REPUBLIC OF PERU

PRIVATE INVESTMENT PROMOTION AGENCY

PROINVERSIÓN COMMITTEE IN TRANSPORT AND COMMUNICATIONS PROJECTS -PRO TRANSPORT AND COMMUNICATIONS



INITIAL VERSION OF THE CONCESSION CONTRACT

Peripheral Ring Road

November 2023

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CONCESSION CONTRACT

Mr. Notary:

Please extend in your Registry of Public Deeds one in which the Concession Contract for the design, financing, Construction, Execution, Operation and Maintenance of the Peripheral Ring Road Project signed between the State of the Republic of Peru, hereinafter the GRANTOR, acting through the Ministry of Transport and Communications, empowered by numeral 5) of subsection 6.1 of Article 6 of Legislative Decree No. Legislative Decree No. 1362, Legislative Decree that regulates the Promotion of Private Investment through Public-Private Partnerships and Projects in Assets, domiciled at Jr. Zorritos No. 1203, Cercado de Lima 15082, province and department of Lima, Peru, duly represented by [•], with D.N.I. (National Identity Document) No. [•], duly authorized by Ministerial Resolution No. [•], dated [•]; and on the other hand, [•], hereinafter the CONCESSIONAIRE, with domicile at [•], duly represented by [•], identified with [•], with domicile at [•], duly authorized for such purpose by means of Power of Attorney registered in Certificate No. [•], of the Registry of Legal Persons of the Registry Office of Lima of the National Superintendence of Public Registries.

CHAPTER I: BACKGROUND AND DEFINITIONS

BACKGROUND

- 1.1 By Letter no number dated March 14, 2013, the consortium formed by the companies Cintra Global SE (formerly Cintra Global LTD.), Cintra Infrastructures SE and JJC Contratistas Generales S.A., submitted to the Private Investment Promotion Agency (hereinafter, "PROINVERSIÓN") the Co-financed Unsolicited Proposal containing the "Peripheral Ring Road" Project (hereinafter, "IPC AVP").
- 1.2 By Memorandum No. 11-2013/DE, dated April 5, 2013, was assigned to the PROINVERSIÓN Committee in Road Infrastructure, Railway Infrastructure and Airport Infrastructure Projects - Pro Integration, today Special Committee for Investment in Transport and Communications Projects - PRO TRANSPORT AND COMMUNICATIONS (hereinafter, the "Committee"), the processing and evaluation of the IPC AVP.
- 1.3 By means of Pro-Integration Committee Agreement No. 288-1-2013-IP, dated April 10, 2013, it was agreed to admit the IPC AVP for processing and, likewise, on November 15, 2016, the Delegation of Powers Agreement was signed between the Metropolitan Municipality of Lima and the Ministry of Transport and Communications (hereinafter, the "MTC"), whereby the MTC is delegated the specific powers and functions necessary for it to become the sole grantor of the Peripheral Ring Road Project and to carry out the corresponding procedures for its approval. The validity and termination of this Delegation Agreement is regulated in accordance with the provisions of its seventh and eighth clauses.
- 1.4 By Ministerial Resolution No. 965-2016-MTC-01.02, published in the Official Gazette "El Peruano" dated November 23, 2016, temporarily classifies the roads: Canta Callao (Section Lima - Callao Provincial Boundary - Av. Naranjal) - Avenida Naranjal (Section Canta Callao - Av. Túpac Amaru) - Periférico Vial Norte - Avenida El Sol - Separadora Industrial (Section Ramiro Prialé Highway - Av. Circunvalación), as a National Route that is part of the National Road Network; assigning it the temporary code PE-20 J,

which will remain in force until the Expiration, due to expiration of the contractual term, of the respective concession contract of the Peripheral Ring Road Project.

- 1.5 By means of Official Communication No. 6494-2016-EF/63.01 dated December 14, 2016, the General Directorate for Public Investment of the Ministry of Economy and Finance communicated to PROINVERSIÓN the declaration of viability of the project with SNIP Code No. 309972, related to IPC AVP.
- 1.6 By means of Pro Integration Agreement No. 612-5-2017-VIALES, adopted in Session on June 21, 2017, Cintra Global SE and Cintra Infrastructures SE assumed full ownership of the Peripheral Ring Road Project, becoming the sole members of the consortium proponent of the IPC AVP.
- 1.7 By means of a session dated [•], [•], the Board of Directors of PROINVERSIÓN ratified the declaration of interest of the IPC AVP, as well as the Initial Version of the Concession Contract made by the Committee through Resolution of [•] dated [•], [•].
- 1.8 On [•] and [•], the declaration of interest of the project associated with the IPC AVP was published in the Official Gazette "El Peruano" and in the national newspaper [•], and in PROINVERSIÓN's institutional portal.
- 1.9 By Executive Directorate Resolution No. [•], dated [•], [•], the Bidding Terms of the Tender were approved. In this context, by means of Session dated [•], [•], the Board of Directors of PROINVERSIÓN ratified the approval of the Bidding Terms of the Tender described above.
- 1.10 The Call for Comprehensive Project Tender for the Concession of the Peripheral Ring Road Project was published in the Official Gazette "El Peruano", and [•] and [•], on [•] and [•], [•], and the Bidding Terms were published in PROINVERSIÓN's institutional portal.
- 1.11 [By means of Session dated [•], [•], the Board of Directors of PROINVERSIÓN ratified the approval of the Final Version of the Concession Contract of the Peripheral Ring Road Project, to be subscribed between the GRANTOR, represented by the MTC, and the CONCESSIONAIRE, made by the Committee through Resolution of [•] dated [•], [•]].
- 1.12 The Committee, on [•], [•], awarded the successful bid for the Comprehensive Project Tender for the Concession of the Peripheral Ring Road Project to the bidder [•], whose members have constituted the CONCESSIONAIRE, who has accredited compliance with the conditions set forth in the Bidding Terms in order to proceed with the subscription of this Contract.
- 1.13 By means of Ministerial Resolution No. [•], dated [•], [•], Mr. [•] is hereby authorized to execute this Concession Contract on behalf of the MTC.

DEFINITIONS

- 1.14 In this Contract, the following terms shall have the meanings indicated below:
- 1.14.1. <u>"Permitted Creditors"</u>, The concept of Permitted Creditor(s) is only applicable for the cases of the Permitted Guaranteed Indebtedness. The Permitted Creditors must have the authorization of PROINVERSIÓN to prove such condition by previously submitting Annex No. 8, Appendix 1 of this Contract. For such effects, Permitted Creditor may be:
 - (a) In the event that the Permitted Guaranteed Indebtedness is structured through credits, mutual or money loans of any kind, syndicated or not:
 - (i) Any multilateral credit institution of which the State of the Republic of Peru is a member or any fund or equity administered by a multilateral credit institution of which the State of the Republic of Peru is a member.
 - (ii) Any Export Credit Agency or any governmental institution or agency of any country with which the State of the Republic of Peru maintains diplomatic relations and any fund or equity administered by an Export Credit Agency or any governmental institution or agency of any country with which the State of the Republic of Peru maintains diplomatic relations.
 - (iii) Any international financial institution designated as a First-rate Foreign Bank in the official letter issued by the Central Reserve Bank of Peru, in effect at the date of qualification of the Permitted Creditor. Any change, modification or substitution of such official letter does not affect the qualification previously granted.
 - (iv) Any other international financial entity, that has a classification no lower than the classification of Peruvian sovereign debt corresponding to foreign currency and long-term, assigned by an international risk classification entity that classify the Republic of Peru.
 - (v) Any domestic financial institution with a local risk rating of no less than "A", assigned by a domestic risk rating company, duly authorized by the Superintendence of Securities Market (SMV).

In these cases, the Permitted Creditors may be represented by an Administrative Agent or Collateral Agent, which shall be any of the subjects indicated in numerals (i) to (v) of subparagraph a) above. For such purposes, the following are considered:

"<u>Administrative Agent</u>", whose function will be to manage and monitor compliance with the obligations and commitments established in the Permitted Guaranteed Indebtedness contract, as well as to represent the Permitted Creditors.

"<u>Collateral Agent</u>", in favor of whom the collateral is granted for the benefit of the Permitted Creditors and whose function will be to administer the collateral agreements that the CONCESSIONAIRE has granted in support of the

Permitted Guaranteed Indebtedness, to execute the collateral on behalf of and for the account of the Permitted Creditors and to recover the amounts of the execution to be distributed among the Permitted Creditors.

It should be noted that the qualification of the Administrative Agent or Collateral Agent is of an administrative nature to exercise the rights on behalf of the Permitted Creditors.

Permitted Creditors must have the necessary conditions to qualify as such as of the submission date of Annex No. 8, Appendix 1.

It is hereby established that the CONCESSIONAIRE shall submit to PROINVERSIÓN the necessary documentation to prove that the Permitted Creditors, Administrative Agent and/or Collateral Agent comply with the conditions described above.

(b) In the event that the Permitted Guaranteed Indebtedness is structured through issues in the stock or capital markets, both domestic and international, the Permitted Creditor shall be the representative of the future acquires of the transferable securities or debt instruments (securitization company, bondholders' representative or equivalent position) issued by the CONCESSIONAIRE by means of a public or private offering or through a trust patrimony, investment fund, securitization company or special purpose company, any of them incorporated in Peru or abroad, that directly or indirectly acquires rights and/or assets derived from the Concession Contract.

For such purpose, the representative of the future acquirers of the transferable securities or debt instruments must submit Annex No. 8, Appendix 1 to this Contract, for which it must be any of the entities indicated in numerals (i) to (v) of subparagraph (a) above.

The representative of the acquirers of the transferable securities or debt instruments must have the necessary conditions to qualify as such as of the submission date of Annex No. 8, Appendix 1.

It is hereby established that the CONCESSIONAIRE shall submit to PROINVERSIÓN the necessary documentation to prove that the representative of the acquirers of the transferable securities or debt instruments comply with the conditions described above.

(c) Ineligibility regime:

The Permitted Creditor(s) shall in no case be: (i) any Related Company or entity, fund or individual with economic ties to the CONCESSIONAIRE or its shareholders, in accordance with the provisions of Resolution SMV No. 019-2015-SMV/01, or standard that replaces it; (ii) any entity, fund or, individual, declared ineligible by the Inter-American Development Bank or on the list of parties sanctioned by the World Bank or other multilateral organization with which the State has entered into credit contracts as of the date of submission of Annex No. 8, Appendix 1 or thereafter; (iii) any convicted individual, which has been sanctioned by the competent authority by means of a final and unappealable judgment, or entity that has been sanctioned with criminal or

administrative liability, by means of a final and unappealable judgment, for the commission of corruption offenses (related to biddings, public works, Public-Private Partnerships and Projects in Assets), money laundering or terrorism to the detriment of the Peruvian State, committed in Peru or abroad; and, (iv) any entity, or fund through its attorneys-in-fact, legal representatives, directors, or managers (or equivalent positions), officers and/or employees, acting in the exercise of their functions, that had recognized before a competent authority the commission of corruption crimes (related to biddings, public works, Public-Private Partnerships and Projects in Assets), money laundering or terrorism against the Peruvian State, committed in Peru or abroad, provided that such recognition had been officially informed by a competent authority to the Peruvian State or to the GRANTOR.

In the case of the financing operations indicated in subparagraphs a) and b) above, PROINVERSIÓN must verify that the Permitted Creditor does not fall under the cases (i) to (iv) of the first paragraph of subparagraph c) when evaluating the qualification of such Permitted Creditor as part of the Permitted Guaranteed Indebtedness.

In the case of the financing operations indicated in subparagraph a) above, if one or more Permitted Creditors, based on information that is notorious and/or public knowledge, is included in any of the cases of the first paragraph of this subparagraph and this affects the availability of financial resources associated with said Permitted Creditor in such a way that the CONCESSIONAIRE may not be able to execute the project, the CONCESSIONAIRE shall, within one hundred and twenty (120) Calendar Days after having been notified by the GRANTOR of such situation: (aa) deliver evidence to the GRANTOR of the substitution of the Permitted Creditor for another one that complies with the requirements established in accordance with the provisions of the Concession Contract; (bb) prove to the GRANTOR that it has the necessary resources for the completion of the execution of the project, in which case the CONCESSIONAIRE may submit a resolution of its General Shareholders' Meeting committing itself to carry out the corresponding capital increases to replace the current schedule of disbursements of the creditor that has lost the status of Permitted Creditor; (cc) submit to the GRANTOR a new loan agreement entered into with a new Permitted Creditor, a third party or an entity related to the CONCESSIONAIRE; (dd) submit to the GRANTOR documents evidencing the extension of any of the financing contracts in force that will allow the completion of the execution of the project, if applicable; or in any case; (ee) prove to the GRANTOR that it has the necessary resources through the combination of two (2) or more of the above mentioned accreditations or methods; otherwise, after the one hundred and twenty (120) Calendar Days indicated above, the penalty foreseen in Annex No. 10 of this Contract shall be applicable.

In the event that after the authorization of a Permitted Guaranteed Indebtedness (a) of syndicated or bilateral credits, a Permitted Creditor wishes to assign its credit to a third party, either totally or partially in such Permitted Guaranteed Indebtedness; or, (b) of issues in the securities market, the acquirers of the transferable securities or debt instruments wish to replace their representative, in order for such third party to be considered a Permitted Creditor, it must first be qualified as a Permitted Creditor by PROINVERSIÓN, and for such purpose it must submit the affidavit contained in

Annex No. 8, Appendix 1 of this Contract.

PROINVERSIÓN will be in charge of the compliance procedure of Permitted Creditors and their agents until the date on which any of the Sections starts its Operation Stage. Subsequently, such procedure shall be in charge of the GRANTOR, therefore, from that moment on, all references to PROINVERSIÓN included in the present definition shall be understood to be made to the GRANTOR.

- 1.14.2. <u>"Certificate of Compliance with the Requirements for Financial Closing"</u>, is the document signed by the GRANTOR, PROINVERSIÓN and the CONCESSIONAIRE by virtue of which it is evidenced that the CONCESSIONAIRE has complied with the requirements set forth in Clause 4.4. of this Contract for the corresponding Section.
- 1.14.3. <u>"Partial Act of Delivery of Assets or Initial Act of Delivery of Assets"</u>, is the document signed by the GRANTOR and the CONCESSIONAIRE, by virtue of which states that the CONCESSIONAIRE has taken initial possession of some(s) of the Concession Assets of the corresponding Section and that, together, shall form part of the Comprehensive Act of Delivery of Assets.

The act shall be prepared by the GRANTOR, in coordination with the CONCESSIONAIRE, and shall record the Interferences, charges or encumbrances existing on the Concession Assets delivered or integrated to the Concession, as the case may be, among other components that the GRANTOR deems convenient. The release of existing Interferences, charges and encumbrances shall be carried out in accordance with the provisions of Chapter VI of this Contract and as set forth in the Applicable Laws and Provisions.

- 1.14.4. "Work Initiation Act" is the document subscribed by the GRANTOR and the CONCESSIONAIRE by means of which the commencement of the Construction of the Works of the applicable Section is recorded, in accordance with the provisions of Clause 8.5.
- 1.14.5. <u>"Works Acceptance Certificate</u>", is the document and annexes subscribed by the GRANTOR and the CONCESSIONAIRE by means of which the acceptance of the Works of each Section or Additional Works, as the case may be, is recorded, and that the same are in accordance with the Contract.
- 1.14.6. <u>"Reversion Certificate of the Assets</u>", is the document and annexes subscribed by the GRANTOR and the CONCESSIONAIRE by virtue of which the delivery in favor of the GRANTOR of the Concession Assets is recorded, once the Concession has expired, the return of the Execution of Works Area in Local / Auxiliary / Side Roads or the anticipated return of the Concession Assets.
- 1.14.7. <u>"Comprehensive Act of Delivery of Assets or Final Act of Delivery of Assets",</u> is the document signed by the GRANTOR and the CONCESSIONAIRE, by means of which it is recorded that the CONCESSIONAIRE has taken possession of the totality of the Concession Assets of the corresponding Section and that they will be destined to the execution of the Contract. Each of the Partial or Initial Act of Delivery of Assets subscribed by the Parties are part of the Comprehensive Act of Delivery of Assets.

The act shall include a record of the Interferences, charges or encumbrances that exist on the Concession Assets delivered, among other components that the GRANTOR considers convenient.

- 1.14.8. <u>**"Award or Award of the Successful Bid"**</u>, is the declaration made by the Committee, determining the Successful Bidder that will constitute the CONCESSIONAIRE, which enters into the Concession Contract with the GRANTOR.
- 1.14.9. <u>"Successful Bidder",</u> is the company or consortium bidder, participant of the Tender, which was favored with the award of the Project Award.
- 1.14.10. <u>"Private Investment Promotion Agency PROINVERSIÓN"</u>, is the agency referred to in Law No. 28660 and Ministerial Resolution No. 185-2017-EF, it is in charge, among other functions, of promoting private investment through public-private partnerships, projects in assets and works for taxes, for its incorporation in public services, public infrastructure, in assets, projects and State-owned companies, in accordance with its powers.
- 1.14.11. "<u>Calendar Year</u>", is the period computed from January 1 to December 31 of each year, including both dates.
- 1.14.12. <u>"Concession Year"</u>, is the annual period computed from the Closing Date of the Contract, counted from date to date, concluding on a day equal to that of the Calendar Year in which the computation began.
- 1.14.13. <u>"Execution of Works Area in Local / Auxiliary / Side Roads"</u>, is the strip of land occupied by transversal and side roads of a metropolitan nature, according to Clause 6.27 of this Contract, in which the Works indicated in Annex No. 3 of the Contract shall be developed, which shall comply with the Service Levels of Works Acceptance of Annex No. 11, levels that shall be developed in the Definitive Engineering Studies of the corresponding Works according to the local and auxiliary nature of the referred roads, and which shall be returned to the GRANTOR so that, in turn, the latter delivers them to the Relevant Governmental Authorities, for their subsequent and corresponding operation and maintenance by the referred authorities, at the end of the execution and acceptance of such Works.
- 1.14.13. <u>"Concession Area"</u> is the strip of public domain land located within the Right of Way, as well as the extensions made in application of Clause 6.83 and following, which shall be delivered by the GRANTOR to the CONCESSIONAIRE for the execution and Operation of the Project.

The Concession Area is identified in Annex No. 1 of this Contract. However, as established in Clause 6.83 et seq., the Concession Area may be readjusted during the preparation of the Definitive Engineering Study(s) (EDIs) of the Project, provided that it is approved by the GRANTOR, due to (i) the conclusion of the acquisition and/or expropriation procedure of the real estate necessary for the execution of the Project, as applicable, (ii) in case the CONCESSIONAIRE, prior acceptance of the GRANTOR, requires for the design of the Project, and/or (iii) that the Execution of Works Area in Local / Auxiliary / Side Roads, once the Works are completed, it will be returned to the GRANTOR. The modification of the Concession Area shall comply with the provisions of this Contract and the Applicable Laws and Provisions.

- 1.14.14. "Project Area of Influence", is the area defined or delimited in the environmental impact assessment process and approved in the Environmental Management Instrument approved by the Relevant Environmental Authority, in which the socioenvironmental impacts resulting from the activities developed within the framework of the Project will affect, which includes the Execution of Works Area in Local / Auxiliary / Side Roads; as well as auxiliary areas with their respective accesses. This Project Area of Influence includes both the Area of Direct Influence and the Area of Indirect Influence of the Project, as determined by the approved Environmental Management Instrument.
- 1.14.15. <u>"Relevant Environmental Authority</u>", is the MTC, through the General Directorate of Environmental Affairs, or the one acting in its stead; and/or the National Service of Environmental Certification for Sustainable Investments SENACE, as appropriate. It is within the concept of Governmental Authorities.
- 1.14.16. <u>"Governmental Authority(ies)</u>", is any national, regional or municipal government or authority, or any of its dependencies or agencies, regulatory or administrative, or any public entity or organism of State of the Republic of Peru that, according to the law, exercises executive, legislative or judicial powers, or that belongs to any of the above-mentioned governments, authorities or institutions, with jurisdiction over the persons or matters in question.
- 1.14.17. <u>"Work Progress"</u>, is the physical progress at the execution of the Works of each Section carried out by the CONCESSIONAIRE, according to the Work Progress Report of Chapter VIII of the Contract.
- 1.14.18. "Bidding Terms", is the public document that contains the administrative aspects, procedures and conditions, including its Annexes, Forms, Appendices and the Official Letters issued by the PROINVERSIÓN Committee in Transports and Communications Projects PRO TRANSPORTS AND COMMUNICATIONS, establishing the terms under which the Tender will be carried out. The Bidding Terms form part of this Contract.
- 1.14.19. <u>"Concession Assets"</u>, is all movable and immovable property defined as such by the Applicable Laws and Provisions, delivered by the GRANTOR to the CONCESSIONAIRE, or acquired or constructed by the latter, or which have been affected or incorporated to them by accession, during the term of the Contract, intended directly or indirectly and which are necessary to achieve the Service Levels. The Concession Assets shall be returned and/or delivered to the GRANTOR upon the Expiration of the Concession. The CONCESSIONAIRE's Assets, third party assets and/or those incorporated through service contracts entered into by the CONCESSIONAIRE with third parties shall not be considered Concession Assets, provided that they may be removed without affecting the Concession Assets. Concession Assets are considered to be, but are not limited to, those elements that are indispensable for an effective, efficient and transparent management of the Operation and Maintenance of the Project, such as road management and maintenance systems, operations systems, control centers, among others.
- 1.14.20. <u>"CONCESSIONAIRE Assets"</u>, is all movable and immovable property defined as such by the Applicable Laws and Provisions, not considered within the concept of Concession Assets, which are incorporated by the CONCESSIONAIRE and which are

not necessary to achieve the Service Levels. These assets do not revert in favor of the GRANTOR upon the Expiration of the Concession, unless they cannot be removed without affecting the Concession Assets.

- 1.14.21. <u>**"Expiration of the Concession or Expiration"**</u>, is the total or partial extinction of the Concession for the reasons set forth in Chapter XVIII of the Contract.
- 1.14.22. <u>"Roadway or Road Surface"</u>, is the surface plan of the road pavement, consisting of one or more lanes, which supports the loads of vehicular traffic. It does not include the berm.
- 1.14.23. <u>**"Fortuitous Event" or "Force Majeure"**</u>, is an event, condition or circumstance not attributable to the Parties, of an extraordinary, unforeseeable and irresistible nature, which prevents any of them from performing the obligations at their charge or causes their partial, late or defective performance. Force Majeure or Fortuitous Event shall be considered, among others, those events detailed in subparagraph a) of Clause 5.5, without being limited to the same.
- 1.14.24. "<u>Environmental Certification</u>", is the approval of each Environmental Management Instrument of each Section of the Project, including the integral Environmental Management Instrument to be approved, by the Relevant Environmental Authority, which is issued by means of an administrative resolution, in accordance with the Applicable Laws and Provisions.
- 1.14.25. <u>"Certificate for Advancement of Property Release or CALP",</u> is the certificate issued by the GRANTOR, based on the request for reimbursement of property expenses submitted by the CONCESSIONAIRE, which shall entitle the CONCESSIONAIRE to receive reimbursement, in Dollars, of the property expenses derived from the property release process, in accordance with the provisions of Appendix 3 of Annex No. 4.

Upon issuance of the CALP, the reimbursements of property expenses shall be irrevocable, unconditional and freely transferable and shall be paid by the GRANTOR in favor of the CONCESSIONAIRE through the Administration Trust, according to the terms and conditions set forth in Appendix 3 of Annex No. 4. The payment of the CALP will consider the amount to be added as VAT, and the applicable Regulation Contribution.

- 1.14.26. <u>"Certificate of Work Progress or CAO</u>", is the certificate issued by the REGULATOR, based on the Work Review Report issued by the latter, through which grants the conformity to the Work Progress, in accordance with the terms and conditions set forth in Appendix 2 of Annex No. 9 of this Contract and the model included in Appendix 3.1 or Appendix 3.2 of Annex No. 9.
- 1.14.27. <u>"Financial Closing"</u>, is the process by which the CONCESSIONAIRE shall evidence to PROINVERSIÓN that it has (i) the minimum capital stock referred to in Clauses 3.6 and/or 3.7, as applicable; and, (ii) the additional financial resources necessary to execute all the Works. Such accreditation shall be made in accordance with the provisions of Chapter IV of the Contract. The Financial Closing may be carried out in Sections (or in two phases, in the case of Section 2, as determined in Annex No. 19 of the Contract), in which case the aforementioned accreditation shall be given in respect of each of the Sections (or phases, in the case of Section 2, as determined in

Annex No. 19 of the Contract) independently and in the corresponding terms for each of said Sections (or phases, in the case of Section 2, as determined in Annex No. 19 of the Contract), with respect to both the minimum capital stock and additional financial resources.

- 1.14.28. <u>"Co-financing"</u>, is the sum of money in Dollars that the GRANTOR shall disburse to the CONCESSIONAIRE through the PRI mechanism, in accordance with the provisions of Chapter XII and Annex No. 9 of this Contract.
- 1.14.29. "<u>Committee"</u>, is the PROINVERSIÓN Committee in Transport and Communications Projects PRO TRANSPORT AND COMMUNICATIONS.
- 1.14.30. <u>"Works Acceptance Committee"</u>, is the committee appointed and formed by the GRANTOR and which will act on its behalf for the acceptance of the Works, as specified in Clause 8.29 and 8.30 of the Contract.
- 1.14.31. <u>"GRANTOR"</u>, is the State of the Republic of Peru, acting through the MTC.
- 1.14.32. <u>"Concession"</u>, is the legal relationship of Public Law that is established between the GRANTOR and the CONCESSIONAIRE as of the Closing Date, by virtue of which the GRANTOR grants the CONCESSIONAIRE the right to the economic use of the Concession Assets, and whereby it undertakes to design, financing, Construction, Execution, Operation and Maintenance the Peripheral Ring Road Project, in accordance with the provisions of this Contract and subject to the provisions of the Applicable Laws and Provisions.
- 1.14.33. <u>"CONCESSIONAIRE</u>", is the special purpose legal person that subscribes the Concession Contract with the GRANTOR, constituted at least with the Successful Bidder.
- 1.14.34. <u>**"Tender"**</u>, is the process regulated by the Bidding Terms/Declaration of Interest for the Award of the Concession to the private sector of the Peripheral Ring Road Project.
- 1.14.35. <u>"Construction</u>", is the process comprising all the activities necessary for the execution and commissioning of the Works, which includes the installation of equipment and all those activities related to the commissioning, in accordance with the provisions of the corresponding EDI and the Applicable Laws and Provisions.
- 1.14.36. <u>"Builder"</u>, is the legal person(s) that will enter into the construction contract(s) with the CONCESSIONAIRE, which may be a third party, a partner or shareholder of the CONCESSIONAIRE, a Related Company of the CONCESSIONAIRE or of one of its partners or shareholders, or a consortium of legal persons, in charge of the Construction.
- 1.14.37. <u>"Concession Contract or Contract"</u>, is this Contract, including its Annexes and Appendices, entered into between the GRANTOR and the CONCESSIONAIRE, which governs the relations between the Parties during the term of the Concession.
- 1.14.38. <u>"Control"</u>, a natural or legal person holds or is subject to the Control of another natural or legal person according to the definition contained in SMV Resolution No. 019-2015-SMV-01, Regulation of Indirect Property, Linkage and Economic Groups, or standard that replaces it.

1.14.39. <u>"Works Progress Schedule</u>", is the document submitted by the CONCESSIONAIRE to the GRANTOR together with the EDI, in order to be approved by the GRANTOR, whereby the dates for the execution of the Works are determined.

The Works Progress Schedule must be prepared in accordance with the schedule contained in Annex No. 2, and within the terms set forth in Clause 8.7, (i) separately for each Section and (ii) in total including all Sections, in accordance with the provisions of Clauses 8.7 and 8.8 of this Contract.

- 1.14.40. "Declaration of Interest", is the Agreement [•] of the Board of Directors of PROINVERSIÓN through which the IPC AVP was declared of interest.
- 1.14.41. "<u>Legislative Decree No. 1362</u>", is the Legislative Decree that regulates the Promotion of Private Investment through Public-Private Partnerships and Projects in Assets and/or the standards that substitute, modify and/or replace it.
- 1.14.42. "<u>Right of Way</u>", is the strip of land defined in Ministerial Resolution No. 918-2017 MTC/01.02, as amended by Ministerial Resolution No. 1084-2017 MTC/01.02 and/or the standards that replace, modify and/or replace it, and has also been included in Annex No, 1.

It may be subject to modification, as determined ex-officio by the GRANTOR and/or at the request of the CONCESSIONAIRE, subject to acceptance by the GRANTOR.

- 1.14.43. <u>"Working Day or Working Days"</u>, are days that are not Saturdays, Sundays or nonworking holidays in Lima. Holidays are also understood to be those days on which banks in the city of Lima are not obliged to serve the public as required by the Governmental Authority and regional non-working holidays.
- 1.14.44. <u>"Calendar Day or Calendar Days",</u> are all days, including Saturdays, Sundays and holidays.
- 1.14.45. "Legal Technical Diagnosis", is the review of the technical aspects (location and physical characteristics of the property) and legal aspects (ownership of the area of interest, charges, encumbrances and others) obtained from the area affected by the Project, with the purpose of preparing the corresponding technical-legal file established in the Single Ordered Text (TUO) of Legislative Decree No. 1192. It includes the activities and work described in Annex No. 4 of this Contract.
- 1.14.46. <u>"Dollar or US Dollar or US\$"</u>, is the currency of legal tender in the United States of America.
- 1.14.47. "Road Emergency(s)", is the unforeseen and extraordinary event experienced by the road due to the forces of nature and/or human intervention (anthropic phenomenon), and which hinders or prevents the circulation and/or Trafficability of the Users on the road, according to the conditions and terms established in Annex No. 11 of this Contract. Road Emergencies may occur at any time during the Calendar Year and must be attended by the CONCESSIONAIRE as soon as conditions permit. By way of example, and without limitation, the activities to be carried out by the CONCESSIONAIRE to attend and/or remedy the Road Emergencies at its cost and

risk, both as preventive and definitive measures, are as follows: (i) cleaning of landslides on the road, (ii) cleaning of mudslides, (iii) repair of the Works, (iii) repair of the Roadway, (iv) stabilization of eroded slopes, (v) habilitation of alternate routes or roads, (vi) restoration of the road, (vi) modular bridges, (vii) provisional signaling in the road infrastructure, (viii) definitive horizontal and/or vertical signaling in the road infrastructure, safety barriers, among other works related to the Road Emergency necessary to recover the Trafficability of the road, in addition to complying, as a minimum, with the Service Levels established in Annex No. 11 of the Contract and/or the Applicable Laws and Provisions.

1.14.48. <u>"Affiliated, Parent, Subsidiary or Related Company</u>", the definitions are as follows:

- a) <u>"Affiliated Company".</u>: A company shall be considered an affiliate of another company when the Control of such companies is exercised by the same Parent Company.
- b) "<u>Parent Company</u>": It is a company that owns the Control of another company. Also considered in this definition is a company that has Control of a Parent Company, as defined, and so on.
- c) "<u>Subsidiary Company</u>: A company whose Control is exercised by the Parent Company.
- d) "<u>Related Company</u>": It is any Affiliate, Parent or Subsidiary Company. In the absence of evidence to the contrary, the existence of a linkage is presumed, among other cases, in the following: (i) when they are part of the same economic group, (ii) when one legal person has, directly or indirectly, an interest in the capital stock of another that allows it to have a presence on its board or management, (iii) when the same guarantee supports obligations of both, (iv) when more than 50% of the obligations of one company are guaranteed by the other, or (v) when more than 50% of the obligations of one legal person are claims of the other.

In addition to the foregoing and whenever applicable for purposes of determining the definitions indicated, Resolution SMV No. 019-2015-SMV/01, as amended, or the standard that replaces it, shall be applied supplementarily.

1.14.49. <u>"Permitted Guaranteed Indebtedness"</u>, is the indebtedness by way of financing or credit transactions, issuance of transferable securities, debt instruments or securitizations and/or borrowing of money of any Permitted Creditor in any form, the proceeds of which shall be applied to the performance of the subject matter of this Contract (including, without limitation, any renewal, rescheduling or refinancing of any Indebtedness the proceeds of which were intended for the purpose of this Contract whether or not it previously qualified as Permitted Guaranteed Indebtedness) and which is secured as provided in Clause 4.9. It also consists of financing or refinancing of the CONCESSIONAIRE's capital stock, without prejudice to the contributions that its shareholders or partners must make with their own capital in accordance with Clauses 3.6 and 3.7.

Those financing or credit operations, issuance of transferable securities, debt instruments or securitizations and/or money lending, whose funds (i) are destined to finance Assets of the Concessionaire, (ii) imply the assignment of the

CONCESSIONAIRE of its RPI-CAO and/or CALP rights and/or (iii) imply the constitution of guarantees on such RPI-CAO and/or CALP rights, shall not be considered Permitted Guaranteed Indebtedness.

- 1.14.50. <u>"Definitive Engineering Study (EDI)</u>", is (are) the technical document(s) to be prepared by the CONCESSIONAIRE where the engineering design details are established according to Appendix 2 of Annex No. 3 and contemplates the environmental impacts described in the approved Environmental Management Instrument of each of the Sections.
- 1.14.51. <u>"Construction Stage</u>", is the period in which the CONCESSIONAIRE executes the Works corresponding to each Section, in accordance with the provisions of Annex No. 3 of the Contract, the EDI, the terms and conditions of the Contract and the Applicable Laws and Provisions.
- 1.14.52. "<u>Operation Stage</u>", is the period in which the CONCESSIONAIRE carries out the Operation of the corresponding Section, in accordance with the provisions of Chapter X of the Contract and the Applicable Laws and Provisions.
- 1.14.53. "<u>Pre-construction Stage</u>", is the period from the Closing Date until the beginning of the Construction Stage corresponding to each Section of the Project.
- 1.14.54. "<u>Operation</u>", includes the Operation and Maintenance of the Concession Assets, the rendering of the Mandatory Services and Optional Services, and the collection of the Tariff from the Users for the use of the road infrastructure and facilities, as well as for the rendering of the aforementioned services, under the terms established in the Contract.
- 1.14.55. "<u>Expropriation</u>", is the compulsory transfer of the right of ownership of the properties that will form part of the Concession Area, which is necessary for the execution of the Project, in accordance with the rules established in the Single Ordered Text (TUO) of Legislative Decree No. 1192 and in this Contract.
- 1.14.56. "<u>Closing Date</u>", is the day on which the Concession Contract is signed between the GRANTOR and the CONCESSIONAIRE.
- 1.14.57. "Pricing Date", is, in the case of financing in the capital market, issuance of transferable securities, debt instruments and/or securitizations that imply the assignment of the CONCESSIONAIRE of its RPI-CAO rights and/or the constitution of guarantees on such RPI-CAO rights, the date on which the amount of the financing and the rate is determined, which shall occur after the accreditation of the Financial Closing and at the latest within ten (10) Working Days after the signature of the Work Initiation Act corresponding to the Section applicable to such Financial Closing, in accordance with the provisions of numeral 4.3 of this Contract. Notwithstanding the above, for the purposes of this Contract in relation to Section 2, if the CONCESSIONAIRE chooses to carry out the Financial Closing in two phases, the Pricing Date for phase 2 of Section 2 must occur within fifteen (15) Working Days after the accreditation of the Financial Closing of phase 2 of Section 2.

- 1.14.58. "<u>Reference Date</u>", is the Closing Date used as a reference for the calculation of the VPIPm and VPIP.
- 1.14.59. "<u>Administration Trust</u>", is the trust patrimony, constituted by the CONCESSIONAIRE and the GRANTOR, which shall be made up, among others, by the Toll revenues, resources from the Co-financing and the penalties established in Annex No. 10, which shall have as its purpose the administration of the resources to guarantee the adequate and timely compliance with the obligations derived from this Contract. The Administration Trust shall be entered into in accordance with the terms described in Appendix 5 of Annex No. 9.

All costs associated with the Administration Trust, such as commissions, expenses and taxes, including the Financial Transaction Tax (ITF), are assumed at the account, cost and risk of the CONCESSIONAIRE.

- 1.14.60. "<u>Guarantees of Faithful Fulfillment</u>", are, jointly, the Guarantees of Faithful Fulfillment of the Construction Works and the Guarantee of Faithful Fulfillment of the Concession Contract.
- 1.14.61. "Guarantee of Faithful Fulfillment of the Concession Contract", is the letter of guarantee granted by a company authorized to issue letters of guarantee for purposes of the Concession in accordance with Annex No. 6, which the CONCESSIONAIRE shall deliver to the GRANTOR in order to ensure compliance with each and every one of the obligations set forth in this Contract and the Applicable Laws and Provisions, including the payment of penalties and other sanctions, in accordance with Clause 13.4 of the Contract. Such letter of guarantee shall be issued in substantially the same terms as the model contained in Appendix 1 of Annex No. 7 of this Contract, which shall be verified by the GRANTOR. Said guarantee will not cover the contractual obligations that are backed by the Guarantee of Faithful Fulfillment of the Construction Works once it has been delivered.

In all cases, the Guarantee of Faithful Fulfillment of the Concession Contract may be constituted by more than one letter of guarantee or alternatively stand-by letter of credit, provided that they total the amount required for the corresponding guarantee.

1.14.62. "<u>Guarantee(s) of Faithful Fulfillment of Construction Works</u>", is(are) the letter(s) of guarantee granted by a company authorized to issue letter of guarantee for purposes of the Concession in accordance with Annex No. 6, which the CONCESSIONAIRE shall deliver to the GRANTOR in order to ensure the correct execution of the Works, including the payment of penalties and other sanctions, in accordance with Clause 13.5 of the Contract. Such letter(s) of guarantee shall be issued in substantially the same terms as the model contained in Appendix 2 of Annex No. 7 of this Contract, which shall be verified by the GRANTOR.

In all cases, the Guarantee(s) of Faithful Fulfillment of the Construction Works may be constituted by more than one letter of guarantee or alternatively stand-by letter of credit, provided that they total the amount required for the corresponding guarantee(s).

1.14.63. "<u>VAT</u>", is the acronym of the General Sales Tax referred to in Supreme Decree No. 055-99-EF, Single Ordered Text of Law on General Sales Tax and Selective Consumption Tax, or any other standard that may replace it; as well as the Municipal Promotion Tax referred to in Supreme Decree No. 156-2004-EF, Single Ordered Text

of the Municipal Taxation Law, or any other standard that may replace it.

- 1.14.64. "<u>Environmental Impact</u>", is the positive or negative alteration of one or more components of the environment, caused by the execution and/or action of the Project.
- 1.14.65. "Significant Negative Environmental Impact", are those impacts or alterations that occur in one, several or all of the factors that make up the environment, as a result of the execution of the Project or activities with characteristics, magnitude or location with certain particularities.
- 1.14.66. "Unsolicited Proposal or IPC AVP" has the meaning assigned to the Peripheral Ring Road Project.
- 1.14.67. <u>"Work Progress Report</u>", is the document to be submitted by the CONCESSIONAIRE to the REGULATOR, with a copy to the GRANTOR, by means of which it shall record the execution of the Works of each Section, indicating the amount invested and the progress percentages of each certificate of the budget approved in the EDI of the corresponding Section, complying with the terms and conditions of the Environmental Management Instrument of the respective Section and the conditions of Appendix 2 of Annex No. 9.
- 1.14.68. "<u>CONCESSIONAIRE Revenues</u>", are the revenues of the CONCESSIONAIRE from the collection of the Tariff, Optional Revenues, RPI and CALP.
- 1.14.69. "<u>Optional Revenues</u>", are those Revenues of the CONCESSIONAIRE that correspond to the provision of Optional Services, except for the percentage that corresponds to the GRANTOR, in accordance with the provisions of Clause 10.17 of this Contract.
- 1.14.70. "Environmental Management Instrument" or "IGA", are the environmental studies for the Project, as established in the Regulation of the Law of the National Environmental Impact Assessment System (SEIA), being able to be: the Environmental Impact Statement (EIS), the Semi-Detailed Environmental Impact Assessment (EIA-sd), the Detailed Environmental Impact Assessment (EIA-d), and/or other environmental assessments determined by the Relevant Environmental Authority, in accordance with the Environmental Protection Regulations for the Transport Sector in force; which must be approved by said authority, through the corresponding Environmental Certification, which must be previously obtained by the CONCESSIONAIRE in addition to being kept in force and/or updated, as appropriate, for the Construction, Operation, Execution and Maintenance of each Section of the Project, in accordance with the provisions of the Applicable Laws and Provisions.
- 1.14.71. "Interferences", are the existing installations in charge of the companies or entities providing public services and other installations or assets found within the Right of Way or the area of execution of the Works, which affect the normal execution of the Works, such as, but not limited to, movable and immovable property used for the direct and indirect provision of public services, the drinking water and drainage networks, natural gas distribution networks, towers, cables or electricity connections, optical fiber, telephony or other telecommunications elements, fuel networks, panels, channels, bus stops, signaling, traffic lights, among others, in accordance with the Applicable Laws and Provisions.

- 1.14.72. **"Essential Interferences**", is the set of Interferences whose removal and relocation, due to their relevance for the execution of the Project, is a priority. They are detailed in Annex No. 5 of this Contract and shall be released in accordance with the schedule set forth in Clause 6.39.
- 1.14.73. "Non-Essential Interferences or other Interferences", is the set of Interferences that do not constitute Essential Interferences. They are detailed in Annex No. 5 of this Contract and shall be released in accordance with the schedule set forth in Clause 6.39.
- 1.14.74. "Inventories", are the simple Inventories that must accurately detail the Concession Assets and Assets of the CONCESSIONAIRE, including their characteristics, location, state of conservation, photographs, plans, reports, annotations on their operation or performance formulated and submitted in accordance with the Applicable Laws and Provisions, which shall also be in a digital database and under a geo-referencing system Datum WGS84 (except for the Initial Inventory which shall preferably be geo-referenced). The REGULATOR and/or the GRANTOR may request additional documentation they deem pertinent related to these documents, the following Inventories shall be prepared and submitted:
 - a) "<u>Initial Inventory</u>", is the list of the Concession Assets that the GRANTOR delivers to the CONCESSIONAIRE within thirty (30) Calendar Days prior to the Possession Taking of each of the corresponding Sections. This or these initial inventories will be prepared by the GRANTOR and will be part of the Partial Act of Delivery of Assets or of the Integral Act of Delivery of Assets respectively, in accordance with the provisions of Chapter VI of the Contract.
 - b) "<u>Construction Inventory</u>", is the list of the Concession Assets that result from the execution of the Works of the corresponding Section, which shall be submitted by the CONCESSIONAIRE to the GRANTOR and to the REGULATOR at the same time of the corresponding Works Acceptance Certificate.
 - c) "<u>Annual Inventory</u>", is the list of the Concession Assets and Assets of the CONCESSIONAIRE as of the annual closing dates of each year of the term of the Contract until its Expiration, which shall be submitted by the CONCESSIONAIRE to the GRANTOR and the REGULATOR, before January 30 of each Concession Year, and during the entire term of the Concession.
 - d) "<u>Final Inventory</u>", is the list of the Concession Assets and Assets of the CONCESSIONAIRE with which the CONCESSIONAIRE has at the date of Expiration of the Concession. It shall be formulated by the CONCESSIONAIRE.
- 1.14.75. "<u>Applicable Laws and Provisions</u>", is the set of Peruvian legal and/or regulatory provisions of a general nature that regulate the Contract. They include the Political Constitution of Peru, the standards with the rank of law, regulations, directives and resolutions, among other similar ones, that may be issued by any Relevant Governmental Authority in accordance with its law of creation; including the Regulatory standards, which shall be of mandatory observance for the Parties.

- 1.14.76. "Physical and Effective Release", refers to the possession of the properties involved in the Project by the GRANTOR, free of Taxable Persons and/or occupants, which allows the CONCESSIONAIRE to comply with its contractual obligations related to the Construction of the Works of the Project.
- 1.14.78. <u>"Maintenance"</u>, is the set of activities carried out by the CONCESSIONAIRE as from the Operation Stage, which are performed to preserve, recover, delay the loss of the structural and functional conditions of the Concession Assets of the corresponding Section and/or maintain in good condition the physical conditions of the different elements that constitute the Project and, in this way, guarantee that traffic is safe, fluid and economical for the Users. The aim is to avoid premature deterioration of the road and, above all, to maintain the road in operating conditions adequate to the needs and demands of the Users, complying with the Service Levels of Annex No. 11 on a permanent basis throughout the term of the Concession. It includes socioenvironmental activities and care and surveillance of the road. The CONCESSIONAIRE assumes all responsibility for the Maintenance of the Project with respect to the Service Levels established in this Contract. It may be periodic or routine in nature.

Maintenance of the Execution of Works Area in Local / Auxiliary / Side Roads, within the Right of Way, shall be the responsibility of the CONCESSIONAIRE until they are delivered to the GRANTOR, and they must be delivered with the Service Levels established in Annex No. 11 of this Contract.

- 1.14.79. "Periodic Road Maintenance", is the set of activities programmable every certain period according to this Contract and/or the Applicable Laws and Provisions, which are performed on the Project's roads to recover their service conditions and to comply with the Service Levels. These activities can be manual or mechanical and refer mainly, but not limited to: (i) replacement of wearing courses, pavement recycling, asphalt overlay, placement of leveling courses, surface treatments, seals and/or the application of basic, technically evaluated and environmentally sustainable solutions to wearing courses, (ii) spot repair or reconstruction of pavement underlayments, (iii) spot repair or reconstruction of tunnels, walls, drainage works, Road Safety elements and signage, (iv) punctual repair or reconstruction of the road platform, which may include punctual drainage works and works that contribute to the stability of the same, (v) punctual repair or reconstruction of bridge components of both the superstructure and substructure and/or (vi) horizontal and/or vertical signaling in the road infrastructure, safety barriers, among other similar activities.
- 1.14.80. "Routine Road Maintenance", is the set of activities carried out on roads on a permanent basis to maintain their Service Levels. These activities can be manual or mechanical and are mainly referred to, but not limited to, cleaning, patching, platform profiling, scraping and cleaning of the right-of-way, general cleaning of the drainage system, maintenance of signaling and road safety elements, elimination of small landslides, as well as cleaning or repair of expansion joints, support elements, painting and drainage in the superstructure and substructure of the bridges.
- 1.14.81. "MTC", is the Ministry of Transport and Communications.
- 1.14.82. "<u>Operation Manual</u>", is a document elaborated by the CONCESSIONAIRE, which contains the model, procedures and protocols for the Operation of the Project's road infrastructure necessary for routine activities related to the road infrastructure, the

execution of Mandatory Services and to act in the event of possible Road Emergencies, incidents, accidents and/or extraordinary situations related to the road infrastructure, Users, among others.

- 1.14.83. "<u>Service Levels</u>", are indicators that qualify and quantify the state of service of the road, and which are used as minimum admissible limits in its surface, functional, structural and/or safety condition, which must be reached by the CONCESSIONAIRE and maintained permanently during the entire term of the Contract, in addition to being used as evaluation elements by the REGULATOR. They are those indicated in Annex No. 11 of this Contract.
- 1.14.84. "Regulatory Standards" are the regulations, directives and resolutions that the REGULATOR may issue pursuant to its law of creation and/or whose compliance is mandatory for the GRANTOR and the CONCESSIONAIRE. They are part of the Applicable Laws and Provisions.
- 1.14.85. "Works", are the physical elements resulting from the investments in road infrastructure related to each Section of the Concession, not including the costs for the elaboration of the respective EDIs, to be executed by the CONCESSIONAIRE in accordance with the Works Progress Schedule. The Annex No. 3 contains the details of the characteristics of the Works of each of the Sections of the Concession. The term Works includes the Additional Works, the Works in the Execution of Works Area in Local / Auxiliary / Side Roads (only until the date of delivery thereof by the CONCESSIONAIRE in favor of the GRANTOR in accordance with the provisions of the Contract) and any other Works incorporated by addendum to the Contract, which are added to the Sections of the Concession, as applicable.
- 1.14.86. "Additional Works", are those Works not considered in the Contract or in the Definitive Engineering Studies, which must be executed without affecting the original Works and/or the Obligatory Services in charge of the CONCESSIONAIRE. They may be requested by the GRANTOR or proposed by the CONCESSIONAIRE, although in both cases they must be expressly accepted by the GRANTOR. In no case shall such works have their origin in the reduction of the Service Levels, the correction of calculation, design or construction errors of the Project and/or other causes attributable to the CONCESSIONAIRE.

The execution and Maintenance of the Additional Works shall be subject to the provisions of Chapter VII and VIII of this Contract.

- 1.14.87. **"Operation**", is the set of activities to be carried out for the provision of the Services in accordance with the Service Levels set forth in Annex No. 11 of this Contract. They are initiated at the end of the Construction Stage and are intended to maintain the Service Levels established in the Contract. These activities refer, among others, to the administration of the Concession, the care and surveillance of the road's comfort elements, including, but not limited to, the preservation of the physical integrity of the Right of Way, the Mandatory Services, the Optional Services, Road Safety measures, as well as the prevention and attention to Road Emergencies.
- 1.14.88. "<u>PACRI</u>", is the Compensation and Involuntary Resettlement Plan, to be approved by the GRANTOR within the framework of the Property Acquisition Plan, pursuant to the provisions of Clause 6.29 and the Applicable Laws and Provisions.

- "Parties", are the GRANTOR and the CONCESSIONAIRE, each constituting a Party 1.14.89. to the Contract.
- 1.14.90. "Minimum Participation", is the shareholding equivalent to thirty-five percent (35%) of the subscribed and paid-in capital stock of the CONCESSIONAIRE that the Strategic Partner shall hold and maintain as a minimum in the CONCESSIONAIRE during the entire term of the Concession. This participation will necessarily have the right to vote at the general shareholders' meeting.
- 1.14.91. "Environmental Liability(ies)", are the facilities, effluents, emissions, contaminated sites and/or remains or waste deposits, located in the national territory, including the marine area, produced by the development of productive, extractive or service activities, abandoned; that affect in an actual, potential or permanent way the health of people, the environmental quality and/or the functionality of the ecosystem, without prejudice to the specific definition established by the Relevant Environmental Authority and/or the Applicable Laws and Provisions.
- 1.14.92. "**Toll**", is the amount in Soles, not including VAT or any other applicable tax, paid by the User, in each direction of the corresponding Toll Unit, for the right to use and transit the road infrastructure of any of the Project Sections and which is collected by the CONCESSIONAIRE, as established in this Contract.
- 1.14.93. "Tolls,", is the value of the Toll revenues actually received in month i expressed in constant Soles as of the Reference Date, as defined in Appendix 4 of Annex No. 9.
- 1.14.94. "Expert", is the technical expert person appointed by the Parties for the resolution of certain technical disputes set forth in this Contract, prior to the commencement of any dispute resolution proceedings, as set forth in Clause 7.13 of this Contract.
- 1.14.95. "Property Acquisition Plan or PAP", is the document elaborated by the CONCESSIONAIRE for the properties acquisition and/or the relocation of the affected taxable persons, which are included within the Concession Area, in accordance with the provisions of Clause 6.29 of this Contract and the Applicable Laws and Provisions.
- 1.14.96. "Critical Properties", is the set of properties located in the access areas and tunnel mouths of Section 2 of the Concession detailed in Appendix 2 of Annex No. 4 of this Contract.
- 1.14.97. "Remnant Properties,", is the set of properties, other than the Critical Properties, which are part of Section 2 of the Concession.
- 1.14.98. "Road Maintenance Program", is the document to be elaborated by the CONCESSIONAIRE pursuant to Clause 9.10 of this Contract, prior to the commencement of the Operation Stage of each Section, in which the maintenance activities during the term of the Concession shall be detailed in chronological order.
- 1.14.99. "Project or Peripheral Ring Road Project", is the one that includes the design, financing, construction, operation and maintenance of a 34.80-kilometer road or highway from the Óvalo de las 200 Millas, Constitutional Province of Callao, Callao Region, to the intersection of Avenida Del Aire with Avenida Rosa Toro, district of San Luis, Lima Region, which will allow the improvement of the road system of Lima and

Callao. It shall consist of three (3) Sections, as described and specified in this Contract.

- 1.14.100. "<u>Annual Readjustment</u>", has the meaning set forth in the first and second paragraphs of Clause 11.8 of this Contract.
- 1.14.101. "<u>Extraordinary Readjustment</u>", has the meaning set forth in the third paragraph of Clause 11.8 of this Contract.
- 1.14.102. "Regulations", is the Regulations of Legislative Decree No. 1362.
- 1.14.103. <u>**"REGULATOR"**</u>, is the Supervisory Board for Investment in Public Transport Infrastructure - OSITRAN, in accordance with the provisions of Law No. 26917, in Law No. 27332 and its regulatory, complementary, amending and/or substituting standards and whose provisions, autonomous regulations, directives of a general nature and rules of a particular nature are of mandatory observance and compliance for the CONCESSIONAIRE and the GRANTOR.
- 1.14.104. "Remuneration for Investments (RPI)", is the annual remuneration in Dollars, of an irrevocable, unconditional and freely transferable nature that the GRANTOR undertakes to pay in favor of the CONCESSIONAIRE through the Administration Trust to remunerate part of the investment in the Works of the Sections, according to the terms and conditions set forth in Chapter XII and Annex No. 9. The payment of the RPI does not include the VAT that could be generated if so established by the Applicable Laws and Provisions, in which case it would have to be added.
- 1.14.105. "<u>Work Review Report.</u>", is the document that the REGULATOR shall submit to the GRANTOR and the CONCESSIONAIRE for each Work Progress Report, according to Appendix 2 of Annex No. 9.
- 1.14.106. "<u>Technical Requirements of the Project</u>", are those set forth in Appendix 1 of Annex No. 3 to this Contract.
- 1.14.107. "<u>RPI-CAO</u>", is the irrevocable, unconditional and freely transferable aliquot of the RPI, which the GRANTOR shall pay in favor of the CONCESSIONAIRE through the Administration Trust equivalent to that corresponding to the "i"th CAO issued by the REGULATOR according to the terms and conditions set forth in Chapter XII and Annex No. 9.
- 1.14.108. "<u>Critical Route</u>", is the programmed sequence of activities during Construction that determine the maximum execution term of the Project, whose activities must be carried out sequentially since they are indispensable for its execution within the time established in the Contract. They shall be determined by the CONCESSIONAIRE in the Work Execution Schedule to be prepared, submitted and executed by the CONCESSIONAIRE in accordance with the provisions of numeral 1.3.8 of Appendix 2 of Annex No. 3 of the Contract.
- 1.14.109. "Road Safety", is the set of actions aimed at increasing the intrinsic safety and the quality of protection of the Project's road infrastructure, for the benefit of Users. It is governed by the provisions of the Road Safety Manual, approved by Directorial Resolution No. 05-2017-MTC-14 and/or its modifying and/or substitute regulations.

- 1.14.110. "<u>Service(s)</u>", are those to be rendered by the CONCESSIONAIRE in each of the Sections, in accordance with this Contract and the Applicable Laws and Provisions. Includes Mandatory Services and Optional Services.
- 1.14.111. "Mandatory Services", are those basic services related to the specific object of the Concession and that are essential for the correct operation of the same, which will be remunerated with the Project Tariff. These services are contemplated in Clause 10.12 et seq. of the Contract.
- 1.14.112. "**Optional Services**", are those physical, technological and/or virtual services, that without being indispensable for the operation of the Concession and not being contemplated in the present Contract, the CONCESSIONAIRE may provide along the road infrastructure of the Project and/or in favor of the Users, prior authorization of the GRANTOR, provided that they are useful and contribute to raise the quality standards of the Project, provide security to the Users, allow the performance of the functions of the Governmental Authorities and/or are in accordance with the Applicable Laws and Provisions.
- 1.14.113. "Easement(s)", is that real right that entitles the CONCESSIONAIRE to temporarily occupy or transit over privately owned property, for the purpose of fulfilling its obligations under this Contract.
- 1.14.114. "Sol or Soles or S/", is currency of legal tender in the Republic of Peru.
- 1.14.115. "<u>Strategic Partner</u>", is the shareholder or partner of the CONCESSIONAIRE that accredited compliance with the minimum technical operating requirements set forth in the Declaration of Interest, and that holds the ownership of the Minimum Participation in the CONCESSIONAIRE, in accordance with the provisions of this Contract.
- 1.14.116. "Taxable Person(s)", is the owner or possessor of the property subject to acquisition or expropriation, in accordance with the rules contained in the Single Ordered Text (TUO) of Legislative Decree No. 1192, or standard that modifies and/or replaces it. Likewise, in accordance with the provisions of numeral 30.3 of Article 30 of Legislative Decree No. 1362, the occupants or possessors described in the Third Final Supplementary Provision of the TUO of Legislative Decree No. 1192 are included in the category of Taxable Persons, so that they can only be relocated in accordance with the provisions of this Contract and the Applicable Laws and Provisions.
- 1.14.117. "<u>SUTRAN</u>", is the Superintendency of Land Transport of People, Cargo and Freight, with the powers provided for in Law No. 29380, Supreme Decree No. 033-2009-MTC and its complementary, modifying and/or substituting standards.
- 1.14.118. "<u>Tariff</u>", is the Toll, including VAT and other applicable taxes, that the CONCESSIONAIRE charges to the Users in each direction of the respective Toll Units, under the terms set forth in this Contract.
- 1.14.119. "Legal Interest Rate", corresponds to the annual effective legal interest rate in foreign currency set by the Central Reserve Bank of Peru pursuant to article 1244 of the Civil Code and published by the Superintendency of Banking, Insurance and Private Pension Fund Administrators on its web page called "Tasa de Interés Legal Efectiva

(EffectiveLegalInterestRate)"("https://www.sbs.gob.pe/app/pp/EstadisticasSAEEPortal/Paginas/TILegalEfectiva.aspx") or such rate as may replace it.

- 1.14.120. "Sovereign Credit Rating (SCR)", corresponds to the rate published by the Superintendency of Banking, Insurance and Private Pension Fund Administrators for the "Curva Cupón Cero Perú Exterior Dólares Soberana (Yield Curve Peru Foreign Dollars Sovereign)" on its web page called "Una curva en una fecha (A curve on a date)" ("https://www.sbs.gob.pe/app/pu/CCID/Paginas/cc_unacurva.aspx") or the one that replaces it.
- 1.14.121. "Single Ordered Text or TUO of Legislative Decree No. 1192", is Supreme Decree No. 015-2020-VIVIENDA and/or its modifying and/or substitute regulations, which compiles in a single regulatory body, the provisions of the Legislative Decree that approves the Framework Law on Acquisition and Expropriation of real estate, transfer of State-owned real estate, release of interferences and dictates other measures for the execution of infrastructure works and its respective amendments.
- 1.14.122. "Exchange Rate", is the weighted average exchange rate published by the Superintendency of Banking, Insurance and Private Pension Fund Administrators for the conversion of Dollars to Soles and vice versa in its web page called "Cotización de Oferta y Demanda Tipo De Cambio Average Ponderado (Supply and Demand Quotation Weighted Average Exchange Rate)" (https://www.sbs.gob.pe/app/pp/SISTIP_PORTAL/Paginas/Publicacion/TipoCambio Promedio.aspx) or the one that replaces it.
- 1.14.123. "<u>Operating Permit(s)</u>", is any administrative act that, regardless of its denomination (authorization, permit or license), authorizes the CONCESSIONAIRE to carry out activities for the performance of its contractual obligations.
- 1.14.124. "Possession Taking", is the act by which the CONCESSIONAIRE takes partial or total possession of the Concession Area and the Concession Assets to be used for the execution of the Contract, recording it in the Partial Act of Delivery of Assets or Comprehensive Act of Delivery of Assets, as applicable. The Possession Taking is verified in accordance with the provisions of Chapter VI.
- 1.14.125. "<u>Sections</u>", includes Section 1, Section 2 and Section 3, which are component parts of the Project described and defined in Annex No. 1 of this Contract.
- 1.14.126. "<u>Section 1</u>", is the component part of the Project described and defined in Annex No.
 1 of this Contract, from Óvalo 200 Millas to the Panamericana Norte Highway, with a length of 8.7 Km.
- 1.14.127. "<u>Section 2</u>", is the component part of the Project described and defined in Annex No.
 1 of this Contract, from the Panamericana Norte Highway to the Ramiro Prialé Highway, with a length of 15.1 Km.
- 1.14.128. "Section 3", is the component part of the Project described and defined in Annex No.
 1 of this Contract, from the Ramiro Prialé Highway to Av. Circunvalación, with a length of 11 Km.

