMP and EMoP and had informed the EMB-CO and other agencies of the relevant changes in these documents. The DOTr will closely coordinate with EMB-CO regarding their concerns on these submissions. Once the revised EMP and EMoP are concurred by the EMB CO, these shall be officially transmitted to the GC, and the civil works contractors. The GC will then provide assistance to the DOTr in the proper implementation of the revised EMP and EMoP. An amended ECC is anticipated to be issued following these submissions. Same shall be forwarded to GC and the contractors for implementation of the compliance requirements.

80. The project had been prepared and tendered with safeguard requirements of both the Government, ADB, and JICA taken into consideration. These safeguard commitments are incorporated in documents that will eventually become contractual obligations that the Contractors will be required to comply.

81. DOTr has executed the preparatory activities to comply with project safeguards commitments amidst institutional limitations. DOTr continues to build the number of staff, and their environmental management capability are being strengthened through hands-on experience and through available relevant environment training opportunities. These are necessary to prepare them to take on their roles and responsibilities for the environment safeguards requirements of the project.

82. The major tasks accomplished during the reporting period are those relating to ECC compliance which are deemed very important to proceed with project implementation while waiting for the actual construction activities to commence. The EIS and its component plans, e.g., EMP, EMoP, SDP, have been harmonized with the changes brought about by the improved Project design and has been reported to DENR-EMB CO, ADB, and JICA. Relevant activities such as tree inventory have been conducted, which are done in conjunction with the RAP preparation activities.

83. Overall, Project preparation and pre-construction execution are generally compliant with safeguards commitments. However, as the project nears the construction stage, additional efforts shall still be exerted to meet the environmental management and monitoring requirements of the project. The following are being recommended:

a) Continued coordination among and across teams through timely communication and provision of complete and updated information;

b) A register of lessons learned shall be maintained in order to apply the same in similar future situations;

c) Continued IEC to apprise the stakeholders of project progress and development;

d) Increase the number and diversity of DOTr environment staff;

e) Continuous capability-building investment on a wider range of safeguard subject matters for the DOTr staff;

f) Contractors when they come on board shall undergo environment (and social) safeguards induction training to orient them of the environmental (and social) safeguards requirements of the project;

g) Contractors must have capable environmental staff (in its Environmental Management Unit) to manage the environmental management and monitoring requirements of their contracts; and

h) Contractor management must provide the resources to enable their staff to perform their work alongside DOTr and the GC.

84. Activities that are planned in the next reporting period following the completion of the preparatory activities, and award of construction contracts include but not limited to the following:

- Coordinate closely with the EMB-CO for the issuance of an amended ECC following their satisfactory review of the submitted revised EIS, EMP and EMoP;
- Provide copies of the updated DD EIS, ECC and EMP to the Contractors as basis for the preparation of their CEMMP consistent with the requirements of General Specifications 118 (GS118) of the Contractors' contracts;
- Baseline environmental quality measurements to be conducted by the Contractors as required in the EMP;
- Increase the number of DOTr EMU Staff to oversee GCR and Contractors' EMP and EMoP implementation;
- From among the DOTr EMU staff, send as many of these staff for PCO training, and designate adequate number of candidates per region who will be responsible for reporting in compliance with EMB CO requirements under the PEISS;
- GCR to approve the CEMPs and copies provided to DOTr and ADB for review;
- Award of the contract for EMA currently being tendered by GCR;
- Development and refinement of Monitoring Manual that includes monitoring and reporting checklists (sample report templates are provided here as Appendix O to this second SEMR)
- Establishment of registers of project activities, documents, incidents, among other information that will be useful for project supervision, and will form part of important inputs to the project completion report (**Annex I**);
- Improved IEC Program and its implementation;
- Conduct public consultations using recent project information to Project-affected communities and LGU officials emphasizing environment, and community health and safety;
- Completion and finalization of draft SDP;
- Submission to DENR of the third Compliance Monitoring Report (CMR);
- Submission of detailed plan for tree cutting and earth-balling, and replanting of native/endemic trees to DENR;
- Greening Program MOA signing between DENR, DOTr and PNR;

- Tree cutting permit issuance by DENR Region 3 and PCA;
- Conduct of the detailed Traffic Impact Assessment (TIA) in coordination with the concerned LGUs for every proposed station prior to Project construction;
- Establishment of EMF and EGF;
- Engagement of the EMA;
- Establishment and commencement of formal operations of HSEC;
- Review and approval of Contractors' Waste Management Plan (WMP) and Construction Environmental Monitoring and Management Plan (CEMMP);
- Review and approval of updated DD EIS by DENR-EMB;
- Diligent updating and coordination with concerned government agencies, LGUs, businesses and communities on the potential changes in project scope;
- DOTr and GCR will monitor compliance to the EMP and EMoP by the Contractors; and
- Integrate monitoring results in the next SEMR for submission to the ADB. Copies of the SEMR shall be provided to the EMA for their assessment as well.

Annexes

Annex A: Letter from EMB CO on N2 TPA Approval

Annex B: Letter to EMB on EIS Resubmission and ECC Amendment Request

Annex C: CP N-04 Notice of Contract Award

Annex D: CP N-05 Notice of Contract Award

Annex E: CP N-01, CP N-02 and CP N-03 Notice of Contract Award

Annex F: Compliance Monitoring Reports (Submitted through DENR website)

Annex G: Letter from EMB CO on SC TPA Approval

Annex H: Summary of Grievances Received

Annex I: Summary Registers for Project Supervision

Annex J: Chronology of NSCR Clark and Calamba Extension Project Activities

Annex K: Updated Environmental Impact Statement (August 2020)

Environmental Monitoring Report

Semi-annual Environmental Monitoring Report No. 2
September 2020

Appendix A: Letter from EMB CO on N2 TPA Approval

PHI: Malolos-Clark Railway Project – Tranche 1

Prepared by the Project Management Office (PMO) of the Department of Transportation (DOTr) for the Government of the Republic of the Philippines and the Asian Development Bank.

Republic of the Philippines
Department of Environment and Natural Resources
ENVIRONMENTAL MANAGEMENT BUREAU
DENR Compound, Visayas Avenue, Diliman, Quezon City 1116
Telephone Nos.: (632)927-15-17, 928-37-25; Fax No.: (632) 920-22-58
Website: http://www.emb.gov.ph / Email: mail@emb.gov.ph

May 12, 2020

ATTY. TIMOTHY JOHN R. BATAN
Undersecretary for Railways
DEPARTMENT OF TRANSPORTATION
DOTr Compound, Apo Court Pinatubo St. cor. Osmena,
Clark Freeport Zone, Pampanga

Subject: **Approval of Request for the Amendment of ECC Condition No. 10.2 on the Engagement of a Third-Party Auditor (TPA) in lieu of the Multipartite Monitoring Team (MMT) for the Malolos Clark Railway Project under ECC-CO-1807-0017**

Dear **Undersecretary Batan**:

This refers to your letter dated 17 March 2020, requesting the amendment of ECC Condition No. 10.2 of the abovementioned project.

After review and evaluation of your request, this Office allows you to engage a TPA in lieu of forming an MMT. Pursuant to Section 9.2 of DAO 2003-30, the third-party audit may be undertaken by a qualified environmental or EMS auditor. You shall submit to EMB on a semi-annual basis a copy of the audit findings and shall be held accountable for the veracity of the report. This Office is not precluded to validate the said report. Further, the engagement of TPA shall cover the project's construction and operational phase.

Please be guided accordingly.

Very truly yours,

ENGR. WILLIAM P. CUÑADO
OIC-Director

IIS No.: CO-2020-006850

Environmental Monitoring Report

Semi-annual Environmental Monitoring Report No. 2
September 2020

Appendix B: Letter to EMB on EIS Resubmission and ECC Amendment Request

PHI: Malolos-Clark Railway Project – Tranche 1

Prepared by the Project Management Office (PMO) of the Department of Transportation (DOTr) for the Government of the Republic of the Philippines and the Asian Development Bank.

DOTr NSCR Clark Extension (ECC-CO-1807-0017) Letter Transmittal of EIS and ECC Amendment Request

2 messages

North-South Commuter Railway Project DOTr-envi <nscr.envi@dotr.gov.ph> Fri, Sep 11, 2020 at 10:19 AM
To: recordsco <recordsco@emb.gov.ph>
Cc: Monica Francisco <monfrancisco.dotr@gmail.com>, Rae Palma <raepalma.dotr@gmail.com>

Good day! We are transmitting the following letter addressed to **DENR EMB Director William P. Cuñado**. The total file size exceeds the 25MB limit for gmail, so kindly click on the folder link to access the files (contains 8 files in total).

1. NSCR Clark Extension Transmittal of the Environmental Impact Statement Report and Request for Amendment of Issued ECC (ECC-CO-1807-0017)
    - Annex 1: Copy of ECC-CO-1807-0017
    - Annex 2: Updated NSCR Clark Extension EIS Report (August 2020)
        - Volume I
        - Volume II
        - Volume III
    - Annex 3: Summary of changes from FS EIS to DD EIS
    - Annex 4: Justifications for the project modifications from FS stage to DD stage
    - Annex 5: Summary of communication between DOTr and DENR EMB CO regarding ECC Amendment

If you have queries or concerns, please do not hesitate to contact us through this email.

Please confirm receipt of this email and attachment.

Thank you!

Kind Regards,

Rae Cecille D. Palma
Civil Engineer

REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF TRANSPORTATION
Office of the Undersecretary for Railways
Pinatubo Street corner Sergio Osmena Street,
Clark Freeport Zone, Mabalacat City,
Pampanga
+632 790 8300 local 285
+632 727 7943 (fax)

recordsco <recordsco@emb.gov.ph> Fri, Sep 11, 2020 at 5:21 PM
To: North-South Commuter Railway Project DOTr-envi <nscr.envi@dotr.gov.ph>

Good Day!

Sir/Madam:

This is to acknowledge the receipt of your email, this was already input in our EMB-Integrated Information System with IIS No. CO-2020-024098

Please see attached document for your reference.

NELLY P. BARIZO
Chief, Records Section
Environmental Management Bureau
DENR Compound, Visayas Avenue, Diliman, Quezon City
Tel. No. (02) 8920 2253

From: North-South Commuter Railway Project DOTr-envi <nscr.envi@dotr.gov.ph>
Sent: Friday, September 11, 2020 10:19 AM
To: recordsco <recordsco@emb.gov.ph>
Cc: Monica Francisco <monfrancisco.dotr@gmail.com>; Rae Palma <raepalma.dotr@gmail.com>
Subject: DOTr NSCR Clark Extension (ECC-CO-1807-0017) Letter Transmittal of EIS and ECC Amendment Request

[Quoted text hidden]

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Department of Environment and Natural Reources
ENVIRONMENTAL MANAGEMENT BUREAU
EMB Building, DENR Compound, Visayas Ave., Diliman, Quezon City
Tel Nos.: 927-1517/18, 426-4332, 928-1215, 825-5324, 920-2241/43

ACKNOWLEDGEMENT RECEIPT

September 11, 2020

Greetings!

This is to Acknowledge Receipt of your ECC Application with the Subject : EMAIL DTD SEPT. 11, 2020 FROM North-South Commuter Railway Project DOTr-envi ., RE: DOTr NSCR Clark Extension (ECC-CO-1807-0017) Letter Transmittal of EIS and ECC Amendment Request. (W/ ATTACHMENTS), submitted on September 11, 2020, 5:20pm.

Your transaction has been tagged as IIS No. CO-2020-024098 with Company ID EMBR3-1053620-111. For follow-ups, you may provide the given details.

For further inquiries, you may contact our designated EMB Office in your area from Monday to Friday 8:00 a.m. to 5:00 p.m. office hours, or email us at recordsco@emb.gov.ph.

Please be guided accordingly.

Thank you.

Environmental Monitoring Report

Semi-annual Environmental Monitoring Report No. 2
September 2020

Appendix C: CP N-04 Notice of Contract Award

PHI: Malolos-Clark Railway Project – Tranche 1

Prepared by the Project Management Office (PMO) of the Department of Transportation (DOTr) for the Government of the Republic of the Philippines and the Asian Development Bank.

REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF TRANSPORTATION
RAILWAYS SECTOR

Notice of Contract Award

This is to inform the results of the evaluation of bids that was submitted on 14 October 2019 for the **Malolos to Clark Railway Project – Package CP N-04** – The Procurement of Building and Civil Engineering Works for Apx. 6.5 kms of Railway Track Structure including Underground Station at Clark International Airport under PB No.19-154-10 and to notify that the contract was awarded on 08 July 2020 in accordance with ITB 41.1.

The summary of the evaluation are as follows:

1. List of Bidders

Name of Bidder	Country	Bid Price as Read Out at Opening	Evaluated Bid Price
Joint Venture of Acciona Construction Philippines Inc. and EEI Corporation	Philippines	PHP 19,393,784,380.43 EUR 5,005,241.60 USD 8,682,167.53 SGD 34,026,066.01	PHP 19,393,784,372.26 EUR 5,005,241.60 USD 8,682,167.53 SGD 34,026,066.01
		(PHP Equivalent) PHP 21,427,740,420.03	***(PHP Equivalent)*** PHP 21,427,740,411.87
GS Engineering & Construction Corp.	Korea	PHP 18,549,771,987.00 USD 67,596,674.27	PHP 18,549,771,987.58 USD 67,596,674.27
		(PHP Equivalent) PHP 22,074,938,550.18	***(PHP Equivalent)*** PHP 22,074,938,550.76
Joint Venture of PT Waskita Karya (Persero) Tbk and PT Wijaya Karya (Persero) Tbk	Indonesia	PHP 18,475,728,719.67 USD 114,373,119.76	PHP 17,916,044,074.08 USD 115,740,586.08
		(PHP Equivalent) PHP 24,440,286,915.15	***(PHP Equivalent)*** PHP 23,951,915,638.15

2. Reasons why other Bids were Unsuccessful

Package No.	Name of Bidder	Reasons why Bid was unsuccessful	Reference
CP N-04	Joint Venture of PT Waskita Karya (Persero) Tbk and PT Wijaya Karya (Persero) Tbk	The bidder failed the qualification requirements for construction experience in key activities as per EQC 2.4.2	ITB 29.4 & EQC 2.4.2
	GS Engineering & Construction Corp.	The Bid is not among the lowest cost combination of the technical responsive Bids as per EQC 1.4.	ITB 35.4 & 35.5

3. The Successful Bidder

Name of Bidder	Acciona Construction Philippines Inc. and EEI Corporation Joint Venture
Address	21st Floor, The Enterprise Center, Tower 2, Ayala cor Paseo de Roxas Ave., Makati City
Contract Price	PHP 19,393,784,372.26, EUR 5,005,241.60, USD 8,682,167.53 and SGD 34,026,066.01 inclusive of provisional sums and VAT
Duration of Contract	1,156 Calendar Days
Scope of Contract Awarded	Building and Civil Engineering Works for Apx. 6.5 kms of Railway Track and 1.1kms of Depot Access Track Structures including Underground Station at Clark International Airport

USEC. REINIER PAUL R. YEBRA
Department of Transportation
Head of the Procuring Entity

Environmental Monitoring Report

Semi-annual Environmental Monitoring Report No. 2
September 2020

Appendix D: CP N-05 Notice of Contract Award

PHI: Malolos-Clark Railway Project – Tranche 1

Prepared by the Project Management Office (PMO) of the Department of Transportation (DOTr) for the Government of the Republic of the Philippines and the Asian Development Bank.

REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF TRANSPORTATION
RAILWAYS SECTOR

Notice of Contract Award

This is to inform the results of the evaluation of bids that was submitted on 14 October 2019 for the **Malolos to Clark Railway Project – Package CP N-05** – The Procurement of Building and Civil Engineering Works for Depot Buildings including Related Infrastructure and Track Work Sub-Ballast under PB No.19-154-10 and to notify that the contract was awarded on 08 July 2020 in accordance with ITB 41.1.

The summary of the evaluation are as follows:

1. List of Bidders

Name of Bidder	Country	Bid Price as Read Out at Opening	Evaluated Bid Price
PT Wijaya Karya (Persero) Tbk	Indonesia	PHP 14,951,669,964.77 USD 1,000,000.00	PHP 14,598,418,054.15 USD 1,000,000.00
		(PHP Equivalent) PHP 15,003,819,964.77	***(PHP Equivalent)*** PHP 14,650,568,054.15
POSCO Engineering and Construction Co., Ltd.	Korea	PHP 13,473,274,192.96 USD 58,976,843.42	PHP 13,473,274,193.47 USD 58,976,843.42
		(PHP Equivalent) PHP 16,548,916,577.31	***(PHP Equivalent)*** PHP 16,548,916,577.82
GS Engineering & Construction Corp.	Korea	PHP 15,920,806,662.00 USD 54,050,281.65	PHP 15,920,806,662.57 USD 54,050,281.65
		(PHP Equivalent) PHP 18,739,528,850.05	***(PHP Equivalent)*** PHP 18,739,528,850.61

2. Reasons why other Bids were Unsuccessful

Package No.	Bidder	Reasons why Bid was unsuccessful	Reference
CP N-05	PT Wijaya-Karya (Persero) Tbk (Wika)	In accordance with ITB 29.4, the bid is rejected as it is not substantially responsive by failing the technical evaluation to achieve an overall "Pass" assessment with a score of 70 for each of the three principal aspects as specified in EQC 1.2.	ITB 29.4 & EQC 1.2
	GS Engineering & Construction Corp.	The Bid is not among the lowest cost combination of the technical responsive Bids as per EQC 1.4.	ITB 35.4

3. The Successful Bidder

Name of Bidder	POSCO Engineering and Construction Co., Ltd.
Address	180, Daesong-ro, Nam-gu, Pohang-si, Gyeongsangbuk, Republic of Korea
Contract Price	PHP 13,473,274,193.47 and USD 58,976,843.42 inclusive of provisional sums and VAT
Duration of Contract	1,460 Calendar Days
Scope of Contract Awarded	Building and Civil Engineering Works for Depot Buildings including Related Infrastructure and Track Work Sub-Ballast

USEC. REINIER PAUL R. YEBRA
Department of Transportation
Head of the Procuring Entity

Environmental Monitoring Report

Semi-annual Environmental Monitoring Report No. 2
September 2020

Appendix E: CP N-01, CP N-02 and CP N-03 Notice of Contract Award

PHI: Malolos-Clark Railway Project – Tranche 1

Prepared by the Project Management Office (PMO) of the Department of Transportation (DOTr) for the Government of the Republic of the Philippines and the Asian Development Bank.

REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF TRANSPORTATION
RAILWAYS SECTOR

Notice of Contract Award

This is to inform the results of the evaluation of bids for the **Malolos to Clark Railway Project for Packages CP N-01, CP N-02 & CP N-03; Construction of Civil Structures: Viaducts, Bridges and Five stations** dated 27 August 2019 under Public Bidding No. 19-041-4 and to notify that the contract were awarded on 18 September 2020 in accordance with ITB 41.1.

Pursuant to ITB 35.4 and EQC 1.5.5. of the Bidding Documents, the Employer has evaluated and compared Bids on the basis of a contract, or a combination of contracts, or as a total of contracts in order to arrive at the least-cost combination of the substantially responsive bids for the Employer by taking into account discounts offered by Bidders in case of award of multiple contracts.

The summary of the evaluation are as follows:

1. List of Bidders

Package No.	Bidder	Country	Bid Price as Read Out at Opening	Evaluated Bid Price
CP N-01	Joint Venture of Sumitomo Mitsui Construction Co., Ltd. and Italian-Thai Development Public Company Limited	Japan/ Thailand	JPY 10,964,564,037.55 USD 1,400,000.00 PHP 30,421,230,878.59	JPY 10,963,389,118.96 USD 1,400,000.00 PHP 30,291,381,185.69
			(PHP Equivalent) *PHP 35,669,622,039.03*	***(PHP Equivalent)*** *PHP 35,539,217,653.08*
CP N-01	Joint Venture of Hyundai Engineering & Construction Co., Ltd., Megawide Construction Corporation, and Dong-ah Geological Engineering Company Ltd.	Korea / Philippines	USD 201,950,486.00 PHP 18,059,718,237.00	USD 201,679,064.89 PHP 18,020,878,182.23
			(PHP Equivalent) *PHP 28,430,389,193.10*	***(PHP Equivalent)*** *PHP 28,377,098,164.33*
CP N-02	Italian-Thai Development Public Company Limited	Thailand	USD 145,066,021.79 PHP 15,762,935,496.22	USD 145,565,246.47 PHP 15,764,622,499.87
			(PHP Equivalent) *PHP 23,212,075,715.14*	***(PHP Equivalent)*** *PHP 23,239,397,906.11*

CP N-02	Joint Venture of Hyundai Engineering & Construction Co., Ltd., Megawide Construction Corporation, and Dong-ah Geological Engineering Company Ltd.	Korea / Philippines	USD 174,273,475.00 PHP 14,673,115,978.00 ***(PHP Equivalent)*** *PHP 23,622,058,919.25*	USD 174,273,439.07 PHP 14,673,115,768.19 ***(PHP Equivalent)*** *PHP 23,622,056,864.43*
CP N-02	Joint Venture of PT Wijaya Karya (Persero) Tbk, PT Waskita Karya (Persero) Tbk, and PT PP (Persero Tbk	Indonesia	USD 2,355,000.00 PHP 28,032,175,456.70 ***(PHP Equivalent)*** *PHP 28,153,104,706.70*	USD 2,355,000.00 PHP 27,896,393,882.71 ***(PHP Equivalent)*** *PHP 28,017,323,132.71*
CP N-02	Joint Venture of Acciona Construction Philippines and Daelim Industrial Co,. Ltd.	Philippines / Korea	EUR 10,350,647.55 USD 70,362,961.20 PHP 30,959,022,160.64 ***(PHP Equivalent)*** *PHP 35,164,523,378.52*	***(PHP Equivalent)*** *PHP 33,705,571,890.88*
CP N-03	Italian-Thai Development Public Company Limited	Thailand	USD 138,458,221.57 PHP 16,432,074,768.18 ***(PHP Equivalent)*** *PHP 23,285,154,445.80*	USD 133,192,749.03 PHP 15,937,046,813.47 ***(PHP Equivalent)*** *PHP 22,776,494,476.16*
CP N-03	Joint Venture of Acciona Construction Philippines, Daelim Industrial Co,. Ltd. And EEI Corporation	Korea / Philippines	EUR 14,761,848.35 USD 66,707,834.41 PHP 27,849,540,935.75 ***(PHP Equivalent)*** *PHP 32,119,802,539.99*	EUR 14,761,848.35 USD 66,707,834.41 PHP 27,849,540,935.75 ***(PHP Equivalent)*** *PHP 32,119,802,539.99*
CP N-03	PT Waskita Karya (Persero) Tbk	Indonesia	USD 137,598,414.62 PHP 17,195,546,607.03 ***(PHP Equivalent)*** *PHP 24,261,225,197.76*	USD137,598,414.62 PHP 17,195,879,670.86 ***(PHP Equivalent)*** *PHP 24,261,558,261.60*

2. Reasons why other Bids were Unsuccessful

Package No.	Bidder	Reasons why Bid was unsuccessful	Reference
CP N-01	Joint Venture of Sumitomo Mitsui Construction Co., Ltd. and Italian-Thai Development Public Company Limited	The Bid is not among the lowest cost combination of the technical compliant Bids as per EQC 1.4	ITB 35.4 and EQC 1.4
		The Bidder is not qualified to be awarded more than one package because one of the Joint Venture partners cannot meet the aggregated Average Annual Construction Turnover for multiple-package award.	EQC 1.5.5.
CP N-02	Italian-Thai Development Public Company Limited	The Bidder is not qualified to be awarded more than one package because the Bidder cannot meet the aggregated Average Annual Construction Turnover for multiple-package award.	EQC 1.5.5
		In accordance with ITB 29.4, the bid is rejected as it is not substantially responsive by failing to achieve an overall "Pass" assessment with a score of 70 for **Overall Programme Considerations** aspect of the evaluation as specified in EQC 1.2.	ITB 29.4 & EQC 1.2
CP N-02	Joint Venture of Hyundai Engineering & Construction Co., Ltd., Megawide Construction Corporation, and Dong-ah Geological Engineering Company Ltd.	The Bidder is not qualified to be awarded more than one package because two of the Joint Venture partners cannot meet the aggregated Average Annual Construction Turnover for multiple-package award.	EQC 1.5.5
		The Bid is not among the lowest cost combination of the technical compliant Bids as per EQC 1.4	ITB 35.4 and EQC 1.4
CP N-02	Joint Venture of PT Wijaya Karya (Persero) Tbk, PT Waskita Karya (Persero) Tbk, and PT PP (Persero Tbk	In accordance with ITB 29.4, the bid is rejected as it is not substantially responsive by failing to achieve an overall "Pass" assessment with a score of 70 for three of the four principal aspects, specifically **Overall Project Management, Project**	ITB 29.4 & EQC 1.2

		Programme Considerations, and Project Administration Matters, as specified in EQC 1.2.	
CP N-03	Joint Venture of Acciona Construction Philippines, Daelim Industrial Co,. Ltd. And EEI Corporation	The Bid is not among the lowest cost combination of the technical compliant Bids as per EQC 1.4	ITB 35.4 and EQC 1.4
CP N-03	PT Waskita Karya (Persero) Tbk	In accordance with ITB 29.4, the bid is rejected as it is not substantially responsive by failing to achieve an overall "Pass" assessment with a score of 70 for two of the four principal aspects, specifically **Project Programme Considerations, and Project Administration Matters**, as specified in EQC 1.2.	ITB 29.4 & EQC 1.2

3. The Successful Bidders of the Lowest Cost Combination of the Substantially Responsive Bids

For CP N-01:

Name of Bidder	Joint Venture of Hyundai Engineering & Construction Co., Ltd., Megawide Construction Corporation, and Dong-ah Geological Engineering Company Ltd.
Address	Hyundai Bdlg. 75, Yulgok-ro, Jongno-gu, Seoul, Korea, 110-793
Contract Price	PHP 18,020,878,182.23 and USD 201,679,064.89; inclusive of provisional sums and Value-Added Tax (VAT)
Duration of Contract	1,460 Calendar Days
Scope of Contract Awarded	Building and Civil Engineering Works for approximately 17Km of elevated rail viaduct including seven balanced cantilever bridges and two elevated steel framed station buildings

For CP N-02:

Name of Bidder	Joint Venture of Acciona Construction Philippines and Daelim Industrial Co,. Ltd.
Address	Acciona Construction Philippines Inc., 21st Floor,

	The Enterprise Centre, Tower 2 Ayala Corner Paseo De Roxas Ave., Makati City 1200
Contract Price	Equivalent Contract Amount of PHP 33,705,571,890.88 inclusive of all amounts in both local and foreign currencies specifically, with these included foreign currencies amounting to: USD 70,362,961.20; and EUR 10,350,647.55; inclusive of provisional sums and Value-Added Tax (VAT)
Duration of Contract	1,460 Calendar Days
Scope of Contract Awarded	Building and Civil Engineering Works for Apx. 16 Kms of Viaduct Structure including Elevated Station Building at San Fernando

For CP N-03:

Name of Bidder	Italian-Thai Development Public Company Limited
Address	2034/1332-161 Italthai Tower, New Petchburi Road, Bankgapi, Huaykwang, Bangkok 10320, Thailand
Contract Price	PHP 15,937,046,813.47 and USD 133,192,749.03; inclusive of provisional sums and Value-Added Tax (VAT)
Duration of Contract	1,460 Calendar Days
Scope of Contract Awarded	Building and Civil Engineering Works for Apx. 12 Kms of Viaduct Structure including Elevated Station Buildings at Angeles and Clark

USEC. REINIER PAUL R. YEBRA
Department of Transportation
Head of the Procuring Entity

Environmental Monitoring Report

Semi-annual Environmental Monitoring Report No. 2
September 2020

Appendix F: Compliance Monitoring Reports (Submitted through DENR website)

PHI: Malolos-Clark Railway Project – Tranche 1

Prepared by the Project Management Office (PMO) of the Department of Transportation (DOTr) for the Government of the Republic of the Philippines and the Asian Development Bank.

COMPLIANCE MONITORING REPORT
ACCOUNTABILITY STATEMENT OF PROJECT PROPONENT

This is to certify that all information in the submitted Compliance Monitoring Report (CMR) of the North-South Commuter Railway – Clark Extension Project (ECC-CO-1807-0017) for the monitoring period January-June 2020 is true, accurate and complete. Should I learn of any information which makes this inaccurate, I shall bring said information to the appropriate Department of Environment and Natural Resources - Environmental Management Bureau Office.

In witness whereof, I hereby set out my hands this AUG 18 2020 at QUEZON CITY MM.

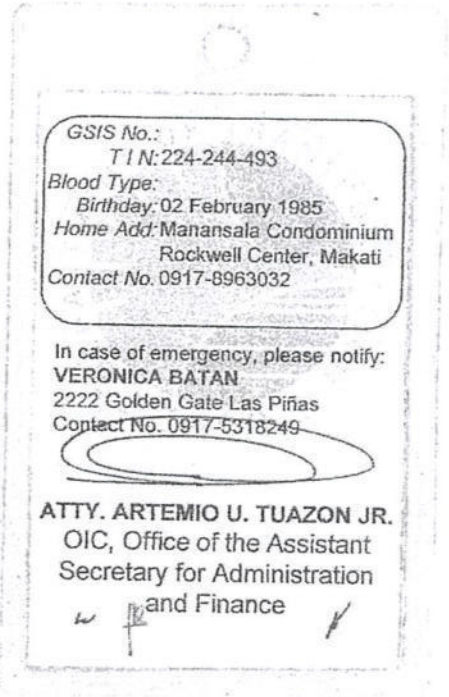
TIMOTHY JOHN R. BATAN
Undersecretary for Railways
Department of Transportation

SUBSCRIBED AND SWORN to before me this AUG 18 2020 at QUEZON CITY MM.
Affiant exhibiting to me his _____ with identification no. _____
issued on _____ at _____.

ATTY. JOSE FLORO P. CRISOLOGO
Notary Public
Until December 31, 2021
Adm. Matter No. NP-023
PTR No. 9270054-C/01-02-2020 Q.C.
IBP Lifetime No. LRN-03688
Roll No. 44852
MCLE VI-0017262 Valid Until 4-14-2022

Doc. No. 149
Page No. 30
Book No. 27
Series of 2020


Department of Transportation
Apo Court, Brgy. Sergio Osmeña St.
Clark Freeport Zone, Pampanga
Trunkline: 7338600
3312
TIMOTHY JOHN R. BATAN
Undersecretary for Railways


GSIS No.:
T I N: 224-244-493
Blood Type:
Birthday: 02 February 1985
Home Add: Manansala Condominium
Rockwell Center, Makati
Contact No. 0917-8963032
In case of emergency, please notify:
VERONICA BATAN
2222 Golden Gate Las Piñas
Contact No. 0917-5318249
ATTY. ARTEMIO U. TUAZON JR.
OIC, Office of the Assistant
Secretary for Administration
and Finance

Compliance Monitoring Report (CMR)

DEPARTMENT OF TRANSPORTATION (DOTR)
DOTr Head Office, Pinatubo Corber Osmena Street, Clark Freeport Zone, Angeles City, Pampanga

MONITORING PERIOD COVERED: January - June 2020 (1st Semester 2020)

I. Basic Project Information

ECC Reference No.	ECC-CO-1807-0017
Project Title	North-South Commuter Railway Clark Extension Project
Project Type	Infrastructure Projects, Major Roads and Bridges, On-grade railway system (new project)
Location	x, Malolos, Bulacan, R03
Project Stage/Phase	Pre Construction
Contact Person	Monica C. Francisco - Project Development Officer IV, Environmental Unit Lead
Contact Number/Email	+639176830047/nscr.envi@dotr.gov.ph
EMP Approval	[X] During ECC Application Stage [ ] Updated after ECC Issuance, Approved on

Project Description in ECC:

[This ECC shall cover] the construction and operation of the 72.5 km railway project traversing the following cities and municipalities:
-Malolos, Bulacan
-Calumpit, Bulacan
-Apalit, Pampanga
-Minalin, Pampanga
-Sto. Tomas, Pampanga
-San Fernando, Pampanga
-Angeles, Pampanga
-Mabalacat, Pampanga
-Bamban, Tarlac
-Capas, Tarlac

The project shall have the following components:
1. Major Components
-72.5 km Main Railway Line
-Seven (7) Stations
-Maintenance Depot (area along Sacobia near Clark International Airport)
-Electrical Mechanical System
-Rolling Stock
2. Support Facilities
-Substation Facilities
-Drainage Facilities
-Administration and Operation Center
-Training Center
-Maintenance Facilities
-Construction Yard
-Power Supply (MERALCO)
3. Pollution Control Devices
-Sewage Treatment Plant/ 3-Chamber Septic Tanks per commuter station, provision of muffler for gen sets.

Changes in Project Design (if any):

There is a current request for ECC amendment, submitted to DENR EMB on March 04, 2020, to include the new project components in the coverage of the ECC. The letter and attached updated EIS can be accessed through these links:
https://drive.google.com/file/d/16yD7vKkPfbom4AbJURI0xIn9J_Oocusr/view?usp=sharing
https://drive.google.com/drive/folders/1qb0NFvBdoFinth_WG28pht6gS-72ZMrr?usp=sharing

An updated EIS and ECC amendment request is planned to be submitted in the 2nd semester 2020 to reflect additional river improvement works in the Project scope. The study for the Clark-NCC section of the Project is still ongoing.

a. Project Area Geo-Coordinates

Area	Latitude	Longitude
Project Area 1	14.90292453	120.7694633
	14.90129943	120.7710201

	14.90159733	120.7714968
	14.90329421	120.7698711
Project Area 2	14.9457851	120.7480679
	14.94272369	120.7506522
	14.94306765	120.7510835
	14.94599329	120.7486137
Project Area 3	15.02881888	120.6847729
	15.02538866	120.6877214
	15.02538889	120.6877636
	15.02547543	120.6883736
	15.02916659	120.6852011
Project Area 4	15.13558416	120.5974947
	15.13342851	120.60116
	15.13389224	120.601449
	15.1362211	120.5974551
Project Area 5	15.17482858	120.5811699
	15.17218544	120.5815552
	15.17216046	120.5815693
	15.17215057	120.5815966
	15.17215152	120.5822259
	15.17226712	120.582258
	15.17492576	120.5818617
Project Area 6	15.19999235	120.5568301
	15.19987441	120.5567835
	15.19989888	120.5567176
	15.19978102	120.5566708
	15.19975612	120.5567368
	15.1981318	120.5560953
	15.19814337	120.5560643
	15.19791988	120.5559757
	15.19793275	120.555941
	15.19775578	120.5558711
	15.19773096	120.5559369
	15.19758343	120.5558786
	15.19740572	120.5563555
	15.19863202	120.5568398
	15.1986214	120.5568686
	15.19877333	120.5569287
	15.1987843	120.5569
	15.19940531	120.5571453
	15.1993776	120.5572199
	15.1996685	120.557335
	15.19969649	120.5572603
	15.19981457	120.5573069
Project Area 7	15.22765093	120.5630422
	15.2279918	120.5634415
	15.22848248	120.5651785
	15.2269324	120.5656474

	15.22629322	120.5660011
	15.22279634	120.5670666
	15.22220118	120.5675398
	15.21812239	120.5686763
	15.21626298	120.5653585
	15.21632249	120.565323
	15.21691073	120.5650304
	15.2172014	120.5650155
	15.21742596	120.5651946
	15.21761345	120.5657986
	15.21768638	120.5659428
	15.21786754	120.565965
	15.22687905	120.5632735
	15.2269652	120.563112
	15.22686125	120.5628652
	15.22682133	120.5627246
	15.22679501	120.5625106
	15.2267603	120.5622939
	15.22681972	120.5620515
	15.22692574	120.561904
	15.2276619	120.561229
	15.2277377	120.5610171
	15.22765713	120.5608365
	15.22695902	120.5600095
	15.22687875	120.5596902
	15.22696734	120.5595403
	15.22706937	120.5594015
	15.22703025	120.5592538
	15.22739186	120.5596844
	15.2272949	120.5596163
	15.22720492	120.5596173
	15.22712766	120.5596646
	15.22707973	120.5597672
	15.22712612	120.5599163
	15.22781738	120.5607354
	15.2279248	120.5610197
	15.22779522	120.5613635
	15.22703933	120.5620503
	15.22698112	120.562135
	15.22694085	120.5623143
	15.22698022	120.5624905
	15.22705825	120.5626535
	15.22709763	120.5627931
	15.22711121	120.5629279
	15.22713689	120.5630541
	15.22730751	120.563145
Project Area 8	15.33334625	120.5260756
	15.33594447	120.5260697

	15.33594557	120.5265807
	15.33334741	120.5265867
Project Area 9	14.85887064	120.8096706
	14.90009653	120.7723194
	14.90071073	120.7715911
	14.90126917	120.770976
	14.90291479	120.7694378
	14.90361643	120.7688843
	14.90530157	120.7674185
	14.9065604	120.7666843
	14.90892028	120.7660557
	14.9113347	120.7659928
	14.91875925	120.7653993
	14.92533648	120.7643671
	14.929609	120.7617631
	14.94273482	120.7506663
	14.94581004	120.748131
	14.94941252	120.7442924
	14.95823695	120.7288336
	14.96003773	120.7265362
	14.96379478	120.7235565
	14.9673897	120.7220244
	14.99515514	120.7165423
	15.01322563	120.6995739
	15.02540951	120.6879092
	15.02882741	120.6847835
	15.03016182	120.6838126
	15.04566505	120.6714369
	15.04574289	120.6713212
	15.04578408	120.6713508
	15.05429041	120.6655723
	15.05940391	120.6628189
	15.12439377	120.6153788
	15.12789111	120.6109338
	15.13346277	120.6011815
	15.13580355	120.5974809
	15.13912579	120.5935038
	15.16301532	120.5841214
	15.16897613	120.5828247
	15.1692052	120.5827659
	15.16941507	120.5827123
	15.16938904	120.5826038
	15.17035489	120.5824719
	15.17139989	120.5821985
	15.17215103	120.581927
	15.1748612	120.5814019
	15.17627626	120.5813262
	15.18003341	120.5806935

	15.1829292	120.5791344
	15.18614175	120.5790652
	15.19192659	120.5789655
	15.19841062	120.5772828
	15.20112086	120.5759977
	15.20084709	120.5754674
	15.2023902	120.5753511
	15.20261226	120.5752565
	15.20255243	120.5750873
	15.20332863	120.5749904
	15.20355066	120.5749207
	15.20857396	120.5736003
	15.20944219	120.5732899
	15.21310939	120.5714192
	15.21485984	120.5695107
	15.21500769	120.5654952
	15.21299441	120.5625826
	15.19982086	120.5572908
	15.19998637	120.5568462
	15.21309513	120.5624274
	15.215184	120.5654525
	15.2150988	120.5693914
	15.2160295	120.5690901
	15.21801997	120.5684937
	15.21811306	120.5686598
	15.21607796	120.5692876
	15.21355757	120.5718991
	15.20951562	120.5736646
	15.20862455	120.5738084
	15.20358835	120.5751087
	15.20365331	120.5753096
	15.20268247	120.5754317
	15.20259087	120.5754698
	15.20285847	120.5760752
	15.20121549	120.5761811
	15.20120572	120.5761621
	15.19843125	120.5774723
	15.19843407	120.5774811
	15.23054382	120.568696
	15.23605473	120.5680514
	15.24374971	120.5654302
	15.26508237	120.5610465
	15.28060361	120.5562296
	15.28310965	120.555415
	15.3085208	120.5472295
	15.32702195	120.5270898
	15.33208902	120.5262214
	15.33334623	120.5260851

	15.33334715	120.5265773
	15.33209934	120.5264474
	15.32711369	120.5272828
	15.30862665	120.5473807
	15.28315081	120.5555964
	15.28066761	120.556404
	15.26510168	120.5612317
	15.2438114	120.5656054
	15.23610068	120.5682316
	15.23056272	120.5688811
	15.19847238	120.5776634
	15.19196354	120.5793455
	15.18614745	120.5792579
	15.18297133	120.5793153
	15.18009247	120.5808694
	15.17631978	120.5815169
	15.17492565	120.5818609
	15.1722709	120.5822659
	15.17142189	120.5823951
	15.17033579	120.5826688
	15.17036488	120.5827896
	15.16944462	120.5829221
	15.16921646	120.5829549
	15.16899875	120.5830105
	15.16902058	120.5831009
	15.16309915	120.584387
	15.13926815	120.5937422
	15.13613253	120.5974606
	15.13393632	120.6014752
	15.1281415	120.611047
	15.12456823	120.6155927
	15.05955192	120.6630527
	15.05439002	120.6658333
	15.04594407	120.671576
	15.04588448	120.6716192
	15.04577492	120.6716987
	15.03034619	120.6840471
	15.02918156	120.685219
	15.02545566	120.6882333
	15.01340861	120.6997804
	14.99525674	120.7168017
	14.96743995	120.7222994
	14.96391965	120.7238039
	14.9601946	120.7267733
	14.9584586	120.728994
	14.94963933	120.7444458
	14.94591037	120.7484071
	14.94293579	120.7509182

	14.9297664	120.7619915
	14.9254116	120.7646352
	14.91878639	120.7656767
	14.91133946	120.7662716
	14.90895592	120.7663321
	14.90667143	120.7669387
	14.90541269	120.7676808
	14.90383737	120.7691402
	14.90324997	120.7698221
	14.90157104	120.7714597
	14.90100123	120.7719448
	14.90028427	120.7725538
	14.85907706	120.8099188

b. Project Buffer Zone

Area	Latitude	Longitude
Buffer Zone 1	15.22765093	120.5630422
	15.2279918	120.5634415
	15.22848248	120.5651785
	15.2269324	120.5656474
	15.22629322	120.5660011
	15.22279634	120.5670666
	15.22220118	120.5675398
	15.21812239	120.5686763
	15.21626298	120.5653585
	15.21632249	120.565323
	15.21691073	120.5650304
	15.2172014	120.5650155
	15.21742596	120.5651946
	15.21761345	120.5657986
	15.21768638	120.5659428
	15.21786754	120.565965
	15.22687905	120.5632735
	15.2269652	120.563112
	15.22686125	120.5628652
	15.22682133	120.5627246
	15.22679501	120.5625106
	15.2267603	120.5622939
	15.22681972	120.5620515
	15.22692574	120.561904
	15.2276619	120.561229
	15.2277377	120.5610171
	15.22765713	120.5608365
	15.22695902	120.5600095
	15.22687875	120.5596902
	15.22696734	120.5595403
	15.22706937	120.5594015

	15.22703025	120.5592538
	15.22739186	120.5596844
	15.2272949	120.5596163
	15.22720492	120.5596173
	15.22712766	120.5596646
	15.22707973	120.5597672
	15.22712612	120.5599163
	15.22781738	120.5607354
	15.2279248	120.5610197
	15.22779522	120.5613635
	15.22703933	120.5620503
	15.22698112	120.562135
	15.22694085	120.5623143
	15.22698022	120.5624905
	15.22705825	120.5626535
	15.22709763	120.5627931
	15.22711121	120.5629279
	15.22713689	120.5630541
	15.22730751	120.563145
Buffer Zone 2	14.90292453	120.7694633
	14.90129943	120.7710201
	14.90159733	120.7714968
	14.90329421	120.7698711
Buffer Zone 3	14.9457851	120.7480679
	14.94272369	120.7506522
	14.94306765	120.7510835
	14.94599329	120.7486137
Buffer Zone 4	15.02881888	120.6847729
	15.02538866	120.6877214
	15.02538889	120.6877636
	15.02547543	120.6883736
	15.02916659	120.6852011
Buffer Zone 5	15.13558416	120.5974947
	15.13342851	120.60116
	15.13389224	120.601449
	15.1362211	120.5974551
Buffer Zone 6	15.17482858	120.5811699
	15.17218544	120.5815552
	15.17216046	120.5815693
	15.17215057	120.5815966
	15.17215152	120.5822259
	15.17226712	120.582258
	15.17492576	120.5818617

c. Carbon Sink/GHG Program Area Coordinates

Area	Latitude	Longitude
Program Area 1	15.2052	120.7425

	15.2053	120.7426
	15.2051	120.7424

II. Executive Summary

a. Summary of Major Findings for the Monitoring Period

Condition / Requirement / Commitment	Compliance Status &Summary of Actions taken	Recommendation	Commitment for the Next Reporting Period
Compliance with ECC	The Proponent is working to comply with all conditions of the ECC. Non-compliance for some conditions is due to ongoing preparation of requirements, or due to dependency of condition to onboarding of contractor. Due to the changes in the Project from Feasibility Study to Detailed Design Study, the Proponent has submitted to DENR-EMB-CO the following: 1) Detailed Design EIS for review, dated January 07, 2020, received by EMB on January 16, 2020 https://drive.google.com/file/d/1ZzpLba7xFb--n7YuBtKUvEGrC-AVatdL/view?usp=sharing ; and 2) Request for the Amendment of ECC-CO-1807-0017, dated February 20, 2020, received by EMB on March 04 2020. https://drive.google.com/file/d/16yD7vKkPfbom4AbJURI0xIn9J_Oocusr/view?usp=sharing In response to DOTr's February 20, 2020 Request for ECC Amendment, DENR-EMB-CO has instructed DOTr through a letter dated April 20 2020, to submit the updated EMP and environmental baseline of CIA-NCC Line. https://drive.google.com/file/d/1dhtnJlcNb1KobgjJx_3Rdwl1ksuAkVyG/view?usp=sharing A request for amendment of ECC Condition No. 10.2: Establishment of a Multipartite Monitoring Team (MMT), to engage a third-party auditor (TPA) in lieu of an MMT, was submitted on 17 April 2020. Request was approved by DENR-EMB-CO through a letter response on May 12, 2020. https://drive.google.com/file/d/16F30t1EPSfda41sGMry2VBCj39BFss_d/view?usp=sharing		Continuously work on and ensure the compliance of the Project with the ECC conditions.
Compliance with EMP	EMP had minimal revisions from the updating of the EIS Report. The updated EIS Report has been submitted to DENR EMB CO for review on January 16, 2020. In response to DOTr's February 20, 2020 Request for ECC Amendment, DENR-EMB-CO has instructed DOTr through a letter dated April 20 2020, to submit the updated EMP and environmental baseline of CIA-NCC Line. The studies for the said section is ongoing.		Submit the updated EMP once finalized. Ensure EMP will strictly be implemented. Ensure that the modified EMP will be transmitted to the General Consultant (GC) for monitoring of compliance, and to the civil works contractors for strict implementation.
Implementation of appropriate	Construction has not yet begun as		Ensure that the ECC, EMP and

&effective env'tal impact remedial actions in case of exceedances	the civil works contracts of the Project have not been awarded yet. The Commencement Date is targeted to be on 27 July 2020.		EMoP will be transmitted to the GC for monitoring of compliance and to the civil works contractors for strict and proper implementation.
Complaints Management	The Grievance Redress (GR) Mechanism (GRM) help desks in every LGU affected by the project has been completed. Help desks are now operational. The Proponent still maintains the following contact details for the Grievance Redress (GR) Mechanism (GRM) Central Helpdesk: GLOBE: (0927) 450 6720; SMART: (0939) 223 7993; E-MAIL: nscr.grm@dotr.gov.ph, nscrex.dotr@gmail.com The Proponent has conducted a Virtual Meeting with Local GR Officers for the Strategic Planning for Mobile Helpdesk Establishment on May 27, 2020 and June 10, 2020. Grievances received for January-June 2020 totals to 187 • JAN 2020 - 87 • FEB 2020 - 45 • MAR 2020 - 27 • APR 2020 - 4 • MAY 2020 - 1 • JUNE 2020 - 23 Of the 187 grievances received, four (4) are still on-going/pending. 26 grievances were received through phone calls from Project-Affected Persons (PAPs) • 8 in Angeles • 4 in Calumpit • 12 in San Fernando • 1 in Mabalacat • 1 in Malolos		1. Conduct of Iteration Workshop for the GR focal persons. 2. Conduct of GRM and SCS Mid-term Assessment and Risk Communication Webinar. 3. Establishment of a Mobile Helpdesk in all LGUs.
Realistic and sufficient budget for conducting the environmental monitoring and audit activities	Engagement of a TPA/ External Environmental Monitoring Agent, and the associated Environmental Monitoring Fund (EMF) will be covered by the GC's budget. The Environmental Guarantee Fund (EGF) will be part of the civil works contractor's budget.		1. Engagement of the TPA in the later half of 2020. 2. Reiterate to winning contractors the EGF Provision in their budget.
Accountability - qualified personnel are charged with the routine monitoring of the project activities in terms of education, training, knowledge and experience of the environmental team	No changes in the organizational chart of the Project's Environmental Unit submitted to DENR EMB CO on December 23, 2019. https://drive.google.com/file/d/1Dkmg6xz8dUhQ4F_LKQA1Wt7PSsoVQNo4/view?usp=sharing Designated staff have undergone the 40-hour Basic Pollution Control Officer Training last November 18-22, 2019, and the Project Managers have undergone the 8-hour Environmental Training for Managing Heads on January 21, 2020.		Work on accreditation of designated staff as PCOs.

III. Results and Discussions

A. Compliance Monitoring

I. Status of Compliance to Project Description

Requirement	Description	Status of Compliance	Remarks
Project coverage/limits	The ECC covers the construction and operation of the 72.5 km railway project traversing the following cities and municipalities: • Malolos, Bulacan • Calumpit, Bulacan • Apalit, Pampanga • Minalin, Pampanga • Santo Tomas, Pampanga • San Fernando, Pampanga • Angeles, Pampanga • Mabalacat, Pampanga • Bamban, Tarlac • Capas, Tarlac	Complied	No changes in the list of LGUs traversed by the project. KMZ file of the alignment (version 27.0.3) can be accessed here: https://drive.google.com/file/d/12xFajwwdYtCPXchZZHnYvsWtosa_Ocej/view?usp=sharing
Components	The Project shall have the following components: Major Components • 72.5 km main railway line • seven (7) stations • maintenance depot (area along Sacobia near Clark International Airport) • electrical and mechanical system • rolling stock Support Facilities • substation facilities • drainage facilities • administration and operation center • training center • maintenance facilities • construction yard/s • power supply (MERALCO) Pollution Control Devices • sewage treatment plant or 3-chamber septic tanks per commuter station • provision of muffler for generator set/s	Not Complied	Change in depot location is included in the EIS Report submitted on 16 January 2020. A request for ECC amendment was submitted to EMB-CO on March 04 2020 for the following proposed changes: • Change of Project name from "Malolos-Clark Railway Project" to "North-South Commuter Railway Clark Extension Project (NSCR Clark Extension)" • Total length of the alignment will be 71 km. • Maintenance depot will be located at the Dropzone near Clark International Airport, between Gil Puyat and Prince Balagtas Avenues. • Change of "Substation Facilities" to "Power Distribution Substation Facilities" • Power supply will be sourced from different power utilities MERALCO, PELCO 3, SFELAPCO, AEC, CEDC) along the alignment per EPIRA. • Change of "Sewage Treatment Plant/ 3-Chamber Septic Tanks" to "Wastewater Treatment Facility (Membrane Bioreactor)" • Inclusion of River Improvements for Dolores River and Sapang Balen as part of the Project components

II. Status of Compliance to ECC Conditions

Condition No.	Description	Status of Compliance	Remarks
1	Conduct an effective and continuing Information, Education and Communication (IEC) Program through the use of most effective media to inform and educate all stakeholders, especially the contractors, workers, LGUs, businesses and local residents about the following: a. Project impacts and mitigating measures embodied in its EIS; b. Conditions stipulated in the ECC; c. Environmental and human safety features of the project, and; d. Health consciousness alerts for any project-induced discomfort (from dust, smell, noise, vibration) as the project progresses throughout the whole route.	Complied	Stakeholders Consultation Meetings (SCMs) with Project-Affected Persons to update them on the progress of the project is continuously being conducted. Attached are the documentation from the SCMs conducted from January 2020-June 2020. https://drive.google.com/file/d/1J8f5DU5L8lzkxKojU7lT1uW__S7PKoVA/view?usp=sharing The Asian Development Bank has provided a Public Relations (PR) Firm for the Project through its Technical Assistance Program. The PR Firm has onboarded on June 2020 and is currently working on the PR and IEC requirements of the Project, among others.
2	Implement a comprehensive Social Development Program (SDP) and submit a separate report together with the Compliance Monitoring Report (CMR) to	Not Complied	Development of project proposals is ongoing. The considerations for the Project Proposals will include LGU's inputs from the previously held

	the EMB Central Office using CMR Online on a semi-annual basis pursuant to EMB MC 2016-01.		workshops, the Resettlement Action Plan (RAP), and the Environmental Management Plan (EMP).
3	Submit detailed waste management program (WMP) for proper handling, collection and disposal of solid, hazardous and liquid wastes to EMB Central Office (CO) and EMB Region III within six (6) months prior to project construction. Proof of implementation shall be submitted together with the CMR.	Not Complied	The Proponent has prepared a Project Waste Management Plan as a basis for the detailed WMP to be developed by the Contractors as part of the Contractors Environmental Management and Monitoring Plan (CEMMP). https://drive.google.com/file/d/1OOhnR_bdBB8UvBQG7A7Kbk9bgB07Hoxt/view?usp=sharing Compliance will be done when the civil works contractors are on board.
4	Ensure that all the existing waterways affected by the proposed project construction are maintained and not obstructed.	Complied	Certificate of No Objections (CNO), and/or concurrences have been secured from relevant offices (https://drive.google.com/file/d/1YojwsgPZJnIJce3kQ-h8CL58WZudpT0J/view?usp=sharing) for the following purposes: 1. Project Drainage Design CNO/concurrence of LGUs 2. River Improvements CNO/concurrence of DPWH Pampanga 1st DEO for Sapang Balen, and of Clark Development Corporation for Dolores Creek 3. River Bridge Design crossing Malalam River (Eastern Branch River), and Pambaling River (Third River Upstream) concurrence of DPWH MPE-PMO and DPWH UPMO Operations and Technical Services Coordination to secure certificate of no objections from other DPWH Region III Offices, LGUs, and NIA Region III is also ongoing.
5	Submit a detailed construction environmental management program, including mobilization and demobilization plans, for the construction yards one (1) month prior to project implementation. The plan should include the coordination with concerned LGUs to promote compatibility of adjoining land uses with the intended project stations including its exit and entrance.	Not Complied	Target schedule for site hand over to the contractor is on 27 July 2020. Compliance will be done when the civil works contractors are on board. The Proponent, through the GC, will brief the civil works contractors with their commitments in the implementation of the EMP prior to commencement of construction. The Construction Environmental Management and Monitoring Plan (CEMMP), which will be submitted by the civil works contractors, will be reviewed before Project construction. The CEMMP must be aligned with the EMP of the Project. The civil works contractors must observe the measures or mitigations stated in the CEMMP.
6	Submit a detailed plan for earth balling and replanting of mature native/endemic trees within three (3) months prior to project construction. The plan should include the following: a. Specific recipient sites which have already been prepared and conditioned; b. Ensure high degree of survival; and, c. Provision for regular maintenance until trees have re-establish in their new environment.	Not Complied	The proponent has prepared an initial earth-balling and transplant plan, to be completed once the DENR has determined the total number of trees to be earth-balled and the location where the trees should be replanted and maintained. https://drive.google.com/file/d/1_59VlkmzimKthpz1Q38KmschqGrZFDWD/view?usp=sharing
7	Implement a greening program in line	Not Complied	Locations indicated in the previous

	with the DENR's thrust for GHG Emission Reduction Program. The program shall be submitted to EMB sixty (60) days prior to the project implementation.		section for the Buffer Zones are the station, and the depot areas where the landscaping will serve as the buffer zones. The coordinates will be updated if there are changes. The location for the Greening Program will be in Mt. Arayat, Pampanga. Specific area to be agreed upon with DENR EMB Region III. The Proponent will participate in the "adopt a site" as part of the Enhanced National Greening Program - a flagship program of the DENR. At the least, a five (5) hectare degraded site (either upland or mangrove area) within the province of Bulacan will be developed by the DOTr. The Department will also engage a registered People's organization living within or adjacent to the proposed area who will be our partner in the maintenance and protection of the developed site. A tripartite MOA between the DOTr, DENR Region III and the PO for this initiative is targeted to be finalized on 31 January 2020. A meeting with the DENR-Region 3 will commence on 17 July 2020, to clarify and refine some provisions of the MOA.
8	Submit an approved Resettlement Action Plan (RAP) of the affected communities within two (2) months prior to project construction.	Complied	The Mabalacat RAP, covering the areas of Civil Works Packages CPN04 and N05 of the Project, has been finalized, approved, and is now for implementation. A copy of the said RAP will also be transmitted to DENR EMB, and other relevant offices for their reference. The Mabalacat RAP (https://drive.google.com/file/d/1kvOePPqIECw-is_BMzGiUPwqITPgcO7a/view?usp=sharing) includes the following chapters: 1. Project Description 2. Scope of Land Acquisition and Resettlement 3. Socio-Economic Profile of Project-Affected Persons 4. Legal and Policy Framework 5. Compensation and Entitlement 6. Relocation and Resettlement Plans 7. Public Consultation 8. Livelihood Restoration and Improvement Plan 9. Grievance Redress Mechanism 10. RAP Implementation Arrangements 11. RAP Implementation Schedule 12. Cost and Budget for Resettlement and Acquisition of Land Assets 13. Monitoring and Evaluation Finalization of the following detailed RAPs is ongoing: 1. Landowner RAP (Malolos-Angeles) (CP N01, N02, N03) 2. Non-Landowner RAP (Malolos-Angeles) (CP N01, N02, N03)
9	Conduct a detailed Traffic Impact Assessment (TIA) in coordination with the concerned LGUs for every proposed station prior to project construction integrating proposed road expansion projects of the concerned government agencies. Transport of heavy structures	Complied	The TIA, has been discussed with LGUs and DPWH Region III. The TIA report has been revised per LGUs and DPWH Region III's inputs. The TIA can be accessed here: https://drive.google.com/open?id=1VhHn

	shall be scheduled during the period that may not cause traffic in the area.		a6PDz4tSQt22w5b__u2GW-qyL0hw The Traffic Management Plans (TMP) will be based from the TIA and will be developed by the Civil Works Contractors. The TMPs shall be transmitted to and coordinated with all concerned offices before implementation.
10.1	The Proponent shall set-up a readily available and replenishable Environmental Guarantee Fund (EGF) to cover further environmental assessments, compensation, rehabilitation or restoration, and abandonment or decommissioning.	Not Complied	EGF is part of contractor's budget. Target schedule for site hand over to the contractor is on 27 July 2020. Compliance will be done when the civil works contractors are onboard.
10.2	Establish an MMT composed of representative(s) from the local environmental Non-Government Organization/s (NGOs), People's Organization/s (POs) and the Local Government Units per DAO 2017-15. The MMT shall primarily oversee the compliance of the Proponent with the Environmental Management and Monitoring Plan (EMMoP) and the ECC conditions.	Not Complied	A request for the amendment of the condition to engage a Third-Party Auditor (TPA) in lieu of an MMT was submitted to EMB-CO on 17 April 2020, and was approved on 12 May 2020 (https://drive.google.com/file/d/16F30t1EPSfda41sGMry2VBCj39BFss_d/view?usp=sharing). The TPA will also act as the External Monitoring Agent (EMA), which is part of the loan requirements of the Asian Development Bank (ADB), and the Japan International Cooperation Agency (JICA). TPA has not yet been engaged during this reporting period, and is expected to onboard in the later half of 2020.
10.3	The Proponent shall set-up a replenishable Environmental Monitoring Fund (EMF) to cover all costs attendant to the operation of the MMT such as training, hiring of technical experts and resource persons, fieldwork and transportation.	Not Complied	The EMF will be included in the TPA/EMA's budget.
11	Establish an Environmental Unit (EU) in sixty (60) days prior to construction that shall competently handle the environment-related aspects of the project. In addition to the monitoring requirements as specified in the EMMoP, the EU shall have the following responsibilities: a. Monitor actual project impacts vis-à-vis the predicted impacts and management measures in the EIS; b. Recommend revisions to the EMMoP, whenever necessary subject to the approval of the EMB-CO; c. Ensure that data gathered during monitoring activities are properly documented, assessed, evaluated, and reported in accordance with the standard formats; and, d. Ensure that monitoring and submission of reports to EMB-CO are carried out as required.	Complied	The Proponent has submitted the organizational chart (can be accessed here: https://drive.google.com/open?id=1Dkmg6xz8dUhQ4F_LKQA1Wt7PSsoVQNo4) of the Project's Environmental Unit to DENR EMB CO on December 23, 2019. Designated staff have undergone the 40-hour Basic Pollution Control Officer Training last November 18-22, 2019, and the Project Managers have undergone the 8-hour Environmental Training for Managing Heads on January 21, 2020. The Proponent is currently working on the requirements for the accreditation of the PCOs.
12	The Proponent shall ensure that its contractors and sub-contractors are provided with copies of this ECC, including the EMP, and that they will strictly comply with the relevant conditions of the ECC.	Complied	The General Consultant (GC) has onboarded and has been provided with the copy of the ECC. The project is still in the process of procuring civil works contractors, but the ECC and the EMP were already disclosed in the bidding documents.