- 1.14.129. "Existing Section(s)", constitute the existing roads as of the Closing Date within the Right of Way and are detailed in Appendix 3 of Annex No. 1 of this Contract.
- 1.14.130. "Trafficability", is the condition of the road infrastructure that allows and ensures the continuous movement of all types of vehicles allowed to circulate on such road infrastructure. The CONCESSIONAIRE shall guarantee the same during the entire term of the Concession, including during the Construction Stage of the Works, including during the occurrence of a Road Emergency and/or events of Fortuitous Event or Force Majeure, through the road infrastructure of the Concession or through roads or variants thereof, as established in this Contract and/or the Applicable Laws and Provisions.
- 1.14.131. "<u>UIT</u>", is the Tax Unit in accordance with Regulation XV of the Preliminary Title of the Single Ordered Text of the Tax Code, approved by Supreme Decree No. 133-2013-EF or the regulation that replaces it. For purposes of this Concession Contract, the value in effect at the time of its application shall be considered.
- 1.14.132. "<u>Toll Units</u>", are the areas equipped with the necessary equipment for the collection of the Tariff from the Users of the Project built by the CONCESSIONAIRE as part of the execution of the Works, as described in Appendix 1 of Annex No. 3, and which will be subject to Operation in accordance with the provisions of Chapter X of this Contract. The Toll Units are authorized to collect the User Tariff in both directions (Direction 1 and Direction 2) of the road infrastructure.
- 1.14.133. "**Users**", are the beneficiaries of the Service provided by the CONCESSIONAIRE, as they use the concessioned road infrastructure. They may be natural persons, legal persons, public or private, national or foreign, as driver or passenger of a Light Vehicle or Heavy Vehicle, whether it is used for private or public transport service.
- 1.14.134. <u>"Net Book Value of Intangible Assets</u>", is the value recognized by the GRANTOR to the CONCESSIONAIRE in case of early termination of the Contract, consisting of the book value of the Concession Assets that have not been fully depreciated, in accordance with the provisions of Article 22 of the Single Ordered Text (TUO) of the standards with the rank of Law that regulate the concession to the private sector of public works of infrastructure and public services, approved by Supreme Decree No. 059-96-PCM, and Clause 18.26 et seq. of this Contract.
- 1.14.135. <u>"Present Value of Toll Revenue (VPIP)</u>", is the present value as of the Reference Date of the Toll revenues to be obtained by CONCESSIONAIRE during the Concession term, as indicated in Clause 5.1 of this Contract and as defined in Appendix 4 of Annex No. 9.
- 1.14.136. "Present Value of Toll Revenue at month "m" (VPIPm)", is the present value as of the Reference Date of the Toll revenues accrued up to the last Calendar Day of month "m", as defined in Appendix 4 of Annex No. 9.
- 1.14.137. "Vehicles", are together Light Vehicles and Heavy Vehicles.
- 1.14.138. "Light Vehicle", is that means of motor vehicle used to transport people and/or goods and which is included in category M₁, M₂ and/or N₁, with trailers O₁ and/or O₂ or without trailers, in accordance with the provisions of Supreme Decree No. 058-2003-MTC, or the standard that modifies and/or replaces it.

- 1.14.139. "Heavy Vehicle", is that means of motor vehicle used to transport people and/or goods and which is included in category M₃, N₂ and/or N₃, with trailers O₃ and/or O₄ or without trailers, in accordance with the provisions of Supreme Decree No. 058-2003-MTC, or the standard that modifies and/or replaces it.
- 1.14.140. "Expressways", are those roads located in the central area of the Right of Way, and which are part of the Concession.

For other definitions not contemplated in this Contract, the "GLOSSARY OF TERMS FREQUENTLY USED IN ROAD INFRASTRUCTURE PROJECTS" approved by Directorial Resolution No. 02-2018-MTC/14, and its modifying and/or substitute regulations.

CHAPTER II: PURPOSE, MODALITY AND CHARACTERISTICS

PURPOSE

2.1. By this Contract, the GRANTOR grants the CONCESSIONAIRE the right of Concession of the Design, Financing, Construction, Operation and Maintenance of the Project, for which it grants the use and economic exploitation of the Concession Assets during the term of the Concession. For such purpose, the CONCESSIONAIRE shall comply with the parameters, levels, capacity and others associated with the investment, as well as with the Service Levels, as established in this Contract.

The CONCESSIONAIRE undertakes to Operate and to deliver and/or return all the Concession Assets to the CONCESSIONAIRE upon the Expiration of the Concession.

This Contract is on a lump sum basis, and therefore no readjustments shall be applied except for those expressly agreed upon, which are detailed in Clauses 6.36, 6.38 and 11.8 and following, as well as in Appendix 6 of Annex No. 4, Appendices 2 and 4 of Annex No. 9 and Appendices 1 and 2 of Annex No. 13. This provision prevails over any other provision that could establish or allow an interpretation to the contrary.

- 2.2. The activities or services that form part of the Concession and that, therefore, constitute obligations of the Parties are the following:
 - a) The delivery, transfer, use and return of the Concession Assets indicated in Chapter VI of the Contract.
 - b) The Co-financing, in accordance with the conditions indicated in Chapter XII of the Contract.
 - c) The design, financing, Construction and Operation of Sections 1, 2 and 3 of the Project, in accordance with the conditions indicated in Chapters VII, XII, VIII, and IX of the Contract.
 - d) The Operation of Sections 1, 2 and 3 of the Project, in accordance with the terms indicated in Chapter X of the Contract.
 - e) The compliance with the Service Levels, according to Annex No. 11 of the Contract.
- 2.3. This Contract responds to a DFBOMT (Design, Finance, Build, Operate, Maintain and Transfer) scheme, therefore the ownership of the infrastructure that is part of the Concession, at all times, maintains its public condition.
- 2.4. Considering that the purpose of the Concession right is to contribute to the social welfare of the population through an adequate provision of the Service, in the economic conditions and in compliance with the Service Levels established in the Concession Contract, the acts of disposition and the constitution of rights over the Concession must be compatible with this nature and must be approved by the GRANTOR, prior opinion of the REGULATOR, as specified in this Contract.

MODALITY

2.5. The modality under which the Concession is granted is a Public-Private Partnership in its classification of Co-financed by the State, in accordance with numeral 1 of Article 22 of the Legislative Decree No. 1362 and Articles 30 and 102 of Regulation.

CHARACTERISTICS

- 2.6. Notwithstanding the multiplicity of activities and services into which its object is divided, as described in Clauses 2.1 to 2.4, the Contract is of a unitary nature and responds to a single cause.
- 2.7. The Contract is principal, of reciprocal benefits, of successive tract and of continuous execution. On the other hand, and in accordance with Clause 12.3 et seq. of this Contract, one of the main characteristics of the Contract is that the economic-financial balance of the Parties must be maintained at all times.
- 2.8. The main obligations of the CONCESSIONAIRE are the execution of the Works and the provision of the Service, in accordance with the provisions of this Contract.
- 2.9. Considering the public nature of the ownership of the Concession Assets, the Service that is the subject of the Contract is governed by the principles of continuity, regularity and non-discrimination.

CHAPTER III: EVENTS AS OF THE CLOSING DATE

STATEMENTS OF THE CONCESSIONAIRE

- 3.1. The CONCESSIONAIRE guarantees to the GRANTOR that, as of the Closing Date, the statements set forth below are true, correct and complete and acknowledges that the subscription of the Contract by the GRANTOR is based thereon:
 - a) Incorporation, Validity and Consent

That, the CONCESSIONAIRE (i) is a company duly incorporated in Peru in accordance with the Applicable Laws and Provisions; (ii) in accordance with its corporate purpose, is duly authorized and capable of assuming the obligations that respectively correspond to as a consequence of the execution of this Contract; and, (iii) has complied with all the necessary requirements to formalize this Contract and to comply with the commitments contemplated herein.

b) Authorization, Signature and Effect

That, the signature and compliance of this Contract, as well as the compliance of the obligations contemplated herein by the CONCESSIONAIRE, are within its powers and have been duly authorized by its general meeting or other bodies with equivalent functions.

That, the CONCESSIONAIRE has fully complied with the acts and/or procedures to authorize the execution of this Contract, including those required in the Tender (in case it has been carried out), and for the fulfillment of the obligations that respectively correspond to it under this Contract. That, the Contract has been duly and validly signed by the CONCESSIONAIRE, and constitutes a valid, binding and enforceable obligation for the CONCESSIONAIRE.

That, the execution of this Contract constitutes the ratification of all acts performed and documents subscribed by the legal representative(s) of the CONCESSIONAIRE, including any right or obligation corresponding to it under this Contract, the Bidding Terms (in case a Tender has been carried out) and/or the Applicable Laws and Provisions.

That, it is not necessary for the CONCESSIONAIRE to carry out other acts or procedures to authorize the execution and compliance with the corresponding obligations under the Contract.

- c) <u>Formation of the CONCESSIONAIRE, its Bylaws and Capital Stock</u> The CONCESSIONAIRE declares the following:
 - i) The sole corporate purpose of the CONCESSIONAIRE is the design, financing, Construction, Execution, Operation and Maintenance of the Project, as well as the provision of the Service and the other obligations and/or activities set forth in the Concession Contract.
 - ii) The domicile of the CONCESSIONAIRE is in the province of Lima.
 - iii) The CONCESSIONAIRE has a minimum subscribed and paid-in capital stock that complies with the provisions of Clauses 3.6 and 3.7.
 - iv) The formation of the CONCESSIONAIRE's capital in force as of the Closing Date is in accordance with the provisions of Clauses 3.6 and 3.7 of this Contract.
 - v) The Strategic Partner is owner and holder of, at least, the Minimum Participation.
- d) Litigations

That, is not aware of and has not been formally notified of any claims, complaints, lawsuits, arbitration or other legal proceedings in progress, or judgments, or decisions of any kind, against the CONCESSIONAIRE and/or the Strategic Partner that are intended to prohibit or otherwise prevent or limit the compliance of the commitments or obligations contemplated in this Contract.

e) Of the Contracting

The CONCESSIONAIRE expressly declares and acknowledges that it has achieved such condition as a consequence of the Award of the Project.

That, the CONCESSIONAIRE does not have any impediment or is subject to restrictions (by contractual, judicial, arbitration, legal or any other means) to enter into contracts with the State pursuant to the Applicable Laws and Provisions, or to assume and comply with each and every one of the obligations that correspond or may correspond to it pursuant to the Declaration of Interest, the Technical Offer, the Economic Offer, the present Contract and the Bidding Terms, as the case may be.

That, it has no impediment to contract according to Article 1366 of the Civil Code, and Article 29 of Legislative Decree No. 1362, and is not administratively sanctioned with temporary or permanent disqualification in the exercise of its rights to contract with the State.

As of the Closing Date, all information, declarations, certifications and, in general, all documents submitted by the Successful Bidder, for the Declaration of Interest and/or during the Tender stage, as applicable, remain valid.

In the event that, after the execution of the Contract, it is proven that the statement contained in this subparagraph e) is false, this Contract shall be automatically terminated for breach by the CONCESSIONAIRE, and the guarantee of seriousness

or the guarantee granted prior to the Award of the Project, as the case may be, shall be executed.

f) Limitation of Responsibility

That, the CONCESSIONAIRE and the Strategic Partner have based their decisions, including that of formulating, determining and submitting the Technical Offer, Economic Offer and subscribing the Contract on their own investigations, examinations, inspections, visits, interviews and others.

Consequently, the GRANTOR and/or any of its organs or dependencies, PROINVERSIÓN, the advisors and the State of the Republic of Peru or any dependency thereof, do not guarantee, neither expressly nor implicitly, the totality, integrity, reliability, or veracity of the information, verbal or written, provided to it, including the information provided for the purposes of or within the Tender. Consequently, no liability whatsoever may be attributed to any of the aforementioned parties or their representatives, agents or dependents for the use that may be made of such information or for any inaccuracy, insufficiency, defect, failure to update or for any other cause not expressly contemplated in this Clause.

The aforementioned limitation reaches, as broadly as possible, to all the information related to the Project that was effectively known, to the information not known and to the information that at some point should have been known, including the possible errors or omissions contained therein, by the GRANTOR, PROINVERSIÓN, the advisors and the State of the Republic of Peru or any dependency of these. Likewise, such limitation of liability extends to any information, whether or not supplied or formulated, directly or indirectly, by any of the aforementioned parties.

The limitation of responsibility also includes all general information reached by the GRANTOR, PROINVERSIÓN, the advisors and the State of the Republic of Peru or any agency thereof, marketing documents, as well as that provided through Official Letters or any other form of communication, that which is acquired during the visits to the data room, and that which is mentioned in the Bidding Terms, including all its forms, annexes and appendices.

g) Minimum Participation of the Strategic Partner

That, the Minimum Participation of the Strategic Partner, the bylaws and the constitutive documents of the CONCESSIONAIRE are and will be maintained in accordance with the requirements of the Bidding Terms/Declaration of Interest.

h) Effects of Contracts with Third Parties

That, the contracts entered into by the CONCESSIONAIRE with third parties shall not be enforceable against the GRANTOR.

i) Acts of Corruption

That neither the CONCESSIONAIRE, nor the Strategic Partner, nor any of its shareholders, partners or Related Companies, nor any of their respective directors, officers, employees, advisors, legal representatives or agents, has paid, received, offered, or attempted to pay, receive or offer, nor will attempt to pay or receive or offer in the future any illegal payment or commission to any Governmental Authority in connection with the Concession, the Contract and/or the Tender, including the award of the Successful Bid and/or the execution and/or performance of the Contract and/or

its respective addenda. In the event that this is verified, the provisions of Clause 18.21 et seq. of the Contract shall apply.

- 3.2. The CONCESSIONAIRE and the Strategic Partner expressly, unconditionally and irrevocably waive the right to invoke or exercise any privilege or immunity, diplomatic or otherwise, or claim through diplomatic channels that may be brought by or against the GRANTOR or its agencies, PROINVERSIÓN, the advisors, the State or its agencies, under Applicable Laws and Provisions or under any other applicable legislation, with respect to any obligations that correspond or may correspond to it under the Declaration of Interest/ the Bidding Terms and this Contract.
- 3.3. The CONCESSIONAIRE and the Strategic Partner shall keep confidential the information of a reserved nature that they have received from the GRANTOR, or the information that they are obliged to keep confidential in accordance with the Applicable Laws and Provisions. The CONCESSIONAIRE may disclose such confidential or reserved information only with the prior written authorization of the GRANTOR.

STATEMENTS OF THE GRANTOR

- 3.4. The GRANTOR, on its part, guarantees to the CONCESSIONAIRE, on the Closing Date, the veracity and accuracy of the following statements, and acknowledges that the execution of the Contract by the CONCESSIONAIRE is based on the same:
 - a) That, the Concession is a co-financed public-private partnership that complies with the requirements of the Legislative Decree No. 1362, the Regulations and other Applicable Laws and Provisions, and that the acts prior to the signing of this Contract and the Contract itself comply with the provisions of the aforementioned standards.
 - b) That, it is duly authorized, in accordance with the Applicable Laws and Provisions, to act as GRANTOR in the Contract. The subscription of the Contract by the GRANTOR is in accordance with the Applicable Laws and Provisions, therefore, no other action or procedure by the GRANTOR or any other governmental entity is necessary to authorize the subscription of the Contract. This Contract has been duly and validly signed by the authorized representative(s) of the GRANTOR and, together with the due authorization and signature thereof by the CONCESSIONAIRE, constitutes a valid and binding obligation of the GRANTOR.
 - c) That it has complied with all the administrative acts, requirements, demands and obligations necessary to enter into this Contract and to duly comply with its stipulations. Likewise, that the Award of the Concession was made in compliance and in accordance with the Applicable Laws and Provisions.
 - d) That, there are no Applicable Laws or Provisions that prevent the GRANTOR from complying with its obligations under this Contract. That, there are no claims, complaints, lawsuits, investigations, litigations or proceedings in progress before a jurisdictional body, arbitration court or Governmental Authority, which prohibit, oppose or in any way prevent the signature or compliance of the terms of this Contract by the GRANTOR.
 - e) That, the CONCESSIONAIRE shall have the right to the Operation as from the dates foreseen for such purposes, in accordance with the provisions of Chapter X and until

the expiration of the Contract, and this right shall only terminate in the cases of Expiration of the Concession foreseen in Chapter XVIII of this Contract.

- f) That, the validity and scope of the stipulations in the Contract have been formulated in accordance to the Applicable Laws and Provisions.
- g) That, any dispute relating to the Contract shall be resolved in accordance with the provisions of Chapter XIX of this Contract and/or with the Expert, as applicable.
- h) That, to the best of its knowledge, there are no liabilities, obligations, or administrative, labor, tax, judicial, legal or any other contingencies, other than the Vizcachera area, that in any way affect or may affect in the future the Concession, the Concession Assets or the right to the Operation. In case of liabilities or contingencies generated before the Possession Taking, these will be assumed directly by the GRANTOR, in accordance with the provisions of the Applicable Laws and Provisions, or, alternatively, it will be its responsibility to remedy that situation that could affect the Concession right granted by virtue of this Contract. In any case, it shall be the responsibility of the GRANTOR to hold the CONCESSIONAIRE harmless against any claim or circumstance generated as a result of the referred Environmental Liabilities, except in the case of fraud or inexcusable fault of the CONCESSIONAIRE.
- i) That, assumes the obligation to release the Concession Area in accordance with the terms and conditions set forth in this Contract, which includes the possible relocation of the Taxable Persons and/or the expropriation of their real estate, without prejudice to the activities entrusted to the CONCESSIONAIRE on these matters, as set forth in the Contract.
- j) That, will make its best efforts and act as facilitator before the Relevant Governmental Authorities so that, provided that the respective legal requirements are met, to enter into the Legal Stability Agreements with the CONCESSIONAIRE and its investors, as referred to in Legislative Decrees No. 662 and No. 757; Article 19 of Supreme Decree No. 059-96-PCM, Single Ordered Text of the standards with the rank of Law that regulate the concession of public infrastructure and public services works to the private sector; Article 25 of Legislative Decree No. 1362, and Article 117 of the Regulations, or the standards that modify or replace them. This obligation is one of means rather than ends.
- k) That, the GRANTOR has and will keep the ownership of the roads that are object of the Concession and/or the power of management over them during all the validity of the Contract, so it is fully competent to deliver in Concession the execution of the Project and Operation in favor of the CONCESSIONAIRE.
- I) That, in accordance with numeral 25.1 of Article 25 of Legislative Decree No. 1362, the Executive Branch has issued the Supreme Decree by which the guarantee of the State of the Republic of Peru is granted in support of the obligations, declarations and guarantees of the GRANTOR established in the Concession Contract. This is not a financial guarantee.
- m) That it is obliged to make the contributions to the Administration Trust within the terms and conditions established in the Concession Contract.

n) That it has complied with the following management goals for the property release and the release or removal of Interferences established in the structuring stage of the Project, according to the Applicable Laws and Provisions:

Property Release Goals	
Phases	Goals
Structuring (before the	Preliminary identification of the affected properties,
Declaration of Interest)	according to the Project's route, taking into account
	the last census carried out by the Relevant
	Governmental Authorities.
Transaction (before Award)	Preventive annotation of the Right of Way of the
	Project in the land registries of the properties
	affected by the Project.
Interference Release or Removal	
Goals	
Phases	Goals
Structuring (before the	1. Location and preliminary inventory of
Declaration of Interest)	Interferences, grouping them by service and
	affected Section, including their location on the
	route with an analysis of their impact on the
	Work.
	2. Obtaining the preliminary valuation of the
	repositioning of these Interferences.
	3. Elaboration and delivery of preliminary
	schedules for the removal of interferences by
	Sections.
Transaction (before Award)	Sending communications to the companies and/or
	entities owning the Interferences, providing them
	with the Project documentation and requesting
	confirmation of the impact on their infrastructure, as
	well as the technical solution they consider
	pertinent, including the cost and term of the same.

OBLIGATIONS OF THE CONCESSIONAIRE AS OF THE CLOSING DATE

- 3.5. The CONCESSIONAIRE shall have complied as of the Closing Date with the following:
 - a) Submit the public deed of incorporation and bylaws of the CONCESSIONAIRE, and if applicable, the public deed of capital stock increase and partial amendment of bylaws, with proof of registration, in order to prove: (i) that it is a company validly incorporated in accordance with the Applicable Laws and Provisions, having adopted one of the forms regulated by the General Corporation Law and in accordance with the provisions of the Bidding Terms; and, (ii) that it has at least the same partners, shareholders, or members that were part of the Successful Bidder; not being allowed in the shareholding structure of the CONCESSIONAIRE, the participation of any legal entity that has submitted, directly or indirectly through a Related Company, an economic offer in the Tender, if applicable. This testimony is attached to this Contract as Annex No. 14.

- b) Proof of a minimum amount of capital stock equivalent to the amount indicated in numeral (i) of Clause 3.6.
- c) Submit a copy of the documents stating that its competent internal bodies have approved this Contract and accredit the registration in the corresponding registry office of the powers of attorney of the legal representative of the CONCESSIONAIRE who signs the Contract in its name and on its behalf.
- d) Submit notarized copy of the entries of the share registration book or equivalent document, stating the formation of the shareholders or the participations of the CONCESSIONAIRE.
- e) Submit the insurance policy offer, in accordance with Chapter XIV of the Contract.
- f) The bylaws of the CONCESSIONAIRE must contain, at least, the following provisions:
 - (i) A restriction to the free transfer, disposition or encumbrance of shares or participations corresponding to the Minimum Participation of the Strategic Partner that accredited the capacity or minimum technical requirements in favor of third parties or to other partners or shareholders of the CONCESSIONAIRE until after five (5) Calendar Years counted from the Section that first initiates the Operation, in accordance with the provisions of Clause 16.8 of Chapter XVI of this Contract, except for the provisions of subparagraph b) of Clause 4.9 regarding the possibility of encumbering the Minimum Participation from the beginning of the Concession with the purpose of obtaining financing.

As from such date, the Strategic Partner may transfer, dispose or encumber the Minimum Participation in favor of a new strategic partner, subject to the approval of the GRANTOR, in accordance with the provisions of of Clauses 16.8 and following.

The GRANTOR shall not recognize the operations described in this clause that are carried out without observing the provisions of this clause. The CONCESSIONAIRE and the Strategic Partner shall be solely liable to indemnify third parties for damages resulting from the non-compliance with such provisions.

(ii) A restriction to the free transfer, disposition or encumbrance of the shares or participations of the CONCESSIONAIRE, other than the Minimum Participation, in favor of the other bidding legal persons and/or the members of the other consortiums that submitted economic offers in the event that a Tender has been carried out, until after five (5) Calendar Years counted from the Section that first begins Operation. As of such date, the shareholders or partners of the CONCESSIONAIRE may freely transfer, dispose of or encumber such shares or participations.

The aforementioned limitation also includes the transfer, provision or encumbrance of the shares or participations of the CONCESSIONAIRE, other than the Minimum Participation, in favor of Related Companies of the bidding legal persons and/or of the members of the consortiums that submitted economic offers during the Tender, in case the Tender has been carried out.

The GRANTOR shall not recognize the operations described in this Clause that are carried out without observing the provisions of this clause. The CONCESSIONAIRE shall be solely liable to indemnify third parties for damages resulting from the non-compliance of such provisions. Additionally, failure to comply with the provisions of this numeral shall give rise to the application to the CONCESSIONAIRE of the penalties set forth in Annex No. 10.

- (iii) That, any amendment to the bylaws involving a capital increase, capital reduction, merger, spin-off, transformation, liquidation or other corporate reorganization of the CONCESSIONAIRE, as of the Closing Date and throughout the term of the Concession, shall:
 - (1) Maintain the Minimum Percentage Participation of capital stock for the Strategic Partner, as established in the Bidding Terms/Declaration of Interest and in the Concession Contract; and
 - (2) Have necessarily the favorable vote of the Strategic Partner.

These provisions must be maintained during the entire term of the Concession, always respecting the Minimum Participation.

Likewise, in case the CONCESSIONAIRE decides to carry out a capital reduction, merger, spin-off, transformation or liquidation process, it shall submit to the GRANTOR, with a copy to the REGULATOR, the draft resolution of the corresponding general shareholders' meeting or equivalent body. This shall be evaluated and, if applicable, authorized by the GRANTOR within a maximum term of forty-five (45) Working Days of receipt of the CONCESSIONAIRE's request, prior opinion of the REGULATOR, which shall be issued within a term no longer than thirty (30) Working Days of receipt of the CONCESSIONAIRE's request. If the REGULATOR and the GRANTOR do not issue their pronouncements within the established terms, it shall be understood that their pronouncements are favorable, provided that, ten (10) Working Days prior to the expiration date of the term that the GRANTOR and/or the REGULATOR has for its pronouncement, the CONCESSIONAIRE sends to the GRANTOR or the REGULATOR, as the case may be, a written communication on the deadline of the term for its pronouncement. In the event the CONCESSIONAIRE does not send such communication and the GRANTOR or the REGULATOR do not issue a decision, their decisions shall be deemed unfavorable, as the case may be.

The GRANTOR shall not recognize the operations described in this Clause that are carried out without observing the provisions of this clause. The CONCESSIONAIRE shall be solely liable to indemnify third parties for damages resulting from the non-compliance of such provisions. Additionally, failure to comply with the provisions of this numeral shall give rise to the application to the CONCESSIONAIRE of the penalties set forth in Annex No. 10.

- (iv) That, the CONCESSIONAIRE has adopted one of the corporate forms regulated by the General Corporation Law, with the exception of the Publicly Traded Company.
- (v) That, for the purposes of the incorporation, operation and performance of the CONCESSIONAIRE, it shall be governed in strict compliance with the Applicable Laws and Provisions.
- (vi) That, the CONCESSIONAIRE is an exclusive purpose company, whose corporate purpose is limited to those activities that are necessary for the execution of the Contract, consisting exclusively in the exercise of the rights and obligations related to the Concession, as well as in the provision of the Mandatory Services and those Optional Services authorized by the GRANTOR. The corporate purpose must also indicate that it is a CONCESSIONAIRE of the State of the Republic of Peru.
- (vii) That, the term of the CONCESSIONAIRE'S incorporation is indefinite. Likewise, a fixed term may be chosen and it may be stated that, if for any reason the duration of the Concession is extended beyond such term, the duration of the CONCESSIONAIRE's term shall be extended for an additional term, equal to or greater than the expected duration of the Concession, in accordance with the provisions of Clause 5.1 et seq. of the Contract.

Notwithstanding the foregoing, the CONCESSIONAIRE may not be dissolved or liquidated until all of the CONCESSIONAIRE's obligations under this Contract have been concluded and fulfilled.

- g) Submit the Guarantee of Faithful Fulfillment of the Concession Contract according to the terms and conditions set forth in Clause 13.4. Such guarantee shall be fully enforceable at the sole unilateral request of the GRANTOR and in accordance with the provisions of Clause 13.6.
- h) Pay the amount of US\$ 5,421,848.44 (five million four hundred and twenty-one thousand eight hundred and forty eight and 44/100 US Dollars) in favor of PROINVERSIÓN for the expenses incurred during the private investment promotion procedure including, among others, the fees of the financial, legal and technical advisors hired by PROINVERSIÓN.
- i) Submit an affidavit from the Strategic Partner to the GRANTOR whereby it undertakes to comply with the points detailed in Clause 16.11.
- j) If applicable, pay the reimbursement of the expenses referred to in Article 75 of the Regulations established in the Declaration of Interest.
- k) Submit the economic-financial model, according to the details of Article 35 of the Regulations.
- I) Submit a statement in which the CONCESSIONAIRE declares, with respect to the company or consortium members, as the case may be, that it/they are not impeded and/or disqualified to participate in selection processes or to contract with the State in accordance with the Applicable Laws and Provisions and has/have not ceased to

be concessionaire(s) due to breach of a concession contract as indicated in the Bidding Terms/Declaration of Interest.

- m) In case a Tender has been carried out, submit an affidavit certifying that, as of the Closing Date, all the information submitted in the Tender through Envelopes No. 1 and No. 2 remains valid and reliable, according to the Bidding Terms.
- n) Deliver one (1) management check in favor of the REGULATOR for the beginning of the hiring process of the supervisor, as indicated in Clause 8.17.
- Submit the design and work plan of the PAP of each of the Project Sections for the GRANTOR's conformity, with copy to the REGULATOR, as established in Clause 6.29.

OBLIGATIONS OF THE CONCESSIONAIRE IN RELATION TO ITS MINIMUM CAPITAL STOCK AND EQUITY

3.6. Pursuant to the milestones indicated below, the CONCESSIONAIRE shall credit a minimum capital stock amount of US\$ 396,745,641.92 (Three hundred and ninety six million seven hundred and forty five thousand six hundred and forty one and 92/100 US Dollars), which shall be accredited by submitting to the GRANTOR the testimony of the public deed of incorporation and bylaws of the CONCESSIONAIRE that, as Annex No. 14, forms an integral part of this Contract, as well as the corresponding registry registration certificate; or, if applicable, the certificates of capital stock increase and amendment of the bylaws and proof of the corresponding registration.

This amount of minimum capital stock shall be fully subscribed and fully paid in Soles, at the exchange rate on the date of adoption of the respective corporate resolution and in compliance with the provisions of the General Corporation Law, in accordance with the following detail:

- (i) Ten percent (10%) of such minimum capital stock amount shall be subscribed and paid no later than the Closing Date.
- (ii) Thirty-six percent (36%) of said minimum capital stock amount shall be subscribed and paid no later than the subscription of the Work Initiation Act of Section 1.
- (iii) Fifty-one percent (51%) of said minimum capital stock amount shall be subscribed and paid no later than the subscription of the Work Initiation Act of Section 3.
- (iv) Eighty-four percent (84%) of said minimum capital stock amount shall be subscribed and paid in no later than (a) the subscription of the Work Initiation Act of Section 2 in case the CONCESSIONAIRE chooses to credit the Financial Closing of Section 2 in a single opportunity or, (b) the referred minimum capital stock must be subscribed and paid in no later than the date of submission of the request for the accreditation of the Financial Closing of Phase 2 of Section 2 (as determined in Annex No. 19 of the Contract), in case the CONCESSIONAIRE chooses to accredit the Financial Closing of Section 2 in 2 phases, as determined in Annex No. 19 of the Contract.

- (v) Ninety-two percent (92%) of said minimum capital stock amount shall be subscribed and paid when fifty percent (50%) of the Works of Section 2 have been executed, which shall be evidenced by a Work Review Report issued by the REGULATOR. The CONCESSIONAIRE shall have a term of thirty (30) Working Days after receiving the Work Review Report to subscribe and pay the percentage of the minimum capital stock amount mentioned above.
- (vi) One hundred percent (100%) of said minimum capital stock amount must be subscribed and paid upon completion of the Construction Stage of all the Sections.
- (vii) As from the first year counted from the beginning of the Operation Stage of all the Sections, the CONCESSIONAIRE may reduce its capital stock and maintain an amount equivalent to twenty percent (20%) of the minimum capital stock amount. The capital reduction carried out for this purpose shall require authorization by the GRANTOR, with the opinion of the REGULATOR, pursuant to Clause 3.5, subparagraph f), numeral (iii).
- (viii) After five (5) years from the beginning of the Operation Stage of all the Sections, the CONCESSIONAIRE may reduce its capital stock and maintain an amount equivalent to ten percent (10%) of the minimum capital stock amount. The capital reduction carried out for this purpose shall require authorization by the GRANTOR, with the opinion of the REGULATOR, pursuant to Clause 3.5, subparagraph f), numeral (iii).
- 3.7. In the event of termination or partial expiration of the Contract due to the impossibility of acquiring property as established in Clause 6.34 et seq., the minimum capital stock amount shall be readjusted. In such case, the minimum adjusted capital stock amount shall be US\$ 198,704,482.42 (One hundred and ninety eight million seven hundred and four thousand four hundred and eighty two and 42/100 US Dollars) and shall be subscribed and paid as follows:
 - (i) Ten percent (10%) of such minimum adjusted capital stock amount shall be subscribed and paid in no later than the Closing Date.
 - (ii) Fifty-three percent (53%) of said minimum adjusted capital stock amount must be subscribed and paid in no later than the subscription of the Work Initiation Act of Section 1.
 - (iii) Seventy-nine percent (79%) of said minimum adjusted capital stock amount must be subscribed and paid in no later than the subscription of the Work Initiation Act of Section 3.
 - (iv) Ninety-two percent (92%) of said minimum adjusted capital stock amount must be subscribed and paid when fifty percent (50%) of the Works of Sections 1 or 3 have been executed, whichever occurs first, which shall be evidenced by a Work Review Report issued by the REGULATOR. The CONCESSIONAIRE shall have a term of thirty (30) Working Days after receiving the Work Review Report to subscribe and pay the percentage of the minimum adjusted capital stock amount mentioned above.

- One hundred percent (100%) of the minimum adjusted capital stock amount must be subscribed and paid upon completion of the Construction Stage of Sections 1 and 3.
- (vi) As from the first (1) year counted from the later of the beginning of the Operation Stage of Section 1 or Section 3, the CONCESSIONAIRE may reduce its capital stock and maintain an amount equivalent to twenty percent (20%) of the minimum adjusted capital stock amount. The capital reduction carried out for this purpose shall require authorization by the GRANTOR, with the opinion of the REGULATOR, pursuant to Clause 3.5, subparagraph f), numeral (iii).
- (vii) After five (5) years from the later of the beginning of the Operation Stage of Section 1 or Section 3, the CONCESSIONAIRE may reduce its capital stock and maintain an amount equivalent to ten percent (10%) of the adjusted minimum capital stock amount. The capital reduction carried out for this purpose shall require authorization by the GRANTOR, with the opinion of the REGULATOR, pursuant to Clause 3.5, subparagraph f), numeral (iii).
- (viii) In the event of the termination or partial expiration of the Contract due to the cause indicated in Clause 6.35 (i), and the CONCESSIONAIRE has made a capital contribution in accordance with the contribution schedule indicated in Clause 3.6, the CONCESSIONAIRE may reduce its capital stock in order to maintain the minimum capital stock required for such moment.

OBLIGATIONS OF THE GRANTOR AS OF THE CLOSING DATE

- 3.8. The GRANTOR, as of the Closing Date, shall comply with the following:
 - (i) Return to the CONCESSIONAIRE the Guarantee of Validity, Effectiveness and Seriousness of the Offer submitted by the Successful Bidder during the Tender, as established in the Applicable Laws and Provisions.
 - (ii) Submit a copy of the Contract duly signed.
 - (iii) Submit a copy of the Legal Stability Agreement, provided that the CONCESSIONAIRE has requested it, having complied with the requirements set forth in Legislative Decrees No. 662 and No. 757; Article 19 of Supreme Decree No. 059-96-PCM, Single Ordered Text of the standards with the rank of Law that regulate the concession of public infrastructure and public services works to the private sector; Article 25 of Legislative Decree No. 1362, and Article 117 of the Regulations, or the standards that modify or replace them.
 - (iv) Submit to the CONCESSIONAIRE a copy of the Supreme Decree referred to in numeral 25.1 of Article 25 of Legislative Decree No. 1362 and/or the standards that modify or replace it, by which the CONCESSIONAIRE is granted the guarantee of the State in support of the statements, securities and obligations assumed by the GRANTOR by this Contract; which is not a financial guarantee.
 - (v) Submit to the CONCESSIONAIRE, for its signature, a copy of the contract of

assurances and guarantees duly signed by the Relevant Governmental Authorities.

- (vi) Submit a copy of the Ministerial Resolution or the corresponding legal provision that defines the scope of the Right of Way of the areas included in Annex No. 1 of the Contract, if applicable.
- (vii) Submit to the CONCESSIONAIRE the preliminary technical files of works, removal and/or replacement for the release of Interferences, received from the utility companies and/or the corresponding holders of the Interferences.
- (viii) Submit to the CONCESSIONAIRE the progress made in the process of Acquisition and/or Expropriation of the real estate necessary for the execution of the Project in accordance with the provisions of subsection n) of Article 3.4, carried out in accordance with the Applicable Laws and Provisions, during the Structuring and/or Transaction Phases.

In this sense, the GRANTOR shall deliver within a maximum term of one hundred and eighty (180) Calendar Days counted from the Closing Date, all the properties it has acquired during the Structuring and/or Transaction Phases, even if it had not complied with guaranteeing its Physical and Effective Release on the Closing Date, in order for the GRANTOR to take custody of such properties.

It should be noted that the CONCESSIONAIRE shall be obliged to take custody of the assets acquired by the GRANTOR during the Structuring and/or Transaction Phases, provided that it is stated for the record that the GRANTOR shall be the sole responsible for the physical and legal sanitation of each of the referred properties, in accordance with the provisions of Clause 6.7 of this Contract. For these purposes, the Parties shall sign a specific custody deed recording, among other matters, all the properties that have been acquired by the GRANTOR during the Structuring and/or Transaction Phases and in respect of which the CONCESSIONAIRE shall carry out the custody and possessory defenses that may be pertinent, in accordance with the provisions of Clause 6.57 and subsequent clauses of the Contract.

Likewise, only and for the properties that comply with the conditions described above, acquired by the GRANTOR during the Structuring and/or Transaction Phases, the CONCESSIONAIRE shall not be deemed to have taken possession of such properties until the GRANTOR complies with the Physical and Effective Release of the properties, and the CONCESSIONAIRE shall include all the properties described above within the corresponding Property Acquisition Plan.

The Possession Taking of the properties that the GRANTOR has acquired until the Closing Date will be made provided that the GRANTOR guarantees that the properties to be delivered will be free of: (i) Taxable Persons, Essential Interferences and of any physical restriction that could affect the normal development of the Works or the future Operation or, (ii) seizure, judicial, extrajudicial or administrative measure, that could limit, prevent or affect its normal use for the purposes of the Contract; the GRANTOR being obliged to the sanitation as the case may be, either by eviction, by hidden defect and/or by own act of the GRANTOR.

The Possession Taking of the properties that the GRANTOR has acquired and its Physical and Effective Release has been achieved by the Closing Date will be formalized by means of an Initial Act of Delivery of Assets.

3.9. The provisions of this Chapter are a prerequisite for the obligations and rights of the GRANTOR and the CONCESSIONAIRE under the Contract to be enforceable.

CHAPTER IV: FINANCIAL CLOSING, PERMITTED GUARANTEED INDEBTEDNESS AND GUARANTEES IN FAVOR OF PERMITTED CREDITORS

OVERVIEW AND DEADLINE FOR FINANCIAL CLOSINGS

4.1 The CONCESSIONAIRE must accredit the Financial Closings before PROINVERSIÓN within the terms established in Clause 4.5 of this Contract. To such effect, the CONCESSIONAIRE shall submit in writing one or more requests for Financial Closing conformity to PROINVERSIÓN, accompanying the necessary documentation in accordance with Clauses 4.2 and 4.3, as well as that required by the Applicable Laws and Provisions. Likewise, the CONCESSIONAIRE shall send a copy of its requests to the GRANTOR, for its knowledge.

It is hereby established that the conformity of the requests by PROINVERSIÓN does not affect or limit the exclusive responsibility of the CONCESSIONAIRE to have sufficient resources to execute the Works and to comply with the other purposes of the Concession Contract. Likewise, the CONCESSIONAIRE's financing operations do not commit the GRANTOR. Therefore, it is hereby established that the GRANTOR shall not assume any obligations or debts derived from such operations. The operations that the CONCESSIONAIRE enters into with the Permitted Creditors are not and shall not be enforceable against the GRANTOR.

Once the request for conformity of Financial Closing of the Section (or phase of Section 2, as determined in Annex No. 19 of the Contract) corresponding to PROINVERSIÓN has been submitted in accordance with the provisions of this Clause, the CONCESSIONAIRE may not submit a new request for conformity of Financial Closing, replace the request already submitted and/or request the extension of the term provided in Clause 4.7, for the applicable Section (or phase of Section 2, as determined in Annex No. 19 of the Contract).

4.2 In order to evidence that the CONCESSIONAIRE has the minimum capital stock referred to in Clauses 3.6 and/or 3.7, as applicable, the CONCESSIONAIRE shall submit, alternatively or jointly, for PROINVERSIÓN's conformity, (a) the testimony of the public deed of incorporation and bylaws of the CONCESSIONAIRE, as well as the corresponding registration record; (b) the testimonies of the public deed evidencing the corresponding capital stock increases, duly subscribed, paid and registered in the Public Registries; and/or, (c) the testimonies of public deed evidencing the resolutions of its general shareholders' meeting committing to carry out the corresponding capital increases in accordance with Clauses 3.6 and/or 3.7. For such purposes, the CONCESSIONAIRE may submit the documentation it has submitted or will submit to evidence the amount of minimum capital stock required pursuant to Clauses 3.6 and/or 3.7, as applicable. Likewise, in the event the CONCESSIONAIRE submits a testimony of

public deed in which its general shareholders' meeting commits to carry out capital increases pursuant to subparagraph (c) above, such increases may not exceed the amounts corresponding to the minimum capital stock amounts set forth in Clause 3.6 and/or 3.7, as the case may be. These resources will not constitute Permitted Guaranteed Indebtedness.

- 4.3 In order to prove that the CONCESSIONAIRE has the additional financial resources to the minimum capital stock for the execution of the Works, the CONCESSIONAIRE shall submit, alternatively or jointly, for PROINVERSIÓN's conformity, the following:
 - (i) A notarized copy of the financing contracts, guarantees, trusts and, in general, any relevant contractual text, that the CONCESSIONAIRE has agreed with the Permitted Creditor(s) that will participate in the financing of the Concession through Permitted Guaranteed Indebtedness.

It is hereby established that, in order for any Financial Closing to occur with this documentation, PROINVERSIÓN must previously provide its conformity to the Permitted Guaranteed Indebtedness as provided in Clauses 4.17 and following.

- (ii) A notarized copy of the financing contracts, guarantees, trusts and, in general, any relevant contractual text that has been agreed with third parties other than Permitted Creditors that will participate in financing operations of the Concession; and/or,
- (iii) A notarized copy of the financing contracts, guarantees, trusts and, in general, any relevant contractual text that has been agreed with CONCESSIONAIRE's Related Companies.
- (iv) A notarized copy of the testimonies of public deed evidencing capital increases duly subscribed, paid and registered in the Public Registries, for additional amounts to the minimum capital stock accredited pursuant to Clause 4.2.

For clarification purposes, it is hereby established that in case the Financial Closing is carried out with the documents indicated in numerals (ii), (iii) and (iv), these shall not constitute Permitted Guaranteed Indebtedness. Likewise, in case any of the documents indicated in numerals (i), (ii), (iii) and (iv) are written in a foreign language, they must be accompanied by an official translation into Spanish.

In case the Financial Closing is credited through an issuance of transferable securities, debt instruments, securitization and/or any form of financing in the capital market, whether domestic and/or international, the CONCESSIONAIRE shall submit to PROINVERSIÓN notarized copies of the respective master issuance contracts or equivalent contracts in other jurisdictions and/or the respective purchase and sale contracts of RPI or debt instruments or equivalent contracts in other jurisdictions. Notwithstanding the foregoing, subsequent to the accreditation of the Financial Closing and no later than ten (10) Working Days after the signature of the Work Initiation Act corresponding to the Section applicable to such Financial Closing, the CONCESSIONAIRE shall submit to PROINVERSIÓN a notarized copy of any contract or documentation complementary to the documentation indicated in this paragraph that had not been subscribed as of the date of presentation of the accreditation of the Financial Closing before PROINVERSIÓN. Notwithstanding the foregoing, for the purposes of this Contract in relation to Section 2, in the event the CONCESSIONAIRE chooses to carry out the Financial Closing in two phases, the Pricing Date for phase 2 of Section 2 shall occur within fifteen (15) Working

Days after the accreditation of the Financial Closing of phase 2 of Section 2. In any of such cases, the reference to the CONCESSIONAIRE's accreditation of having additional financial resources to the minimum capital stock for the execution of the Works under the Financial Closing shall not mean that the CONCESSIONAIRE has necessarily received the referred resources as of such date, but that such resources are available to the CONCESSIONAIRE through a binding obligation assumed by one or more third party financiers and/or acquirers to grant such financing in favor of the CONCESSIONAIRE and/or to purchase the RPI from the CONCESSIONAIRE, for the purpose of the execution of the Works by the CONCESSIONAIRE.

- 4.4 Pursuant to Clause 4.5, the term to evidence the Financial Closing of each Section will begin to elapse as of the subscription of the Certificate of Compliance with the Requirements for Financial Closing of the corresponding Section or the maximum terms indicated below, whichever occurs first. In order to execute such certificate, each of the following conditions must be previously met for the applicable Section:
 - a) That, (i) in the case of Section 1 and 3, the Parties have subscribed an act of partial release of the properties of the corresponding Section to be elaborated by the GRANTOR, which certifies that the Physical and Effective Release of eighty percent (80%) of the properties established in the diagnosis of the corresponding Section has been carried out, according to Appendix 1 of Annex No. 4 of the Contract; and, (ii) in the case of Section 2 (whether the Financial Closing will be carried out in one or two phases, as determined in Annex No. 19 of the Contract), that the Parties have executed a Partial Act of Delivery of Assets corresponding to the Critical Properties;
 - b) That the CONCESSIONAIRE has obtained the approval of the EDI of the corresponding Section;
 - c) That the CONCESSIONAIRE has obtained the approval by the Relevant Environmental Authority of the Environmental Management Instrument(s) of the corresponding Section;
 - d) That the CONCESSIONAIRE, if applicable, has obtained the Certificate of Nonexistence of Archaeological Remains (CIRA) required to start the Works of the corresponding Section;
 - e) That the CONCESSIONAIRE has obtained from the Governmental Authorities the Operating Permits and other permits, licenses and authorizations required for the commencement of the Construction of the Works of the corresponding Section; and,
 - f) That the Essential Interferences have been removed from the corresponding Section.

Once all the conditions previously established have been fulfilled, the GRANTOR shall prepare and, together with PROINVERSIÓN, the Parties shall sign the Certificate of Compliance with the Requirements for Financial Closing of the corresponding Section, evidencing the compliance with the referred conditions and the beginning of the term to prove the Financial Closing of the corresponding Section according to Clause 4.5.

Notwithstanding the foregoing, the CONCESSIONAIRE shall have, as a maximum, the following deadlines to sign with the GRANTOR the Certificate of Compliance with the Requirements for Financial Closing of each Section:

- (i) For Section 1: six hundred and sixty (660) Calendar Days from the Closing Date.
- (ii) For Section 2: one thousand three hundred and eighty (1380) Calendar Days from the Closing Date.

The Parties agree that the CONCESSIONAIRE has, at its sole discretion, the option to choose to credit the Section 2 Financial Closing, in a single opportunity, or to credit it in two phases, as determined in Annex No. 19 of the Contract.

- (iii) For Section 3: seven hundred and eighty (780) Calendar Days from the Closing Date.
- 4.5 The Financial Closing of each Section must be accredited by the CONCESSIONAIRE before PROINVERSIÓN within the following maximum terms, as applicable to each Section:
 - Section 1: Three hundred (300) Calendar Days from the earlier of (i) the execution of the Certificate of Compliance with the Requirements for Financial Closing of Section 1 or (ii) the deadline provided for the execution of such certificate, in accordance with the provisions of Clause 4.4.
 - Section 2: Three hundred (300) Calendar Days from the earlier of (i) the execution of the Certificate of Compliance with the Requirements for Financial Closing of Section 2 or (ii) the deadline provided for the execution of such certificate, pursuant to the provisions of Clause 4.4.

If the CONCESSIONAIRE chooses to credit the Financial Closing of Section 2 in two phases, as determined in Annex No. 19 of the Contract, the maximum term shall be:

- (i) For Phase 1 of Section 2 (as determined in Annex No. 19 of the Contract): three hundred (300) Calendar Days from the earlier of (a) the execution of the Certificate of Compliance with the Requirements for Financial Closing of Section 2 or (b) the deadline provided for the execution of such certificate, in accordance with the provisions of Clause 4.4.
- (ii) For Phase 2 of Section 2 (as determined in Annex No. 19 of the Contract): seven hundred and twenty (720) Calendar Days from the earlier of (a) the execution of the Certificate of Compliance with the Requirements for Financial Closing of Section 2 or (b) the deadline provided for the execution of such certificate, in accordance with the provisions of Clause 4.4.
- Section 3: Three hundred (300) Calendar Days from the earlier of (i) the execution of the Certificate of Compliance with the Requirements for Financial Closing of Section 3 or (ii) the deadline provided for the execution of such certificate, in accordance with the provisions of Clause 4.4.

The CONCESSIONAIRE may carry out a Financial Closing for each Section of the Concession (or in two phases, in the case of Section 2, as determined in Annex No. 19 of the Contract) or accumulate the Financial Closings of one or more Sections in a single Financial Closing provided that the Certificate of Compliance with the Requirements for Financial Closing of each Section involved have been executed.

In the event that the GRANTOR does not comply with the submission of the Concession Area corresponding to each of the Project Sections, in accordance with and within the terms established in Clause 6.23, the obligations of the CONCESSIONAIRE corresponding to the accreditation of the Financial Closing of the corresponding Section shall be suspended, in accordance with the procedure established in Clause 5.5. and following of the Contract.

It is hereby established that, if a Financial Closing is credited with a Permitted Guaranteed Indebtedness, the terms indicated above include the term of the procedure to obtain PROINVERSIÓN's conformity to such Permitted Guaranteed Indebtedness.

4.6 After submitting the documentation as established in the previous clauses, PROINVERSIÓN will have a term of sixty (60) Calendar Days as of the reception of the CONCESSIONAIRE's request to evaluate the documentation submitted and grant the conformity of the Financial Closing of the applicable Section as provided in numerals (i), (ii) and (iii) of the following paragraph. For this purpose, PROINVERSION shall verify (a) that the CONCESSIONAIRE has at least the resources to cover one hundred percent (100%) of the amounts set forth in the approved EDI of the corresponding Section, unless the CONCESSIONAIRE has chosen to accredit the Financial Closing of Section 2 in two phases, as determined in Annex No. 19 of the Contract, in which case it shall comply with accrediting that it has the necessary financial resources for the execution of the Works in accordance with the provisions of Section 2 of Annex No. 19; (b) that the documents submitted pursuant to Clause 4.2 and/or 4.3 are duly signed; and, (c) that the CONCESSIONAIRE has submitted an affidavit signed by its general manager certifying that all the representatives of the parties to the documents submitted pursuant to Clause 4.2 and/or 4.3 who have signed the same have sufficient powers and authority to sign them on behalf of the parties they represent.

For purposes of the evaluation referred to in the preceding paragraph, the following time terms shall be applicable to each of the following three (3) scenarios:

- (i) In case PROINVERSIÓN requires to request additional information and make observations to the CONCESSIONAIRE:
 - PROINVERSIÓN shall request additional information from the CONCESSIONAIRE within fifteen (15) Calendar Days of receipt of the request for Financial Closing conformity submitted by the CONCESSIONAIRE.
 - The CONCESSIONAIRE shall have a maximum term of seven (7) Calendar Days from PROINVERSIÓN's request to submit the additional information requested. The term of sixty (60) Calendar Days referred to in the first paragraph of this Clause 4.6 shall be suspended during the Calendar Days used by the CONCESSIONAIRE to submit to PROINVERSIÓN the additional information requested.
 - Upon receipt of the additional information, PROINVERSIÓN shall formulate observations to the CONCESSIONAIRE within the following twenty (20) Calendar Days.
 - The CONCESSIONAIRE shall have a maximum term of seven (7) Calendar Days from the receipt of PROINVERSIÓN's observations to submit the corresponding corrections. The term of sixty (60) Calendar Days referred to in the first paragraph of this Clause 4.6 shall be suspended during the Calendar Days used by the CONCESSIONAIRE to submit such corrections to PROINVERSIÓN.

- PROINVERSIÓN shall have the remaining term of the sixty (60) Calendar Days term referred to in the first paragraph of this Clause 4.6 to issue its pronouncement.
- (ii) In the event PROINVERSIÓN only requires to make observations, without requesting additional information, to the CONCESSIONAIRE:
 - PROINVERSIÓN shall request additional information or make observations to the CONCESSIONAIRE within thirty (30) Calendar Days of receipt of the request for conformity of the Financial Closing submitted by the CONCESSIONAIRE.
 - The CONCESSIONAIRE shall have a maximum term of fifteen (15) Calendar Days from PROINVERSIÓN's request to submit the additional information requested or to correct the corresponding observations. The term of sixty (60) Calendar Days referred to in the first paragraph of this Clause 4.6 shall be suspended during the Calendar Days used by the CONCESSIONAIRE to submit to PROINVERSIÓN the additional information requested or the corresponding corrections.
 - PROINVERSIÓN shall have the remaining term of the sixty (60) Calendar Days term referred to in the first paragraph of this Clause 4.6 to issue its pronouncement.
- (iii) In the event PROINVERSIÓN does not require additional information or make observations to the CONCESSIONAIRE, it shall have the term of sixty (60) Calendar Days referred to in the first paragraph of this Clause 4.6 without any suspension.

It is hereby established that the terms mentioned in this clause may elapse after the maximum terms available to the CONCESSIONAIRE to accredit the Financial Closings of each Section provided that the CONCESSIONAIRE has submitted its request of conformity of the Financial Closing to PROINVERSIÓN (accompanying the necessary documentation according to this Contract) prior to the deadline set forth in Clause 4.5 and/or its extension according to Clause 4.7.

In the event that PROINVERSIÓN does not issue its opinion within the terms set forth in this Clause, it shall be understood that its opinion is favorable, provided that, three (3) Working Days prior to the date of expiration of the term PROINVERSIÓN has for its opinion, the CONCESSIONAIRE sends PROINVERSIÓN a written communication about the deadline for its opinion. In the event that the CONCESSIONAIRE does not send such communication and the PROINVERSIÓN does not pronounce itself, its pronouncement will be understood to be unfavorable.

In case PROINVERSIÓN issues its conformity or the event foreseen in the preceding paragraph occurs, it shall send to the GRANTOR, with a copy to the REGULATOR, the documents evidencing the Financial Closing for its knowledge.

Notwithstanding the foregoing, in order to facilitate and accelerate the compliance procedure described above, PROINVERSIÓN and the CONCESSIONAIRE may exchange information and hold the working meetings they deem appropriate prior to the commencement of each procedure to obtain PROINVERSIÓN's approval of each Financial Closing.

EXTENSION OF THE TERM TO COMPLY WITH THE FINANCIAL CLOSING

4.7 In the event that the CONCESSIONAIRE anticipates that it will not be able to perform the Financial Closing of the Section corresponding to the deadline set forth in Clause 4.5 of this Contract and provided that the failure to obtain the Financial Closing of the respective Section within such term is not attributable to the CONCESSIONAIRE, the CONCESSIONAIRE may request in writing to the GRANTOR, with a copy to PROINVERSIÓN, an additional extension of up to one hundred and eighty (180) Calendar Days for the Financial Closing of the corresponding Section or phase of the Section, with due support of the circumstances that prevented the obtaining of the respective financing within the term set forth in Clause 4.5.

For such purpose, and at least forty (40) Calendar Days prior to the corresponding deadline under Clause 4.5, the CONCESSIONAIRE shall send to the GRANTOR, with a copy to PROINVERSION, in writing and with the corresponding justification, a request for the extension of the referred term. The GRANTOR may request additional information, on a one-time basis, within ten (10) Calendar Days of receipt of the request submitted by the CONCESSIONAIRE. In such case, the CONCESSIONAIRE shall have a maximum term of five (5) Calendar Days as from the request for additional information to submit to the GRANTOR, with a copy to PROINVERSIÓN, the additional information requested. The pronouncement of the GRANTOR shall be sent to the CONCESSIONAIRE, with a copy to PROINVERSIÓN, within twenty (20) Calendar Days of receipt of the request submitted by the CONCESSIONAIRE. In the event that the GRANTOR does not issue its pronouncement within the term indicated, it shall be understood that its pronouncement is favorable, provided that, ten (10) Working Days prior to the date of expiration of the term the GRANTOR has for its pronouncement, the CONCESSIONAIRE sends to the GRANTOR a written communication about the deadline for its pronouncement. In the event that the CONCESSIONAIRE does not send such communication and the GRANTOR does not make a statement, its pronouncement will be deemed unfavorable.

4.8 In the event that (i) the CONCESSIONAIRE does not submit any request for compliance with the Financial Closing accompanied by the necessary documentation as provided in the Contract and within the terms set forth in Clause 4.5 and/or its extension pursuant to Clause 4.7; (ii) it does not remedy the observations and/or requests for additional information within the terms set forth in Clause 4.6; or (iii) once PROINVERSIÓN rejects the accreditation of such Financial Closing, it shall be understood that the CONCESSIONAIRE has not achieved the accreditation of the corresponding Financial Closing and the GRANTOR may invoke the Expiration of the Concession due to non-compliance of the CONCESSIONAIRE in accordance with the provisions of Clauses 18.5 to 18.9.

GUARANTEES IN FAVOR OF PERMITTED CREDITORS

4.9 For the purpose of obtaining financing through Permitted Creditors, the CONCESSIONAIRE, following the procedure set forth in the Applicable Laws and Provisions and in Clauses 4.17 and following of this Contract, may, with the prior approval of PROINVERSIÓN, grant and/or allow a guarantee to be granted in favor of the

Permitted Creditors, to guarantee the Permitted Guaranteed Indebtedness, on the following:

- a) The Concession right, pursuant to the provisions of Article 26 of Legislative Decree No. 1362; and,
- b) The shares or participations corresponding to the Minimum Participation.

It is hereby established that the CONCESSIONAIRE may grant a guarantee in favor of its creditors, whether they are Permitted Creditors or not, on the revenues derived from the Tariff. Such guarantee shall not require the prior approval of PROINVERSIÓN or the GRANTOR.

- 4.10 The CONCESSIONAIRE accepts and acknowledges that any such guarantees shall not relieve it of its obligations set forth in this Concession Contract. Likewise, the GRANTOR shall not recognize such guarantees in case they are granted without observing the provisions of this Contract. The CONCESSIONAIRE shall be solely liable to indemnify third parties for damages resulting from the non-compliance of such provisions.
- 4.11 The GRANTOR accepts and acknowledges that neither the Permitted Creditors nor any other person acting on their behalf shall be liable for the compliance of the Contract by the CONCESSIONAIRE until, as the case may be, the Permitted Creditors exercise their rights in accordance with the terms indicated in this Chapter, in which case whoever becomes the holder of the Concession, as a consequence of its execution, shall assume, in its condition of new concessionaire, the obligations and rights of this Contract.
- 4.12 The GRANTOR and the CONCESSIONAIRE guarantee that the rights stipulated in favor of the Permitted Creditors in this Contract are inalienable, irrevocable and immutable, except with the prior and express consent of such Permitted Creditors; it being understood that with the sole communication of the Permitted Creditors, addressed to the GRANTOR and the CONCESSIONAIRE, letting them know that they will make use of such rights, the acceptance of the respective Permitted Creditor referred to in Article 1458 of the Civil Code shall be deemed to have been fulfilled.
- 4.13 The Permitted Creditors may request the execution of the guarantees provided for in Clause 4.9 granted in their favor in accordance with the procedures set forth in Clause 4.24.
- 4.14 The execution of the mortgage on the Concession right will be made following similar principles and mechanisms to those established for the execution of the security interest on the Minimum Participation provided in Clause 4.24, execution procedure that will be included in the corresponding mortgage contract, respecting the provisions of Article 26 of Legislative Decree No. 1362.

MANDATORY CONTENTS OF CONTRACTS OF PERMITTED GUARANTEED INDEBTEDNESS

- 4.15 The CONCESSIONAIRE undertakes to include in the Permitted Guaranteed Indebtedness contracts (i) the express obligation of the Permitted Creditors to notify the GRANTOR of the occurrence of any cause that generates the enforceability and early maturity of the payment obligations of the CONCESSIONAIRE, as well as the acceleration, resolution or termination thereof immediately after the occurrence of any such events, and (ii) a statement by the CONCESSIONAIRE and the Permitted Creditors that the Permitted Guaranteed Indebtedness contracts and the guarantees thereof do not violate the terms and conditions of the Concession Contract and that any agreement to the contrary shall not be enforceable against the Grantor.
- 4.16 The Permitted Guaranteed Indebtedness contracts shall contain clauses that obligate the CONCESSIONAIRE to use the resources derived from or related thereto exclusively to comply with the purpose of this Contract, to refinance previous indebtedness destined to comply with the purpose of this Contract (regardless of whether these qualified as Permitted Guaranteed Indebtedness or not) and/or to finance or refinance the capital stock of the CONCESSIONAIRE, without prejudice to the contributions that its shareholders or partners shall make with their own capital pursuant to Clauses 3.6 and/or 3.7.

COMPLIANCE PROCEDURE FOR PERMITTED GUARANTEED INDEBTEDNESS

- 4.17 Permitted Guaranteed Indebtedness will require the prior approval of PROINVERSIÓN. For such purpose, the CONCESSIONAIRE shall submit in writing to PROINVERSIÓN the following:
 - a) A request for compliance of Permitted Guaranteed Indebtedness;
 - A copy of the draft contracts of Permitted Guaranteed Indebtedness and those through which the guarantees referred to in subparagraphs a) and b) of Clause 4.9 shall be constituted;
 - c) A executive summary containing (i) a brief description of the Permitted Guaranteed Indebtedness contracts, (ii) the amounts committed in each of the Permitted Guaranteed Indebtedness contracts and (iii) the guarantees that will support each Permitted Guaranteed Indebtedness;
 - d) An affidavit of CONCESSIONAIRE in substantially the same terms as those contained in Annex No. 8, Appendix 2;
 - e) The statement(s) of the Permitted Creditor(s), Administrative Agent and/or Guarantee Agent in substantially the same terms as those contained in Annex No. 8, Appendix 1;
 - f) The information evidencing compliance with the requirements established in the Concession Contract for the qualification of, as applicable, the Permitted Creditors, Administrative Agent and/or Guarantee Agent.
- 4.18 In order to grant its approval, PROINVERSIÓN shall verify that: (a) the main terms of the Permitted Guaranteed Indebtedness are in accordance with the terms and conditions set forth in this Contract; (b) the draft contracts through which the guarantees referred to in

subparagraphs (a) and (b) of Clause 4.9 conform to the terms of this Contract; (c) the affidavit of the CONCESSIONAIRE has been filed in substantially the same terms as those contained in Annex No. 8, Appendix 2; (d) the statements of the Permitted Creditors, Administrative Agent and/or Guarantee Agent have been filed in substantially the same terms as those contained in Annex No. 8, Appendix 1; and, (e) the Permitted Creditors, Administrative Agent and/or Guarantee Agent qualify as such pursuant to the information submitted by the CONCESSIONAIRE.