			The civil works contractors will be briefed of their obligations in the implementation of the EMP once they are onboard. The relevant documents shall be transmitted to the GC and to the civil works contractors.
13	No activities shall be undertaken other than what were stipulated in the final EIS. Any expansion and/ or modification of the Project beyond the Project description or change in alignment/ route that will cause significant impacts to the environment shall be subjected to a new Environmental Impact Assessment.	Complied	The updated EIS has been transmitted to EMB-CO for further review and will undergo the required process if found with any significant modifications or changes.
14	In case of transfer of ownership of this Project, the same conditions and restrictions shall apply to the transferee or grantee who shall secure in writing the corresponding amendment of this ECC from the EMB-CO within fifteen (15) working days reflecting such transfer.	Complied	N/A No change in ownership

III. Status of Compliance to EMP Conditions

Impacts	**Mitigating Measures**	**Status of Compliance**	**Remarks**
All	To be updated	Complied	The Project is still in the Pre-Construction Phase. Further compliance with the EMP will be monitored and reported when construction works have started.
Pre-construction, Construction and Operation activities Impacts in general	Comply with the relevant laws: RA 6969: Storage, transport, handling, treatment and disposal of hazardous waste Secure hazardous waste generator's ID from DENR-EMB; Provision of hazardous materials storage area; Hazardous materials/ wastes will be stored in appropriate container properly sealed and labelled; Hazardous waste will be hauled by an accredited transporter; Hazardous waste will be treated by a registered treater (TSD Facility) RA 9003: Management and disposal of solid wastes Waste segregation, recycling, provision of waste color coded bins, etc.; Provision of Material Recovery Facility (MRF); Regular hauling of solid wastes through the LGU or private contractor. RA 8749: Comprehensive Air Pollution Control Policy Secure permit to operate for all air pollution source installations (i.e genset); Regular inspection and preventive maintenance of heavy equipment, machineries and service vehicles to meet the DENR Emission Standard; Regular cleaning and clearing of construction access / sites surfaces of spoils and debris from construction equipment and vehicles and wetting of ground soil in the construction site when necessary; Control vehicle movement maintaining the speed limit within the construction	Complied	The Project is still in the Pre-Construction Phase. Further compliance will be monitored and reported when construction works have started.

	site to RA 9275: Comprehensive Water Quality Management and for Other Purposes • Secure discharge permit; • Provision of Wastewater Treatment Facility at the depot; • Provision of three-chambered septic tank at each station. PD 442: Labor Code of the Philippines, as amended (including Occupational Safety and Health Standards) • Gender equality will be considered in hiring of workers; • Include medical certificate in the requirements for hiring of workers to ensure that they are fit to work. Ensure that they are provided with proper training on construction, occupational health and safety, and emergency response procedure; • Provide appropriate personal protective equipment (PPE) to all construction workers, particularly to the personnel working on heights, heavy and electrical equipment; • Establish Health and Safety Desk or Medical Station at the active construction sites to monitor and safeguard the health of the workers and local residents and to provide immediate response during unexpected incidents/emergencies; • Close coordination with the nearest hospitals in the active construction site for immediate transfer and/or further evaluation and medical management of the patient. RA 8504: Philippine AIDS Prevention and Control Act of 1998 • Education of employees on standardized basic HIV/AIDS information and instruction PD 856: Sanitation Code of the Philippines • Provide safe and clean water for drinking; • Provision of appropriate sanitary facilities such as portable toilets and waste bins. Implementation of Emergency Response Plan and Health and Safety Management Plan to include but not limited to: • Distribution of manual/guideline for workers/employee on health safety and environmental management; • Orientation and continuous training of qualified workers/ employee/ operator on Environment Management, Basic and Construction Occupational Safety and Health, Scaffolding Safety, Fire Safety and Safe Use of Chemicals at Work; • Provision of earthquake, fire drills for workers; • Provision of appropriate PPE for workers; • Provision of security personnel. Regular monitoring of site condition		
Land acquisition for the project ROW Land use and Classification Incompatibility with the Existing	[Pre-Construction/ Construction] • Maximize the use of existing PNR ROW from Malolos to Clark and BCDA	Complied	Mitigating measures are part of the design considerations. The Proponent has continuously coordinated with the

Land Use	property from Clark to NCC Information sharing to the affected LGU to align and ensure that the Project will be accommodated in their future land use plan Identification of future land use of surrounding areas that will result to a significant increase of transportation-oriented developments (TOD) in cooperation with urban planners of LGUs to adopt in the future developments.		affected LGUs regarding updates on the Project design, among other concerns.
Construction at the following: Areas with the existing old PNR structures Areas with high risk to typhoon passage, high susceptibility to flooding Prime agricultural areas in depot Environmentally Critical Area (ECA) Incompatibility with Classification as an ECA	[Pre-Construction/ Construction] Plan and design the site, structure foundation, and structure including construction activities in consideration to the ECAs. Coordinate with relevant government agencies and stakeholders as required	Complied	Mitigating measures are part of the design considerations. The Proponent has continuously coordinated with the relevant government agencies regarding updates on the Project design, among other concerns.
Land acquisition for the project ROW Land Tenure Involuntary resettlement of informal settlers who had encroached portion of the existing PNR ROW; settlements outside the existing PNR ROW	[Pre-Construction] Implement Resettlement Action Plan in coordination with KSAs/ NHA, LGUs, lot owners and other concerned stakeholders and agencies to address the issue on land acquisition and relocation of informal settlers.	Complied	The Mabalacat RAP (https://drive.google.com/file/d/1kvOePPqIECw-is_BMzGiUPwqITPgcO7a/view?usp=sharing), covering the areas of Civil Works Packages CPN04 and N05 of the Project, has been finalized, approved, and is now for implementation. A copy of the said RAP will also be transmitted to DENR EMB, and other relevant offices for their reference. Finalization of the detailed RAPs for other sections of the alignment is ongoing.
Land acquisition for the project ROW Land Tenure Potential conflict with other government infrastructure projects	[Pre-Construction] Coordinate with BCDA, DPWH, and other relevant agencies	Complied	Mitigating measures are part of the design considerations. The Proponent has continuously coordinated with the relevant government agencies regarding updates on the Project design, among other concerns.
Land acquisition for the project ROW Land Tenure Areas with CADT/CADC	[Pre-Construction] Coordinate with the NCIP and conduct FBI to determine the possible overlap with the CADT/CADC	Complied	Certificate of Non-Overlap has been secured for the depot location. The certificate can be accessed here: https://drive.google.com/open?id=1uRFJwag6fsZIEuIa4XUXkvKr9Zgh0QnQ
Construction activities Visual Aesthetic and Land Use Degradation of aesthetic view and land architecture	[Pre-Construction/ Construction] Design and install facilities to harmonize with the surrounding environments (shape, color, size, etc.) Identify planting area within the ROW that will not be covered by development to act as buffer zone, green corridor and to lessen aesthetic sore brought by construction and railway structures, and plant trees Adequately record the condition of roads, agricultural land and other infrastructure prior to start transport materials and construction [Construction] Maintain the construction site/ yards tidy and clean and rehabilitate after construction. Provision for temporary screens/ walls to minimize the visual clutter.	Complied	Mitigating measures are part of the design considerations. Further compliance will be done when the civil works contractors are onboard.

	Fully reinstate pathways, other local infrastructure, and agricultural land to at least their pre-project condition upon the completion of construction.		
Generation and improper handling and disposal of domestic and hazardous solid waste. Land Value Devaluation of land value as a result of improper solid waste management	[Pre-Construction] Prepare a Waste Management Plan (WMP). [Construction] Implement WMP including strict implementation of solid waste management plan and proper disposal by contractor in accordance with RA 9003, hazardous waste disposal in accordance with RA 6969 Conduct Social Development Plan (SDP) including waste management to the communities	Complied	Mitigating measures are part of the planning considerations. Detailed Waste Management Plan (WMP) is part of the CEMMP. Further Compliance will be done when the civil works contractors are onboard.
Generation and improper handling and disposal of excavated soil, leftover concrete by excavation activities Land Value Devaluation of land value as a result of improper handling of excavated soil	[Pre-Construction/ Construction] Plan and Implement the spoils management and disposal plan. Plan and implement recycling and reuse of excavated soil to be utilized for the project/ other project as much as possible. In case of excessive soil to be generated, identify the final spoil disposal site. [Construction] Place excavated materials on appropriate dump sites or spoils area and with adequate containment. Strictly implement construction plan, soil management plan, and proper disposal by contractor in accordance to RA 9003, minimization of waste, segregation.	Complied	Mitigating measures are part of the planning considerations. Detailed Waste Management Plan (WMP) is part of the CEMMP. Further Compliance will be done when the civil works contractors are onboard.
Construction of embankment/slope protection Topography Permanent modification of the terrain and alteration of landform may cause ground failure	[Pre-Construction/ Construction] Formulate and implement appropriate design measures for the protection on slopes and banks, soil improvement / ground reinforcement to minimize ground failure during construction based on the results of the geological survey and geotechnical investigations.	Complied	Mitigating measures are part of the design considerations. Further compliance will be done when the civil works contractors are onboard.
Earthworks (excavation, backfilling, stockpiling, tunneling/ underground, elevated tracks/platforms), and natural hazards Geology/ Geomorphology Ground Subsidence, Liquefaction, Landslide, Mud/ Debris Flow, etc. Foundation of piers of elevated structures may cause unequal settlement of road surfaces.	[Pre-Construction/Construction] Design and implement appropriate foundation and structures based on combination of geotechnical, geodetic and hydrologic study, and seismicity studies, and in compliance with the National Building Code and the Structural Code of the Philippines and internationally accepted guideline. Design and install emergency escape route, early warning (alarm) system, emergency power supplies in the design of the structure particularly in the viaduct. Plan and implement appropriate construction method, schedule, and activities based on combination of geotechnical and geological investigations, and seismicity studies in coordination with the PHIVOLCS. [Construction] Install sufficient protection measure such as soil improvements during excavation activities and implement appropriate materials handling program or a site protection and rehabilitation program. Proper inspection of all installed and constructed/ ongoing construction structures and facilities.	Complied	Mitigating measures are part of the design and planning considerations. Further compliance will be done when the civil works contractors are onboard.

	Coordinate with the PHIVOLCS during earthquake and volcanic events to adjust construction schedule. Conduct earthquake drills for workers. Use earth pressure balance (EPB) technique with the Tunnel Boring Machine (TBM) to prevent collapse of soil. Construct diaphragm wall using polymer and bentonite Avoid simultaneous excavation in areas near river. Monitor land subsidence. Compact soil in excavation area. The contractor will be required to implement construction methods through underpinning of the existing structures to control vertical and horizontal settlement of road, bridges and other existing buildings.		
Clearing and removal of vegetation, stripping of soil cover, excavation of underlying rock, grading or construction of embankments and works in depot. Pedology Soil erosion/ loss of topsoil	[Pre-Construction/ Construction] Design and install slope protection/ soil erosion control to prevent or minimize slope failure during construction based on the results of the geo-hazard assessment and geotechnical investigations. [Construction] Minimize the removal of vegetation cover as much as possible, provision of slope stabilization measure/s, when necessary. Install surface water runoff drainage systems, protection of slope and bank as required. Provide drainage system with sedimentation pond and temporary ditches to collect runoff and settle sediments before discharge to the public drainage system. Clean and de-clog drainage canals surrounding the work sites and depot regularly. Implement appropriate materials handling program or a site protection and rehabilitation program including but not limited to the following; Schedule clearing and excavation activities in a speedy manner during dry season if possible. Installation of temporary erosion ponds or silt traps around the major work areas. Placement of excavated materials on appropriate staging site or spoils area and with adequate containment. Limit stock pile height up to 2 m high only. Cover stockpile of excavated soil. Also Install silt traps, deviation channels, mounting, barriers or trenches around the stockpiles. Installation of fence at the stockpiles of sand and gravel to reduce sediment transport during heavy rains including reduction of storage time in the work areas. Underground works and similar excavation should be adequately braced. For bored pile construction, the use of bentonite or polymer slurry is highly recommended, to stabilize uncased borings in loose soils. Utilize heavy equipment for transporting, hauling and excavating material from one area to another so as to avoid spills into	Complied	Mitigating measures are part of the design and planning considerations. Further compliance will be done when the civil works contractors are onboard.

	drainage system Place construction materials in suitable areas, away from surface waters, canals and drains. Schedule excavation works, levelling of area, removal of public utilities, e.g. water pipes, drain pipes, electric poles, etc. during the dry season to avoid soil erosion problems. Designate 2-3 workers to be in-charge of cleaning the site and clearing the construction materials scraps such as soil, rock, sand, and lime that are scattered onto the construction areas and road surfaces every day or within 24 hours to avoid the obstruction of natural flow, especially during the wet season.		
Accidental spills of fuels /lubricants from construction vehicles &machineries/ hazardous chemicals. Generation and improper handling/ disposal of construction/ domestic/ hazardous wastes. Pedology Degradation of soil quality because of soil contamination	[Construction] Proper inspection and maintenance of machines and equipment. Strictly implement solid waste management plan and proper disposal by contractor in accordance with RA 9003, hazardous waste disposal in accordance with RA 6969. Conduct soil quality monitoring in case of any possible contamination events occur.	Complied	Mitigating measures are part of the planning considerations. Detailed WMP is part of the CEMMP. Further Compliance will be done when the civil works contractors are onboard.
Drilling and excavation at previously contaminated site (e.g. Old Calumpit Dump Site) Pedology Exposure to contaminated soil	[Pre-Construction/ Construction] Identify a potentially contaminated site and conduct of soil sampling survey, if necessary. Conduct Environmental Site Assessment if there is suspected contamination on the proposed location of facilities. In case that toxic substances are found within the project area and/or adjacent sites, prepare contaminated soil management plan and implement necessary remediation measures. Storage, handling, transport, treatment and disposal of contaminated soil will be in accordance with RA 6969 [Construction] Conduct continuous monitoring of toxic level to ensure that contaminants will not pose hazards. In case traces are detected, construction activities on affected site will be paused until a soil management plan is developed and implemented in consultation to the DENR–EMB.	Complied	Mitigating measures are part of the design and planning considerations. Further compliance will be done when the civil works contractors are onboard.
Removal of vegetation along the proposed project particularly the trees at some areas along the ROW, and depot area Terrestrial Ecology (Flora) Loss of Habitat Threat to Existence and/or Loss of Important Local Species Threat to Abundance, Frequency and Distribution of Important Species Hindrance to Wildlife Access	[Pre-Construction] Design, plan and implement the project that will minimize vegetation clearing, alteration of landform particularly in areas adjacent to flora of higher conservation significance (i.e. Antipolo, Is-is, Narra) and in the vicinity of ecological significant areas Conduct 100% inventory of the affected trees along the alignment to determine the total counts, category, and characteristics of affected trees and minimize removal particularly in areas adjacent to vegetation of higher conservation significance as much as possible. Native/Endemic/ Indigenous species of trees, shrubs and grasses will be specified. Wildlings of the endangered and threatened species, if any, will be	Complied	Mitigating measures are part of the design and planning considerations. Further compliance will be done when the civil works contractors are onboard.

	collected before construction, placed in the nursery, and give priority during nursery operation to be used for rehabilitation of areas that will be affected by project For tree replanting, areas not part of the development within the ROW, around the stations and depot will be prioritized for replanting activity to create buffer zone and to improve habitat for wildlife. For those that cannot be replanted within the project area, coordination with the DENR and LGUs on the identification of area for the potential trees that will be relocated. Earth balling of trees (if there are any) will be coordinated with the DENR and LGUs including the site where the earth balled trees will be transplanted Secure tree cutting permit in compliance with DENR Memorandum Order No. 2012-02. [Construction] Prior to any clearing activity, clearly mark the ROW to avoid the unnecessary clearance of tree cutting. Conduct tree planting activities to compensate site clearing activities. Conduct regular monitoring on survival of replanted trees and replant if necessary.		
Earthworks and vehicle movement. Generation of dust and noise, vibration, and illumination pollution Terrestrial Ecology (Fauna) Loss of Habitat Threat to Existence and/or Loss of Important Local Species Threat to Abundance, Frequency and Distribution of Important Species Hindrance to Wildlife Access	[Construction] Minimize vegetation clearing, alteration of landform, generation of noise, vibration, illumination, and vehicular movement particularly in areas adjacent to flora of higher conservation significance (i.e. Antipolo, Is-is, Narra) and in the vicinity of ecological significant areas. Prepare and implement a tree and vegetation management plan as part of the construction plan considering the significance to fauna (local bird species) such as installing buffer zone, minimizing the use of herbicide and machinery as much as possible. Coordinate with BMB-DENR and SCPW for the conservation of migratory birds if required.	Complied	Mitigating measures are part of the design and planning considerations. Further compliance will be done when the civil works contractors are onboard.
Site preparation, land clearing, removal of vegetation Excavation Construction activities Hydrology Flooding and inundation by sediment run off, siltation, drainage overflow, clogging	[Pre-Construction/ Construction] Design and install sufficient drainage system including temporary drainage system during construction to accommodate the surface water runoff from the project and avoid any flooding in the area caused by the project, in consideration to the existing drainage system and flood storage capacity. Based on the hydrological, geological study and local climate change data from PAGASA, design and install train system insusceptible to flood and related extreme events including temporary construction drainage, train structure to be above the flood level, installation of drainage pumping system, slope protection, etc. Based on the result of hydrological study, design and install viaduct piers considering the potential impacts on flood levels upstream and downstream of the rivers traversed by the project. Coordinate with DPWH and LGUs on the integration of proposed drainage plan	Complied	Mitigating measures are part of the design and planning considerations. Further compliance will be done when the civil works contractors are onboard.

	to the project area. [Construction] Minimize the removal of vegetation and alteration of topography as much as possible. Install soil erosion control such as protection of slope and bank silt traps to minimize siltation of waterways as required. Strictly implement construction plan, operating instructions and solid waste / soil management plan, which include minimization of waste/soil generation, segregation, and proper disposal by contractor in accordance to RA 9003 Regular inspection and prompt maintenance of the drainage system, all installed structures and facilities and improve/ enhance capacity when possible.		
Site preparation, land clearing, removal of vegetation Excavation Construction activities Hydrogeology Depletion of water resource/ competition in water use	[Construction] Utilize surface water from the local water service provider/s Conduct regular monitoring of water consumption Implement water conservation program such as use of rain harvested/ recycled water at construction yard/ camp.	Complied	Mitigating measures are part of the design and planning considerations. Further compliance will be done when the civil works contractors are onboard.
Earthworks (excavation, backfilling, stockpiling, tunneling/underground) Water Quality Degradation of groundwater quality	[Pre-Construction/ Construction] Plan and Implement appropriate construction methods (i.e. excavation, backfilling, stockpiling) based on geological and geotechnical investigations. [Construction] Install siltation/filtration pond at tunnel construction area Comply with environmental permitting requirements for the storage, transport, handling, treatment, and disposal of hazardous material/ wastes and contaminated soil in accordance with RA 6969, and solid waste / soil management plan, in accordance to RA 9003. Ensure movement of any existing utilities and underground structures during excavation and construction take into account the effect of the actual in-situ ground condition and construction practices	Complied	Mitigating measures are part of the design and planning considerations. Further compliance will be done when the civil works contractors are onboard.
Earthworks (excavation, backfilling, stockpiling) Water Quality Disturbance on bottom sediment degradation of surface water Siltation Induce of turbidity Freshwater Ecology Threat to abundance, frequency and distribution of species	[Pre-Construction] Based on the hydrological and geodetic surveys, design bridge piers that will minimize number of piers to be installed within the rivers and select appropriate construction materials to be used. Coordinate with NWRB, DPWH and LGUs for necessary permit [Construction] Implement construction activities in consideration to the water course, embankment, and dry season. Minimize the removal of vegetation cover, alternation of topography as much as possible. Install slope protection (i.e. grouted riprap, gabion wall, gabion mattress or sheet pile) to prevent soil erosion and bottom sediment around the bridge piers if necessary. Place excavated material in temporary	Complied	Mitigating measures are part of the design and planning considerations. Further compliance will be done when the civil works contractors are onboard.

	staging area with provision for silt traps/ siltation pond to avoid silt draining to waterways, degradation of surface water quality and clogging of waterways, if necessary. Conduct regular surface water quality monitoring.		
Discharge of wastewater from construction sites/ yards/ camps/ related facilities; Accidental spills of fuels and lubricants from construction vehicles and machineries, as well as other hazardous chemicals like paints and solvents; Generation and improper handling and disposal of construction, domestic and hazardous wastes Water Quality Degradation of surface water quality Freshwater Ecology Threat to abundance, frequency and distribution of species	[Pre-Construction/ Construction] Design and implement the temporary drainage of waste water from construction yard/ facilities/ camp, surface water runoff drainage systems to minimize discharge. Design and install sewage treatment facility and separate non-sewage wastewater for stations and Depot in compliance to the Sanitation Code of the Philippines. In addition, depot will have interceptor tank to remove oil and fuel from surface water. Compliance with RA 9275, secure discharge permit. [Construction] Install wastewater treatment, portable sanitary facilities at construction sites/yards. Toilets and lavatories to be provided at the construction camps should be at a ratio of 10 people per toilet. The mobile toilets with wastewater treatment system will be provided. Conduct proper inspection and regular maintenance of construction machineries, equipment, vehicles and wastewater treatment equipment and facilities with appropriate measure to collect any leakage Control oil refueling activities and provide oil bunds in oil storage areas. Prohibit workers from dumping garbage into drains and canals. Implement material handling program or a site protection program. Prior to operation of the batching plant, construct settling/retention ponds with sufficient capacity for treatment of wastewater from washing of equipment such as mixer drums, trucks, chutes) Comply with environmental permitting requirements for the storage, transport, handling, and treatment of hazardous material/ wastes and contaminated soil in accordance with RA 6969 and solid waste / soil management plan, which include minimization of waste/soil generation, segregation, and proper disposal including the temporary storage by contractor in accordance with RA 9003 Properly maintain settling/retention ponds to ensure compliance with the effluent quality. Conduct of effluent quality monitoring at discharge point.	Complied	Mitigating measures are part of the design and planning considerations. Further compliance will be done when the civil works contractors are onboard.
Operation of construction machinery, equipment and vehicles; Removal of trees and other vegetation Climate Change Exhaust emissions from movement of equipment and vehicles, excavated soil carried by vehicles and other heavy loaders.	[Pre-Construction] Plan and design structures that will minimize the removal of vegetation and alteration of topography if possible. [Construction] Conduct proper inspection and preventive maintenance of heavy equipment, machineries and service vehicles to meet the DENR Emission Standard Use electric or fuel-efficient equipment,	Complied	Mitigating measures are part of the design and planning considerations. Further compliance will be done when the civil works contractors are onboard.

	machineries and vehicles and maximize its operation if possible		
Climate Risk Meteorology/ climatology Restrictions/ disruption of construct-ion due to soil erosion/ landslides/ and flooding. Slower drainage, soil erosion, disruption in construct-ion by increased rainfall Overheating of construct-ion equipment, vehicles / heat stress by high temperature and heat waves	[Pre-Construction] Take account of change in local micro climate such as rainfall, temperature pattern for 2020 and 2050 in project design criteria and schedule of construction works. Based on the hydrological and geodetic study, design and install train system which is robust to climate change and related extreme events including drainage, passenger facilities and structures (viaduct and embankment) i.e. train facilities to be above the flood level, installation of drainage pumping system. [Construction] Adjust construction activities in consideration to local climate / extreme events such as extreme heat to avoid overheating of construction equipment and service vehicles and cause heat stress to workers. Implement Emergency Response Plan.	Complied	Mitigating measures are part of the design and planning considerations. Further compliance will be done when the civil works contractors are onboard.
Earthworks including excavation activities Site clearance including removal of topsoil at the depot site Air Quality Degradation of air quality due to dust generation from transportation of excessive soil / spoil to fill area construction activities Operation of construction machinery, equipment and vehicles Air Quality Degradation of air quality due to gaseous emissions from machineries and service vehicles	[Construction] Minimize alteration of topography and removal of vegetation. Adjust construction activities in consideration to weather system, identifying periods of high winds and drought that aggravated dust transport. Conduct prompt inspection and regular maintenance of heavy equipment, machineries and service vehicles to meet the DENR Emission Standards Check and maintain or monitor engine conditions and machines used in the construction at least once a week. Conduct weekly maintenance of vehicles and equipment to ensure emissions comply with standards. Conduct regular cleaning and clearing of construction access / sites surfaces of spoils and debris from construction equipment and vehicles. Implement materials handling or a site protection and rehabilitation program. Haul the excavated materials from the construction areas as soon as possible or within 24 hours Conduct water sprinkling in areas prone to dust emission such as at soil excavation areas or stockpile of aggregates and under the elevated stations. Keep excavated soil and stockpiles moist. Control vehicle movement maintaining the speed limit within the construction site to Impose speed limit of no more than 30kph on construction vehicles particularly when passing communities, residential or commercial areas or sensitive areas such as hospitals, schools or religious institutions such as temples, mosques and churches. Require contractor to wash wheels of vehicles before leaving the construction area particularly at the depot and transition areas to avoid mud tracking on roads that cause dust emission later on. Require materials delivery trucks to provide cover when transporting materials Install board-ups or fence at the construction area not less than 2 meters	Complied	Mitigating measures are part of the design and planning considerations. Further compliance will be done when the civil works contractors are onboard.

	high. In case of accidental spill of materials during transport, the contractor will be required to immediately clean-up spilled materials. Prohibit burning of waste materials in accordance to RA 9003. Unauthorized burning of construction materials and wastes shall be subject to penalties for the Contractor. Ready mixed concrete produced and mixed outside the construction area shall be used to prevent and mitigate impacts on communities around the construction area. Designate at least 3-4 workers per construction area to clean the site after the completion of daily activities and arrange material piling in order to prevent dust diffusion. For the elevated structures, provide nets and scaffoldings for falling debris from construction of elevated structures to avoid dust emission and hazards from falling debris. Monitor air quality at identified nearby sensitive receptors regularly and evaluate effectiveness of the air pollution reduction measures provided.		
Operation of construction machinery, equipment and vehicles Earthworks Construction of structures and facilities Acoustic Noise Increase in ambient noise level	[Pre-Construction /Construction] Select sites (i.e. ROW, construction yard, temporary facilities, access route) in consideration to sensitive receptors including ecologically significant areas (if any) likely to be affected. Design and install effective noise barriers and absorbers along the alignment during construction especially in areas with sensitive facilities. Design and adopt long rails and ballast-less track with elastic and absorbent sleeper support to minimize noise generation from train operation Conduct noise prediction or modelling to determine appropriate specifications and locations of permanent noise barriers and other noise reduction measures to ensure that ambient noise levels during operation phase will meet WB-IFC Environmental, Health and Safety Guidelines for different types of sensitive receptors [Construction] Implement construction activities in consideration to time, duration, and scale to optimize the use construction equipment, machineries, and vehicles in accordance to the noise emission standard. Minimize activities like alteration of topography and removal of vegetation which generate noise Install noise control devices such as mufflers and noise suppressors to all construction equipment and machineries. Use of electric instead of diesel-powered equipment, hydraulic tools instead of pneumatic tools. Conduct regular inspection and preventive maintenance of heavy equipment, machineries and service vehicles to meet the DENR Emission Standard Monitor noise levels at identified nearby sensitive receptors (residential, school and hospital areas) including ecologically significant area/s (if any) likely to be	Complied	Mitigating measures are part of the design and planning considerations. Further compliance will be done when the civil works contractors are onboard.

	affected by the operation and evaluate effectiveness of the noise reduction measures provided. Noise control measures at surface construction include installation of temporary noise barriers and 2.0-meter fence around the construction area. Use noise barriers and sound absorption materials with no less than 70% and 80% of sound absorption coefficient at 1,000 and 500 hertz, respectively. Noise levels from equipment and machinery shall conform to the noise standards and WB-IFC Environmental, Health and Safety Guidelines. No construction shall be allowed between nighttime hours of 10 pm to 6 am. In case of activities that will cause noise exceeding the acceptable level, permission from DOTr-PMO and concerned LGU must be secured and advance notice to the public will be issued at least 24 hours before the start of construction activities. Workers will be required to wear appropriate PPE including ear plugs or ear muffs in areas generating excessive noise. Properly maintain machinery to minimize noise Require drivers of construction vehicles to minimize blowing of horn and limit speed when passing through residential areas. In case of complaints, the DOTr-PMO and contractor will continuously operate GRM to urgently respond to the complaint and resolve the problem.		
Conduct of geotechnical investigation; Operation of construction machinery, equipment and vehicles; Pile driving for piers Ground vibration Increase in ambient vibration level and threat to the health and safety of sensitive receptors Threat to existence and/or loss of important local species and habitat Threat to abundance, frequency and distribution of species	[Pre-Construction / Construction] Select sites in consideration to sensitive receptors including ecologically significant areas (if any) likely to be affected. Conduct building condition survey of old PNR structures and buildings adjacent to the alignment to provide proper protection provision measures and continuous monitoring from the impact of vibration. Prepare and submit work plan for building and structures of historic concerns and obtain approval from Cultural Agencies. [Construction] Implement construction activities in consideration of time, duration, and scale of construction to optimize the use construction equipment, machineries, and vehicles with minimal vibration generation. Select construction equipment and machineries matching the scale of the construction and with minimal vibration generation if possible Provide training on vibration mitigation and provide appropriate PPE to construction workers; Monitor vibration levels including identified nearby sensitive receptors, old PNR structures including ecologically significant area/s (if any) likely to be affected by the operation and evaluate effectiveness of the vibration reduction measures provided. Coordinate with sensitive receptors prior to pile driving. Strictly control construction activities	Complied	Mitigating measures are part of the design and planning considerations. Further compliance will be done when the civil works contractors are onboard.

	close to historical/archaeological sites. If construction activities will cause continuous vibration, especially foundation excavation, it is necessary to reduce energy at each excavation. Require vehicles transporting construction materials and equipment to follow traffic rules strictly and limit speed not to exceed 30 kph and the load shall not exceed 25 tonnes if passing communities, commercial or sensitive areas (e.g. health premises, schools, educational institutions or religious institutions such as temples, mosques and churches). In case of vibration due to construction activities of the underground structures and stations using a tunnel boring machine, the construction works will be carried out only in daytime from 8 am to 6 pm to minimize disturbance to people.		
Land acquisition for ROW and involuntary Resettlement for Project Affected Families (PAFs) Informal Settler Families (ISFs) Vulnerable persons (Women-headed households, elderly, persons with disabilities and the poor) Displacement of ISFs Disturbance of livelihood Loss of income Legal PAFs Displacement/ Disturbance of Properties Change/Conflict in Land Ownership Impact on Livelihood and Income (i.e. farming, business)	[Pre-Construction] Prepare and implement Resettlement Action Plan (RAP) to ensure that PAFs are justly compensated for the loss of income by the project. Payment of compensation prior to displacement. Coordination with the LGUs, land owners and other concerned stakeholders in acquiring the land and/or securing ROW [Pre-Construction/ construction] Prepare and implement livelihood and income restoration for PAF's whose present means of livelihood is no longer viable and will have to engage in new income activity. Conduct Social Development Plan (SDP) including livelihood training for business owners, vendors, employers and agricultural landowners affected by project. Conduct external and internal monitoring agencies to ensure that displacement activities are conducted in compliance to the RAP. If PAFs raise an issue, ensure prompt response and resolution per established GRM	Complied	The Mabalacat RAP (https://drive.google.com/file/d/1kvOePPqIECw-is_BMzGiUPwqITPgcO7a/view?usp=sharing), covering the areas of Civil Works Packages CPN04 and N05 of the Project, has been finalized, approved, and is now for implementation. A copy of the said RAP will also be transmitted to DENR EMB, and other relevant offices for their reference. Finalization of the detailed RAPs for other sections of the alignment is ongoing.
Employment of residents of impact communities Social Aspect (Gender Equality and Vulnerable Groups) Generation of Employment and Livelihood Opportunities and improvement of safety	[Pre-Construction/ Construction] Prepare and implement RAP to ensure that gender equality and needs of vulnerable group are well addressed including livelihood and skills training program Design and install train system in consideration to universal design and strategic placement of security and lighting within the vicinity of the stations; Employ workers in consideration to gender equality. Include gender sensitive livelihood and skills training program in the SDP with due consideration to vulnerable group.	Complied	Mitigating measures are part of the design and planning considerations of the SDPs and the RAP. The Mabalacat RAP (https://drive.google.com/file/d/1kvOePPqIECw-is_BMzGiUPwqITPgcO7a/view?usp=sharing), covering the areas of Civil Works Packages CPN04 and N05 of the Project, has been finalized, approved, and is now for implementation. A copy of the said RAP will also be transmitted to DENR EMB, and other relevant offices for their reference. Finalization of the detailed RAPs for other sections of the alignment is ongoing.
Clearing of the proposed project area Resettlement In-migration In-migration to the project area	[Pre-Construction / Construction] Plan and implement construction schedule to shorten time between the pre-construction and construction as	Complied	Mitigating measures are part of the design and planning considerations. Further compliance will be done when the civil works contractors are onboard.

	much as possible. Install fencing and guarding of the proposed project to restrict the public from entering the ROW.		
Clearing of the proposed project area Resettlement In-migration Conflict between existing residents and new relocatees	[Pre-Construction / Construction] Prepare and Implement SDP in coordination with host LGU's to align projects/programs to their development plans.	Complied	Mitigating measures are part of the design and planning considerations of the SDPs.
In migration to new relocation site Basic Services/ Resources Increased demand on public infrastructure Degradation on livelihood	[Pre-Construction / Construction] Prepare and implement RAP in consideration of relocation site to be sufficiently covered the expected demand of basic services and resource and social programs at relocation sites in coordination with LGUs. Prepare and implement SDP in coordination with the host LGUs to align projects or programs to their development plans	Complied	Mitigating measures are part of the design and planning considerations of the SDPs and the RAP. The Mabalacat RAP (https://drive.google.com/file/d/1kvOePPqIECw-is_BMzGiUPwqITPgcO7a/view?usp=sharing), covering the areas of Civil Works Packages CPN04 and N05 of the Project, has been finalized, approved, and is now for implementation. A copy of the said RAP will also be transmitted to DENR EMB, and other relevant offices for their reference. Finalization of the detailed RAPs for other sections of the alignment is ongoing.
In migration to new relocation site Basic Services/ Resources Loss of outdoor spaces	[Pre-Construction] Coordinate with respective LGU's and PNR regarding the possible measures for the transfer/provision or relocation of public parks and other recreational facility.	Complied	Mitigating measures are part of the design and planning considerations of the SDPs and the RAP.
Construction of the proposed project PAFs/IP Cultural/ Lifestyle Change	[Pre-Construction] Conduct Field-Based Investigation in accordance to the NCIP AO No. 3, 2012. If section of the project site is within an Ancestral Domain, additional measures will be implemented in close coordination with the NCIP and LGUs. Ensure resolution of issues by the indigenous community (if any) in coordination with NCIP and LGU.	Complied	Certificate of Non-Overlap has been secured for the depot location. The certificate can be accessed here: https://drive.google.com/open?id=1uRFJwag6fsZIEuIa4XUXkvKr9Zgh0QnQ
Encroachment of the proposed project on historical sites, tourist spots, etc. Excavation activities Construction of the proposed project Historical Sites, artefacts and archaeological remains Impacts on Cultural/ Historical resources	[Pre-Construction] Conduct literature review and site validation of the potential historic structures in coordination with PNR and Cultural Agencies (NCCA, National Museum, NHCP); Perform measured survey of the identified historic structures including its foundation and building condition Coordinate closely with the Cultural Agencies, concerned LGUs, and PNR for verifying the qualification of those structures and provide necessary protection measures. Prepare a protection plan for those identified PNR structures which will be maintained in accordance to the agreed procedure. [Construction] Implement the approved protection plan Close coordination with the National Museum on the appropriate course of action in case of any archaeological finds.	Complied	Mitigating measures are part of the design and planning considerations. Further compliance will be done when the civil works contractors are onboard.

Encroachment of the proposed project on historical sites, tourist spots, etc. Excavation activities Construction of the proposed project Local conflicts of interest Potential conflict among PAFs, and other government infrastructure projects	[Pre-Construction] Close coordination with BCDA, DPWH, and other relevant agencies Prepare and implement Resettlement Action Plan (RAP) to ensure that PAFs are justly compensated for the loss of income by the project prior to displacement. Conduct external and internal monitoring agencies to ensure that displacement activities are conducted in compliance to the RAP. Prepare and implement arrangement on financial assistant to the receiving of PAFs. [Construction] If PAFs raise an issue, ensure prompt response and resolution per established GRM Conduct external and internal monitoring agencies to ensure that displacement activities are conducted in compliance to the RAP.	Complied	Mitigating measures are part of the design and planning considerations of the RAP.
Generation of solid waste, excavated soil and hazardous material Basic Services/ Resources Increased demand on waste disposal	[Pre-Construction / Construction] Identification of final disposal site for solid waste, excavated soil, hazardous waste at each LGUs. Conduct regular monitoring of disposal status in compliance to RA 9003 and RA 6969.	Complied	Mitigating measures are part of the planning considerations. Detailed Waste Management Plan (WMP) is part of the CEMMP. Further Compliance will be done when the civil works contractors are onboard.
Generation of potential air and water pollutants due to: Heavy lifting and movement of heavy equipment Construction of the proposed project Public Health and Safety Degradation of public health Increase in accident involving local communities	[Pre-Construction / Construction] Formulation and implementation of IEC Plan to inform the affected LGU and local communities and the general public about 1) the project, project activities, duration, possible project impacts and incorporate their comments and inputs in the design; 2) the potential impact of project activities to air quality, noise, vibration, and climate change, and corresponding health and safety mitigation measures; and 3) the Grievance Redress Mechanism to handle complaint/s if any. Plan for construction sites/facilities/yard and access route in consideration to health and safety of local communities. Plan and implement SDP including health and safety of local community [Construction] Provide safety officers to monitor the health and safety of the local community. If any complains rises, immediately identify the causes and evaluate built-in measures. Install fencing of the construction site, provision of signage and posters, and guarding of the access point to ensure that the area is not accessible to the public. Implement Emergency Response Plan and Health and Safety Management Plan.	Complied	Mitigating measures are part of the design and planning considerations. Further compliance will be done when the civil works contractors are onboard.
Risks to Workers Occupational Health and Safety Increase risk of accidents at construction sites; Spread of infectious disease among workers	[Pre-Construction/Construction] Prepare and implement Occupational and Community Health and Safety Plan and Emergency Response Plan based on the WB-IFC EHS Guidelines. Include medical certificate in the requirements for hiring of workers to ensure that they are fit to work. Ensure that they are provided with proper	Complied	Mitigating measures are part of the design and planning considerations. Further compliance will be done when the civil works contractors are onboard.

	training on construction, occupational health and safety, and emergency response procedure. Plan construction details such as storage of equipment and machinery and access route of heavy vehicle considering health and safety of workers. Provide appropriate personal protective equipment (PPE) to all construction workers, particularly to the personnel working on heights, heavy and electrical equipment. Establish Health and Safety Desk or Medical Station at the active construction sites to monitor and safeguard the health of the workers and local residents and to provide immediate response during unexpected incidents/emergencies. Provide fire-fighting equipment at work areas and construction camps. Close coordination with the nearest hospitals in the active construction site for immediate transfer and/or further evaluation and medical management of the patient. Require the contractor to appoint an environment, health and safety officer to supervise the implementation of environmental mitigation measures and to ensure that health and safety measures are strictly implemented at the construction site and immediate vicinity. Provide adequate drainage in construction camps to prevent water logging and formation of breeding sites for mosquitoes. Provide potable water, hygienic sanitation facilities/toilets with sufficient water supply. Ensure that all wastewater emanating from construction camps are treated and complies with the effluent standards. Provide fence on all areas of excavation to avoid accidents. Implement fall prevention and protection measures such as scaffoldings, wearing of safety belts by workers, etc. when working in high areas. Provide sufficient lighting in tunnel areas and underground station excavation sites. Provide emergency lighting system in case of power shutdown. Ensure that sufficient fresh air is supplied at confined work spaces at the tunnel and underground station excavation sites. Ensure that air filters are kept clean. Confined spaces such as tunnels shall be provided with safety measures such as venting, monitoring, and emergency rescue procedures. Conduct orientation for construction workers regarding health and safety measures, emergency response in case of accidents, fire, etc. and prevention of HIV/AIDS, STIs and other diseases.		
Employment of workers Local Economy Generation of Local Employment Hiring of workers from outside the community might create peace and order and social conflicts with local communities and increased HIV/AIDS risk.	[Pre-Construction /Construction] Close coordination with the host LGUs (barangay level) regarding the hiring of temporary workers to ensure that the workers being considered are legitimate residents in the area. Those affected by the Project will be prioritized for employment. Provide skill trainings to PAFs under livelihood and income generation program developed by RAP	Complied	Mitigating measures are part of the design and planning considerations. Further compliance will be done when the civil works contractors are onboard.

	Provide HIV/STI awareness and prevention training to construction workers and contractor's employees/staff		
Blocking of existing access roads Public Access Impact on Public Access Impact to School Access Increase in accidents	[Pre-Construction/ Construction] Based on the study on public access at affected barangay, maintain the existing public access as much as possible. In case of any temporary closure during construction, minimize the impact to the daily life of affected communities such as access to school infrastructure in coordination with the DepEd and host LGUs for the schedule of construction activities. In case of permeant loss of public access, RAP will be applied. Disseminate information to the public, barangay, and LGUs on the potential impact to the existing public access and mitigation measure through the project activities. Provision of diversion route with appropriate health and safety measures. In case of any changes, prompt update on the diverted routes to the concerned communities and LGUs, Assignment of traffic guide to provide assistance to the road users.	Complied	Mitigating measures are part of the design and planning considerations. Further compliance will be done when the civil works contractors are onboard.
Movement of construction equipment; Delivery of construction materials; Additional commuters due to construction workforce; Blocking of access roads Traffic Management Traffic Congestion	[Pre-Construction/ Construction] Conduct TIA and based on the results of TIA, prepare and implement TMP, coordinate to the concerned LGUs and transport operator/s and get their inputs and approval Schedule transport of heavy structures during period when there are fewer vehicles on the road and posting of appropriate traffic signage and warnings. Disseminate information to the general public, host barangays, and LGUs on the potential impact of the project to the existing access and provide mitigating measures.	Complied	The initial draft TIA, has been discussed with LGUs and DPWH Region III. The TIA report has been revised per LGUs and DPWH Region III's inputs. The updated version of the TIA can be accessed here: https://drive.google.com/open?id=1VhHna6PDz4tSQt22w5b__u2GW-qyL0hw The Traffic Management Plans (TMP) will be based from the TIA and will be developed by the Civil Works Contractors. The TMPs shall be transmitted to and coordinated with all concerned offices before implementation.
Operation and maintenance of the Project ECA Incompatibility with the area that will be hit hard by natural calamities.	[Operations] Coordinate with PAGASA / PHIVOLCS and adjustment of train schedules. Implement proper inspection and prompt maintenance of drainage systems.	Not Complied	Project is currently in Pre-Construction Phase
Presence of the proposed project structures (railway, passenger facilities, depot etc.) Visual aesthetics Impairment of visual aesthetic	[Operations] Maintain tree planting to minimize the visual impact by the project and harmonize to the surrounding environments in open areas within the ROW, depot and around the stations, to create green corridor.	Not Complied	Project is currently in Pre-Construction Phase
Generation of domestic and hazardous wastes including accidental oil and lubricant spills from passenger facilities (station), depot Land value Degradation of land value and of soil quality due to improper handling of domestic and hazardous wastes	[Operations] Conduct proper inspection and prompt maintenance of machines and equipment, and facilities Strictly implement solid waste management plan in accordance to RA 9003, and treatment of hazardous chemicals and contaminated soil in accordance with RA 6969. Conduct of soil quality monitoring when necessary.	Not Complied	Project is currently in Pre-Construction Phase
Occurrence of landslides, volcanic hazards, ground shaking and	[Operations] Conduct inspection in the event of	Not Complied	Project is currently in Pre-Construction Phase

liquefaction Likely seismic events around the alignment Subsidence, Liquefaction, Landslide, Mud/Debris Flow, etc. Damage to tracks Risk to the life of passengers and workers Damage to passenger facilities.	natural hazard occurrence to assess damage of structures Regular Coordination with the PHIVOLCS for earthquake and volcanic events to adjust the train schedule as necessary. Conduct earthquake drills for train users are also advised Conduct proper inspection and prompt maintenance checks to every single installed structure and facility and improve/ enhance capacity when possible Upgrades or install new technological advances when available are also encouraged for the continued operation of the Project		
Operation of the project and passenger facility, depot, service vehicle, Passenger movement Terrestrial Ecology Threat to Existence and/or Loss of Important Local Species Hindrance to Wildlife Access	[Operations] Minimize noise, vibration, illumination, and vehicular movement in significant fauna area (e.g., depot area) Continuous planting of replacement tress if needed Conduct monitoring on survival of replanted trees and replant if necessary	Not Complied	Project is currently in Pre-Construction Phase
Operation of passenger trains/facilities, depot: Discharge of waste water from passenger facilities, depot. Accidental spills of fuels and lubricants from service vehicles and machineries at depot Generation and improper handling and disposal of domestic and hazardous wastes. Hydrology Increase of flood intensity/ occurrence.	[Operations] Conduct proper inspection and prompt maintenance of the installed drainage system, and improve/ enhance capacity when possible	Not Complied	Project is currently in Pre-Construction Phase
Operation of passenger trains/facilities, depot: Discharge of waste water from passenger facilities, depot. Accidental spills of fuels and lubricants from service vehicles and machineries at depot Generation and improper handling and disposal of domestic and hazardous wastes. Water Quality Degradation of groundwater quality Degradation of surface water quality Freshwater Ecology Threat to abundance, frequency and distribution of species	[Operations] Comply with environmental permitting requirements for the storage, transport, handling, and treatment and disposal of hazardous material/ wastes and contaminated soil in accordance with RA 6969. Compliance to RA 9275 including but not limited to securing of discharge permit. Hygienic toilets will be provided at all stations and facilities. Wastewater will be treated by a wastewater treatment system at each station before release of effluent into public waterways. Recycle train washing to reduce volume of wastewater to be discharged daily. Conduct proper inspection and prompt maintenance of the installed wastewater treatment facilities &drainage system and treatment facility. Monitor effluent of the wastewater treatment system to ensure compliance with the effluent standards.	Not Complied	Project is currently in Pre-Construction Phase
Climate Change Meteorology/ Climatology Restrictions/ disruption of railway operation due to soil erosion/ landslides/ flooding. Slower drainage, soil erosion, disruption in construction by increased rainfall Overheating of construction equipment and vehicles and track	[Operations] Regular inspection and preventive maintenance of railway structures and facilities to ensure optimum working condition; When necessary, install improvement of railway system to make it more resilient to temperature and rainfall increase; Planting of vegetation as much as	Not Complied	Project is currently in Pre-Construction Phase

buckling and signaling problems	possible in open areas at the depot, around the stations and along the railway track; Implementation of an Emergency Response Plan		
Operation of trains, depot, passenger facilities (stations), service vehicles, etc. Meteorology/ Climatology Reduction of Greenhouse Gases	[Operations] Provide incentives and information dissemination activities to encourage commuters to use rail transit and its benefits over other modes of transport (Modal Shift) Plant and manage vegetation as much as possible to open areas at the depot, around the stations and along the railway track Conduct energy/water conservation program such as use energy efficient products (i.e. LED lights) and monitor carbon footprint monitoring Conduct regular inspection and proper maintenance of railway systems and facilities, and equipment and machinery	Not Complied	Project is currently in Pre-Construction Phase
Operation of trains, depot, passenger facilities (stations), service vehicles, etc Air Quality Degradation of air quality in the vicinity of the station and in depot area Increase in Vehicle Exhaust emission and entrained dust due of increased movement of people	[Operations] Select appropriate operation and maintenance equipment that are fuel efficient to reduce emission. Conduct regular inspection and maintenance of heavy equipment, machineries, facilities and service vehicles and facilities such as generator etc. to meet the DENR Emission Standard Regular cleaning and clearing of road from spoils and debris and wetting of ground in the periphery of the depot when necessary. Comply with environmental permitting requirements for the storage, transport, handling, and treatment of hazardous material/ wastes and contaminated soil in accordance with RA 6969 at depot area, and provide appropriate PPE for the concerned personnel Control service vehicle movement by maintaining the speed limit to Monitor air quality at the identified sampling stations	Not Complied	Project is currently in Pre-Construction Phase
Operation of trains, depot, passenger facilities (stations), service vehicles, etc. Acoustic Noise Reduction of noise due to decrease in traffic volumes	[Operations] Provide incentives to and information dissemination activities to encourage commuters to use rail transit over other modes of transport	Not Complied	Project is currently in Pre-Construction Phase
Operation of trains, depot, passenger facilities (stations), service vehicles, etc. Acoustic Noise Increase in ambient noise level	[Operations] Optimize the number of train operation at night time to reduce generated noise Provision of 2m high concrete noise barriers for about 59 km length of the alignment especially along areas identified as sensitive receptors. Provision of noise control device such as muffler to all stationary sources (i.e. generator set) Install traffic signs in the areas before and after passing all stations, e.g. directional signs, speed limit signs, no blowing of horn signs, etc. Inspect the strength and efficiency of sound absorbing materials installed at the routes or areas under the stations at least once a month. Change the material in case these are damaged or their efficiency has decreased by more than 40%.	Not Complied	Project is currently in Pre-Construction Phase

	Regular inspection and proper maintenance of trains and tracks to ensure its optimal operation and functionality Monitor noise levels including identified nearby sensitive receptors including ecologically significant area/s (if any) likely to be affected by the operation and evaluate effectiveness of the noise reduction measures provided.		
Operation of trains, depot, passenger facilities (stations), service vehicles, etc. Ground Vibration Increase in ground vibration level	[Operations] Monitor vibration levels including identified nearby sensitive receptors, old PNR structures, historical heritages including ecologically significant area/s (if any) likely to be affected by the operation and evaluate effectiveness of the vibration reduction measures provided. The strength and efficiency of rail pads at the train stations or hubs must be inspected at least once or twice a month. In case of damage or decrease in efficiency of the pads by more than 40%, these should be replaced. Regular inspection, proper maintenance and reconditioning of trains and tracks such as rail grinding, slip-slide detectors and maintenance or replacement of suspension system, brakes and wheels	Not Complied	Project is currently in Pre-Construction Phase
Hiring of workers Local Economy Generation of Local Benefits Business opportunities	[Operations] Coordinate closely with the host LGUs, specifically at the barangay level regarding the hiring of regular workers to ensure that the workers being considered are legitimate residents in the area in consideration to gender equality.	Not Complied	Project is currently in Pre-Construction Phase
Operation of train In Migration Influx of ISFs	[Operations] Install fencing and provide guards to prevent the settlement of ISFs along the ROW	Not Complied	Project is currently in Pre-Construction Phase
Operation of train Physical/ Cultural resource Conservation of old PNR structure and parks	[Operations] Continuous conservation activities of old PNR structures in coordination with PNR and LGUs	Not Complied	Project is currently in Pre-Construction Phase
Operation of train and station Maintenance work at Depot Public Health and Safety Increase risk of accidents	[Operations] Provide security guards in all stations to direct passengers on the safe zone.	Not Complied	Project is currently in Pre-Construction Phase
Operation of train and station Maintenance work at Depot Occupational Health and Safety Increase the risk of accidents and infectious disease of employees	[Operations] Implement the Occupational Health and Safety Management Plan. Provide appropriate PPE to all personnel undertaking maintenance work. Implement the Emergency Response Plan Provide sanitary facilities or utilities in all stations and depot.	Not Complied	Project is currently in Pre-Construction Phase
Train Operation Traffic Conditions Traffic congestion may occur in the areas adjacent to the proposed stations due to pick-up and drop off of passengers by transport vehicles	[Operations] Establish a traffic management committee, which is composed of the Traffic Management of LGUs, Planning Office, PNR, DPWH, and DOTr to plan and implement TOD in consideration to the loading and unloading area and the circulation of the traffic as well as the integration of transport facility within the station.	Not Complied	Project is currently in Pre-Construction Phase

IV. Status of Compliance to Annex B of ECC

Condition/Requirement	Description	Status of Compliance	Remarks
Other Sectoral Requirements Mandated by Other Agencies To Be Complied With	Strict compliance with the Revised National Structural Code of the Philippines	Complied	Designs and plans comply with the requirement. Target schedule for site hand over to the contractor is on 27 July 2020. Further compliance will be done when the civil works contractors are onboard.
	Compliance with the Sanitation Code of the Philippines	Complied	Designs and plans comply with the requirement. Target schedule for site hand over to the contractor is on 27 July 2020. Further compliance will be done when the civil works contractors are onboard.
	Compliance with the Labor Code of the Philippines	Complied	The requirement has been included in the Project's contracts. Compliance will be ensured and further monitored when the civil works contractors are onboard.
	Compliance with the Building Code of the Philippines	Not Complied	Designs and plans comply with the requirement. Target schedule for site hand over to the contractor is on 27 July 2020. Further compliance will be done when the civil works contractors are onboard.
	Ensure compliance with the Ecological Solid Waste Management Act	Complied	Target schedule for site hand over to the contractor is on 27 July 2020. Compliance will be done when the civil works contractors are onboard. Detailed Waste Management Plan (WMP) is part of the CEMMP.
	Secure Certificate of Non-Overlap from National Commission on Indigenous People (NCIP) if applicable.	Complied	Certificate of Non-Overlap has been secured for the depot location. The certificate can be accessed here: https://drive.google.com/open?id=1uRFJwag6fsZIEuIa4XUXkvKr9Zgh0QnQ
Environmental Planning Recommendations for the Proponent	Priority of employment shall be given to qualified local residents. Opportunities for qualified PWDs, women, senior citizens, where possible, shall be considered. Adequate public information for jobs available to local residents in the affected areas will be provided.	Not Complied	Target schedule for site hand over to the contractor is on 27 July 2020. Compliance will be done when the civil works contractors are on board. Requirement is also one of the considerations for the Social Development Programs.

V. Status of Compliance to Socia Development Plan (SDP)

Condition/Requirement	Description	Status of Compliance	Remarks
Social Development Plan	Implement a comprehensive Social Development Program (SDP) and submit a separate report together with the Compliance Monitoring Report (CMR) to the EMB Central Office using CMR Online on a semi-annual basis pursuant to EMB MC 2016-01.	Not Complied	Development of project proposals is ongoing. The considerations for the Project Proposals will include LGU's inputs from the previously held workshops, the Resettlement Action Plan (RAP), and the Environmental Management Plan.

VI. Status of Compliance to Information Education Communication (IEC)

Condition/Requirement	Description	Status of Compliance	Remarks

	Development Program (SDP) and submit a separate report together with the Compliance Monitoring Report (CMR) to the EMB Central Office using CMR Online on a semi-annual basis pursuant to EMB MC 2016-01.		ongoing. The considerations for the Project Proposals will include LGU's inputs from the previously held workshops, the Resettlement Action Plan (RAP), and the Environmental Management Plan.

VI. Status of Compliance to Information Education Communication (IEC)

Condition/Requirement	Description	Status of Compliance	Remarks
Information, Education and Communication Program	Conduct an effective and continuing Information, Education and Communication (IEC) Program through the use of most effective media to inform and educate all stakeholders, especially the contractors, workers, LGUs, businesses and local residents about the following: a. Project impacts and mitigating measures embodied in its EIS; b. Conditions stipulated in the ECC; c. Environmental and human safety features of the project, and; d. Health consciousness alerts for any project-induced discomfort (from dust, smell, noise, vibration) as the project progresses throughout the whole route.	Complied	Stakeholders Consultation Meetings (SCMs) with Project-Affected Persons to update them on the progress of the project is continuously being conducted. Attached are the documentation from the SCMs conducted from January 2020-June 2020. https://drive.google.com/file/d/1J8f5DU5L8lzkxKojU7IT1uW__S7PKoVA/view?usp=sharing The Asian Development Bank has provided a Public Relations (PR) Firm for the Project through its Technical Assistance Program. The PR Firm has onboarded on June 2020 and is currently working on the PR and IEC requirements of the Project, among others.

VII. Status of Compliance to Contingency/Emergency Response Plan or Equivalent Risk Management Plan.

Condition/Requirement	Description	Status of Compliance	Remarks
Emergency Response Program	The proponent will adopt an active program of pursuing a healthy, safe, and environment-friendly operation. DOTr/Operator guidelines on health and safety will be made clear to contractors and all employees during construction and operations. An orientation briefing for contractors and training for employees will be implemented.	Complied	There are no revisions in the ERP which was included in Section 5.6 of the EIS. The ERP excerpt from the EIS can be accessed here: https://drive.google.com/open?id=1CxBhD4vYTg1Y08t24X8N1SOrWKA2Xj7q

B. Impact Monitoring

I. Summary of Previous Monitoring

Findings/Issues	Recommendations	Action Plan
No construction works have been done in the previous reporting period.	N/A	N/A

II. Current Monitoring and Findings

Table 2. Summary Status of Environmental Impact Management and Monitoring Plan Implementation

A. Ambient Water Quality Monitoring

B. Effluent Water Quality Monitoring

Overall Remarks on Water Quality Monitoring

N/A Construction of Project has not begun since contracts for civil works packages have not been awarded yet.

C. Ambient Air Quality Monitoring

D. Effluent Air Quality Monitoring

Overall Remarks on Air Quality Monitoring

N/A Construction of Project has not begun since contracts for civil works packages have not been awarded yet.

E. Noise Level Monitoring

Overall Remarks on Noise Level Monitoring

N/A Construction of Project has not begun since contracts for civil works packages have not been awarded yet.

Table 3. Report on Status of Environmental Budget Allocations and Expenses

Expense Item	Budget		Actual Expenses	
	Direct from Co.	Budget for MMT	Direct Co. Expense	MMT Expense
A. Implementation of Management Plans & Programs				
1. Environmental Impact Mitigation Plan - to be updated once finalized	1.00	0.00	0.00	0.00
2. Social Development Plan - to be updated once finalized, currently developing proposals	1.00	0.00	0.00	0.00
3. IEC Plan - to be updated once finalized, budget based from estimates in the EIS	15532000.00	0.00	0.00	0.00
4. Enhancement Program (if any) - to be updated once finalized	1.00	0.00	0.00	0.00
B. Implementation of Monitoring Plans				
1. Self-Monitoring - to be updated, part of General Consultant expenses	1.00	0.00	0.00	0.00
2. Environmental Monitoring Fund (TPA Budget) - to be updated once finalized/secured	2000000.00	2000000.00	0.00	0.00
3. Environmental Guarantee Fund (Trust Fund) - to be updated, part of Contractors' expenses, budget based from estimates in the EIS	5000000.00	0.00	0.00	0.00
4. Environmental Guarantee Fund (Cash Fund) - to be updated, part of Contractors' expenses, budget based from estimates in the EIS	3000000.00	0.00	0.00	0.00
TOTAL	**25532004.00**	**2000000.00**	**0.00**	**0.00**

IV. Conclusions and Recommendations

A. Compliance Status

The target project site hand over to contractor is on 27 July 2020 for CP N-04 and N05 (both civil works packages in Mabalacat City, Pampanga). For this reason, no monitoring activities have taken place and Self-Monitoring Report is not available during this reporting period. The Proponent is currently working on complying with ECC conditions and EMP commitments relevant to pre-construction.

Documents relevant to this submission can be accessed here:
https://drive.google.com/drive/folders/1jqeEThH7hmvWVgk6qw6nVO8TRDAwyQzy?usp=sharing

B. Environmental Quality Status (applicable only if EQPLs have been set by the Proponent as its commitment or if opted to be mutually agreed upon by Proponent with the EMB and other members of the MMT)

Evaluation of the Environmental Quality Status (EQS) is ongoing. Modifications in the EQS, if any, will be transmitted to EMB-CO for review and approval.

C. Environmental Management Plan Status

Construction has not begun for the project. The Proponent is currently awaiting approval of the revised EIS (including revisions in the EMP) in line with the ECC amendment. Compliance with the EMP will be monitored and reported when construction works have started.

D. Environmental Risk Categorization

The Project's Environmental Monitoring and Audit Prioritization Scheme are attached in the next section.

E. Work Plan for Next Monitoring Period

The following will be conducted in the next monitoring period:

1. Submission of the revised or modified EIS, EMP, and EMoP, reflecting the changes in the Project design once finalized. Coordination with EMB-CO and other agencies to relay any updates and modifications of the coverage and components of the Project.

2. Provision of copies of the Project's ECC, EMP, and EMoP to the civil works contractors after onboarding. The civil works contractors will be oriented to strictly comply with the relevant conditions of the ECC.

3. Continue operations of the GRM.

4. Engagement of TPA, and establishment of EMF.

5. Establishment of EGF as part of civil works contractor's scope.

6. Accreditation of Pollution Control Officers as part of the Environmental Unit (EU).

7. Continuously work on the compliance with the ECC.

8. Work on detailed environmental budget allocations.

V. Attachments

1. PEMAPS

2. Sworn Accountability Statement (for the submitted CMR)

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PROJECT ENVIRONMENTAL MONITORING AND AUDIT PRIORITIZATION SCHEME

PROJECT NAME	:	**NORTH-SOUTH COMMUTER RAILWAY CLARK EXTENSION PROJECT**
PROJECT LOCATION	:	Traversing ten (10) local government units, namely the municipalities/cities of Malolos and Calumpit in Bulacan; Apalit, Minalin, Santo Tomas, San Fernando, Angeles and Mabalacat in Pampanga; and Bamban and Capas in Tarlac
PROPONENT	:	**REPUBLIC OF THE PHILIPPINES DEPARTMENT OF TRANSPORTATION**
TEL. NO./FAX NO.	:	(02) 8790-8300 local 301
E-MAIL ADDRESS	:	nscr.envi@dotr.gov.ph/ nscr@dotr.gov.ph
PROJECT TYPE	:	Railway Infrastructure Project
PROJECT STATUS	:	Pre-Construction/Procurement Stage

I. PROJECT CONSIDERATIONS

1.1. Size and Type

1.1.1. Size based on number of employees
Specify number of employees: 1,400

1.1.2. Type

ECP (in either ECA or Non-ECA)	✓
Non-ECP but in ECA	
Non-ECP and Non-ECA	

1.2. Waste Generation and Management

1.2.1. Enumerate Waste Type and Specify Quantity of Wastes generated in your facility.

Category	Waste	Type		Quantity
		Hazardous	Non-Hazardous	
Air	Dust (TSP, PM10, PM2.5)	N/A		Pre-Construction/ Procurement Stage
	SO_2	N/A		Pre-Construction/ Procurement Stage
	NO_2	N/A		Pre-Construction/ Procurement Stage
Liquid	Domestic and Wash Water		N/A	Pre-Construction/ Procurement Stage
Solid	Garbage		N/A	Pre-Construction/ Procurement Stage
	Overburden		N/A	Pre-Construction/ Procurement Stage
	Equipment parts		N/A	Pre-Construction/ Procurement Stage
Hazardous	busted light bulbs	N/A		Pre-Construction/ Procurement Stage
	used oils and sludge	N/A		Pre-Construction/ Procurement Stage

1.3. Pollution Control System (PCS)

1.3.1. Enumerate PCS or Waste Management Method Used in your facility.

Category	PCS/ Waste Management Method Used	Remarks
Air	N/A	Pre-Construction/ Procurement Stage
	N/A	Pre-Construction/ Procurement Stage
Liquid	N/A	Pre-Construction/ Procurement Stage
Solid	N/A	Pre-Construction/ Procurement Stage
	N/A	Pre-Construction/ Procurement Stage
Hazardous	N/A	Pre-Construction/ Procurement Stage

II. PATHWAYS

2.1. Prevailing wind towards barrio or city? Yes _____ No ✓

2.2. Rainfall (impacts surface & groundwater pathways)

2.2.1. Average annual net rainfall (1981-2010, PAGASA) 2,026.8 mm
2.2.2. Maximum 24-hour rainfall (PAGASA) 274.5 mm

2.3. Terrain (select one and mark) Flat ✓ Steep _____

2.4. Is the facility located in a flood-prone area? Yes ✓ No _____

2.5. Ground Water (Depth of groundwater table in meter)

0 to less than 3	
3 to 10	✓
Greater than 10	

III. RECEIVING MEDIA/RECEPTORS

3.1. Air (Distance to nearest community in km) (select on and mark)

0 to less than 0.5	✓
0.5 to 1	
Greater than 1	

3.2. Receiving Surface Water Body

3.2.1. Distance to receiving surface water in km (select on and mark)

0 to less than 0.5	✓
0.5 to 1	
Greater than 1	

3.2.2. Size of population using receiving surface water (specify number) N/A, Pre-Construction/ Procurement Stage

3.2.3. Fresh Water

2.3.1. Classification of fresh water (select one and mark)

AA	
A	
B	
C	✓
D	

2.3.2. Size of freshwater body _____ km²

2.3.3. Economic value of water use

Drinking	
Domestic	✓
Recreational	
Fishery	
Industrial	
Agricultural	✓

3.2.4. Saltwater **N**/**A**

3.2.4.1. Classification of saltwater

SA	
SB	
SC	
SD	

3.2.4.2. Economic Value of Water use

Fishery	
Tourist zone or park	
Recreational	
Industrial	

3.3. Ground Water

3.3.1. Distance to the nearest recharge area

0 to less than 0.5	
0.5 to 1	
Greater than 1	✓

3.3.2. Distance to the nearest well used

0 to less than 0.5	✓
0.5 to 1	
Greater than 1	

3.3.3. Groundwater use within the nearest well

Domestic	✓
Industrial	
Agricultural	

3.4. Land

3.4.1. Indicate current/actual uses within 0.5 km radius

Residential	✓
Commercial/Institutional	✓
Industrial	✓
Agricultural/Recreational	✓
Protected Area	

3.4.2. Potential/proposed land uses within 0.5 km

Residential	✓
Commercial/Institutional	✓
Industrial	✓
Agricultural/Recreational	✓
Protected Area	

3.4.3. Number of affected Environmentally Critical Areas within 1 km:
Specify Number: 7 Municipalities and 3 Cities

3.4.4. Distance to nearest ECA (in km)

0 to less than 0.5	✓
0.5 to 1	
Greater than 1	

IV. ENVIRONMENTAL PERFORMANCE (for existing projects for expansion)

4.1. Compliance

Law	Violation	Type (please specify number of times committed)				Type of Admin Violation	Additional Remarks/ Status of Compliance
		STANDARD					
		Emission/ Effluent/ Discharge	Ambient	Human Impact	Admin/ ECC		
RA 8749	N/A						Pre-Construction/ Procurement Stage
RA 9275	N/A						Pre-Construction/ Procurement Stage
RA 6969	N/A						Pre-Construction/ Procurement Stage
PD 1586	N/A						Pre-Construction/ Procurement Stage
RA 9003	N/A						Pre-Construction/ Procurement Stage

4.2. Number of Valid Complaints(/Grievances)

4.2.1.	Citizen and NGOs Specify number	227 (Jan 2019-Jun 2020)
4.2.2.	Others (other Government Agencies, Private Institutions) Specify number	2 inquiries from private institutions (Jan 2019-Jun 2020)

(To be filled up by EMB Personnel)

RECOMMENDATION/S:

Assessed by:

Noted by:

COMPLIANCE MONITORING REPORT
ACCOUNTABILITY STATEMENT OF PROJECT PROPONENT

This is to certify that all information in the submitted Compliance Monitoring Report (CMR) of the North-South Commuter Railway - Calamba Extension Project (ECC-CO-1807-0018) for the monitoring period January-June 2020 is true, accurate and complete. Should I learn of any information which makes this inaccurate, I shall bring said information to the appropriate Department of Environment and Natural Resources - Environmental Management Bureau Office.