- 4.19 PROINVERSIÓN shall issue its pronouncement within a maximum term of sixty (60) Calendar Days counted from the date of receipt of the request by the CONCESSIONAIRE according to the provisions of numerals (i), (ii) and (iii) of Clause 4.20 below.
- 4.20 For purposes of the evaluation referred to in the preceding clause, the following time terms shall be applicable to each of the following three (3) scenarios:
 - (i) In case PROINVERSIÓN requires to request additional information and make observations to the CONCESSIONAIRE:
 - PROINVERSIÓN shall request additional information from the CONCESSIONAIRE within fifteen (15) Calendar Days of receipt of the request for conformity of the Permitted Guaranteed Indebtedness submitted by the CONCESSIONAIRE.
 - The CONCESSIONAIRE shall have a maximum term of seven (7) Calendar Days from PROINVERSIÓN's request to submit the additional information requested. The term of sixty (60) Calendar Days referred to in Clause 4.19 above shall be suspended during the Calendar Days used by the CONCESSIONAIRE to submit to PROINVERSIÓN the additional information requested.
 - Upon receipt of the additional information, PROINVERSIÓN shall formulate observations to the CONCESSIONAIRE within the following twenty (20) Calendar Days.
 - The CONCESSIONAIRE shall have a maximum term of seven (7) Calendar Days from the receipt of PROINVERSIÓN's observations to submit the corresponding corrections. The term of sixty (60) Calendar Days referred to in Clause 4.19 above shall be suspended during the Calendar Days used by the CONCESSIONAIRE to submit such corrections to PROINVERSIÓN.
 - PROINVERSIÓN shall have the remaining term of the sixty (60) Calendar Days term referred to in Clause 4.19 above to issue its pronouncement.
 - (ii) In the event PROINVERSIÓN only requires to make observations, without requesting additional information, to the CONCESSIONAIRE:
 - PROINVERSIÓN shall request additional information or make observations to the CONCESSIONAIRE within thirty (30) Calendar Days of receipt of the request for the Permitted Guaranteed Indebtedness submitted by the CONCESSIONAIRE.
 - The CONCESSIONAIRE shall have a maximum term of fifteen (15) Calendar Days from PROINVERSIÓN's request to submit the additional information requested or to correct the corresponding observations. The term of sixty (60) Calendar Days referred to in Clause 4.19 above shall be suspended during the Calendar Days used by the CONCESSIONAIRE to submit to

PROINVERSIÓN the additional information requested or the corresponding corrections.

- PROINVERSIÓN shall have the remaining term of the sixty (60) Calendar Days term referred to in Clause 4.19 above to issue its pronouncement.
- (iii) In case PROINVERSIÓN does not need to request additional information or make observations to the CONCESSIONAIRE, it shall have the term of sixty (60) Calendar Days referred to in Clause 4.19 above without any suspension.

Once the applicable procedure of this Clause has been carried out or in the event provided for in Clause 4.21, PROINVERSIÓN will issue its conformity by which it will approve the Permitted Guaranteed Indebtedness and, as the case may be, the Permitted Creditors, Administrative Agent and/or Guarantee Agent, as well as the guarantees constituted in favor of such entities in accordance with this Concession Contract.

Notwithstanding the foregoing, in order to facilitate and accelerate the compliance procedure described above, PROINVERSIÓN and the CONCESSIONAIRE may exchange information and hold the working meetings they deem appropriate prior to the commencement of each procedure to obtain PROINVERSIÓN's compliance with the terms of the Permitted Guaranteed Indebtedness.

4.21 In case PROINVERSIÓN does not issue its pronouncement within the terms indicated in the previous Clause, it shall be understood that PROINVERSIÓN has granted its consent to the Permitted Guaranteed Indebtedness and to, as the case may be, the Permitted Creditors, Administrative Agent and/or Guarantee Agent, provided that, three (3) Working Days prior to the date of expiration of PROINVERSION's term for its pronouncement, the CONCESSIONAIRE sends PROINVERSIÓN a written communication regarding the deadline for its pronouncement. In the event that the CONCESSIONAIRE does not send such communication and the PROINVERSIÓN does not pronounce itself, its pronouncement will be understood to be unfavorable.

If PROINVERSIÓN issues its conformity or the event foreseen in the preceding paragraph occurs, it shall send to the GRANTOR, with a copy to the REGULATOR, the conformity documents of the Permitted Guaranteed Indebtedness and, as the case may be, of the Permitted Creditors, Administrative Agent and Guarantee Agent, as well as of the guarantees constituted in favor of such entities in accordance with this Concession Contract, for its knowledge.

- 4.22 Within a maximum term of thirty (30) Calendar Days after PROINVERSIÓN's approval has been issued or the event foreseen in the first paragraph of the previous Clause has occurred, the CONCESSIONAIRE shall send to PROINVERSIÓN and the GRANTOR a notarized copy of the documents of the Permitted Guaranteed Indebtedness and of the contracts through which the guarantees referred to in subparagraphs a) and b) of Clause 4.9 shall be constituted, which must have been executed in substantially the same terms as those approved by PROINVERSIÓN.
- 4.23 The modification of the main terms of the Permitted Guaranteed Indebtedness, as well as any renewal or refinancing thereof, and the modifications to the contracts through which the guarantees referred to in subparagraphs a) and b) of Clause 4.9 are constituted, must be previously approved by PROINVERSIÓN, in accordance with the procedure established in Clause 4.17 and following of this Contract.

The GRANTOR shall not recognize the operations described in this Clause that are carried out without observing the provisions of this clause. The CONCESSIONAIRE shall be solely responsible for indemnifying damages to third parties arising from the non-observance of these provisions.

PROINVERSIÓN will be in charge of the compliance procedure for the subscription and modification of the Permitted Guaranteed Indebtedness and its guarantees until the date on which any of the Sections starts its Operation Stage. Subsequently, such procedure shall be in charge of the GRANTOR, therefore, from that moment on, all references to PROINVERSIÓN included in Clauses 4.17 to 4.23 shall be understood to be made to the GRANTOR.

EXECUTION OF A SECURITY INTEREST IN SHARES OR PARTICIPATIONS CORRESPONDING TO THE CONCESSIONAIRE

- 4.24 The procedure for the execution of the security interest over shares or participations corresponding to the Minimum Participation, which shall be included in the corresponding security interest contract, shall be carried out under the direction of the Permitted Creditor(s) and with the participation of the GRANTOR and shall be mandatorily governed by the following rules:
 - a) The decision of the Permitted Creditor(s) to exercise its right to enforce the security interest in its favor shall be communicated in writing, by means of a notarized letter, to the GRANTOR, with a copy to the REGULATOR and the CONCESSIONAIRE, prior to taking any action or adopting any measure that may directly or indirectly jeopardize the Concession.
 - b) From such moment: (i) the GRANTOR shall be prevented from declaring the Expiration of the Contract and shall be obliged to immediately initiate the coordination of the case with the Permitted Creditors, with the purpose of appointing the legal person that, in accordance with the same terms provided in the Contract and under a remuneration to be agreed with the Permitted Creditors and to be assumed by the CONCESSIONAIRE, shall act as an auditor and shall be temporarily in charge of the Operation of the Concession during the time required for the replacement of the Strategic Partner referred to in the following points; and, (ii) no act of the CONCESSIONAIRE may suspend the procedure for the execution of the security interest, being prevented from complying with the obligations that gave rise to the execution of the aforementioned security interest.
 - c) For such purposes, the Permitted Creditors shall propose to the GRANTOR, for its approval, qualified operators, who shall act as auditors taking into account the parameters established in the Declaration of Interest and/or in the Bidding Terms of the Tender, as the case may be. The successful operator will be authorized to temporarily operate the Concession as auditor. Its designation shall be communicated in writing to the CONCESSIONAIRE and to the REGULATOR. Only one operator may be appointed to temporarily operate the Concession as auditor.
 - d) From that moment on, the CONCESSIONAIRE shall be obliged to coordinate its actions with the appointed auditor, so that the transfer is carried out as efficiently as

possible, and it must be completed within a maximum term of sixty (60) Working Days as from its appointment.

- e) The CONCESSIONAIRE shall be liable for any action or omission that due to fraud or fault attributable to the CONCESSIONAIRE prevents, delays or hinders the transfer of the Concession to the hands of the auditor, as well as for the damages that this may cause to the GRANTOR, the Permitted Creditors, the Users and/or third parties.
- f) Once the Concession is under the temporary Operation of the auditor, the Authorized Creditor(s) must coordinate with the GRANTOR, the full text of the call for tender and the bidding terms of the private auction procedure for the Minimum Participation, within a maximum term of thirty (30) Working Days. Said bidding terms shall respect the substantive guidelines contained in the Bidding Terms of the Tender/Declaration of Interest, especially regarding the general characteristics of the Concession, so as to ensure the correct Operation, which shall be approved by the GRANTOR. For this purpose, the Permitted Creditor(s) must submit an offer for the call for tender and bidding terms to the GRANTOR.
- g) Once the text of the call for tender and the bidding terms of the private auction procedure of the Minimum Participation are submitted to the consideration of the GRANTOR, the latter shall formulate its observations, if it is the case, bearing in mind to give its approval, the development that the Contract has had up to that moment and the possible causes of the financial problems that arose in order to try to prevent these situations in the text of the new call for tender.
- h) Said observations shall be contained in a pronouncement to be issued within ten (10) Working Days from the date on which the text in reference was communicated. Upon expiration of such term and in the absence of any pronouncement by the GRANTOR, the aforementioned text shall be deemed approved and the Permitted Creditors may proceed to execute the selection procedure.
- i) If there are observations from the GRANTOR, once the Permitted Creditors become aware of them, they will have a term of no more than ten (10) Working Days to correct or reject them and submit to the GRANTOR for a second time the text of the call for tender and the bidding terms of the private auction procedure of the Minimum Participation. Subsequently, the GRANTOR must issue a statement regarding the text in reference within ten (10) Working Days from the date on which it was communicated for the second time. However, once the period in question has expired and in the absence of a pronouncement in the sense of approval, the aforementioned text shall be deemed to have been approved.
- j) Once the text of the call for tender and the bidding terms of the private auction procedure of the Minimum Participation have been approved, the Permitted Creditor(s) shall proceed with the procedure established therein in a term no longer than the following five (5) Working Days, until the moment in which such Permitted Creditors grant the successful bid, which shall not occur later than one hundred and eighty (180) Working Days as from the moment in which the GRANTOR was informed of the decision to execute the security interest, extendable at the request of the Permitted Creditors, subject to the GRANTOR's approval, in case of impossibility to complete the execution process within such initial term.

- k) Upon the successful bid of the private auction for the Minimum Participation, in accordance with the provisions outlined in the approved terms by the GRANTOR and as indicated in this Clause, this act must be communicated in writing to both the GRANTOR and the intervening legal person. From that moment on, the latter will be obliged to initiate the necessary coordination so that the transition of the operation of the Concession is carried out in the most efficient manner possible.
- I) The definitive substitution of the Strategic Partner in favor of the successful bidder shall be perfected within a term no longer than thirty (30) Working Days from the date on which the successful bid was awarded in the private auction, under the exclusive responsibility of the auditor and the CONCESSIONAIRE, unless the substitution cannot be perfected within said term due to an event attributable to the successful bidder.
- m) Such definitive substitution must be accredited by means of the respective certificates or deeds of transfer of the shares or rights. A copy of said documents shall be submitted to the Permitted Creditors, the GRANTOR and the REGULATOR, in addition to making the registrations in the corresponding Public Registries within a maximum term of thirty (30) Calendar Days of being subscribed.
- n) In accordance with the procedure established above, the successful bidder of successful bid the private auction, described above, will be recognized by the GRANTOR as a new Strategic Partner. For such purposes, such Strategic Partner shall fully replace the original Strategic Partner, being subject to the terms of the Concession Contract, and must also submit the affidavit mentioned in Clause 16.11.
- o) The execution of the security interest over shares or participations corresponding to the Minimum Participation by the Permitted Creditors shall in no case be understood as the assumption by the Permitted Creditors of any of the covenants, agreements or obligations of the CONCESSIONAIRE in this Contract, which shall be assumed by the operator that temporarily operates the Concession as auditor.
- p) The costs of the private auction for the execution of the security interest over shares or participations corresponding to the Minimum Participation shall be assumed by the CONCESSIONAIRE and in no case shall be assumed by the GRANTOR.

RIGHT OF CORRECTION OF PERMITTED CREDITORS

- 4.25 The GRANTOR shall notify the Permitted Creditors, simultaneously with the notification sent to the CONCESSIONAIRE and the REGULATOR, of the occurrence of any breach of the obligations of the CONCESSIONAIRE established in the Contract and which constitute grounds for the Expiration of the Concession, so that the Permitted Creditors may carry out the actions they consider necessary to contribute to the full compliance of the obligations to be borne by the CONCESSIONAIRE.
- 4.26 Additionally, the GRANTOR acknowledges that it cannot terminate the Contract or declare the Expiration of the Concession due to breaches by the CONCESSIONAIRE without previously notifying the Permitted Creditors of such intention and without the Permitted Creditors having had the opportunity to remedy the cause that has originated

the right of the GRANTOR to terminate the Contract in accordance with the provisions of this Clause and with the procedure set forth below:

- a) In the event that any of the curable grounds set forth in Clause 18.5 of the Contract should occur, the term set forth in Clause 18.43 for the CONCESSIONAIRE to remedy such breach has expired and the GRANTOR wishes to exercise its right to terminate the Contract, this shall first send a written notice to the Permitted Creditors. In such notification, the GRANTOR shall expressly state the cause or causes of Expiration that have occurred and have not been remedied.
- b) The Permitted Creditors shall have a term of thirty (30) Calendar Days from the notification referred to in subparagraph a) above to remedy the cause or causes of Expiration that have been notified to them. Once such term has elapsed without the Permitted Creditors being able to remedy the cause of Expiration occurred, the GRANTOR may exercise its right to terminate the Contract in accordance with the provisions of Clause 18.7.
- c) The intention to correction or the correction of the cause produced by the Permitted Creditors shall in no case be understood as the assumption by the Permitted Creditors of any of the covenants, agreements, or obligations of the CONCESSIONAIRE in this Contract; therefore, the CONCESSIONAIRE shall continue to be liable for the performance of the obligations at its charge provided for in the Contract, as well as for any breach and/or penalty that has occurred or subsequently occurs in relation thereto. The failure of the Permitted Creditors to exercise their right to correction shall not affect the benefits and/or rights established in favor of the Permitted Creditors in this Contract.
- d) In the event the CONCESSIONAIRE and/or the Permitted Creditors remedy the cause for Expiration during the thirty (30) Calendar Days period referred to in subparagraph b) above, the GRANTOR shall notify the CONCESSIONAIRE and the Permitted Creditors within a maximum term of three (3) Working Days from the occurrence of such event the cessation of the existence of the cause for Expiration.

CHAPTER V: CONCESSION TERM

TERM

- 5.1 The term for which the Concession is granted, counted as from the Closing Date is, (i) thirty (30) years or (ii) until the CONCESSIONAIRE reaches the VPIP, whichever occurs last. The term provided in (i) or (ii) may be extended up to the maximum term described in Clause 5.2, except in the cases of Expiration. With regard to the extension of the Contract term, the request for extension shall be processed according to the rules of the contractual modification procedure established in the Applicable Laws and Provisions.
- 5.2 This Contract shall be in force and shall have full legal effect during the term indicated in the preceding paragraph, terminating due to any of the causes of Expiration set forth in Chapter XVIII. In no event shall the term of the Concession plus any extension or extensions exceed the maximum term of sixty (60) years from the Closing Date.

- 5.3 In the event that the CONCESSIONAIRE reaches the VPIP before the term of thirty (30) years, counted as from the Closing Date, situation to be determined and corroborated by the REGULATOR, the CONCESSIONAIRE's Revenues referred to the Toll of all the Toll Units shall be shared between the CONCESSIONAIRE and the GRANTOR in the proportion or percentage established in numerals 5 or 6 of Appendix 4 of Annex No. 9, as the case may be.
- 5.4 Taking into account the term of the Contract established in Clause 5.1, the GRANTOR may re-bid the road infrastructure object of this Contract or determine the destination it deems pertinent, in accordance with the Applicable Laws and Provisions.

EVENTS OF SUSPENSION OF THE OBLIGATIONS OF THE PARTIES

- 5.5 For purposes of this Contract, the obligations of any of the Parties with respect to the affected Section shall be suspended, in whole or in part, whenever any of the following events occur:
 - a) Force Majeure or Fortuitous Event, understood as events, conditions or circumstances not attributable to the Parties, of an extraordinary, unforeseeable and irresistible nature, which prevent any of them from complying with the obligations under their responsibility or cause their partial, late or defective compliance. The event must be beyond the reasonable control of the Party invoking the cause, which despite all reasonable efforts to prevent or mitigate its effects, cannot prevent the non-compliance situation from arising. Among other events, there are the following situations:
 - i. Any act of external, internal or civil war (declared or undeclared), invasion, armed conflict, blockade, revolution, munity, insurrection, civil or social commotion, protests or acts of terrorism that prevents the performance of any of the obligations under this Contract, except for the protests or social commotion described in Clause 11.4 of this Contract.
 - ii. Those general stoppages or strikes by workers or third parties not dependent on the CONCESSIONAIRE, protests, acts of violence or force carried out by community, social or political organizations, or large-scale public demonstrations that directly affect the CONCESSIONAIRE due to causes beyond its control that are not attributable to it and that go beyond its reasonable control.
 - iii. The eventual confiscation, requisition, or total or partial destruction of the infrastructure of the Concession and its impossibility of recovery, caused by causes not attributable to the CONCESSIONAIRE, which seriously affect the execution of the Contract and prevent it from complying with the obligations under its responsibility.
 - iv. Any earthquake, flood, hurricane, tornado, tidal wave, typhoon, cyclone, electrical storm, fire, explosion, or similar event, provided that it directly affects in whole or in part the Concession Assets.

- v. Those discoveries of archaeological remains that are of such a magnitude that they definitively prevent the CONCESSIONAIRE from complying within the contractual term with its obligations.
- vi. Destruction or partial affectation of the Concession Assets for causes not attributable to the Parties, in such a way as to make the Service permanently impossible.
- vii. Other situations of force majeure or fortuitous event related to this Contract.
- b) Agreement between the Parties, derived from circumstances other than those referred to in the preceding subparagraph, in which case it shall be necessary to have the prior non-binding opinion of the REGULATOR.
- c) Other cases of suspension of contractual obligations expressly provided for in this Contract, such as those contained in Clauses 4.5, 4.6, 4.20, 6.7, 6.9, 6.33, 6.47, 6.48, 6.89, 7.13, 8.3, 11.4, 14.11, 15.9, 15.10, 15.14, 17.11, 19.14, 21.2 and those contained in the Annexes to this Contract.
- 5.6 In addition to the grounds for suspension set forth in Clause 5.5, the CONCESSIONAIRE may request the total or partial suspension of its obligations whenever, (i) due to a cause not directly or indirectly attributable to the CONCESSIONAIRE, the CONCESSIONAIRE is unable to comply totally or partially with its obligations affected by the following events and (ii) provided that the CONCESSIONAIRE submits the necessary, sufficient and adequate information for the GRANTOR to make a decision. The referred causes are the following:
 - (i) That the Relevant Governmental Authorities do not issue an express pronouncement for the approval of the Environmental Management Instrument of each Section, within the terms set forth in the Applicable Laws and Provisions and in accordance with the provisions of Clause 15.10 of this Contract, which includes, but is not limited to, the delay and/or failure to issue a decision within the term described above due to the entry into force of the Provisions for the Single Procedure of the Environmental Certification Process of the National Service of Environmental Certification for Sustainable Investments, approved by Supreme Decree No. 004-2022-MINAM and/or its substituting or amending regulations.
 - (ii) That, the GRANTOR does not deliver the Concession Area corresponding to the Sections, in accordance with the provisions of this Contract, provided that they are not in the cases of partial expiration established in Clauses 6.34 to 6.38 of the Contract.
 - (iii) That, the GRANTOR does not approve the EDI within the terms and following the mechanism foreseen in Clauses 7.1 and following of the Contract.
 - (iv) That the CONCESSIONAIRE is unable to obtain from the Governmental Authorities the permits, licenses and/or authorizations necessary for the execution of the Project, within the legally established terms, other than the Environmental Management Instruments of the Sections, and this affects the fulfillment of its obligations.
 - (v) The finding of archaeological remains that prevent the CONCESSIONAIRE from complying with its obligations, and that must be preserved and rescued by the GRANTOR, as established in the Applicable Laws and Provisions.

- (vi) That the public service companies and/or other entities owning the Interferences do not comply and/or delay with the removal and/or release of Interferences from the Concession Area, as established in this Contract.
- (vii) The non-compliance of the GRANTOR of the obligations related to the sanitation of the Vizcachera area, as established in this Contract.
- (viii) If, during the execution of the Works, an Environmental Liability is discovered whose identification, characterization and/or remediation prevents the continuation of the execution of the Works as established in this Contract.
- (ix) That, due to causes not attributable to the CONCESSIONAIRE and due to the noncleared charges in the Concession Area, the CONCESSIONAIRE cannot comply with the Construction or Operation of the respective Works, as set forth in Clause 6.7 of the Contract.
- (x) That, upon expiration of the fifteen (15) Working Days term set forth in Clause 11.4, the CONCESSIONAIRE is unable to operate any of the Toll Units due to acts of social protests, social commotion and/or third parties.

In the application of Clauses 5.5 or 5.6, the GRANTOR may declare the total suspension of the obligations of any of the Parties, provided that the Critical Route of the Construction of the three (3) Sections as a whole or the Operation of the referred Sections as a whole and simultaneously is affected. In all other cases, the GRANTOR may declare the partial suspension of the obligations of any of the Parties.

Likewise, due to the occurrence of the aforementioned causes of suspension, no economic and financial damage shall be recognized to any of them, unless any of the aforementioned causes has been originated by liability attributable to any of the Parties involved.

In the cases provided for in this Clause, the CONCESSIONAIRE shall comply with the provisions of this Chapter in order for the GRANTOR to declare the suspension of its obligations. Notwithstanding the foregoing, in the event of a dispute, either Party shall be entitled to have recourse to an Expert pursuant to Clause 7.13 of this Contract and, thereafter, to the Dispute Resolution procedure provided for in Chapter XIX.

5.7 In the cases of items (ii), (iii), (v) and/or (ix) of Clause 5.6 above, the CONCESSIONAIRE shall have the right to request the GRANTOR the continuation of the execution of the Works in a different order than the one planned, and the GRANTOR shall have the right to approve or not such request. In case the CONCESSIONAIRE's request is expressly approved in writing by the GRANTOR, the obligations of the CONCESSIONAIRE shall not be suspended.

PROCEDURE FOR THE DECLARATION OF SUSPENSION OF OBLIGATIONS OF THE PARTIES

5.8 With the exception of subparagraph b) of Clause 5.5, if one of the Parties is unable to comply with the obligations imposed by this Contract, due to any of the events indicated in Clauses 5.5 and/or 5.6 of this Contract, within seven (7) Calendar Days of the occurrence of the event, such Party shall submit its request for suspension to the other Party, with a copy to the REGULATOR, attaching the corresponding Technical-Legal Report, which must be substantiated as a minimum:

- a) The occurrence of the event.
- b) The starting date of the suspension term.
- c) The identification of the affected obligations that need to be suspended and the estimated term of the total or partial suspension of the obligations, specifying its starting date and time as well as its date and time of possible termination or conclusion.
- d) The degree of expected impact, details of such an event, the obligation or condition affected.
- e) The mitigation measures adopted, in accordance with the provisions of this Contract and the Applicable Laws and Provisions.
- f) Other actions derived from these events.
- g) Offer for an insurance regime, contractual guarantees, and other obligations whose fulfillment is not directly affected by the event.

In addition, it shall keep the other Party informed constantly and with the corresponding immediacy, of the development of such events.

- 5.9 Within twenty (20) Working Days after the notification of the suspension request, the REGULATOR shall issue and notify its non-binding opinion to the Parties.
- 5.10 In case the CONCESSIONAIRE has formulated the suspension request mentioned in the preceding paragraphs, the term for the GRANTOR to declare the suspension shall be fifteen (15) Working Days after receiving the REGULATOR's opinion.
- 5.11 In case the GRANTOR has formulated the suspension request mentioned in the preceding paragraphs, the term for the GRANTOR to declare the suspension shall be fifteen (15) Working Days as from the receipt of the non-binding opinion of the REGULATOR and the opinion of the CONCESSIONAIRE. In the latter case, the CONCESSIONAIRE shall have a term of ten (10) Working Days from receipt of the suspension request to send its non-binding opinion to the GRANTOR.
- 5.12 In all cases, the GRANTOR will be responsible for declaring the suspension of the obligation(s) or of the Concession, in accordance with the Applicable Laws and Provisions. In the event that the GRANTOR does not issue a decision within the term, the application shall be deemed to be denied for all purposes.
- 5.13 Whenever the suspension has been declared, if the obligation or the Concession is affected by an event of Force Majeure or Fortuitous Event, it shall be automatically suspended from the occurrence of the event of Force Majeure or Fortuitous Event and for the duration of such event. In the case of the events described in Clauses 5.5 (b), (c) and/or 5.6, the affected obligation shall be suspended from the moment the GRANTOR declares the suspension and for the duration of such event. In all cases, the GRANTOR shall expressly declare the restart of the corresponding obligation(s), as set forth in Clause 5.19.
- 5.14 In the event of any dispute over the statement issued by the GRANTOR or over its failure to issue a statement, either Party shall be entitled to have recourse to an Expert pursuant to Clause 7.13 hereof and, thereafter, to the Dispute Resolution procedure provided for in Chapter XIX.
- 5.15 The suspension of obligations may not be invoked in the event of non-compliance with the information procedure established in this Clause.

EFFECTS OF THE DECLARATION OF SUSPENSION

Once the Suspension of Obligations has been declared, the following will be considered:

- 5.16 The terms stipulated for the fulfillment of the affected obligations shall be suspended according to the provisions of Clause 5.13 of the Contract and until the GRANTOR expressly declares the lifting of the suspension, as the case may be.
- 5.17 The non-fulfillment of obligations expressly declared suspended by the GRANTOR, shall not be sanctioned with the penalties set for in this Contract according to the terms and conditions foreseen.
- 5.18 The event shall not release the Parties from the fulfillment of the obligations that have not been suspended, to which the penalties set for in may be applied if applicable. Likewise, it will not release the CONCESSIONAIRE from the application of penalties for noncompliance that occurred prior to the event that led to the declaration of suspension. In the event that the suspension request, if applicable, is not approved, the corresponding penalties shall be applied retroactively to the CONCESSIONAIRE.
- 5.19 Once the GRANTOR, after the REGULATOR's opinion, orders the resumption of the enforceability of the obligations subject to suspension, the GRANTOR shall issue the corresponding act stating the date of resumption of the computation of the term of each suspended obligation, the term of the suspension, among other considerations.
- 5.20 In the event that the suspension of obligations affects the totality of the services to be provided by the CONCESSIONAIRE, the temporary suspension of the Concession shall be applicable.
- 5.21 The Parties shall make their best efforts to ensure the resumption of the fulfillment of their obligations, in the shortest possible time, after the occurrence of such events.
- 5.22 In case the suspension lasts for more than one hundred and eighty (180) Calendar Days counted from the respective suspension declaration of the GRANTOR, any of the Parties may invoke the Expiration of the Concession, which shall be governed, depending on the type of applicable event, by the rules of Chapter XVIII of this Contract.

Only for the cases described in (a) subparagraphs (i), (ii), (v), (vii) and (viii) of Clause 5.6, with respect to Section 2 of the Project, the suspension term may be extended up to three hundred and sixty five (365) Calendar Days counted from the respective suspension declaration of the GRANTOR, and (b) for the case described in subparagraph (x) of Clause 5.6, and according to the conditions set forth in Clause 11.4, the suspension term may be extended up to all the Calendar Days necessary without any limitation (including the corresponding extensions) counted from the respective suspension declaration of the GRANTOR, so that the Parties may invoke the Expiration of the Concession, as set forth in this Contract.

The terms of one hundred and eighty (180) Calendar Days, three hundred and sixty-five (365) Calendar Days and the total number of Calendar Days required for the application

of subparagraph (x) of Clause 5.6, shall be suspended until the issuance of the resolution or binding opinion of an Expert, in case any of the Parties requests its intervention to resolve a technical dispute, as established in Clauses 7.13 and/or 11.4 of this Contract and its corresponding annexes, as the case may be. Subsequently, the Parties may apply the Dispute Resolution procedure provided for in Chapter XIX.

5.23 The CONCESSIONAIRE shall reestablish the Concession's Trafficability to the extent that it has been affected, in the shortest possible time after the occurrence of such events. For these purposes, the Trafficability shall be reestablished within the Right of Way and at points close to the occurrence of the interruption of the same.

CHAPTER VI: ASSETS REGIME

GENERAL PROVISIONS

- 6.1 This Chapter regulates the contractual aspects related to the Concession Assets and Assets of the CONCESSIONAIRE.
- 6.2 The Concession Assets are and will always be property of the GRANTOR, and are assigned, only, to the purpose of the Concession. The Concession Assets may not be transferred separately from the Concession. Neither may they be mortgaged, transferred in trust, pledged as guarantee or, in general, encumbered without the authorization of the GRANTOR, and prior opinion of the REGULATOR, in accordance with the provisions of the Concession Contract and in compliance with the Applicable Laws and Provisions.
- 6.3 Once the Works that are within the Concession Area have been executed, they must be incorporated to the Concession Assets through the procedure indicated in the Regulation for the Control of the Registrations and Terminations of the Concession Assets, approved by means of Resolution of the Board of Directors No. 006-2006-CD-OSITRAN, and any other standard that complements, modifies and/or replaces it.
- 6.4 Notwithstanding the foregoing, this Concession is sufficient title for the CONCESSIONAIRE to exercise exclusive rights of Operation of the Concession Assets and to enforce its rights against third parties. Likewise, the Concession is also sufficient title to guarantee the economic operations and of any other similar nature of the CONCESSIONAIRE, directly linked to the Concession, in the banking and financial system, within the provisions of this Contract.
- 6.5 During the term of the Concession, the CONCESSIONAIRE shall have the exclusive right to operate the Concession Assets, the rendering of the Service, as well as the exercise of the rights that are necessary for the fulfillment of the obligations established in this Contract and/or in the Applicable Laws and Provisions.
- 6.6 It is hereby established that the importation of assets intended for the provision of the Service shall be the sole responsibility and liability of the CONCESSIONAIRE.
- 6.7 The GRANTOR declares and guarantees that, upon the CONCESSIONAIRE possession taking of the Concession Area, it will be free of (i) Taxable Persons, Essential Interferences and of any physical restriction that could affect the normal development of the Works or the future Operation or, (ii) seizure, judicial, extrajudicial or administrative

measure, which could limit, prevent or affect its normal use for the purposes of the Contract; The GRANTOR shall be obliged to the necessary remedy, either by eviction, hidden defect and/or by the GRANTOR's own act. The GRANTOR may deliver to the CONCESSIONAIRE, and the latter may not refuse to take possession, all or part of the Concession Area with cargos, provided, however, that such charges do not affect the Construction of the Works or their future Operation, and the GRANTOR shall maintain the obligation to carry out the corresponding reorganization of such Concession Assets. In the event that the non-cleared cargos prevent the Construction or Operation of the Works described above, the corresponding obligations shall be suspended, as specified in Clause 5.6 et seq. of this Contract.

- 6.8 In case the CONCESSIONAIRE identifies the presence of the elements described in the preceding paragraph, it shall notify the GRANTOR within fifteen (15) Calendar Days of becoming aware of it.
- 6.9 Once the notification referred to in the previous paragraph has been received, the GRANTOR assumes the obligation to remedy such situation, which shall be executed within a term no longer than thirty-six (36) months as from the reception of the notification described above, unless the suspension provided in Clause 5.16 and following clauses is declared.

Any delay or adverse effect generated in the CONCESSIONAIRE's activities as a consequence of the event giving rise to the aforementioned remedial obligation shall entitle the LICENSEE to the suspension of obligations for the period of the delay in the event that such delay or adverse effect affects the performance of the CONCESSIONAIRE's obligations.

- 6.10 The GRANTOR undertakes not to exercise any disposition acts over the Concession Assets, nor to constitute cargos or encumbrances over them, during the term of the Concession. It is worth mentioning that, between the Closing Date and the dates of Possession Taking of the Concession Area, the GRANTOR shall exercise the corresponding judicial and/or extrajudicial possessory defenses over the respective properties of such area.
- 6.11 The following will acquire the condition of Concession Assets:
 - a) The Concession Area described in Annex No. 1, as from the corresponding Possession Taking, including the Execution Area in Local / Auxiliary / Lateral Roads until, in accordance with Clause 6.19 of the Concession Contract, it is returned to the GRANTOR upon completion of the Works.
 - b) The Works, once the corresponding Works Acceptance Certificate has been signed.
 - c) Works to be incorporated by addenda to the Contract.
 - d) Any right of way or easement that the CONCESSIONAIRE acquires or obtains, as the case may be, as a consequence of this Contract, or the performance of its contractual obligations, at the time they are acquired or obtained.
 - e) Any other property that has been integrated into the Concession and cannot be separated without affecting the proper functioning of the Concession or any other Concession Property, including Additional Works.
- 6.12 The fact that certain assets referred to in subparagraphs b), c), d), and e) of the preceding Clause acquire the character of Concession Assets does not imply in any way an explicit or implicit acceptance by the GRANTOR as to the suitability of such assets, or their quality

or capacity to adequately serve the purposes of the Concession, and comply with the obligations set forth in the Contract and the Service Levels. The responsibility for the performance of the Contract and the suitability of the Concession Assets to achieve it corresponds to the CONCESSIONAIRE in such cases.

- 6.13 Each and every one of the assets that acquire the condition of Concession Assets, in accordance with the provisions of Clause 6.11, shall be transferred to the property of the GRANTOR when they obtain such condition. The Concession Assets shall be free of any lien, encumbrance or limitation, including, but not limited to, those arising by provision of the Applicable Laws and Provisions, such as mortgages or legal guarantees; it shall also be the CONCESSIONAIRE's obligation to execute all acts necessary for such transfer to be carried out and perfected properly, according to the nature of each asset.
- 6.14 The ownership of the Concession Assets does not imply the transfer of the risk over such assets to the GRANTOR. The risk on the Concession Assets corresponds to the CONCESSIONAIRE from the time of the Possession Taking until the reversion thereof to the GRANTOR, being liable for any damages that may occur, under the terms and conditions set forth in this Contract.
- 6.15 Except for the real property that has been delivered to the CONCESSIONAIRE without being cleaned up, in the case of real property or rights over real property that has the quality of Concession Assets, as is the case of constructed Works or easements, the CONCESSIONAIRE shall register them in the respective real property registry in the name of the GRANTOR, within a term of six (06) months from the completion of their construction or execution or from obtaining the right, respectively.
- 6.16 When the assets or immovable property operated by the CONCESSIONAIRE is subject to financial leasing or similar contracts entered into by the CONCESSIONAIRE with third parties, such assets shall be transferred in ownership to the CONCESSIONAIRE in the event the corresponding purchase option is exercised by the CONCESSIONAIRE or at the corresponding time according to the terms of such contracts.

In such case, the CONCESSIONAIRE undertakes to include the provisions of Clause 16.2 of this Contract in each of these contracts and the obligation of the lessor to notify the GRANTOR prior to an eventual resolution or termination of the contract, for any reason whatsoever, according to the respective contract. This communication must be made to the GRANTOR with a term of no less than ten (10) Calendar Days prior to the termination of the contract.

- 6.17 The Concession Assets shall be recorded in the books and accounts of the GRANTOR according to the Applicable Laws and Provisions.
- 6.18 Both the reversion and the return of the Concession Assets to the GRANTOR shall be exempt from all taxes created or to be created, according to the provisions of Article 22 of the Single Ordered Text (TUO) of the standards with the rank of Law that regulate the delivery in concession to the private sector of public works of infrastructure and public services, approved by Supreme Decree No. 059-96-PCM, its complementary, modifying and/or substituting standards.

POSSESSION TAKING

- 6.19 The Possession Taking of the Concession Area, as well as of the Concession Assets, shall be carried out in accordance with the provisions of this section. The maximum terms described in Clause 6.23 shall be understood as the maximum terms that the GRANTOR has to carry out the property release or expropriation and the release of Interferences, in an effective manner, of each Section, so that the CONCESSIONAIRE may carry out the corresponding Possession Taking of each Section.
- 6.20 During the act of Possession Taking the GRANTOR and the CONCESSIONAIRE shall sign the corresponding Partial Act of Delivery of Assets, which shall be part of the Comprehensive Act of Delivery of Assets. The respective Partial of Acts of Delivery of Assets shall establish the general conditions of their delivery, specifying in the most detailed manner possible and with respect to each of their components, their characteristics, location, state of conservation, notes on their operation or performance and other aspects of interest. Likewise, any other element that helps to individualize and interpret the object delivered, its condition and state, shall also form part of the act. For such purposes, Concession boundary plans shall be included, as well as photographs or diagrams, as appropriate.
- 6.21 The GRANTOR shall submit to the CONCESSIONAIRE the Initial Inventory corresponding to the Sections, at the latest, within thirty (30) Calendar Days prior to the Possession Taking of each one of them.
- 6.22 The Initial Inventory and the Partial Acts of Delivery of Assets will be part of the Comprehensive Act of Delivery of Assets. The Comprehensive Act of Delivery of Assets, as well as the Partial Acts of Delivery of Assets shall be subscribed in three (3) originals, one of which shall be submitted, in due time, to the REGULATOR by the GRANTOR.

The acts referred to in the preceding paragraph shall be amended if, within thirty (30) Working Days from the date of execution thereof, the CONCESSIONAIRE identifies encumbrances, liens or interferences that may affect the delivered goods and that have not been contemplated in the respective acts.

The acts, as well as the corresponding Inventories must be previously prepared by a representative of the GRANTOR and a representative of the CONCESSIONAIRE, and be subscribed before the presence of a Notary Public. Notarial expenses shall be borne by the CONCESSIONAIRE. In addition, the REGULATOR shall subscribe the acts and the Inventories in the exercise of its powers.

- 6.23 The CONCESSIONAIRE shall take possession of the Concession Area in accordance with the following detail:
 - 6.23.1 Section 1: Within a maximum term of twenty-four (24) months from the Closing Date, the GRANTOR shall deliver to the CONCESSIONAIRE the Concession Area corresponding to Section 1, with the due Physical and Effective Release of the properties and the removal of the Essential Interferences, according to Annex No. 5.

6.23.2 Section 2:

Within a maximum term of forty-six (46) months from the Closing Date, the GRANTOR shall deliver to the CONCESSIONAIRE the Concession Area corresponding to the Critical Properties established in Appendix 2 of Annex No. 4.

On the same occasion, the Critical Properties located in the extensions to the Right of Way made in application of Clause 6.83 and following that have been identified in the corresponding EDI shall be delivered. The referred extensions shall be delivered to the Concessionaire under the same terms and conditions set forth in Clauses 6.7 and following, as well as following the procedure set forth in Clauses 6.19 and following and in accordance with the obligations of the CONCESSIONAIRE set forth in Clauses 6.29 and following.

- Within a maximum term of forty-eight (48) months from the Closing Date, the GRANTOR shall deliver to the CONCESSIONAIRE the Concession Area corresponding to the Essential Interferences, according to Annex No. 5.
- Within a maximum term of sixty-six (66) months from the Closing Date, the GRANTOR shall deliver to the CONCESSIONAIRE the Concession Area corresponding to the rest of Section 2, with the due Physical and Effective Release of the properties and the removal of the corresponding Interferences, as described in Annex No. 5 and as amended.
- 6.23.3 Section 3: Within a maximum term of twenty-eight (28) months as from the Closing Date, the GRANTOR shall deliver to the CONCESSIONAIRE the Concession Area corresponding to Section 3, with the due Physical and Effective Release of the properties and the removal of the essential Interferences, according to Annex No. 5.
- 6.24 The GRANTOR shall notify the CONCESSIONAIRE no less than ten (10) Working Days in advance, the day, time and place where each delivery of each Section shall commence. If the CONCESSIONAIRE does not attend to receive the corresponding Concession Area, without any justification, the penalties set forth in Annex No. 10 shall be applied to the CONCESSIONAIRE, and a new date for the Possession Taking shall be set.

If the GRANTOR does not deliver the aforementioned areas within the term indicated in the preceding Clause due to the fact that the CONCESSIONAIRE again does not attend the Possession Taking, the Possession Taking shall be deemed to have been carried out by the CONCESSIONAIRE with its corresponding effects.

- 6.25 From the Closing Date until the CONCESSIONAIRE takes possession of each Section, all the Concession Assets shall be the responsibility of the GRANTOR.
- 6.26 After receipt of the Concession Assets with the Possession Taking by the CONCESSIONAIRE, they shall be the responsibility of the CONCESSIONAIRE and for the exclusive use of the Concession during the term of the Concession, in accordance with the Applicable Laws and Provisions. Any use for the benefit of the CONCESSIONAIRE other than the aforementioned use shall be authorized by the GRANTOR, subject to the opinion of the REGULATOR.
- 6.27 Due to construction requirements, the CONCESSIONAIRE shall receive from the GRANTOR the exclusive possession, on a temporary basis, of the Execution of Works

Area in Local / Auxiliary / Side Roads, for the purpose of executing the Works detailed in Annex No. 3 of this Contract and according to the Service Levels of Annex No. 11.

Once said Works have been completed by the CONCESSIONAIRE, and are received and accepted to the satisfaction of the GRANTOR by means of the subscription of the corresponding act, the Execution of Works Area in Local / Auxiliary / Side Roads, and others that are not necessary for the purposes of the Operation, shall be delivered to the GRANTOR, for their subsequent return to the Relevant Governmental Authorities. In the latter case, the Execution of Works Area in Local / Auxiliary / Side Roads will be delivered to the GRANTOR in accordance with the provisions of the corresponding EDI and in accordance with Clause 8.28 of this Contract.

Without prejudice to the foregoing, the Parties agree that the CONCESSIONAIRE shall be liable to the GRANTOR for (i) eviction, (ii) hidden defects in each and every one of the Works, for which the CONCESSIONAIRE is responsible, that it builds or subcontracts in accordance with this Contract, including, but not limited to, the Works of the Execution of Works Area in Local / Auxiliary / Side Roads, and/or (iii) its own or its subcontractors' acts, which do not allow the Works to be used for the purpose for which they were built and/or which diminish their value, which shall be governed by the provisions of the Applicable Laws and Provisions, including the Civil Code.

In this regard and as an exceptional case, the Parties agree that the CONCESSIONAIRE shall not be liable for the hidden defects of the Works of the Execution of Works Area in Local / Auxiliary / Side Roads that are caused by events not attributable to the CONCESSIONAIRE, provided that an Expert so determines, in accordance with the dispute resolution procedure regulated in Clause 7.13 of this Contract.

In this regard, the Parties agree that the terms to sue for hidden defects in the Works of the Execution of Works Area in Local / Auxiliary / Side Roads are the following: (i) ten (10) years counted from the date of subscription of the works acceptance certificate of the Execution of Works Area in Local / Auxiliary / Side Roads, in the case of structural defects therein, and (ii) seven (7) years, in the case of non-structural defects of the Works. Notwithstanding the foregoing, in both cases and under any circumstances, the term to sue shall not be less than seven (7) years counted from the date of subscription of the works acceptance certificate of the Execution of Works Area in Local / Auxiliary / Side Roads. Likewise, the Parties agree that, in the event that there is a dispute regarding the existence of hidden defects derived from the Works of the Execution of Works Area in Local / Auxiliary / Side Roads of the sewerage infrastructure and the responsibility for their remediation, such dispute may be submitted to an expert appraisal in accordance with the dispute resolution procedure regulated in Clause 7.13 of this Contract.

In the event of the existence of any of the aforementioned events (eviction, hidden defects and/or own or subcontractors' events), except for the exceptional event described in the previous paragraph, the GRANTOR shall be authorized to execute the Guarantees of Faithful Fulfillment, as appropriate.

6.28 The controversies that may arise during the partial delivery of the Concession Area shall not exempt the CONCESSIONAIRE from complying with its obligations, such as those related to EDI, among others.

PROPERTY ACQUISITION PLAN (PAP)

6.29 The CONCESSIONAIRE, in accordance with the provisions of the Applicable Laws and Provisions and Annex No. 4, shall carry out the Properties acquisition by direct treatment and/or the relocation of the Taxable Persons located within the Concession Area. To this end, it will design and implement the PAP for each of the Project Sections, including activities related to the relocation of the Taxable Persons and/or a Compensation and Involuntary Resettlement Plan (PACRI) for the Project, if applicable, in addition to the relocation of the Taxable Persons (when applicable). Likewise, the PAP of each Section shall include the execution of demolition activities and removal of waste from existing properties and/or infrastructures and the fencing and custody of released properties and those properties that have been delivered by the GRANTOR to the CONCESSIONAIRE on the Closing Date, as established in subsection (viii) of clause 3.8 of the Contract, in order to avoid any type of invasion and/or precarious possession at a later date. It is worth mentioning that the design and work plans for the execution of the PAP of each Section must have the express written consent of the GRANTOR, which will be given on the Closing Date.

The general objective of the PAP of each Section is to identify the property affects, in order to minimize the Significant Negative Environmental Impacts of the release of the Concession Area and guarantee adequate compensations to facilitate the development of the Project with equity and social peace.

The PAP should be designed and its execution should begin early, in order to release the properties in time for the implementation of the Project. The design and work plan, for the implementation of the PAP shall contemplate the progress of property release made by the GRANTOR during the Structuring and Transaction phases and shall consider the properties delivered by the GRANTOR as established in subsection (viii) of clause 3.8 of the Contract, as well as, and, among other aspects, the following:

- a. Socioeconomic study that describes the social context, describing the environment in which the property is affected (business, housing, services, etc.). The type of impact should be described and, if applicable, justify the need for a process of relocation of the Taxable Persons.
- b. Development of a technical-legal diagnosis that establishes the physical characteristics of the affected properties, their correlation with the registry information and the status of the owners, possessors and/or occupants (Taxable Persons) and the preparation of the list of affected parties. State-owned and privately-owned properties should be identified and their legal status indicated, as well as whether the properties in the study area are subject to limitations or special conditions. Individualized files must be contemplated and prepared for each affected property, so that, subsequently, the GRANTOR can make the corresponding appraisal.
- c. Design of the communications plan to be implemented with respect to Taxable Persons.
- d. Schedule and initial estimated budget for the implementation of the PAP.

e. Evaluation, monitoring and follow-up processes must be designed and implemented in order to verify compliance with the Concession Area's release goals and social purpose.

The execution of the PAP of each Section will consist of the implementation of the processes for the properties acquisition by direct treatment, up to the amounts described in the Applicable Laws and Provisions and/or the relocation of the Taxable Persons in properties, real estate or real estate units acquired, rented and/or built by the CONCESSIONAIRE, in accordance with the obligation set forth in Annex No. 4. The financing of direct property acquisition processes will be carried out in accordance with the provisions of Annex No. 4.

The GRANTOR shall proceed to the Expropriation of the properties that could not be released by means of direct treatment and/or relocation of Taxable Persons by the CONCESSIONAIRE. The financing and execution of the Expropriations will be in charge of the GRANTOR.

The CONCESSIONAIRE shall submit the design and work plan of the PAPs of each Section of the Project for the corresponding conformity of the GRANTOR, with a copy to the REGULATOR, on the Closing Date.

In the event that there are subsequent modifications to any of the approved PAPs of each Section, the Parties agree to follow the following procedure.

Once the modification of the design and/or the work plan for the execution of the PAP of the corresponding Section is received, the GRANTOR will have a term of fifteen (15) Calendar Days, counted from its reception, to formulate its observations duly justified, or, in its absence, to give its conformity.

In case the GRANTOR formulates observations, the CONCESSIONAIRE shall have a term of ten (10) Calendar Days to make the corresponding corrections, with a copy to the REGULATOR, and the GRANTOR shall have a term of ten (10) Calendar Days to pronounce on them, giving or not its conformity with respect to the design and work plan for the execution of the respective PAP. In the event the GRANTOR does not make a decision within the terms indicated above, the modified design and/or work plan for the execution of the respective PAP shall be deemed approved, provided that the CONCESSIONAIRE, with five (5) Calendar Days prior to the date of termination of the term for the GRANTOR to make a decision, sends a prior written communication to the GRANTOR, with a copy to the REGULATOR, indicating that the term is about to expire. Likewise, in case of non-conformity of the design and/or work plan for the execution of the PAP, the CONCESSIONAIRE shall have a maximum term of fifteen (15) Calendar Days to resubmit the adjusted documents to the GRANTOR, with a copy to the REGULATOR, with a copy to the REGULATOR, with a copy to the REGULATOR, with a plan for the execution of the PAP, the CONCESSIONAIRE shall have a maximum term of fifteen (15) Calendar Days to resubmit the adjusted documents to the GRANTOR, with a copy to the REGULATOR, for its corresponding evaluation and conformity, following the same procedure as above, if applicable.

With the GRANTOR'S approval, regarding the design and work plan for the execution of the PAP of the corresponding Section and/or its respective modification, as the case may be, the CONCESSIONAIRE shall initiate the activities for the properties acquisition by direct treatment and/or relocation of the Taxable Persons located in the Concession Area, within the terms set forth in Annex No. 4.

Notwithstanding the foregoing, the GRANTOR may carry out activities of Acquisition and Expropriation of properties during the stage of direct treatment, provided that it reaches an agreement with the CONCESSIONAIRE, and such activities must be specified in the PAP. In this case, the financing of the costs and expenses demanded by the property management activities and the compensations to the Taxable Persons, carried out by the GRANTOR, as well as the corresponding payments shall be directly assumed by the GRANTOR. In the event that the Parties do not reach an agreement for the GRANTOR to carry out the activities described above, such activities shall be carried out by the CONCESSIONAIRE, as developed in this Clause 6.29.

The participation of the GRANTOR in the activities of property acquisition by direct treatment does not eliminate, limit or annul in any way the obligations of the CONCESSIONAIRE regulated in this Contract; with the exception of those expressly contemplated in the PAP in charge of the GRANTOR.

6.30 In the event that the CONCESSIONAIRE fails to comply with its obligations related to this section and/or the PAP, the penalties described in Annex No. 10 of this Contract shall be imposed.

RELEASE OF THE CONCESSION AREA

6.31 It constitutes an obligation of the GRANTOR, the Physical and Effective Release of the Concession Area, without prejudice of the obligations of the CONCESSIONAIRE that it assumes with respect to this matter.

The GRANTOR shall not be liable if the Physical and Effective Release of the Concession Area is not performed and/or its performance is delayed due to causes attributable to the CONCESSIONAIRE.

- 6.32 The land areas corresponding to the Concession Area shall be delivered by the GRANTOR to the CONCESSIONAIRE, within the maximum terms established in Clause 6.23.
- 6.33 Failure by the GRANTOR to comply with the terms in Clause 6.23, provided that it is not due to a cause attributable to the CONCESSIONAIRE, shall entail the right of the CONCESSIONAIRE to a suspension of its obligations, in accordance with the provisions of Clauses 5.6 and 5.7 of this Contract.

TERMINATION OF THE CONTRACT DUE TO IMPOSSIBILITY OF PROPERTIES ACQUISITION IN SECTION 2.

6.34 Given the relevance of the release of the Concession Area for the execution of the Project, within the first fifteen (15) Calendar Days of the twenty-second (22) month, computed from the Closing Date, the CONCESSIONAIRE shall submit to the GRANTOR, regarding four hundred (400) Critical Properties of the total of Critical Properties indicated in Annex No. 4, the certificates of compliance of relocation and/or the certificates of

compliance for the acquisition by direct treatment of the referred properties, duly subscribed by the corresponding Taxable Persons.

For the purposes of what is indicated in the preceding paragraph, the GRANTOR shall have a maximum term of thirty (30) Working Days counted from the reception of all the documents described above, to review them, evaluate them and confirm compliance with the provisions of this Clause.

For the purposes of the provisions of this Clause, the CONCESSIONAIRE's obligation is exhausted with the submission of information to the GRANTOR. In this regard, the CONCESSIONAIRE shall evidence compliance with its obligations with the sole submission of the information described above.

- 6.35 If at the expiration of the first fifteen (15) Calendar Days of the twenty-second (22) month described above, does not comply or partially complies with the provisions of Clause 6.34 above, the following consequences shall materialize:
 - (i) The Parties may, by means of a written agreement signed by both, opt to terminate the Concession Contract by mutual agreement, partially, only with respect to Section 2 of the Project, granting this act the effects of the termination due to Fortuitous Event or Force Majeure pursuant to subparagraph f) of Clause 18.1; or,
 - (ii) Either Party may terminate this Concession Contract, in a total manner, by sending a written communication of a date certain to the other Party, giving this act all the effects of termination due to Fortuitous Event or Force Majeure as per subparagraph f) of Clause 18.1.

The adoption and materialization of any of the consequences described above by the Party(ies) shall take place within a maximum term of thirty (30) Working Days counted from the expiration of the term described in the first paragraph of this clause. If any of the consequences described in subparagraphs (i) or (ii) above are not adopted within the maximum term described above, the Contract shall remain in force and each of the Parties shall continue and comply with each and every one of their respective obligations.

6.36 In the event that the Parties choose to partially terminate the Concession Contract, the VPIP will be readjusted to the values described in Appendix 4 of Annex No. 9, maintaining in force all other contractual obligations established for Sections 1 and/or 3 of the Project, according to this Contract. Likewise, for all purposes, including Chapter XVIII, in the event the partial expiration of the Contract materializes, the auditing entity of international prestige chosen and hired by the REGULATOR shall calculate the amount that the CONCESSIONAIRE shall be entitled to receive (avoiding the recognition and/or double payment of the same concept), which shall be the product of the sum of (i) the costs for the preparation of the Detailed Engineering Study (EDI) of Section 2 of the Project, duly recorded in the balance sheet and the audited financial statements of the CONCESSIONAIRE; (ii) the costs and expenses incurred by the CONCESSIONAIRE, duly recorded in the balance sheet and the audited financial statements of the CONCESSIONAIRE, resulting from the demolition of buildings, cleaning and removal of debris, waste, fencing, security, custody of all the properties of Section 2 of the Project that are delivered by the GRANTOR to the CONCESSIONAIRE in accordance with the provisions of numeral (viii) of clause 3.8 and as a consequence of the execution of the Property Acquisition Plan and (iii) the early termination expenses as a consequence of

the partial expiration, which are duly supported by the CONCESSIONAIRE and approved by the GRANTOR, in accordance with the provisions of Clause 18.27 of the Contract. Except for the provisions of Clause 18.16 and subparagraph c) of Clause 18.27, all other rules provided for in Chapter XVIII for termination due to Fortuitous Event or Force Majeure shall be fully applicable to the extent applicable and insofar as they do not conflict with this clause. Notwithstanding the foregoing, in the present case, the GRANTOR declares that it will carry out the corresponding procedures to, directly or indirectly, construct Section 2 of the Project, as established in the Applicable Laws and Provisions.

In this respect, with respect to the provisions of subparagraph c) of Clause 18.27, the Parties agree that the exception described below shall apply. If the early termination of the Concession Contract is generated by the cause set forth in subparagraph f) of Clause 18.1, one hundred percent (100%) of the total amount of the expenses generated by the termination of the Contract to the CONCESSIONAIRE shall be added to the Net Book Value of the Intangible, such as the expenses of breach of contracts with contractors, financiers and/or suppliers, as well as the costs of the auditing entity set forth in Clause 18.26, duly accredited by the CONCESSIONAIRE and approved by the GRANTOR and the REGULATOR, considering the value or maximum limit equivalent to twenty-five percent (25%) of the value resulting from the sum of the Guarantee of Faithful Fulfillment of the Construction of Works in force at the time of the early termination of the Contract. Expenses shall be considered from the date of occurrence of the termination event until the date of crediting of the expenses referred to in this paragraph.

6.37 Likewise, within the calendar month of the forty-sixth (46) month, computed from the Closing Date, and within the terms of Clause 6.23.2, the Parties shall verify the Physical and Effective Release of one hundred percent (100%) of the Critical Properties indicated in Appendix 2 of Annex No. 4, as well as the Critical Properties located in the extensions to the Right of Way carried out in application of Clause 6.83 and following, if applicable.

If by the last Calendar Day of the forty-sixth (46) month the Physical and Effective Release indicated in the preceding paragraph has not been obtained or has been partially obtained, either Party may terminate this Concession Contract, partially, only with respect to Section 2 of the Project, by sending a written communication of a date certain to the other Party, granting this act the effects of the termination for the cause of Fortuitous Event or Force Majeure pursuant to subparagraph f) of Clause 18.1.

If this occurs, the VPIP will be readjusted to the values described in Annex No. 9, and all other contractual obligations established for Sections 1 and/or 3 of the Project, according to this Contract, will remain in effect. Likewise, for all purposes, including Chapter XVIII, in the event the partial expiration of the Contract described above materializes, the auditing entity of international prestige chosen and hired by the REGULATOR shall calculate the amount that the CONCESSIONAIRE shall be entitled to receive (avoiding the recognition and/or double payment of the same concept), which shall be the product of the sum of the concepts described in subparagraphs (i), (ii) and (iii) of Clause 6.36 above. Except for the provisions of Clause 18.16 and subparagraph c) of Clause 18.27, all other rules provided for in Chapter XVIII for termination due to Fortuitous Event or Force Majeure shall be fully applicable to the extent applicable and insofar as they do not conflict with this clause. Notwithstanding the foregoing, in the present case, the GRANTOR undertakes to carry out the corresponding procedures to, directly or indirectly, construct Section 2 of the Project, as established in the Applicable Laws and Provisions.

In this respect, with respect to the provisions of subparagraph c) of Clause 18.27, the Parties agree that the exception described below shall apply. If the early termination of the Concession Contract is generated by the cause set forth in subparagraph f) of Clause 18.1, one hundred percent (100%) of the total amount of the expenses generated by the termination of the Contract to the CONCESSIONAIRE shall be added to the Net Book Value of the Intangible, such as the expenses of breach of contracts with contractors, financiers and/or suppliers, as well as the costs of the auditing entity set forth in Clause 18.26, duly accredited by the CONCESSIONAIRE and approved by the GRANTOR and the REGULATOR, considering the value or maximum limit equivalent to twenty-five percent (25%) of the value resulting from the sum of the Guarantee of Faithful Fulfillment of the Construction of Works in force at the time of the early termination of the Contract. Expenses shall be considered from the date of occurrence of the termination event until the date of crediting of the expenses referred to in this paragraph.

The adoption and sending of the communication described in the second paragraph of this clause shall be carried out within a maximum period of thirty (30) Working Days from the expiration of the term described in the first paragraph above. In case of not sending the above-described communication within the maximum term mentioned above, the Contract shall remain in force and each of the Parties shall continue and comply with their respective obligations.

6.38 Within the calendar month of the sixty-sixth (66) month, computed from the Closing Date, and within the terms of Section 6.23.2, the Parties shall verify the Physical and Effective Release of one hundred percent (100%) of the Remnant Properties.

If at the expiration of the last Calendar Day of the month sixty-six (66) the Physical and Effective Release indicated in the preceding paragraph has not been obtained or has been obtained partially, either Party may terminate this Concession Contract, partially, only with respect to Section 2 of the Project, by sending a written communication of a date certain to the other Party. The Parties agree that, if the expiration described above is activated, the termination of the Concession Contract shall be carried out partially following for these purposes (i) the rules of the procedure established for the cause of Fortuitous Event or Force Majeure, pursuant to subparagraph f) of Clause 18.1. and applicable Clauses 18.17 and following, and (ii) the rules described in the following paragraph.

In the event that the Parties opt to partially terminate the Concession Contract, the VPIP will be readjusted to the values described in Appendix 4 of Annex No. 9, maintaining in force all other contractual obligations established for Sections 1 and/or 3 of the Project, according to this Contract. Likewise, for all purposes, including Chapter XVIII, in case the partial expiration of the Contract materializes, the auditing entity of international prestige chosen and hired by the REGULATOR shall calculate the amount that the CONCESSIONAIRE shall be entitled to receive (avoiding the recognition and/or double payment of the same concept), which shall be the product of the sum of (i) the costs and expenses related to the progress made by the CONCESSIONAIRE with respect to the Works of Section 2 duly recorded in the balance sheet and audited financial statements of the CONCESSIONAIRE, (ii) the costs for the preparation of the Detailed Engineering Study (EDI) of Section 2 of the Project, duly recorded in the balance sheet and expenses incurred by the CONCESSIONAIRE, duly recorded in the balance sheet and the audited financial statements of the CONCESSIONAIRE, duly recorded in the balance sheet and the audited financial statements of the CONCESSIONAIRE, resulting from the demolition of buildings,

cleaning and removal of debris, waste, fencing, security, custody of all the properties of Section 2 of the Project that are delivered by the GRANTOR to the CONCESSIONAIRE in accordance with the provisions of numeral (viii) of clause 3.8 and as a consequence of the execution of the Property Acquisition Plan; and (iv) the early termination expenses as a consequence of the partial expiration, which are duly supported by the CONCESSIONAIRE and approved by the GRANTOR, in accordance with the provisions of Clause 18.27 of the Contract. Except as provided in Clause 18.16, subparagraph c) of Clause 18.27 and numeral (iii) of Clause 18.31, all other rules provided in Chapter XVIII for termination due to Fortuitous Event or Force Majeure shall be fully applicable to the extent applicable and insofar as they do not conflict with this clause. Likewise, it should be noted that the concepts indicated in this paragraph are total and are the only payments to be recognized in favor of the CONCESSIONAIRE in the event of partial expiration of the Contract for failure to deliver the Concession Area of Section 2, and the CONCESSIONAIRE waives any additional amount or indemnity.