In witness whereof, I hereby set out my hands this AUG 18 2020 at _____.

QUEZON CITY

TIMOTHY JOHN R. BATAN
Undersecretary for Railways
Department of Transportation

QUEZON CITY

SUBSCRIBED AND SWORN to before me this AUG 18 2020 at _____.
Affiant exhibiting to me his _____ with identification no. _____
issued on _____ at _____.

Doc. No. 150
Page No. 30
Book No. 27
Series of 2020

ATTY. JOSE FLORO P. CRISOLOGO
Notary Public
Until December 31, 2021
Adm. Matter No. NP-023
PTR No. 9270054-C/01-02-2020 Q.C.
IBP Lifetime No. LRN-03688
Roll No. 49462
MCLE VI-0017262 Valid Until 4-14-2022


3312
TIMOTHY JOHN R. BATAN
Undersecretary for Railways


GSIS No.:
T I N: 224-244-493
Blood Type:
Birthday: 02 February 1985
Home Add: Manansala Condominium
Rockwell Center, Makati
Contact No. 0917-8963032
In case of emergency, please notify:
VERONICA BATAN
2222 Golden Gate Las Piñas
Contact No. 0917-5318249
ATTY. ARTEMIO U. TUAZON JR.
OIC, Office of the Assistant
Secretary for Administration
and Finance

Compliance Monitoring Report (CMR)

DEPARTMENT OF TRANSPORTATION (DOTR)
DOTr Head Office, Pinatubo Corber Osmena Street, Clark Freeport Zone, Angeles City, Pampanga

MONITORING PERIOD COVERED: January - June 2020 (1st Semester 2020)

I. Basic Project Information

ECC Reference No.	ECC-CO-1807-0018
Project Title	North-South Commuter Railway Calamba Extension Project
Project Type	Infrastructure Projects, Major Roads and Bridges, On-grade railway system (new project)
Location	-, Taguig, Metro Manila, NCR
Project Stage/Phase	Pre Construction
Contact Person	Monica C. Francisco - Project Development Officer IV, Environmental Unit Lead
Contact Number/Email	+639176830047/nscr.envi@dotr.gov.ph
EMP Approval	[X] During ECC Application Stage [ ] Updated after ECC Issuance, Approved on

Project Description in ECC:

This ECC shall cover the construction and operation of the 56.5 km railway project traversing the following cities:
• Manila (NCR)
• Makati (NCR)
• Taguig (NCR)
• Parañaque (NCR)
• Muntinlupa (NCR)
• San Pedro (Laguna)
• Biñan (Laguna)
• Sta. Rosa (Laguna)
• Cabuyao (Laguna)
• Calamba (Laguna)

The project shall have the following components:

Major Components
• 56.5km main railway line
• twenty (20) stations
• maintenance depot (Banlic, Calamba)
• electrical and mechanical system
• rolling stock

Support Facilities
• substation facilities
• drainage facilities
• administration and operation center
• training center
• maintenance facilities
• construction yard/s
• power supply

Pollution Control Devices
• sewage treatment plant or 3-chamber septic tanks per commuter station
• provision of muffler for generator set/s.

Changes in Project Design (if any):

An updated version of the EIS was submitted to DENR EMB on March 04, 2020, to include the new project components in the coverage of the ECC. The updated EIS can be accessed through this link:
https://drive.google.com/file/d/1Qf5vUa2UC5L7POeqyDm-HZX3z2-z1UGQ/view?usp=sharing
https://drive.google.com/drive/folders/1Fvs_Zat245zyWR0NUiP_Ae3WZh-sU6rX?usp=sharing

The detailed engineering design of the Project is still ongoing, and additional revisions to the EIS is expected. The Proponent will inform Environmental Management Bureau – Central Office (EMB-CO) and other agencies of the changes once the design and modifications in project description have been finalized.

a. Project Area Geo-Coordinates

Area	Latitude	Longitude
Project Area 1	14.63256175	120.9762103
	14.6259745	120.9752682
	14.6231805	120.9765549
	14.62281124	120.9766299
	14.62291793	120.977225
	14.62275849	120.9791242
	14.62281612	120.9791338
	14.62280727	120.9792546
	14.62274656	120.9792489
	14.62265438	120.9802096
	14.62271506	120.9802147
	14.62268176	120.9805907
	14.62261776	120.9805899
	14.6225789	120.9809943
	14.62253374	120.9809928
	14.62244551	120.981911
	14.6227979	120.9815483
	14.62228099	120.9826824
	14.62216483	120.9826776
	14.62197365	120.9863067
	14.62180688	120.9873334
	14.62161352	120.9873636
	14.61692465	120.9920286
	14.61690168	120.9920064
	14.61430452	120.9944537
	14.61413704	120.9944257
	14.61259639	120.9958784
	14.61274081	120.9960415
	14.60323063	121.0054089
	14.60157354	121.0088281
	14.60135785	121.008871
	14.59981728	121.0107314
	14.59981247	121.0109976
	14.59626862	121.0132687
	14.5962884	121.0131848
	14.59567367	121.0129559
	14.59559218	121.0130214
	14.59520477	121.0126103
	14.59489377	121.0123446
	14.59482846	121.0124851
	14.59301316	121.0109015
	14.59302792	121.0108841
	14.59120585	121.0092686
	14.58225682	121.0017634
	14.58228936	121.0015994
	14.58212671	121.0014564

	14.58217888	121.0013939
	14.58063277	121.000035
	14.58043892	121.0002853
	14.57861853	120.998711
	14.57862315	120.9985715
	14.57760392	120.9979985
	14.57757451	120.9981022
	14.5750986	120.9983983
	14.56651759	121.003221
	14.56057869	121.0062139
	14.55671734	121.0083179
	14.55671096	121.0083039
	14.55473791	121.0093513
	14.5529233	121.0103249
	14.55291036	121.0103005
	14.55051071	121.0115613
	14.55053746	121.0116147
	14.54761676	121.0131083
	14.54764503	121.0131623
	14.53749225	121.0185718
	14.53360645	121.0207052
	14.53360414	121.0207145
	14.53329129	121.0208945
	14.53327532	121.0208877
	14.52960342	121.0229172
	14.52956057	121.0228338
	14.52765069	121.0238647
	14.52767039	121.0239013
	14.52559138	121.0250627
	14.5255569	121.0249956
	14.52446063	121.0255871
	14.52450173	121.0256653
	14.51094247	121.0328838
	14.51099877	121.0329902
	14.50505501	121.0361536
	14.50504187	121.03613
	14.50387262	121.0367585
	14.50388531	121.0367831
	14.48720982	121.0456875
	14.47745365	121.0504693
	14.45495866	121.0511248
	14.45362024	121.0509627
	14.45056011	121.0506
	14.4483186	121.0503144
	14.44627552	121.0500693
	14.44547342	121.049983
	14.41815334	121.0475471
	14.41476548	121.0475169

	14.41331085	121.0475132
	14.40370821	121.0475491
	14.40370315	121.0474478
	14.40273595	121.0474397
	14.40273549	121.0474807
	14.3991784	121.0474531
	14.39917755	121.0475112
	14.39120773	121.0474397
	14.39114559	121.0472993
	14.38879449	121.0472985
	14.38876785	121.0474299
	14.37593464	121.0475937
	14.36249815	121.0547436
	14.36229053	121.0546896
	14.36115981	121.0553056
	14.36112079	121.0553403
	14.35947095	121.0562405
	14.35952081	121.0563369
	14.3582283	121.0568652
	14.35817515	121.0567691
	14.35584277	121.0580283
	14.35590935	121.0581592
	14.3497217	121.0617509
	14.3472219	121.062897
	14.34731465	121.0630827
	14.34474574	121.0658261
	14.34469039	121.0658496
	14.33353135	121.0784638
	14.33345665	121.0783959
	14.3317089	121.0803789
	14.33175978	121.0804406
	14.3315444	121.0806858
	14.33157943	121.0807198
	14.3150081	121.0995276
	14.31481912	121.0993536
	14.31456562	121.0996407
	14.31449579	121.0994387
	14.31453028	121.099407
	14.31452659	121.099385
	14.31426792	121.0994807
	14.31427648	121.0995015
	14.3143173	121.0995013
	14.31442943	121.0997956
	14.31330553	121.101072
	14.31349183	121.1012465
	14.2980083	121.1186159
	14.27071322	121.1295492
	14.27058809	121.1292331

	14.26807318	121.1302641
	14.26819396	121.1305801
	14.24145933	121.1418037
	14.24138575	121.141813
	14.23690866	121.1436269
	14.23559825	121.1441551
	14.23192197	121.1456537
	14.22528359	121.1483452
	14.22416825	121.1487972
	14.22309259	121.1492366
	14.22152118	121.1500314
	14.21915977	121.151276
	14.21131208	121.1554331
	14.20767731	121.1573377
	14.20756944	121.1572372
	14.20736437	121.157347
	14.20445109	121.1590608
	14.2043804	121.1589315
	14.19967273	121.1589919
	14.1978056	121.159228
	14.19772261	121.1591153
	14.19528813	121.1603929
	14.19563363	121.1609244
	14.19800062	121.1596896
	14.19967674	121.1593174
	14.20464663	121.1594346
	14.20459797	121.159339
	14.20758626	121.1578703
	14.20786394	121.1577232
	14.21150765	121.1558661
	14.21149115	121.1558022
	14.21938584	121.1519419
	14.22081017	121.1518767
	14.22188238	121.1529527
	14.22245721	121.153105
	14.22189027	121.150474
	14.22327529	121.1497785
	14.22435372	121.1492846
	14.22550631	121.1488777
	14.23208011	121.1460772
	14.23201222	121.1459465
	14.23569912	121.1444262
	14.23569362	121.1444076
	14.23698662	121.1438951
	14.2369964	121.1439112
	14.24157558	121.1420476
	14.24165899	121.1420342
	14.26838128	121.1311365

	14.2709202	121.1300958
	14.29814424	121.1188275
	14.31370065	121.1014394
	14.31521747	121.0997208
	14.33181083	121.0809376
	14.33199252	121.08071
	14.33372598	121.0787441
	14.3448718	121.0660626
	14.34505373	121.0658751
	14.34746378	121.0633407
	14.34982566	121.0620051
	14.35609219	121.0585654
	14.35973425	121.0567253
	14.35970675	121.0566843
	14.36141961	121.0558032
	14.3614552	121.0557666
	14.36266747	121.0550881
	14.36267092	121.0549537
	14.37596773	121.0478718
	14.38868427	121.047741
	14.39121208	121.0477987
	14.39121247	121.0477647
	14.39914633	121.0477897
	14.41330322	121.0477971
	14.4147802	121.0480006
	14.41818226	121.0480949
	14.41818562	121.0479914
	14.44540309	121.0503095
	14.44602356	121.0506157
	14.44819677	121.0517177
	14.45047299	121.0521265
	14.45048943	121.05203
	14.4538101	121.0519296
	14.45503441	121.0516521
	14.46642104	121.05228
	14.47753633	121.0507331
	14.48230062	121.0485143
	14.48232755	121.0485692
	14.48328336	121.0481345
	14.48326035	121.0480793
	14.48398999	121.0477818
	14.48401734	121.047845
	14.48741999	121.0461925
	14.48750342	121.0464416
	14.48941799	121.0454202
	14.48943769	121.0452714
	14.49997188	121.0393595
	14.5000035	121.0394156

	14.50462986	121.0369312
	14.50457118	121.0368193
	14.5046716	121.0367642
	14.50459823	121.0366211
	14.51109765	121.0332276
	14.52571885	121.0253112
	14.52568174	121.0252413
	14.52751904	121.0244436
	14.52762467	121.0246452
	14.53079137	121.0225571
	14.53765581	121.018865
	14.53772368	121.0189921
	14.54026608	121.0176244
	14.54072755	121.018014
	14.5407479	121.0179339
	14.5401958	121.0175021
	14.54757967	121.013524
	14.54760735	121.0135775
	14.55341796	121.0107554
	14.55345595	121.0108294
	14.55506463	121.0099552
	14.55505732	121.0099348
	14.55703979	121.0085249
	14.55702396	121.0084756
	14.56075543	121.0064512
	14.5607118	121.0063647
	14.56651759	121.003221
	14.56655541	121.0032978
	14.57521359	120.9986332
	14.57764878	120.9984041
	14.57828628	120.9990399
	14.57832125	120.9988893
	14.57861659	120.9989793
	14.57870856	120.9991933
	14.58017981	121.0006197
	14.58025761	121.0005186
	14.590837	121.0094947
	14.59085432	121.0094511
	14.59278963	121.0111631
	14.59283439	121.0111113
	14.59542671	121.013261
	14.59843347	121.0130548
	14.60014313	121.0109913
	14.60145445	121.0094078
	14.60344283	121.0054819
	14.61065284	120.9984837
	14.61289009	120.9962256
	14.61442175	120.9948054

	14.62201465	120.9874286
	14.62236391	120.9863643
	14.62235514	120.9819086
	14.622903	120.9804398
	14.62302067	120.9792307
	14.62324403	120.9773972
	14.62346091	120.9768573
	14.62599901	120.9755731
	14.63253313	120.9764872
Project Area 2	14.45499758	121.0513737
	14.45363316	121.0512125
	14.45373957	121.0516579
	14.45048641	121.0517462
	14.45051715	121.0515708
	14.45055003	121.0508512
	14.44828902	121.0511721
	14.44823783	121.0514589
	14.44828941	121.0505857
	14.44611633	121.0503424
Project Area 3	14.22247653	121.1531731
	14.22315784	121.1530935
	14.2231225	121.1528491
	14.22322364	121.1528307
	14.2237163	121.1530278
	14.22394571	121.1531714
	14.22409332	121.1531875
	14.22408863	121.1532557
	14.22418378	121.1532642
	14.22416742	121.1534928
	14.22265335	121.1534489
	14.22303854	121.1545007
	14.22368636	121.1552002
	14.22675944	121.1621971
	14.22783216	121.1648719
	14.2272425	121.1652601
	14.22631438	121.1649232
	14.22533386	121.1627258
	14.22352782	121.1583603
	14.2224026	121.1556475
	14.2221938	121.1544065
	14.2223397	121.1540503
	14.22211951	121.153541
	14.22180103	121.1537267
	14.22202344	121.1545726
	14.22174531	121.1546603
	14.22151381	121.1536769
	14.22199535	121.1532559

b. Project Buffer Zone

Area	Latitude	Longitude
Buffer Zone 1	14.22247653	121.1531731
	14.22315784	121.1530935
	14.2231225	121.1528491
	14.22322364	121.1528307
	14.2237163	121.1530278
	14.22394571	121.1531714
	14.22409332	121.1531875
	14.22408863	121.1532557
	14.22418378	121.1532642
	14.22416742	121.1534928
	14.22265335	121.1534489
	14.22303854	121.1545007
	14.22368636	121.1552002
	14.22675944	121.1621971
	14.22783216	121.1648719
	14.2272425	121.1652601
	14.22631438	121.1649232
	14.22533386	121.1627258
	14.22352782	121.1583603
	14.2224026	121.1556475
	14.2221938	121.1544065
	14.2223397	121.1540503
	14.22211951	121.153541
	14.22180103	121.1537267
	14.22202344	121.1545726
	14.22174531	121.1546603
	14.22151381	121.1536769
	14.22199535	121.1532559
Buffer Zone 2	14.62244551	120.981911
	14.62235514	120.9819086
	14.62228099	120.9826824
	14.62216483	120.9826776
	14.62197365	120.9863067
	14.62236391	120.9863643
	14.6227979	120.9815483
Buffer Zone 3	14.61430452	120.9944537
	14.61413704	120.9944257
	14.61259639	120.9958784
	14.61274081	120.9960415
	14.61289009	120.9962256
	14.61442175	120.9948054
Buffer Zone 4	14.60157354	121.0088281
	14.60135785	121.008871
	14.59981728	121.0107314
	14.59981247	121.0109976
	14.60014313	121.0109913

	14.60145445	121.0094078
Buffer Zone 5	14.58225682	121.0017634
	14.58228936	121.0015994
	14.58212671	121.0014564
	14.58217888	121.0013939
	14.58063277	121.000035
	14.58043892	121.0002853
	14.58025761	121.0005186
	14.58017981	121.0006197
	14.581398	121.00169
	14.581582	121.001645
	14.58205	121.002052
Buffer Zone 6	14.55473791	121.0093513
	14.5529233	121.0103249
	14.55291036	121.0103005
	14.55341796	121.0107554
	14.55345595	121.0108294
	14.55506463	121.0099552
	14.55505732	121.0099348
Buffer Zone 7	14.5394	121.017538
	14.53749225	121.0185718
	14.53765581	121.018865
	14.53772368	121.0189921
	14.539505	121.018035
Buffer Zone 8	14.52960342	121.0229172
	14.52956057	121.0228338
	14.52765069	121.0238647
	14.52767039	121.0239013
	14.52751904	121.0244436
	14.52762467	121.0246452
	14.529878	121.023444
Buffer Zone 9	14.50388531	121.0367831
	14.50387262	121.0367585
	14.499863	121.038954
	14.49997188	121.0393595
	14.5000035	121.0394156
	14.50462986	121.0369312
	14.50457118	121.0368193
	14.5046716	121.0367642
	14.50459823	121.0366211
Buffer Zone 10	14.489336	121.044541
	14.48720982	121.0456875
	14.48741999	121.0461925
	14.48750342	121.0464416
	14.48941799	121.0454202
	14.48943769	121.0452714

c. Carbon Sink/GHG Program Area Coordinates

Area	Latitude	Longitude
Program Area 1	14.22247653	121.1531731
	14.22315784	121.1530935
	14.576121	120.997496
	14.22322364	121.1528307
	14.2237163	121.1530278
	14.22394571	121.1531714
	14.22409332	121.1531875
	14.22408863	121.1532557
	14.22418378	121.1532642
	14.22416742	121.1534928
	14.22265335	121.1534489
	14.22303854	121.1545007
	14.22368636	121.1552002
	14.22675944	121.1621971
	14.22783216	121.1648719
	14.2272425	121.1652601
	14.22631438	121.1649232
	14.22533386	121.1627258
	14.22352782	121.1583603
	14.2224026	121.1556475
	14.2221938	121.1544065
	14.2223397	121.1540503
	14.22211951	121.153541
	14.22180103	121.1537267
	14.22202344	121.1545726
	14.22174531	121.1546603
	14.22151381	121.1536769
	14.22199535	121.1532559
Program Area 2	14.45048641	121.0517462
	14.45051715	121.0515708
	14.44828902	121.0511721
	14.44823783	121.0514589
	14.44819677	121.0517177
	14.45047299	121.0521265
	14.45048943	121.05203
Program Area 3	14.41815334	121.0475471
	14.41476548	121.0475169
	14.4147802	121.0480006
	14.41818226	121.0480949
	14.41818562	121.0479914
Program Area 4	14.39120773	121.0474397
	14.39114559	121.0472993
	14.38879449	121.0472985
	14.38876785	121.0474299
	14.38868427	121.047741
	14.39121247	121.0477647

Program Area 5	14.3582283	121.0568652
	14.35817515	121.0567691
	14.35584277	121.0580283
	14.35590935	121.0581592
	14.3497217	121.0617509
	14.3496125	121.0615389
	14.3472219	121.062897
	14.34746378	121.0633407
	14.34982566	121.0620051
	14.35609219	121.0585654
	14.358471	121.057262
Program Area 6	14.33353135	121.0784638
	14.33175978	121.0804406
	14.33199252	121.08071
	14.33372598	121.0787441
Program Area 7	14.3150081	121.0995276
	14.31481912	121.0993536
	14.31456562	121.0996407
	14.31330553	121.101072
	14.31370065	121.1014394
	14.31521747	121.0997208
Program Area 8	14.27071322	121.1295492
	14.27058809	121.1292331
	14.26807318	121.1302641
	14.26819396	121.1305801
	14.26838128	121.1311365
	14.2709202	121.1300958
Program Area 9	14.22528359	121.1483452
	14.22416825	121.1487972
	14.22309259	121.1492366
	14.22327529	121.1497785
	14.22550631	121.1488777
Program Area 10	14.1978056	121.159228
	14.19772261	121.1591153
	14.19528813	121.1603929
	14.19563363	121.1609244
	14.19800062	121.1596896

II. Executive Summary

a. Summary of Major Findings for the Monitoring Period

Condition / Requirement / Commitment	**Compliance Status &Summary of Actions taken**	**Recommendation**	**Commitment for the Next Reporting Period**
Compliance with ECC	The Proponent is working to comply with all conditions of the ECC. Non-compliance for some conditions is due to ongoing preparation of requirements, ongoing updating of the		Submit the revised EIS, EMP, and the Environmental Monitoring Plan (EMoP) once the detailed engineering design has been finalized. The Proponent will inform EMB-CO and other

	Environmental Impact Statement (EIS) as the Project is still in the detailed engineering design stage, and/or due to dependency of condition to onboarding of contractor. Due to the changes in the Project from Feasibility Study to Detailed Design Study, the Proponent has submitted to DENR-EMB-CO a request for the Amendment of ECC-CO-1807-0017, dated February 20, 2020, received by EMB on March 04 2020. The detailed design study is ongoing and more revisions are expected for the EIS. A new version of the EIS will be submitted to DENR EMB CO to reflect all the changes in the Project design. A request for amendment of ECC Condition No. 10.2: Establishment of a Multipartite Monitoring Team (MMT), to engage a third-party auditor (TPA) in lieu of an MMT, was submitted on 17 April 2020. Request was approved by DENR-EMB-CO through a letter response on May 12, 2020.		agencies of the relevant changes in the EIS, EMP, and in the EMoP. The Proponent will closely coordinate with EMB-CO for inquiries or concerns regarding the submission and project status. The Proponent shall also continuously work on and ensure the compliance of the Project with the ECC conditions
Compliance with EMP	The Proponent is in the process of updating the EMP and the EMoP appropriate to the changes made in the EIS and the Project design.		Submit the revised EMP and EMoP once the detailed engineering design has been finalized. Ensure that the modified EMP and EMoP will be transmitted to the General Consultant (GC) for monitoring of compliance, and to the civil works contractors for strict implementation, and that the EMP and EMoP is implemented properly.
Implementation of appropriate &effective env'tal impact remedial actions in case of exceedances	Construction has not yet begun as the Project is still in the detailed engineering design stage, and no civil works contracts have been awarded yet.		Ensure that the ECC, EMP and EMoP will be transmitted to the GC for monitoring of compliance and to the civil works contractors for strict and proper implementation.
Complaints Management	The Proponent still maintains the following contact details for the Grievance Redress (GR) Mechanism (GRM) Central Helpdesk: GLOBE: (0927) 450 6720; SMART: (0939) 223 7993; E-MAIL: nscr.grm@dotr.gov.ph; nscrex.dotr@gmail.com Grievances received for January-June 2020 totals to 60 • JAN 2020 - 7; • FEB 2020 - 6; • MAR 2020 - 33; • APR 2020 - 6; • MAY 2020 - 0; • JUNE 2020 - 8. Of the 60 grievances received, one (1) are still on-going/pending. A GRM Iteration Workshop for Local GR Officers was conducted with ADB Social Safeguard Representative and ADB Communication Consultant on March 05, 2020.		1. Establishment of a Physical Helpdesk and distribution of IEC Materials in Manila and Calamba LGUs; 2. Establishment of a Remote Helpdesk in all LGUs
Realistic and sufficient budget for conducting the environmental monitoring and audit activities	Engagement of a TPA/ External Environmental Monitoring Agent, and the associated Environmental Monitoring Fund (EMF) will be covered by the GC's budget. The Environmental Guarantee Fund		1. Engagement of the TPA in the later half of 2020; 2. Reiterate to winning contractors the EGF Provision in their budget.

	(EGF) will be part of the civil works contractor's budget.		
Accountability - qualified personnel are charged with the routine monitoring of the project activities in terms of education, training, knowledge and experience of the environmental team	No changes in the organizational chart of the Project's Environmental Unit submitted to DENR EMB CO on December 23, 2019. Designated staff have undergone the 40-hour Basic Pollution Control Officer Training last November 18-22, 2019, and the Project Managers have undergone the 8-hour Environmental Training for Managing Heads on January 21, 2020.		Work on accreditation of designated staff as PCOs.

III. Results and Discussions

A. Compliance Monitoring

I. Status of Compliance to Project Description

Requirement	Description	Status of Compliance	Remarks
Project coverage/limits	This ECC shall cover the construction and operation of the 56.5 km railway project traversing the following cities: • Manila (NCR) • Makati (NCR) • Taguig (NCR) • Parañaque (NCR) • Muntinlupa (NCR) • San Pedro (Laguna) • Biñan (Laguna) • Sta. Rosa (Laguna) • Cabuyao (Laguna) • Calamba (Laguna)	Complied	No changes in the list of LGUs traversed by the project. Final length of the Project will be reported upon finalization of the detailed engineering design. KMZ file of the alignment (version 3.6.5) can be accessed here: https://drive.google.com/open?id=1vcIEyZdGqeZWFKkoOX5TXeBLD8hiVyik
Components	The project shall have the following components: Major Components • 56.5km main railway line • twenty (20) stations • maintenance depot (Banlic, Calamba) • electrical and mechanical system • rolling stock Support Facilities • substation facilities • drainage facilities • administration and operation center • training center • maintenance facilities • construction yard/s • power supply Pollution Control Devices • sewage treatment plant or 3-chamber septic tanks per commuter station • provision of muffler	Complied	Additional components, if any, will be reported upon finalization of the detailed engineering design and will be reflected in the updating of EIS. The updates will be reported to DENR EMB CO and other relevant offices.