In this respect, with respect to the provisions of subparagraph c) of Clause 18.27, the Parties agree that the exception described below shall apply. If the early termination of the Concession Contract is generated by subparagraph f) of Clause 18.1, one hundred percent (100%) of the total amount of the expenses generated to the CONCESSIONAIRE by the termination shall be added to the Net Book Value of the Intangible, such as the expenses of breach of contracts with contractors, financiers and/or suppliers, as well as the costs of the auditing entity foreseen in Clause 18.26, duly accredited by the CONCESSIONAIRE and approved by the GRANTOR and the REGULATOR, considering the value or maximum limit equivalent to one hundred percent (100%) of the value resulting from the sum of the Guarantee of Faithful Fulfillment of the Concession Contract and the Guarantee of Faithful Fulfillment of the Concession Contract and the termination of the Contract. Expenses shall be considered from the date of occurrence of the termination event until the date of crediting of the expenses referred to in this subparagraph.

The adoption and sending of the communication described in the second paragraph of this clause shall be carried out within a maximum period of thirty (30) Working Days from the expiration of the term described in the first paragraph above. In case of not sending the above-described communication within the maximum term mentioned above, the Contract shall remain in force in all its provisions and each of the Parties shall continue and comply with their respective obligations.

Notwithstanding the foregoing, in the present case, the GRANTOR undertakes to carry out the corresponding procedures to, directly or indirectly, construct Section 2 of the Project, as established in the Applicable Laws and Provisions. In this regard, the GRANTOR, following the contractual modification procedure established by the Applicable Laws and Provisions, may require the CONCESSIONAIRE to complete the construction of the tunnels belonging to Section 2 of the Project.

In the event that the CONCESSIONAIRE had requested the suspension of its obligations as a consequence of the delay in the delivery of the Concession Area of Section 2 and this suspension had been approved by the GRANTOR in accordance with the provisions of Clauses 5.6 and 5.7 of the Contract, the CONCESSIONAIRE may only request the partial termination of the Contract in the event that the suspension extends for terms longer than those regulated in Clause 5.22 of the Contract.

The Parties agree that all penalties related to Section 2 and referred to in Annex No. 10 of the Contract shall not be applicable in the event of the partial expiration of the Contract resulting from the non-delivery of the Concession Area of Section 2, as established in clause 6.34 and following, and provided that the partial expiration of the Contract impacts or affects any of the CONCESSIONAIRE's contractual obligations. On the other hand, the penalties generated and applicable to Section 1 and/or 3 will be applicable in the event that the above scenario materializes.

INTERFERENCES

6.39 The GRANTOR is responsible for obtaining the removal, withdrawal and transfer of the corresponding Interferences, which shall be effective within the following maximum terms, counted from the Closing Date:

	Section 1 (months)	Section 2 (months)	Section 3 (months)
Essential Interferences	24	48	28
Not Essential Interferences (other Interferences)	38	66	43

The terms indicated for the removal, withdrawal and relocation of the Interferences corresponding to Section 2, include those identified in the area of Critical Properties located in the extensions to the Right of Way carried out in application of Clause 6.83 and following.

- 6.40 In order for the release or removal of Interferences to be effective within the terms previously indicated and pursuant to the provisions of the Applicable Laws and Provisions, the CONCESSIONAIRE undertakes to comply with the obligations described in the following Clauses. Notwithstanding the foregoing, the GRANTOR may entrust the management of the release or removal of the Interferences to the CONCESSIONAIRE, and the Parties shall determine the terms and scope of the entrustment of the management by means of an executed act, provided that the Applicable Laws and Provisions allow it.
- 6.41 The CONCESSIONAIRE shall be responsible for evaluating and making compatible the Interference release works submitted by the public service companies and/or the Interference holders to the GRANTOR, with the execution of the Execution of Works of the Project, for which it shall determine the following:
 - a. If the route proposed by the referred companies or the owners of the Interferences are compatible with the Project's route; and,
 - b. If the schedules for the release of Interferences are compatible with the Project execution schedules established in this Concession Contract.

In order to comply with this obligation, the GRANTOR shall deliver to the CONCESSIONAIRE, as of the Closing Date, the technical files of the works to be performed for the release of Interferences and the schedules thereof received from the

owners of the Interferences identified and communicated by them to the GRANTOR.

The CONCESSIONAIRE may not give its opinion on the budget determined by the public service companies or the Interference holders, nor on the technical suitability proposed by them for its removal.

6.42 The CONCESSIONAIRE shall send to the GRANTOR, with a copy to the REGULATOR, a report on the information received from each Interference holder, regarding the aspects described in the preceding numeral, according to the following schedule, which shall commence upon receipt of such information:

	Section 1 (months)	Section 2 (months)	Section 3 (months)
Essential Interferences	02	06	03
Not-Essential Interferences	05	08	06

In the event that the CONCESSIONAIRE fails to comply with its obligations related to this section, the penalties described in Annex No. 10 of this Contract shall be imposed.

6.43 With the report submitted by the CONCESSIONAIRE, the GRANTOR shall notify the owners of the Interferences, the corresponding observations or conformities.

In the event that there are no observations to the aforementioned files, the execution of the removal shall begin within fifteen (15) Working Days from the date on which the GRANTOR communicates the conformity of the schedule and the layout established in the corresponding technical file.

In the event that there are observations from the CONCESSIONAIRE, the GRANTOR shall transfer them to the holders of the Interferences and obtain the corresponding corrections, within fifteen (15) Working Days after receiving them, and shall also attach the technical file and updated schedules, if applicable.

- 6.44 In the case indicated in the previous paragraph, the GRANTOR shall send to the CONCESSIONAIRE, within three (3) Working Days as of its receipt, the observations report together with the technical files and schedules updated by the Interference holders. The CONCESSIONAIRE shall send to the GRANTOR, with a copy to the REGULATOR, the corresponding report within a term of twenty (20) Working Days from the date of receipt of the new technical files and schedules.
- 6.45 In the event that the holders of the Interferences do not submit their observations and/or the updated technical files and schedules within the term indicated in the previous Clause, or having submitted them, do not address the observations made or still do not comply with the compatibility with the layout and/or schedule of the Project, the GRANTOR shall proceed as established in Article 43 and following of the Single Ordered Text (TUO) of Legislative Decree No. 1192, or the standard that modifies or replaces it.

- 6.46 The GRANTOR shall not be liable if the release or removal of the Interferences, which are within the Concession Area, is not performed and/or is delayed due to causes attributable to the GRANTOR. Notwithstanding the foregoing, the CONCESSIONAIRE shall not assume any liability for the delay of such activities due to (i) causes beyond its will, control or responsibility; or, (ii) which are attributable to the GRANTOR or third parties; nor for the consequences derived from such delay, except for willful misconduct or inexcusable fault on the part of the CONCESSIONAIRE.
- 6.47 Failure to comply with the terms set forth in Clause 6.44 by the GRANTOR, provided that it is not due to a cause attributable to the CONCESSIONAIRE, shall entail the right of the CONCESSIONAIRE to the suspension of its contractual obligations related to the Interferences and/or the extension of the terms for compliance with the obligations of the CONCESSIONAIRE and other effects set forth in the Contract, as applicable.
- 6.48 If during the Pre-Construction and Construction Stage, new Interferences not identified and/or not previously communicated by the holders of Interferences, it shall be the responsibility of the GRANTOR to obtain the release or removal of the respective Interferences, and the CONCESSIONAIRE to notify the GRANTOR in a timely manner of the finding of new Interferences, as well as to comply with the activities described in Clause 6.41 et seq. The terms for the release of the new Interferences shall not affect the schedule of execution of Project Works. However, if, due to the nature or complexity of the Interferences, the release or removal works will affect the schedule of execution of the Project Works, either Party may request the suspension of the affected obligations and/or the other effects provided for in this Contract.

Likewise, the CONCESSIONAIRE shall grant the GRANTOR the areas or zones strictly necessary, within the Concession Area, for the relocation and/or installation of Interferences and/or any other infrastructure that the GRANTOR deems necessary within the Concession Area. To this end, the GRANTOR must previously send to the CONCESSIONAIRE a written request with the due technical and legal justification or motivation, which could include, but not be limited to, the design of the installation of an infrastructure or Interference that is intervened, among others, In this regard, the Parties agree that the authorization of the CONCESSIONAIRE will be granted provided that the request described above, does not affect the performance of any and all obligations of the CONCESSIONAIRE set forth in this Contract and/or in the Applicable Laws and Provisions.

EASEMENTS

6.49 The GRANTOR is responsible for and undertakes to execute the procedures for the imposition of Easements required by the CONCESSIONAIRE for the fulfillment of its obligations under this Contract, upon request of the latter, in accordance with the procedure and complying with the requirements provided for in the Applicable Laws and Provisions. All costs related to the imposition of Easements, including compensation and other corresponding concepts, will be borne in full by the GRANTOR.

Notwithstanding the foregoing, the CONCESSIONAIRE may be in charge of the negotiation that may take place, subject to agreement and acceptance by the GRANTOR.

- 6.50 The CONCESSIONAIRE shall initiate the corresponding actions and procedures in the Public Registries of the Easements imposed on the properties owned by third parties, within a term of ninety (90) Calendar Days from the constitution of the easement. This obligation shall include the collection of the respective observations, until the corresponding registration is achieved.
- 6.51 Easements for the occupation of private property may include, among, others, the following:
 - a) Temporary occupation of privately owned property, indispensable for the fulfilment of the obligations of the Contract.
 - b) Transit, for the fulfilment of the obligations of the Contract.
- 6.52 The Easements, once imposed, will be considered as Concession assets.
- 6.53 Easements of temporary occupation, entitle the owner of the servient property to receive the payment of the indemnities and compensations established by the Applicable Laws and Provisions, as long as they affect private property. The negotiation and the cost of the compensation that may be applicable, as a result of the imposition of such Easements, shall correspond to the GRANTOR, from its resources.
- 6.54 The GRANTOR will provide the facilities and make the arrangements so that the CONCESSIONAIRE can use the assistance of the public force, provided that there is opposition from the owner or driver of the servient property, without prejudice to the possibility of initiating the legal actions that may be appropriate.

- 6.55 The GRANTOR acknowledges the right of the CONCESSIONAIRE to avoid or oppose any repair or modification attempted by any public or private entity, favored or not by an easement, and the exercise of which is incompatible with the rights granted to the CONCESSIONAIRE under this Contract or with the Project. The CONCESSIONAIRE may request the GRANTOR its intervention for the adequate defense of its right.
- 6.56 In the event that an easement is extinguished due to the fault of the CONCESSIONAIRE and, for this reason, a new Easement is required it will be up to the CONCESSIONAIRE to obtain it at its own expense. On the other hand, if for any reason not attributable to the CONCESSIONAIRE, the CONCESSIONAIRE loses the right to any easement already constituted, the GRANTOR will be obliged to obtain, at its own expense, the imposition of a new easement in favor of the CONCESSIONAIRE, which replaces the previous one.

In the event that the CONCESSIONAIRE requires Easements for the provision of the Optional Services, it must obtain them at its own expense.

POSSESSORY DEFENSES

- 6.57 The CONCESSIONAIRE has the obligation to (i) notify the GRANTOR immediately and no later than twenty-four (24) hours after any event occurred and (ii) to exercise the following modalities of possessory defense from the Possession Taking, both in the case of attempted usurpation of the corresponding Concession Area, and in the case of activities incompatible with the proper use of said area by third parties:
 - (i) <u>Extrajudicial Possessory Defense</u>

Used to repel the force used against the CONCESSIONAIRE and to be able to recover the property, without an interval of time, if it is dispossessed, but always refraining from the use of de facto means not justified by the circumstances. In the event that the extrajudicial possessory defenses initiated by the CONCESSIONAIRE are not satisfactory within a term of seven (7) Calendar Days, the CONCESSIONAIRE shall initiate the judicial possessory defenses, as established by the Applicable Laws and Provisions.

(ii) Judicial Possessory Defense

The CONCESSIONAIRE must exercise in the event that any affectation, dispossession, occupation and/or usurpation falls on the Concession, and must notify the REGULATOR of such facts and make use of the mechanisms and judicial remedies that allow it to maintain the right of the GRANTOR over the Concession Assets unharmed.

The CONCESSIONAIRE undertakes to exercise extrajudicial and/or judicial possessory defenses, in the terms indicated in this Clause, with respect to the Area of Execution of Works on Local / Auxiliary / Side Roads, while it is in possession of the same and until its delivery to the GRANTOR. Likewise, the CONCESSIONAIRE undertakes to exercise the corresponding extrajudicial possessory defenses, in the terms indicated in this Clause, with respect to all the properties that are delivered to it for safekeeping, as established in numeral viii) of clause 3.8 of the Contract.

- 6.58 The exercise of the defenses described above does not exempt the CONCESSIONAIRE from liability, which, in a case such as those described in the preceding paragraph, must coordinate within a maximum term of one (1) Calendar Day with the GRANTOR the legal actions that it has filed or will file, in which case, the GRANTOR may initiate the additional legal actions that it deems appropriate in order to maintain unharmed its right over the Concession Assets. Any additional legal actions that may be taken by the GRANTOR do not prejudice the enforcement of the CONCESSIONAIRE's obligations to charge, nor the application of the respective penalty.
- 6.59 The exercise of possessory defenses, both judicial and extrajudicial, are the responsibility of the CONCESSIONAIRE, and must assume the cost and risk that they demand.
- 6.60 Failure to exercise any possessory, extrajudicial and/or judicial defense by the CONCESSIONAIRE will be penalized in accordance with the stipulations of Annex No. 10.

OBLIGATIONS OF THE CONCESSIONAIRE WITH RESPECT TO THE CONCESSION ASSETS

6.61 With the exception of real estate that has been delivered to the CONCESSIONAIRE without being restored, the Concession Assets resulting from the Works that are within the Concession Area must be registered in the Public Registries, on behalf of the GRANTOR, within a maximum term of six (6) months from the signing of the corresponding Works Acceptance Certificate. The CONCESSIONAIRE will automatically acquire the right to use the Concession Assets as soon as they become available.

The Works and Additional Works executed by the CONCESSIONAIRE, subject to registration in the Public Registries, will be registered in favor of the GRANTOR. For such purposes, within a term of thirty (30) Working Days, counted from the signing of the corresponding Works Acceptance Certificate, the CONCESSIONAIRE must request registration with the Public Registries and must make the corresponding observations, in order to seek the registration of the aforementioned works.

6.62 The Concession Assets referring to any movable property acquired by the CONCESSIONAIRE during the Concession must be new and complete and operational, and delivered to the GRANTOR upon the expiration of the Concession.

Those susceptible to registration in the corresponding Public Registry must be registered, within a maximum term of thirty (30) Working Days counted from their acquisition. For such purposes, within a term of ten (10) Working Days, counted from their acquisition, the CONCESSIONAIRE must request registration with the Public Registries and must make the corresponding observations, in order to procure the registration of the Concession Assets.

6.63 The CONCESSIONAIRE is obliged to carry out activities aimed at preserving, during the term of the Concession, the state and nature of the Concession Assets, being clearly agreed and understood between the Parties that such assets will suffer deterioration resulting from their ordinary use. However, it is the obligation of the CONCESSIONAIRE to continuously maintain at least the Service Levels, in the terms established in Annex No. 11, for which it must carry out the corresponding activities of Routine Road Maintenance and Periodic Road Maintenance.

- 6.64 The CONCESSIONAIRE is also obliged to attend to Road Emergencies and, in general, all those works that seek to maintain the operability of the Concession Assets and avoid a Significant Negative Environmental Impact, according to the scope defined in the Environmental Management Instruments of the Project and the respective EDI. The CONCESSIONAIRE is obligated to make necessary and useful improvements required by the Concession Assets, in accordance with the Service Levels required in this Contract.
- 6.65 All Concession Assets that have not been returned to the GRANTOR prior to the Expiration of the Concession will form part of the Final Inventory and will be reverted to the GRANTOR. Both the reversion and the return of goods that for any reason the CONCESSIONAIRE makes to the GRANTOR will be unaffected by any tax, created or to be created.
- 6.66 The CONCESSIONAIRE shall be liable for any damages, losses or caused to the Concession Assets from the Possession Taking or execution of the Works, as applicable, until the signing of the Reversion Certificate of the Goods, except in cases of force majeure or fortuitous event regulated in this Contract. Any loss or damage to a Concession Asset must be supplanted or replaced by the CONCESSIONAIRE.
- 6.67 The CONCESSIONAIRE has the obligation to supplant or replace the Concession Assets, referring to machinery, equipment, electrical and mechanical and electronic systems, among other movable property, when applicable, that may be lost or declared obsolete within the terms established in the Service Levels described in Annex No. 11, which may not exceed, in all cases, (3) months after the loss of the property or the declaration of its obsolescence. The recover or replacement shall be deemed to have been affected as long as the goods recovered or replaced are new and fulfil the same operational functions as the lost or obsolete goods. In the event of non-compliance with this obligation, the penalties set for in Annex No.10 will be applied to the CONCESSIONAIRE, regardless of the corresponding administrative sanctions.
- 6.68 In the case of goods declared obsolete, in addition to the obligation referred to in the previous Clause, the CONCESSIONAIRE must make said obsolete goods available to the GRANTOR, within a term that must not exceed three (3) months from the date the REGULATOR communicates to the GRANTOR the approval of the derecognition of the obsolete assets.

The procedure for the custody and return of the assets declared obsolete to the GRANTOR will be established in Annex No. 12, which is in accordance with the Regulations applicable to the Control of the Registrations and Terminations of the Concession Assets, approved by Resolution of the Board of Directors No. 006-2006-CD-OSITRAN, and any other regulation that complements, modifies and/or replaces it. In the case of lost goods that have a minimum unit value of fifty percent (50%) of the UIT (Tax Unit), the CONCESSIONAIRE must timely report to the relevant Governmental Authority and notify the GRANTOR within a maximum term of five (5) Working Days of becoming aware of the loss of the property.

- 6.69 The procedure for deregistering such assets will follow the provisions of the Regulations applicable to the Control of the Registrations and Terminations of Concession Assets, approved by Resolution of the Board of Directors No. 006-2006-CD-OSITRAN, and any other regulation that complements, modifies and/or replaces it.
- 6.70 The CONCESSIONAIRE shall hold the GRANTOR harmless with respect to and against any action or exception of a legal, administrative, arbitral or contractual nature, or claim of any nature with respect to the Concession Assets, provided that this situation has arisen from the Possession Taking and until the reversion of the Concession Assets by the CONCESSIONAIRE to the GRANTOR; as long as the affectation is not the result of an action or omission of the GRANTOR itself.

The GRANTOR shall hold the CONCESSIONAIRE harmless from any claim or action by third parties over the Concession Assets, as long as the affectation is not the result of an act or omission of the CONCESSIONAIRE itself.

- 6.71 The CONCESSIONAIRE shall be liable to the GRANTOR for the correct administration and use of the Concession Assets, as well as for the risk of loss, destruction, technological lag and impossibility of fulfilling the purpose for which they were intended. In this context, as established in the Applicable Laws and Provisions, it must carry out annual evaluations of the Concession Assets, as part of its Annual Inventories, in order to make improvements that are necessary to permanently comply with the Service Levels of Annex No. 11.
- 6.72 The CONCESSIONAIRE, in order to mitigate the risks of the Contract, undertakes to take out the insurance policies under the terms set forth in Chapter XIV of this Contract.
- 6.73 The CONCESSIONAIRE is required to submit all inventories related to the Concession Assets and the CONCESSIONAIRE's Assets, including the Initial Inventory, to both the GRANTOR and the REGULATOR, on the relevant date and throughout the term of the Concession.
- 6.74 The CONCESSIONAIRE shall be responsible and obligated to pay the taxes, fees and contributions that are applied to the Concession Assets, as well as the payment of water, electricity, telephone, Internet and other public or private services that are applied to the Concession Assets, as of the Possession Taking, in accordance with the Applicable Laws and Provisions. In the event of non-compliance with this obligation, the penalties set for in Annex No.10 will be applied to the CONCESSIONAIRE, regardless of the corresponding administrative sanctions.

In the event that amounts are owed for taxes, fees, contributions or payment of services with respect to the Concession Assets, generated prior to the Possession Taking, these will be assumed directly by the GRANTOR, who must hold the CONCESSIONAIRE harmless; without prejudice to its obligation to remedy any situation that could affect the right of Concession granted under this Contract.

RETURN OF CONCESSION ASSETS

- 6.75 Upon Expiration for any reason, the CONCESSIONAIRE has the obligation to return to the GRANTOR within the following thirty (30) Working Days, in a single act, or through partial deliveries, all those areas of land included within the Concession Area that were delivered by the GRANTOR at the Possession Taking or by constitution of Easements or other subsequent acts in a good state of conservation, except for the deterioration resulting from their normal and ordinary use, free of occupants, encumbrances and charges, and in conditions of use and Operation according to the technical parameters of Annex No. 11 and the indications made by the REGULATOR, which, within the framework of its powers and in accordance with the Applicable Laws and Provisions, will carry out the corresponding supervisions in order to verify the status of the Concession Area to be returned. During the period between the declaration of Expiration and the return of all areas of land within the Concession Area, the CONCESSIONAIRE must comply with the Service Levels established in Annex No. 11 of this Contract.
- 6.76 In the same way, in the event of the Expiration of the Concession for any reason, the CONCESSIONAIRE has the obligation to return to the GRANTOR within thirty (30) Working Days, in a single act, or through partial deliveries, the Concession Assets. The assets will be returned in a good state of conservation, except for the deterioration resulting from their normal and ordinary use, free of occupants, encumbrances and charges, and in conditions of use and exploitation, when this is applicable considering the reasons that gave rise to the Expiration of the Concession, according to the parameters established in this Contract and the indications made by the REGULATOR.
- 6.77 Whether delivered with the Concession or incorporated during its term, all Concession Assets that have not been returned to the GRANTOR prior to the Expiration of the Concession will form part of the Final Inventory and will revert to the GRANTOR, with the exception of intangible, assets. such as industrial property rights, intellectual property rights, technology and know-how contracts and other similar, ones, which shall be, for all intents and purposes, Assets of the CONCESSIONAIRE.
- 6.78 During the return act, the CONCESSIONAIRE and the GRANTOR will sign the respective Reversion Certificate of the Assets. The Certificate shall establish the description of the property to be returned, specifying in general, or for each of its components: its characteristics, location, state of conservation, notes on operation or performance and other elements of interest. The Final Inventory will be part of the Reversion Certificate of the Assets, as well as any other element that helps to interpret the returned object and the statehood. Plans, photographs or diagrams may be included in the interpretative elements.
- 6.79 The Reversion Certificate of the Assets shall be signed in three (3) originals documents, one of them shall be delivered to the REGULATOR.

ASSETS OF THE CONCESSIONAIRE

6.80 The Assets of the CONCESSIONAIRE that are convenient for the continuity of the activities of the Concession may be offered and acquired by the GRANTOR at the termination of the Concession, who will have a preferential option to purchase, within a term not exceeding six (6) months, counted from the date on which the CONCESSIONAIRE puts at the disposal of the GRANTOR, the list of the CONCESSIONAIRE's Goods and, after verification of their state of conservation and

normal use, as well as their real value according to market conditions determined by a specialized expert chosen by the GRANTOR and, paid for by the CONCESSIONAIRE.

- 6.81 In the event of Expiration due to the end of the term, the list of Goods of the CONCESSIONAIRE must be delivered no later than six (6) months before the date on which the Expiration operates, and in any of the other causes of Expiration, no later than thirty (30) Calendar Days counted from the date on which the Expiration operates, in accordance with the provisions of Chapter XVIII of this Contract.
- 6.82 If this term has elapsed without the GRANTOR having communicated in writing its decision to acquire all or some of the Assets from the Concessionaire, the CONCESSIONAIRE may freely dispose of them, and must remove and move them at its sole cost and risk.

RIGHT OF WAY EXTENSION

- 6.83 The obligation of the GRANTOR to deliver to the CONCESSIONAIRE on the Closing Date the Ministerial Resolution defining and approving the Right of Way extension of the areas included in Annex No. 1 of the Contract, if applicable, does not limit the right of the CONCESSIONAIRE to request the GRANTOR, before or during the preparation of the EDI, the Right of Way extension in compliance with the stipulations set forth in this Contract. Notwithstanding the foregoing, except for the costs of removing Interferences and, in accordance with Appendix 3 of Annex No. 4, management expenses and property expenses, which will be assumed by the GRANTOR, the approval of a modification of the Right of Way, derived from any of the cases described in the following numerals, will not generate any additional collection rights and /or higher costs or expenses for the GRANTOR, including, but not limited to, an increased RPI, as set forth in this Contract, in favor of CONCESSIONAIRE
- 6.84 The CONCESSIONAIRE may request the GRANTOR, before or during the preparation of the EDI of each Section, the approved Right of Way extension, in accordance with the provisions of this Contract and the Applicable Laws and Provisions.
- 6.85 For this purpose, the CONCESSIONAIRE must submit an application for extension to the GRANTOR, with a copy to the REGULATOR, attaching a legal technical report supporting and justifying the possible expansion of the Right of Way. The legal technical report must also contain, but is not limited to, (i) a list and identification of the properties owned by third parties and the Taxpayers that could be affected by the the Right of Way extension, (ii) the proposal for modification of the corresponding PAP, (iii) the identification of the Interferences, and their corresponding owners, that are in the required extension and (iv) a schedule of property release and release of Interferences agreed with the schedule of execution of the Works of each Section, as established in this Contract.
- 6.86 In the event that the Right of Way extensionrequires the acquisition and/or expropriation of property owned or owned by third parties (property release), the same procedure as that contemplated in Clauses 6.29 et seq. shall be followed, and for the release of Interferences, the same procedure shall be followed as that established in Clauses 6.39 et seq. The terms must be determined so that (i) the CONCESSIONAIRE can carry out the direct deal with the Taxable Persons to achieve the property release, (ii) so that the GRANTOR can carry out the pertinent expropriations, if applicable, and (iii) so that the GRANTOR can achieve the removal of the Interferences, if applicable.

- 6.87 It should be noted that the request for extension may refer to the use of any remaining land resulting from the expropriations carried out by the GRANTOR.
- 6.88 The approval of the extension of the Right of Way will always be a unilateral decision and at the sole discretion of the GRANTOR, following a non-binding opinion of the REGULATOR regarding its necessity. However, if any of the Environmental Management Instruments of the corresponding Sections, duly approved by the Relevant Environmental Authority, establishes the need to release additional areas, the GRANTOR must approve the modification of the corresponding Right of Way, upon request of the CONCESSIONAIRE, issuing the corresponding resolution of the new Right of Way. To this end, the CONCESSIONAIRE must submit the request for modification of the Right of Way, attaching a technical-legal report, supporting said request based on the provisions of the corresponding approved Environmental Management Instrument.
- 6.89 In the event that the GRANTOR approves adjustments or modifications to any of the EDIs of the Project Sections or for Road Safety reasons in favor of the Users, which generate changes in the Right of Way, the GRANTOR must issue the corresponding resolution approving the new Right of Way. If, due to events not attributable to the CONCESSIONAIRE, the GRANTOR delays more than sixty (60) Working Days in issuing the resolution corresponding to the new Right of Way, and this prevents the execution of the Works within the established terms, the CONCESSIONAIRE may request the GRANTOR to suspend the terms for executing the aforementioned Works and its other related contractual obligations.

CHAPTER VII: DEFINITIVE ENGINEERING STUDY

- 7.1 The CONCESSIONAIRE will be in charge of the design for the execution of the Works. In this sense, the risks associated with this are assumed by the CONCESSIONAIRE, including design errors, which do not release the CONCESSIONAIRE from its obligation to comply with the Service Levels.
- 7.2 For the execution of the Works of each Section, the CONCESSIONAIRE must prepare the corresponding EDI, which must comply with the provisions of this Contract, and must be approved by the GRANTOR, with the prior non-binding opinion of the REGULATOR. In no case shall the revision, evaluation and approval of the EDI generate the transfer of the design risk from the CONCESSIONAIRE to the GRANTOR, with the CONCESSIONAIRE maintaining at all times the ownership and effects of the aforementioned risk.
- 7.3 For the purposes of formulating the EDI of each Section, the CONCESSIONAIRE must exhaust all design options to achieve the effective execution of the Works whose scope is defined in the following numerals 7.3 (i) and 7.3 (ii), observing at all times the Applicable Laws and Provisions, the Right of Way, as modified, and the following technical documents with the following order of priority, in case of contradiction or ambiguity:
 - (i) The Technical Requirements of the Project indicated in Annex No. 3 of this Contract.
 - (ii) The Terms of Reference for the preparation of the EDIs indicated in Annex No. 3 of this Contract.
- 7.4 The CONCESSIONAIRE shall submit the final EDI of each Section to the GRANTOR, with a copy to the REGULATOR, for its corresponding evaluation and approval, if applicable, according to the following schedule:
 - 7.4.1 <u>Section 1:</u> Not later than three hundred and ninety (390) Calendar Days from the Closing Date.
 - 7.4.2 <u>Section 2:</u> A maximum of one thousand fifty (1050) Calendar Days from the Closing Date.
 - 7.4.3 <u>Section 3:</u> Not later than five hundred and ten (510) Calendar Days from the Closing Date.

The EDI of each Section shall be prepared by the CONCESSIONAIRE independently and within the terms described above, and its submission or approval shall not be subject to the submission or approval of the EDI of any other Section. In the event of non-compliance with this obligation, the penalties set for in Annex No.10 will be applied to the CONCESSIONAIRE, regardless of the corresponding administrative sanctions.

- 7.5 In order to facilitate and optimize the times associated with the submission, revision and approval of the respective EDI, the CONCESSIONAIRE shall make partial deliveries of the EDI of each Section for approval by the GRANTOR, without prejudice to the final submission and its corresponding final approval as indicated in Clause 7.10.
- 7.6 For such purposes, one hundred and twenty (120) Calendar Days from the Closing Date, the CONCESSIONAIRE must submit to the GRANTOR, with a copy to the REGULATOR, the scope of what will be developed in each of the partial deliveries of the EDI of each Section, which must be in accordance with the provisions of Annex No. 3, as well as the

foreseen opportunity for them to occur, being that each one must necessarily refer to a sub-section or complete component of the Section in question.

The schedule for partial deliveries of EDIs shall consider the following:

- 7.6.1 In the case of Section 1, the submission of a partial delivery of the EDI will be admitted, which must be submitted no later than one hundred and eighty (180) Calendar Days from the Closing Date.
- 7.6.2 In the case of Section 2, the submission of up to two (2) partial deliveries of the corresponding EDI will be admitted, with the first filing being made no later than three hundred and sixty (360) Calendar Days from the Closing Date and the second filing no later than seven hundred and fifty (750) Calendar Days from the Closing Date.
- 7.6.3 In the case of Section 3, the submission of a partial delivery of the EDI will be admitted, which must be submitted no later than two hundred and seventy (270) Calendar Days from the Closing Date.
- 7.7 Partial deliveries of the EDI must be submitted to the GRANTOR with a copy to the REGULATOR, for approval under the terms established in Clause 7.2 of this Contract. Within the framework of the processing of partial EDI and/or within the maximum term established for this purpose, the CONCESSIONAIRE must identify and communicate to the GRANTOR if it requires any type of access, easement and/or interconnection of the Works of each Section with any existing road and/or infrastructure work within and/or close to the Concession Area. In this context, the Parties agree that with respect to the roads granted or not and/or any other infrastructure work, as applicable, the GRANTOR will make its best efforts to achieve access, easement and/or interconnection of the Project with the aforementioned roads and/or infrastructures, following the provisions described in the following paragraph.

Prior to the approval of the final EDI of each Section and/or within the maximum term established for this purpose, as applicable, the GRANTOR must make its best efforts before the relevant Governmental Authority and/or the corresponding concessionaire, in order to achieve an agreement for access, easement and/or interconnection of the Project with the existing roads and/or with the corresponding infrastructure and/or public service works required by the CONCESSIONAIRE. The Parties agree that, in this case, the regulation contained in Clauses 7.15 et seq., as applicable, referring to the possibility of Additional Works during the preparation of the EDI, may be applied. Notwithstanding the foregoing, in the event of failure to reach an access, easement and/or interconnection agreement within the maximum term mentioned above, any of the Parties may request the termination of the Concession Contract on the grounds of Fortuitous Event or Force Majeure, in accordance with subparagraph f) of Clause 18.1.

On the other hand, in relation to the project works "Line 2 and Ramal Av. Faucett – Av. Gambetta of the Basic Network of the Lima and Callao Metro", in charge of the Sociedad Concesionario Metro de Lima Línea 2 S.A. or its successor, the Parties agree that the CONCESSIONAIRE must make the corresponding adaptations and/or adjusted designs in the respective EDIs, in order to achieve the effective execution of the Project.

In relation to the interconnection of Section 3 of the Project with the Via de Evitamiento Highway, by Lima Expresa S.A.C. or its successor, and in order to make the best efforts to achieve an access, easement and/or interconnection agreement, this interconnection will be regulated in accordance with the provisions of Annex No. 20 of this Contract. as

well as the regulation contained in Clauses 7.15 et seq., as applicable, referring to the possibility of Additional Works during the preparation of the EDI.

- 7.8 The submission and approval of the partial deliveries of the respective EDIs will not be conditional on the approval of the respective Environmental Management Instruments. However, the approval of the final EDI of each Section will take into account the environmental impacts of the Project and whether the aforementioned final EDI are coherent, consistent and/or concordant with the Environmental Management Instruments of each Section approved by the Relevant Environmental Authority.
- 7.9 For the purposes of approving partial deliveries of EDI for each Section, the following provisions must be complied with:
 - 7.9.1 Once the partial deliverable of the EDI of the corresponding Section has been submitted, the REGULATOR will have a maximum term of thirty (30) Working Days from receipt to issue its non-binding pronouncement and communicate it to the GRANTOR.
 - 7.9.2 The GRANTOR shall have a maximum term of thirty (30) Working Days from the receipt of the non-binding opinion of the REGULATOR indicated above, or from the deadline to issue such pronouncement, whichever occurs first, to issue the observations corresponding to the partial deliverable of the EDI or to approve it, and communicate it to the CONCESSIONAIRE, together with the observations received from the REGULATOR, if applicable.
 - 7.9.3 The CONCESSIONAIRE shall submit to the GRANTOR, with a copy to the REGULATOR, the corrections or clarifications corresponding to the observations made, within a maximum term of thirty (30) Working Days from the receipt of the aforementioned observations.
 - 7.9.4 Once the CONCESSIONAIRE has received the survey of the observations, the REGULATOR and the GRANTOR will have up to twenty (20) Working Days from the receipt of the responses or corrections from the CONCESSIONAIRE, to (i) observe what has not been corrected and/or make, for a single time, a new round of observations regarding the new information presented by the CONCESSIONAIRE or (ii) issue the non-binding pronouncement and/or approve the respective partial delivery of the EDI, as appropriate, and forward its decision to the CONCESSIONAIRE. No observations may be made, as well as comments or additions not previously observed. In the event of making the observations of the new information presented described above, the provisions of Clauses 7.9.5, 7.9.6 and 7.9.7 will apply, so that, subsequently, the REGULATOR and the GRANTOR evaluate whether or not to approve the partial delivery of the EDI, according to the terms of Clauses 7.9.7.
 - 7.9.5 For the purposes of the provisions of the preceding clause, the REGULATOR shall have a maximum term of ten (10) Working Days from receipt of the CONCESSIONAIRE's corrections to issue its non-binding opinion and communicate it to the GRANTOR. Likewise, the GRANTOR will have a maximum term of ten (10) Working Days from receipt of the opinion of the REGULATOR, to communicate its observations or approve the partial delivery of the EDI to the CONCESSIONAIRE.
 - 7.9.6 The CONCESSIONAIRE shall submit to the GRANTOR and the REGULATOR the correction of the observations referred to in the preceding numeral, within a term of no more than five (5) Working Days.

- 7.9.7 Upon receipt of the correction from the CONCESSIONAIRE, the GRANTOR will have a term of no more than ten (10) Working Days to approve or reject the partial deliverable of the corresponding EDI, which must be communicated to the CONCESSIONAIRE. In the event that the GRANTOR does not make a decision within the term indicated above, the original term will be automatically extended for an additional ten (10) Working Days, in order for the GRANTOR make a decision on the respective EDI. In this case, within the framework of the present procedure for the review of the corresponding EDI, if the GRANTOR does not issue any pronouncement within the additional extended term, the partial delivery of the EDI will be deemed unfavorable.
- 7.10 For the purposes of approving the final EDI for each Section, the following provisions must be complied with, according to the schedule set forth in Clause 7.4 above:
 - 7.10.1 Once the final EDI of the corresponding Section has been submitted, the REGULATOR will have a maximum term of fifteen (15) Working Days from receipt to issue its non-binding pronouncement and communicate it to the GRANTOR.
 - 7.10.2 The GRANTOR shall have a maximum term of fifteen (15) Working Days from the receipt of the non-binding opinion of the REGULATOR indicated above, or from the deadline to issue such pronouncement, whichever occurs first, to issue the observations corresponding to the EDI or to approve it, and communicate it to the CONCESSIONAIRE, together with the observations received from the REGULATOR, if necessary.
 - 7.10.3 The CONCESSIONAIRE shall submit to the GRANTOR, with a copy to the REGULATOR, the corrections or clarifications corresponding to the observations made to the EDI, within a maximum term of twenty-five (25) Working Days from the receipt of the aforementioned observations.
 - 7.10.4 Once the CONCESSIONAIRE has received the survey of the observations, the REGULATOR and the GRANTOR will have up to twenty (20) Working Days from the receipt of the responses or corrections from the CONCESSIONAIRE, to (i) observe what has not been corrected and/or make, for a single time, a new round of observations regarding the new information presented by the CONCESSIONAIRE or (ii) issue the non-binding pronouncement and/or approve the respective EDI, as appropriate, and forward its decision to the CONCESSIONAIRE. No observations may be made, as well as comments or additions not previously observed. In the event of making the observations to the new information described above, the provisions of Clauses 7.10.5, 7.10.6 and 7.10.7 will apply, so that, subsequently, the REGULATOR and the GRANTOR may evaluate whether or not to approve the respective EDI, according to the terms of Clauses 7.10.7.
 - 7.10.5 For the purposes of the provisions of the preceding clause, the REGULATOR shall have a maximum term of ten (10) Working Days from receipt of the CONCESSIONAIRE's corrections to issue its non-binding opinion and communicate it to the GRANTOR. Likewise, the GRANTOR will have a maximum term of ten (10) Working Days from receipt of the opinion of the REGULATOR, to communicate to the CONCESSIONAIRE its observations or the approval of the EDI.
 - 7.10.6 In the event that the EDI is observed again by the GRANTOR, the CONCESSIONAIRE must submit to the GRANTOR and the REGULATOR the correction to the observations referred to in the preceding numeral within a term of no more than seven (7) Working Days.

- 7.10.7 Once the CONCESSIONAIRE's correction has been received, the REGULATOR will have a maximum term of five (5) Working Days from receipt of the CONCESSIONAIRE's corrections to issue its non-binding opinion and communicate it to the GRANTOR. Likewise, the GRANTOR will have a maximum term of seven (7) Working Days from receipt of the opinion of the REGULATOR, to approve or reject the corresponding EDI, which must be communicated to the CONCESSIONAIRE. In the event that the GRANTOR does not make a decision within the term indicated above, the original term will be automatically extended for an additional ten (10) Working Days, in order the GRANTOR make a decision on the respective EDI. In this case, within the framework of the present procedure for the revision of the corresponding EDI, if the GRANTOR does not issue any pronouncement within the additional term extended, the delivery of the EDI will be deemed unfavorable.
- 7.10.8 The GRANTOR or the REGULATOR may not observe what has been previously approved in the partial deliveries of the corresponding EDI, except in the case of observations that are a consequence of the revision or approval of the corresponding Environmental Management Instrument by the Relevant Environmental Authority, in which case the CONCESSIONAIRE must correct all the aforementioned observations. The failure to correct observations or the rejection of partial deliveries of the EDI will in no case prevent the submission and evaluation of the final EDI.
- 7.11 Taking into account the above, the GRANTOR must have issued its decision on the approval or not of the final EDI of each Section, within the following maximum terms:
 - <u>Section 1:</u> Within two hundred and forty (240) Calendar Days from the end of the term described in Clause 7.4.1.
 - <u>Section 2:</u> Within two hundred and forty (240) Calendar Days from the end of the term described in Clause 7.4.2.
 - <u>Section 3:</u> Within two hundred and forty (240) Calendar Days from the end of the term described in Clause 7.4.3.

The maximum time limits described above include, but are not limited to, the time limit established for an Expert to resolve a possible technical dispute, according to the terms set forth in Clause 7.13. In this regard, the Parties undertake to comply with the EDI approval procedure described above, as well as to comply with the decision of the Expert, as appropriate.

7.12 In the event that, once the EDI of each Section has been approved, the CONCESSIONAIRE proposes a modification to it, this must be duly substantiated to the GRANTOR with a copy to the REGULATOR. The latter will have a maximum term of fifteen (15) Working Days from receipt of the proposed modification to the EDI, to issue its non-binding opinion or to make the observations it deems pertinent, which must be sent to the GRANTOR for its respective evaluation. The GRANTOR shall have a maximum term of ten (10) Working Days to issue its pronouncement or to make the observations it deems pertinent, counted from the receipt of the opinion of the REGULATOR or the deadline to pronounce itself, whichever occurs first. Once this has occurred, the rules set out in Clauses 7.10.3 to 7.10.8 shall apply to the proposed EDI amendment submitted. In the event that the GRANTOR does not make a decision within the term indicated above, the proposal to modify the EDI will be deemed approved, provided that, (i) there is a favorable non-binding opinion or without observations from the

REGULATOR and (ii) that three (3) Working Days prior to the end date of the term that the GRANTOR has for its pronouncement, the CONCESSIONAIRE sends the GRANTOR a written communication on the deadline for its decision. In the event that the CONCESSIONAIRE does not send such communication or sends it, but there is an unfavorable non-binding opinion or with observations from the REGULATOR, and the GRANTOR does not pronounce itself, its pronouncement will be understood as unfavorable. In the event that the proposed modification is denied, the CONCESSIONAIRE shall be obliged to continue the execution of the Contract on the basis of the version of the EDI that has been approved and is in force. Modifications to the EDI shall not involve greater investments or expenses of works

attributable to the GRANTOR and shall not be intended to reduce the characteristics, durability and performance already approved of the respective Works, nor may they reduce the Service Levels established in this Contract. In addition, the modification of the EDI of the corresponding Section will take into account the respective environmental impacts and the aforementioned modification must also be consistent and consistent with the modification of the corresponding Environmental Management Instruments, duly approved by the Relevant Environmental Authority.

- 7.13 Any dispute arising between the Parties: (i) resulting from the EDI review procedure of each Section, or (ii) referred to this clause in the Contract, may be submitted to an Expert by either Party, and the following rules shall be followed:
 - 7.13.1 A Party wishing to submit a technical dispute to an Expert must forward a request to the other Party setting out the technical issues in dispute, its claims and the technical basis for them.
 - 7.13.2 The Parties have a term of five (5) Working Days, counted from the notification of the request established in the preceding paragraph, to, by mutual agreement and by means of minutes signed by their representatives, appoint the Expert, who must correspond to an entity dedicated to engineering or technical consulting of recognized international prestige and with extensive experience in the subject matter of the technical dispute, not being able to have an economic relationship or be directly or indirectly providing any type of service in favor of the Parties, their shareholders or Related Companies, in Peru or abroad, from the year prior to the one designated and up to two (2) years after the resolution of the technical dispute.
 - 7.13.3 In the event that the Parties are unable to reach an agreement on the appointment within the above term, the Parties or any of them shall request the appointment of the Expert to the International Centre for ADR of the International Chamber of Commerce, to proceed, within a maximum term of thirty (30) Calendar Days from the date of submission of the corresponding request to the appointment of the Expert in accordance with the Regulations on the Appointment of Experts and Third Parties. The appointment made by the above institution shall be binding on the Parties. The application to the International Chamber of Commerce shall include a description of the technical dispute.
 - 7.13.4 The parties state that the appointment of the Expert and his/her acceptance constitute a sufficient contract for the execution of the Expert's assignment.

- 7.13.5 Once the Expert has been appointed and the acceptance of the assignment has been received by him/her, the procedure for the resolution of the technical dispute will be initiated, which will be as established below. The proceedings for the resolution of a Technical Dispute shall take place in the city of Lima, Peru.
- 7.13.6 The Expert will request the Parties to submit all the information necessary to resolve the technical dispute, with each of the Parties having a term of five (5) Working Days from receipt of the request to make the corresponding response. Upon receipt of such information, the Expert may request from the Parties the additional information and/or clarifications that he/she deems necessary for the resolution of the technical dispute within a term of ten (10) Working Days following the receipt of the information by the Parties. The Parties will have a maximum term of five (5) Working Days to evaluate such additional information process. Any of the time limits governing this procedure may be extended provided that it is mutually agreed by the Parties. In view of all the information, documentation and/or clarifications previously received, the Expert will proceed to communicate his/her final decision to the Parties within a maximum term of fifteen (15) Working Days. The Expert will decide on how to resolve the dispute that has arisen in accordance with this Contract. The Parties declare and accept that the decision of the Expert shall be binding, i.e. it shall be complied with by the Parties, and if it is challenged by any of the Parties by means of the notification of the request for conscientious arbitration, according to this Contract, such challenge shall not suspend the effects of the Expert's decision. For this purpose, the Parties will have a term of ten (10) Working Days from the time the Expert notifies his/her decision, to submit the request for arbitration in accordance with the Arbitration Rules of the Center for Analysis and Resolution of Conflicts of the Pontifical Catholic University of Peru. If this term has expired without any of the Parties submitting such a request for arbitration, the Parties agree that the technical and/or factual decision of the Expert is final and cannot be questioned by any means.
- 7.13.7 Once the Expert's decision is final, if by its nature it has to be implemented by an arbitral tribunal or a judicial court, the arbitrators or judges may not modify the decision in whole or in part, and must execute the technical and/or factual decision as established by the Expert, in accordance with the provisions of the Thirteenth Supplementary Provision of Legislative Decree No. 1071, Arbitration Law.
- 7.13.8 The Expert shall resolve to the best of his/her knowledge, in good faith and to the best of his/her knowledge, and in accordance with this Contract.
- 7.13.9 The Expert must maintain absolute reserve and confidentiality regarding all the information that he or she learns from his or her participation in the resolution of a technical dispute.
- 7.13.10 During the course of the procedure described above, the Parties shall continue with the performance of their contractual obligations, as far as possible, except for those that are the subject of this procedure. If the technical dispute submitted to such procedure deals with the fulfillment of obligations guaranteed by the Guarantees of Faithful Fulfillment, the collection of the penalties that accrue and the execution of the respective Guarantees of Faithful Fulfillment will be suspended during the execution of the expert procedure. The penalties that

accrue during the expert procedure may be collected, in case the Expert determines the breach of the respective obligations.

7.13.11 All expenses incurred in resolving a technical dispute, including the fees of the Expert participating in the resolution of a dispute, shall be borne by the losing Party. Likewise, in the event that the decision partially favors the positions of the Parties, the Expert will decide on the distribution of the aforementioned costs.

Excluded from the provisions of this Clause are costs and expenses such as internal costs or others that are ascribable to an individual Party.

7.13.12 The Parties may, by mutual agreement, supplement these rules. In the event that they cannot agree within a maximum term of five (5) Working Days from the time a Party requests in writing the other Party to establish a new rule, the Expert will have the power to establish any rule, that is absolutely necessary for the execution of the technical dispute resolution procedure.

Once the procedure described above has been completed, the Parties are entitled to initiate the Dispute Resolution procedure provided for in Chapter XIX, and the initiation of the Dispute Resolution procedure does not suspend the effects of the decision issued by the Expert.

7.14 Notwithstanding the foregoing, in the event that the dispute concerns the correction of an observation and its result is adverse to the CONCESSIONAIRE, the CONCESSIONAIRE must submit, within a maximum term of ten (10) Calendar Days, from the date on which the resolution of the controversy is communicated, the correction corresponding to the observation made in such a way that it complies with Annex No. 3.

ADDITIONAL WORKS DURING THE PREPARATION OF THE EDI

7.15 In those cases in which the CONCESSIONAIRE is preparing the EDI corresponding to a certain Section and the GRANTOR or other competent Government Authority, to issue an opinion within the framework of the approval of the EDI and/or the corresponding Environmental Management Instrument, proposes to incorporate Additional Work(s) into said study, prior opinion of the REGULATOR that must be carried out within a term of no more than ten (10) Working Days from the submission of the application and with the subsequent acceptance of the GRANTOR within a term of no more than twenty (20) Working Days from the receipt of the REGULATOR's opinion, the CONCESSIONAIRE will be obliged to incorporate them in the respective EDI, provided that the contractual modification procedure established in the Applicable Laws and Provisions is complied with.

All costs and expenses for the preparation of studies and the execution of these Additional Works, referred to in this numeral, shall be borne by the GRANTOR, without requiring greater resources for the CONCESSIONAIRE.

In the event that there is no agreement and/or an addendum is not signed, the GRANTOR will evaluate the possibility of executing these Additional Works, required by the GRANTOR itself and/or by another Governmental Authority, through public procurement mechanisms.

Likewise, the CONCESSIONAIRE may require the GRANTOR to incorporate Additional Work(s), in which case, prior to its incorporation into the EDI, it must have the approval of the GRANTOR, after the opinion of the REGULATOR, within the terms described in the first paragraph of this section. All costs and expenses of preparing studies and executing these Additional Works will be borne by the CONCESSIONAIRE, without requiring greater resources for the GRANTOR. For the purposes of this Clause, the Parties shall comply with the contractual modification procedure established in the Applicable Laws and Provisions.

7.16 In cases in which the request for Additional Work comes from the same CONCESSIONAIRE, the CONCESSIONAIRE must submit its request to the GRANTOR with a copy to the REGULATOR. The REGULATOR will have a maximum term of five (5) Working Days from the receipt of the pertinent documents related to the request for Additional Works to issue its opinion.

Likewise, the GRANTOR will have a maximum term of five (5) Working Days, counted from the receipt of the opinion of the REGULATOR, to approve the incorporation in the EDI or to reject it. The decision of the GRANTOR must be communicated to the CONCESSIONAIRE within three (3) Working Days of its adoption.

In the event of rejection of requests for Additional Works by the CONCESSIONAIRE due to regulatory changes, the CONCESSIONAIRE may request that such dispute be settled by an Expert and, subsequently, in accordance with the dispute resolution procedure established in Chapter XIX of this Contract.

- 7.17 The cost of execution of the Additional Works required by the GRANTOR will be assumed by the GRANTOR in accordance with the payment mechanism established by the Parties in the contractual modification process, if applicable. Likewise, the cost of the subsequent Maintenance and Operation will be assumed by the GRANTOR and the method of payment of the compensation to be received by the CONCESSIONAIRE will be established by mutual agreement in the addendum described above. This rule is not applicable to the Additional Works required by the CONCESSIONAIRE and approved by the GRANTOR, whose costs and expenses of studies and execution will be assumed by the CONCESSIONAIRE, being that Operation and Maintenance costs of the aforementioned Additional Works will be assumed by the Party determined in the corresponding addendum.
- 7.18 In the event that the incorporation of such Additional Works into the EDI implies a longer term for the completion of the corresponding EDI, the term for the preparation of the same must be extended by the same term as the incorporation of the same, at the request of the CONCESSIONAIRE.
- 7.19 The supervision of the execution of the approved Additional Work of each Section will be in charge of the REGULATOR, which may be carried out directly or through a third party hired for this purpose.

The costs derived from the aforementioned supervisory activities, including those related to the third-party selection procedures as indicated in the preceding paragraph, shall be borne by the CONCESSIONAIRE and shall be determined and specified in the corresponding addendum. The CONCESSIONAIRE shall pay such costs upon presentation by the REGULATOR of the corresponding payment vouchers or contracts evidencing the expenses for supervision.

7.20 Any dispute that emerge between the Parties arising out of the qualification of Additional Works, costs and expenses of such Additional Works, among other considerations, may be submitted by either Party to an Expert in accordance with Clause 7.13. Subsequently, the Parties may apply to the Dispute Settlement procedure provided for in Chapter XIX.

CHAPTER VIII: EXECUTION OF WORKS

- 8.1 The CONCESSIONAIRE shall be in charge of the execution and construction of the Works, as established in the respective approved EDI, the respective Environmental Management Instrument and the national and international technical regulations or any other legal or regulatory standard whose application is determined by the GRANTOR, according to the order of priority established in Appendix 1 of Annex No. 3 of this Contract. The direct and indirect risks associated with these are assumed by the CONCESSIONAIRE.
- 8.2 The CONCESSIONAIRE shall always be liable to the GRANTOR for the correct execution of all the Works, including those in charge of the CONCESSIONAIRE's contractors and subcontractors. To this end, it must hold the GRANTOR harmless for the breaches and claims of the contractors and subcontractors and/or employees.
- 8.3 The CONCESSIONAIRE will assume the responsibility related to the geological risks that arise, with the exception of Environmental Liabilities that alter the conditions and natural characteristics of the soil materials. In this case, the CONCESSIONAIRE may request the GRANTOR to suspend the corresponding affected obligations, as well as the execution term of the corresponding Section. The GRANTOR shall determine whether or not the aforementioned suspension of obligations and granting of a longer term of execution of the corresponding Section is appropriate.
- 8.4 In order to start the Construction Stage of each Section, the CONCESSIONAIRE must first obtain PROINVERSIÓN's approval of the Financial Closing of the corresponding Section in accordance with the provisions of Chapter IV.
- 8.5 Once PROINVERSIÓN's agreement to the Financial Closing of the corresponding Section has been obtained, the CONCESSIONAIRE will have a maximum term of one (1) month from the receipt of PROINVERSIÓN's agreement to begin the Construction of the Works of the applicable Section, at which time the Construction Stage of said Section will begin. Within this month, the GRANTOR shall prepare and the Parties shall sign a Work Initiation Act, recording the date of commencement of the Construction Stage of the corresponding Section.
- 8.6 Notwithstanding the foregoing, it is established that the CONCESSIONAIRE will only begin the Construction of the Works of the corresponding Section to the extent that each of the following conditions for the applicable Section have previously been met:
 - (a) That, (i) in the case of Sections 1 and 3, the Parties have signed the Comprehensive Act of Delivery of Assets of the corresponding Section, which certifies that the Possession Taking of one hundred percent (100%) of the Concession Area of said Section has been carried out, in accordance with the provisions of Clause 6.23; and, (ii) in the case of Section 2, that the Parties have signed a Partial Act of Delivery of Assets corresponding to the Critical Properties, in accordance with the provisions of Clause 6.23 and subparagraph a) of Clause 4.4. Notwithstanding the foregoing, the

Construction of the items of Section 2 that are not included in the Partial Act of Delivery of Assets corresponding to the Critical Properties will begin from the Comprehensive Act of Delivery of Assets of said Section.

Likewise, in the case of item (i) above, if the Parties have not been able to sign the Comprehensive Act of Delivery of Assets of Section 1 or 3 within a term of one (1) month from the receipt of PROINVERSIÓN's compliance to the Financial Closing, as applicable, and the remaining properties do not impact the start of the Construction of the corresponding Section, the GRANTOR and the CONCESSIONAIRE may, by mutual contract, commence the Works of the applicable Section, for which the GRANTOR shall prepare and the Parties shall sign the Work Commencement Act referred to in this Clause.

- (b) That the CONCESSIONAIRE has submitted the Guarantee of Faithful Fulfillment with the Construction of Works of the corresponding Section in accordance with Clause 13.5.
- (c) That the CONCESSIONAIRE has increased its share capital to the corresponding minimum amount of share capital in accordance with Clause 3.6 or 3.7, as applicable.
- (d) That the CONCESSIONAIRE has signed the construction contract with the Builder, if applicable.
- (e) That the CONCESSIONAIRE has accredited the contracting of the insurance required in accordance with Chapter XIV of this Contract of the corresponding Section.

TERMS FOR THE EXECUTION OF THE WORKS PROGRESS SCHEDULE

- 8.7 The CONCESSIONAIRE undertakes to execute the Works of each Section in accordance with the following maximum terms, which will be counted from the signing of the Work Initiation Act of the corresponding Section:
 - a) Duration of the Construction Stage of Section 1: one thousand one hundred and forty (1140) Calendar Days.
 - b) Duration of the Construction Stage of Section 2:

b.1 For the execution of the Works corresponding to the area of the accesses and tunnels of Section 2: one thousand eight hundred (1800) Calendar Days.

b.2 For the execution of the Works corresponding to the rest of Section 2: one thousand four hundred and forty (1440) Calendar Days.

- c) Duration of the Construction Stage of Section 3: one thousand two hundred and sixty (1260) Calendar Days.
- 8.8 The CONCESSIONAIRE must execute the Works within the terms established in the Work Progress Schedule, whose total term per Section may not be longer than that established in the immediately preceding Clause except for extensions of term granted for the execution of the Work.

The CONCESSIONAIRE, in the event that it requires the prolongation or extension of a partial term in the Work Progress Schedule in relation to a respective Section that does not imply the modification of the total term of said Section, must request it from the GRANTOR before its expiration, with a copy to the REGULATOR.

EXTENSIONS OF THE TERM FOR THE EXECUTION OF THE WORKS

8.9 From the beginning of the Construction Phase, the CONCESSIONAIRE may submit requests for an extension of the term to the GRANTOR for reasons not attributable to the CONCESSIONAIRE.

Requests for extension of the term for the execution of the Works shall be submitted to the GRANTOR, with a copy to the REGULATOR, within five (5) Working Days following the occurrence or completion of the cause that motivates them. The request for an extension of the term must contain the corresponding support, a copy of the Logbook detailing the circumstances that, in the opinion of the CONCESSIONAIRE, merit the extension of the term and the reformulated Work Progress Schedule. The REGULATOR shall submit its opinion to the GRANTOR within a maximum term of thirty (30) Calendar Days, counted from the notification of the request. The GRANTOR shall make a decision within thirty (30) Calendar Days from the receipt of the REGULATOR's opinion or at the deadline without the issuance of this opinion having been submitted, whichever comes first. If the aforementioned term elapses and the GRANTOR does not issue its opinion, it will be understood that the request for extension of term has been accepted, without this implying the requirement or recognition of greater expenses or costs to be borne by the GRANTOR, except in the event that the request for extension is based on an act or omission of the GRANTOR, and provided that, ten (10) Working Days prior to the end date of the term that the GRANTOR has for its pronouncement, the CONCESSIONAIRE sends the GRANTOR a written communication on the deadline of the term for its pronouncement. In the event that the CONCESSIONAIRE does not send such communication and the GRANTOR does not make a statement, its pronouncement will be deemed unfavorable.

- 8.10 Only in cases where the GRANTOR issues an express statement denying the requested extension of the term, will the CONCESSIONAIRE, where applicable, apply the penalties for non-compliance indicated in Annex No. 10 of this Contract, for the term of days that correspond to the delay. When the extensions are granted to the CONCESSIONAIRE, no penalties or sanctions will be applied for breach of contract due to the delay in the execution of the Works.
- 8.11 If there are two (2) or more concurrent causes of delay and only one of them entitles the CONCESSIONAIRE to an extension of time, the CONCESSIONAIRE will be entitled to an extension equivalent to the term of that cause entitling it to the extension.
- 8.12 Notwithstanding the provisions of Clause 8.10, in the event of denial of the extension of the term of the Works Progress Schedule, the CONCESSIONAIRE may request the Expert to define it, provided that the corresponding procedure established in Clause 7.13 of this Contract is complied with.

WORK PROGRESS REPORT

8.13 From the date of signing the Work Initiation Act and during the same, the CONCESSIONAIRE will issue the respective Work Progress Reports, which will be issued in accordance with the provisions of Numeral 3 of Appendix 2 of Annex No. 9.

SUPERVISION OF WORK

8.14 The supervision of the design and execution of the Works is the responsibility of the REGULATOR from the Closing Date in accordance with the Applicable Laws and Provisions. Underno circumstances shall the revision, evaluation and/or supervision of the Works generate the transfer of the design risk of the Project to the GRANTOR, a risk that is exclusive and exclusionary to the CONCESSIONAIRE.

The REGULATOR may appoint a third party as supervisor of the design and execution of the Works. The REGULATOR shall communicate this designation in writing to the GRANTOR and the CONCESSIONAIRE during the Pre-construction Stage and before the start of the preparation of the first EDI of the corresponding Section by the CONCESSIONAIRE, within a maximum term of five (05) Working Days from the date of the same.

- 8.15 The CONCESSIONAIRE shall give the REGULATOR, through the works supervisor and the equipment at its disposal, free access to the Concession Area to carry out its work with the required accuracy, within the working hours of the respective area, and the REGULATOR shall not interrupt the activity of the CONCESSIONAIRE to the extent possible. It shall be the responsibility of the Construction Supervisor to periodically and regularly report the progress of the Works to the REGULATOR, in the form required for the information and in accordance with the Applicable Laws and Provisions. In the event that the CONCESSIONAIRE, its contractors or subcontractors, do not grant the access described above to the REGULATOR and/or the corresponding supervisors, without prejudice to the corresponding administrative sanctions, the REGULATOR will apply the penalties established in Annex No. 10.
- 8.16 The costs derived from the aforementioned supervisory activities, including those related to the selection procedures of third parties as indicated in the preceding paragraph and other activities that the REGULATOR carries out in relation to supervision, will be borne by the CONCESSIONAIRE, for a maximum value of five percent (5%) of the value of the Works of all the Sections. The CONCESSIONAIRE shall pay such costs upon presentation by the REGULATOR of the corresponding payment vouchers or contracts evidencing the expenses for supervision, within a maximum term of ten (10) Working Days from the receipt of the aforementioned documents. Except as indicated in Clause 8.17 below, these shall be the only costs and expenses that shall be recognized in favor of the REGULATOR.
- 8.17 In order to provide the REGULATOR with funds for the initiation of the selection procedure of the supervising company, on the Closing Date, the CONCESSIONAIRE must deliver one (1) manager's check in favor of the REGULATOR for an amount of US\$ 4,000,000.00 (Four Million and 00/100 US Dollars), which will constitute a payment on account for the concept of supervision of the design and execution of the Works.

In the event that longer deadlines for the execution of the Works are generated for reasons attributable to any of the Parties (delay in the delivery of land, extensions of the

deadline in the execution of the Works, design errors, among others), and this generates greater costs in the supervision of the Works, these will be assumed by the Party to whom it is attributable.

Within a maximum term of three (3) months from the date of signing the Works Acceptance Certificate of the respective Section, the REGULATOR must accredit the expenses for supervision with the corresponding payment vouchers or contracts. In the event that the amount disbursed by the CONCESSIONAIRE is greater than that credited by the REGULATOR, the REGULATOR must deliver the corresponding difference to the GRANTOR within a maximum term of thirty (30) Working Days from the accreditation made.

LOGBOOK

8.18 From the date of signing the respective Work Initiation Act, the CONCESSIONAIRE undertakes to open and maintain a Logbook for each Section, which may be physical and/or virtual, as established by the Applicable Laws and Provisions. In said Logbooks, the most important facts during the execution of the Works will be noted, including among others: (i) list of sources of materials that are being used; (ii) list of suppliers and subcontractors; (iii) copy of test results or commissioning tests; (iv) copy of communications between the CONCESSIONAIRE and the REGULATOR; (v) copy of the Progress Reports; (vi) minor modifications made to the Works by the CONCESSIONAIRE, which do not require a modification of the corresponding EDI; (vii) a list of events that have affected compliance with the progress schedule; referring to any transcendent event that is related to the process of execution of the Construction. Finally, the conditions under which the Works are put into service will be noted.

The physical Logbook must be kept in original and must be at all times at the site of the Construction of the Works. Additionally, three (3) sets of copies must be distributed in accordance with the provisions of the following paragraph. The pages of the logbooks must be notarized, numbered sequentially, and the mechanized system of loose sheets may be adopted.

The GRANTOR and the REGULATOR will have free access to the Logbooks during the Construction Stage of the corresponding Section. Once the Operation has begun, the original and one (1) copy will be delivered to the GRANTOR, within thirty (30) Calendar Days from the beginning of the Operation Stage leaving one set of copies in the possession of the CONCESSIONAIRE and another in the possession of the REGULATOR. The CONCESSIONAIRE shall deliver the copies to the REGULATOR within the same term described above.

GRANTING OF OPERATING PERMIT FOR THE EXECUTION OF THE WORKS

- 8.19 The CONCESSIONAIRE shall have the obligation to prepare and submit the necessary documentation to obtain the Operating Permit (licenses, permits, authorizations and registrations) required for the execution of the corresponding Sections.
- 8.20 The GRANTOR undertakes to make its best efforts, vis-à-vis the relevant Government Authorities, to facilitate all those procedures that may be necessary, including the signing of the necessary agreements, in order for the CONCESSIONAIRE to obtain the Operating

Permit required for the execution of the Works of the Sections and/or the Additional Works. This obligation is one of means not of ends.

8.21 The delay or delay in the granting of the Operating Permit mentioned in this Clause due to facts or circumstances that are not attributable to the CONCESSIONAIRE, may receive the treatment provided for events classified as Force Majeure or Fortuitous Event, provided that such event complies with the provisions of Clause 18.17 and following.

TRAFFICABILITY DURING THE EXECUTION OF THE WORKS

- 8.22 The CONCESSIONAIRE is obliged, while executing the Works, to comply with the Applicable Laws and Provisions on traffic management, to follow the indications of the EDI and the respective Environmental Management Instrument. Likewise, the CONCESSIONAIRE must comply with the indications and recommendations determined in this regard by the GRANTOR, in coordination with the REGULATOR, which may not establish additional obligations for the CONCESSIONAIRE, to those provided for in this Contract and in the Applicable Laws and Provisions. The compliance of these obligations will not imply the payment of any extraordinary compensation to the CONCESSIONAIRE. Failure to comply with the obligations described above will result in a penalty as set forth in Annex No. 10 of this Contract.
- 8.23 Notwithstanding the provisions of the preceding Clause, it is the responsibility of the CONCESSIONAIRE, in coordination with the relevant Governmental Authorities, to maintain at its own expense the conditions of Trafficability of the roads included in the Right of Way, except in the case of Additional Works that are executed by the GRANTOR and/or by its respective contractors.
- 8.24 In the same way, the CONCESSIONAIRE will use, at its discretion and choice, the construction methods and engineering procedures and/or solutions such that they mean the least occupation, intervention or interference in the roads subject to the execution of Works in accordance with the good engineering and construction practices applicable to projects of this nature, at its own cost and expense.
- 8.25 In order to comply with the obligations described in the preceding numerals, the CONCESSIONAIRE undertakes to submit to the REGULATOR for approval, thirty (30) Calendar Days prior to the start of any task of execution of the Works and/or Additional Works, a provisional transit plan, with express mention of the methods, procedures and technologies that ensure the smooth transit throughout the sector affected by the Works and/or Additional Works. The REGULATOR shall issue its approval or opinion within a term of no more than twenty (20) Working Days. In the event of not issuing a pronouncement, it will be understood that the Provisional Transit Plan has been approved, provided that, three (3) Working Days prior to the end date of the term that the REGULATOR has for its pronouncement, the CONCESSIONAIRE sends the REGULATOR a written communication on the deadline for its pronouncement. In the event that the CONCESSIONAIRE does not send such communication and the REGULATOR does not pronounce itself, its pronouncement will be understood to be unfavorable. The REGULATOR may verify compliance with the provisional transit plan at any time and apply the appropriate sanctions in the event of non-compliance. Once the plan has been implemented, the REGULATOR may, in agreement with the CONCESSIONAIRE, propose modifications to it.

Failure to comply with this obligation will result in a penalty as set forth in Annex No. 10 of this Contract.

- 8.26 In accordance with the regulations in force on the matter, the CONCESSIONAIRE is obliged to guarantee the safety of the traffic of the Users and must provide, place and maintain signs, warnings and/or danger signs, day and night, in the place of the Works and throughout the period of execution of the same, in accordance with the Applicable Laws and Provisions.
- 8.27 Additionally, through the use of posters, notices and/or signs, the CONCESSIONAIRE must communicate to the affected population and Users about the execution of any of the Works, at least seven (7) Calendar Days prior to the start of its execution, all in accordance with the Applicable Laws and Provisions.

RECEPTION OF THE WORKS

- 8.28 As the Works corresponding to each Section and/or the Works referred to the Area of Execution of Works on Local / Auxiliary / Side Roads are completed, according to the construction terms described in Clause 8.7 and/or Annex No. 3 of this Contract, as applicable, within a maximum term of ten (10) Calendar Days from the completion of the same, the CONCESSIONAIRE shall request the GRANTOR, with a copy to the REGULATOR, the reception the Works of each Section and/or the Works referred to the Area of Execution of Works on Local / Auxiliary / Side Roads, attaching the respective report where it will establish its completion in accordance with the approved EDI and with the Service Levels specified in Annex No. 11, as set forth in this Contract. In addition, the CONCESSIONAIRE must attach (i) the plans as built of the Works and (ii) the environmental compliance of the execution of the aforementioned Works by the relevant Government Authorities, if applicable. Notwithstanding the foregoing, the Parties agree that only in the case of Works referred to the Area of Execution of Works on Local / Auxiliary / Side Roads, these may be delivered by the CONCESSIONAIRE to the GRANTOR partially. For the partial and/or total delivery of the Works referred to the Local / Auxiliary / Side Roads, the same procedure for the reception of Works described in this section will be followed.
- 8.29 The GRANTOR, through the Works Reception Committee to be appointed within ten (10) Working Days following receipt of the request indicated in the preceding numeral, shall determine the acceptance or rejection of the Works, following a non-binding opinion from the REGULATOR. For such purposes, the REGULATOR shall issue and notify its pronouncement to the GRANTOR and the CONCESSIONAIRE within a term of twenty (20) Calendar Days from the communication sent by the CONCESSIONAIRE. For its part, the GRANTOR will have a term of twenty (20) Calendar Days from the receipt of the non-binding opinion of the REGULATOR or the deadline to issue its pronouncement, whichever occurs first, to determine the acceptance or rejection of the Works.

If the GRANTOR does not make a decision within the established term, and provided that the CONCESSIONAIRE, three (3) Working Days prior to the date of termination of the term for the GRANTOR to make a decision, sends a prior written communication to the GRANTOR indicating that the term is about to expire, it will be understood that the Works of the corresponding Section have been accepted; therefore, they will manage the signing of the Works Acceptance Certificate. In the event that the CONCESSIONAIRE does not send such communication and the GRANTOR does not make a statement, its

pronouncement will be deemed unfavorable. In addition, the REGULATOR shall sign such minutes in the exercise of its supervisory function.

- 8.30 By signing the Works Acceptance Certificates, the GRANTOR, through the Committee for the Reception of Works, and the CONCESSIONAIRE will record that the execution of the Works of the respective Section is in accordance with the requirements of the Contract, including those Additional Works that have been executed, if applicable.
- 8.31 In the event that the GRANTOR identifies defects in the Works that do not affect the normal provision of the Services, the correction of which does not represent a value equal to or greater than one percent (1%) of the final EDI budget of the Works to be received, it will proceed to carry out the procedure described in Clause 8.30 subject to observations corrections specified above. In this context, the CONCESSIONAIRE will have thirty (30) Calendar Days, extendable up to thirty (30) additional Calendar Days, for duly substantiated reasons, to correct the observations. If the corresponding correction is not made within the aforementioned terms, penalties will be applied for non-compliance with the correction described in Annex No.10, and the Works with uncorrected defects shall be understood as not received. The application of penalties by the REGULATOR does not exempt the CONCESSIONAIRE from the effective fulfillment of its respective contractual and/or legal obligations.
- 8.32 If there are defects that affect the normal provision of the Services and/or whose correction represents a value equal to or greater than one percent (1%) of the final EDI budget of the Works and/or Additional Works to be received, as indicated in the pronouncement presented by the REGULATOR, the GRANTOR will reject the Works applying the penalties set out in Annex No. 10. In this case, the CONCESSIONAIRE must comply with raising the observations or correcting the irregularities detected, in accordance with the terms specified in the previous paragraph, so that the Works of the corresponding Section can be received.
- 8.33 In the event that the term set for the corresponding correction expires, without the Works and/or Additional Works having been accepted for reasons attributable to the CONCESSIONAIRE, the GRANTOR may invoke the termination of the Contract, following the opinion of the REGULATOR in accordance with the provisions of Clause 18.1 of this Contract, without prejudice to the penalties that have been charged or have been previously accrued.
- 8.34 If the CONCESSIONAIRE does not agree with the GRANTOR's pronouncement regarding the observations made by the latter or on the assessment made of such observations, the GRANTOR shall be entitled to resort to an Expert in accordance with Clause 7.13 of this Contract and, subsequently, to the Dispute Resolution procedure provided for in Chapter XIX.

ADDITIONAL WORKS

8.35 If, during the term of the Concession, either Party determines the need to carry out Additional Works, it must submit to the other Party, with a copy to the REGULATOR, a technical and economic report that supports the need to execute such Additional Works, including all the costs necessary for the Construction, Maintenance and Operation. In the event that the GRANTOR requests the execution of the Additional Work, the CONCESSIONAIRE will have the right to accept or reject the order. In the event that the Party that receives the aforementioned technical and economic report is the CONCESSIONAIRE, it will have a term of twenty (20) Working Days for its evaluation and approval or acceptance. In the event that the Party that receives the aforementioned technical and economic report is the GRANTOR, it will have a term of twenty (20) Working Days for its evaluation and approval or acceptance, after a non-binding opinion of the REGULATOR regarding the need for the execution of the Additional Work, which must be sent to the GRANTOR and the CONCESSIONAIRE within a maximum term of ten (10) Working Days from receipt of the technical and economic report indicated above.

Additional Works may be requested by the GRANTOR and/or proposed by the CONCESSIONAIRE before the end of the term of the Concession, which must have the approval or acceptance of the GRANTOR. In both cases, the Additional Works must be executed before the end of the term of the Contract.

8.36 In the event that the CONCESSIONAIRE accepts the execution of the Additional Works proposed by the GRANTOR or the GRANTOR authorizes the execution of the Additional Works proposed by the CONCESSIONAIRE, after having complied with the corresponding contractual modification procedure, the CONCESSIONAIRE will execute the Additional Work, for which it will prepare the studies in accordance with the Applicable Laws and Provisions, will obtain the corresponding Environmental Management Instrument and prepare the corresponding EDI, together with the respective Work Progress Schedule, in accordance with the provisions of Clause 8.1 and following.

The costs for the preparation of the corresponding studies and the Construction of the Additional Work will be assumed by the GRANTOR or by the CONCESSIONAIRE, depending on who proposed the Additional Work, within the framework of the corresponding contractual modification procedure.

8.37 In the event that the CONCESSIONAIRE rejects the GRANTOR's proposal regarding the Construction of the Additional Works, the latter may contract a third party to carry out the Construction of the aforementioned Additional Works, with the GRANTOR assuming all the costs of Construction, Maintenance and Operation of the aforementioned works. The GRANTOR will convene an administrative selection procedure for the contracting of the execution of the same, in accordance with the Applicable Laws and Provisions, and the GRANTOR must previously obtain the declaration of viability of the Additional Works within the framework of the National System of Multiannual Programming and Investment Management, as well as the corresponding Environmental Management Instrument.

The contractor that is chosen in the procedure described in the preceding Clause shall undertake by contract, charged to replacement and the payment of compensation, not to damage the Concession Assets at the expense of the CONCESSIONAIRE, for which purpose it shall deliver to the GRANTOR a letter of guarantee for an amount established by the latter, as a guarantee of compliance with the obligations described above. In order to proceed to execute the letter of guarantee in the event that the contractor causes damage to the Concession Assets, the CONCESSIONAIRE must send a duly substantiated report to the REGULATOR, who will have a maximum term of fifteen (15) Working Days to corroborate the facts, then proceed to execute the letter of guarantee.

In the event that the Additional Works have been executed by third parties, the GRANTOR will deliver them to the CONCESSIONAIRE, who must receive them within a maximum term of fifteen (15) Calendar Days, after signing the respective minutes. In the event that there are observations in relation to the Additional Works executed, the

GRANTOR will be responsible for requiring the third-party builder to correct them, while the GRANTOR maintains the risk of design and construction of the Additional Works executed by third parties.

- 8.38 The Additional Works, which will be processed in accordance with the contractual modification procedure established in the Applicable Laws and Provisions, may not refer to the correction of calculation, design or construction errors of the Works, to the extent that the latter will be at the CONCESSIONAIRE's expense, risk and cost.
- 8.39 The CONCESSIONAIRE shall be responsible for the Maintenance and Operation of the Additional Works from the moment of their acceptance if they have been executed or from the delivery of the GRANTOR and receipt by the CONCESSIONAIRE in the event that they have been executed by third parties. The Parties shall agree by means of the corresponding addendum, the amounts and forms of payment of the costs generated by the Maintenance and Operation of the Additional Works.

NATIONAL BACKBONE NETWORK OF OPTICAL FIBER

8.40 In accordance with the provisions of Law No. 29904, Law on the Promotion of Broadband and Construction of the National Backbone Network of Optical Fiber, the CONCESSIONAIRE undertakes to install ducts and cameras, in accordance with the requirements established by said law, by its regulations approved by Supreme Decree No. 014-2013-MTC, as well as by Applicable Laws and Provisions and Regulatory Standards. For the purposes of this Clause, the CONCESSIONAIRE shall incorporate the engineering design for the execution of these activities into the EDI of the corresponding Section. Without prejudice to the corresponding administrative sanctions, failure to comply with this obligation will generate a penalty in accordance with the provisions of Annex No. 10 of this Contract.

CHAPTER IX: MAINTENANCE

OBLIGATIONS OF THE CONCESSIONAIRE

9.1 The CONCESSIONAIRE undertakes to carry out the Maintenance of the Concession Assets, from the completion of the Works in the case of Sections 1, 2 and 3 until the date on which the Expiration of the Concession operates in accordance with Chapter XVIII of the Contract, as well as with respect to other Concession Assets that incorporate or are incorporated into the Concession. This obligation includes Periodic Maintenance, Emergency Maintenance and Routine Maintenance.

The obligation of the CONCESSIONAIRE consists, at least, of permanently maintaining the Service Levels established in the Contract, which must be maintained throughout the Operation Stage and until the completion of the Contract, in accordance with the parameters indicated in Annex No.11 of this Contract. Without prejudice to the corresponding sanctions, failure to comply with the Service Levels will generate a penalty in accordance with the provisions of Annex No. 10.

- 9.2 The CONCESSIONAIRE shall carry out the Maintenance work of each Section, including safety work, which is necessary to achieve and maintain the Service Levels established in Annex No. 11 of this Contract and shall always be adjusted to achieve and guarantee the Service Levels required in said Annex. The risk of reduced revenues or increased maintenance costs due to errors in execution, deficiencies in the design or even additional activities not foreseen in the final studies or in the technical file related to unforeseen repairs and emergency interventions that are at its expense will be assumed by the CONCESSIONAIRE, without this implying that it is released from the obligation to comply with the Service Levels provided for in this Contract.
- 9.3 In the execution of Road Maintenance work, the Applicable Laws and Provisions on road maintenance will also be respected in everything that does not conflict with the provisions of Annex No. 11.
- 9.4 From the Possession Taking of the Existing Sections to the completion of the execution of the Works of each Section, the CONCESSIONAIRE will carry out the Maintenance work, if applicable.
- 9.5 The list and classification of Maintenance activities can be found in the General Technical Specifications for Road Maintenance, approved by the MTC through Directorial Resolution No. 008-2014-MTC-14 or the standard that replaces it.

SUPERVISION OF MAINTENANCE

- 9.6 It is the responsibility of the REGULATOR, directly or through the supervisor, to carry out the supervisory actions that are within its competence, in accordance with the Applicable Laws and Provisions, for the development of the Maintenance tasks indicated in this Chapter and in accordance with Clause 17.12 et seq. and Annex No. 11 of the Contract.
- 9.7 When the REGULATOR appoints a Maintenance supervisor, it must inform the CONCESSIONAIRE in writing within a maximum term of five (5) Calendar Days, counted from the date of signing the contract with the aforementioned supervisor.

- 9.8 The CONCESSIONAIRE shall grant the REGULATOR, or its designee, free access to the Concession Area to carry out its work, without hindrance, who undertakes not to interrupt the activities of the CONCESSIONAIRE as far as possible, unless the Applicable Laws and Provisions enable it in certain circumstances.
- 9.9 Failure to give the REGULATOR, the Maintenance supervisor and/or the equipment that has, if applicable, free access to the Concession Area to carry out his/her work will be penalized in accordance with Annex No. 10.

ROAD MAINTENANCE PROGRAMS

9.10 The obligation assumed by the CONCESSIONAIRE entails the responsibility of defining the techniques, procedures and timeliness of the different maintenance tasks. To this end, annually, within the first fifteen (15) Working Days of December of each Calendar Year counted from the beginning of the Operation Stage, the CONCESSIONAIRE shall submit to the REGULATOR, with a copy to the GRANTOR, the corresponding Road Maintenance Programs that allow the maintenance of the road and compliance with the Service Levels established in Annex No. 11. Such plans must be approved by the REGULATOR, if applicable, within a maximum term of twenty (20) Working Days from the date of their submission. If the REGULATOR does not rule within this period regarding the new programs, the CONCESSIONAIRE has the obligation to continue with the previously approved Road Maintenance Programs, and if there are none, it will perform the Maintenance work as established in the Contract and/or the Applicable Laws and Regulations. If it is not approved, the CONCESSIONAIRE must resubmit the Road Maintenance Programs, for which the same terms indicated above will apply. In the event of disapproval of three (3) or more versions of the same Road Maintenance Program, the CONCESSIONAIRE may use the dispute resolution mechanisms provided for in Chapter XIX.

The aforementioned programs shall include the description and justification of the policies used, the schedules of the operations to be carried out, the level measurements on which it is based and its general technical justification, all in accordance with the provisions of Annex No.11 of the Contract. The Road Maintenance Programs shall guarantee the light transit of Users under the terms established in Clause 8.22 et seq of this Contract.

The Road Maintenance Programs may be modified in the event of extraordinary or unforeseeable circumstances and must be evaluated and approved by the REGULATOR within the same terms as those described in the first paragraph of this clause.

Delay in the deadline for submission of the Road Maintenance Programs will generate a penalty for the CONCESSIONAIRE in accordance with the provisions of Annex No. 10, without prejudice to the corresponding penalties.

ROAD EMERGENCY

9.11 In the event of a Road Emergency situation the CONCESSIONAIRE will carry out at its sole cost and risk, the preliminary and/or final work that is necessary to recover the Trafficability of the road in the shortest possible time, in order to recover the established Service Levels in Annex No. 11 of this Contract, an obligation that must be executed without considering the magnitude of the event, including, but not limited to, the execution of adequate and timely signaling of the road infrastructure during the Road Emergency

and, in general, the execution of all those works that seek to maintain the operability of the Concession Assets, in accordance with the required Service Levels. In the event of non-compliance with this obligation, the penalties established in Annex No. 10 will be applied to the CONCESSIONAIRE, regardless of the corresponding administrative sanctions.

INFORMATION

9.12 Once the Annual Road Maintenance Programs has been approved, it is the CONCESSIONAIRE's obligation to provide the REGULATOR with monthly reports related to the development of the Maintenance activities for evaluation in accordance with the procedure and deadlines established in Annex No. 11 of the Contract. These reports must include, among other things, information on the evaluation and results of the Service Levels of the Maintenance activities carried out, resources used, and records per Maintenance event. The cost of preparing the reports shall be borne by the CONCESSIONAIRE in accordance with the format approved by the REGULATOR.

Likewise, the CONCESSIONAIRE must inform the Users, no less than ten (10) calendar days in advance of the start of the execution of the corresponding Road Maintenance Program, regarding the beginning, content and duration of each activity of the aforementioned program. The aforementioned obligation of information must be carried out by the CONCESSIONAIRE through the mechanisms, chosen by the CONCESSIONAIRE, that allow the greatest dissemination to the Users.

Delay in the submission of the Reports related to the development of the Maintenance will generate a penalty as indicated in Annex No. 10.

CHAPTER X: OPERATION OF THE CONCESSION

RIGHTS AND DUTIES OF THE CONCESSIONAIRE

10.1 The Exploitation of the Concession Sections by the CONCESSIONAIRE constitutes a right, insofar as it is the mechanism by which the CONCESSIONAIRE will recover the investment made as a result of the execution of the Works and the provision of the Services; as well as a duty, to the extent that the CONCESSIONAIRE is obliged to comply with certain levels, capacity and others associated with the investment, as well as with Service Level standards specific to the Operation of the Sections, provided for in Annex No. 11 of this Contract.

It is the duty of the CONCESSIONAIRE, within the limits of the Contract, to answer for the acts of omission and/or negligence of the personnel in charge of the operation of the road or of the contractors that the CONCESSIONAIRE decides to hire.

ORGANIZATION OF SERVICES

10.2 It is the responsibility of the CONCESSIONAIRE to manage and administer the Services that will be provided to the Users of the Sections, in accordance with the parameters established for this purpose in the Concession Contract.

SUPERVISION OF THE OPERATION

10.3 It is the responsibility of the REGULATOR to carry out the supervision and control actions that are within its competence, in accordance with the Applicable Laws and Provisions, for the development of the Exploitation of the Concession indicated in this Chapter and in accordance with Clause 17.12 et seq. and Annex No. 11 of the Contract.

The REGULATOR will be in charge of verifying compliance with the CONCESSIONAIRE's obligation to maintain certain parameters, capacity and others, as well as the Service Levels of the Operation of the Sections provided for in this Contract.

10.4 The CONCESSIONAIRE is obliged to provide the necessary cooperation for the supervision of the Operation, assuming the costs of the aforementioned supervision, as established in Clause 9.8 of the Contract.

INFORMATION

- 10.5 It is the obligation of the CONCESSIONAIRE to provide the REGULATOR and the GRANTOR or the latter's designee as described below. In the event of non-compliance with this obligation, the penalties established in Annex No. 10 will be applied to the CONCESSIONAIRE, regardless of the corresponding administrative sanctions:
 - (i) Monthly reports on the development of the Concession Operation. The cost of preparing the reports shall be borne by the CONCESSIONAIRE in accordance with the format approved by the REGULATOR. Without prejudice to the obligation to submit other reports mentioned in the Contract, the basic periodic information to be provided by the CONCESSIONAIRE is subject to the provisions of the General Supervision Regulations, approved by Resolution of the Board of Directors No. 024-2011-CD-OSITRAN, or the standard that replaces it.

Delay in the delivery of the above reports will result in the application of a penalty as set out in Annex No. 10.

(ii) From the completion of the Works of each Section, monthly reports relating to the surface condition and structural condition of the road and the activities carried out that have allowed it to comply with the Service Levels, in accordance with the provisions of Annex No. 11.

The REGULATOR shall approve such reports within a maximum term of twenty (20) Working Days of receipt, or request the correction of observations prior to approval, in accordance with the provisions of Annex No. 11, in which case the REGULATOR shall approve the report within a term of no more than seven (7) Working Days after the observations are corrected. If no decision is made within the term, the reports will be deemed approved by the REGULATOR, provided that, three (3) Working Days prior to the end date of the deadline that the REGULATOR has for its pronouncement, the CONCESSIONAIRE sends the REGULATOR a written communication on the deadline for its pronouncement. In the event that the CONCESSIONAIRE does not send such communication and the REGULATOR does not pronounce itself, its pronouncement will be understood to be unfavorable.

(iii) From the completion of the Works of Sections 1, 2 and 3, as appropriate, annual reports related to the evaluation and determination of the Service Levels of the Concession. It must be accompanied by the certificates of the evaluations, tests, analyses, lists of measurements, data processing methodology, designs used, graphic elements and others in accordance with the provisions of Annex No. 11.

The REGULATOR shall approve such reports within a maximum term of thirty (30) Calendar Days of receipt or request the correction of observations prior to approval, in accordance with the provisions of Annex No. 11, in which case the REGULATOR shall make the approval within a term of no more than twenty (20) Calendar Days after the observations have been corrected. If no decision is made within the term, the reports will be deemed to have been approved by the REGULATOR, provided that, three (3) Working Days prior to the end date of the term that the REGULATOR has for its pronouncement, the CONCESSIONAIRE sends the REGULATOR a written communication on the deadline for its pronouncement. In the event that the CONCESSIONAIRE does not send such communication and the REGULATOR does not pronounce itself, its pronouncement will be understood to be unfavorable.

The REGULATOR will grant a term to the CONCESSIONAIRE to correct the observation, which will be set according to its magnitude.

The REGULATOR may carry out the tests, trials and in general measurements of the Service Levels at the time it deems appropriate, in order to verify the minimum values established in the Concession Contract, as a result of the inspections carried out to verify the state of the infrastructure. The REGULATOR shall coordinate the tests with the CONCESSIONAIRE in such a way that interference in the Operation of the concession and in the CONCESSIONAIRE is kept to a minimum; without prejudice to the performance of its supervisory functions.

USERS' RIGHTS AND CLAIMS

10.6 The inherent rights of the Users will consist of the use of the road, the possibility of accessing all the Mandatory and Optional Services of the Concession, to receive a Service in accordance with the provisions of the Contract and to be informed about the characteristics of the same, and the others contemplated by the Applicable Laws and Provisions, and others that may be set forth in the Contract.

Specifically, Users have the right (i) to access and use the road without restrictions, except for those exceptions duly contemplated by the Applicable Laws and Provisions and/or by this Contract, (ii) to receive the effective provision of the Mandatory Services and the Optional Services of the Concession, as well as all those services that are inherent to the Operation of the road. Likewise, they have the right (i) to have the services provided in accordance with the levels contemplated in this Contract, (ii) to receive complete, truthful and timely information on the characteristics of such services, as well as any other right that is compatible with the provisions contained or that may be established in this Contract and the others contemplated by the Applicable Laws and Provisions.

- 10.7 The CONCESSIONAIRE will open (i) a book of suggestions or recommendations and, separately, (ii) a book of complaints in each Toll Unit, the purpose of which will be to register and process all claims submitted by Users, in accordance with the provisions of the Regulations for Attention to Claims and Resolution of Disputes of OSITRAN, approved by Board of Directors Resolution No. 019-2011-CD-OSITRAN, or standard that modifies and/or replaces it. Both books may be physical and/or virtual, as established by the Applicable Laws and Regulations. In addition, the CONCESSIONAIRE must develop and implement tools that guarantee the quality of customer service, based on CRM systems (User Relationship Management), toll-free telephone lines for complaints (0800), websites, emails, User complaint service offices, or other corresponding ones, as specified in Annex No. 11 of the Contract and/or the Applicable Laws and Provisions.
- 10.8 Once the claim has been submitted, the CONCESSIONAIRE must process it and issue a decision within the term provided for in the Regulations for Attention to Claims and Resolution of Disputes of OSITRAN, and, if applicable, in its own Claims Regulations. In the event that the User is not satisfied with the resolution of the claim, he/she may file the administrative remedies that the Contract and/or the Applicable Laws and Provisions allow.

INTERNAL REGULATIONS

- 10.9 On the date of submission to the GRANTOR about the request for receipt of the Works of the first Section, when Construction is completed, the CONCESSIONAIRE, in accordance with the Applicable Laws and Provisions, must inform and send to the REGULATOR, in addition to publishing mandatorily on its website, the internal regulations indicated in the following subparagraphs::
 - a) Operating procedures, including:
 - (i) Procedures for collection at the Toll Unit.
 - (ii) Procedures for monitoring and quality control.
 - (iii) Procedures for the control of weights and measures of vehicles.

- (iv) User service procedures.
- b) For the attention of accidents and emergencies.

The list of the aforementioned regulations does not limit the power of the REGULATOR to request other documents and information of a similar nature related to the regulation and control of the concessioned infrastructure.

The CONCESSIONAIRE shall incorporate in the formulation of its Internal Regulations, the applicable principles in accordance with the provisions of the Regulatory Standards. In case of doubt or discrepancy, the provisions of the Regulatory Standards shall prevail.

Additionally, on the aforementioned date, the CONCESSIONAIRE must deliver to the REGULATOR the Operation Manual of each of the Project Sections, which must also contain the protocols, mechanisms and audits to ensure the Road Safety of the Users throughout the term of the Contract, according to the Applicable Laws and Provisions.

Delay in the delivery or non-delivery of the internal regulations and manuals indicated above will give rise to the application of a penalty as established in Annex No. 10, without prejudice to the corresponding sanctions.

START OF OPERATION

10.10 The CONCESSIONAIRE shall be entitled to the collection of the Tariffs indicated in Chapter XI from the start of the Exploitation Stage corresponding to each Section, as established in this Chapter.

The start of the Operation Stage of the Sections of the corresponding Concession will take place on the date on which the Works Acceptance Certificate of the respective Section is signed, a document in which the effective date of the collection of Tariffs will begin will be established, which may not be before the publication of the tariff described in subparagraph a) of Clause 11.7 of this Contract.

Before the date of signing the Works Acceptance Certificate of the corresponding Section and with no less than ten (10) Calendar Days prior to the entry into force of the Tariffs, the CONCESSIONAIRE will have the obligation to pre-publish the Tariffs to be charged in the respective Section, for the benefit of the Users, without prejudice to the fact that the effective collection of the Tariffs shall be subject to the rules established in this Contract. In order to carry out the pre-publication, the CONCESSIONAIRE must comply with the provisions established in the OSITRAN General Regulation of Tariffs – RETA, approved by Resolution of the Board of Directors No. 003-2021-CD-OSITRAN, and its modifying and/or substitute standards, regarding the means of dissemination of the Tariffs, among others applicable.

The REGULATOR shall ensure the suitability of the means used by the CONCESSIONAIRE to disseminate information on the Tariffs, as well as make the recommendations that are necessary for proper dissemination, in accordance with the provisions of Article 13 of the Regulations on Users of Transport Infrastructures for Public Use, approved by Resolution of the Board of Directors No. 035-2017-CD-OSITRAN and its amending and/or substitute standards.

Once the start date of the Operation Stage of any Section is given and the collection of the corresponding Tariff begins, the flows of the Toll Units will be deposited in the Administration Trust, without prejudice to the fact that the right to collect the Tariffs will be owned by the CONCESSIONAIRE as indicated above.

10.11 If, having complied with the conditions indicated in the preceding Clause, the CONCESSIONAIRE does not start the Operation of the Sections, the penalty indicated in Annex No. 10 will be applied.

MANDATORY SERVICES

- 10.12 The Mandatory Services to be implemented or provided by the CONCESSIONAIRE free of charge to Users and/or Government Authorities shall be the following:
 - a) Emergency Center Service, which will operate twenty-four (24) hours and three hundred and sixty-five (365) Calendar Days of the Calendar Year, according to the characteristics of Annex No. 11. The CONCESSIONAIRE shall attend to requests for emergencies and/or accidents that have occurred in any Section of the Concession, through the Emergency Centre, communicating them or referring the requests in real time to the National Police of Peru, SUTRAN, firefighters, any hospital, doctor, polyclinic or any other relevant Governmental Authority, as the case may be.
 - b) Emergency Real-Time Communication System, whose terminals according to the technical characteristics specified in Annex No. 11. This system must, at a minimum, allow free calls to be made exclusively to the Emergency Centre. This system must also be compatible with the computer systems of the National Police of Peru, the REGULATOR, SUTRAN and/or any other Governmental Authority that requires to be connected to the CONCESSIONAIRE's system in order to fulfill its functions, including the exchange of information in real time between the CONCESSIONAIRE and the aforementioned Governmental Authorities, as set forth in this Contract and/or Applicable Laws and Provisions. The CONCESSIONAIRE must provide access and connectivity, on a permanent and uninterrupted basis, to the signals of its system to the Governmental Authorities described above.
 - c) Ambulance service for the care of the wounded and transfer to a hospital, medical center, polyclinic, as the case may be. In this regard, the CONCESSIONAIRE must have, at least, two (2) type III ambulances, owned or leased, duly implemented, as established in Ministerial Resolution No. 953-2006-MINSA and/or its amending and/or substitute standards.
 - d) Transfer service for vehicles that have been damaged on the road to the nearest service station, not exceeding forty (40) kilometers. In this regard, the CONCESSIONAIRE must have at least two (2) platform cranes, owned or leased, duly implemented, that allow the Vehicles to be moved. In this regard, at least one (1) of the CONCESSIONAIRE's cranes must be a trawling crane with auxiliary capacity so that the Vehicles do not suffer damage or deterioration.
 - e) Weighing stations (moving scale for dynamic weighing). The CONCESSIONAIRE shall install and operate two (02) mobile weighing stations throughout the Concession. The location for the installation of the fixed stations will be

determined by the GRANTOR and SUTRAN.

Weighing stations must come into operation no later than ninety (90) Calendar Days from the beginning of the Operation Stage of the Section corresponding to the location of each weighing station. All the information obtained from the Weighing Stations must be sent in real time to SUTRAN and the National Police of Peru so that these entities act in accordance with their administrative competences.

- f) The Mandatory Services described in Annex No. 11.
- 10.13 It is an essential requirement that, in order to collect the Tariff, the Services indicated in subparagraphs a) to f) of the preceding Clause are in operation.
- 10.14 For the provision of the Mandatory Services, the CONCESSIONAIRE may choose to provide the equipment directly, lease the equipment or subcontract it. If it is convenient, and when possible, part of the Mandatory Services may be consolidated in the same physical place, even taking into account the Toll Unit.

In any case, the CONCESSIONAIRE will be solely responsible for ensuring that the Mandatory Services are provided in a timely and efficient manner, in accordance with the provisions of Annex No. 11.

Failure to implement the Mandatory Services will result in the application of a penalty as set forth in Annex No. 10.

OPTIONAL SERVICES

10.15 During the entire term of the Concession and provided that the three (3) Sections of the Project are in joint Operation, or, in the event of partial Expiration of the Project, Sections 1 and 3 jointly, the CONCESSIONAIRE may, with the prior approval of the GRANTOR, choose to provide Optional Services, for which the CONCESSIONAIRE must submit a written request to the GRANTOR with a copy to the REGULATOR. The GRANTOR shall have thirty (30) Working Days to make a decision in this regard, counted from the receipt of the prior non-binding opinion of the REGULATOR. The REGULATOR shall have a term of fifteen (15) Working Days from receipt of the CONCESSIONAIRE's request to issue and notify its non-binding opinion to the GRANTOR. The request must contain, at a minimum, the specification of the type of service to be provided, the price to be charged (owned by the CONCESSIONAIRE or the third party that would operate the Optional Service, if applicable) and the general conditions for its provision. These services will be remunerated with a percentage of the Optional Income.

In the event that it is a third party that would operate the Optional Service, including the possibility that the third party is an Affiliate, Subsidiary or Related Company of the CONCESSIONAIRE, the request must contain a justification or support for the price to be charged to the Users and the price that the CONCESSIONAIRE would charge to this third party, in addition to the corresponding tax implications.

In the event that the GRANTOR does not make a decision within the term indicated in the preceding paragraph, the Optional Service shall be deemed to have been denied, provided that, three (3) Working Days prior to the end date of the term that the GRANTOR

has for its decision the CONCESSIONAIRE sends the GRANTOR a written communication regarding the possible deadline for its pronouncement. In the event that the CONCESSIONAIRE does not send such communication and the GRANTOR does not make a statement, its pronouncement will be deemed unfavorable.

- 10.16 The CONCESSIONAIRE may cease to provide the Optional Services at any time, and to do so it must notify the GRANTOR and inform the Users of such decision, through the means that allow its wider dissemination, within a term of no less than sixty (60) Calendar Days prior to the date of cessation.
- 10.17 The CONCESSIONAIRE shall recognize in favor of the GRANTORa percentage of the income obtained from providing Optional Services, and shall agree on the terms and conditions for such purposes.
- 10.18 The Optional Services that the CONCESSIONAIRE has incorporated during the term of the Concession will be carried out within the Concession Area and/or will be related to the Concession, in accordance with the Applicable Laws and Provisions.

In this sense, the Optional Services may not be contrary to morality, good customs and/or public order, observing the applicable regulations of the REGULATOR and/or the Applicable Laws and Provisions.

- 10.19 The implementation of the facilities for the provision of the Optional Services is the responsibility and expense of the CONCESSIONAIRE.
- 10.20 The income obtained from the Optional Services will not be considered for the purposes of authorizing guarantees in favor of the Permitted Creditors.

CHAPTER XI: TOLL AND TARIFF

TOLL AND TARIFF

- 11.1 The Tariff will be collected through the Toll Units included within the Concession Area and during the Operation Stage of the corresponding Section, in accordance with the provisions of Clause 10.10 of this Contract, and applying the Tariff Regime in force at the time of collection of said Tariff.
- 11.2 The Toll Units to be operated are the following:

SECTION	DENOMINATION	
1	Trunk	
2	Trunk	
2	Lateral Los Alamos	
3	Trunk	
3	Lateral Carretera Central	

The exact location of the Toll Units will be detailed in the Final Engineering Study of each Section.

11.3 At any time during the term of the Concession, the CONCESSIONAIRE and the GRANTOR, by mutual agreement and with due justification, may modify the location of the Toll Units within the Concession Area (which will be automatically incorporated into Annex No. 3 of the Concession Contract), in which case the Parties by mutual agreement will determine which Party will assume the costs derived from such relocation. In the event of refusal by the GRANTOR, the CONCESSIONAIRE will be prevented from modifying the location of the Toll Units within the Concession Area.

Notwithstanding the foregoing, the CONCESSIONAIRE has the obligation to submit monthly to the REGULATOR and the GRANTOR, within fifteen (15) Working Days of the month following the month in which the information is generated, its calculations of Tolls, total revenues for the month, result of the current rates and the vehicular flows of each Toll Unit within the Concession Area (for each direction of the road, Vehicle category, day and time, without prejudice to complying with the requirements of the Toll Management Module of Appendix 1 of Annex No. 3), as well as the calculation of the VPIPm in accordance with the provisions of Appendix 4 of Annex No. 9 of the Contract

The purpose of the provision of the above information will be for the REGULATOR to carry out and/or verify the monthly calculation of the Tolls_i and VPIPm, results that will serve for compliance with Clause 5.3 of this Contract, without prejudice to the sending of the aforementioned information in real time, from the beginning of the Operation of each Section, by the CONCESSIONAIRE to the REGULATOR, through the Comprehensive Computer System for Operation and Maintenance Control, established in Appendix 1 of Annex No. 3 of this Contract.

The REGULATOR is in charge of supervising and monitoring the veracity, consistency, among others, of the information on the Tolls_i and VPIPm sent monthly by the CONCESSIONAIRE, without prejudice to the application to the CONCESSIONAIRE of the penalties established in Annex No. 10 of the Contract.

11.4 In the event that the CONCESSIONAIRE is unable to install, operate and/or develop any of the Toll Units due to acts of social protest, social or civil commotion and/or third parties that, directly or indirectly, prevent or materially affect the operation of the same or put at risk the integrity of the Concession Assets and/or any person, the latter must notify the GRANTOR in writing of this situation. The GRANTOR shall adopt those measures within its competence and coordinate with the corresponding Governmental Authorities so that they may proceed to restore order to provide security to the Concession Assets and people, and to allow the CONCESSIONAIRE to install and/or operate the Toll Units, Operation of the Concession and/or collection of Tariffs.

In the event that the GRANTOR has exhausted its efforts and the relevant Governmental Authorities are unable to re-establish, within fifteen (15) Working Days from the receipt by the GRANTOR of the request described above, the conditions that allow the CONCESSIONAIRE to install and/or operate the Toll Units, the Operation of the Concession and/or the collection of the Tariffs under the terms established in the Contract, the CONCESSIONAIRE may request the suspension of the affected obligations in accordance with the provisions of Clause 5.6 et seq., and the GRANTOR must grant them, and no penalties may be imposed on the CONCESSIONAIRE for non-compliance with the affected and suspended obligations, maintaining compliance with the other obligations not affected and/or not suspended.

In the event that the aforementioned social commotion persists for a term of three (3) months, counted from the end of the term of fifteen (15) Working Days described above, and within this term the Parties have not been able to relocate the Toll Unit(s) within the Right of Way, the Parties shall, by mutual agreement and through the execution of a written act, establish a mechanism and/or a compensation formula in favor of the CONCESSIONAIRE for the non-installation and/or non-operation of any of the Project's Toll Units, whose negotiation must be executed (initiated and concluded with or without agreement) within a maximum term of three (3) months from the receipt of the letter of commencement of the same, forwarded by either Party to the other Party. On a referential basis, and not mandatory, the Parties may take into account or consider the compensation mechanisms established in Annex No. 16 in order to reach an agreement.

In the event that there is no agreement between the Parties within the term described above, related to the aforementioned compensation, the Parties may submit this dispute to an Expert in order for this third party to determine the mechanism and/or the compensation formula applicable in favor of the CONCESSIONAIRE, among other matters, as established in Annexes No. 17 and 18 of this Contract. The Parties agree that the choice of the Expert and the determination of compensation shall follow the rules and procedure set forth in Annex No. 17 to the Contract. On the other hand, for the determination of the compensation mechanism, the form of payment and/or the term of validity of the aforementioned mechanism and/or the corresponding formula, the Expert may take into consideration the reference mechanisms described in Annex No. 16 and, mandatorily, must follow the rules established in Annex No. 18.

11.5 It is the responsibility of the CONCESSIONAIRE to charge the Tariff according to the type of Vehicle in accordance with the provisions of Clauses 11.7 and following, without prejudice to whether or not the amount collected constitutes income from the Concessionaire for accounting and/or tax purposes in accordance with the Applicable Laws and Provisions.

Vehicles used to attend emergency services such as ambulances, firefighters or vehicles of the National Police, as well as military vehicles on commission, maneuvers, exercises or convoys, and vehicles of the Peruvian Red Cross that carry out activities for humanitarian purposes, will be exempt from the payment of the Tariff in accordance with the provisions of Decree Law No. 22467, Law No. 24423, and other Applicable Laws and Regulations.

11.6 The Tariff will be charged for the right of way, which implies that the User of the Concession Sections will be charged for the right of way, in both directions, for each Toll Unit, in application of the regime described in Clause 11.7.

The CONCESSIONAIRE shall install the most advanced Tariff charging technology permitted by the Applicable Laws and Provisions to the Closing Date. As detailed in Annex No. 3, the CONCESSIONAIRE may modify the technology used to charge the Tariff, provided that it allows it to comply with the Service Levels of the Contract and/or if so determined by the Applicable Laws and Provisions, with the CONCESSIONAIRE directly assuming the respective costs and expenses, without this implying greater resources on the part of the GRANTOR and/or an increase in the corresponding Tariff. This modification of technology may be made by the CONCESSIONAIRE, after notifying the GRANTOR and the REGULATOR sixty (60) Working Days in advance of such

variation, without requiring a contractual modification. As of the above communication, the REGULATOR shall issue a non-binding opinion within thirty (30) Working Days from the receipt of such communication. After the opinion has been notified to the CONCESSIONAIRE, it may implement the corresponding technological modification. In the event that it does not issue and notify the CONCESSIONAIRE of the aforementioned opinion within the term described above, it will be understood that it is in accordance with the proposed change in technology, and the CONCESSIONAIRE may implement the corresponding technological modification.

In the event that the GRANTOR requests the modification of such technology, the CONCESSIONAIRE shall not be obliged to implement it, unless there is an agreement between the Parties regarding the recognition of the costs of implementing the change of technology, following the respective contractual modification procedure.

In the event that it is necessary to modify the aforementioned technology as a result of a regulatory change, the CONCESSIONAIRE will be obliged to implement such modification, having the right to restore the economic-financial balance if the conditions required for this purpose in Chapter XII are verified.

In any of the aforementioned cases, the CONCESSIONAIRE has the obligation to assume always and at all times all the costs of administration of the system for charging the Tariffs related to the new technology, not being able to transfer them to the User and/or the GRANTOR, and must not affect the Tariff, except for the cost of the devices to be installed in the Vehicles, to be assumed directly by the Users.

- 11.7 The "Tariff Regime" is the set of rules contained in the Contract that regulates the Tariff that the CONCESSIONAIRE will be authorized to charge during the Operation of the Concession, in accordance with the following:
 - a) The Tariffs will enter into force once the CONCESSIONAIRE has complied with the publication of the tariff, in accordance with the provisions of articles 47 and following of the OSITRAN General Regulation of Tariffs RETA, approved by Resolution of the Board of Directors No. 003-2021-CD-OSITRAN, and its modifying and/or substitute regulations. The REGULATOR shall ensure the suitability of the means used by the CONCESSIONAIRE to disseminate information on the Tariffs and/or Tolls, as well as make the recommendations that are necessary for proper dissemination, in accordance with the provisions of Article 13 of the Regulations on Users of Transport Infrastructures for Public Use, approved by Board of Directors Resolution No. 035-2017-CD-OSITRAN and its modifying and/or substitute regulations.
 - b) The CONCESSIONAIRE may apply a different Fee for:
 - i. Toll Unit (both directions) z:
 - 1. Direction 1
 - 2. Direction 2
 - ii. Type of day *d*, distinguishing between:
 - 1. Working day *I* (Monday to Friday, excluding public holidays)
 - 2. Saturday *s* (excluding public holidays)
 - 3. Sunday and public holidays *d*
 - iii. Time *period h*, distinguishing between:
 - 1. Peak Period p

- 2. Valley Period v
- 3. Night Period *n*
- iv. Vehicle Type w, distinguishing between:
 - 1. Light Vehicles, I
 - 2. Heavy Vehicles, c

The Tariff by type of Vehicle will be obtained by adding (i) to the Toll by type of Vehicle, (ii) the Toll Unit (Direction 1 or Direction 2), (ii) the type of day, (iii) the time period, which is defined below, (iv) the VAT and other applicable taxes, finally rounding the resulting Tariff to the next lower ten (10) cents of Sol or to the lowest fractional currency in force (understood as the in force at the currency whose circulation is approved by the Central Reserve Bank of Peru) on the date of collection of the Tariff. This rounding will be carried out for the payments of the Tariff made by the Users through any means of payment (cash payment, bank cards, among others).

Rounding may not be to the detriment of Users, so the CONCESSIONAIRE must always round to the nearest corresponding lower decimal number, in accordance with the rules established in the Consumer Protection and Defense Code, Law No. 29571, and/or the regulations that modify and/or replace it. In addition, Users will always have the right to request the refund of those amounts paid for Tolls that have been unduly or excessively charged by the CONCESSIONAIRE plus the corresponding interest until the date of effective refund, as established in the Applicable Laws and Provisions.

The Toll by type of vehicle, Toll Unit (both directions), type of day and time period will have to comply with the following conditions:

$$\begin{aligned} P_{td}^{z,l} &\leq P_{t}^{max} \\ P_{td}^{z,e} &\leq P_{t}^{max} \\ P_{td}^{z,l} &= \frac{P_{td,p}^{z,l} \times n_{td,p}^{z,l} + P_{td,v}^{z,l} \times n_{td,v}^{z,l} + P_{td,n}^{z,l} \times n_{td,n}^{z,l}}{24} \\ P_{td}^{z,e} &= \frac{P_{td,p}^{z,e} \times n_{td,p}^{z,e} + P_{td,v}^{z,e} \times n_{td,v}^{z,e} + P_{td,n}^{z,e} \times n_{td,n}^{z,e}}{24} \\ P_{td}^{z,e} &= \frac{P_{td}^{z,e} \times n_{td,p}^{z,e} + P_{td,v}^{z,e} \times n_{td,v}^{z,e} + P_{td,n}^{z,e} \times n_{td,n}^{z,e}}{24} \end{aligned}$$

Where:

- *P*^{*max*} : Maximum average daily toll in Calendar Year *t* for Light Vehicles and Heavy Vehicles axle
- *P*^{*z,l*}*td* : Maximum average daily toll in Calendar Year t, day type d, Toll Unit (both directions) *z* for Light Vehicles *I*
- P^{z,e}_{td} : Maximum average daily toll in Calendar Year t, day type d, Toll Unit (both directions) z for each Heavy Goods Vehicle eaxle

$P_{td.p}^{z,l}$ and	:	Maximum average daily toll in Calendar Year t , type of day d , peak <i>time period</i> p , Toll Unit (both directions) z for Light Vehicles I and for each axle e of Heavy Vehicles respectively
$n_{td,p}^{z,l}$ and	:	Number of daily hours of application of the Tolls $P_{td,p}^{z,l}$ and $P_{td,p}^{z,e}$, respectively
$P_{td,v}^{z,l}$ and	:	Tolls in Calendar Year t, day type d, valley time period v, Toll Unit (both directions) z, for Light Vehicles I and for each Heavy Vehicle e-axle respectively
$n_{td,v}^{z,l}$ and	:	Number of daily hours of application of the Tolls $P_{td,v}^{z,l}$ and $P_{td,v}^{z,e}$, respectively
$P_{td.n}^{z,l}$ and	:	Tolls in Calendar <i>Year t</i> , type of day <i>d</i> , time period of Night n, Toll Unit (both directions) <i>z</i> for Light Vehicles I and for each axle e of Heavy Vehicles, respectively ,
$n_{td,n}^{z,l}$ and	:	Number of daily hours of application of the Tolls $P_{td,n}^{z,l}$ and $P_{td,n}^{z,e}$, respectively
$n_{td,p}^{z,l} n_{td,v}^{z,l} n_{td,v}^{z,l}$:	they must in no case be less than zero, and the result of their sum must be equal to 24
$\mathbf{n}_{td,p}^{z,e} \mathbf{n}_{td,v}^{z,e} \mathbf{n}_{td,n}^{z,e}$:	they must in no case be less than zero, and the result of their sum must be equal to 24
$P_{td}^{z,c}$:	Average daily toll in Calendar Year t , day $type d$, Toll Unit (both directions) z for Heavy Goods Vehicles c
е	:	number of axles and heavy vehicles, including trailer axles

 $P_{td,p}^{z,l}$, $P_{td,v}^{z,l}$, $P_{td,n}^{z,l}$, $P_{td,p}^{z,e}$, $P_{td,v}^{z,e}$, $P_{td,n}^{z,e}$ may not be greater than 1.5 times or P_t^{max} less than 20% of P_t^{max}

c) The maximum average daily toll for Light Vehicles and per axle of Heavy Vehicles in force from the date of commencement of the Operation Stage of the first of the Sections and until the date of the first tariff readjustment (defined in accordance with Clause 11.8), is as follows.

$$P_{t^*}^{max} = P_{2019}^{max} x \left(\frac{IPC_{t^*-1}}{IPC_{2018}} + RR x (t^* - 2019) \right)$$

Where:

- t* Calendar year corresponding to the start of operation of the first Section of the Project.
- $P_{t^*}^{max}$ Maximum average daily toll in the Calendar Year of the start date of the Operation Stage of the first Section (*t**) for Light Vehicles and Heavy

Vehicle axle

 P_{2019}^{max} Average maximum daily toll in Calendar Year 2019, for Light Vehicles and Heavy Vehicles axle, amounting to S/ 2.86.

 $\left(\frac{IPC_{t^*-1}}{IPC_{2018}}\right)$ Toll Update Factor in the Calendar Year of the Start Date of the Operation Stage of the First Section (*t**)

- IPC_{t^*-1} Consumer Price Index of Peru for the last available month of the Calendar Year prior to the Calendar Year of the start date of the Operation Stage of the first of the Sections (t^*-1), published by the National Institute of Statistics and Informatics (INEI)
- IPC₂₀₁₈ Consumer Price Index of Peru for the same month of the Calendar Year 2018, published by the National Institute of Statistics and Informatics (INEI)
- RR It is the maximum real annual readjustment to the Toll, which may be applied by the CONCESSIONAIRE over the accumulated inflation of a period of twelve (12) months, and which is equivalent to 0.015.

The variables used in the preceding formula, as well as their result, must be rounded to six (6) decimal places, according to the rounding rules described above.

- d) From the start date of the Operation Stage of the first of the Sections and until the date of the first tariff readjustment, defined in accordance with Clause 11.8, they are established in all Toll Units (both directions) and for all types of days, both for Light Vehicles and for Heavy Vehicles, the following Peak, Valley and Night time periods:
 - i. Peak Period *p*: 7:00 a.m. to 9:00 a.m. and 5:00 p.m. to 7:00 p.m.
 - ii. Off-peak Period v: 6:00 a.m. to 7:00 a.m., 9:00 a.m. to 5:00 p.m., and 7:00 p.m. 11 p.m.
 - iii. Night Period *n*: 11:00 p.m. to 6:00 a.m.
- e) THE CONCESSIONAIRE will annually readjust the maximum average daily Toll for Light Vehicles and Heavy Vehicles axle in accordance with the provisions of Clause 11.8 of this Contract, and will establish the time periods and the corresponding Tariffs in the Toll Units (in both directions) on each type of day and for each type of vehicle.

TOLL READJUSTMENT

11.8 The maximum average daily Toll for Light Vehicles and axle tolls for Heavy Vehicles shall be readjusted by the CONCESSIONAIRE annually (the "Annual Readjustment") in ordinary form every tenth (10) day of January of each Calendar Year, starting from the Calendar Year immediately following the Calendar Year of the start date of the Operating Stage of the first of the Sections, according to the following method of toll adjustment:

$$P_t^{max} = P_{t-1}^{max} \times \left(\left(\frac{IPC_{t-1}}{IPC_{t-2}} \right) + RR \right)$$

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Where:

- P_t^{max} Maximum average daily toll in Calendar Year *t* for Light Vehicles and Heavy Vehicle axle.
- P_{t-1}^{max} Maximum average daily toll in Calendar Year *t-1* for Light Vehicles and Heavy Vehicles axle.
- $\binom{IPC_{t-1}}{IPC_{t-1}}$ Toll Update factor in Calendar Year *t*.
- IPC_{t-1} Consumer Price Index of Peru for the last available month of Calendar Year*t-1*, published by the National Institute of Statistics and Informatics (INEI)
- IPCt-2 Consumer Price Index of Peru for the same month of CPIt-1 for Calendar *Year t-2*, published by the National Institute of Statistics and Informatics (INEI)
- RR It is the maximum real annual readjustment to the Toll, which may be applied by the CONCESSIONAIRE over the accumulated inflation of a period of twelve (12) months, and which is equivalent to 0.015.

The variables used in the preceding formula, as well as the result thereof, shall be rounded to six (6) decimal places, according to the rules described in Clause 11.7 of this Contract.

In the event that during any Year there is a variation in the Consumer Price Index (CPI) of Peru published by the National Institute of Statistics and Informatics (INEI) of more than five percent (5%) from the date of the last Toll readjustment made, the CONCESSIONAIRE will be entitled to make an extraordinary readjustment (the "Extraordinary Readjustment") increasing the Toll in the same proportion as the Consumer Price Index (CPI) in force to that date. In order for the Extraordinary Readjustment to be effective and enforceable against Users, the CONCESSIONAIRE must (i) comply with the Applicable Laws and Provisions, to the extent applicable, and (ii) publish the readjusted Tariff according to the rules set for in Clause 11.9.

Notwithstanding the foregoing, the Parties agree that this Extraordinary Readjustment will be made only when the factual event described in the preceding paragraph materializes and will be independent of the corresponding Annual Readjustment that is made each Calendar Year.

In the event that any of the Sections of the Project begins the Operation Stage, in the first order with respect to the other two (2) Sections, in the months of November or December of the corresponding Calendar Year, the tariff readjustment of the first Calendar Year immediately following will be calculated according to the formula described above, but such readjustment may not be charged to the User. rather, it will be accumulated for collection with the corresponding readjustment of the subsequent Calendar Year (second Calendar Year), as established in the formula indicated above.

11.9 The CONCESSIONAIRE is obliged to communicate the maximum average daily toll for Light Vehicles and axle for Heavy Vehicles, resulting from the application of the Annual Toll Readjustment formula, as well as the Time Periods and the corresponding Tariffs in the Toll Units (both directions) on each type of day and for each type of vehicle. within the following deadlines:

- i. For newly opened Toll Units, the communication to the GRANTOR and the REGULATOR of the Tolls and the consequent Tariffs must be made at least twenty (20) Working Days in advance of the start date of the Operation Stage of the corresponding Section, while the communication to the Users and the publication of the tariff will have to be carried out in accordance with the provisions of articles 47 and following of the OSITRAN General Regulations of Tariffs of – RETA, approved by Resolution No. 003-2021-CD-OSITRAN and its modifying and/or substitute regulations, and through any other means of communication, chosen by the CONCESSIONAIRE, that allows its mass dissemination among Users.
- ii. For Toll Units in the Operation Stage, the communication to the GRANTOR and the REGULATOR of the Tolls and the consequent Tariffs must be made at least twenty (20) Working Days in advance of the date of readjustment of the Toll, while the communication of the Tariffs to the Users and the publication of the tariff will have to be carried out in accordance with the provisions of articles 47 and following of the OSITRAN General Regulation of Tariffs - RETA General Tariff Regulations approved by Resolution No. 003-2021and its modifying and/or substitute regulations, and through any other means of communication, chosen by the CONCESSIONAIRE, that allows its mass dissemination among Users.

Failure to comply with this procedure within the indicated terms will result in the application of penalties in accordance with the provisions of Annex No. 10 of this Contract.

11.10 The REGULATOR has the power to carry out supervisory actions to verify the correct application of the Tolls and the consequent readjusted Rates in the corresponding period, including the Annual Readjustment and the Extraordinary Readjustment, if applicable. In no case may this power be interpreted as questioning the right of the CONCESSIONAIRE to apply the readjustment of the Toll agreed under this Contract. Notwithstanding the foregoing, the REGULATOR shall always have supervisory powers related to the collection of the Tariff and the tariff regime of this Contract. The foregoing is also applicable to any observation or question that the GRANTOR may have regarding the readjustment of the Toll communicated in accordance with the preceding Clauses.

The incorrect application of the tariff formulas and/or readjustment of the Toll, provided for in this section, and/or, in general, the execution of an undue or excessive collection that is carried out to the detriment of the Users will lead to the application of penalties in accordance with Annex No. 10, without prejudice to the corresponding penalties and that the CONCESSIONAIRE deposit the amounts unduly charged in the Administration Trust.

11.11 The readjustments or increases of the Tolls and the consequent Tariffs other than those provided for in this Chapter must be agreed by the Parties, with the prior and binding opinion of the REGULATOR.