II. Status of Compliance to ECC Conditions

Condition No.	Description	Status of Compliance	Remarks

1	Conduct an effective and continuing Information, Education, and Communication (IEC) Program through the use of most effective media to inform and educate all stakeholders, especially the contractors, workers, LGUs, businesses and local residents about the following: a. Project impacts and mitigating measures embodied in its EIS; b. Conditions stipulated in this Certificate; c. Environmental and human safety features of the project; and, d. Health consciousness alerts for any project-induced discomfort (from dust, smell, noise, vibration) as the project progresses throughout the whole route.	Complied	Stakeholders Consultation Meetings (SCMs) with Project-Affected Persons to update them on the progress of the project is continuously being conducted. Attached are the documentation from the SCMs conducted from January 2020-June 2020. https://drive.google.com/file/d/1SfduEVEkPjRboyN2dCwveZ7GEYecDsU-/view?usp=sharing The Asian Development Bank has provided a Public Relations (PR) Firm for the Project through its Technical Assistance Program. The PR Firm has onboarded on June 2020 and is currently working on the PR and IEC requirements of the Project, among others.
2	Implement a comprehensive Social Development Plan (SDP) and submit a separate report together with the CMR to the EMB-CO using CMR Online on a semi-annual basis pursuant to EMB MC 2016-01.	Not Complied	Sit-down workshop meetings with LGUs will be conducted in order to plan the appropriate SDPs to be implemented. Workshops for at least 3 LGUs is targeted to be conducted for the later half of the year. Attached is the general considerations for the SDP to be implemented and can also be accessed here: https://drive.google.com/open?id=1Sd305I3A-ckHKxqyBa7oOluJqFyzjc4r
3	Waste Management Program (WMP) Submit detailed Waste Management Program (WMP) for proper handling, collection, and disposal of solid, hazardous, and liquid wastes to EMB-CO, EMBNCR, and EMB-Region IV-A within six (6) months prior to project construction. Proof of implementation shall be submitted together with the CMR.	Not Complied	The Proponent has prepared a Project Waste Management Plan as a basis for the detailed WMP to be developed by the Contractors as part of the Contractors Environmental Management and Monitoring Plan (CEMMP). https://drive.google.com/file/d/1tmelfQrGzLtQbZ_AGw0OA9lob9ICHXNN/view?usp=sharing Compliance will be done when the civil works contractors are on board.
4	Ensure that all existing waterways affected by the project construction are maintained and not obstructed.	Complied	The Proponent is currently coordinating with DPWH, MMDA, NIA and affected LGUs regarding approval of the Project's design in relation to the affected drainages and waterways in the jurisdiction of said offices.
5	Submit a detailed construction environmental management program, including mobilization and demobilization plans, for the construction yards one (1) month prior to project implementation. The plan should include the coordination with concerned local government units to promote compatibility of adjoining land uses with the intended project stations including its exit and entrance.	Not Complied	The Project is still in the detailed design stage, and the EIS, EMP and EMoP are also being updated to reflect changes in the design. The Proponent, through the General Consultant (GC), will brief the construction contractors their commitments in the implementation of the EMP. Compliance will be done when the civil works contractors are onboard. The Proponent, through the GC, will brief the civil works contractors with their commitments in the implementation of the EMP prior to commencement of construction. The Construction Environmental Management and Monitoring Plan (CEMMP), which will be submitted by the civil works contractors, will be reviewed before Project construction. The CEMMP must be aligned with the EMP of the Project. The civil works contractors must observe the

			measures or mitigations stated in the CEMMP.
6	Submit a detailed plan for earth balling and replanting of mature native/endemic trees within three (3) months prior to project construction. The plan should include the following: a. Specific recipient sites which have already been prepared and conditioned; b. Ensure high degree of survival; and, c. Provision for regular maintenance until trees have re-establish in their new environment.	Not Complied	The Proponent has coordinated with DENR FMB for the matter. Accordingly, the DENR will conduct validation of the inventoried trees which will further enable them to identify specific trees that are to be earth balled. Moreover, earth balling shall be subject to the following conditions: 1. Only healthy trees shall be earth-balled; 2. Indigenous species shall be prioritized; 3. The surrounding of the tree shall be free from impediments to support digging/moving operations; and 4. A suitable area for transplanting shall be pre-identified The area for the transplanting shall be identified by the DENR. The Proponent on the other hand, shall maintain and protect the earth-balled trees for a period of at least one (1) year. The DENR will commence its validation once all the requirements for the application of Tree Cutting and/or Earth Balling permits have been completed by the Proponent.
7	Implement a greening program in line with the DENR's thrust for GHG Emission Reduction Program. The program shall be submitted to EMB sixty (60) days prior to the project implementation.	Not Complied	Locations indicated in the previous section for the Buffer Zones and GHG Program Areas are the station, and the depot areas where the landscaping will serve as the buffer zones of the Project. The coordinates will be updated if there are changes. Planning for the Greening Program is still ongoing within the Environmental Unit. Requirements will be submitted once finalized.
8	Submit an approved Resettlement Action Plan (RAP) of the affected communities within two (2) months prior to project construction.	Not Complied	Finalization of the detailed RAP is ongoing and will be done per Civil Works Contact Package (CP).The following types of RAP are being prepared for the Project: 1. Landowner and Non-Resident Business Owner RAP 2. Non-Landowner RAP The RAPs will include the following chapters: 1. Project Description 2. Scope of Land Acquisition and Resettlement/ Necessity of Land Acquisition and Resettlement 3. Socio-Economic Profile of Project-Affected Persons 4. Legal and Policy Framework 5. Compensation and Entitlement 6. Relocation and Resettlement Plans 7. Public Consultation 8. Livelihood Restoration and Improvement Plan 9. Grievance Redress Mechanism 10. RAP Implementation Arrangements 11. RAP Implementation Schedule 12. Cost and Budget for Resettlement and Acquisition of Land Assets 13. Monitoring and Evaluation 14. Public Consultation

9	Conduct a detailed Traffic Impact Assessment (TIA) in coordination with the concerned LGUs for every proposed station prior to project construction integrating proposed road expansion projects of the concerned government agencies. Transport of heavy structures shall be scheduled during the period that may not cause traffic in the area.	Complied	Initial TIA can be accessed here: https://drive.google.com/open?id=1aiT6w9CXgrA5Kgu_c5R9Vspb0DqyN1OJ TIA will be updated to reflect changes in the detailed design of the Project. The Traffic Management Plans (TMP) will be based from the TIA and will be developed by the Civil Works Contractors. The TMPs shall be transmitted to and coordinated with all concerned offices before implementation.
10.1	A readily available and replenishable Environmental Guarantee Fund (EGF) to cover further environmental assessments, compensation, rehabilitation or restoration, and abandonment or decommissioning.	Not Complied	EGF is part of contractor's budget. The project is still in the detailed design and procurement stage. Compliance will be done when the civil works contractors are onboard.
10.2	Establish an MMT composed of representative(s) from the local environmental NonGovernment Organization/s (NGOs), People's Organization/s (POs) and the Local Government Units per DAO 2017-15. The MMT shall primarily oversee the compliance of the Proponent with the Environmental Management and Monitoring Plan (EMMoP) and the ECC conditions.	Not Complied	A request for the amendment of the condition to engage a Third-Party Auditor (TPA) in lieu of an MMT was submitted to EMB-CO on 17 April 2020, and was approved on 12 May 2020 (https://drive.google.com/file/d/1TAGcRYplr3miCL1quElcH5bB0TAK2HQE/view?usp=sharing). The TPA will also act as the External Monitoring Agent (EMA), which is part of the loan requirements of the Asian Development Bank (ADB), and the Japan International Cooperation Agency (JICA). TPA has not yet been engaged during this reporting period, and is expected to onboard in the later half of 2020.
10.3	The Proponent shall set-up replenishable Environmental Management Fund (EMF) to cover all costs attendant to the operation of the MMT such as training, hiring of technical experts and resource persons, fieldwork and transportation.	Not Complied	The EMF will be included in the TPA/EMA's budget.
11	Establish an Environmental Unit (EU) in sixty (60) days prior to construction that shall competently handle the environment-related aspects of the project. In addition to the monitoring requirements as specified in the EMMoP, the EU shall have the following responsibilities: a. Monitor actual project impacts vis-à-vis the predicted impacts and management measures in the EIS; b. Recommend revisions to the EMMoP, whenever necessary subject to the approval of the EMB-CO; c. Ensure that data gathered during monitoring activities are properly documented, assessed, evaluated, and reported in accordance with the standard formats; and, d. Ensure that monitoring and submission of reports to EMB-CO are carried out as required.	Complied	The Proponent has submitted the organizational chart (can also be accessed here: https://drive.google.com/open?id=14Kjft81QWc2165dtXmLwJ0i1w-3Z1sSQ) of the Project's Environmental Unit to DENR EMB CO on December 23, 2019. Designated staff have undergone the 40-hour Basic Pollution Control Officer Training last November 18-22, 2019, and the Project Managers have undergone the 8-hour Environmental Training for Managing Heads on January 21, 2020. The Proponent is currently working on the requirements for the accreditation of the PCOs.
12	The Proponent shall ensure that its contractors and sub-contractors are provided with copies of this ECC, including the EMP, and that they will strictly comply with the relevant conditions of the ECC.	Complied	The General Consultant (GC) has onboarded and has been provided with the copy of the ECC. The project is still in the process of procuring civil works contractors, but the

			ECC and the EMP were already disclosed in the bidding documents. The civil works contractors will be briefed of their obligations in the implementation of the EMP once they are onboard. The relevant documents shall be transmitted to the GC and to the civil works contractors.
13	No activities shall be undertaken other than what were stipulated in the final EIS. Any expansion and/ or modification of the Project beyond the Project description or change in alignment/ route that will cause significant impacts to the environment shall be subjected to a new Environmental Impact Assessment.	Complied	The project is currently in the detailed design stage, and the EIS is currently being revised per the changes from the Feasibility Study to the Detailed Design Study. The modified EIS will be transmitted to EMB-CO for further review and will undergo the required process if found with any significant modifications or changes.
14	In case of transfer of ownership of this Project, the same conditions and restrictions shall apply to the transferee or grantee who shall secure in writing the corresponding amendment of this ECC from the EMB-CO within fifteen (15) working days reflecting such transfer.	Complied	N/A No change in ownership

III. Status of Compliance to EMP Conditions

Impacts	**Mitigating Measures**	**Status of Compliance**	**Remarks**
All	To be updated	Complied	The Project is still in the Pre-Construction Phase. Further compliance with the EMP will be monitored and reported when construction works have started.
Pre-construction, Construction and Operation activities Impacts in general	Comply with the relevant laws: RA 6969: Storage, Transport, Handling, Treatment and Disposal of Hazardous Waste • Secure hazardous waste generator's ID from DENR-EMB; • Provision of hazardous materials storage area; • Hazardous materials/ wastes will be stored in appropriate container properly sealed and labelled; • Hazardous waste will be hauled by an accredited transporter; • Hazardous waste will be treated by a registered treater (TSD Facility). RA 9003: Management and Disposal of Solid Wastes • Waste segregation, recycling, provision of waste color coded bins, etc.; • Provision of Material Recovery Facility (MRF); • Regular hauling of solid wastes through the LGU or private contractor. RA 8749: Comprehensive Air Pollution Control Policy • Secure permit to operate for all air pollution source installations (i.e genset); • Regular inspection and preventive maintenance of heavy equipment, machineries and service vehicles to meet the DENR Emission Standards; • Regular cleaning and clearing of construction access/ site surfaces of spoils and debris from construction equipment and vehicles and wetting of	Complied	The Project is still in the Pre-Construction Phase. Further compliance will be monitored and reported when construction works have started.

	ground soil in the construction site when necessary; • Control vehicle movement maintaining the speed limit within the construction site to RA 9275: Comprehensive Water Quality Management and for Other Purposes • Secure discharge permit; • Provision of Wastewater Treatment Facility at the depot; • Provision of three-chambered septic tank at each station. PD 442: Labor Code of the Philippines, as amended (including Occupational Safety and Health Standards) • Gender equality will be considered in hiring of workers; • Include medical certificate in the requirements for hiring of workers to ensure that they are fit to work. Ensure that they are provided with proper training on construction, occupational health and safety, and emergency response procedure; • Provide appropriate personal protective equipment (PPE) to all construction workers, particularly to the personnel working on heights, heavy and electrical equipment; • Establish Health and Safety Desk or Medical Station at the active construction sites to monitor and safeguard the health of the workers and local residents and to provide immediate response during unexpected incidents/emergencies; • Close coordination with the nearest hospitals in the active construction site for immediate transfer and/or further evaluation and medical management of the patient. PD 856: Sanitation Code of the Philippines • Provide safe and clean water for drinking; • Provision of appropriate sanitary facilities such as portable toilets and waste bins. Implementation of Emergency Response Plan and Health and Safety Management Plan to include but not limited to: • Distribution of manual/ guideline for workers/ employee on health, safety and environmental management; • Orientation and continuous training of qualified workers/ employee/ operator on Environment Management, Basic and Construction Occupational Safety and Health, Scaffolding Safety, Fire Safety and Safe Use of Chemicals at Work; • Provision of earthquake, fire drills for workers; • Provision of appropriate PPE for workers; • Provision of security personnel. Regular monitoring of site condition		
Land acquisition for the Project ROW Land use and Classification Incompatibility with the Existing Land Use	[Pre-Construction/ Construction] • Maximize the use of existing PNR ROW from Solis to Calamba. • Information sharing to the affected LGU to align and ensure that proposed project will be accommodated in their future land use plan. • Identification of future land use of surrounding areas that will result to a	Complied	Mitigating measures are part of the design considerations. The Proponent has continuously coordinated with the affected LGUs regarding updates on the Project design, among other concerns.

	significant increase of transportation-oriented developments in cooperation with urban planners of LGUs to adopt in the future developments.		
Construction activities at the following: • Areas with the existing old PNR structures • Areas with high risk to typhoon passage, high susceptibility to flooding • Prime agricultural areas in depot Environmentally Critical Area (ECA) Incompatibility with Classification as an ECA	[Pre-Construction/ Construction] • Plan and design the site, structure foundation, and structure including construction activities in consideration to the ECAs. • Coordinate with relevant government agencies and stakeholders as required.	Complied	Mitigating measures are part of the design considerations. The Proponent has continuously coordinated with the relevant government agencies regarding updates on the Project design, among other concerns.
Land acquisition for the Project ROW Land Tenure Involuntary resettlement of informal settlers who had encroached portion of the existing PNR ROW; settlements outside the existing PNR ROW between Solis to Sta. Mesa; agricultural area at Depot; and other government project sites	[Pre-Construction] • Implement Resettlement Action Plan in coordination with KSAs/ NHA, LGUs, lot owners and other concerned stakeholders and agencies to address the issue on land acquisition and relocation of informal settlers.	Complied	Finalization of the detailed RAP is ongoing and will be done per Civil Works Contact Package (CP).The following types of RAP are being prepared for the Project: 1. Landowner and Non-Resident Business Owner RAP 2. Non-Landowner RAP The RAPs will include the following chapters: 1. Project Description 2. Scope of Land Acquisition and Resettlement/ Necessity of Land Acquisition and Resettlement 3. Socio-Economic Profile of Project-Affected Persons 4. Legal and Policy Framework 5. Compensation and Entitlement 6. Relocation and Resettlement Plans 7. Public Consultation 8. Livelihood Restoration and Improvement Plan 9. Grievance Redress Mechanism 10. RAP Implementation Arrangements 11. RAP Implementation Schedule 12. Cost and Budget for Resettlement and Acquisition of Land Assets 13. Monitoring and Evaluation 14. Public Consultation
Land acquisition for the Project ROW Land Tenure Potential conflict with other government infrastructure projects	[Pre-Construction] • Coordinate with DPWH and other relevant agencies.	Complied	Mitigating measures are part of the design considerations. The Proponent has continuously coordinated with the relevant government agencies regarding updates on the Project design, among other concerns.
Construction activities Visual Aesthetic and Land Use Degradation of aesthetic view and land architecture	[Pre-Construction/ Construction] • Design and install facilities to harmonise with the surrounding environments (shape, colour, size, etc.). • Identify planting area within the ROW that will not be covered by development to act as buffer zone, green corridor and to lessen aesthetic sore brought by construction and railway structures, and plant trees. • Adequately record the condition of roads, agricultural land and other infrastructure prior to starting to transport materials and construction. [Construction] • Maintain the construction site/ yards tidy and clean and rehabilitate after construction. • Provision for temporary screens/ walls	Complied	Mitigating measures are part of the design considerations. Further compliance will be done when the civil works contractors are onboard.

	to minimise the visual clutter. • Fully reinstate pathways, other local infrastructure, and agricultural land to at least their pre-project condition upon the completion of construction.		
Generation and improper handling and disposal of domestic and hazardous solid waste Land Value Devaluation of land value as a result of improper solid waste management	[Pre-Construction] • Prepare a Waste Management Plan (WMP) [Construction] • Implement WMP including strict implementation of solid waste manangement plan and proper disposal by contractor in accordance with RA 9003, hazardous waste disposal in accordance with RA 6969. • Conduct Social Development Plan (SDP) including waste management to the communities.	Complied	Mitigating measures are part of the planning considerations. Detailed Waste Management Plan (WMP) is part of the CEMMP. Further Compliance will be done when the civil works contractors are onboard.
Generation and improper handling and disposal of excavated soil, leftover concrete by excavation activities Land Value Devaluation of land value as a result of improper handling of excavated soil	[Pre-Construction/ Construction] • Plan and implement the spoils management and disposal plan. • Plan and implement recycling and reuse of excavated soil to be utilized for the project/ other project as much as possible. In case of excessive soil to be generated, identify the final spoil disposal site. [Construction] • Place excavated materials on appropriate dump sites or spoils area and with adequate containment. • Strictly implement construction plan, soil management plan, and proper disposal by contractor in accordance to RA 9003, minimization of waste, segregation.	Complied	Mitigating measures are part of the planning considerations. Detailed Waste Management Plan (WMP) is part of the CEMMP. Further Compliance will be done when the civil works contractors are onboard.
Construction of embankment/ slope protection Topography Permanent and major modification of the terrain and alteration of landform may cause ground failure	[Pre-Construction/ Construction] • Formulate and implement appropriate design measures for the protection on slopes and banks, soil improvement / ground reinforcement to minimize ground failure during construction based on the results of the geological survey and geotechnical investigations.	Complied	Mitigating measures are part of the design considerations. Further compliance will be done when the civil works contractors are onboard.
Earthworks, (excavation, backfilling, stockpiling, tunneling/ underground, elevated tracks/ platforms) and natural hazards Geology/ Geomorphology • Ground Subsidence Liquefaction Landslide, Mud/ Debris Flow, etc. • Foundation of piers of elevated structures may cause unequal settlement of road surfaces.	[Pre-Construction/Construction] • Design and implement appropriate foundation and structures based on combination of geotechnical, geodetic and hydrologic study, and seismicity studies, and in compliance with the National Building Code and the Structural Code of the Philippines and internationally accepted guideline. • Design and install emergency escape route, early warning (alarm) system, emergency power supplies in the design of the structure particularly in the viaduct. • Plan and implement appropriate construction method, schedule, and activities based on combination of geotechnical and geological investigations, and seismicity studies in coordination with the PHIVOLCS. [Construction] • Install sufficient protection measure such as soil improvements during excavation activities and implement appropriate materials handling program or a site protection and rehabilitation program.	Complied	Mitigating measures are part of the design and planning considerations. Further compliance will be done when the civil works contractors are onboard.

	• Proper inspection of all installed and constructed/ ongoing construction structures and facilities. • Coordinate with the PHIVOLCS during earthquake and volcanic events to adjust construction schedule. Conduct earthquake drills for workers. • Use earth pressure balance (EPB) technique with the Tunnel Boring Machine (TBM) to prevent collapse of soil. • Construct diaphragm wall using polymer and bentonite. • Avoid simultaneous excavation in areas near river. • Monitor land subsidence. • Compact soil in excavation area. • The contractor will be required to implement construction methods through underpinning of the existing structures to control vertical and horizontal settlement of road, bridges and other existing buildings.		
Clearing and removal of vegetation, stripping of soil cover, excavation of underlying rock, grading or construction of embankments and works in depot Pedology Soil erosion/loss of top soil	[Pre-Construction/ Construction] • Design and install slope protection/ soil erosion control to prevent or minimize slope failure during construction based on the results of the geo-hazard assessment and geotechnical investigations. [Construction] • Minimise the removal of vegetation cover as much as possible, provision of slope stabilization measure/s, when necessary. • Install surface water runoff drainage systems, protection of slope and bank as required. • Provide drainage system with sedimentation pond and temporary ditches to collect runoff and settle sediments before discharge to the public drainage system. • Clean and de-clog drainage canals surrounding the work sites and depot regularly. • Implement appropriate materials handling program or a site protection and rehabilitation program including but not limited to the following; • Schedule clearing and excavation activities in a speedy manner during dry season, if possible. • Installation of temporary erosion ponds or silt traps around the major work areas. • Placement of excavated materials on appropriate staging site or spoils area and with adequate containment. Limit stock pile height up to 2 m high only. Cover stockpile of excavated soil. In addition, install silt traps, deviation channels, mounting, barriers or trenches around the stockpiles. • Installation of fence at the stockpiles of sand and gravel to reduce sediment transport during heavy rains including reduction of storage time in the work areas. • For bored pile construction, use of bentonite or polymer slurry to stabilize uncased borings in loose soils is highly recommended. • Utilize heavy equipment for transporting, hauling and excavating material from one area to another so as to avoid spills into drainage system. • Place construction materials in suitable	Complied	Mitigating measures are part of the design and planning considerations. Further compliance will be done when the civil works contractors are onboard.

	areas, away from surface waters, canals and drains. • Schedule excavation works, levelling of area, removal of public utilities, e.g. water pipes, drain pipes, electric poles, etc. during the dry season to avoid soil erosion problems. • The contractor will designate sufficient number of workers to be in-charge of cleaning the site and clearing the construction materials scraps such as soil, rock, sand, and lime that are scattered onto the construction areas and road surfaces every day or within 24 hours to avoid the obstruction of natural flow, especially during the wet season. • For the underground structures, double steel sheet piles will be driven in the construction area near soil surface water sources to prevent soil erosion or soft soil displacement. • Polymer solutions mixed with bentonite shall be used in holes to prevent soil erosion and to stabilize the soil, reduce seepage into sand layers and help in soil cohesion.		
Accidental spills of fuels /lubricants from construction vehicles &machineries/ hazardous chemical; Generation and improper handling/ disposal of construction/ domestic/ hazardous wastes Pedology Degradation of soil quality because of soil contamination	[Construction] • Proper inspection and maintenance of machines and equipment. • Strictly implement solid waste management plan and proper disposal by contractor in accordance with RA 9003, hazardous waste disposal in accordance with RA 6969. • Conduct soil quality monitoring in case of any possible contamination events occur.	Complied	Mitigating measures are part of the planning considerations. Detailed WMP is part of the CEMMP. Further Compliance will be done when the civil works contractors are onboard.
Drilling and excavation at previously contaminated site (e.g. Sucat Thermal Power Plant) Pedology Exposure to contaminated soil	[Pre-Construction/ Construction] • Identify a potentially contaminated site and conduct soil sampling survey, if necessary. • Conduct Environmental Site Assessment if there is suspected contamination on the proposed location of facilities. In case that toxic substances are found within the project area and/or adjacent sites, prepare contaminated soil management plan and implement necessary remediation measures. • Storage, handling, transport, treatment and disposal of contaminated soil will be in accordance with RA 6969. [Construction] • Conduct continuous monitoring of toxic level to ensure that contaminants will not pose hazards. In case traces are detected, construction activities on affected site will be paused until a soil management plan is developed and implemented in consultation to the DENR – EMB.	Complied	Mitigating measures are part of the design and planning considerations. Further compliance will be done when the civil works contractors are onboard.
Removal of vegetation along the proposed Project alignment particularly the trees at some areas along the ROW and at the depot Terrestrial Ecology (Flora) • Loss of Habitat • Threat to Existence and/or Loss of Important Local Species • Threat to Abundance, Frequency and Distribution of Important Species • Hindrance to Wildlife Access	[Pre-Construction] • Design, plan and implement the project that will minimise vegetation clearing, alteration of landform, generation of noise, vibration, illumination, and vehicular movement particularly in areas adjacent to flora of higher conservation significance (i.e. Antipolo, Is-is, Narra) and in the vicinity of ecological significant areas. • Conduct 100% inventory of the affected trees along the alignment to determine	Complied	Mitigating measures are part of the design and planning considerations. Further compliance will be done when the civil works contractors are onboard.

	the total counts, category, and characteristics of affected trees and minimise removal particularly in areas adjacent to vegetation of higher conservation significance as much as possible. Native/ Endemic/ Indigenous species of trees, shrubs and grasses will be specified. • Wildlings of the endangered and threatened species, if any, will be collected before construction, placed in the nursery, and give priority during nursery operation to be used for rehabilitation of areas that will be affected by project. • For tree replanting, areas not part of the development within the ROW, around the stations and depot will be prioritized for replanting activity to create buffer zone and to improve habitat for wildlife. For those that cannot be replanted within the project area, coordination with the DENR and LGUs on the identification of area for the potential trees that will be relocated. • Earth balling of trees (if there are any) will be coordinated with the DENR and LGUs including the site where the earth balled trees will be transplanted. • Secure tree cutting permit in compliance with DENR Memorandum Order No. 2012-02. [Construction] • Prior to any clearing activity, clearly mark the ROW to avoid the unnecessary clearance of tree cutting. • Conduct tree planting activities to compensate site clearing activities. Conduct regular monitoring on survival of replanted trees and replant if necessary.		
Earthworks and vehicle movement; Generation of dust and noise, vibration, and illumination pollution. Terrestrial Ecology (Fauna) • Loss of Habitat • Threat to Existence and/or Loss of Important Local Species • Threat to Abundance, Frequency and Distribution of Important Species • Hindrance to Wildlife Access	[Construction] • Minimize vegetation clearing, alteration of landform, generation of noise, vibration, illumination, and vehicular movement particularly in areas adjacent to flora of higher conservation significance (i.e. Antipolo, Is-is, Narra) and in the vicinity of ecological significant areas if any. • Prepare and implement a tree and vegetation management plan as part of the construction plan considering the significance to fauna (local bird species) such as installing buffer zone, minimising the use of herbicide and machinery as much as possible. • Coordinate with EMB-DENR and SCPW for the conservation of migratory birds if required.	Complied	Mitigating measures are part of the design and planning considerations. Further compliance will be done when the civil works contractors are onboard.
Site preparation, land clearing, removal of vegetation; Excavation; Construction activities Hydrology Flooding and inundation by sediment run off, siltation, drainage overflow, clogging	[Pre-Construction/ Construction] • Design and install sufficient drainage system including temporary drainage system during construction to accommodate the surface water runoff from the project and avoid any flooding in the area caused by the project, in consideration to the existing drainage system and flood storage capacity. • Based on the hydrological, geological study and local climate change data from PAGASA, design and install train system insusceptible to flood and related extreme events including temporary construction drainage, train structure to be above the flood level, installation of drainage pumping system, slope	Complied	Mitigating measures are part of the design and planning considerations. Further compliance will be done when the civil works contractors are onboard.

	protection, etc. • Based on the result of hydrological study, design and install viaduct piers considering the potential impacts on flood levels upstream and downstream of the waterway. • Coordinate with DPWH and LGUs on the integration of proposed drainage plan to the project area. [Construction] • Minimise the removal of vegetation and alteration of topography as much as possible. • Install soil erosion control such as protection of slope and bank silt traps to minimize siltation of waterways as required. • Strictly implement construction plan, operating instructions and solid waste/ soil management plan, which include minimization of waste/ soil generation, segregation, and proper disposal by contractor in accordance to RA 9003. • Regular inspection and prompt maintenance of the drainage system, all installed structures and facilities and improve/ enhance capacity when possible.		
Site preparation, land clearing, removal of vegetation; Excavation; Construction activities Hydrogeology Depletion of water resource/ competition in water use	[Construction] • Utilize surface water from the local water service provider/s. • Conduct regular monitoring of water consumption. • Implement water conservation program such as use of rain harvested/ recycled water at construction yard/ camp.	Complied	Mitigating measures are part of the design and planning considerations. Further compliance will be done when the civil works contractors are onboard.
Earthworks (excavation, backfilling, stockpiling, tunneling/underground) Water Quality Degradation of groundwater quality	[Pre-Construction/ Construction] • Plan and Implement appropriate construction methods (i.e. excavation, backfilling, stockpiling) based on geological and geotechnical investigations. [Construction] • Install siltation/ filtration pond at tunnel construction area. • Comply with environmental permitting requirements for the storage, transport, handling, treatment, and disposal of hazardous material/ wastes and contaminated soil in accordance with RA 6969, and solid waste / soil management plan, in accordance to RA 9003.	Complied	Mitigating measures are part of the design and planning considerations. Further compliance will be done when the civil works contractors are onboard.
Earthworks (excavation, backfilling, stockpiling) Water Quality • Disturbance on bottom sediment and degradation of surface water • Siltation • Induce of turbidity Freshwater Ecology • Threat to abundance, frequency and distribution of species	[Pre-Construction] • Based on the hydrological and geodetic surveys, design bridge piers that will minimise installation within the rivers and select appropriate construction materials to be used. • Minimize the removal of vegetation cover, alternation of topography as much as possible. • Plan and implement construction activities in consideration to the water course, embankment, and dry season. • Coordinate with NWRB, DPWH and LGUs for necessary permit. [Construction] • Implement construction activities in consideration to the water course, embankment, and dry season. • Minimize the removal of vegetation	Complied	Mitigating measures are part of the design and planning considerations. Further compliance will be done when the civil works contractors are onboard.

	cover, alternation of topography as much as possible. • Install slope protection to prevent soil erosion and bottom sediment around the bridge piers if necessary. • Place excavated material in temporary staging area with provision for silt traps/ siltation pond to avoid silt draining to waterways, degradation of surface water quality and clogging of waterways, if necessary. • Conduct regular surface water quality monitoring.		
Discharge of wastewater, from construction sites/ yards/camps/related facilities; Accidental spills of fuels and lubricants from construction vehicles and machineries, as well as other hazardous chemicals like paints and solvents; Generation and improper handling and disposal of construction, domestic wastes. Water Quality • Degradation of surface water quality from wastewater discharge, accidental spills and runoff of fuel, paints and solvents to water bodies near the construction sites Freshwater Ecology • Threat to abundance, frequency and distribution of species	[Pre-Construction/ Construction] • Design, and implement the temporary drainage of waste water from construction yard/ facilities/ camp, surface water runoff drainage systems to minimise discharge. • Design and install sewage treatment facility and separate non-sewage wastewater for stations and Depot in compliance to the Sanitation Code of the Philippines. In addition, depot will have interceptor tank to remove oil and fuel from surface water. • Compliance with RA 9275, secure discharge permit. [Construction] • Install wastewater treatment and portable sanitary facilities at the construction sites/yards. Toilets and lavatories to be provided at the construction camps should be at a ratio of 10 people per toilet. The mobile toilets with wastewater treatment system will be provided. • Conduct proper inspection and regular maintenance of construction machineries, equipment, vehicles and wastewater treatment equipment and facilities with appropriate measure to collect any leakage • Control oil refuelling activities and provide oil bunds in oil storage areas. • Prohibit workers from dumping garbage into drains and canals. • Implement material handling program or a site protection program. • Prior to operation of the batching plant, construct settling/retention ponds with sufficient capacity for treatment of wastewater from washing of equipment such as mixer drums, trucks, and chutes. • Properly maintain settling/retention ponds to ensure compliance with the effluent quality. • Comply with environmental permitting requirements for the storage, transport, handling, and treatment of hazardous material/ wastes and contaminated soil in accordance with RA 6969 and solid waste / soil management plan, which include minimization of waste/soil generation, segregation, and proper disposal including the temporary storage by contractor in accordance with RA 9003. • Conduct of effluent quality monitoring at discharge point.	Complied	Mitigating measures are part of the design and planning considerations. Further compliance will be done when the civil works contractors are onboard.
Operation of construction machinery, equipment and vehicles; Removal of trees and other vegetation Climate Change Exhaust emissions from	[Pre-Construction] • Plan and design structures that will minimise the removal of vegetation and alteration of topography, if possible.	Complied	Mitigating measures are part of the design and planning considerations. Further compliance will be done when the civil works contractors are onboard.

movement of equipment and vehicles, excavated soil carried by vehicles and other heavy loaders.	[Construction] • Conduct proper inspection and preventive maintenance of heavy equipment, machineries and service vehicles to meet the DENR Emission Standards. • Use electric or fuel-efficient equipment, machineries and vehicles and maximize its operation, if possible.		
Climate Risk Meteorology/ climatology • Restrictions/ disruption of construction due to soil erosion/ landslides/ and flooding. • Slower drainage, soil erosion, disruption in construction by increased rainfall. • Overheating of construction equipment, vehicles / heat stress by high temperature and heat waves.	[Pre-Construction] • Take account of change in local micro climate such as rainfall, temperature pattern for 2020 and 2050 in project design criteria and schedule of construction works. • Based on the hydrological and geodetic study, design and install train system which is robust to climate change and related extreme events including drainage, passenger facilities and structures (viaduct and embankment) i.e. train facilities to be above the flood level, installation of drainage pumping system. [Construction] • Adjust construction activities in consideration to local climate/ extreme events such as extreme heat to avoid overheating of construction equipment and service vehicles and cause heat stress to workers. • Implement Emergency Response Plan.	Complied	Mitigating measures are part of the design and planning considerations. Further compliance will be done when the civil works contractors are onboard.
Earthworks including excavation activities; Site clearance including removal of topsoil at the depot site; Operation of construction machinery, equipment and vehicles Air Quality Degradation of air quality due to dust generation from transportation of excessive soil/ spoil to fill area construction activities.	[Construction] • Minimize alteration of topography and removal of vegetation. • Adjust construction activities in consideration to weather system, identifying periods of high winds and drought that aggravated dust transport. • Conduct prompt inspection and regular maintenance of heavy equipment, machineries and service vehicles to meet the DENR Emission Standards • Check and maintain or monitor engine conditions and machines used in the construction at least once a week. • Conduct weekly maintenance of vehicles and equipment to ensure emissions comply with standards. • Conduct regular cleaning and clearing of construction access / sites surfaces of spoils and debris from construction equipment and vehicles. • Implement materials handling or a site protection and rehabilitation program. • Haul the excavated materials from the construction areas as soon as possible or within 24 hours • Conduct water sprinkling in areas prone to dust emission such as at soil excavation areas or stockpile of aggregates and under the elevated stations. Keep excavated soil and stockpiles moist. • Control vehicle movement maintaining the speed limit within the construction site to • Impose speed limit of no more than 30kph on construction vehicles particularly when passing communities, residential or commercial areas or sensitive areas such as hospitals, schools or religious institutions such as temples, mosques and churches. • Require contractor to wash wheels of vehicles before leaving the construction area particularly at the depot and	Complied	Mitigating measures are part of the design and planning considerations. Further compliance will be done when the civil works contractors are onboard.