CHAPTER XII: ECONOMICAND FINANCIALREGIME

THE CO-FINANCING

- 12.1 The resources necessary for the Co-financing will be made effective through the GRANTOR, charged to the resources of its budget, in accordance with the following:
 - a) The resources required for the payment of the RPI will be included in the Public Sector Budget for the corresponding fiscal year. To this end, the GRANTOR undertakes to program each year the necessary budget items for the payment of the annual amount of the RPI, taking into account the provisions of the annual budget laws, as well as Legislative Decree No. 1440, Legislative Decree of the National Public Budget System.
 - b) The specific regulation on the RPI can be found in Annex No. 9.
 - c) The GRANTOR shall deposit in the Administration Trust the amount corresponding to the RPI, as well as the amount that must be added as VAT, in accordance with the provisions of Annex No. 9.
 - d) In the event that the GRANTOR has not complied with the payment of the Cofinancing in the Administration Trust for the payment of the RPI for more than six (6) consecutive months from the date on which the payment of such obligation becomes due, the CONCESSIONAIRE may request the Expiration of the Contract in accordance with the provisions of Clause 18.10.

OTHER INCOME

12.2 Additional revenues of the CONCESSIONAIRE shall be the Optional Revenues received as a consequence of the operation of Optional Services in accordance with Clauses 10.15 to 10.20 of the Contract.

In the case of Optional Services performed by an Affiliate, Subsidiary, Related Company or third parties not related to the CONCESSIONAIRE, the CONCESSIONAIRE's Optional Income will be considered to be those that the CONCESSIONAIRE receives or should receive for allowing access to the areas in which such services will be provided.

In any of the cases indicated above, the liability of the CONCESSIONAIRE for the provision of these services is not limited.

ECONOMIC AND FINANCIAL BALANCE

- 12.3 The Parties declare their commitment to maintain the economic and financial equilibrium of the Contract throughout the term of the Contract, for which they declare that this Contract is in a situation of economic and financial equilibrium in terms of rights, responsibilities and risks assigned to the Parties at the Closing Date.
- 12.4 This Contract stipulates a mechanism for the restoration of the economic-financial balance to which the CONCESSIONAIRE and the GRANTOR shall be entitled in the

event that the Concession is affected, exclusively and explicitly, due to changes in the Applicable Laws and Provisions, to the extent that such changes are directly related to economic and financial aspects linked to this Contract. and must have implications on the variation of revenues, costs or revenues and costs assumed by the CONCESSIONAIRE.

Any of the Parties that considers that the economic and financial balance of the Contract has been affected, may invoke its reinstatement, proposing in writing to the other Party, with a copy to the REGULATOR, and with sufficient support, the solutions and procedures to be followed for its restoration.

12.5 It will be up to the REGULATOR to ratify or deny the invocation of the rupture of the economic-financial equilibrium by one of the Parties, as well as to determine the amount of compensation that allows such equilibrium to be restored, if applicable.

The restoration of the economic-financial balance will be carried out on the basis of the income statement of the audited annual year of the CONCESSIONAIRE and any additional information provided by the Parties, where the variations in income and/or costs referred to above are supported. Notwithstanding the foregoing, the GRANTOR, the CONCESSIONAIRE and/or the REGULATOR may request further information to support the variations indicated. The GRANTOR and the REGULATOR will not assume any cost in case the information must be delivered by the CONCESSIONAIRE.

The REGULATOR shall establish the magnitude of the imbalance based on the difference between:

- a) The pre-tax result for the period obtained by the CONCESSIONAIRE affected by the economic imbalance; and
- b) The recalculation of the profit before tax for the same period, applying the corresponding income or cost values if the changes in the Applicable Laws and Provisions referred to in this Clause had not been generated.

To this end, the REGULATOR may request from the CONCESSIONAIRE and/or the GRANTOR the information it deems necessary on the revenues and/or costs that have been affected by the changes in the Applicable Laws and Provisions.

If the imbalance occurs in several periods, without having been restored, the difference between a) and b) will be found cumulatively.

Next, we will proceed to find the percentage of the imbalance through the following expression:

Percentage of imbalance = [Amount obtained in (a) – Amount obtained in (b)] [Amount obtained in (b)]

If the percentage of imbalance, in absolute value, exceeds 5.5% (five and five tenths of a percent), it will be restored.

If the imbalance affects the GRANTEE (b>a), the GRANTOR shall award compensation to the CONCESSIONAIRE equal to the difference between the amount obtained in (b) minus the amount obtained in (a). If the imbalance affects the GRANTOR (b<a), the CONCESSIONAIRE will grant a compensation to the GRANTOR equivalent to the difference of the amount obtained in (a) minus the amount obtained in (b).

If the amount obtained in b) is equal to zero (0), in order to restore the economic and financial equilibrium, only the difference between the amount obtained in (a) and the amount obtained in (b) will be taken into account, without it being necessary to calculate the percentage of imbalance mentioned above.

In any case, the Parties must agree on the compensation mechanism, which may be a monetary payment or a modification of the amount of the VPIP agreed in this Contract, as well as a different mechanism. If the Parties do not reach an agreement, the compensation will be a monetary payment, as indicated in the following Clause. In addition, if the Parties agree on a compensation mechanism other than a monetary payment, the contractual modification provisions set forth in this Contract and in the Applicable Laws and Provisions shall be observed.

12.6 In the event that the CONCESSIONAIRE invokes the restoration of the economicfinancial balance, it will be up to the REGULATOR to determine, within thirty (30) Working Days following receipt of such request, the admissibility in application of the provisions of the preceding paragraphs. If this is the case, the GRANTOR and the CONCESSIONAIRE must agree on the way to re-establish the economic-financial balance within a term of no more than thirty (30) Working Days or, failing that, the REGULATOR will define in an additional term of no more than thirty (30) Working Days, the monetary amount to be paid in favor of the CONCESSIONAIRE. applying for this purpose, the valuation criteria provided for in this Contract and will inform both parties of the result. In this case, the GRANTOR must make the corresponding budgetary forecasts in the budget of the following fiscal year, so that during the first quarter of said fiscal year it makes the corresponding payment. For any delay, a rate equal to the Legal Interest Rate plus two percent (2%) per annum will be recognized on the unpaid balance for the days of delay.

It is established that, in the event that the restoration of the economic-financial balance in favor of the CONCESSIONAIRE is due to a variation in its income, the monetary amounts that the GRANTOR pays to the CONCESSIONAIRE will be included in the calculation of the VPIPm. Likewise, in the event that the restoration of the economicfinancial balance in favor of the CONCESSIONAIRE is due to a variation in its revenues and costs, the monetary amounts that the GRANTOR pays to the CONCESSIONAIRE only for the variation in its income will be included in the calculation of the VPIPm.

In the event that the CONCESSIONAIRE invokes the restoration of the economicfinancial balance, it will be up to the REGULATOR to determine, within thirty (30) Working Days of receipt of the request, proceeding in application of the provisions of the preceding paragraphs. If this is the case, the GRANTOR and the CONCESSIONAIRE must agree on the way to re-establish the economic-financial balance within a term of not exceeding thirty (30) Working Days or, failing that, the REGULATOR will define in an additional term of no more than thirty (30) Working Days, the monetary amount to be paid in favor of the GRANTOR. applying for this purpose, the valuation criteria provided for in this Contract and shall inform both Parties of the result. In this case, the CONCESSIONAIRE must make the payment during the first quarter of the fiscal year following the one in which the economic and financial equilibrium was broken. For any delay, a rate equal to the Legal Interest Rate plus two percent (2%) per annum will be recognized on the unpaid balance for the days of delay.

12.7 Discrepancies regarding the result issued by the REGULATOR shall be resolved in accordance with the dispute resolution mechanisms regulated in Chapter XIX of this Contract, governing the other provisions of the preceding Clauses to the extent relevant.

The provisions of the preceding Clauses shall not be considered applicable for those changes produced as a result of provisions or Regulatory Standards issued by the REGULATOR that establish infractions or penalties or matters related to the above, which were contemplated in the Contract or that were as a consequence of acts, attributable facts or the result of the performance of the CONCESSIONAIRE.

In the same way, it is established that in no case does the rupture of the economicfinancial balance generate the suspension of the obligations of this Contract or the Expiration of the Concession.

TAX REGIME OF THE CONCESSION

12.8 The CONCESSIONAIRE shall be subject to the applicable national, regional and municipal tax legislation, and shall comply with all tax obligations corresponding to the exercise of its activity.

The CONCESSIONAIRE shall be obliged, under the terms indicated by the Applicable Laws and Provisions, to pay all taxes, contributions and fees that apply, among others, to the Concession Assets or to those that are built or incorporated into the Concession, provided that such taxes, contributions and fees are directly linked to the exercise of the activities under the Contract.

- 12.9 The CONCESSIONAIRE may request the signing of a legal stability agreement with the GRANTOR, which, in accordance with the applicable regulations, has the status of a contract law, in accordance with the provisions of Legislative Decrees No. 662 and No. 757 and the first and second paragraph of Article 19 of the Sole Ordered Text of the regulations with the status of Law that regulate the concession to the private sector of public infrastructure and public service works approved by Supreme Decree No. 059-96-PCM, subject to compliance with the procedures, requirements and substantial and formal conditions established in such standards and in the Applicable Laws and Provisions that complement or replace them.
- 12.10 Likewise, the CONCESSIONAIRE may access or request access, as the case may be, to the tax benefits to which it is entitled, provided that it complies with the procedures, requirements and substantial and formal conditions indicated in the Applicable Laws and Provisions.

VPIP & TARIFF

12.11 The provisions on VPIP and Tariff contemplated, respectively, in Chapters V and XI of this Contract, as well as in the applicable annexes, form an integral part of the economic-financial regime of the Concession.

CHAPTER XIII: GUARANTEES

GRANTOR'S GUARANTEE

13.1 In accordance with the provisions of subparagraph m) of Clause 3.4,the GRANTOR grants to the CONCESSIONAIRE the guarantee of the State of the Republic of Peru in support of the obligations, declarations and guarantees of the GRANTOR set for in the Concession Contract, which does not constitute a financial guarantee.

GUARANTEES IN FAVOUR OF THE GRANTOR

13.2 The Guarantee of Faithful Fulfillment that the CONCESSIONAIRE must provide in favor of the GRANTOR provided for in this Chapter must be delivered to the GRANTOR and will be letters of guarantee with the characteristics of solidary, unconditional, irrevocable, without benefit of exemption, division and automatic realization; They may be issued and renewed for annual periods as long as their renewal is made no less than thirty (30) Calendar Days before the date of their expiration, in order to keep them in force in accordance with the provisions of this Contract.

If the Guarantee of Faithful Fulfillment are not renewed and delivered to the GRANTOR by the CONCESSIONAIRE no later than thirty (30) Calendar Days prior to their expiration as set forth in the preceding paragraph, the GRANTOR shall proceed to their full execution. Notwithstanding the provisions of subparagraph r) of Clause 18.5, the amount of the guarantee shall be retained by the GRANTOR as security until the CONCESSIONAIRE complies with the renewal of the letter of guarantee. Upon the renewal of the letter of guarantee, the GRANTOR shall return to the CONCESSIONAIRE the amount of the guarantee, without interest, and after deducting any applicable expenses.

The document containing each guarantee must be returned to the CONCESSIONAIRE upon expiration, provided that the document stating its renewal has been previously delivered to the GRANTOR. Likewise, it is established that the Guarantee of Faithful Fulfillment must be renewed even when the dispute resolution mechanisms established in Chapter XIX of this Contract have been initiated.

The amount of the Guarantee of Faithful Fulfillment of the Contract and the Guarantee of Faithful Fulfillment of the Construction of Works does not constitute a limit to the penalties or indemnities that may correspond to non-compliance by the CONCESSIONAIRE.

Likewise, without prejudice to the provisions of the preceding paragraphs, the penalties provided for in Annex No. 10 of this Contract shall apply.

13.3 The Guarantee of Faithful Fulfillment must be issued by one of the banking companies, insurance companies, first-class foreign banks, multilateral credit institutions of which the Republic of Peru is a member, or international financial institutions authorized in accordance with the provisions of Annex No. 6 of this Contract. In the event that such guarantees are issued by a first-class foreign bank or international financial institution authorized in accordance with the provisions of Annex No. 6 of this Contract, or a subsidiary or branch thereof, they must necessarily be confirmed by a banking company of the national financial system authorized in accordance with Annex No.6 of this Contract.

Alternatively, with the prior approval of the GRANTOR, a stand-by letter of credit may be accepted, which may be the formality used by the bank carrying out the operation, provided that it complies with the requirements established in the models set out in Annex No. 7 and is issued by a first-class foreign bank and confirmed by a banking company in the national financial system. both authorized in accordance with Annex No. 6 to this Contract.

GUARANTEE OF FAITHFUL FULFILLMENT OF THE CONCESSION CONTRACT

- 13.4 In order to ensure the correct and timely fulfillment of each and every one of the obligations of the CONCESSIONAIRE derived from the execution of the Contract and the Applicable Laws and Provisions, including, without limitation, the design, financing, construction and Operation of the Project, as well as the payment of outstanding penalties, the CONCESSIONAIRE shall deliver to the GRANTOR, in accordance with the format included as Appendix 1 of Annex No. 7 of this Contract, the Guarantee of Faithful Fulfillment of the Concession Contract in favor of the GRANTOR for an amount equivalent to US\$ 30,000,000.00 (thirty million and 00/100 US Dollars), which shall be increased in accordance with the following:
 - (i) From the beginning of the Exploitation Stage of Section 1, it must be increased by an amount equivalent to US\$ 850,000.00 (eight hundred and fifty thousand and 00/100 US Dollars). This guarantee must be delivered no later than the fifteenth Working Day prior to the start of the Exploitation Stage of Section 1.
 - (ii) From the beginning of the Operation Stage of Section 3, it must be increased by an amount equivalent to US\$ 1,750,000.00 (one million seven hundred and fifty thousand and 00/100 US dollars). This guarantee must be delivered no later than the fifteenth Working Day prior to the start of the Operation Stage of Section 3.
 - (iii) From the beginning of the Operation Stage of Section 2, it must be increased by an amount equivalent to US\$ 3,400,000.00 (three million four hundred thousand and 00/100 US dollars). This guarantee must be delivered no later than the fifteenth Working Day prior to the start of the Operation Stage of Section 2.

The CONCESSIONAIRE shall maintain the Guarantee of Faithful Fulfillment of the Concession Contract in force for the entire term of the Concession and for up to two (2) additional years. If the term of the Concession is extended, the Guarantee of Faithful Fulfillment of the Concession Contract must be renewed annually in such a way that it remains in force for up to two (2) years after the term of the extension.

GUARANTEES OF FAITHFUL FULFILLMENT OF CONSTRUCTION WORKS

13.5 To guarantee the correct execution of the Works of each Section in accordance with the Contract, its annexes, the Bases, the approved EDIs and Environmental Management Instruments and the Applicable Laws and Provisions, as well as to guarantee the payment of outstanding penalties and other sanctions related to the execution of Works, the CONCESSIONAIRE shall deliver to the GRANTOR, in accordance with the format included as Appendix 2 of Annex No. 7 of this Contract, a Guarantee of Faithful Fulfillment of the Construction of Works in favor of the GRANTOR for each Section, the amount of which shall amount to ten percent (10%) of the EDI budget approved (excluding VAT) for the respective Section. Each Guarantee of Faithful Fulfillment of Construction of

Works will guarantee the correct execution of Works of the Section to which it corresponds.

These guarantees must be delivered no later than the signing of the Work Initiation Act of the Section to which each guarantee corresponds, and must be renewed annually for up to two (2) years after the signing of the Works Acceptance Certificate of the Section corresponding. The Guarantee of Faithful Fulfillment of Construction of Works must be returned by the GRANTOR to the CONCESSIONAIRE on the date that ends the aforementioned term, as applicable to each Section. Likewise, the execution of the Works in the Execution of Works Area on Local / Auxiliary / Side Roads of the corresponding Section will cease to be guaranteed by these guarantees on the date of delivery of said Works by the CONCESSIONAIRE in favor of the GRANTOR in accordance with the provisions of the Contract.

ENFORCEMENT OFGUARANTEES OF FAITHFUL FULFILLMENT

- 13.6 The Guarantee of Faithful Fulfillment may be executed by the GRANTOR in whole or in part in the cases established in this Contract and/or when the CONCESSIONAIRE has not paid the penalties or corrected the breaches, as applicable, of the obligations guaranteed by such guarantees within the terms granted for such effects. The execution of the Guarantee of Faithful Fulfillment will be compensatory, without prejudice to the payment of the corresponding penalties that are guaranteed by said guarantees.
- 13.7 In the event that the GRANTOR executes all or part of the Guarantee of Faithful Fulfillment, it must indicate to the corresponding entity the account in which it must deposit the executed amounts.
- 13.8 In the event of total or partial execution of the guarantees mentioned in this Chapter, the CONCESSIONAIRE shall return or cause such guarantees to be returned to the amounts established in this Chapter and under the same conditions, within a term of thirty (30) Calendar Days counted from the date on which the total or partial execution of the same was carried out. In the event that such term expires without the CONCESSIONAIRE complying with the total refund, the GRANTOR may invoke the Expiration of the Concession due to non-compliance by the CONCESSIONAIRE, in accordance with subparagraph r) of Clause 18.5 of this Contract.
- 13.9 Similarly, for the execution of the Guarantee of Faithful Fulfillment as a result of the application of penalties provided for in Annex No. 10, the provisions of this Chapter XIII shall apply.
- 13.10 In the event that any of the Guarantee of Faithful Fulfillment is executed, the value of the reissuance of such guarantees, or the value of any other expenses, shall be borne by the CONCESSIONAIRE.

CHAPTER XIV: INSURANCE REGIME AND CONCESSIONAIRELIABILITY

14.1 During the term of this Contract, the CONCESSIONAIRE undertakes to contract or cause to be contracted and to maintain in force the insurances detailed in this Chapter; establishing the GRANTOR, or whoever it designates, as an additional insured in the respective policies contracted, in order to allocate the proceeds of the insurance indemnity to the restitution, replacement or repair of the damaged assets, where appropriate.

The Parties undertake to allocate one hundred percent (100%) of the amounts resulting from the compensation for any loss, to the repair of the damages caused by such incident, to the replacement of the damaged assets and/or to the reconstruction of the Works, as appropriate.

Likewise, the CONCESSIONAIRE assumes the obligation to include in the insurance policies provided for in this Chapter, if applicable, an obligation of the corresponding insurance or reinsurance company to deposit the cash flows derived from the insurance policy in the Administration Trust in the event that restitution is materially impossible. replacement or repair of the insured assets, which will be used in accordance with Clause 18.19, and the insurance or reinsurance company is not obliged to pay or deposit any sum to the CONCESSIONAIRE.

14.2 The GRANTOR shall not assume any obligation or liability to pay to any insurance or reinsurance company with respect to the insurance policies required under the Concession Contract.

INSURANCE APPROVAL

- 14.3 The CONCESSIONAIRE must have the insurance policies required by this Chapter, including but not limited to, being considered, in any case, as minimum requirements that may be extended and improved by the CONCESSIONAIRE and whose final offer has been duly approved by the REGULATOR, as established in this Chapter.
- 14.4 The policy proposals, including the proforma policies and the respective risk study(s), must be submitted to the REGULATOR, with a copy to the GRANTOR, for approval, in accordance with the provisions of the following Clauses. Failure to submit insurance policies will result in the application of a penalty as set forth in Annex No. 10 of this Contract.
- 14.5 In no case will the approval of insurance policies by the REGULATOR imply a transfer and/or shared responsibility of the risk that the CONCESSIONAIRE has with respect to their contracting.
- 14.6 The policy proposals for the insurances indicated in Clauses 14.9 to 14.12 must be submitted by the CONCESSIONAIRE to the REGULATOR, with a copy to the GRANTOR, within forty (40) Calendar Days prior to the start of the coverage of each insurance indicated in said Clauses, as applicable.
- 14.7 For all policy proposals, the REGULATOR has a term of twenty (20) Calendar Days to issue its approval or make observations from its presentation by the CONCESSIONAIRE. Such situation is also applicable to cases in which the CONCESSIONAIRE must present the list of insurance policies, in accordance with the provisions of Clause 14.17. If any

observation is made by the REGULATOR, the CONCESSIONAIRE will have ten (10) Calendar Days to correct it. The REGULATOR will have a term of fifteen (15) final Calendar Days to issue its approval from the submission of the correction of observations by the CONCESSIONAIRE.

If no pronouncement is made by the REGULATOR within the aforementioned terms, the policy proposals shall be deemed approved, provided that, three (3) Working Days prior to the end date of the term that the REGULATOR has for its pronouncement, the CONCESSIONAIRE sends the REGULATOR a written communication on the deadline for its pronouncement. In the event that the CONCESSIONAIRE does not send such communication and the REGULATOR does not pronounce itself, its pronouncement will be understood to be unfavorable. In the case of automatic approval, if during the term of the policy it is verified that any of the conditions required for them are not met, the CONCESSIONAIRE must adapt it to what is indicated by the GRANTOR or the REGULATOR within a maximum term of thirty (30) Calendar Days from the communication of the request for adaptation, without prejudice to the application of the penalties that may be pertinent.

The final policies must be contracted and delivered by the CONCESSIONAIRE to the REGULATOR, with a copy to the GRANTOR, within ten (10) Calendar Days of the approval of the respective policy proposal or of its approval in accordance with the previous paragraph.

Likewise, without prejudice to the provisions of the preceding paragraphs, in the event of non-compliance with the obligations of the CONCESSIONAIRE, the penalties provided for in Annex No. 10 of this Contract shall be applicable.

INSURANCE POLICIES

14.8 During the term of the Contract, the CONCESSIONAIRE will take and maintain in force, or cause to be taken and maintained in force, at least the insurance policies detailed in the following clauses, which will have the purpose of covering the losses that occur related to the execution of the Works and the Operation of the same. The policies referred to must comply with the internationally recognized coverage standards in the insurance market.

In no event shall there be periods of time in which the Concession Assets are not insured under this Contract, including during the transition between policies or policy renewals.

In the event that any loss exceeds the sum insured, the CONCESSIONAIRE will be responsible for the uncovered balance of any of the insurances contracted, relieving the GRANTOR of liability and holding the GRANTOR harmless at all times.

In the event of non-compliance with the CONCESSIONAIRE's obligations, the penalties provided for in Annex No. 10 of this Contract shall apply.

14.9 Liability Insurance

The CONCESSIONAIRE is obliged to contract, or cause to be contracted, insurance policies for Civil Liability (CR) that will cover any damage, loss or injury that may occur to the property of third assets or to third parties due to any act or omission of the CONCESSIONAIRE, its contractors, its subcontractors, its officers and/or dependents, in

connection with the execution of this Contract. which shall be in force from the Possession Taking in Clause 6.23 until the termination of this Contract.

Such insurance must include the GRANTOR as an additional insured.

These insurances must have at least the following coverage:

- CR for activities related to the Contract (CR Contractual).
- Payment for Construction
- CR derived from the operation and maintenance of the Concession Assets.
- RC per Cargo.
- CR due to Leakage, Pollution or Sudden, Unforeseen and Accidental Contamination.
- Employers' Liability, including work at height and/or underground. Employees and workers of subcontractors must also be included within this insurance or under a separate policy.
- RC Cruzada.
- RC of Motor Vehicles and Mobile Equipment, covering all owned, leased or leased vehicles used in connection with Road Construction and Maintenance.

The CONCESSIONAIRE may take out separate policies for the Construction Stage and the Operation Stage, in which case each one will independently cover the civil liability for Construction and the civil liability derived from the Operation.

14.10 All-Risk Insurance for Construction Property

For each component of Works, the CONCESSIONAIRE must comply with contracting the aforementioned policy, covering the risk of construction and assembly of civil and electromechanical works and all assets that may suffer material damage of any kind and description, as well as equipment and machinery for Construction, in any place and condition in which they are located. including own and/or third-party premises, permanent and/or temporary camps, weathering or underground, or in aquatic areas.

The risks covered by this policy should include the following:

- Basic Coverage (A).
- Coverage (B) that covers damage due to earthquake, tremor, tsunami.
- Coverage (C) covering rain, flood and landslides;
- Coverage (D) which covers material damage until receipt of the Work;
- Coverage (G) Debris Removal.
- Coverage for political risks such as strikes, civil commotions, malicious damage, vandalism and terrorism.
- Extensive maintenance coverage, other adjacent properties, weakening of foundations, masses and subsoils.
- Coverage of design errors in approved EDIs and the hidden defects associated with them.

Additionally, "Civil Liability E and F" coverage shall be included, which shall cover direct, indirect and consequential damages during the entire corresponding Construction Stage.

The insured value shall not be less than the maximum probable loss resulting from the risk study set out in Clause 14.23 of this Contract.

The validity of this policy will be from the beginning of the Construction of the Work of each Section and until its culmination with the issuance of all the Works Acceptance Certificate of each Section, except for coverage (D) which begins when the Works are completed and remains in force during the period of receipt of the Work.

14.11 All Risk Insurance for Completed Civil Works or All Risk Property Insurance.

The CONCESSIONAIRE must comply with contracting the aforementioned policy, covering the patrimonial risk of the completed Works and in operation of all risks, which must be in force from the beginning of the Operation of the corresponding Section until the end of the term of the Concession.

The coverage must cover all completed works (civil works and equipment, including all installations, equipment and stocks of any kind and description, whether terrestrial or underground), for all material damage that may be suffered by any property of any kind and description, which will be consistent with the actual budget executed, with the exception of preliminary or preparatory works that will not form part of the insured value, such as building demolition expenses, pavement removal, cleaning and debris removal, among others.

The risks covered by this policy should include the following:

- Coverage for risks associated with the physical and/or structural integrity of the infrastructure.
- Coverage for political risks such as strikes, civil commotions, malicious damage, vandalism and terrorism.
- Coverage for natural hazards such as earthquakes, tidal waves, floods, landslides and heavy rains;
- Coverage of risks for environmental damage.
- Coverage for risks of machinery breakdown, electronic equipment, contractor all-risk, misfortune, mobile and/or portable equipment.
- Automatic coverage for new acquisitions, own and/or third-party vehicles within the insured properties, risks due to impact of Vessel, aircraft and vehicles.
- Coverage for land subsidence, landslides and earthworks.
- Coverage for design errors and hidden defects that may manifest themselves in the infrastructure.
- Coverage for direct loss risks from any type of loss, including demolition expenses, cleanup, debris removal, extra expenses and extraordinary expenses.

The CONCESSIONAIRE shall declare to the insurance company the total replacement value of the Works referred to in this Clause, including all its facilities, equipment and stocks, as the total value of the risk exposure.

The insured value, at all times, must include the replacement value to new Clause. Such sum insured shall be at least the maximum probable loss resulting from the risk analysis set out in Clause 14.23 of the Contract.

The GRANTOR, following the opinion of the REGULATOR, will suspend the obligation of the CONCESSIONAIRE to contract and maintain in force the policy that covers damages to the finished Work only with respect to acts of terrorism and/or hidden defects, if this type of insurance is not offered and/or ceases to be offered in the national and

international market. To prove this, the CONCESSIONAIRE must submit a report prepared by a specialized company of recognized international prestige, other than the CONCESSIONAIRE's broker, broker or insurance advisor. The suspension of this obligation will operate from the moment that the alternative treatment that must be agreed by the CONCESSIONAIRE and the GRANTOR in writing comes into force to regulate the event that the finished Work suffers damage due to acts of terrorism and/or hidden defects. If, during the suspension referred to in this paragraph, the national or international market again offers policies to cover damages caused by acts of terrorism, the CONCESSIONAIRE must comply with informing the GRANTOR and the REGULATOR of such situation, reactivating the obligation of the CONCESSIONAIRE to contract and maintain in force the policy that covers this type of damage. which shall become effective, and the CONCESSIONAIRE shall take out such policy within twenty (20) Calendar Days of the written request of the GRANTOR. This obligation will come into force at the time the CONCESSIONAIRE takes out the policy to cover damage to the completed Work due to acts of terrorism and/or hidden defects; or, after the expiration of the term of twenty (20) Calendar Days referred to, whichever occurs first. Simultaneously with the entry into force of this obligation, the alternative treatment agreed upon by the Parties shall be null and void, and there shall again be the possibility of suspending it in the same terms referred to in this paragraph, if the event provided for herein occurs again.

14.12 Occupational Risk Insurance

The CONCESSIONAIRE, as an employer, is obliged to take out a supplementary insurance policy for risky work, as regulated by Law No. 26790 and its regulations and any amending standards, as well as the other labor insurance policies provided for by the Applicable Laws and Provisions.

Likewise, the CONCESSIONAIRE must verify that the special service companies, contractor agents or subcontractors with which the CONCESSIONAIRE is going to employ or contract, also comply with the standards indicated in the previous paragraph or, failing that, must contract said insurance directly on their behalf.

The amounts insured, the protections contemplated and the validity of each labor insurance policy must correspond to the requirements contained in the Applicable Laws and Provisions.

14.13 Other Policies

Without prejudice to the mandatory policies indicated in this Clause, the CONCESSIONAIRE may, in accordance with its own strategic vision of risk management and distribution, either to comply with the provisions of the legal system of the Republic of Peru or for any other duly justified cause, take any other insurance policy at its own expense. communicating this fact to the GRANTOR and REGULATOR.

The amount to be insured in each of the aforementioned policies will be determined by the CONCESSIONAIRE at a level sufficient to cover damages according to each type of policy. Such sum insured shall be at least the maximum probable loss resulting from the risk analysis set out in Clause 14.23.

In the event that any loss exceeds the sum insured, the CONCESSIONAIRE will be responsible for the balance not covered by the insurance contracted, relieving the

GRANTOR of liability, except as provided in Clause 14.24.

COMMUNICATION

14.14 The policies issued in accordance with the provisions of the Contract must contain a stipulation that obliges the respective insurance company to notify in writing the REGULATOR, the GRANTOR and, if applicable, the Permitted Creditors, of any failure to pay premiums incurred by the CONCESSIONAIRE and of any circumstance affecting the term, validity or effectiveness of the policies, no less than twenty (20) Working Days prior to the date on which the non-compliance of the CONCESSIONAIRE may determine the expiration or loss of validity of the policy and/or the suspension of coverage in whole or in part. The notification obligation shall also apply in the event of cessation, withdrawal, cancellation or non-renewal of any insurance that the CONCESSIONAIRE is required to maintain under the Contract.

The respective policy must also establish that the expiration or loss of validity of the policy will only occur if the insurance company has previously complied with the obligation referred to in the preceding paragraph.

POLICY RENEWAL

14.15 The CONCESSIONAIRE undertakes to renew or cause the renewal of the insurance policies provided for in this Contract, for which it must notify the REGULATOR, with a copy to the GRANTOR, no later than forty (40) Calendar Days before the expiration of the corresponding policies, of the dates on which it will carry out the renewals of the same, sending them so that the REGULATOR can review and give its opinion regarding the conditions under which they will be issued and whose agreement shall be made in accordance with the provisions of Clause 14.7.

Once the renewal of the insurance policy has been approved by the REGULATOR, a copy of the aforementioned insurance policy must be sent to the REGULATOR, with a copy to the GRANTOR, within a maximum term of ten (10) Calendar Days.

- 14.16 When the renewals of the insurance policies do not imply a modification of their terms and conditions, it will only be necessary to inform the REGULATOR, with a copy to the GRANTOR, ten (10) Calendar Days prior to the expiration of the corresponding policies. In this case, the CONCESSIONAIRE must send to the REGULATOR, with a copy to the GRANTOR, a copy of the renewed policy together with the previous communication, for the respective subsequent control.
- 14.17 Notwithstanding the foregoing, the CONCESSIONAIRE undertakes to submit to the REGULATOR, with a copy to the GRANTOR, annually, no later than January 30 of each year, and during the term of the Concession, a list of the insurance policies to be taken out and/or maintained during each Calendar Year, indicating at least the coverage, the validity of each, the insurance companies, the reinsurance companies, the claims made during the preceding Calendar Year, and a certificate issued by an authorized representative of the insurance company indicating that the CONCESSIONAIRE has complied during the preceding Calendar Year with the terms of this Clause.

Notwithstanding the foregoing, during the course of the Contract and whenever the GRANTOR and/or the REGULATOR so requires, the CONCESSIONAIRE must submit

reliable proof to the GRANTOR, with a copy to the REGULATOR, that all insurance policies are still in force and up to date with their payments.

In the event of non-compliance by the CONCESSIONAIRE, the penalties provided for in Annex No.10 of this Contract shall apply.

GRANTOR'S RIGHT TO INSURE

- 14.18 In the event of non-compliance with the CONCESSIONAIRE's obligation to maintain the policies indicated in the preceding Clauses or the CONCESSIONAIRE's obligation provided for in the event contemplated in Clause 14.3, the GRANTOR shall be entitled, proceeding in a reasonable manner, to acquire such insurance itself, in which case all amounts paid by the GRANTOR for this concept must be reimbursed by the CONCESSIONAIRE to the GRANTOR. with a penalty fee of ten percent (10%) within thirty (30) Calendar Days following the date on which the GRANTOR has formally communicated the exercise of the power included in this Clause. It should be noted that this penalty will be in addition to any other penalty applicable to the CONCESSIONAIRE for failure to comply with these obligations.
- 14.19 In the event of non-compliance with the reimbursement obligation, as well as the aforementioned surcharge, the GRANTOR shall immediately execute the Guarantee of Faithful Fulfillment with the Concession Contract, without prejudice to any actions that may arise from the aforementioned breach, including the termination of the Contract in accordance with the provisions of Clause 18.5.

CONCESSIONAIRE RESPONSIBILITY

14.20 The contracting of insurance policies by the CONCESSIONAIRE does not reduce the liability of the latter, which is attributable to causes originating after the Possession Taking carried out progressively through the partial delivery of assets; therefore, the CONCESSIONAIRE continues to be bound by the obligations set forth in this Contract.

The GRANTOR shall not be subject to any liability for any loss, damage, claim or liability arising out of or based on the use, operation, condition or condition of the Works in the Concession Area from (and including) the date on which the Possession Taking occurs effected in a progressive manner by partial delivery of assets and up to (and including) the date on which the Expiration of the Concession operates as set forth in Chapter XVIII of the Contract, the CONCESSIONAIRE shall indemnify, defend and hold harmless the GRANTOR, except when such events (i) are caused by gross negligence or wilful misconduct of the GRANTOR (or any employee, agent, or representative thereof); or, (ii) that are caused solely and directly by any unlawful regulatory action taken by the REGULATOR or any other Governmental Authority.

Likewise, and notwithstanding the provisions of this Clause and the obligations set forth in this Chapter, the CONCESSIONAIRE shall pay all amounts owed to any entity and/or natural or legal person, including, but not limited to, the GRANTOR, up to the limit of its corresponding liability, in accordance with the provisions of this Contract and the Applicable Laws and Provisions. This includes that in the event of a loss due to intent or fault of the CONCESSIONAIRE, and which is not covered by the insurance policies contracted, the CONCESSIONAIRE will be solely responsible for any possible damage that may be caused. The CONCESSIONAIRE will assume the costs of any and all deductibles and/or coinsurance that you have taken out in the required insurance policies.

OTHER RESPONSIBILITIES AND OBLIGATIONS OF THE CONCESSIONAIRE

14.21 The CONCESSIONAIRE shall contract or cause to be contracted all insurance policies required by virtue of this Contract with insurance and reinsurance companies that have a risk rating of "A" or higher at the time of contracting or renewing the insurance policy, according to information from the Superintendency of Banking, Insurance and Private Pension Fund Administrators and/or a risk rating agency operating in Peru and/or abroad. The international reinsurers covering the risks of the insurer contracted by the CONCESSIONAIRE shall have a minimum rating of "A-," granted by an international risk rating company that rates the Republic of Peru, at the time of contracting and successive renewals. Insurance policies and insurance contracts must be written in Spanish or must be accompanied by a translation into that language, with Spanish prevailing at all times.

Likewise, the insurance and reinsurance companies that provide the policies provided for in this Contract must be authorized, registered and competent, in accordance with the regulations applicable to each one and, if applicable, comply with the inspection, surveillance and control regulations of the Superintendency of Banking, Insurance and Private Pension Fund Administrators.

The certificates of insurance for each of the above policies shall contain the following:

- a) A statement in which the GRANTOR appears as the insured and additional beneficiary, to the extent permitted by the policy.
- b) Contain a statement that the insurance company has waived subrogation rights with respect to the GRANTOR.
- c) A statement by the insurance company agreeing to notify the REGULATOR, the GRANTOR and, if applicable, the Permitted Creditors in writing of any failure to pay premiums incurred by the CONCESSIONAIRE and of any circumstance affecting the validity, validity or effectiveness of the policy, in accordance with Clause 14.14.
- d) A declaration by the insurance company according to which, if applicable, it has assumed the obligation to deposit the cash flows derived from the respective insurance policy in the Administration Trust in the event that it is materially impossible to return, replace or repair the damaged assets, and the insurance or reinsurance company is not obliged to pay or deposit any sum to the CONCESSIONAIRE.

In the event of a claim, the CONCESSIONAIRE must report it without delay to the insurance company and at the same time notify the GRANTOR and the REGULATOR. If the insurance coverage is cancelled due to lack of timely notification of a claim, the liability incurred will be borne by the CONCESSIONAIRE and this releases the GRANTOR from all liability, with respect to the equivalent of the amount that should have been compensated to the insured party, if the loss had been notified in a timely manner.

OBLIGATION OF THE GRANTOR

14.22 In the event that the GRANTOR receives any amount of reimbursement for damages caused to the road infrastructure in compliance with the terms agreed in the policies referred to in this Chapter, they will be used solely and exclusively for the CONCESSIONAIRE to repair such damages, so that it can continue to comply with its obligations under this Contract. For this purpose, the GRANTOR must deliver the

amounts received to the CONCESSIONAIRE within a term that shall not exceed thirty (30) Working Days.

RISK STUDY

14.23 The CONCESSIONAIRE will hire the services of a specialized company of recognized international prestige, other than the broker, broker or insurance advisor of the CONCESSIONAIRE, to carry out the risk study, in order to determine the maximum probable loss of all the assets to be insured, which may be caused as a result of the losses or events that occur and that will be covered by the policies mentioned in Clauses 14.9 to 14.11. The policies set forth in Section 14.12 and their contents shall be determined as set forth in the Applicable Laws and Regulations. The maximum likely loss will be the minimum sum insured amount for each required policy.

On the Closing Date, the CONCESSIONAIRE shall submit to the REGULATOR a list of not less than three (3) specialized companies. The REGULATOR has a term of five (5) Working Days to choose one of the offers specialized companies and communicate its decision to the CONCESSIONAIRE. If this choice is not made, within the aforementioned term, the CONCESSIONAIRE may contract the company of its choice.

The CONCESSIONAIRE shall submit to the REGULATOR, with a copy to the GRANTOR, the risk study corresponding to the insurances referred to in Clauses 14.9 to 14.12 at least fifty (50) Calendar Days prior to the commencement of the coverage of each insurance as indicated in the aforementioned Clauses.

After the acceptance of the Works of any Section, the CONCESSIONAIRE must deliver to the GRANTOR, with a copy to the REGULATOR, within the first month of each Calendar Year, a risk study updated as of December 31 of the previous Calendar Year, including the assets that have acquired the status of Concession Assets.

In the event of non-compliance with the CONCESSIONAIRE's obligations, the penalties provided for in Annex No. 10 of this Contract shall apply.

EVENTS NOT COVERED:

14.24 The CONCESSIONAIRE shall be liable to the GRANTOR or to the corresponding third parties for losses, damages and liabilities not covered by the insurance policies mentioned in this Chapter, except only in cases of uninsurable events of force majeure and/or fortuitous event in the national or international market and/or those cases of force majeure and/or fortuitous event that have an uninsurable part in the national and international market. international (and only in those parts that are not insurable). For the purposes of the above, once the corresponding event has occurred, the Parties must agree on the losses, damages and liabilities that must be assumed by each one. If they fail to reach an agreement within sixty (60) calendar days of the request of any of them in writing, they may submit the dispute to an insurance adjuster in accordance with the procedure set forth in Clause 7.13.

CHAPTER XV: SOCIO-ENVIRONMENTAL CONSIDERATIONS

SOCIO-ENVIRONMENTAL OBLIGATIONS OF THE CONCESSIONAIRE

15.1 The CONCESSIONAIRE declares to be aware of and undertakes to comply with current national legislation, international regulations and those established in this Contract, insofar as they are applicable to the activities regulated by this Contract, including, but not limited to, Law No. 28611, General Law on the Environment; Law No. 27446, Law on the National Environmental Impact Assessment System and its Regulations, approved by Supreme Decree No. 019-2009-MINAM; the Environmental Protection Regulations for the Transport Sector, approved by Supreme Decree No. 004-2017-MTC, the regulations that develop them; the relevant sectoral legislation and the other Applicable Laws and Provisions; as well as the obligations arising from the Environmental Management Instruments provisions and/or mandates approved by the Relevant Governmental Authority in each case.

During the period of execution of this Concession Contract, the CONCESSIONAIRE undertakes to comply with current environmental regulations as a fundamental variable of its management, implementing all environmental obligations and commitments, all necessary plans and measures, derived from the Applicable Laws and Provisions and/or the Environmental Management Instrument of each of the approved Sections, as well as with the mandates and provisions issued by the Relevant Environmental Authority, which ensure an appropriate environmental management of the Project and the mechanisms that allow adequate communication with the community.

To this end, it must be governed by the Environmental Management Instruments approved by the Relevant Environmental Authority, as well as the mandates and provisions established by it, within the framework of current environmental regulations. The environmental certification granted by the Relevant Environmental Authority does not exempt the CONCESSIONAIRE from liability with respect to compliance with current environmental regulations, and non-compliance will be sanctioned in accordance with the Applicable Laws and Provisions.

The implementation of the conditions and/or measures set forth in the approved Environmental Management Instruments will be the exclusive responsibility and cost of the CONCESSIONAIRE, as long as they establish obligations under its responsibility, and must comply with all current environmental regulations.

In this regard, the CONCESSIONAIRE, at its own expense, undertakes to take corrective and/or compensatory measures in addition to implementing the corresponding environmental improvements, previously approved by the Relevant Environmental Authority, as appropriate, to prevent the development of its construction, Exploitation and/or conservation activities from generating environmental risks that exceed the permissible levels and/or standards of pollution or deterioration of the environment and/or direct impact on the population of the Project's area of influence, as determined in the Environmental Management Instruments approved by the Relevant Environmental Authority and in the Applicable Laws and Provisions.

15.2 In order to minimize the Significant Negative Environmental Impacts that may occur to the environment in the area of influence of the Project, the CONCESSIONAIRE undertakes to comply, during the period of execution of this Contract, with the

specifications and environmental measures derived from the Environmental Management Instrument of each of the Sections that will be approved by the Relevant Environmental Authority and their corresponding backgrounds, mandates and/or provisions issued by the aforementioned authority, approved terms of reference and other related instruments.

The CONCESSIONAIRE shall assume exclusive responsibility to third parties for the Significant Negative Environmental Impacts not identified in the approved Environmental Management Instrument, during the execution of the obligations that correspond to it under this Concession Contract, provided that they derive from any action and/or omission of the CONCESSIONAIRE.

- 15.3 At the end of the Concession Contract as long as the Applicable Laws and Provisions so establish, the Environmental Management Instruments will be assigned to the GRANTOR or the new concessionaire, if applicable. The GRANTOR, or the new concessionaire (assignees of the Environmental Management Instruments, as the case may be), together with the CONCESSIONAIRE, shall be responsible for the communication to the Relevant Environmental Authority regarding the assignment of the respective Environmental Management Instrument. The assignee shall be obliged to execute the obligations set forth in each of the corresponding Environmental Management Instruments.
- 15.4 The CONCESSIONAIRE shall be responsible for the prevention, mitigation, compensation and/or rehabilitation of Significant Negative Environmental Impacts, including environmental damages, that are generated in the Concession Area and/or the Areas of Direct and Indirect Influence of the Project set forth in the Environmental Management Instrument(s) of the Project Sections, according to the obligations specified for such areas, from the Possession Taking, and until: (i) the date on which the Execution of Works Area in Local / Auxiliary / Side Roads, for the specific case of these areas; or (ii) the date on which the Expiration of the Concession Operates, for the rest of the Concession Area as set forth in Chapter XVIII of the Contract, as applicable.

In the case of areas outside the Project's Area of Direct Influence, the CONCESSIONAIRE will be responsible for Significant Negative Environmental Impacts, including environmental damages, generated as a direct or indirect consequence of acts and/or omissions attributable to the CONCESSIONAIRE since the Possession Taking related to the Project activities contemplated in this Contract. In order to remedy these impacts, the CONCESSIONAIRE shall adopt the measures provided for in the respective Environmental Management Instruments, their corresponding backgrounds, approved terms of reference, mandates and provisions approved by the Relevant Environmental Authority and other related instruments.

Notwithstanding the foregoing, prior to the start date of the execution of the Project Works, the CONCESSIONAIRE must provide training to its workers on topics related to the type of activities to be carried out and the environmental measures to be implemented within the framework of the Environmental Management Instrument approved for each Section by the Relevant Environmental Authority. It must also implement an Office of Social Affairs and Community Relations for the Project, in order to establish an adequate social relationship with the population.

ENVIRONMENTAL LIABILITIES

15.5 In accordance with the provisions of the Applicable Laws and Provisions, the GRANTOR will assume and pay directly the costs and expenses related to (i) the remediation of the degraded land to its initial topographic conditions and the foundation of the embankments for the execution of the Project, with respect to any Environmental Liabilities existing prior to the Closing Date and that are located within and/or adjacent to the Right of Way, provided that its remediation is necessary for the performance of the Works of this Contract; and (ii) the release of existing properties and Interferences in the area of the Environmental Liabilities described above, including the costs and expenses of the respective technical and environmental studies and the processing of the corresponding Operating Permit.

The CONCESSIONAIRE will carry out the identification, characterization and evaluation of the Environmental Liabilities of the Project, establishing measures, costs and execution schedule for the management of said liabilities, through the corresponding Environmental Management Instrument, taking into account current environmental regulations.

Prior to the Closing Date, the CONCESSIONAIRE will not be responsible for Environmental Liabilities, environmental pollution and/or Significant Negative Environmental Impacts that may have been generated outside or within the Project's Area of Direct Influence, as well as in other related areas used for the installation, use and/or operation of warehouses, offices, workshops, machinery yard, among others.

The GRANTOR may instruct the CONCESSIONAIRE to carry out the activities of conditioning, remediation, sanitation, environmental cleaning and/or mitigation and final disposal of the Environmental Liabilities of the Concession Area, within the framework of the corresponding approved Environmental Management Instrument, following an agreement signed with the GRANTOR, in which the respective remuneration for the performance of the aforementioned activities is contemplated. The aforementioned agreement shall contain, among other sections, the respective incentives and penalties for the proper fulfillment of the obligations entrusted to the CONCESSIONAIRE. In the event that the CONCESSIONAIRE entrusts the CONCESSIONAIRE with the activities in question, the latter will be responsible for the results of the mitigation activities carried out, so that the Environmental Liabilities that are maintained and/or that appear after its mitigation activities, as a result of the actions and/or omissions of the CONCESSIONAIRE, will not be the responsibility of the GRANTOR. The CONCESSIONAIRE must mitigate them in accordance with the provisions of current environmental standards.

15.6 In this regard, the Parties recognize the existence of the area known as Vizcachera, whose relevance for the execution of the Project requires the remediation and recovery of contaminated and/or degraded soils, the removal and final disposal of organic and inorganic waste, and all that is present in said area, within a maximum term of thirty (30) months, which will begin no later than the forty-eighth (48th) month and end no later than the seventy-eighth (78th) month from the Closing Date, counted from the Closing Date; as well as the restitution of the land to its initial topographic conditions and in conditions of foundation of the embankments for the execution of the Project. In this context, the CONCESSIONAIRE undertakes to carry out the activities described above to remediate the Vizcachera area, in order to be able to execute the Works and the Project, in

accordance with the obligations, conditions and terms described in Annex No.13 and the Applicable Laws and Provisions.

15.7 In relation to the Vizcachera area, the risks and consequences related to (i) the approval of the technical and/or environmental studies, (ii) the release of existing properties and interferences in the Vizcachera area and (iii) the approval of the Environmental Management Instruments, the Certificate of Non-Existence of Archaeological Remains – CIRA and the other Operating Permit necessary to execute the remediation and recovery of contaminated and/or degraded soils, and/or the removal and final disposal of organic and inorganic waste, shall remain within the responsibility and obligation of the GRANTOR, with the CONCESSIONAIRE assuming only the construction risk and the consequences derived from the aforementioned risk, with respect to the activities described in Annex No. 13, in accordance with the technical and/or environmental studies approved by the Relevant Governmental Authority.

ENVIRONMENTAL DOCUMENTATION OF THE CONTRACT

15.8 The implementation of the conditions and/or measures set for in the Environmental Management Instruments of each Section will be the sole responsibility and cost of the CONCESSIONAIRE, and must comply with all current environmental standards. Each of the Environmental Management Instruments that are approved in accordance with the requirements of this Contract and the Applicable Laws and Regulations, constitute an integral part of this Contract.

ENVIRONMENTAL MANAGEMENT INSTRUMENT(S)

15.9 The Environmental Management Instrument corresponding to each Section will be prepared and developed by the CONCESSIONAIRE, in accordance with the environmental regulations in force at the time of its preparation, the Terms of Reference (TORs) for the Environmental Impact Assessment (EIA) of each Section and other resolutions, approved by the Relevant Environmental Authority, and in accordance with the preparation deadlines described in Annex No. 2 of this Contract.

Without prejudice to the application of the corresponding administrative sanctions, failure to comply with the environmental obligations provided for in this Contract will result in the imposition of penalties, in accordance with the provisions of Annex 10 of this Contract.

It is worth mentioning that, if after the approval of the Environmental Management Instruments corresponding to each Project Section, the GRANTOR or any Government Authority, with prior authorization from the Relevant Environmental Authority, identifies the need to implement mitigation and/or compensation measures in addition to those described in the Environmental Management Instruments described above, these will be considered as Additional Works and will be governed by the procedure established in this Contract, and the respective Environmental Management Instrument(s) must be modified, according to the Applicable Laws and Provisions.

For the purposes of implementing the above, such mitigation and/or compensation measures for additional socio-environmental impacts must be presented as a modification of the respective Environmental Management Instrument and approved by

the Corresponding Environmental Authority, in accordance with the provisions of the Applicable Laws and Provisions.

If the process of identifying the mitigation and/or compensation measures for the additional socio-environmental impacts and/or the approval process of the modification of the corresponding Environmental Management Instrument will affect the fulfillment of the contractual obligations of the Concessionaire, the Concessionaire may request the suspension of the affected obligations in accordance with the provisions of Clause 5.6 et seq. of this Contract.

Subsequently, as established by the Applicable Laws and Provisions, the CONCESSIONAIRE must prepare, for its corresponding approval by the Relevant Environmental Authority, the Project's Integrated Environmental Management Instrument.

15.10 The CONCESSIONAIRE is obliged to prepare the Environmental Management Instrument for Sections 1, 2 and 3, based on the Applicable Laws and Provisions. After its preparation, the CONCESSIONAIRE must submit the respective Environmental Management Instruments to the Relevant Environmental Authority for approval in accordance with the terms and deadlines established in the aforementioned Applicable Laws and Provisions.

Once the term granted in the Applicable Laws and Provisions for the Relevant Environmental Authority to issue the resolution approving the corresponding Environmental Management Instrument has expired and this has not been issued, provided that it is not due to a cause attributable to the CONCESSIONAIRE, the CONCESSIONAIRE shall notify the GRANTOR of such situation, so that it may make its best efforts before said Entity for the purpose of issuing its pronouncement.

Thirty (30) Working Days have elapsed since the communication to the GRANTOR referred to in the previous paragraph, without the Relevant Environmental Authority having issued its pronouncement, the Parties will apply the suspension of obligations, in accordance with the provisions of Clause 5.6 et seq. of the Contract.

One hundred and eighty (180) Calendar Days have expired after the Parties have decided to apply the suspension of obligations without the Relevant Environmental Authority having issued its pronouncement on the approval or disapproval of the Environmental Management Instrument, the CONCESSIONAIRE may terminate the Contract, by virtue of the provisions of Clause 5.22.

15.11 In application of the provisions of Supreme Decree No. 003-2011- MINAM, if the Concession Area is affecting a Natural Protected Area or its Buffer Zone, the GRANTOR, in its capacity as owner of the Project, through its corresponding administrative body, will request the SERNANP to issue compatibility in advance, to the preparation of the corresponding Environmental Management Instrument and/or to the granting of rights aimed at the provision of infrastructure in Natural Protected Areas and/or their Buffer, Zones, in accordance with the Applicable Laws and Provisions.

SOCIO-ENVIRONMENTAL SPECIFICATIONS

- 15.12 The socio-environmental specifications to be implemented by the CONCESSIONAIRE, both for the Construction Stage and for the Operation, Operation and Maintenance Stage, must consider adequate mitigation, recovery and/or compensation measures, if applicable, as well as risk management, accident control, environmental follow-up and monitoring, as appropriate, for those activities of the Project that produce a Significant Negative Environmental Impact that cannot be avoided without the application of such measures, or when it is necessary to apply them to comply with Applicable Laws and Regulations.
- 15.8 The measures set for in the Project's Environmental Management Instruments are part of the corresponding studies and must be considered within the criteria, procedures and actions necessary to implement for the development of an adequate and timely socioenvironmental management of the Contract, as established in the Applicable Laws and Provisions.

Failure to comply with the measures in this section and/or the instructions given by the REGULATOR will incur the penalties established in Annex No. 10 of this Contract, without prejudice to the administrative sanctions that may correspond, in accordance with the Applicable Laws and Provisions.

- 15.9 For the treatment of aspects of Cultural Heritage, in addition to the Applicable Laws and Provisions, the CONCESSIONAIRE must take into consideration the following:
 - (i) In accordance with the provisions of the National Directorate of the INC in Official Communication No. 1180-2004-INC/DN, dated November 23, 2004, in the case of concessions that compromise asphalt roads built in past decades, do not require the issuance of the Certificate of Non-Existence of Archaeological Remains (CIRA),, because they are built and in full use, as are the cases of the rights of way of such public roads. If necessary, obtaining the CIRA will be the sole responsibility of the CONCESSIONAIRE.
 - (ii) Any new Work, extension, demolition, restoration, renovation or other that involves a real estate that is part of the Cultural Heritage of the Nation, requires prior authorization from the Ministry of Culture for its execution. In these cases, obtaining the corresponding archaeological authorizations will be the responsibility of the CONCESSIONAIRE, and for such purposes it must observe the provisions of the Archaeological Research Regulations, approved by Supreme Decree No. 003-2014-MC or the regulation that complements, modifies or replaces it, and other Applicable Laws and Provisions.
 - (iii) If any archaeological or historical remains are found during the Construction, the CONCESSIONAIRE will be responsible for automatically suspending all activity in the area of the discovery and immediately notifying the Ministry of Culture, with a copy to the GRANTOR and the REGULATOR. A finding of this nature qualifies, for the purposes of the provisions of this Contract, as a Force Majeure event or Acts of God.
 - (iv) However, in the event that the CONCESSIONAIRE identifies archaeological remains that are not of such magnitude as to prevent compliance with its obligations, and that therefore can be preserved, the CONCESSIONAIRE may request the GRANTOR to suspend its obligations and extend the terms for

compliance with the affected obligation, which must be expressly approved by the GRANTOR.

The GRANTOR shall be responsible for carrying out, at its own risk, the necessary actions in order to rescue and preserve the cultural heritage of the nation in accordance with the Applicable Laws and Provisions and the applicable protocols.

- 15.10 In the event that it requires the modification of one or more of the Environmental Management Programs or Plans approved as part of the corresponding Environmental Management Instrument, the CONCESSIONAIRE must inform the GRANTOR and the REGULATOR, in addition to submitting it for approval by the Competent Environmental Authority, before the start of the corresponding activity. Prior to the start of the execution of the Works and Maintenance work, the CONCESSIONAIRE must carry out a series of activities aimed at training its workers, among others, in topics related, to:
 - a) Safe handling.
 - b) Procedures in case of accidents at camps, asphalt and concrete plants, quarrying operations, and surplus material deposits.
 - c) Procedures in the event of accidents on the construction sites.
 - d) Procedures in case of unwanted events of natural and/or anthropogenic origin.
- 15.11 The CONCESSIONAIRE will implement, on the start date of the Pre-Construction Stage and will maintain in force throughout the term of the Contract, an integrated management system that contemplates environmental management, quality, occupational safety and social responsibility. The purpose of this system is to ensure the comprehensive management of the CONCESSIONAIRE's activities during all stages of the Contract. The integrated management system shall be subject to external audit and certification by an entity other than the CONCESSIONAIRE (except for ISO 26000: 2010 – Social Responsibility Guide), taking into account at least the provisions of the following documents (and their corresponding modifications, updates and/or replacements):
 - ISO 9001: 2015 Quality Management Systems
 - ISO 14001:2015 Environmental Management Systems
 - ISO 45001 2018 Occupational Health and Safety Management System
 - ISO 26000: 2010 Social Responsibility Guide

ENVIRONMENTAL REPORTS

- 15.12 In accordance with the frequency specified in the Environmental Management Instruments for the Project Sections, the CONCESSIONAIRE will submit to the Relevant Environmental Authority, with a copy to the REGULATOR, an environmental report detailing compliance with the respective environmental components included in the Environmental Management Instrument and the environmental considerations of the Concession Agreement during the execution of the Works, the Operation Stage, Execution, and Maintenance of each Section of the Concession.
- 15.13 In these reports, the CONCESSIONAIRE must provide information on the activities carried out, give an account of the measures defined in the respective Environmental Management Instrument, point out the remaining environmental problems, and may propose, with the due support (reports, photographs, videos, among others), additional measures necessary to mitigate and/or correct them. Failure to deliver these reports

within the established terms will result in the application of the penalties established in Annex No. 10 of this Contract, without prejudice to the corresponding administrative sanctions.

CHAPTER XVI: RELATIONS WITH PARTNERS, THIRD PARTIES AND PERSONNEL

ASSIGNMENT OR TRANSFER OF THE CONCESSION

16.1 The CONCESSIONAIRE may not transfer its right to the Concession or assign its contractual position in the Contract without the prior authorization of the GRANTOR, which must take into consideration the technical opinion that must be previously issued by the REGULATOR.

For the purposes of the authorization, the CONCESSIONAIRE must communicate its intention to transfer the Concession or assign its contractual position, accompanied by the following:

- a) Preparatory contract or letter of intent to transfer or assignment, duly signed by the assignor and assignee, in accordance with the procedure and with the corporate majorities required by its bylaws.
- b) Documentation evidencing the necessary legal capacity of the assignee.
- c) Documentation that proves the agreement of the assignees with respect to the assignment of contractual position in the contracts that the assignor has entered into in compliance with the [Terms and Conditions / Declaration of Interest].
- d) Documentation proving that the transferee has the share capital required in this Contract.
- e) Documentation that proves that the assignee has a Strategic Partner, in accordance with the requirements of the [Bidding Terms/Declaration of Interest] and this Contract.
- f) Documentation that proves the financial and technical capacity of the assignee, taking into account the provisions of the [Bidding Terms/Declaration of Interest] and the Contract.
- g) Documentation that proves the financial and technical capacity of the assignee, taking into account the provisions of the [Bidding Terms of the Tender/Declaration of Interest] and the Contract.
- h) Agreement whereby the acquirer or assignee agrees to assume any damages and pay any other sums due and payable by the CONCESSIONAIRE. This same agreement must state that the issuance of payment vouchers will correspond to the assignee in accordance with the provisions of the Contract.
- i) Approval of Permitted Creditors regarding the proposed transfer or assignment agreement, if applicable.

The CONCESSIONAIRE shall submit all the documentation indicated in this Clause to both the GRANTOR and the REGULATOR. Within a term of no more than thirty (30)

Calendar Days from the submission made by the CONCESSIONAIRE, the REGULATOR shall issue a technical opinion. In turn, the GRANTOR shall decide on the transaction within a term of no more than thirty (30) Calendar Days, counted from the receipt of the REGULATOR's opinion or the expiration date of the deadline for issuing the REGULATOR's opinion. The negative pronouncement of the GRANTOR or the absence of a pronouncement implies the rejection of the transaction.

The consent of the GRANTOR does not release the CONCESSIONAIRE from liability for the transfer of its right to the Concession or assignment of its contractual position for a maximum term of three (3) years from the date of approval of the transfer or assignment. This implies that during this period, the CONCESSIONAIRE will be jointly and severally liable with the new concessionaire for the acts carried out prior to the transfer or assignment.,

The GRANTOR shall not recognize the transactions described in this Clause that are carried out without observing the provisions of this Clause. The CONCESSIONAIRE shall be solely liable for compensating third parties for damages arising from non-compliance with such provisions.

CLAUSES IN CONTRACTS

- 16.2 In all contracts, agreements, or arrangements that the CONCESSIONAIRE enters into with its partners, third parties, personnel, and Related Companies, clauses should be included to address the following aspects:
 - a) The termination of the respective contracts due to the Expiration of the Concession, unless the GRANTOR has expressed its decision to exercise the assignment of contractual possession referred to in subparagraph d) of this Clause.
 - b) That the term of validity does not exceed the term of the Concession.
 - c) The waiver of the counterparty to file civil liability actions against the GRANTOR, the REGULATOR, PROINVERSIÓN and its officers.
 - d) A clause that allows the GRANTOR, at its sole option, to assume the contractual position of the CONCESSIONAIRE in said contract or designate a person to assume the contractual position of the CONCESSIONAIRE in said contract through an irrevocably authorized assignment of contractual position by the third party, in the event of the expiration of the Concession for any reason, enabling the continuation of such contracts on the same terms, and therefore, the Exploitation of the Concession.

The inclusion of the provisions contained in subparagraphs a), b) and d) above shall not be applicable to: (i) the financing contracts of the CONCESSIONAIRE and the guarantees linked thereto; (ii) the contracts and guarantees linked to the Permitted Secured Indebtedness, with the exception of the guarantee provided for in Section 4.9(a), which shall be subject to the term of the Concession Contract; and, (iii) the contracts for the provision of public services in favor of the CONCESSIONAIRE, without prejudice to the ability of the GRANTOR to renegotiate the terms of the aforementioned contracts, if applicable, including the power to cancel such contracts, the liabilities of the CONCESSIONAIRE for these services not being enforceable against the Peruvian State.

The CONCESSIONAIRE shall indemnify the GRANTOR, the REGULATOR, PROINVERSIÓN, and their officials for any civil liability action against them arising from the execution of these contracts.

The GRANTOR may request from the CONCESSIONAIRE, without prejudice to the supervisory function of the REGULATOR, a copy of the contracts referred to in this clause.

Under no circumstances shall the CONCESSIONAIRE be exempt from any liability to the GRANTOR for acts arising from the execution of contracts signed with third parties, which may have any impact on the Concession.

PERSONNEL RELATIONS

- 16.3 The employment contracts of national or foreign personnel of the CONCESSIONAIRE, the execution of such contracts and their termination are subject to the standards that regulate the labor relations of workers in the private sector. Likewise, the special work regimes will be applied in the cases that arise.
- 16.4 The CONCESSIONAIRE must strictly comply with the labor regulations referring to the formal obligations of the employer (payroll books, pay slips and others), the payment and withholding of social security contributions, as well as the contractual and legal obligations referring to occupational health and safety.
- 16.5 From the first Section that begins Operation, the CONCESSIONAIRE must have a team of personnel that in any emergency, situation, guarantees the adequate provision of the Service twenty-four (24) hours a day.
- 16.6 In the event of the Expiration of the Concession, the CONCESSIONAIRE is solely responsible for the payment of all labor benefits, such as wages, working conditions and other conventional or unilateral benefits, owed to its workers until the date on which the Expiration of the Concession occurred. The GRANTOR shall not be liable, under any circumstances, for such debts.

In the event that the GRANTOR is judicially ordered to pay any labor debt of the CONCESSIONAIRE, the latter may repeat against the CONCESSIONAIRE.

16.7 The CONCESSIONAIRE will freely determine the number of personnel to be hired for the Operation of the road infrastructure of the Sections, including the operation of the Toll Units and weighing system, as well as for the provision of other services authorized within the framework of this Contract. Such personnel must be duly hired, trained, qualified and, if applicable, duly certified.

RELATIONS WITH THE STRATEGIC PARTNER

16.8 It is established that, during the term of the Concession, the Minimum Participation in the CONCESSIONAIRE must be maintained. The Strategic Partner may not transfer its Minimum Participation until five (5) Calendar Years from the Section that first commences Operation.

The above restriction does not include the transfer of the Strategic Partner's Minimum Stake to a Related Company, to the extent that control of both is exercised by the same

Parent Company, in which case the transfer of the Minimum Stake may be made prior to the aforementioned term. However, even in this case, the transaction must have the prior approval of the GRANTOR, with the non-binding opinion of the REGULATOR, as indicated in Clauses 16.9 and 16.10.

The GRANTOR shall not recognize the transactions described in this Clause that are carried out without observing the provisions of this Clause. The CONCESSIONAIRE shall be solely responsible for compensating third parties for damages arising from non-compliance with these provisions. Additionally, failure to comply with the provisions of this clause will result in the application to the CONCESSIONAIRE of the penalties set for in Annex No. 10.

16.9 For the purposes of the transfer of the Minimum Participation, the CONCESSIONAIRE must request the GRANTOR for its prior authorization, with a non-binding opinion of the REGULATOR, which will be granted as long as the entity that replaces the Strategic Partner is a company that accredits the minimum technical requirements provided for in the [Declaration of Interest/Bidding Terms] of the Tender.

To this end, the CONCESSIONAIRE must submit its application to the GRANTOR and the REGULATOR with the documents required in the [Bidding Terms/Declaration of Interest] to prequalify the new Strategic Partner. The REGULATOR shall make a decision within a maximum term of twenty (20) Calendar Days from receipt of the CONCESSIONAIRE's request. For its part, the GRANTOR must make a decision within a maximum term of twenty (20) Calendar Days from the date of receipt of the opinion of the REGULATOR or the deadline for issuing it. In the event that the GRANTOR does not make a decision within the aforementioned term, the request will be deemed to have been rejected; without prejudice to which the CONCESSIONAIRE may again request the approval of the replacement of the Strategic Partner, complying with the procedure provided for in this Clause.

In the event that the GRANTOR and/or the REGULATOR wish to make observations or requests for additional information, they must be made within twenty (20) Calendar Days of receipt of the CONCESSIONAIRE's request. The CONCESSIONAIRE will have a maximum term of ten (10) Calendar Days from the date of receipt of said requirement to send, both to the GRANTOR and the REGULATOR, the correction or additional information requested. The REGULATOR shall have a term of ten (10) Calendar Days from the correction of observations or submission of additional information by the CONCESSIONAIRE to issue its opinion, which shall be sent to the GRANTOR, who shall issue a decision within a term of no more than ten (10) Calendar Days from receipt of the REGULATOR's opinion or the deadline to issue it. In the event that the GRANTOR does not make a decision within the aforementioned term, the request will be deemed to have been rejected; without prejudice to which the CONCESSIONAIRE may again request the approval of the replacement of the Strategic Partner, complying with the procedure provided for in this Clause.

16.10 The prior authorization of the GRANTOR, as well as the non-binding opinion of the REGULATOR, for the purposes of the transfer or disposition of the Minimum Participation of the Strategic Partner, must ensure compliance with all the minimum technical requirements required in the [Bidding Terms of the Tender/Declaration of Interest], at the stage of prequalification of bidders, so that during the term of the Contract said requirements are complied with at all times.

- 16.11 The Strategic Partner, as of the Closing Date, must have signed an affidavit with the GRANTOR by which it undertakes to:
 - a) Maintain the Minimum Participation in the CONCESSIONAIRE for the entire term of the Concession under the terms of Clauses 3.5 (i) and 16.8, without prejudice to the provisions of Clause 16.9. In this regard, it must oppose any motion presented by a shareholder or partner of the CONCESSIONAIRE that proposes an increase in the capital stock in respect of which the Strategic Partner is not able to exercise its preemptive subscription right that allows it, at least, to continue to maintain the Minimum Participation in the CONCESSIONAIRE.
 - b) Adjust their conduct at the general meetings of the CONCESSIONAIRE in such a way as to facilitate with their vote the resolutions and decisions of the highest body of the company in favor of matters related to the full execution of the Contract.
 - c) Not to impede by its acts or omissions the CONCESSIONAIRE from carrying out its activities normally, especially those that involve the execution of the Contract.
 - d) Assume the obligations, responsibilities and guarantees that correspond to it in accordance with this Contract and other related agreements.

In the event of transfer or disposition of the Strategic Partner's Minimum Participation, as well as transfer of the right to the Concession, assignment of the CONCESSIONAIRE's contractual position in the Contract or execution of the guarantees mentioned in subparagraphs a) and b) of Clause 4.9, the new Strategic Partner, if any, must sign the affidavit referred to in this Clause.

CONSTRUCTION CONTRACTS

- 16.12 On the date of commencement of the Construction Stage, the CONCESSIONAIRE must start the Construction of the Works directly or must have complied with signing with the Builder(s) the contract(s) necessary to proceed with its execution.
- 16.13 The execution of new Construction contracts, as well as any modification or discrepancy in the construction contracts related to the technical characteristics of the Project shall be subject to at least the following: (a) contractual modifications or discrepancies with the technical characteristics provided for in the Contract shall be brought to the attention of the GRANTOR; (b) the execution of new Construction contracts, as well as modifications that imply changes of the Builder, will require the prior approval of the GRANTOR, who for this purpose must request the prior opinion of the REGULATOR,, as indicated in the following Clause; (c) that, in the event of a change of Builder, compliance with the technical requirements of the Project established [in Annex No. 3 of this Contract] and the Applicable Laws and Provisions must be ensured, so that during the term of the Contract such requirements are complied with at all times, under the grounds of Expiration of the Concession.

The restrictions indicated in the preceding paragraph shall not apply to subcontracting that may be carried out by the Builder.

16.14 For the purposes of entering into new Construction contracts, as well as agreeing to modifications in construction contracts that imply changes in the Builder, the CONCESSIONAIRE must submit its application to the GRANTOR and the REGULATOR with the corresponding supporting information. The REGULATOR shall make a decision within a maximum term of twenty (20) Calendar Days from receipt of the CONCESSIONAIRE's request. For its part, the GRANTOR must make a decision within

a maximum term of twenty (20) Calendar Days from the date of receipt of the opinion of the REGULATOR or the deadline for issuing it. In the event that the GRANTOR does not make a decision within the aforementioned term, the request will be deemed to have been rejected; without prejudice to which the CONCESSIONAIRE may again request the approval of the GRANTOR, complying with the procedure provided for in this Clause.

In the event that the GRANTOR and/or the REGULATOR wish to make observations or requests for additional information, they must be made within twenty (20) Calendar Days of receipt of the CONCESSIONAIRE's request. The CONCESSIONAIRE will have a maximum term of ten (10) Calendar Days from the date of receipt of said requirement to send, both to the GRANTOR and the REGULATOR, the correction or additional information requested. In such case, the REGULATOR will have a term of ten (10) Calendar Days from the correction of observations or presentation of additional information by the CONCESSIONAIRE to issue its opinion, which must be sent to the GRANTOR, who must pronounce itself within a term of no more than ten (10) Calendar Days from the receipt of the opinion of the REGULATOR or the deadline to issue it. In the event that the GRANTOR does not make a decision within the aforementioned term, the request will be deemed to have been rejected; without prejudice to which the CONCESSIONAIRE may again request the approval of the GRANTOR, complying with the procedure provided for in this Clause.

The GRANTOR may only oppose the selection of the Builder if it is verified that the proposed Builder does not comply with the minimum technical conditions set for in in the [Bidding Terms/Declaration of Interest]. The CONCESSIONAIRE may challenge the dismissal in accordance with the dispute resolution mechanisms provided for in Chapter XIX. The request for approval by the Builder will not imply in any case the extension of the term of execution of the Works, being the expenses generated during said term assumed exclusively by the CONCESSIONAIRE.

CHAPTER XVII: ADMINISTRATIVE SKILLS

COMMON PROVISIONS

- 17.1 The exercise of the functions that by virtue of this Contract and/or the pertinent legal regulations must be fulfilled by the GRANTOR, the REGULATOR and any other Governmental Authority, shall in no case be subject to authorizations, permits or any manifestation of will of the CONCESSIONAIRE. The CONCESSIONAIRE must provide all its cooperation to facilitate the fulfillment of these functions, otherwise the provisions of the Regulations of Incentives, Infractions and Sanctions of OSITRAN, approved by Resolution of the Board of Directors No. 009-2018-CD-OSITRANor any standard that modifies, complements and/or replaces it and the other Applicable Laws and Regulations. The GRANTOR and the REGULATOR are obliged to carry out inspections, reviews and similar actions, in accordance with the standards of their competence.
- 17.2 With respect to any request of the CONCESSIONAIRE whose resolution depends on the GRANTOR, and the latter, in order to resolve it, requires the prior opinion of the REGULATOR, it must be sent to the latter by the CONCESSIONAIRE, simultaneously.
- 17.3 In the event that the CONCESSIONAIRE needs to make a request on matters of strict competence of the GRANTOR, but which are directly or indirectly related to the

development of the Concession, the CONCESSIONAIRE must submit the request to the GRANTOR, which may channel it to the REGULATOR when it deems it appropriate.

- 17.4 In the event that the CONCESSIONAIRE needs to submit a request on aspects and matters strictly within the competence of the REGULATOR, the CONCESSIONAIRE must submit the request with a copy to the GRANTOR.
- 17.5 It is expressly established that, with the exception of the exercise of powers of the GRANTOR within the framework of this Contract, the administrative powers, their exercise by the REGULATOR and the other Governmental Authorities and/or the administrative acts issued by them within the framework of the Applicable Laws and Provisions, may not be subject to arbitration, they must be subject to the contentious-administrative jurisdiction of the Judicial Branch of the Republic of Peru.
- 17.6 The deadlines in which the REGULATOR and the GRANTOR must issue a decision on the requests made by the CONCESSIONAIRE shall be those established in this Contract. In all matters that are not expressly, regulated, the terms established in the Applicable Laws and Provisions, depending on the subject matter, of the REGULATOR or the GRANTOR will be applicable.
- 17.7 The CONCESSIONAIRE shall comply with all the information requirements and procedures established in this Contract or that may be established by the GRANTOR, in matters within its competence and that of the REGULATOR, within the framework of the provisions of the Applicable Laws and Provisions.
- 17.8 The CONCESSIONAIRE shall submit periodic reports, statistics and other data in relation to its activities and operations, in the forms and terms established by the GRANTOR and the REGULATOR in their respective requirements.
- 17.9 Under no circumstances may the CONCESSIONAIRE refuse to provide the information requested by the GRANTOR. Failure to provide information by the CONCESSIONAIRE will be subject to the provisions of the Regulations on Incentives, Infractions and Sanctions of OSITRAN, approved by Resolution of the Board of Directors No. 009-2018-CD-OSITRANor standard that modifies, complements and/or replaces it.
- 17.10 The CONCESSIONAIRE shall facilitate the revision of its documentation, files and other data required by the GRANTOR and the REGULATOR. In addition, the REGULATOR will use such review for monitoring and compliance with the terms of this Contract.

PREVIOUS REVIEWS

- 17.11 In the cases provided for in this Contract, in which the exercise of the functions to be performed by the GRANTOR or the REGULATOR requires a prior opinion from any of the aforementioned entities, and that no different deadlines, matters or procedures have been established for these purposes, expressly in the corresponding Clauses The following supplementary rules must be respected:
 - In cases in which such entities are responsible for issuing a pronouncement with the opinion of the other entity, the CONCESSIONAIRE must deliver the reports, reports and in general any necessary analogous document, to the GRANTOR and the REGULATOR, on the same date;

- (ii) The maximum term for issuing a pronouncement is thirty (30) Calendar Days, except for other express provisions of the Contract. This term is counted from the Working Day following the date of submission of the application to the entities;
- (iii) In cases in which one of the entities is responsible for formulating an opinion, the term will be half of the term plus one Working Day that the competent entity has to make a decision in accordance with the provisions of this Contract. Otherwise, the latter may dispense with such opinion in order to comply with the decision within the contractually established terms, unless it is expressly provided for in the Applicable Laws and Provisions as a condition for the performance of any act;

In the event that more information is required to issue an opinion, both the REGULATOR and the GRANTOR may suspend the term while the CONCESSIONAIRE sends the requested information. The request for information must be made within the first ten (10) Days of receipt of the request to issue an opinion, and this procedure may be repeated until the requested information is delivered to the CONCESSIONAIRE.

17.12 The CONCESSIONAIRE shall facilitate the review of its documentation, files and other data required by the REGULATOR in order to monitor and enforce the terms of this Contract.

Failure to comply with this Clause is subject to the provisions of the Regulations on Incentives, Infractions and Sanctions of OSITRAN, approved by Resolution of the Board of Directors No. 009-2018-CD-OSITRAN, or standard that modifies, complements and/or replaces it.

POWERS OF THE REGULATOR

17.13 The REGULATOR is empowered to exercise all the powers and functions conferred on it by the Contract, as well as the administrative competence to exercise all the powers and functions conferred by Law No. 27332 and Law No. 26917, as well as its amending, substituting, supplementary and regulatory rules.

SUPERVISION AND OVERSIG POWERS

17.14 By way of example, the REGULATOR is competent to supervise the CONCESSIONAIRE in compliance with legal, contractual, technical or administrative obligations, in the aspects within the scope of its competence, in accordance with the provisions of this Contract and the Applicable Laws and Provisions. The CONCESSIONAIRE shall proceed to comply with the provisions issued by the REGULATOR within the framework of this Contract and/or the Applicable Laws and Provisions.

The CONCESSIONAIRE shall provide the REGULATOR with the information requested by the REGULATOR in accordance with the powers conferred in the Applicable Laws and Provisions.

In the event of detecting any breach of the CONCESSIONAIRE's obligations, the REGULATOR may (i) interrupt or paralyze the execution of the Works and/or (ii) demand the necessary corrections in accordance with the Contract and the Applicable Laws and Provisions, without prejudice to the application of the sanctions and/or penalties in Annex

No. 10 that correspond to the CONCESSIONAIRE, For the application of the contractual penalties described above, it will not be necessary for the CONCESSIONAIRE and/or the REGULATOR to be in arrears, in accordance with the provisions of numeral 1 of article 1333 of the Peruvian Civil Code.

17.15 The REGULATOR may appoint one or more Supervisors, who will perform the functions assigned or delegated by the REGULATOR in relation to the powers conferred on the REGULATOR under this Contract and/or the Applicable Laws and Regulations. The functions, in case of appointment, will be exercised in accordance with the powers conferred by the REGULATOR. Ownership of the function is maintained in the REGULATOR.

The supervisors appointed by the REGULATOR, if applicable, must not have directly or indirectly provided any type of services in favor of the CONCESSIONAIRE, its shareholders or Related Companies in the last year, in Peru or abroad, counted from the moment the REGULATOR makes the contract.

17.16 The fees derived directly from the supervision, activities, both during the construction of the Works corresponding to each Section and during the Operation Stage, will be paid by the REGULATOR from the resources of the CONCESSIONAIRE, in accordance with the provisions of this Contract.,

In the event that the CONCESSIONAIRE does not pay the amounts indicated above, the GRANTOR, after coordination with the REGULATOR, may execute the Guarantee of Faithful Performance of the Concession Contract up to the amount indicated in Clause 13.4 and in accordance with Clauses 13.6 through Clause 13.10 of the Contract.

- 17.17 The CONCESSIONAIRE shall submit to the REGULATOR, within the first ten (10) Calendar Days of each month, from the beginning of the Construction Stage or the Operation Stage, as applicable, monthly reports including, in addition to the information required in the General Supervision Regulations of REGULATOR, approved by Resolution of the Board of Directors No. 024-2011-CD-OSITRANor the standard that modifies, complements and/or replaces it, the following:
 - a) Quarterly and annual financial statements of the company, in whose notes each of the items that make up all income must be individualized. The annual financial statements shall be audited. The quarterly information shall include the presentation of the Balance Sheet, Profit and Loss Statement, Cash Flow, Trial Balance and any other accounting and/or financial information reasonably required by the REGULATOR. Likewise, the CONCESSIONAIRE must submit to the REGULATOR the chart of accounts and any modifications that may be made to it, if applicable. In addition, the REGULATOR may request that the CONCESSIONAIRE provide further information in this regard.
 - b) Monthly information on complaints filed by Users, identifying the User and the claim they have made, as well as their resolution.
 - c) Information on all income received by the CONCESSIONAIRE, identifying the type of income. Each entry must be presented in a manner that is properly discriminated.
 - d) Monthly information on vehicular traffic, cargo and operations, according to the formats established by the REGULATOR.
 - e) Any other additional information that the REGULATOR needs to supervise the proper compliance with the Contract, in the matters within its competence, and for

this purpose it must send the CONCESSIONAIRE the due support or purpose of the information requested.

The information submitted by the CONCESSIONAIRE may be treated as confidential, provided that the REGULATOR expressly declares so, as established by the Applicable Laws and Provisions.

- 17.18 Among other activities, the REGULATOR will be responsible for supervising the CONCESSIONAIRE's compliance with the following obligations:
 - a) Comply with the technical standards on Maintenance.
 - b) Comply with the technical requirements of the Project and the technical specifications of the EDI established in Annex No. 3, as well as with the Service Levels established in Annex No. 11 of the Contract.
 - c) Submit statistical information to the REGULATOR.
 - d) Comply with the delivery of your financial statements
 - e) Comply with Applicable Laws and Regulations.
 - f) Comply with the obligations related to engineering in the projects and the Construction, when the Works are executed.

SANCTIONING AUTHORITY

17.19 The REGULATOR is competent to apply sanctions to the CONCESSIONAIRE in the event of non-compliance with its obligations, in accordance with the provisions of Law No. 26917, Law No. 27332, and Single Harmonized Text of the General Administrative Procedure Law, Law No. 27444, approved by Supreme Decree No. 004-2019-JUS and the regulations issued on the matter, in addition to the rest of the Applicable Laws and Provisions. The CONCESSIONAIRE shall proceed with compliance with the sanctions imposed by the REGULATOR in accordance with the provisions of the Regulations on Incentives, Infractions and Sanctions in force on the date of commission of the infraction.

Administrative sanctions imposed by other Governmental Authorities, arising from the execution of this Contract, shall be applied to the CONCESSIONAIRE regardless of the contractual penalties established therein, without prejudice to the obligation to respond for damages resulting from non-compliance.

REGULATION CONTRIBUTION

17.20 The CONCESSIONAIRE is obliged to pay directly to the REGULATOR the regulatory contribution referred to in Law No. 26917 and Law No. 27332, or rules that modify or replace them, in the terms, terms and amounts referred to in said legal provisions and the Regulatory Rules issued by the REGULATOR on the matter, which will be calculated and charged on the total income invoiced by the CONCESSIONAIRE (the "**Regulation Contribution**"). In the event of non-compliance with this obligation, the penalties set for in Annex No.10 will be applied to the CONCESSIONAIRE, regardless of the corresponding administrative sanctions.

CHAPTER XVIII: EXPIRY OF THE CONCESSION

TERMINATION OF THE CONTRACT

- 18.1 This Concession will expire upon verification of any of the following grounds:
 - a) Deadline of the Concession.
 - b) Mutual agreement.
 - c) CONCESSIONAIRE DEFAULT SETTLEMENT
 - d) <u>Forfeiture due to Non-Compliance of the GRANTOR</u>
 - e) By unilateral decision of the GRANTOR;
 - f) Force Majeure or Fortuitous Event
 - g) By application of the Anti-Corruption Clause.
- 18.2 The Parties declare that the grounds for Forfeiture do not constitute, under any circumstances, events for the GRANTOR to unilaterally interrupt, suspend or default on the payments to which the CONCESSIONAIRE is entitled to receive from the GRANTOR by virtue of this Contract., The aforementioned payments will be made in accordance with the terms and terms established in the Concession Contract, including, but not limited to, the payments that the GRANTOR must make in favor of the CONCESSIONAIRE in installments.

In this regard, regardless of the cause of Expiration, the GRANTOR will maintain its payment, obligations, as applicable to each Section, in accordance with the following detail:

- (i) If the termination and/or termination of the Contract occurs before the start of the Construction Stage of the corresponding Section:
 - The GRANTOR shall continue to pay the commitments for the items derived from the PAP, in accordance with the provisions of this Contract and, if applicable, the reimbursements established in Appendix 3 of Annex No. 4, including the CALPs issued.
- (ii) If the termination and/or termination of the Contract occurs during the Construction Stage of the corresponding Section:
 - For Sections 1, 2 and 3, the GRANTOR shall pay and continue to pay the RPI-CAOs corresponding to the CAOs issued pursuant to Chapter XII and Annex No. 9 to this Contract.
 - In the event that there are Works executed pending certification by the REGULATOR through the CAO, provided that the requirements established in this Contract are met, with the exception of the minimum values established in Clause 2.1 of Appendix 2 of Annex No. 9, which will not be applicable, the REGULATOR will issue the corresponding Work Revision Report(s) and the corresponding CAO(s). This will grant the CONCESSIONAIRE the right to collect the RPI-CAOs that are pending, in accordance with the provisions of Chapter XII and Annex No. 9 of this Contract.
 - The GRANTOR shall continue to pay the commitments for the items derived from the PAP, in accordance with the provisions of this Contract and, if

applicable, the reimbursements established in Appendix 3 of Annex No. 4, including the CALPs issued.

- (iii) If the termination and/or resolution occurs during the Operation Stage of the corresponding Section:
 - For Sections 1, 2 and 3, GRANTOR shall pay and continue to pay the RPI-CAOs corresponding to CAOs issued pursuant to Chapter XII and Annex 9 to this Contract.
 - The GRANTOR shall continue to pay the commitments for the items derived from the PAP, in accordance with the provisions hereof in this Contract and, if applicable, the reimbursements set forth in Appendix 3 of Annex No. 4, including CALPs issued.

TERM DUE TO EXPIRATION OF THE TERM

18.3 The Contract shall terminate upon expiration of the term set forth in Clause 5.1 or any extended term granted pursuant to Clauses 5.2 et seq. of the Contract.

Likewise, the Contract shall terminate and shall be deemed to have expired when the event described in numeral 6 of Appendix 4 of Annex No. 9 of this Contract is fulfilled.

The expiration of the Concession due to the expiration of or the agreed term shall not imply any additional consideration in addition to that established in this Contract, nor any indemnification amount for possible damages that the expiration of the Concession may generate for any of the Parties.

TERMINATION BY MUTUAL AGREEMENT

18.4 The Contract shall be terminated, at any time, by written agreement between the CONCESSIONAIRE and the GRANTOR, subject to the opinion of the REGULATOR.

If the Contract is terminated by mutual agreement between the Parties, it shall contain the Concession liquidation mechanism. The agreement shall consider the time elapsed since the execution of the Contract, the Co-financing payment rights that have not yet been disbursed by the GRANTOR and that contractually correspond to the CONCESSIONAIRE, and the circumstances existing at the date in which the Parties make such decision, as criteria to determine the liquidation mechanism. Under no circumstances may a double payment be recognized for the same Concession Asset.

If applicable, the non-binding opinion of the Permitted Creditors that are financing the Concession or the corresponding Section at the time of the Expiration agreement shall be taken into account, which shall be communicated by the CONCESSIONAIRE to the REGULATOR.

TERMINATION DUE TO NON-COMPLIANCE BY THE CONCESSIONAIRE

- 18.5 The GRANTOR shall terminate the Contract in advance, notwithstanding the penalties and the application of sanctions that may be applicable, in case the CONCESSIONAIRE incurs in the following irremediable breaches:
 - a) The assignment of its contractual position, without prior written authorization from the GRANTOR, with prior technical opinion of the REGULATOR, without observing the Applicable Laws and Provisions and/or the provisions of this Contract.
 - b) The application of contractual penalties that have become effective or have been consented to, as detailed below:
 - (i) In the Construction Stage of any of the Project Sections, the accumulated application of penalties due to causes attributable to the CONCESSIONAIRE for an amount equal to or higher than ten percent (10%) of the total budget of the EDI Works of the corresponding Section.

- (ii) The application of penalties during the Operation Stage of any of the Sections that cumulatively exceeds fifty percent (50%) of the current amount of the Guarantee of Faithful Fulfillment of the Concession Contract.
- c) The serious alteration of the environment, historical heritage and/or natural resources, resulting from the fraudulent or culpable violation of the recommendations of the respective Environmental Management Instrument, as declared by the competent Governmental Authority by means of a final or res judicata resolution, as the case may be.
- d) The commission by the CONCESSIONAIRE of three (3) or more very serious infringements, pursuant to the regulations approved by the REGULATOR, within a period of twelve (12) months. Said infringements must be declared as such in a resolution that has the status of final.
- e) The commission of any act and/or omission that constitutes a fraudulent breach by the CONCESSIONAIRE resulting in the commission of a public action crime to the detriment of the User, the GRANTOR and/or the REGULATOR, declared as such by means of a final judicial sentence.
- f) The declaration of insolvency, dissolution, liquidation, bankruptcy and/or commencement of a bankruptcy proceeding of the CONCESSIONAIRE in accordance with the provisions of the Applicable Laws and Provisions on the matter, including the General Companies Law, Law No. 26887, and the General Law of the Bankruptcy System, Law No. 27809, as amended and/or replaced. In these cases, the expiration of the Contract shall occur when the REGULATOR becomes aware of the commencement of a procedure of this type and notifies the CONCESSIONAIRE to that effect, provided that the insolvency, dissolution and liquidation, bankruptcy or other provided for in this Clause has not been remedied in accordance with the law and/or the procedure has not ended favorably to the CONCESSIONAIRE, within the sixty (60) Calendar Days following notification, or within a longer term set by the REGULATOR in writing, which shall be granted only once when there are reasonable causes, unless it is proven that the initiation of the proceeding and/or the corresponding declaration has been fraudulent.
- g) The issuance of a court order, consented or executed, for causes attributable to the CONCESSIONAIRE that prevents it from carrying out a substantial part of its business or that imposes an embargo, lien or seizure that affects all or part of the Concession Assets, provided that any of these measures remains in force for more than sixty (60) Calendar Days or within the longer term set by the REGULATOR in writing, which shall be granted only once when reasonable causes exist.
- h) In case the Strategic Partner is substituted by a third party without the prior written consent of the GRANTOR, with prior opinion of the REGULATOR, or in case the Strategic Partner does not maintain the Minimum Participation in the CONCESSIONAIRE.
- i) Failure to comply with the rules set forth in Clause 16.8 et seq. of this Contract for the transfer of the Minimum Strategic Partner's Interest.
- j) False or inaccurate statements or failure to comply with the obligations set forth in Clauses 3.1, 3.3 and/or 3.5 of this Contract.
- k) The transfer of the CONCESSIONAIRE's rights generated in the Contract, without prior written authorization from the GRANTOR and/or without observing the Applicable Laws and Provisions, except for the transfer of the RPI, the rights derived from the CALP, the Tariff and the other freely available income of the CONCESSIONAIRE under the Concession Contract, which do not require prior authorization.

- The initiation, at the CONCESSIONAIRE's request, of a corporate, administrative or judicial process for its dissolution or liquidation, without the corresponding authorization of the GRANTOR.
- m) The initiation, at the CONCESSIONAIRE's request, of a procedure of capital reduction, merger, spin-off, transformation or other corporate reorganization, without the corresponding authorization of the GRANTOR, prior opinion of the REGULATOR, in accordance with the provisions of the Contract.
- n) The disposition of the Concession Assets by the CONCESSIONAIRE other than as provided in the Contract, without prior written authorization from the GRANTOR.
- o) Non-compliance in the accreditation of any of the Financial Statements, in accordance with the provisions of Chapter IV.
- p) Repeated non-compliance with the Service Levels described in Annex No. 11 in a period of two (2) consecutive years. For these purposes, repeated non-compliance shall be understood as the imposition on the CONCESSIONAIRE of penalties with respect to such Service Levels that, in the aggregate, are equal to or exceed ten percent (10%) of the amount in force of the Guarantee of Faithful Fulfillment of the Concession Contract in such period.
- q) The CONCESSIONAIRE's failure to comply with the decision issued by the Expert and/or the arbitration awards issued in connection with the Contract, unless, in the case of arbitration awards, the execution or performance thereof is suspended pursuant to this Contract and the Applicable Laws and Provisions. In the latter case, it shall be a breach by the CONCESSIONAIRE under the Contract to fail to comply with the award confirmed in the corresponding appeal for annulment of the award.
- r) The failure of the CONCESSIONAIRE to grant, reinstate or renew the Guarantee of Faithful Fulfillment of the Concession Contract and/or the Guarantees of Faithful Fulfillment of the Construction Works indicated in the manner and within the terms set forth in the Contract.
- 18.6 The GRANTOR may terminate the Contract in advance in case the CONCESSIONAIRE incurs in a serious breach of its contractual obligations, and the CONCESSIONAIRE shall be previously required to remedy the breach and upon expiration of the term granted by the GRANTOR for such purpose without having done so. The term to remedy shall be determined and granted unilaterally by the GRANTOR, unless such term is expressly established in the following subparagraphs.

Notwithstanding the penalties and the application of sanctions that may apply, after the term for the correction has been granted without the correction having been made, those expressly indicated in the Contract shall be considered as causes for serious breach of the CONCESSIONAIRE's obligations, among which are the following:

- a) Failure of the CONCESSIONAIRE to comply with the obligation of having the minimum amount of capital stock within the terms and in accordance with the provisions of Clauses 3.6 or 3.7, as the case may be.
- b) The collection of the Tariff for amounts higher than those authorized, verified and penalized as indicated in the Contract, up to three (3) times by the REGULATOR in a period of twelve (12) months.
- c) The unjustified refusal to Possession Taking within the term and in the manner provided for in the Contract for such purposes.
- d) The lack of validity of any of the insurance policies in charge of the CONCESSIONAIRE, as established in Chapter XIV.
- e) Unjustified delays in the commencement and/or execution of the Construction Stage of each Section, due to causes attributable to the CONCESSIONAIRE, within the

terms set forth in the Contract, including its extensions, notwithstanding the application of the corresponding penalties.

- f) Failure to provide the Mandatory Services, for causes attributable to the CONCESSIONAIRE, for four (4) consecutive Calendar Days and/or ten (10) nonconsecutive Calendar Days within a period of one (1) month.
- g) The non-obtaining, non-maintenance, loss, suspension, revocation or unjustified lack of renewal of any license, enabling title or permit, including, but not limited to, the Environmental Management Instrument(s) of each Project Section, obtained or to be obtained, by the CONCESSIONAIRE, if such non-obtaining, non-maintenance, loss, suspension or revocation, or lack of renewal, would have a material adverse effect on the CONCESSIONAIRE's ability to comply with its obligations, and has not been remedied within sixty (60) Calendar Days of the occurrence of the loss, suspension or revocation of the right.
- h) Any modification of the Construction contracts subscribed or subscription of new Construction contracts, without observing the provisions of Clauses 16.13 and 16.14.
- Failure by the CONCESSIONAIRE to comply with the procedure foreseen for the reestablishment of the economic and financial equilibrium established in Clause 12.3 et seq.
- j) The failure of the CONCESSIONAIRE to submit for the GRANTOR's approval the partial deliveries of the EDIs, the final deliveries and/or the corrections of the observations made to the same within the terms established in Chapter VII of the Contract.
- 18.7 In order to exercise its right to terminate the Contract for breach by the CONCESSIONAIRE, the GRANTOR shall give written notice thereof to the CONCESSIONAIRE, the REGULATOR and, if any, to the Permitted Creditors, at least ninety (90) Calendar Days prior to the foreseen date of termination. Once the aforementioned term has elapsed, the Expiration of the Contract shall take effect.
- 18.8 For the calculation of the amount to be settled in favor of the CONCESSIONAIRE, the Net Book Value of the Intangible Asset shall be applied, as established in Clause 18.26 et seq. of this Contract.
- 18.9 If the termination of the Contract is caused by default of the CONCESSIONAIRE, the treatment of the guarantees shall be as follows:
 - a) In any case, the GRANTOR shall execute one hundred percent (100%) of the Guarantee of Faithful Fulfillment of the Concession Contract.
 - b) Additionally, in case it is verified that the cause is related to the obligations derived from the execution of Works, the GRANTOR shall execute one hundred percent (100%) of the amount of the Guarantee of Faithful Fulfillment of the Construction Works of the corresponding Sections.

In the event of termination of the Contract for breach by the CONCESSIONAIRE, the GRANTOR is expressly authorized to collect and retain the amount of the aforementioned guarantees without any right of reimbursement for the CONCESSIONAIRE, notwithstanding the payment penalties payable by him.

TERMINATION DUE TO THE GRANTOR'S DEFAULT

- 18.10 The CONCESSIONAIRE may terminate the Contract early in case the GRANTOR incurs in a serious breach of its contractual obligations. The following shall be considered as grounds for a serious breach of the GRANTOR's obligations:
 - a) The delay for a period of six (6) consecutive months of the payment of the RPI of the CAOs issued in accordance with Chapter XII and Appendix 9 of this Contract.
 - b) The delay for a period of six (6) consecutive months of the payment of CALPs issued in accordance with Appendix 3 of Annex No. 4 of this Contract.
 - c) The non-compliance of the GRANTOR of the procedure foreseen for the reestablishment of the economic and financial equilibrium established in Clause 12.3 and following of the Contract.
 - d) The failure of the GRANTOR to deliver the Concession Area of Section 1 and/or 3, within the terms set forth in Clause 6.23 and the terms set forth in this Contract.
 - e) The non-compliance of the GRANTOR with the decision issued by any Expert established in the Contract and/or with the arbitration awards issued in connection with the Contract; except, in the case of arbitration awards, if the execution or performance thereof is suspended in accordance with this Contract and the Applicable Laws and Provisions. In the latter case, it shall be a breach of the GRANTOR under the Contract if the non-compliance with the award is confirmed in the corresponding appeal for annulment of the award.
 - f) The non-compliance of the GRANTOR of the Parties' minutes of agreement establishing a compensation mechanism and/or formula in favor of the CONCESSIONAIRE and/or the making of any of the payments corresponding to the compensation described above for the non-installation and/or non-operation of any of the Project's Toll Units, as set forth in Clause 11.4 and Annex No. 18 of this Contract.

In the event that the CONCESSIONAIRE had requested the suspension of its obligations as a consequence of the delay in the delivery of the Concession Area of Section 1 and/or 3, and this suspension had been approved by the GRANTOR in accordance with the provisions of Clauses 5.6 and 5.7 of the Contract, the CONCESSIONAIRE may only request the termination of the Contract in the event that the suspension extends for periods longer than those regulated in Clause 5.22 of the Contract.

18.11 In order to exercise its right to terminate the Contract due to non-compliance by the GRANTOR, the CONCESSIONAIRE shall notify the GRANTOR, the REGULATOR and, if any, the Permitted Creditors in writing, at least ninety (90) Calendar Days prior to the foreseen termination date. Once the aforementioned term has elapsed and provided that the GRANTOR has not remedied the breach or breaches alleged during the aforementioned term, provided that they can be remedied, the Expiration of the Contract shall take effect.

In order to determine the amount of compensation to be recognized by the GRANTOR to the CONCESSIONAIRE, the Net Book Value of the Intangible Asset shall be applied according to the provisions of Clause 18.26 et seq. of this Contract. Additionally, in the event that the Contract is terminated due to the causes listed in numerals a), b), c), e) and f) of Clause 18.10, the GRANTOR shall pay the CONCESSIONAIRE a total and sole indemnity, according to the provisions of Clause 18.32.

The concepts indicated in this Clause are the only payments to be recognized in favor of the CONCESSIONAIRE, and the CONCESSIONAIRE waives any additional amount.

18.12 The GRANTOR shall return to the CONCESSIONAIRE the Guarantee of Faithful Fulfillment of the Concession Contract and the Guarantees of Faithful Fulfillment of the Construction Works in force, as the case may be, within twelve (12) months after the expiration of the Concession, provided that there are no penalties, pending payments and/or deductions to be made.

UNILATERAL TERMINATION OF THE CONTRACT

18.13 The GRANTOR has the right to unilaterally terminate the Contract, for duly founded reasons of public interest, which shall be individualized, justified and developed in an official communication sent by the GRANTOR to the CONCESSIONAIRE, with a copy to the REGULATOR, not less than one hundred and eighty (180) Calendar Days prior to the term foreseen for the termination of the Contract. Once the aforementioned term has elapsed, the expiration of the Contract shall take effect. Within the same term, it shall notify such decision to the Permitted Creditors, if any.

The aforementioned communication must also be signed by the Peruvian government agency or entity competent to address such problem of public interest.

18.14 For the determination of the amount of compensation to be recognized by the GRANTOR to the CONCESSIONAIRE, the Net Book Value of the Intangible Asset shall be applied, as provided in Clause 18.26 et seq. of this Contract. Additionally, the GRANTOR shall pay to the CONCESSIONAIRE a total and sole compensation, as provided in Clause 18.33.

The concepts indicated in this Clause are the only payments to be recognized in favor of the CONCESSIONAIRE, and the CONCESSIONAIRE waives any additional amount.

18.15 The GRANTOR shall return to the CONCESSIONAIRE the Guarantee of Faithful Fulfillment of the Concession Contract and the Guarantees of Faithful Fulfillment of the Construction Works in force, within twelve (12) months after the expiration of the Concession, provided that there are no penalties, pending payments and/or deductions to be made.

TERMINATION DUE TO FORCE MAJEURE OR FORTUITOUS EVENT

18.16 The Parties shall have the option to unilaterally terminate the Contract due to the events of Force Majeure or Fortuitous Event described in this Contract when such event: (i) has produced certain, actual and determinable damage, duly founded and accredited; and, (ii) prevents any of the Parties from complying with its obligations or causes its partial, late or defective performance for a period exceeding one hundred eighty (180) continuous Calendar Days or in the cases provided in Clause 5.22 of the present Contract, operating the Expiration on the date foreseen by the Party that communicates its intention to terminate the Contract, after the occurrence of the events previously described. Likewise, the Parties agree to terminate the Contract due to the events of Force Majeure or Fortuitous Event described in Clauses 6.35, 6.37 and/or 6.38 without waiting for any term and/or complying with the conditions described in this paragraph.

- 18.17 For the determination of the amount of compensation to be recognized by the GRANTOR to the CONCESSIONAIRE, the Net Book Value of the Intangible Asset shall be applied, according to the provisions of Clause 18.26 and following.
- 18.18 In case disbursements are originated by insurance activation, these amounts shall correspond to the GRANTOR. To such effect, in accordance with the provisions of Clause 14.1, the disbursements arising from insurance activation shall be used by the GRANTOR to pay to the CONCESSIONAIRE the Net Book Value of the Intangible Asset pursuant to the provisions of Clause 18.26 et seq. of this Contract. Any remainder shall be paid by the Management Trust to the GRANTOR.
- 18.19 The GRANTOR shall return to the CONCESSIONAIRE the Guarantee of Faithful Fulfillment of the Concession Contract and the Guarantees of Faithful Fulfillment of the Construction Works in force, within twelve (12) months after the expiration of the Concession, provided that there are no penalties, pending payments and/or deductions to be made.

TERMINATION DUE TO APPLICATION OF THE ANTI-CORRUPTION CLAUSE

- 18.20 The CONCESSIONAIRE declares and undertakes, as applicable, that neither it, the Strategic Partner, nor its shareholders, partners or Related Companies, nor any of their respective directors, officers, employees, nor any of their advisors, representatives or agents, have paid, offered, or attempted to pay or offer, or shall attempt to pay or offer in the future any illegal payment or commission to any authority related to the award of the Successful Bid of the Tender, the Concession or the execution of this Contract.
- 18.21 It is expressly established that in case it is verified that any of the natural or legal persons mentioned in the previous Clause had been convicted by means of a consented or executed sentence, or had admitted and/or recognized the commission of any of the crimes typified in Section IV of Chapter II of Title XVIII of the Criminal Code, or equivalent crimes in case they have been committed in other countries, before any national or foreign competent authority, in relation to the execution of this Contract, the Concession or the awarding of the Successful Bid of the Tender, the Contract shall be terminated as of right and the CONCESSIONAIRE shall pay to the GRANTOR a penalty equivalent to ten percent (10%) of the amount resulting for the Net Book Value of the Intangible Asset, notwithstanding the execution of one hundred percent (100%) of the GRANTOR. Said penalty shall be retained by the GRANTOR from the amount to be paid to the CONCESSIONAIRE for the Net Book Value of the Intangible Asset.
- 18.22 For the determination of the settlement amount in favor of the CONCESSIONAIRE, the Net Book Value of the Intangible Asset shall be applied, as provided in Clause 18.26 et seq. of this Contract.
- 18.23 The termination of the Contract due to the application of the anti-corruption clause does not give rise to any right of indemnification in favor of the CONCESSIONAIRE for damages.
- 18.24 For the determination of the economic relationship referred to in Clause 18.22, the provisions of SMV Resolution No. 019-2015-SMV/01 or the rule that modifies, complements and/or replaces it shall apply.

NET BOOK VALUE OF THE INTANGIBLE ASSET

- 18.25 In the event of early termination of the Concession Contract for causes other than those included in subparagraphs a) or b) of Clause 18.1, the GRANTOR shall pay to the CONCESSIONAIRE an amount of compensation in Dollars equivalent to the Net Book Value of the Intangible Asset calculated in accordance with the provisions of the following clauses, deducting the amounts pending payment for penalties.
- 18.26 The REGULATOR, assisted by an auditing entity of international prestige chosen and hired for such purpose by the REGULATOR, whose cost shall be covered in advance by the REGULATOR through the amount that the CONCESSIONAIRE delivers to the latter within a maximum term of five (5) Working Days as from the REGULATOR's request to such effect, shall make the calculation of the Net Book Value of the Intangible Asset within a maximum term of forty (40) Working Days as from the receipt of the amounts necessary to cover the cost of the aforementioned auditing entity. This calculation shall be sent to the GRANTOR, who shall approve it within a maximum term of fifteen (15) Working Days. Once the GRANTOR'S approval is issued, the REGULATOR shall inform the CONCESSIONAIRE, with a copy to the GRANTOR, within a maximum term of five (5) Working Days from the GRANTOR'S approval.
- 18.27 For the determination of the Net Book Value of the Intangible Asset, the information recorded in the balance sheet of the CONCESSIONAIRE on the Calendar Day prior to the date on which the Expiration is declared, which date shall be determined in accordance with the provisions of clauses 18.3, 18.4, 18.7, 18.11, 18.13, 18.16 and 18.21 of the Contract, according to the financial statements duly audited and prepared in accordance with the rules and principles generally accepted in Peru, which must include the respective amortization to the corresponding asset and must only refer to the part of the investment that is not co-financed through the PRI mechanism.

The Net Book Value of the Intangible Asset shall not consider (i) revaluations of any nature, (ii) the value of the infrastructure developed for an Optional Service that may be removed from the Concession; and, (iii) the value of the infrastructure developed for an Optional Service that may not be removed from the Concession, except when the Concession is terminated due to non-compliance of the GRANTOR or by unilateral decision of the GRANTOR, in which cases the value of the developed infrastructure shall be considered. In the case established in numeral (iii) above, if the infrastructure has been affected by a Force Majeure event, the Concessionaire shall assume the corresponding costs and expenses, and these amounts shall not be included in the calculation of the Net Book Value of the Intangible Asset described above.

Under no circumstances may the same expense, investment amount, interest or others be considered two (2) or more times for the purpose of calculating the Net Book Value of the Intangible Asset.

Additionally, except for the exceptions set forth in Clauses 6.36 and following, if the early termination of the Concession Contract is generated by the causes set forth in:

a) Subparagraphs a), c) and g) of Clause 18.1, no expenses generated to the CONCESSIONAIRE by the termination, such as contract breakage expenses with contractors, financiers or suppliers, shall be added to the Net Book Value of the Intangible Asset.

- b) Subparagraphs d) or e) of Clause 18.1, the total amount of the expenses generated to the CONCESSIONAIRE by the termination shall be added to the Net Book Value of the Intangible Asset, such as the expenses for breach of contracts with contractors, financiers or suppliers and the costs of the auditing entity provided for in Clause 18.26, duly accredited by the CONCESSIONAIRE and approved by the GRANTOR and the REGULATOR, considering the maximum value established in Clause 18.31. The expenses from the date of occurrence of the termination event until the date of accreditation of the expenses referred to in this subparagraph shall be considered.
- c) Subparagraph f) of Clause 18.1, fifty percent (50%) of the total amount of the expenses generated to the CONCESSIONAIRE by the termination shall be added to the Net Book Value of the Intangible Asset, such as the expenses of breach of contracts with contractors, financiers or suppliers and the costs of the auditing entity provided for in Clause 18.26, duly accredited by the CONCESSIONAIRE and approved by the GRANTOR and the REGULATOR, considering the maximum value established in Clause 18.31. The expenses from the date of occurrence of the termination event until the date of accreditation of the expenses referred to in this subparagraph shall be considered.
- 18.28 The Net Book Value of the Intangible Asset is also governed by the following rules:
 - a) The value of the Additional Works shall be that which corresponds to be recorded in the audited financial statements of the CONCESSIONAIRE and is contemplated in the pertinent addendum, duly accredited and approved by the REGULATOR and the GRANTOR, provided that the GRANTOR has not complied with the payment of such Works.
 - b) If required, for the conversion of figures between Soles and Dollars, the Exchange Rate of the Calendar Day in which the respective audited financial statement was issued shall be used.
- 18.29 In the event of early termination of the Contract, the following procedure shall be followed:
 - a) If the Expiration occurs during the Pre-construction Stage of each of the Sections, the Net Book Value of the Intangible Asset shall be equal to the investment made by the CONCESSIONAIRE to cover the expenses related to the fulfillment of its contractual obligations which are included in the audited balance sheet of the CONCESSIONAIRE duly audited and approved by the REGULATOR and the GRANTOR.
 - b) If the Expiration occurs during the Construction Stage or the Operation Stage of each of the Sections, the Net Book Value of the Intangible Asset shall be calculated in accordance with the provisions of Clauses 18.27, 18.28, 18.29 and 18.30 of this Contract and shall include the investment in the Works not co-financed through the PRI mechanism and all those expenses incurred by the CONCESSIONAIRE related to the fulfillment of its contractual obligations, in both cases included in the audited balance sheet of the CONCESSIONAIRE duly audited and approved by the REGULATOR and the GRANTOR.
- 18.30 In the event of termination of the Contract for the causes set forth in subparagraphs c),
 d), e), f) and/or g) of Clause 18.1, (i) the Net Book Value of the Intangible Asset approved by the GRANTOR pursuant to Clause 18.26 and following, (ii) the indemnity for early

termination approved by the GRANTOR pursuant to Clause 18.33 and (iii) the termination expenses approved by the GRANTOR and the REGULATOR according to Clauses 18.29 and 18.31, as they correspond to be paid in each cause, may be paid by the GRANTOR in equal and equivalent semiannual installments, according to the following formula:

$$CSVC = CV * \left[\frac{i * (1 + i)^n}{(1 + i)^n - 1} \right]$$

Where,

CSVC: Equivalent semiannual quota of the CV

- CV: for the reason(s) set forth in (i) subparagraphs (c) and (g) of Clause 18.1, shall be the Net Book Value of the recognized Intangible Asset; (ii) subparagraph (f) of Clause 18.1, shall be the sum of the Net Book Value of the recognized Intangible Asset and the corresponding termination expenses; and, (iii) subparagraphs (d) and (e) of Clause 18.1, shall be the sum of the Net Book Value of the recognized Intangible Asset, the corresponding termination expenses and the indemnity for early termination.
- i: Corresponds to the <u>higher</u> rate between the rate obtained in (a) and the rate obtained in (b):
 - (a) Semiannual rate that corresponds to the **lower** rate between the rate obtained in (i) and the rate obtained in (ii):
 - (i) Estimated semi-annual rate based on the following:

$$Ts = (1 + Ta)^{(1/2)} - 1$$

Where:

- Ta: Corresponds to the debt rate, expressed in annual effective terms, of the financing credited in the Financial Closing or as Permitted Guaranteed Indebtedness by the CONCESSIONAIRE, excluding RPI financing, and which is in force as of the Expiration Date. In case the CONCESSIONAIRE has credited more than one financing, a weighted average of the annual effective rate shall be made according to the amounts of each financing credited by the CONCESSIONAIRE in the Financial Closing and/or as Permitted Guaranteed Indebtedness, excluding RPI financings, in force as of the Expiration Date. In the event that the rate is variable, the rate in force at the time of the Expiration shall be taken. Likewise, in the event that the CONCESSIONAIRE has not accredited any financing of this type and has only acquired RPI financing, or the Financial Closing has not yet been accredited, the rate in subparagraph (ii) below shall be applicable.
- Ts: Corresponds to Ta expressed as a semi-annual rate.
- (ii) Semiannual rate equal to 5.21675% in Dollars.

(b) Semiannual rate according to the following:

TRSs = $(1 + TRSa)^{(1/2)} - 1$ Where:

- TRSa: Corresponds to the TRS for a term of (i) 1,800 Calendar Days in case of Expiration for the reasons set forth in subparagraphs c), f) and/or g) of Clause 18.1 or (ii) 1,080 Calendar Days in case of Expiration for the reasons set forth in subparagraphs d) and/or e) of Clause 18.1.
- TRSs: Corresponds to the TRSa expressed as a semiannual rate.
- n: The number of semesters from the date of occurrence of the Concession Expiration until the total payment of the VC. This factor shall be defined by the GRANTOR and shall not be greater than (i) ten (10) semesters in case of Expiration due to the causes set forth in subparagraphs c), f) and/or g) of Clause 18.1 or (ii) six (6) semesters in case of Expiration due to the causes set forth in subparagraphs d) and/or e) of Clause 18.1.

The CSVC shall be budgeted by the GRANTOR in the draft of the General Budget Law of the Republic for the following budget year and so on. The annuity corresponding to such installments shall be paid in the first and third quarter of each corresponding fiscal year. However, the GRANTOR may always choose to pay the VC in a number of semesters less than those agreed or even in a single installment in the first quarter of the corresponding fiscal year in which the corresponding payment was budgeted.

The amount of compensation determined taking into consideration the grounds for termination of the Concession Contract described in Clause 18.1, as applicable, shall be paid by the GRANTOR to the CONCESSIONAIRE through the Administration Trust.

- 18.31 On the other hand, except for the exceptions established in Clause 6.36 and following, the total value of the termination expenses shall have a maximum value defined according to the following numerals and, without them forming part of the Net Book Value of the Intangible Asset:
 - i. In the event the early termination of the Concession Contract occurs before the start of the Construction of any of the Project Sections, the CONCESSIONAIRE shall not be recognized the termination expenses.
 - ii. In the event of early termination of the Concession Contract for any of the reasons set forth in subparagraphs d) or e) of Clause 18.1 and after the commencement of the Construction of any of the Project Sections, the maximum total amount of the termination expenses shall be limited to fifty percent (50%) of the value resulting from the Guarantee of Faithful Fulfillment of the Concession Contract and the Guarantees of Faithful Fulfillment of the Construction Works in force at the time of the early termination of the Contract.
 - iii. In the event of early termination of the Concession Contract due to the cause set forth in subparagraph f) of Clause 18.1 and after the commencement of the Construction of any of the Project Sections, the maximum total amount of the

termination expenses shall be limited to twenty-five percent (25%) of the value resulting from the Guarantee of Faithful Fulfillment of the Concession Contract and of the Guarantees of Faithful Fulfillment of the Construction Works in force at the time of early termination of the Contract.

EARLY TERMINATION INDEMNITY

18.32 In the event of early termination of the Concession Contract due to the cause set forth in subparagraphs d) and e) of Clause 18.1, and only after the commencement of the Operation Stage of Sections 1 and 3, the GRANTOR shall pay to the CONCESSIONAIRE, in addition to the Net Book Value of the corresponding Intangible Asset, an indemnity for early termination (which includes, but is not limited to, any damage or prejudice, direct or indirect, in addition to the corresponding consequential damage, emerging damage and/or loss of profits, as well as compensation for any other loss, in favor of the CONCESSIONAIRE) equivalent to:

$$I = \left[(VPIP - VPIPm + VPIP_2 * A_2) * (1 + TD)^{\left(\frac{d}{365}\right)} * MO * \frac{IPC_m}{IPC_r} \right] - VCNI$$

- *VPIP* : Present Value of the Toll Revenues of the Operating Sections referred to in Appendix 4 of Annex No. 9 of the Contract.
 - When Sections 1, 2 and 3 are in the Operation Stage, the Complete VIPIP, as defined in numeral 1 of Appendix 4 of Annex No. 9, shall apply.
 - In the event that the Partial Expiration of the Contract has previously occurred due to the impossibility of acquiring land as established in Clause 6.34 and following, the VPIP for Partial Termination, as defined in numeral 2 of Appendix 4 of Annex No. 9, shall apply.
 - When Sections 1 and 3 are in the Operation Stage, Section 2 is in the Construction Stage and the partial expiration of the Contract has not been previously granted due to the impossibility of land acquisition as established in Clause 6.34 and following, the VPIP for Partial termination, as defined in numeral 3 of Appendix 4 of Annex No. 9, shall apply.
- *VPIPm* : Present value as of the Reference Date of the Toll Revenues accrued up to the Calendar Day prior to the date on which the Expiration is declared, in accordance with the provisions of Appendix 4 of Annex No. 9 of the Contract.
- *VPIP*₂ : Present Value of the Toll Revenues associated with Section 2, which for the sole purpose of this formula shall be:
 - When Sections 1, 2 and 3 are in the Operation Stage, it shall be zero.
 - In the event that the partial expiration of the Contract has previously occurred due to the impossibility of acquiring

land as established in Clause 6.34 and subsequent clauses, it shall be zero.

- When Sections 1 and 3 are in the Operation Stage and Section 2 is in the Construction Stage, it shall correspond to: VPIP₂ = VPIP Complete - VPIP of Partial Completion.
- *A*₂ Percentage of Work Progress of Section 2 certified by means of CAOs issued by the REGULATOR up to the Calendar Day prior to the date on which the Expiration is declared.

In the event that there are Works executed pending certification by the REGULATOR through the CAO, provided that they comply with the requirements set forth in this Contract, with the exception of the minimum values set forth in Clause 2.1 of Appendix 2 of Annex No. 9, which shall not apply, the REGULATOR shall issue the corresponding Work Review Report(s) and the corresponding CAO(s), which shall be used for the purposes of calculating this variable.

- TD : Actual discount rate of income amounting to 8.49672% effective annual rate in Soles
- d : Number of Calendar Days between the Closing Date and the Calendar Day prior to the date on which the Expiration is declared.
- MO : Operating Margin, which amounted to:
 - 65% from the beginning of the Section 1 and 3 Operating Stage and up to 28 months after the beginning of the Section 2 Operating Stage;
 - 70% between months 29 and 64 after the beginning of the Operation Stage of Sections 1, 2 and 3 as a whole;
 - 75% between months 65 and 136 after the beginning of the Operation Stage of Sections 1, 2 and 3 as a whole;
 - 80% from month 137 after the beginning of the Operation Stage of Sections 1, 2 and 3 together, and thereafter.

In the event of the termination or partial expiration of the Contract due to the impossibility of acquiring land as established in Clause 6.34 and following, the Operating Margin shall be as follows:

- 55% from the beginning of the Operation Stage of Sections 1 and 3 and up to 19 months after the beginning of the Operation Stage of Sections 1 and 3 together;
- 60% between months 20 and 55 after the beginning of the Operation Stage of Sections 1 and 3 together;
- 65% between months 56 and 103 after the start of the Operation Stage of Sections 1 and 3 together;
- 70% between months 104 and 175 after the start of the Operation Stage of Sections 1 and 3 together;
- 75% from month 176 after the beginning of the Operation Stage of Sections 1 and 3 together, and thereafter.

- *IPC_m* : Peruvian Consumer Price Index for the last available month as of the date on which the forfeiture is declared, published by the National Institute of Statistics and Informatics (INEI).
- *IPC*^r : Peruvian Consumer Price Index for the latest available month as of the Reference Date, published by the National Institute of Statistics and Informatics (INEI).
- VCNI : Net Book Value of the Intangible Asset calculated in accordance with the provisions of Clause 18.26 et seq.

The calculation of the indemnity for early termination provided for in this clause shall be made by the REGULATOR with the same terms and requirements applicable to the calculation of the Net Book Value of the Intangible Asset set forth in Clause 18.27. Likewise, the payment of the indemnity shall include the payment of the taxes and/or charges that may be applicable, according to the Applicable Laws and Provisions.

It should be noted that the CONCESSIONAIRE shall not be entitled to the payment of the indemnity regulated in this clause or any additional or indemnifying amount, in the event that the early termination or partial expiration of the Contract is declared due to failure to deliver the Concession Area within the terms and in the manner set forth in clauses 6.23 of the Contract.

EFFECTS OF TERMINATION

18.33 The expiration of the Concession results in the obligation of the CONCESSIONAIRE to return the Concession Area and deliver the Concession Assets to the GRANTOR, through the execution of the corresponding Minutes of Reversion of the Assets, pursuant to the terms of Chapter VI of this Contract. The partial expiration of the Concession produces the obligation of the CONCESSIONAIRE to return the Concession Area and deliver the Concession Assets to the GRANTOR, pursuant to the terms of Chapter VI of this Contract, which correspond to Section 2 and whose Expiration has been declared.

For such purposes, in the event of Expiration during the execution of Works, both in the Construction Stage and in the Operation Stage, the partially executed Works shall form part of the Concession Assets.

In the event of Expiration in the Operation Stage, the CONCESSIONAIRE shall deliver the Concession in operating conditions, that is to say, in conditions that allow the continuity in the provision of the Mandatory Services in compliance with the Service Levels, except in cases of Force Majeure or Fortuitous Event and only in the extreme case that such event of Force Majeure or Fortuitous Event prevents compliance with the aforementioned.

18.34 Within a maximum term of sixty (60) Calendar Days prior to the termination of the Contract (including the term of cure, if applicable), the formulation of the Final Inventory of the Concession Assets shall begin. This shall be carried out with the intervention of the REGULATOR and shall be concluded within a maximum term of fifteen (15) Calendar Days prior to the date of termination of the Contract. The Final Inventory of the assets shall have the approval of the GRANTOR, prior opinion of the REGULATOR.