	transition areas to avoid mud tracking on roads that cause dust emission later on. • Require materials delivery trucks to provide cover when transporting materials • Install board-ups or fence at the construction area not less than 2 meters high. • In case of accidental spill of materials during transport, the contractor will be required to immediately clean-up spilled materials. • Prohibit burning of waste materials in accordance to RA 9003. Unauthorized burning of construction materials and wastes shall be subject to penalties for the Contractor. • Ready mixed concrete produced and mixed outside the construction area shall be used to prevent and mitigate impacts on communities around the construction area.. • Designate at least 3-4 workers per construction area to clean the site after the completion of daily activities and arrange material piling in order to prevent dust diffusion. • For the elevated structures, provide nets and scaffoldings for falling debris from construction of elevated structures to avoid dust emission and hazards from falling debris. • Monitor air quality at identified nearby sensitive receptors regularly and evaluate effectiveness of the air pollution reduction measures provided.		
Operation of construction machinery, equipment and vehicles; Earthworks; Construction of structures and facilities Acoustic Noise Increase in ambient noise level	[Pre-Construction /Construction] • Position storage and other large equipment to function as noise barriers • Identify haul roads that minimizes noise impacts • Consider traffic re-routing • Maximize the use of existing structures like fences, walls, and other structures as noise barriers. • Select sites (i.e. construction yard, temporary facilities, access route) in consideration to sensitive receptors including ecologically significant areas (if any) likely to be affected. • Design and install absorbers along the alignment during construction especially in areas with sensitive facilities. • Design and adopt long rails and ballast-less track with elastic and absorbent sleeper support to minimize noise generation from train operation. • Provision of effective noise barriers on each side of the track. A continuous 1 m high concrete wall throughout alignment except 773m length in 3 sections all in Makati City i.e. from chainage 7+682 to 7+804, north bound; from chainage 8+171 to 7+715, north bound; and from chainage 13+093 to 13+288, south bound.. A composite noise protection wall with a vertical element of 3.0 m, and on top two elements of 0.25 m and slope of 45 degree is provided at these three locations. [Construction] • Sequence the construction operation: i) Schedule noisy activities at the same time since the combined noise levels may not be significantly higher that noise levels from individual equipment operation; ii) Install temporary noise	Complied	Mitigating measures are part of the design and planning considerations. Further compliance will be done when the civil works contractors are onboard.

	barriers in the early stages of project construction • Use of alternative construction methods: i) Do not use pile driving. Only vibration, hydraulic insertion, or auger drill techniques shall be applied; ii) use of electric compressors which is quieter than gasoline or diesel-fed compressors. • Contract Specifications to include: i) Construction noise criteria limits as follows: Lmax in sensitive areas (residences, institutions, and hotels) • Source Mitigation: i) use of less noisy equipment; ii) installation of mufflers on all internal combustion engines; iii) installation of noise shields to particular equipment; iv) dampeners through equipment modification; v) installation of aprons or curtains using absorptive mats; vi) enclosures; and vii) Equipment operating training • Consultations with affected community: Public involvement regarding noise impact and its mitigation is required under project during the noise assessment process and discuss the effectiveness of the mitigation measures. The need for coordination with the local officials to protect future development on areas identified to be exposed to elevated noises during construction and operation is an important input in the town and land use planning. The local government units can also assist in the dissemination of information to residents. • Implement construction activities in consideration to time, duration, and scale to optimize the use of construction equipment, machineries, and vehicles in accordance to the noise emission standard. • Minimise alteration of topography and removal of vegetation which generate noise. • Install noise control devices such as mufflers and noise suppressors to all construction equipment and machineries. Use of electric instead of diesel-powered equipment, hydraulic tools instead of pneumatic tools. • Conduct regular inspection and preventive maintenance of heavy equipment, machineries and service vehicles to meet the DENR Emission Standards. • Monitor noise levels at identified nearby sensitive receptors (residential, school, places of worship and hospital areas) including ecologically significant area/s (if any) likely to be affected by the operation and evaluate effectiveness of the noise reduction measures provided. • Install 3-m temporary mobile noise barrier made of wood or metal at active construction sites. This will reduce construction noise to Ldn 60 dB(A) during footing construction activities resulting to no residual impacts. The same wall can reduce impacts during in-situ piling from moderate to no impact except for the houses located along the RoW that may be exposed to moderate impacts • Use noise barriers and sound absorption materials with no less than 70% and 80% of sound absorption coefficient at 1,000 and 500 hertz, respectively. • Noise levels from equipment and machinery shall conform to the noise		

	standards and WB-IFC Environmental, Health and Safety Guidelines. • No construction shall be allowed between nighttime hours of 10 pm to 6am unless proper consultation has been conducted and agreement has been reached with the affected persons and local officials, and all adverse environmental impacts are mitigated to acceptable levels. In case of activities that will cause noise exceeding the acceptable level, permission from DOTr-PMO and concerned LGU must be secured and advance notice to the public will be issued at least 24 hours before the start of construction activities. • Workers will be required to wear appropriate PPE including ear plugs or ear muffs in areas generating excessive noise. • Require drivers of construction vehicles to minimize blowing of horn and limit speed when passing through residential areas. • In case of complaints, the DOTr-PMO and contractor will continuously operate GRM to urgently respond to the complaint and resolve the problem.		
Conduct of geotechnical investigation; Operation of construction machinery, equipment and vehicles; Pile driving for piers Ground vibration Increase in ambient vibration level and threat to the health and safety of sensitive receptors	[Pre-Construction / Construction] • Select sites in consideration to sensitive receptors including ecologically significant areas (if any) likely to be affected. • Conduct building condition survey of old PNR structures and buildings adjacent to the alignment to provide proper protection provision measures and continuous monitoring from the impact of vibration. • Prepare and submit work plan for building and structures of historic concerns and obtain approval from Cultural Agencies. [Construction] • Implement construction activities in consideration of time, duration, and scale of construction to optimize the use of construction equipment, machineries, and vehicles with minimal vibration generation. • Select construction equipment and machineries matching the scale of the construction and with minimal vibration generation, if possible. • Provide training on vibration mitigation and provide appropriate PPE to construction workers. • Monitor vibration levels including identified nearby sensitive receptors, old PNR structures including ecologically significant area/s (if any) likely to be affected by the operation and evaluate effectiveness of the vibration reduction measures provided. • Coordinate with sensitive receptors prior to pile driving. • Strictly control construction activities close to historical/ archaeological sites. • If construction activities will cause continuous vibration, especially foundation excavation, it is necessary to reduce energy at each excavation. • Require vehicles transporting construction materials and equipment to follow traffic rules strictly and limit speed not to exceed 30 kph and the load shall not exceed 25 tonnes if passing	Complied	Mitigating measures are part of the design and planning considerations. Further compliance will be done when the civil works contractors are onboard.

	communities or commercial or sensitive areas (e.g. health premises, schools, educational institutions or religious institutions such as temples, mosques and churches). • In case of vibration due to construction activities, the construction works will be carried out only in daytime from 8am to 6pm unless proper consultation has been conducted and agreement has been reached with the affected persons and local officials, and all adverse environmental impacts are mitigated to acceptable levels to minimize disturbance to people.		
Land acquisition for ROW and involuntary Resettlement for Project Affected Families (PAFs) Informal Settler Families (ISFs); Vulnerable persons (Women-headed households, elderly, persons with disabilities and the poor) • Displacement of ISFs • Disturbance of livelihood • Loss of income	[Pre-Construction] • Design train system maximising the existing PNR ROW and minimising additional land acquisition. • Prepare and implement Resettlement Action Plan (RAP) to ensure that PAFs are provided with proper relocation area and/or justly compensated. The RAP will include the following: - Provision of relocation sites for ISFs. - Livelihood and income restoration for head-of-household PAPs of ISFs and vulnerable persons. - Prior to displacement, secure and/or develop relocation sites in coordination with the concerned LGUs, Key Shelter Agencies, and other concerned stakeholders with conducive living condition and basic utilities, services and amenities. [Pre-Construction/ Construction] • Conduct external and internal monitoring to ensure that displacement activities are conducted in compliance to the RAP. • If PAFs raise an issue, ensure prompt response and resolution per established Grievance Redress Mechanism (GRM).	Complied	Mitigating measures are part of the design and planning considerations. Finalization of the detailed RAP is ongoing.
Land acquisition for ROW and involuntary Resettlement for Project Affected Families (PAFs) Legal PAFs • Displacement/ Disturbance of • Properties • Change/Conflict in Land Ownership • Impact on Livelihood and Income (i.e. farming, business)	[Pre-Construction] • Prepare and implement Resettlement Action Plan (RAP) to ensure that PAFs are justly compensated for the loss of income by the project. • Payment of compensation prior to displacement. • Coordination with the LGUs, land owners and other concerned stakeholders in acquiring the land and/or securing ROW. [Pre-Construction/ Construction] • Prepare and implement livelihood and income restoration for PAF's whose present means of livelihood is no longer viable and will have to engage in new income activity. • Prepare and implement Social Development Plan (SDP) including livelihood training for business owners, vendors, employers and agricultural landowners affected by project. • Involve external and internal monitoring agencies to ensure that displacement activities are conducted in compliance to the RAP. • If PAFs raise an issue, ensure prompt response and resolution per established GRM	Complied	Finalization of the detailed RAP is ongoing.
Land acquisition for ROW and			

involuntary Resettlement for Project Affected Families (PAFs) Existing social infrastructure and services Loss of outdoor spaces	[Pre-Construction/ Construction] • Coordinate with the respective LGUs and PNR regarding the possible measures for the transfer/ provision or relocation of public recreational facilities.	Complied	Mitigating measures are part of the design and planning considerations of the SDPs and the RAP.
Land acquisition for ROW and involuntary Resettlement for Project Affected Families (PAFs) Existing social infrastructure and services Disturbance to utilities	[Pre-Construction] • Prepare and implement utility relocation plan in coordination with utility companies such as water, electricity, telephone line, gas and oil, etc. • Prepare and implement protection plan during relocation activities	Complied	Implementation of mitigating measures is ongoing.
Employment and Livelihood Gender and children Generation of Livelihood Opportunities and improvement of safety	[Pre-Construction/ Construction] • Prepare and implement RAP to ensure that gender equality and needs of vulnerable groups are well addressed • Design and install train system in consideration of the following - Strategic placement of security and lighting within the vicinity of the stations; - Adopt universal design • Employ workers in consideration of gender equality • Include gender sensitive livelihood and skills training program in the SDP with due consideration to vulnerable groups	Complied	Mitigating measures are part of the design and planning considerations of the SDPs and the RAP.
Employment and Livelihood Local Economy Generation of Local Employment	[Pre-Construction / Construction] • Close coordination with the host LGUs (barangay level) regarding the hiring of temporary workers to ensure that the workers being considered are legitimate residents of the area. Those affected by the Project will be prioritized for employment.	Complied	Mitigating measures are part of the design and planning considerations. Further compliance will be done when the civil works contractors are onboard.
Clearing of the proposed project area; Resettlement In-migration In-migration to the project area	[Pre-Construction / Construction] • Plan and implement construction schedule to shorten time between the pre-construction and construction as much as possible. • Install fencing and guarding of the proposed project to restrict the public from entering the ROW	Complied	Mitigating measures are part of the design and planning considerations. Further compliance will be done when the civil works contractors are onboard.
In-migration to new relocation site Basic Services/ Resources • Increased demand on public infrastructure • Degradation on livelihood	[Pre-Construction / Construction] • Prepare and implement RAP in consideration of relocation site to sufficiently cover the expected demand of basic services, resource and social programs at relocation sites in coordination with LGUs. • Prepare and implement SDP in coordination with the host LGUs to align projects or programs to their development plans.	Complied	Mitigating measures are part of the design and planning considerations of the SDPs and the RAP.
Encroachment of the proposed Project to historical sites, tourist spots, etc.; Excavation activities; Construction of the proposed project Historical Sites, artefacts and archaeological remains Impacts on Cultural/ Historical resources	[Pre-Construction] • Conduct literature review and site validation of the potential historic structures in coordination with PNR and Cultural Agencies (NCCA, National Museum and NHCP); • Perform measured survey of the identified historic structures including its foundation and building condition. • Coordinate closely with the Cultural Agencies, concerned LGUs and PNR for verifying the qualification of those structures and provide necessary protection measures. • Prepare a protection plan for those identified PNR structures which will be	Complied	Mitigating measures are part of the design and planning considerations. Further compliance will be done when the civil works contractors are onboard.

	maintained in accordance to the agreed procedure. [Construction] • Implement the approved protection plan • Close coordination with the National Museum on the appropriate course of action in case of any archaeological finds.		
Generation of solid waste, excavated soil and hazardous material Basic Services/ Resources Increased demand on waste disposal	[Pre-Construction / Construction] • Identification of final disposal site for solid waste, excavated soil, hazardous waste at each LGUs. • Conduct regular monitoring of disposal status in compliance to RA 9003 and RA 6969.	Complied	Mitigating measures are part of the planning considerations. Detailed Waste Management Plan (WMP) is part of the CEMMP. Further Compliance will be done when the civil works contractors are onboard.
Generation of potential air and water pollutants due to: Heavy lifting and movement of heavy equipment Construction of the proposed project Public Health and Safety Degradation of public health Increase in accident involving local communities	[Pre-Construction / Construction] Formulation and implementation of IEC Plan to inform the affected LGU and local communities and the general public about 1) the project, project activities, duration, possible project impacts and incorporate their comments and inputs in the design; 2) the potential impact of project activities to air quality, noise, vibration, and climate change, and corresponding health and safety mitigation measures; and 3) the Grievance Redress Mechanism to handle complaint/s if any. Plan for construction sites/facilities/yard and access route in consideration to health and safety of local communities. Plan and implement SDP including health and safety of local community [Construction] Provide safety officers to monitor the health and safety of the local community. If any complains rises, immediately identify the causes and evaluate built-in measures. Install fencing of the construction site, provision of signage and posters, and guarding of the access point to ensure that the area is not accessible to the public. Implement Emergency Response Plan and Health and Safety Management Plan.	Complied	Mitigating measures are part of the design and planning considerations. Further compliance will be done when the civil works contractors are onboard.
Generation of potential air and water pollutants due to: Heavy lifting and movement of heavy equipment Construction of the proposed project Occupational Health and Safety Increase risk of accidents at construction sites; Spread of infectious disease among workers	[Pre-Construction/ Construction] Prepare and implement Occupational and Community Health and Safety Plan and Emergency Response Plan based on the WB-IFC EHS Guidelines. Include medical certificate in the requirements for hiring of workers to ensure that they are fit to work. Ensure that they are provided with proper training on construction, occupational health and safety, and emergency response procedure. Provide safe and clean water for drinking, appropriate sanitary facilities such as portable toilets and waste bins. Plan construction details such as storage of equipment and machinery and access route of heavy vehicle considering health and safety of workers. Provide appropriate personal protective equipment (PPE) to all construction workers, particularly to the personnel working on heights, heavy and electrical equipment.	Complied	Mitigating measures are part of the design and planning considerations. Further compliance will be done when the civil works contractors are onboard.

	Establish Health and Safety Desk or Medical Station at the active construction sites to monitor and safeguard the health of the workers and local residents and to provide immediate response during unexpected incidents/emergencies. Provide fire-fighting equipment at work areas and construction camps. Close coordination with the nearest hospitals in the active construction site for immediate transfer and/or further evaluation and medical management of the patient. Require the contractor to appoint an environment, health and safety officer to supervise the implementation of environmental mitigation measures and to ensure that health and safety measures are strictly implemented at the construction site and immediate vicinity. Provide adequate drainage in construction camps to prevent water logging and formation of breeding sites for mosquitoes. Provide potable water, hygienic sanitation facilities/toilets with sufficient water supply. Ensure that all wastewater emanating from construction camps are treated and complies with the effluent standards. Provide fence on all areas of excavation to avoid accidents. Implement fall prevention and protection measures such as scaffoldings, wearing of safety belts by workers, etc. when working in high areas. Provide sufficient lighting in tunnel areas and underground station excavation sites. Provide emergency lighting system in case of power shutdown. Ensure that sufficient fresh air is supplied at confined work spaces at the tunnel and underground station excavation sites. Ensure that air filters are kept clean. Confined spaces such as tunnels shall be provided with safety measures such as venting, monitoring, and emergency rescue procedures. Conduct orientation for construction workers regarding health and safety measures, emergency response in case of accidents, fire, etc. and prevention of HIV/AIDS, STIs and other diseases.		
Blocking of existing access roads Public Access • Impact on Public Access • Impact to School Access • Increase in accidents	[Pre-Construction/ Construction] • Based on the study on public access at affected barangay, maintain the existing public access as much as possible. • In case of any temporary closure during construction, minimise the impact to the daily life of affected communities such as access to school infrastructure in coordination with the DepEd and host LGUs for the schedule of construction activities. • In case of permanent loss of public access, RAP will be applied. • Disseminate information to the public, barangay, and LGUs on the potential impact to the existing public access and mitigation measure through the project activities. • Provision of diversion route with appropriate health and safety measures. In case of any changes, prompt update on the diverted routes to the concerned communities and LGUs,	Complied	Mitigating measures are part of the design and planning considerations. Further compliance will be done when the civil works contractors are onboard.

	• Assignment of traffic guide to provide assistance to the road users.		
Movement of construction equipment; Delivery of construction materials; Additional commuters due to construction workforce; Blocking of access roads Traffic Management Traffic Congestion	[Pre-Construction/ Construction] • Conduct Traffic Impact Assessment (TIA) and based on the results of TIA, prepare and implement Traffic Management Plan (TMP), coordinate to the concerned LGUs and transport operator/s and get their inputs and approval. • Schedule transport of heavy structures during period when there are fewer vehicles on the road and posting of appropriate traffic signage and warnings. • Disseminate information to the general public, host barangays, and LGUs on the potential impact of the project to the existing access and provide mitigating measures.	Complied	Initial TIA can be accessed here: https://drive.google.com/open?id=1aiT6w9CXgrA5Kgu_c5R9Vspb0DqyN1OJ TIA will be updated to reflect changes in the detailed design of the Project. The Traffic Management Plans (TMP) will be based from the TIA and will be developed by the Civil Works Contractors. The TMPs shall be transmitted to and coordinated with all concerned offices before implementation.
Operation and maintenance of the Project ECA Incompatibility with the area that will be hit hard by natural calamities.	[Operations] • Coordinate with PAGASA / PHIVOLCS and adjustment of train schedules. • Implement proper inspection and prompt maintenance of drainage systems.	Not Complied	Project is currently in Pre-Construction Phase
Presence of the proposed project structures (railway, passenger facilities, depot etc.) Visual aesthetics Impairment of visual aesthetic	[Operations] • Maintain tree planting to minimise the visual impact by the project and harmonise to the surrounding environments in open areas within the ROW, depot and around the stations, to create green corridor.	Not Complied	Project is currently in Pre-Construction Phase
Generation of domestic and hazardous wastes including accidental oil and lubricant spills from passenger facilities (station), depot Land value Degradation of land value and soil quality due to improper handling of domestic and hazardous wastes	[Operations] • Conduct proper inspection and prompt maintenance of machines and equipment, and facilities. • Strictly implement solid waste management plan in accordance to RA 9003, and treatment of hazardous chemicals and contaminated soil in accordance with RA 6969. • Conduct of soil quality monitoring when necessary.	Not Complied	Project is currently in Pre-Construction Phase
Occurrence of landslides, volcanic hazards, ground shaking and liquefaction; Likely seismic events around the alignment Subsidence, Liquefaction, Landslide, Mud/Debris Flow, etc. • Damage to tracks • Risk to the life of passengers and workers • Damage to passenger facilities.	[Operations] • Conduct inspection in the event of natural hazard occurrence to assess damage of structures. • Regular coordination with the PHIVOLCS for earthquake and volcanic events to adjust the train schedule as necessary. • Conduct earthquake drills for train users are also advised. • Conduct proper inspection and prompt maintenance checks to every single installed structure and facility and improve/ enhance capacity when possible. • Upgrades or install new technological advances when available are also encouraged for the continued operation of Project.	Not Complied	Project is currently in Pre-Construction Phase
Operation of the proposed project and passenger facility, depot, service vehicle; Passenger movement Terrestrial Ecology • Threat to Existence and/or Loss of Important Local Species • Hindrance to Wildlife Access	[Operations] • Minimise noise, vibration, illumination, and vehicular movement in significant fauna area. • Continuous planting of replacement trees, if needed. • Conduct monitoring on survival of	Not Complied	Project is currently in Pre-Construction Phase

	replanted trees and replant, if necessary. • Implement vegetation management plan considering significant fauna (local bird species) to minimise the use of herbicide and machinery as much as possible.		
Operation of passenger trains/facilities, depot; Discharge of waste water from passenger facilities, depot; Accidental spills of fuels and lubricants from service vehicles and machineries at depot; Generation and improper handling and disposal of domestic and hazardous wastes Hydrology Increase of flood intensity/occurrence	[Operations] • Conduct proper inspection and prompt maintenance of the installed drainage system, and improve/ enhance capacity when possible.	Not Complied	Project is currently in Pre-Construction Phase
Operation of passenger trains/facilities, depot; Discharge of waste water from passenger facilities, depot; Accidental spills of fuels and lubricants from service vehicles and machineries at depot; Generation and improper handling and disposal of domestic and hazardous wastes Water Quality • Degradation of ground water quality Freshwater Ecology • Degradation of surface water quality • Threat to abundance, frequency and distribution of species	[Operations] • Comply with environmental permitting requirements for the storage, transport, handling, and treatment and disposal of hazardous material/ wastes and contaminated soil in accordance with RA 6969. • Compliance to RA 9275 including but not limited to securing of discharge permit. • Hygienic toilets will be provided at all stations and facilities. • Wastewater will be treated by a wastewater treatment system at each station before release of effluent into public waterways. • Recycle train washing to reduce volume of wastewater to be discharged daily. • Conduct proper inspection and prompt maintenance of the installed wastewater treatment facilities &drainage system and treatment facility. • Monitor effluent of the wastewater treatment system to ensure compliance with the effluent standards.	Not Complied	Project is currently in Pre-Construction Phase
Climate Change Meteorology/ Climatology • Restrictions/ disruption of railway operation due to soil erosion/ landslides/ flooding. • Slower drainage, soil erosion, disruption in construction by increased rainfall • Overheating of construction equipment and vehicles and track buckling and signaling problems	[Operations] • Regular inspection and preventive maintenance of railway structures and facilities to ensure optimum working condition; • When necessary, install improvement of railway system to make it more resilient to temperature and rainfall increase; • Planting of vegetation as much as possible in open areas at the depot, around the stations and along the railway track; • Implementation of an Emergency Response Plan.	Not Complied	Project is currently in Pre-Construction Phase
Operation of trains, depot, passenger facilities (stations), service vehicles, etc. Meteorology/ Climatology Reduction of Greenhouse Gases	[Operations] • Provide incentives and information dissemination activities to encourage commuters to use rail transit and its benefits over other modes of transport (Modal Shift). • Plant and manage vegetation as much as possible to open areas at the depot, around the stations and along the railway track. • Conduct energy/water conservation program such as use energy efficient products (i.e. LED lights) and monitor carbon footprint monitoring. • Conduct regular inspection and proper maintenance of railway systems and	Not Complied	Project is currently in Pre-Construction Phase

	facilities, and equipment and machinery.		
Operation of trains, depot, passenger facilities (stations), service vehicles, etc. Air Quality • Degradation of air quality in the vicinity of the station and in the depot area • Increase in vehicle exhaust emission and entrained dust due to increased movement of people	[Operations] • Select appropriate operation and maintenance equipment that are fuel efficient to reduce emission. • Conduct regular inspection and maintenance of heavy equipment, machineries, service vehicles and facilities such as generator etc. to meet the DENR Emission Standards. • Regular cleaning and clearing of road from spoils and debris and wetting of ground in the periphery of the depot when necessary. • Comply with environmental permitting requirements for the storage, transport, handling, and treatment of hazardous material/ wastes and contaminated soil in accordance with RA 6969 at depot area, and provide appropriate PPE for the concerned personnel. • Control service vehicle movement by maintaining the speed limit to • Monitor air quality at the identified sampling stations	Not Complied	Project is currently in Pre-Construction Phase
Operation of trains, depot, passenger facilities (stations), service vehicles, etc. Acoustic Noise Reduction of noise due to decrease in traffic volumes	[Operations] • Provide incentives and conduct information dissemination activities to encourage commuters to use rail transit over other modes of transport.	Not Complied	Project is currently in Pre-Construction Phase
Operation of trains, depot, passenger facilities (stations), service vehicles, etc. Acoustic Noise Increase in ambient noise level	[Operations] • Optimize the number of train operation at night time to reduce generated noise. • Provision of effective height of noise barriers on each side of the track especially on areas with sensitive receptors such as school, hospital, residential area, including but not necessarily limited to: provide continuous 1 m high concrete wall throughout alignment except 773m length in 3 sections all in Makati City i.e. from chainage 7+682 to 7+804, north bound; from chainage 8+171 to 7+715, north bound; and from chainage 13+093 to 13+288, south bound. A composite noise protection wall with a vertical element of 3.0 m, and on top two elements of 0.25 m and slope of 45 degree is provided at these three locations. • Provision of noise control device such as muffler to all stationary sources (i.e. generator set). • Install traffic signs in the areas before and after passing all stations, e.g. directional signs, speed limit signs, no blowing of horn signs, etc. • Inspect the strength and efficiency of sound absorbing materials installed at the routes or areas under the stations at least once a month. Change the material in case these are damaged or their efficiency has decreased by more than 40%. • Regular inspection and proper maintenance of trains and tracks to ensure its optimal operation and functionality. • Monitor noise levels including identified nearby sensitive receptors such as ecologically significant area/s (if any) likely to be affected by the operation and evaluate effectiveness of the noise reduction measures provided.	Not Complied	Project is currently in Pre-Construction Phase

Operation of trains, depot, passenger facilities (stations), service vehicles, etc. Ground Vibration Increase in ground vibration level	[Operations] • Undertake regular inspection, proper maintenance and reconditioning of trains and tracks such as rail grinding, slip-slide detectors and maintenance or replacement of suspension system, brakes and wheels • Monitor vibration levels including identified nearby sensitive receptors, old PNR structures, historical heritages such as ecologically significant area/s (if any) likely to be affected by the operation and evaluate effectiveness of the vibration reduction measures provided. Monitor actions on complaints, if any, and attend to unresolved cases based on Grievance Redress Mechanism. • The strength and efficiency of rail pads at the train stations or hubs must be inspected at least once or twice a month. In case of damage or decrease in efficiency of the pads by more than 40%, these should be replaced.	Not Complied	Project is currently in Pre-Construction Phase
Hiring of workers Local Economy • Generation of Local Benefits • Business opportunities	[Operations] • Coordinate closely with the host LGUs, specifically at the barangay level regarding the hiring of regular workers to ensure that the workers being considered are legitimate residents in the area in consideration to gender equality.	Not Complied	Project is currently in Pre-Construction Phase
Operation of train In Migration Influx of ISFs	[Operations] • Install fencing and provide guards to prevent the settlement of ISFs along the ROW	Not Complied	Project is currently in Pre-Construction Phase
Operation of train Physical/ Cultural resource Conservation of old PNR structure and parks	[Operations] • Continuous conservation activities of old PNR structures in coordination with PNR and LGUs	Not Complied	Project is currently in Pre-Construction Phase
Operation of train and station; Maintenance work at Depot Public Health and Safety Increase risk of accidents	[Operations] • Provide security guards in all stations to direct passengers on the safe zone.	Not Complied	Project is currently in Pre-Construction Phase
Operation of train and station; Maintenance work at Depot Occupational Health and Safety Increase risk of accidents and infectious disease of employee	[Operations] • Implement the Occupational Health and Safety Management Plan. • Provide appropriate PPE to all personnel undertaking maintenance work. • Implement the Emergency Response Plan • Provide sanitary facilities or utilities in all stations and depot.	Not Complied	Project is currently in Pre-Construction Phase
Public Involvement Public Consultation Immediate response to address adverse impacts during train operation	[Operations] • Regular consultations with affected people and relevant offices/agencies will be conducted by the DOTr during operation phase to ensure adequate and timely mitigation of project adverse environmental impacts.	Not Complied	Project is currently in Pre-Construction Phase
Train Operation Traffic Conditions Traffic congestion may occur in the areas adjacent to the proposed stations due to pick-up and drop off of passengers by transport vehicles	[Operations] • Establish a traffic management committee, which compose of the Traffic Management of LGUs, Planning Office, PNR, DPWH, and DOTr to plan and implement TOD in consideration to the loading and unloading area and the circulation of the traffic as well as the integration of transport facility within the	Not Complied	Project is currently in Pre-Construction Phase

	station.		

IV. Status of Compliance to Annex B of ECC

Condition/Requirement	Description	Status of Compliance	Remarks
Other Sectoral Requirements Mandated by Other Agencies to be Complied with	Strict compliance with the Revised National Structural Code of the Philippines	Complied	The Project is currently in the detailed design stage. Designs and plans comply with the requirement. Further compliance will be done when the civil works contractors are onboard.
	Compliance with the Sanitation Code of the Philippines	Complied	The Project is currently in the detailed design stage. Designs and plans comply with the requirement. Further compliance will be done when the civil works contractors are onboard.
	Compliance with the Labor Code of the Philippines	Complied	The requirement has been included in the Project's contracts. Compliance will be ensured and further monitored when the civil works contractors are onboard.
	Compliance with the Building Code of the Philippines	Complied	The Project is currently in the detailed design stage. Designs and plans comply with the requirement. Further compliance will be done when the civil works contractors are onboard.
	Ensure compliance with the Ecological Solid Waste Management Act	Complied	Compliance will be done when the civil works contractors are on board. Detailed Waste Management Plan (WMP) is part of the CEMMP.
Environmental Planning Recommendations for the Proponent	Priority of employment shall be given to qualified local residents. Opportunities for qualified PWDs, women, senior citizens, where possible, shall be considered. Adequate public information for jobs available to local residents in the affected areas will be provided.	Complied	The requirement has been also included in the Project's contracts. Compliance will be ensured and further monitored when the contractors are onboard. Requirement is also one of the considerations for the Social Development Programs.

V. Status of Compliance to Socia Development Plan (SDP)

Condition/Requirement	Description	Status of Compliance	Remarks
Social Development Plan	Implement a comprehensive Social Development Plan (SDP) and submit a separate report together with the CMR to the EMB-CO using CMR Online on a semi-annual basis pursuant to EMB MC 2016-01.	Not Complied	Sit-down workshop meetings with LGUs will be conducted in order to plan the appropriate SDPs to be implemented. Workshops for at least 3 LGUs is targeted to be conducted for the later half of the year. Attached is the general considerations for the SDP to be implemented and can also be accessed here: https://drive.google.com/open?id=1Sd305I3A-ckHKxqyBa7oOluJqFyzjc4r

VI. Status of Compliance to Information Education Communication (IEC)

Condition/Requirement	Description	Status of Compliance	Remarks
Information, Education and Communication Program	Conduct an effective and continuing Information, Education, and Communication (IEC) Program through the use of most effective media to inform	Complied	Stakeholders Consultation Meetings (SCMs) with Project-Affected Persons to update them on the progress of the project is continuously being conducted.

	and educate all stakeholders, especially the contractors, workers, LGUs, businesses and local residents about the following: a. Project impacts and mitigating measures embodied in its EIS; b. Conditions stipulated in this Certificate; c. Environmental and human safety features of the project; and, d. Health consciousness alerts for any project-induced discomfort (from dust, smell, noise, vibration) as the project progresses throughout the whole route.		Attached are the documentation from the SCMs conducted from January 2020-June 2020. https://drive.google.com/file/d/1SfduEVEkPjRboyN2dCwveZ7GEYecDsU-/view?usp=sharing The Asian Development Bank has provided a Public Relations (PR) Firm for the Project through its Technical Assistance Program. The PR Firm has onboarded on June 2020 and is currently working on the PR and IEC requirements of the Project, among others.

VII. Status of Compliance to Contingency/Emergency Response Plan or Equivalent Risk Management Plan.

Condition/Requirement	Description	Status of Compliance	Remarks
Emergency Response Program	The proponent will adopt an active program of pursuing a healthy, safe, and environment-friendly operation. DOTr/Operator guidelines on health and safety will be made clear to contractors and all employees during construction and operations. An orientation briefing for contractors and training for employees will be implemented.	Complied	The ERP excerpt from the EIS can be accessed here: https://drive.google.com/open?id=1VtWSmncLSpKingdsMNxHc6-wO1Pzji3i

B. Impact Monitoring

I. Summary of Previous Monitoring

Findings/Issues	Recommendations	Action Plan
No construction works have been done in the previous reporting period.	N/A	N/A

II. Current Monitoring and Findings

Table 2. Summary Status of Environmental Impact Management and Monitoring Plan Implementation

A. Ambient Water Quality Monitoring

B. Effluent Water Quality Monitoring

Overall Remarks on Water Quality Monitoring

N/A Construction of Project has not begun since contracts for civil works packages have not been awarded yet.

C. Ambient Air Quality Monitoring

D. Effluent Air Quality Monitoring

Overall Remarks on Air Quality Monitoring

N/A Construction of Project has not begun since contracts for civil works packages have not been awarded yet.

E. Noise Level Monitoring

Overall Remarks on Noise Level Monitoring

N/A Construction of Project has not begun since contracts for civil works packages have not been awarded yet.

Table 3. Report on Status of Environmental Budget Allocations and Expenses

Expense Item	Budget		Actual Expenses	
	Direct from Co.	Budget for MMT	Direct Co. Expense	MMT Expense
A. Implementation of Management Plans &Programs				
1. Environmental Impact Mitigation Plan - to be updated once finalized	1.00	0.00	0.00	0.00
2. Social Development Plan - to be updated once finalized	1.00	0.00	0.00	0.00
3. IEC Plan - to be updated once finalized, budget based from estimates in the EIS	22300400.00	0.00	0.00	0.00
4. Enhancement Program (if any) - to be updated once finalized	1.00	0.00	0.00	0.00
B. Implementation of Monitoring Plans				
1. Self-Monitoring - to be updated, part of General Consultant expenses	1.00	0.00	0.00	0.00
2. Environmental Monitoring Fund (TPA Budget) - to be updated once finalized/secured	2000000.00	2000000.00	0.00	0.00
3. Environmental Guarantee Fund (Trust Fund) - to be updated, part of Contractors' expenses, budget based from estimates in the EIS	5000000.00	0.00	0.00	0.00
4. Environmental Guarantee Fund (Cash Fund) - to be updated, part of Contractors' expenses, budget based from estimates in the EIS	3000000.00	0.00	0.00	0.00
TOTAL	**32300404.00**	**2000000.00**	**0.00**	**0.00**

IV. Conclusions and Recommendations

A. Compliance Status

Once the EISR has been finalized, the Proponent will provide the updated report to EMB-CO for review and evaluation.

Construction has not begun for the project. For this reason, no monitoring activities have taken place and Self-Monitoring Report is not available during this reporting period. The Proponent is currently working on complying with ECC conditions and EMP commitments relevant to pre-construction.

Documents relevant to this submission can be accessed here:
https://drive.google.com/drive/folders/1s1BsEjsy0KCuNCw6rMoH0anMKgMtka9n?usp=sharing

B. Environmental Quality Status (applicable only if EQPLs have been set by the Proponent as its commitment or if opted to be mutually agreed upon by Proponent with the EMB and other members of the MMT)

Evaluation of the Environmental Quality Status (EQS) is ongoing. Modifications in the EQS, if any, will be transmitted to EMB-CO for review and approval.

C. Environmental Management Plan Status

Construction has not begun for the project. The Proponent is updating the EIS, and EMP appropriate to the changes made in the Project Detailed Design.

D. Environmental Risk Categorization

The Project’s Environmental Monitoring and Audit Prioritization Scheme are attached in the next section.

E. Work Plan for Next Monitoring Period

The following will be worked on/conducted in the next monitoring period:

1. Submission of the revised or modified EIS, EMP, and EMoP, reflecting the changes in the Project design once finalized. Coordination with EMB-CO and other agencies to relay any updates and modifications of the coverage and components of the Project.

2. Provision of copies of the Project’s ECC, EMP, and EMoP to civil works contractors after onboarding, and orient them regarding the required compliances.

3. Continue operations of the GRM.

4. Engagement of TPA, and establishment of EMF.

5. Establishment of EGF as part of civil works contractor's scope.

6. Accreditation of Pollution Control Officers as part of the Environmental Unit (EU).

7. Continuously work on the compliance with the ECC.

8. Work on detailed environmental budget allocations.

V. Attachments

1. PEMAPS
2. Sworn Accountability Statement (for the submitted CMR)

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PROJECT ENVIRONMENTAL MONITORING AND AUDIT PRIORITIZATION SCHEME

Project Name	:	**NORTH-SOUTH COMMUTER RAILWAY CALAMBA EXTENSION PROJECT**
Project Location	:	Traversing ten (10) local government units, namely the cities of Manila, Makati, Taguig Parañaque and Muntinlupa in the National Capital Region (NCR); and San Pedro, Biñan, Sta. Rosa, Cabuyao and Calamba in the Province of Laguna
Proponent	:	**REPUBLIC OF THE PHILIPPINES DEPARTMENT OF TRANSPORTATION**
Tel. No./Fax No.	:	(02) 8790-8300 local 301
E-mail Address	:	nscr.envi@dotr.gov.ph/ nscr@dotr.gov.ph
Project Type	:	Railway Infrastructure Project
Project Status	:	Pre-Construction/ Detailed Engineering Design Stage, Procurement Stage

I. PROJECT CONSIDERATIONS

1.1. Size and Type

1.1.1. Size based on number of employees
Specify number of employees: 1,400

1.1.2. Type

ECP (in either ECA or Non-ECA)	✓
Non-ECP but in ECA	
Non-ECP and Non-ECA	

1.2. Waste Generation and Management

1.2.1. Enumerate Waste Type and Specify Quantity of Wastes generated in your facility.

Category	Waste	Type		Quantity
		Hazardous	Non-Hazardous	
Air	Dust (TSP, PM10, PM2.5)		N/A	Pre-Construction/ Detailed Engineering Design Stage, Procurement Stage
	SO_x		N/A	Pre-Construction/ Detailed Engineering Design Stage, Procurement Stage
	NO_x		N/A	Pre-Construction/ Detailed Engineering Design Stage, Procurement Stage
	CO		N/A	Pre-Construction/ Detailed Engineering Design Stage, Procurement Stage
Liquid	Wastewater		N/A	Pre-Construction/ Detailed Engineering Design Stage, Procurement Stage
Solid	Garbage		N/A	Pre-Construction/ Detailed Engineering Design Stage, Procurement Stage
	Overburden		N/A	Pre-Construction/ Detailed Engineering Design Stage, Procurement Stage
	Equipment parts		N/A	Pre-Construction/ Detailed Engineering Design Stage, Procurement Stage
Hazardous	busted light bulbs	N/A		Pre-Construction/ Detailed Engineering Design Stage,

				Procurement Stage
	used oils and sludge	N/A		Pre-Construction/ Detailed Engineering Design Stage, Procurement Stage

1.3. Pollution Control System (PCS)

1.3.1. Enumerate PCS or Waste Management Method Used in your facility.

Category	PCS/ Waste Management Method Used	Remarks
Air	N/A	Pre-Construction/ Detailed Engineering Design Stage, Procurement Stage
	N/A	Pre-Construction/ Detailed Engineering Design Stage, Procurement Stage
Liquid	N/A	Pre-Construction/ Detailed Engineering Design Stage, Procurement Stage
Solid	N/A	Pre-Construction/ Detailed Engineering Design Stage, Procurement Stage
	N/A	Pre-Construction/ Detailed Engineering Design Stage, Procurement Stage
Hazardous	N/A	Pre-Construction/ Detailed Engineering Design Stage, Procurement Stage

II. PATHWAYS

2.1. Prevailing wind towards barrio or city? Yes _____ No ✓

2.2. Rainfall (impacts surface & groundwater pathways)

2.2.1. Average annual net rainfall (1981-2010, PAGASA) 1,767.8 mm
2.2.2. Maximum 24-hour rainfall (PAGASA) 472.4 mm

2.3. Terrain (select one and mark) Flat ✓ Steep _____

2.4. Is the facility located in a flood-prone area? Yes ✓ No _____

2.5. Ground Water (Depth of groundwater table in meter) (select on and mark)

0 to less than 3 _____
3 to 10 ✓
Greater than 10 _____

III. RECEIVING MEDIA/RECEPTORS

3.1. Air (Distance to nearest community in km) (select on and mark)

0 to less than 0.5 ✓
0.5 to 1 _____
Greater than 1 _____

3.2. Receiving Surface Water Body

3.2.1. Distance to receiving surface water in km (select on and mark)

0 to less than 0.5	✓
0.5 to 1	
Greater than 1	

3.2.2. Size of population using receiving surface water (specify number) N/A, Pre-Construction/ Detailed Engineering Design Stage, Procurement Stage

3.2.3. Fresh Water

2.3.1. Classification of fresh water (select one and mark)

AA	
A	
B	
C	✓
D	

2.3.2. Size of freshwater body 911–949 km²

2.3.3. Economic value of water use

Drinking	
Domestic	✓
Recreational	
Fishery	
Industrial	
Agricultural	✓

3.2.4. Saltwater **N/A**

3.2.4.1. Classification of saltwater

SA	
SB	
SC	
SD	

3.2.4.2. Economic Value of Water use

Fishery	
Tourist zone or park	
Recreational	
Industrial	

3.3. Ground Water

3.3.1. Distance to the nearest recharge area

0 to less than 0.5	
0.5 to 1	
Greater than 1	✓

3.3.2. Distance to the nearest well used

0 to less than 0.5	✓
0.5 to 1	
Greater than 1	

3.3.3. Groundwater use within the nearest well

Domestic	✓
Industrial	
Agricultural	

3.4. Land

3.4.1. Indicate current/actual uses within 0.5 km radius

Residential	✓
Commercial/Institutional	✓
Industrial	✓
Agricultural/Recreational	✓
Protected Area	

3.4.2. Potential/proposed land uses within 0.5 km

Residential	✓
Commercial/Institutional	✓
Industrial	✓
Agricultural/Recreational	✓
Protected Area	

3.4.3. Number of affected Environmentally Critical Areas within 1 km:

Specify Number	10 Cities

3.4.4. Distance to nearest ECA (in km)

0 to less than 0.5	✓
0.5 to 1	
Greater than 1	

IV. ENVIRONMENTAL PERFORMANCE (for existing projects for expansion)

4.1. Compliance

Law	Violation	Type (please specify number of times committed)				Type of Admin Violation	Additional Remarks/ Status of Compliance
		STANDARD					
		Emission/ Effluent/ Discharge	Ambient	Human Impact	Admin/ ECC		
RA 8749	N/A						Pre-Construction/ Detailed Engineering Design Stage, Procurement Stage
RA 9275	N/A						Pre-Construction/ Detailed Engineering Design Stage, Procurement Stage
RA 6969	N/A						Pre-Construction/ Detailed Engineering Design Stage, Procurement Stage
PD 1586	N/A						Pre-Construction/

							Detailed Engineering Design Stage, Procurement Stage
RA 9003	N/A						Pre-Construction/ Detailed Engineering Design Stage, Procurement Stage

4.2. Number of Valid Complaints(/Grievances)

4.2.1. Citizen and NGOs
Specify number — 151 (Jan 2019-Jun 2020)

4.2.2. Others (other Government Agencies, Private Institutions)
Specify number — 1 inquiry from an LGU Engineering Office (Jan 2019-Jun 2020)

(To be filled up by EMB Personnel)

RECOMMENDATION/S:

Assessed by:

Noted by:

Environmental Monitoring Report

Semi-annual Environmental Monitoring Report No. 2
September 2020

Appendix G: Letter from EMB CO on SC TPA Approval

PHI: Malolos-Clark Railway Project – Tranche 1

Prepared by the Project Management Office (PMO) of the Department of Transportation (DOTr) for the Government of the Republic of the Philippines and the Asian Development Bank.

Republic of the Philippines
Department of Environment and Natural Resources
ENVIRONMENTAL MANAGEMENT BUREAU
DENR Compound, Visayas Avenue, Diliman Quezon City 1116
Telephone Nos.: (632)927-15-17, 928-37-25; Fax No.: (632) 920-22-58
Website: http://www.emb.gov.ph / Email: mail@emb.gov.ph

MAY 12, 2020

MR. TIMOTHY JOHN R. BATAN
Undersecretary for Railways
DEPARTMENT OF TRANSPORTATION (DOTR)
Pinatubo Street cor. S. Osmena Street
Clark Freeport Zone, Pampanga

Subject: **Approval of Request for the Engagement of a Third-Party Auditor (TPA) in lieu of the Multipartite Monitoring Team (MMT) for the Monitoring of Compliance for the North-South Commuter Railway Calamba Extension Project concerning Condition No 10.2 of ECC-CO-1807-0018**

Dear **Undersecretary Batan**:

This refers to your letter dated 17 March 2020 requesting for the engagement of a TPA in lieu of forming an MMT for the North-South Commuter Railway Calamba Extension Project.

After review and evaluation of your request, this Offices allows you to engage a TPA in lieu of forming an MMT. According to Section 9.2 of DAO 2003-30, the third-party auditor may be undertaken by a qualified environmental or EMS auditor. You shall submit to EMB on a semi-annual basis a copy of the audit findings and shall be held accountable for the veracity of the report. This Office is not precluded to validate the said report. Further, the engagement of TPA shall cover the project's construction and operational phase.

Please be guided accordingly.

Very truly yours,

ENGR. WILLIAM P. CUÑADO
OIC-Director

Ref. CO-2020-006849

Environmental Monitoring Report

Semi-annual Environmental Monitoring Report No. 2
September 2020

Appendix H: Summary of Grievances Received

PHI: Malolos-Clark Railway Project – Tranche 1

Prepared by the Project Management Office (PMO) of the Department of Transportation (DOTr) for the Government of the Republic of the Philippines and the Asian Development Bank.

The Summary of the Grievances can be accessed on this link:
https://docs.google.com/spreadsheets/d/19QkLU9E8JWxvg1eoxxlsH17Wj--SyBot-Lw6Elc4IE0/edit#gid=428147654

Note: the grand launch of the Project's GRM Portal will be on 22nd March 2021; same information can be accessed in the said portal

Environmental Monitoring Report

Semi-annual Environmental Monitoring Report No. 2
September 2020

Appendix I: Summary Registers for Project Supervision

PHI: Malolos-Clark Railway Project – Tranche 1

Prepared by the Project Management Office (PMO) of the Department of Transportation (DOTr) for the Government of the Republic of the Philippines and the Asian Development Bank.

Appendix I: PRO FORMA SUMMARY REGISTERS

Appendix _
Summary Register of CEMP Submissions

Contractor Identification and Revision History	Date of Submission	Date of GCR Approval/No Approval	Date of DOTr Review	Date of ADB Review	Remarks
N/A	N/A	N/A	N/A	N/A	No submissions. Construction has not commenced to date.

Source: DOTr and PNR from Contractor Submissions.

Appendix _
Summary Register of Trainings Conducted

Training Title	No. of Participants	Training Date	Training Venue	Training Cost	Remarks
N/A	N/A	N/A	N/A	N/A	No trainings conducted. Construction has not commenced to date.

Source: DOTr and PNR

Appendix _
Summary Register of Environmental Permits/Licenses/Registration Records

Particulars	Registration Number	Date of Application	Date of Issue	Remarks
ECC for Temporary Facilities	N/A	N/A	N/A	No permits acquired. Construction has not commenced to date.
Quarry Permit from the LGU	N/A	N/A	N/A	
Water Extraction Permit	N/A	N/A	N/A	
Water Discharge Permit	N/A	N/A	N/A	
Permit to Operate Generators (Air Pollution Source Installation)	N/A	N/A	N/A	
Others: Please specify	N/A	N/A	N/A	

Source: DOTr and PNR from Contractor Submissions.

Appendix _
Summary Register of Press Releases/Articles

Reference No.	Headline	Date of Publication	Publisher	Journalist/Reporter/Writer	Remarks
N/A	N/A	N/A	N/A	N/A	Construction has not commenced to date.

Source: DOTr and PNR.

Appendix _
Summary Register of Accidents/Incidents/Near Misses

Reference No.	Contractor Identification	Safety Record Hours (Zero Harm)	No. of Accidents	No. of Incidents	No. of Near Misses	Remarks
N/A	N/A	N/A	N/A	N/A	N/A	Construction has not commenced to date.

Source: DOTr and PNR from GCR and Contractor Safety Report Submissions. Monthly distribution per Quarterly and Semi-annual Annual Reporting shall be provided per contract as separate attachments to this summary.

Appendix _
Summary Register of Corrective Action

Reference No.	Non-Conformance Against Environmental Contractual Requirements	Date of Issuance	Contractor Corrective Action	Contractor Date of Compliance	Remarks
N/A	N/A	N/A	N/A	N/A	Construction has not commenced to date.

Source: DOTr and PNR from GCR and Contractor Submissions. Monthly distribution per Quarterly and Semi-annual Annual Reporting shall be provided per contract as separate attachments to this summary.

Appendix _
Summary Register of Stop-work Orders Issued

Reference No.	Stop Work Order Request	Date of Issuance by DOTr, PNR and GCR	Contractor Corrective Action	Date of Compliance by Contractor	Remarks
N/A	N/A	N/A	N/A	N/A	Construction has not commenced to date.

Source: DOTr and PNR from GCR and Contractor Submissions. Monthly distribution per Quarterly and Semi-annual Annual Reporting shall be provided per contract as separate attachments to this summary.

Appendix _
Summary Register of Reported Waste Volumes

Reference No.	Contractor Identification	Total Volume	Volume per Waste Type			Disposal Destination/Remarks
			1	2	Others	
N/A	N/A	N/A	N/A	N/A	N/A	Construction has not commenced to date.

Source: DOTr and PNR from Contractor Submissions. Monthly distribution per Quarterly and Semi-annual Reporting shall be provided per contract as separate attachments to this summary.
Note: 1 and 2 – Identify waste type.

Appendix _
Summary Register of Affected Cultural and Historical Structures

Reference No.	Contractor Identification	Location	Number Affected		Structure Identification and Number Affected			Remarks
			Planned	Actual	1	2	Others	
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Construction has not commenced to date.

Source: DOTr and PNR from Contractor Submissions. Monthly distribution per Quarterly and Semi-annual Reporting shall be provided per contract as separate attachments to this summary.
Note: 1 and 2 – Identify and classify affected structures.

Appendix _
Summary Register of Chance Finds

Reference No.	Contractor Identification	Location	Artifact Identification			Archival Destination/Remarks
			1	2	Others	
N/A	N/A	N/A	N/A	N/A	N/A	Construction has not commenced to date.

Source: DOTr and PNR from Contractor Submissions. Monthly distribution per Quarterly and Semi-annual Reporting shall be provided per contract as separate attachments to this summary.
Note: 1 and 2 – Identify and classify artifacts found, recovered and archived.

Appendix _
Summary Register of Affected Trees

Reference No.	Contractor Identification	Location	Number of Cut Trees						Number of Earthballed Trees					
			Endemic				Non-endemic		Endemic				Non-endemic	
			R	T	E	IL	FT	NFT	R	T	E	FT	F	NFT
N/A	Construction has not commenced to date.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Source: DOTr and PNR from Contractor Submissions. Monthly distribution per Quarterly and Semi-annual Reporting shall be provided per contract and per species type as separate attachments to this summary.
Note: R – Rare; T – Threatened; E – Endangered; IL-IUCN Listed; FT - Forest trees species; NFT - Non-forest tree species. A row for planting locations and survival rate shall be provided per contract and per species.

and Other Vegetation

Reference No.	Contractor Identification	Location	Number of Cut Trees/Other Vegetation													Number of Earth-balled Trees/Other Vegetation												
			Endemic						Native (Non-Endemic)						Exotic	Endemic						Native (Non-Endemic)						Exotic
			N	LC	NT	VU	EN	CR	N	LC	NT	VU	EN	CR		N	LC	NT	VU	EN	CR	N	LC	NT	VU	EN	CR	
N/A	Construction has not commenced to date.	N/A																										

Note: N – Conservation status not evaluated or data deficient; LC – Least Concern; NT – Near-Threatened; VU – Vulnerable; EN – Endangered; CR – Critically Endangered

Summary Register of Affected Trees and Other Vegetation

Reference No.	Contractor Identification	Location	Species Name	Category (Endemic/ Native – Non-Endemic/ Exotic)	Conservation Status[1]	Action Taken (Cut/ Earth-balled)	Remarks

[1]Conservation Status Categories: N – Not evaluated or data deficient; LC – Least Concern; NT – Near-Threatened; VU – Vulnerable; EN – Endangered; CR – Critically Endangered

Summary Register of Greening Program/Seedling Replacement for Removed Trees

Reference No.	Contractor Identification	Location	Site Code	Name of Species Planted	Number of Seedlings Planted	Area Planted (ha)	Survival	
							% Survival	Date Counted
N/A	Construction has not commenced to date.	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Appendix _
Summary Register of Contractor Labor and Employment

Reference No.	Contractor Identification	Location	Labor and Employment Classification						Project Affected Employment					
			No. of Skilled			No. of Semi-skilled			No. of Skilled			No. of Semi-skilled		
			M	F	LGBT/Q	M	F	LGBT/Q	M	F	LGBT/Q	M	F	LGBT/Q
N/A	Construction has not commenced to date.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Source: DOTr and PNR from Contractor Submissions. Monthly distribution per Quarterly and Semi-annual Reporting shall be provided per contract as separate attachments to this summary.
Note: Labor and employment shall be Sex/Gender Disaggregated.

Environmental Monitoring Report

Semi-annual Environmental Monitoring Report No. 2
September 2020

Appendix J: Chronology of NSCR Clark and Calamba Extension Project Activities

PHI: Malolos-Clark Railway Project – Tranche 1

Prepared by the Project Management Office (PMO) of the Department of Transportation (DOTr) for the Government of the Republic of the Philippines and the Asian Development Bank.

Chronology of NSCR Clark and Calamba Extension Project Activities

Date	Activity	Description	Participants
11 March 2020	Meeting	Apalit Non-Landowners (NLO) Stakeholder Consultation Meeting (SCM)	Non-landowner Affected Persons (APs), DOTr, Apalit LGU, PNR, DHSUD, NHA, GCR, and ADB
11 March 2020	Meeting	Sto. Tomas NLO SCM	Non-landowner APs, DOTr, Sto. Tomas LGU, PNR, DHSUD, NHA, GCR, and ADB
01 April 2020	Meeting	DOTr-GCR Meeting on LNO Acquisition and TOR Finalization for SC Tree Inventory Survey	DOTr and GCR
13 April 2020	Meeting	DOTr-GCR Meeting to Address ADB Comments on Draft N2SC SEMR	DOTr and GCR
15 April 2020	Meeting	DOTr-PNR-GCR Internal Coordination Meeting on Environmental Concerns	DOTr, PNR and GCR
24 April 2020	Submission	1st Quarterly Environmental Monitoring Report (Sep-Dec 2019)	DOTr and GCR
24 April 2020	Submission	2nd Quarterly Environmental Monitoring Report (Jan-Mar 2020)	DOTr and GCR
27 April 2020	Meeting	Internal Coordination Meeting on Environment	GCR Construction and Environment Teams
11 May 2020	Meeting	Internal Coordination Meeting on Environment	GCR Construction and Environment Teams
12 May 2020	Approval	Approval of Request for the Amendment of ECC Condition No. 10.2 on the Engagement of a Third-Party Auditor (TPA) in lieu of the Multipartite Monitoring Team (MMT) for Malolos Clark Railway Project under ECC-CO-1807-0017	DENR EMB CO and GCR
12 May 2020	Approval	Approval of Request for the Engagement of a Third-Party Auditor (TPA) in lieu of the Multipartite Monitoring Team (MMT) for the Monitoring of Compliance for the North-South Commuter Railway Calamba Extension Project concerning Condition No. 10.2 of ECC-CO-1807-0018	DENR EMB CO and GCR
13 May 2020	Meeting	Internal Coordination Meeting on Cultural and Heritage Concerns	DOTr and GCR
14 May 2020	Meeting	DOTr-GCR Internal Coordination Meeting on Environmental Concerns	DOTr and GCR
26 May 2020	Meeting	GCR Internal Coordination Meeting on Environment	GCR Construction and Environment Teams
04 June 202	Meeting	Malolos NLO SCM	Non-landowner APs, DOTr, Malolos LGU, PNR, DHSUD, NHA, GCR, and ADB

Date	Activity	Description	Participants
08 June 2020	Meeting	Internal Coordination Meeting on Environment (GCR Construction and Environment Teams)	GCR Construction and Environment Teams
11 and 17 June 2020	Phone Call Interviews	Minalin NLO Stakeholder Consultation	APs, GCR
15-17 June 2020	Distribution & Collection of Project Information Brochures	Calumpit NLO Stakeholder Consultation	DOTr, GCR, Barangay Captains, Community Facilitators, APs
15-19 June 2020	Distribution & Collection of Project Information Brochures	San Fernando NLO Stakeholder Consultation	DOTr, GCR, Barangay Captains, Community Facilitators, APs
16 June 2020	Meeting	Coordination Meeting on DENR-EMB requirements on ECC amendment including Quitanguil River diversion	DOTr and GCR
16-19 June 2020	Distribution & Collection of Project Information Brochures	Angeles NLO Stakeholder Consultation	DOTr, GCR, Barangay Captains, Community Facilitators, APs
19 June 2020	Meeting	Coordination Meeting	DOTr and GCR Environment Teams
22-26 June 2020	Meeting	Calumpit NLO SCM	Non-landowner APs, DOTr, Calumpit LGU, PNR, GCR, and ADB
23-26 June 2020	Phone Call Interviews	Apalit NLO Stakeholder Consultation	APs, GCR
23-26 June 2020	Phone Call Interviews	Sto. Tomas NLO Stakeholder Consultation	APs, GCR
24 June 2020	Meeting	Coordination Meeting	DOTr and GCR Environment and RAP Teams
26 June 2020	Meeting	Internal Coordination Meeting on N2, SC EIS review and update aspects including ECC amendment	DOTr, JDT and GCR
02 July 2020	Meeting	Internal Coordination Meeting on Environment	DOTr, JDT and GCR
06 July 2020	Meeting	NSCR Clark Extension ECC Amendment Consultation Meeting	DENR EMB CO, DOTr, JDT and GCR
08 July 2020	Face-to-Face Interviews	Minalin NLO Stakeholder Consultation	APs, GCR
10 July 2020	Submission	3rd Quarterly Environmental Monitoring Report (Apr-Jun 2020)	DOTr and GCR
16 July 2020	Meeting	EGF Presentation to DOTr and PNR Staff	ADB, DOTr, PNR and GCR

Date	Activity	Description	Participants
24 July 2020	Meeting	EGF Consultation Meeting with NSCR (N1)	DOTr NSCR, DOTr NSCR-EX, PNR and GCR
30 July 2020	Submission	1st Semester 2020 Compliance Monitoring Report (Jan-Jun 2020)	DENR EMB, DOTr and GCR
11 August 2020	Meeting	Brainstorming for DENR EMB Consultation Meeting on EGF Establishment	DOTr and GCR
13 August 2020	Meeting	Greening Program Coordination Meeting	DENR Region 3, PENRO Pampanga, DOTr and GCR
02 September 2020	Meeting	Preparation for EGF Establishment Meeting with AEJV	DOTr and GCR
04 September 2020	Meeting	EGF Coordination Meeting with CP N-04 Contractor	AEJV, DOTr, PNR and GCR
08 September 2020	Meeting	Environment Team Updating Meeting (tree-related activities)	DOTr and GCR
08 September 2020	Meeting	Greening Program Coordination Meeting 1 and 2	DENR region 3, PENRO Pampanga, PENRO Bulacan, CENRO Guiguinto, DOTr and GCR
16 September 2020	Meeting	Coordination Meeting with City Environment and Natural Resources Office (CENRO)-Mabalacat, Pampanga	Mabalacat CENRO, DOTr and GCR
18 September 2020	Meeting	Environment, Gender and Development (GAD) and Grievance Redress Mechanism (GRM)	DOTr, PNR and GCR
21 September 2020	Meeting	Greening Program Consultation Meeting	DENR region 3, PENRO Pampanga, PENRO Bulacan, CENRO Guiguinto, DOTr and GCR
24 September 2020	Meeting	GRM Meeting	DOTr and GCR
29 September 2020	Meeting	EGF Consultation Meeting with DENR EMB CO	DENR EMB CO, DOTr, PNR and GCR
29 September 2020	Submission	4th Quarterly Environmental Monitoring Report (Jul-Sep 2020)	DOTr and GCR
30 September 2020	Meeting	Mabalacat City's Tree Appraisal Committee Meeting	ADB, PENRO Pampanga, Mabalacat LGU, DOTr, PNR and GCR
30 September 2020	Submission	1st Semi-annual Monitoring Report	ADB, DOTr and GCR

** IEC and Stakeholder Consultations/ Meetings conducted were to update the APs about the Project status, and about resettlement and compensation*

Environmental Monitoring Report

Semi-annual Environmental Monitoring Report No. 2
September 2020

Appendix K: Updated Environmental Impact Statement (August 2020)

PHI: Malolos-Clark Railway Project – Tranche 1

Prepared by the Project Management Office (PMO) of the Department of Transportation (DOTr) for the Government of the Republic of the Philippines and the Asian Development Bank.

Update Environmental Impact Statement (August 2020)

Link:
https://drive.google.com/drive/folders/1gf_2PEdc5maCscTxLBvf3_KeXPGx-sun?usp=sharing