- 18.35 In the event of Termination by Mutual Agreement, the Final Inventory shall be part of the agreement signed for such purpose.
- 18.36 Upon the expiration of the Concession, according to the terms set forth in this Chapter XVIII, the activity of the CONCESSIONAIRE ceases with respect to the expired Section(s) and its right to operate the road infrastructure with respect thereto is extinguished, which right is reassumed by the GRANTOR.
- 18.37 Likewise, all contracts referred to in Clause 16.2 shall terminate, except for the contracts entered into with the Permitted Creditors or other financiers, if any, and those that the GRANTOR has expressly decided to keep in force and in respect of which it has assumed the contractual position of the CONCESSIONAIRE or has appointed a third party to assume such contractual position.
- 18.38 In all events in which the GRANTOR or, if applicable, the Permitted Creditors, assume directly, or through a third party, the Operation of the Concession, there shall be no obligation of any kind on the part of the CONCESSIONAIRE towards the Users, except for those caused by fraud or inexcusable fault of the CONCESSIONAIRE.
- 18.39 Whatever the cause of the Expiration, upon its occurrence, the GRANTOR shall substitute the CONCESSIONAIRE in all the rights over the Management Trust, except those related to the payment of the RPI, CALP, Net Book Value of the Intangible Asset and the indemnity provided in Clause 18.33, if applicable.

Additionally, the Administration Trust shall remain in force, at least until six (6) months after the cancellation of the payment obligations referred to in Clauses 18.2, 18.8, 18.12, 18.15, 18.18, 18.23 and 18.33, as applicable, by the GRANTOR on behalf of the CONCESSIONAIRE, as well as the cancellation of the payment obligations of the GRANTOR corresponding to the RPI and CALP.

- 18.40 Once the expiration of the Concession has been declared, the GRANTOR shall carry out the respective liquidation, according to the terms set forth in Clauses 18.30 and 18.33.
- 18.41 Upon the expiration of the Concession, the GRANTOR or the new concessionaire appointed by it shall take over the Concession.

REMEDY IN CASE OF NON-COMPLIANCE

- 18.42 In the event of a breach that can be remedied by any of the Parties, the affected Party shall require the defaulting Party to remedy the breach, notwithstanding the application of penalties to the CONCESSIONAIRE, as long as it is the defaulting Party. Unless a different term is established in the Contract, the Party in breach shall have a term of sixty (60) Calendar Days from the date of receipt of the request to remedy the situation of non-compliance, extendable for thirty (30) Calendar Days or longer term expressly granted in writing by the affected Party.
- 18.43 Only after the communications detailed in the preceding Clause have been sent, as well as after the applicable cure periods have elapsed, may the Parties exercise their right to terminate the Contract for breach by one of them in accordance with Clauses 18.7 and 18.11, except in the case of irremediable breaches, in which case such right may be exercised once the relevant event of breach has occurred.

Furthermore, only in the event of curable breaches, if the affected Party is the GRANTOR, he/she shall notify the Permitted Creditors in accordance with Clause 4.26 so that they may take such actions as they deem necessary to assist in the cure of the breaches by the CONCESSIONAIRE before being able to exercise their right to terminate the Contract for breach by the CONCESSIONAIRE in accordance with Clause 18.7.

PROCEDURE FOR REDEMPTION IN THE EVENT OF TERMINATION OF THE CONTRACT

18.44 In the event that any of the Parties invokes the termination of the Concession Contract for any reason, or the GRANTOR unilaterally decides the termination of the Contract, the GRANTOR shall appoint a legal person to act as comptroller, once the Concession has been declared forfeited, who shall be in charge of the Operation of the Concession and shall fulfill all the obligations of the CONCESSIONAIRE, while the GRANTOR decides the mechanism that allows maintaining the continuity of the Service, according to the Applicable Laws and Provisions.

The GRANTOR shall adopt the necessary measures in order to guarantee the continuity of the Service.

The costs of hiring the Comptroller shall be assumed as follows:

- (i) By the Party whose breach has given rise to the termination of the Contract;
- By the GRANTOR, in case it exercises the power to unilaterally terminate the Contract, or if the cause of partial expiration is configured due to the impossibility of land acquisition; or,
- (iii) By both Parties, in equal proportion in case of Force Majeure or Fortuitous Event.

CHAPTER XIX: DISPUTE RESOLUTION

APPLICABLE LAW

19.1. The Contract shall be governed and interpreted in accordance with the Applicable Laws and Provisions. Therefore, it expresses that the content, execution, conflicts and other consequences arising therefrom shall be governed by such legislation, which the CONCESSIONAIRE declares to be familiar with.

SCOPE OF APPLICATION

- 19.2. This Chapter regulates the resolution of disputes arising between the Parties during the Concession and those related to the termination of the Contract and the expiration of the Concession, with the exception of those disputes arising with respect to the administrative acts issued by the REGULATOR in the exercise of its functions, as provided in this Contract or in the Applicable Laws and Provisions.
- 19.3. Pursuant to Article 62 of the Constitution, it is recognized that conflicts arising from the contractual relationship shall be resolved by direct treatment and through arbitration, according to the protection mechanisms provided for in the Contract.

Notwithstanding the provisions of the preceding paragraphs, the Parties acknowledge that the challenge of the decisions of the REGULATOR, or other public entities in the exercise of their administrative powers attributed by express regulation, shall be subject to the Applicable Laws and Provisions.

INTERPRETATION CRITERIA

- 19.4. In case of divergence in the interpretation of this Contract, the following order of priority shall be followed to resolve such situation:
 - a) The Contract and its amendments (addenda);
 - b) The Annexes and Appendices of the Contract and/or its amendments;
 - c) Official Letters referred to the Bidding Terms; and,
 - d) The Bidding Terms.
- 19.5. The Contract is entered into only in the Spanish language. In the event of any difference between any translation of the Contract and this Contract, the text of the Contract in Spanish shall prevail. Translations of this Contract shall not be considered for purposes of interpretation.

The terms "Annex," "Appendix," "Clause," "Chapter," "Numeral" and "Subparagraph" are understood to refer to this Concession Contract, unless it is unequivocally and undoubtedly inferred from the context that they refer to another document.

19.6. The periods established shall be computed in days, months or years, as appropriate.

The headings contained in the Contract are for identification purposes only and shall not be considered as part of the Contract, to limit or extend its contents or to determine rights and obligations of the Parties.

- 19.7. Terms in the singular shall include the same terms in the plural and vice versa. Terms in the masculine include the feminine and vice versa.
- 19.8. The use of the disjunction "or" in an enumeration must be understood as including exclusively any of the elements of such enumeration or list.
- 19.9. The use of the conjunction "and" in an enumeration shall be understood to include all the elements of such enumeration or list.
- 19.10. All Fees, revenues, costs, expenses and the like to which the CONCESSIONAIRE is entitled to or is responsible for, due the provision of the Services, shall be charged or paid in the corresponding currency in accordance with the Applicable Laws and Provisions, and the terms of the Contract.

WAIVER OF DIPLOMATIC CLAIMS

19.11. The CONCESSIONAIRE and its partners or shareholders expressly, unconditionally and irrevocably waive any diplomatic claim for controversies or conflicts that may arise from the Contract.

DIRECT DEALING

19.12. The Parties declare that it is their shall that all conflicts or uncertainties with legal relevance on matters of an available nature that may arise with respect to the interpretation, execution, compliance, and any aspect related to the existence, validity or effectiveness of the Contract or the expiration of the Concession, with the exception of

the administrative acts issued by the REGULATOR in the exercise of its administrative functions attributed by express regulation, whose means of claim is through administrative channels, shall be resolved by direct agreement between the Parties. In the event the CONCESSIONAIRE initiates an arbitration process without having gone through the direct negotiation stage, the penalty established in Annex No. 10 of this Contract shall be applicable. The payment of such penalty shall not be understood as a waiver to go through the direct dealing stage, notwithstanding the payment of the established penalty. In this regard, any Arbitration Court requested to resolve a dispute under this dispute resolution clause shall be deemed incompetent to do so if the parties have not previously gone through the direct treatment stage regulated in this Clause.

The deadline for direct treatment in the case of technical disputes shall be ninety (90) Calendar Days, counted from the date on which a Party communicates to the other, in writing, the existence of a conflict or uncertainty with legal relevance. The request for initiation of direct treatment must include a comprehensive description of the dispute and its due substantiation, as well as be accompanied by all the corresponding means of evidence.

On the other hand, in the case of non-technical disputes, the negotiation or direct negotiation period shall not exceed one hundred and eighty (180) Calendar Days. The request for the initiation of the direct deal must include a comprehensive description of the dispute and its due justification, as well as be accompanied by all the corresponding means of evidence.

The time periods referred to in the preceding paragraphs may be extended by joint decision of the Parties, an agreement to be recorded in writing, provided that there is a real possibility that, if this additional time period is available, the dispute shall be resolved by means of direct treatment.

Within the direct dealing period, the parties shall define the conflict or uncertainty raised as a technical or non-technical conflict or uncertainty, as the case may be, except for conflicts or uncertainties whose nature is pre-defined as such in the Contract. If the Parties fail to agree within the direct dealing period for technical disputes as to whether the conflict or dispute raised is a technical dispute or a non-technical dispute, or if the conflict has both technical and non-technical dispute components, then such conflict or uncertainty shall be deemed to be a non-technical dispute.

Technical disputes or uncertainties (each, a technical dispute) shall be resolved in accordance with the procedure set forth in subparagraph a) of Clause 19.13. Non-technical disputes or uncertainties (each, a non-technical dispute) shall be resolved in accordance with the procedure set forth in subparagraph b) of Clause 19.13.

The parties shall record the agreements reached, if applicable, in a Direct Deed of Agreement, which shall be signed by the representatives of both parties, notwithstanding the subscription of the documents that may be necessary to implement such agreements. Within five (5) Working Days from the date of execution of the Direct Deed of Agreement by the Parties, the CONCESSIONAIRE shall notify the REGULATOR, the Office of the Comptroller General of the Republic and any other competent Governmental Authority for their knowledge and so that they may adopt the corresponding actions, according to their competencies.

ARBITRATION

19.13. Modalities of procedures according to the nature of the dispute:

a) Conscientious Arbitration. Any and all technical disputes that cannot be resolved directly by the Parties within the direct dealing period shall be submitted to conscientious arbitration, in accordance with Peruvian law governing arbitration, in which the Arbitration Court shall decide in accordance with its knowledge of the subject matter and its sense of fairness. The arbitrators may be national or foreign experts, but in all cases they must have extensive experience in the subject matter of the respective technical dispute, and must not have any conflict of interest with any of the Parties at the time of their appointment and after their appointment as such.

The dispute shall be resolved through national arbitration, being applicable the Regulations of the Center for Analysis and Resolution of Disputes of the Pontificia Universidad Católica del Perú, in all matters not provided for in this Contract. The Parties expressly and unconditionally submit to said regulations.

The Arbitration Court shall set a time limit, counted from the filing of the last written statement of claim, to request the Parties to provide the information it deems necessary to resolve the technical dispute before it. The Parties shall, in turn, have a period of time fixed by the Arbitration Court to submit the requested information. As a consequence of this, the Arbitration Court shall fix in advance, at the beginning of the arbitration, the period of time it shall have, counted from the expiration of the time limit for the Parties to send the information referred to above, to submit a conciliation proposal to the Parties, which may or may not be accepted by them within a period of no more than ten (10) Working Days from its submission. If the parties do not accept the conciliation proposal, the arbitration shall proceed in accordance with the provisions of this clause and the applicable rules of procedure.

Having complied with the provisions of the preceding paragraph, the Arbitration Court may act on all evidence and request from the Parties or third parties such evidence as it deems necessary to resolve the claims raised.

The Arbitration Court shall prepare a preliminary decision which it shall notify to the Parties within twenty (20) Working Days after the expiration of the Parties' time limit to decide on its conciliation proposal, and the Parties shall have five (5) Days to prepare and deliver to the Tribunal their comments on such preliminary decision. The Arbitration Court shall issue its final decision on the Technical Dispute raised within ten (10) Working Days following receipt of the Parties' comments, its preliminary decision or the expiration of the time limit for submitting such comments, whichever occurs first. The proceeding for the resolution of a technical dispute shall be held in the city of Lima, Peru, being applicable Peruvian law applicable to the arbitration. Exceptionally, and due to the nature of the specific case, the Arbitration Court may move to another location for the sole purpose of taking evidence, such as expert opinions, ocular inspections or any other evidentiary means necessary to take place in another location, for a period of no more than ten (10) Working Days. The Arbitration Court has the power to modify, ex officio, if it deems it necessary, any of the aforementioned time periods.

The members of the Arbitration Court shall maintain absolute confidentiality and secrecy with respect to all information they become aware of as a result of their participation in the resolution of a Technical Dispute. **b)** Arbitration at Law. Non-technical disputes that cannot be resolved directly by the Parties within the direct dealing period, shall be resolved by arbitration at law, procedure in which the arbitrators shall resolve in accordance with the Applicable Laws and Provisions. The arbitration at law may be local or international, in accordance with the following:

- i) When the non-technical disputes involve an amount greater than USD 30,000,000.00 (Thirty Million and 00/100 US Dollars) or its equivalent in national currency or the Parties do not agree on its amount, the Parties shall try to resolve such dispute through direct treatment within the term established in Clause 19.12 for the case of non-technical disputes, which may be extended by joint decision of the Parties.
- ii) In the event that the Parties do not reach an agreement within the deadline referred to in the preceding paragraph, disputes arising therefrom shall be settled by international arbitration at law, under the Rules of Arbitration of the International Chamber of Commerce.
- iii) In the event that the disputes are settled by international arbitration at law, it is hereby stated for the record that the time limit established in Article 5 of the Rules of Arbitration of the International Chamber of Commerce for the response to the request for arbitration shall be sixty (60) calendar days from the date of receipt by the Respondent of the request for arbitration sent by the Secretariat of the International Chamber of Commerce.
- iv) Furthermore, in accordance with the provisions of subparagraph b) of numeral 6 of Article 29 of the Rules of Arbitration of the International Chamber of Commerce, the provisions on the Emergency Arbitrator shall not be applicable, and therefore, none of the parties to this Contract may choose to apply the provisions set forth in Article 29 and Appendix V (Emergency Arbitrator Rules) of the Rules of Arbitration of the International Chamber of Commerce.

In addition, pursuant to subparagraph b) of numeral 3 of Article 30 of the Rules of Arbitration of the International Chamber of Commerce, the provisions of the Expedited Procedure shall not apply, and therefore neither party to this Contract may choose to apply the provisions of Article 30 and Appendix VI (Expedited Procedure Rules) of the Rules of Arbitration of the International Chamber of Commerce.

- v) The arbitration shall take place in the city of Lima, Republic of Peru, and shall be conducted in the Spanish language, being applicable Peruvian law applicable to the arbitration.
- vi) Non-technical controversies in which the amount involved is equal to or less than USD 30,000,000.00 (Thirty Million and 00/100 US Dollars), or its equivalent in local currency, as well as those purely legal controversies that are not quantifiable in money, shall be resolved by arbitration at law, through a procedure that shall be followed in accordance with the Regulations of the Center for Conflict Analysis and Resolution of the Pontifical Catholic University of Peru, to whose rules the Parties expressly and unconditionally submit themselves. The Parties may submit disputes to the rules or procedures of an arbitration institution other than the Center for

Conflict Analysis and Resolution of the Pontifical Catholic University of Peru. This shall require an express agreement in writing. The place of arbitration shall be the city of Lima, capital of the Republic of Peru; the official language to be used shall be Spanish; and the law applicable to the arbitration shall be Peruvian law.

COMMON PROCEDURAL RULES

- 19.14 These common rules shall apply to the arbitration at law referred to in subparagraph b) of Clause 19.13, whether international or domestic:
 - a) The Arbitration Court shall consist of three (3) members. The Claimant shall designate its arbitrator together with its Request for Arbitration. The Respondent shall designate its arbitrator within thirty (30) Calendar Days of the request and the third arbitrator shall be designated by agreement of the Parties within thirty (30) Calendar Days of the Respondent's designation of the second arbitrator, who shall in turn serve as Chairman of the Arbitration Court. If one of the Parties fails to appoint its Arbitrator, or if the Parties do not reach an agreement on the appointment of the third arbitrator within the established term, the arbitrators not appointed by that date shall be appointed, at the request of any of the Parties, by the Center for Conflict Analysis and Resolution of the Pontifical Catholic University of Peru, in the case of Arbitration under national law or by the International Arbitration Court of the International Chamber of Commerce, in the case of Arbitration promoted under the Rules of Arbitration of the International Chamber of Commerce.
 - b) Notwithstanding the administrative acts referred to in Clause 19.2, which are excepted from this section, the Arbitration Court may, at its discretion, fill any difference or gap in the law or the Contract by applying general principles of law.
 - c) The award rendered by the Arbitration Court shall be final and not subject to appeal. In this sense, the Parties shall consider it as a final judgment, with the authority of res judicata. Consequently, the Parties waive the remedies of reconsideration, appeal, cassation or any other means of appeal of the arbitration award, declaring that it shall be binding, final and immediately enforceable, except for the remedies provided for in Articles 58 and 62 of Legislative Decree No. 1071.
 - d) During the course of the arbitration, the Parties shall continue with the performance of their contractual obligations, to the extent possible, including those that are the subject matter of the arbitration. Likewise, if the subject matter of the arbitration is the performance of secured obligations, the application of penalties and the enforcement of the corresponding Guarantees of Faithful Fulfillment shall be suspended and shall be subject to the resolution of the dispute.
 - e) When the dispute deals with matters related to the competence that the law or this Contract confers on the REGULATOR, the arbitration institution administering the arbitration and/or the claimant, as the case may be, shall notify the REGULATOR with the request for arbitration. The foregoing also applies to cases in which the Arbitration Court deems that it does not have jurisdiction to hear the dispute because it deals with matters that are not arbitrable.

In the cases set forth in the preceding paragraph, the REGULATOR shall be notified, either by the arbitration secretariat, the Arbitration Court or by the corresponding party, of all acts (writs, orders, award, among others) that take place within the framework of the arbitration. The Arbitration Court shall allow the REGULATOR to address the Tribunal and the parties by means of written documents or by speaking at the hearings scheduled, as the case may be, as if it were one of the parties.

All expenses incurred in the resolution of a technical or non-technical dispute, including the fees of the arbitrators involved in the resolution of a dispute, shall be borne by the losing Party. The same rule applies in the event that the defending or counterclaiming Party accepts or recognizes the claim of the claimant or counterclaimant. The costs shall also be borne by the claimant or counterclaimant who withdraws the claim. In the event the proceeding ends without a decision on the merits of the claims due to a settlement or conciliation, the aforementioned expenses shall be covered in equal parts by the claimant and the defendant or as defined by the Parties in the corresponding settlement or conciliation. Likewise, in the event that the award is partially in favor of the positions of the Parties, the Arbitration Court shall decide on the distribution of such costs.

Excluded from the provisions of this Clause are costs and expenses such as counsel fees, internal costs or other costs that are attributable to an individual Party.

CHAPTER XX: CONTRACT MODIFICATIONS

20.1 Any request for amendment, addition or modification of this Contract by any of the Parties shall be submitted to the other Party, with the due technical and economic-financial support and, if submitted by the CONCESSIONAIRE, with the conformity of the Permitted Creditors as established in the acts and agreements of Permitted Guaranteed Indebtedness, if applicable. The GRANTOR shall resolve the application submitted.

The amendment agreement shall be binding on the Parties only if it is in writing and signed by the duly authorized representatives of the Parties, provided that it complies with the provisions of the Applicable Laws and Provisions.

Pursuant to Article 55 of Legislative Decree No. 1362 and Article 134 of the Regulations, the Parties may modify this Contract, prior agreement in writing, for duly founded cause and when it is necessary for the public interest, maintaining the conditions of competition of the promotion process and the economic-financial balance of the services to be provided by the Parties, taking care not to alter the allocation of risks and the nature of the project.

Notwithstanding the provisions of the present Chapter, for the processing of contractual modifications the provisions and procedure contained in Legislative Decree No. 1362 and its Regulations, as well as in the Applicable Laws and Provisions that modify, complement or replace them shall apply to this Contract.

CHAPTER XX I: PENALTIES

CONTRACTUAL PENALTIES

21.1 The REGULATOR is competent to apply to the CONCESSIONAIRE the penalties established in this Contract, in the event of non-compliance with the obligations agreed to be borne by the CONCESSIONAIRE. The CONCESSIONAIRE shall not be exempt from liability even in the cases in which the breaches are a consequence of contracts

entered into with third parties. The application and payment of penalties under the Contract shall not exempt the CONCESSIONAIRE from the effective performance of its obligations, nor shall it validate and/or enable the breach of the respective obligation.

21.2 The amount of the penalties shall be paid by the CONCESSIONAIRE to the account of the corresponding Administration Trust within ten (10) Working Days from the Working Day following the notification received by the REGULATOR.

The term for the payment of the penalties referred to in this Clause shall be suspended in the event the CONCESSIONAIRE challenges the penalty, and the calculation of such term shall be restarted in the event its imposition by the REGULATOR is confirmed.

21.3 The CONCESSIONAIRE may challenge the penalty, for which it shall submit to the REGULATOR, with a copy to the GRANTOR, within a maximum term of ten (10) Working Days from the Working Day following the date of notification thereof, the written challenge with the respective support.

The REGULATOR shall have a maximum term of fifteen (15) Working Days to issue its duly grounded pronouncement. In the event that, upon expiration of the aforementioned term, the REGULATOR does not issue any pronouncement, it shall be understood that the appeal filed has been rejected. The REGULATOR'S decision shall be final and shall not be subject to any claim by the CONCESSIONAIRE.

If the CONCESSIONAIRE fails to pay such penalties within the aforementioned term, upon instruction from the REGULATOR, the GRANTOR may execute the Guarantees of Faithful Fulfillment that guarantee the penalties imposed, as applicable, up to the amounts they amount to, and the CONCESSIONAIRE shall comply with the provisions of Clause 13.8.

21.4 The payment of the applicable penalties may not be considered as an affectation to the financial flow of the Concession and neither may the breach of the economic-financial equilibrium be invoked for this reason.

CHAPTER XX II: DOMICILES

FIXING

- 22.1 Unless otherwise expressly agreed in the Contract, all notices, summons, petitions, demands and other communications related to the Contract shall be in writing and shall be deemed validly made, (i) when delivered by the corresponding party or when sent by courier, at the time they have the respective reception charge; (ii) when they are sent by telex or fax, at the moment their receipt is confirmed; or, (iii) when they are made by digital means, through the virtual reception desk of the GRANTOR, the REGULATOR and/or PROINVERSIÓN, as the case may be, in which case it shall be necessary the subscription of the documents by means of electronic signature. In case of physical delivery, the communications shall be addressed to the following addresses:
 - If it is addressed to the GRANTOR:

Name:Ministry of Transport and Communications - MTCAddress:Jirón Zorritos No. 1203, Lima 1.Attention:Minister of Transportation and Communications

• If addressed to THE CONCESSIONAIRE:

Name: [•] Address: [•] Attention: [•]

• If addressed to the REGULATOR:

Name:Supervisory Board for Investment in Public Transport Infrastructure -OSITRANAddress:Calle Los Negocios No. 182, Surquillo.Attention:OSITRAN Manager

• If addressed to PROINVERSIÓN:

Name:Private Investment Promotion Agency - ProInversiónAddress:Avenida Enrique Canaval Moreyra No. 150, 9th floor, San Isidro, provinceand department of Lima.Attention:Executive Directorate

ADDRESS CHANGES

22.2 Any change of domicile must be communicated to the other Party to the Contract, to the REGULATOR and PROINVERSIÓN. Any modification shall only produce effects to the extent that it has been communicated in writing fifteen (15) Calendar Days in advance and provided that the new domicile is located in the city of Lima, Peru. In the event that any of the aforementioned requirements are not complied with, the change shall not produce any effect and all communications sent in accordance with the aforementioned terms shall be considered valid and effectively carried out.

Signed in Lima, in four (4) original copies, one for the GRANTOR, one for the REGULATOR, one for PROINVERSIÓN and one for the CONCESSIONAIRE, on the [•] day of the month of [•] of [•].

ANNEX No. 1 RIGHT OF WAY

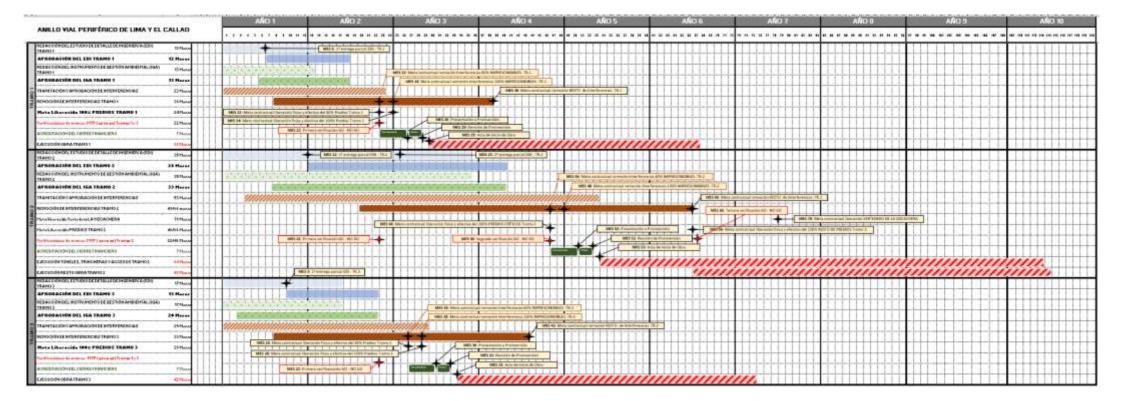
The Right of Way is the strip of land defined in Ministerial Resolution No. 918-2017 MTC/01.02, as amended by Ministerial Resolution No. 1084-2017 MTC/01.02, which shall include the updated Ministerial Resolution No. 918-2017 MTC/01.02, as amended by Ministerial Resolution No. 1084-2017 MTC/01.02, the same which shall include the update of the Right of Way as of the Closing Date, as described below, and/or may be amended at subsequent times.

Pursuant to subparagraph vi) of Clause 3.8 of the Contract, on the Closing Date, the GRANTOR shall deliver to the CONCESSIONAIRE a copy of the Ministerial Resolution or legal provision containing the updated Right of Way.

In accordance with Clauses 1.14.125 to 1.14.129, it is specified that the areas of the three (3) Project Sections indicated below are included within the Right-of-Way:

Section	Section Description	
I	From the ovalo de 200 millas to the Panamericana Norte at the Ovalo del Naranjal.	
11	II From the ovalo del Naranjal on the Panamericana Norte to the Ramiro Prialé Highway Interchange.	
	 From Ramiro Prialé Highway to Av. Circunvalación (passing Av. Circunvalación up to approximately 70 meters before reaching Av. Rosa Toro). 	

ANNEX No. 2 PROJECT SCHEDULE



ANNEX No. 3 TECHNICAL ASPECTS

Appendix 1 Minimum Technical Requirements of the Project for Design and Construction SECTION A

MANDATORY MINIMUM TECHNICAL REQUIREMENTS OF THE PROJECT FOR DESIGN AND CONSTRUCTION

1 Standards related to Road Works

The development of the Interventions and presentation of the detailed engineering study must comply with all the specifications and/or technical standards in accordance with the TORs for the preparation of the Definitive Engineering Study (EDI) and with the Applicable Laws and Provisions in force and in compliance with the exceptions defined in this document.

In the event that some parameters are not established in the above standards, the CONCESSIONAIRE shall use the specifications and/or technical standards of an international nature.

The limits of the works, both in the axis of the main road and in the works to be carried out in the parallel and transversal roads, are those included in the approved Right of Way. The technical solution expressed in the Pre-investment Study of the "Construction of the Peripheral Ring Road" Project (declared viable with code SNIP309972) and its adaptations to the environment is at a referential level

2 Regulations, Manuals and/or Directives of the National Public Investment System

The standards, manuals and directives are detailed in numerals 1.1.1 and 1.1.2 of the terms of reference of the definitive study. The standards, manuals and directives shall be those in force at the time of signing the contract.

3 Exceptions to the rule

Due to the fact that the Project is inserted in an urban environment and in order to adjust the layout to the current reserve established in the Metropolitan Road System in accordance with Ordinance No. 348-MML of January 8, 2002 and the Right of Way approved by RM No. 918-2017 MTC-01.02 and its amendment by RM No. 1084-2017 MTC-01.02, the following geometric exceptions are admissible:

- a) The maximum slope at the access to the tunnels is 6%, in order to adjust the layout to the orography of the area and minimize the effects. It should be noted that this increase in slope to 6% is accepted by the current DG-2018 layout regulations, which allow increasing the maximum slope (5%) by an additional 1%, provided that it is technically justified. This slope is also included within the geometric parameters accepted in the project's Feasibility Statement, published in December 2016 (Technical Report No. 080-2016-EF/63.01).
- b) The maximum slope inside the tunnel is 3% in order not to increase its length and improve conditions at the exit portal. This slope is included within the geometric parameters accepted in the project's **Feasibility Statement**, published in December 2016 (Technical Report No. 080-2016-EF/63.01).
- c) In the Auxiliary Roads, the maximum slope shall be adapted to the existing orography within the approved right-of-way in order to reduce the effects and try to stick as closely as possible to the existing topography and the city's current road system with the service roads.
- d) Along the entire route of the expressway trunk (including tunnels), the right shoulder is 1.4 m and the left shoulder is 0.5 m, as it is a fully consolidated urban area with reduced width corridors. This standard section is included within the geometric parameters accepted in the project's Feasibility Statement, published in December 2016 (Technical Report No. 080-2016-EF/63.01). The type section of the highway has been defined to ensure its maximum integration into the existing feasibility and its adjustment to the approved Right of Way. Taking into consideration the urban environment

in which this project is being developed, during the formulation phase it was decided to keep the previously defined section constant, without considering over-widening for visibility. The central separator is 1 m in order to reduce the impact on the environment. This standard section is included within the geometric parameters accepted in the project's **Feasibility Statement**, published in December 2016 (Technical Report No. 080-2016-EF/63.01).

4 Design parameters main trunk

The route of the road is defined by the current reserve established in the Metropolitan Road System (SVM) in accordance with Ordinance No. 348-MML dated January 8, 2002, which added to the SVM the reserve of the areas affected by the Right of Way.

In order not to modify the current reserve or the approved Right of Way, the layout according to the Preinvestment Study and its adaptations is fixed and must be complied with, except in duly justified specific cases in which the CONCESSIONAIRE demonstrates that the property, environmental or archaeological impacts may be minor.

The design of the new expressway must meet the following minimum parameters:

٠	Project speed:	80 KPH
٠	Standard section:	
	 Minimum width of the central separator 	1.00 m
	- No. of roadways	2 pcs
	- No. of lanes in each roadway	3 units
	- The section is reduced to two lanes per roadway in the following se	ections:

- Passing through the Elmer Faucett Interchanger
- Passing through the Canta Callao Interchanger
- Passing through the Panamericana Norte Interchanger
- Between the Evitamiento trunk toll area (km 31+900) and the end of Section 3

-	Lane width	3.60 m
-	Outside shoulder width	1.40 m
-	Inside shoulder width	0.50 m
-	Pumping	2.00%
-	Normal maximum camber	4.00%
-	Absolute maximum camber	6.00%
-	Tunnel gauge	5.50 m
-	Clearance gauge over FF.CC.	5.50 m
-	Overpass gauge over roads	5.50 m
-	Clearance under pedestrian bridges	5.50 m + 1.0ft

- Geometric layout in plan:
 - Plan definition axis defined at the midpoint of the central separator.

 Minimum radius without clotoid 600.00 m Maximum length between tangents 1,336.00 m Minimum straight length in S 111.00 m Minimum straight length in C 222.00 m Minimum radius for superelevation 2% 1,200.00 m Minimum radius for pumping 3,400.00 m 	-	Minimum radius	280.00 m
 Minimum straight length in S Minimum straight length in C Minimum radius for superelevation 2% 1,200.00 m 	-	Minimum radius without clotoid	600.00 m
 Minimum straight length in C 222.00 m Minimum radius for superelevation 2% 1,200.00 m 	-	Maximum length between tangents	1,336.00 m
- Minimum radius for superelevation 2% 1,200.00 m	-	Minimum straight length in S	111.00 m
	-	Minimum straight length in C	222.00 m
- Minimum radius for pumping 3,400.00 m	-	Minimum radius for superelevation 2%	1,200.00 m
	-	Minimum radius for pumping	3,400.00 m

0.50%.

0.20%.

5%.

The following exceptions to compliance with the minimum geometric parameters in plan shall be adopted (in order to adjust the layout to the approved Right of Way).

KK.MM.	EXCEPTION
5.6 to 5.9	A minimum radius of 190m shall be allowed, corresponding to a speed of 70km/h design with a maximum superelevation of 6% (absolute maximum superelevation in urban areas according to standard DG-2018 in section 304).
8.9 to 8.9	Curve of radius 500 m and circular development of 6.5 m.
9.0 to 9.1	Curve of radius 500 and circular development of 55 m.
15.4 to 15.4	Curve of radius 500 m and circular development of 3.5 m.
17.9 to 17.9	Curve of radius 500 and circular development of 20.04 m.
19.0 to 19.1	Curve of radius 1200 and circular development of 141 m
25.7 to 25.7	Curve with radius 500 and circular development of 1.5 m
29.9 to 30.1	Curve of radius 495 m and circular development of 67 m

- Geometric layout in longitudinal profile:
 - Defining axis on the inner white line of Roadway.
 - Minimum longitudinal slope
 - Exceptional minimum longitudinal slope
 - Maximum longitudinal slope
 - Exceptional maximum slope: 6% slope may be reached in the following sections:

Exceptional maximum slopes:

	SECTIONS WITH A 6% SLOPE	
Γ	Tunnel access sections 1	
	Tunnel access sections 2	

3.00%.
80 m
900.00
200.00
ç

• Tunnel design parameters:

-	No. of lanes in each direction	3 unit
-	Minimum lane width	3.60 m
-	Outside shoulder width	1.40 m
-	Inside shoulder width	0.50 m
-	Minimum internal clearance	5.50 m
-	Indoor/outdoor sidewalk	0.75 m
-	Maximum slope longitudinal profile tunnel	3.00%.

• Access control. The design adopted for the highway includes total access control, both at entrances and exits. Vehicular flows shall be continuous, without crossings or at-grade crossings, and the corresponding crosswalks shall be provided at different levels.

5 Design of auxiliary tracks

• Layout and design of auxiliary tracks

Auxiliary tracks shall be provided on both sides of the road, except for the sections where the Project does not cross urban areas. The limits of action of the auxiliary tracks coincide with the limits of the approved Right of Way.

• Geometric design parameters: The minimum characteristics for the cross section of the auxiliary roads are shown in the following table.

ELEMENT	DIMENSION
Minimum number of lanes ⁽¹⁾	2.00
Lane width (m)	3.00
Parking ⁽¹⁾	2.50
Inner sidewalk ⁽¹⁾	1.00
Exterior sidewalk ⁽¹⁾	2.00

(1) Exceptionally, as long as the Applicable Laws and Provisions allow it and with previous approval of the GRANTOR, these dimensions may be reduced to adapt to the Concession Area, to the Right of Way and/or to adapt due to unforeseen events and/or circumstances that affect the effective execution of the Works, providing the corresponding solution that allows the execution of the Works of the Project that have been affected by the aforementioned circumstances.

The auxiliary roads shall be geometrically adapted to the existing orography and feasibility.

- Type of pavement: The pavement to be laid on the auxiliary roads shall be flexible and shall be designed in accordance with the regulations in force.
- Other elements in auxiliary roads: Traffic lights, cameras, street furniture, bus stops, information
 panels and other existing local elements that are removed by the CONCESSIONAIRE as part of
 the construction works must be replaced, if necessary, information that shall be detailed during the
 EDI.

6 Interchangers

Interchanger design parameters

• Design parameters according to project speed

ELEMENT		V=60 KPH	V=55 KPH	V=40 KPH	V=35 KPH
Lane width (m)		4.00 on one- lane branch line/ 3.60 on two-lane branch line	4.00 on one-lane branch line/ 3.60 on two-lane branch line	4.00 on one-lane branch line/ 3.60 on two-lane branch line	4.00 on one-lane branch lines / 3.60 on two-lane branch lines
Overspan (only for R < 30m)		4.50	4.50	4.50	4.50
Shoulders on 1-lane branch	Right	1.50	1.50	1.50	1.50
lines	Left	0.60	0.60	0.60	0.60
Shoulders on 2-lane branch	Right	1.40	1.40	1.40	1.40
lines	Left	0.50	0.50	0.50	0.50
Minimum radius		120.00	90.00	40.00	35.00
Maximum inclination (%) Kv convex (m) Kv concave (m)		6.00	6.50	8.00	8.00
		1,400.00	1,000	400.00	300
		1,500.00	1,200	600.00	450

• Design parameters of the elements that make up the Interchangers.

Ovalo 200 Millas Interchanger

TYPE OF INTERCHANGER	DIRECTIONAL		
Branch	Design speed (kph)	No. of lanes.	Туре
West Ring Road - South Gambetta	60	2	Direct to level
South Gambetta - East Ring Road	60	2	Direct
North Gambetta - East Ring Road	60	1	Direct to level
East Ring Road - Gambetta North	60	1	Direct

Elmer Faucett Interchanger

TYPE OF INTERCHANGER	DIRECTIONAL		
Branch	Design speed (kph)	No. of lanes.	Туре
West Ring Road - Elmer Faucett	60	2	Direct
Elmer Faucett - West Ring Road	60	2	Direct to level
Elmer Faucett - East Ring Road	60	1	Direct
East Ring Road - Elmer Faucett	60	2	Direct to level

Canta Callao Interchanger

TYPE OF INTERCHANGER	 TWO LEVELS RING ROAD TRUNK AT LOWER LEVEL, DEPRESSED AND ROOFED. CONNECTION OVAL WITH NARANJAL AVE. DESIGN COMPATIBLE WITH THE CONNECTION TO THE FUTURE CANTA CALLAO FREEWAY 		
Branch	Design speed (kph)	No. of lanes.	Туре
Óvalo Central	40	3	-
Connecting branches Ring Road	40	1	-

University Avenue Interchanger

TYPE OF INTERCHANGER	 TWO-LEVEL DIAMOND RING ROAD TRUNK AT LOWER LEVEL DEPRESSED UNDER THE OVAL UNIVERSITY AVE. CONNECTION OVAL 		
Branch	Design speedNo. of(kph)lanes.		
Óvalo Central	40	2	-
Connecting branches Ring Road	40	1	-
Avda. Universitaria	40	2+ 2	-

Panamericana Norte Interchanger

TYPE OF INTERCHANGER	TWO-LEVEL DIAMOND RING ROAD TRUNK AT UPPER LEVEL ELEVATED ABOVE THE OVAL ÓVALO CENTRAL OF CONNECTION WITH PANAMERICANA			
Branch	Design speed (kph)	No. of lanes.	Туре	
Óvalo Central	-	-	-	
Connecting branches (4) Ring Road - Oval	60	1	-	

Ramiro Prialé Interchanger

TYPE OF INTERCHANGER	 TWO-LEVEL DIAMOND RING ROAD TRUNK AT ELEVATED UPPER LEVEL RAMIRO PRIALÉ HIGHWAY AT LOWER LEVEL CENTRAL ROTATIONAL WITH BRAIDED SECTIONS AND OVERPASSES OVER THE RAMIRO PRIALÉ HIGHWAY FOR SEMI-DIRECT MOVEMENTS. MINIMUM LENGTH OF STRANDED SECTIONS: 100 M. 					
Branch	Design speed (kph)					
Óvalo Central	35	2 (3 stranded rail)	At grade level over Ramiro Prialé and under Anillo Vial			
West Ring Road - Rotacional Branch Road	55	1	Direct			
Rotational Branch - West Ring Road	55	1	Direct			
Rotational Branch - East Ring Road	60	1	Direct			
East Ring Road Branch Line - Rotational	40	1	Direct			
Rotational Branch Line - Ramiro Prialé Oeste	60	1	Direct			
Ramiro Prialé Oeste - Rotacional Branch Line	60	1	Direct			
Rotational Branch - Ramiro Prialé Este	60	1	Direct			
Ramiro Prialé East - Rotacional Branch Line	60	1	Direct			

Central Highway Interchanger

TYPOLOGY INTERCHANGER	 DIAMOND OF TWO LEVELS. RING ROAD TRUNK AT ELEVATED UPPER LEVEL. ÓVALO CENTRAL OF CONNECTION WITH CARRETERA CENTRAL. CENTRAL ROAD TRUNK AT OVAL LEVEL. LATERAL TOLLS ON ORIGIN/DESTINATION BRANCHES OF THE EAST RING ROAD. 			
Branch	Design speed (kph)	No. of lanes.	Туре	
Óvalo Central	40	3	-	
Connecting branches (4) Ring Road - Oval	40	1	-	

Interchanger Huarochirí

TYPE OF INTERCHANGER	 TWO-LEVEL DIAMOND RING ROAD TRUNK AT LOWER LEVEL DEPRESSED UNDER THE OVAL ÓVALO CENTRAL OF CONNECTION WITH HUAROCHIRÍ AV. 				
Branch	Design No. of Type (kph)				
Óvalo Central	40	3	-		
Branches (2) connecting Ring Road - Oval. Exit from the Ring Road to the northbound vehicle side road and entrance from the side road to the southbound ring road.	40	1	-		

La Molina Interchanger

TYPOLOGY INTERCHANGER	 TWO-LEVEL DIAMOND RING ROAD TRUNK AT LOWER LEVEL DEPRESSED UNDER THE OVAL ÓVALO CENTRAL OF CONNECTION WITH LA MOLINA AVE. 			
Branch	Design speed (kph)	No. of lanes.	Туре	
Óvalo Central	40	3	-	
Branches (2) connecting Ring Road - Oval. Exit from the Ring Road to the northbound vehicle side road and entrance from the side road to the southbound ring road.	40	1	-	

Interchanger Evacuation

TYPOLOGY INTERCHANGER	• THREE-LEVEL INTERCHANGER • RING ROAD TRUNK AT ELEVATED UPPER LEVEL			
Branch	Design Speed (kph) No. of Ianes. Type			
East Ring Road - South Bypass Branch Road	40	1	Direct overpass over the Via de Evitamiento	
East Ring Road Branch - North Bypass	40	1	Direct	
South bypass - East Ring Road	60	1	Direct	

Circunvalación Interchanger

TYPE OF INTERCHANGER	• TWO-LEVEL DIAMOND • RING ROAD TRUNK AT LOWER LEVEL DEPRESSED UNDER THE OVAL • CIRCUNVALACIÓN CENTRAL CONNECTION OVAL			
Branch	Design speed (kph) No. of Ianes. Type			
Óvalo Central	40	3	-	
Connecting branches (4) Ring Road - Oval	40	1	-	

7 Overpasses

At least the following transverse crossings shall be provided at different levels with respect to the trunk of the Ring Road in order to provide permeability and continuity to the existing urban fabric.

The bridges and structures to be designed to give continuity to these roads must have the minimum dimensions to respect the planned section of lanes for vehicles and sidewalks for pedestrian traffic.

LOCATION	DESIGNATION	HIGH SITUATION	CROSS SECTION OF THE CROSS STREET AT THE INTERSECTION WITH THE RING ROAD	REFERENCE LENGTH (M)
2+100	Bertello	Above the Ring	2+2 lanes and sidewalks on each side	46.00
3+200	Alberto Izaguirre	Above the Ring	2+2 lanes and sidewalks on each side	56.00
4+500	Los Alisos	Above the Ring	2+2 lanes and sidewalks on each side	58.00
6+300	Huandoy Proceres	Above the Ring	2+2 lanes and sidewalks on each side	53.00

LOCATION	DESIGNATION	HIGH SITUATION	CROSS SECTION OF THE CROSS STREET AT THE INTERSECTION WITH THE RING ROAD	REFERENCE LENGTH (M)
7+500	Las Palmeras	Above the Ring	2 lanes and sidewalks on each side	52.00
8+900	Tupac Amaru	New oval under the AVP and overpass of Avenida Tupac Amaru under the oval.	Oval: 3 lanes and sidewalk Avenida Tupac Amaru: 2+2 lanes. Consideration should be given to the future implementation of a 14m wide public transport corridor that would be located in the central separator of calle Tupac Amaru.	25.40 / 38.40
9+900	Huamachuco	Above the Ring	2 lanes and sidewalks on each side	52.00
11+100	José G. Condorcanqui	Above the Ring	2 lanes and sidewalks on each side	50.00
15+700	Peaches	Below the Ring	2 lanes and sidewalks on each side	39.00
16+800	Santa Rosa de Lima	Below the Ring	2+2 lanes and sidewalks on each side	40.00
17+800	San Martín de Porres I	Below the Ring	2 lanes and sidewalks on each side	42.60
18+100	San Martín de Porres II	Below the Ring	2 lanes and sidewalks on each side	31.95
22+000	Próceres I	Below the Ring	2 lanes and sidewalks on each side	31.97
22+700	Próceres II	Below the Ring	2 lanes and sidewalks on each side	33.50
23+700	Francisco Bolognesi	Below the Ring	2 lanes and sidewalks on each side	63.80
24+700	San Pablo	Below the Ring	2 lanes and sidewalks on each side	41.00
25+200	San Juan	Below the Ring	2+2 lanes, railroad and sidewalks on each side	55.20
25+900	Metropolitana	Below the Ring	2+2 lanes and sidewalks on each side	30.00
28+300	Asturias	Oval above the Ring	2 lanes and sidewalks on each side	28.40

LOCATION	DESIGNATION	HIGH SITUATION	CROSS SECTION OF THE CROSS STREET AT THE INTERSECTION WITH THE RING ROAD	REFERENCE LENGTH (M)
29+700	Los Ingenieros	Below the Ring	2 lanes and sidewalks on each side	83.00
31+200	Los Frutales	Below the Ring	2 lanes and sidewalks on each side	81.95
33+100	Santa Rosa	Below the Ring	2 lanes and sidewalks on each side	107.70
33+900	Las Torres	Below the Ring	2 lanes and sidewalks on each side	81.00

8 Pedestrian bridges

In order to ensure the transversal pedestrian permeability of the projected infrastructure, crosswalks, bridges and underpasses must be designed between the projected overpasses. The solution that generates the least interference and impact on properties and provides the best solution in terms of road safety must be designed.

The maximum distance between crossings that allow pedestrians to cross the highway at different levels shall never be greater than approximately 500 m. The necessary bridges or pedestrian underpasses must be built so that this maximum distance is not exceeded.

These elements shall have a minimum clear width of 2.50 m. and shall have ramps for users with reduced mobility.

9 Bridge and Viaduct Design

In addition to the overpasses described in numeral 7, the Project shall include the design and construction of at least the following bridges and viaducts with the following characteristics:

LOCATION	DESIGNATION	REFERENCE LENGTH (m)
0+600	BRANCH EOO-R03	143.10
0+300 y 0+600	BRANCH EOO-R02 (A and B)	139.10 / 116.55
0+400	BRANCH EO1 -ROO	49.40
0+600	BRANCH E01-R01	72.00
5+800	CANTA CALLAO	14.85 - 30.25
7+000	AV. UNIVERSITARIA (A and B)	28.40 / 28.40
8+100	NARANJAL-PANAMERICANA NORTE	200.00
8+900	AV. TÚPAC AMARU	147.50
14+152	AVENIDA DEL SOL ⁽¹⁾	1,411.50
23+610	O.D. 23.61 (HUAYCOLORO RIVER)	161.69
0+810	OD 0.81 (A and B) EXTENSION E21-ROO OVALO	21.83 / 34.00
1+180	O.D. 1.18 EXTENSION E21 -ROO OVAL	21.83
23+800	RAMIRO PRIALÉ HIGHWAY (CROSSING OVER THE RÍMAC RIVER)	389.10
0+400	E-21 ROO OVAL BRANCH	56.00

LOCATION	DESIGNATION	REFERENCE LENGTH (m)
1+000	BRANCH LINE E- 21 ROO OVAL	56.00
27+200	CENTRAL ROAD	135.00
28+800	HUAROCHIRÍ	28.40
30+700	LA MOLINA (A and B)	28.40
31+900	VIA EVITAMIENTO- PANAMERICANA SUR (2)	857.69
0+080	BRANCH E32-ROO	315.94
34+400	CIRCUNVALACION (A and B)	28.40
Note (1): On Avenida del Sol, the expressway trunk should be built as a viaduct over the		
existing auxiliary roads.		
Note (2): Over the Parque de los Anillos, the trunk of the expressway should be on a viaduct.		

Design Criteria

- Width: The cross section in trunk bridges shall be equal to the typical trunk section, in accordance with the DG-2018 Road Manual.
- Sidewalks: Sidewalks shall not be required on bridges that support the trunk or its accesses, since
 pedestrian access to the trunk is impeded and, in addition, such sidewalks would not have
 continuity beyond the bridge. On bridges supporting auxiliary roads and/or overpasses, sidewalks
 shall be included in accordance with the DG-2018 Highway Manual.

Protective works

Protective rockfill shall be installed to protect the piers, abutments, as well as the embankment surfaces approaching the structures, from the maximum floods of the Rimac River.

The protective rockfill shall be sized for the condition of no displacement of the reefs.

10 Pavement Design

Type of pavement

The type of pavement to be provided may be flexible or rigid, except in the interior of tunnels and toll areas, where rigid pavement shall be used, allowing the CONCESSIONAIRE to comply with the Levels of Service of this Contract and the Applicable Laws and Provisions.

Design Criteria

The pavement to be laid must be dimensioned with the capacity to withstand the load generated by the traffic in ideal conditions throughout its useful life. The useful life or design period to be considered according to the type of solution to be adopted is as follows:

Flexible pavements	20 years
Rigid pavements	30 years

Equivalent shafts

The minimum equivalent axles (EE) for the "design lane" to be considered by the CONCESSIONAIRE in the calculation of the pavement structure shall be obtained from the Traffic Study to be developed during the preparation of the Definitive Engineering Study.

All lanes must be constructed to support the equivalent design axles of the "design lane" with no reduction of pavement thicknesses allowed within the travel lanes.

11 Tunnel Design: Civil Works

The Project must include the design and construction of tunnels in Section 2 that cross the Amancaes and Mangomarca hills. The following are the particular requirements for the design and construction of the tunnels, which follow internationally approved standards, methodologies and procedures.

Dimensions

- The minimum length of the Project's tunnels shall be
 - Tunnel 1: Length of 2,285 m
 - Tunnel 2: Length of 1,936 m
- Section: the section of the tunnels shall have at least the following characteristics and dimensions:
 Double pipe, unidirectional, two roadways

-	Double pipe, ununectional, two roadways.	
-	No. of lanes per roadway	3 unit
-	Lane width	3.60 m
-	Outside shoulder	1.40 m
-	Inside shoulder	0.50 m
-	Sidewalks	0.75 m
-	Minimum vertical clearance	5.50 m

Functional elements

The tunnel section shall have the following functional elements:

- Drainage for leaks and platform spills.
 - A geotextile sheet and a plastic sheet shall be used to channel the water to the base of the gables where the sidewalk gutters are located in order to prevent seepage from the rock mass of the vault's backside. These in turn shall connect every 25 m with the longitudinal drainage ducts.
 - For the collection of platform spills, an open concrete drainage channel type CAZ or similar shall be used on the edge of the platform that leads the spill to a longitudinal duct with siphon manholes, which mitigate the combustion of a fluid, in the event that it is produced.
- Electrical and communication conduits located on the sidewalks and shoulders to optimize logging during the tunnel operation phase.
 - Channeling for low voltage and communications in tunnel by means of 8 pvc pipes Ø110 and 16 pvc pipes Ø50, respectively.
 - High voltage conduit with 4 ø160 mm pipes. Secondary channeling of communications in tunnel by means of 9 tubes ø50
- Space in the vault for the placement of fans, lighting and signage, maintaining the minimum clearances established in the previous point.

Support

The support shall be placed in such a way as to allow the ground to deform, always within the stability of the tunnel, so that the rock develops its self-supporting capacity. The fundamental mission of the support is to prevent the ground from losing properties, being its secondary mission to provide its

resistant capacity, which is small in comparison with the great pressures that may exist in the ground due to the enormous weight of the lining ground.

In the final design stage, several types of support shall be defined to be applied according to the geotechnical quality of the rock obtained from the characterization of the same by means of the data provided by the surveys and tests carried out. During construction, the supports shall be optimized with the information provided by the monitoring and geotechnical control of the tunnel.

The design of the tunnel support must meet the following minimum requirements:

- The tunnels must have an impermeable barrier between the primary support and the final lining which shall not allow water infiltration into the interior of the tunnels through the gables and vault, guaranteeing 100% impermeability in these areas. For water that comes up through the floor, it must be directed to the groundwater drainage system. This waterproof barrier must be installed regardless of the tunnel construction method or the type of primary support used.

Coating

Although the planned supports guarantee the stability of the tunnel, given the metropolitan nature of the tunnel, secondary linings are required for maintenance and safety reasons.

This coating provides the following advantages:

- Regularization of the tunnel section.
- Protection of the metallic elements and the shotcrete of the support.
- Collaboration with the waterproofing system in areas where leaks may occur.
- Protection of the support in case of fire.
- Improvement of the safety coefficient in the stability of the supports.
- Improved structural performance in seismic zones.

Coating and finishing

As a final finish, curved geometry panels with a minimum height of 3.5 m shall be incorporated in the tunnel gables to provide greater luminosity inside the tunnel. These panels should be made of a material that allows them to be cleaned without losing their initial characteristics.

Safety auxiliary elements

The tunnels shall have the following safety elements:

Relief niches.

Every 150 m niches shall be located on the right side of each roadway. The purpose of these works is to serve as a refuge for a user who has suffered an incident inside the tunnel and can call for help by means of the communication service located in the niche. They have been provided with:

Emergency telephone connected to the control center Extinguisher Connection to the fire-fighting network

Cross passage connecting tunnels

Pedestrian and vehicle evacuation has been established based on current regulations and connecting both pipes. These passages are useful for the evacuation of Users towards the twin tunnel in the case of fire or another event.

Road widening or parking bay

It will be established based on current regulations, each 1000 meters in the right side of the road (according to the transit progress) with an extension of 40 meters. They will be duly signposted throughout the tunnel.

12 Tunnel design: Electromechanical installations

For the dimensioning of the installations, the current regulations have been followed, as well as the widely-applied international regulations.

Requirements, regarding the security team, are the following:

Power supply system

Tunnels will have power supply from the public network for regular operations and emergency systems through generator set. Also, they will have an Uninterruptible Power System (UPS) for control and monitoring equipment.

Power and lightning system

Both tunnels will have a power and lighting made up by the following elements:

Lightning systems

The main references for writing the lighting system are Peruvian Regulations and lightning recommendations CIE 88:2004 "Guidelines for the lightning of road tunnels and underpasses".

The lightning of the entrance shall be designed based on the publication CIE 88-2004, the values of lightning on the threshold area of each entrance based on the CIE and depend on the gradient of the road (stopping distance), the percentage of daylighting on the road and permissible speed.

To provide an evacuation guideline, marker posts will be installed in the tunnel sidewalls.

Also, the design of the lightning to be implemented will meet the following aspects:

- Adaptation of lightning levels to external brightness.
- Energy efficient lighting
- Efficient light distribution
- Accessibility for safe maintenance

Ventilation System

The two tunnels will have ventilation systems able to control the fumes generated by 100 MW fire for one hour. Also, the ventilation system will be able to maintain the levels of pollutants at appropriate levels following recommendations published by PIARC.

Evacuation passages between the pipelines will have a fume control system avoiding that the fumes arising from fire reach the pipeline not affected by the fire.

Fire protection system

Tunnels will have fire protection systems made up by:

- Water supply (supply and reserve tank)
- Ring Hydrant Network for each tunnel
- Manual extinguisher in the tunnel and evacuation passage
- Linear fire detection in the tunnel

Other installations

In addition to the abovementioned systems, the following elements and equipment will be included for the exploitation of the infrastructure:

Closed-circuit television Embankment detection Variable signposting Traffic light system Speed and vehicle counting Automatic incident detection Fire detection and alarm system Public Address system SOS posts Radiating cable and radiocommunications Mobile phone Environmental data measurement Communication architecture Networking equipment

13 Road Signage

For the development of maintenance and presentation of Detailed studies and Layout and Geometric Design studies related to the maintenance and implying the construction of road sign elements, the CONCESSIONAIRE shall meet all the specifications and/or technical regulations that, based on Laws and applicable provisions in force as of the closing date, are mandatory for the execution of this type of maintenance.

Vertical signage design

It will be made by following the criteria and instructions of the Manual on Control Devices of Road Traffic and the following type of signs will be included:

- Regulatory signs notifying road Users about the constraints, prohibitions or restrictions governing their use and if they are infringed, it would result in a crime.
- Prevention signages, which warn the user of the existence of a danger and its nature.
- Informative signages identifying the roads and provide guidance to the Users when giving appropriate information.

Pavement marking design

In order to regulate vehicle activity and increase road safety, it is necessary to use pavement markings which, based on their purpose, are classified as follows:

- Pavement marking
- Barriers marking
- Signages and arrows

Criteria for the design of pavement marking shall be according to the current regulations.

In areas where there is no lightning, the painting of sewage parapets and walls remaining above the projected ground level will be required to mainly help for night driving or hours with atmospheric restrictions (presence of fog).

Reflective delineators

Two types of these elements are considered to be designed and installed according to current regulations:

- Reflective Delineators: to be installed on the outer side of sharp curves, as well as on sections with possible situations of visibility restrictions of atmospheric origin (such as areas of possible fog), which may coincide with sections of rugged topography.
- Delineator studs as individual pavement marking elements, as position guides, as a complement to other pavement markings, and in some cases as a substitute for other types of markers.

Speed reducers of the speed bump type

The bumps to be implemented will be made of Portland concrete. The quality of the materials used in construction must guarantee the stability of the speed bump, its connection to the roadway, and durability. Its design and construction will be in accordance with current regulations.

Road safety and enclosure systems

The selection, implementation, and design of containment systems will be done in accordance with the current regulations.

The use of certified barriers according to the NCHRP Report 350 standards of the United States of America and/or EN1317 of the European Community is prescribed.

For the enclosure and defenses to be placed between the highway trunk and the auxiliary lanes, a rigid safety barrier of at least two meters in height will be installed to prevent fraudulent invasion of the highway by vehicles or pedestrians. This safety barrier can be replaced by a vehicle containment element when there is a height difference of more than 1.50 meters between the roadbed of the highway trunk and the auxiliary lanes or adjacent streets.

The defense to be placed along the central separator will be of New Jersey concrete type with a minimum height of 0.80 meters or the minimum height determined according to the design.

14 Landscape Treatment

For the development of Environmental Impact Studies (EDI) related to interventions involving landscape design, the CONCESSIONAIRE must comply with all specifications and/or technical standards in accordance with the current Applicable Law.

Topsoil

Topsoil will be spread to provide a substrate that ensures the development of the planted vegetation. The existing topsoil in the trace will be removed, preserved, and spread again. To achieve this:

- Topsoil will be spread over the areas to be restored, except for slopes with a gradient greater than 3H:2V.
- The spreading operation will preferably be carried out using machinery that does not excessively compact the already spread topsoil.
- The thickness of the spread layer shall not be less than 15 centimeters measured orthogonally to the ground surface.
- Spreading operations will be delayed if the topsoil is saturated with moisture. It will also be

avoided to spread it just before hydroseeding; in other words, the time elapsed between spreading the topsoil and applying hydroseeding will be kept to the minimum necessary.

- Soil Decompaction. It is necessary to loosen the soil before proceeding with the installation of vegetation. Decompaction is a process that involves breaking the surface crust of the soil. The preparatory soil work will be done by disc harrowing, with a minimum depth of 15 cm. To achieve uniform preparation, two crossed passes with the tractor should be made.

Hydroseeding

The basic components of hydroseeding are water, mulch, stabilizers or binders, fertilizers, seeds, and additives. The following prescriptions are indicated for this activity:

Water. All waters suitable for agricultural use will be accepted. Salty water or water with chloride or sulfate contents exceeding 1% will not be used.

Mulch. Component of hydroseeding made from plant fibers (wood, straw, or similar) aimed at protecting the seeds from erosion and maintaining optimal moisture conditions for germination.

- Stabilizers or binders. They act by physically aggregating soil particles, thus preventing erosion. They form a film that allows air circulation and maintains soil moisture.
- Fertilizer. Fertilizers should be slow-release fertilizers. A slow-release mineral fertilizer of the 15:15:15 type will be used.
- Seeds. The seed mixture for hydroseeding will be adapted to the environmental conditions of Lima.
- Additives. No additives are added to the mixture to be used.

Hydroseeding will always be carried out in "two passes"; the first will provide the seed with the rest of the components, while the second will contain only water, mulch, and stabilizer.

The doses of components to be applied in each pass are as follows:

	Seed Phase	Covering Phase
Seed Dosage	30 gr/m ²	-
Stabilizer	20 gr/m ²	15 gr/m ²
Mulch	80 gr/m ²	40 gr/m ²
NPK Fertilizer* or similar	30 gr/m ²	-
Water	2 l/m ²	2 l/m ²

Amount of hydroseeding components

* Fertilizer based on nitrogen, phosphorus, and potassium.

Plantations

Plantations will be carried out on the cut and fill slopes, in the open areas between the main road and access roads, and in roundabouts.

Plants will come from an accredited official or commercial nursery, with a size of 30 to 150 cm of height; pits of 40 x 40 x 40 cm will be dug for species planted with a height less than 1.00 m, and 60 x 60 x 60 cm for species from the nursery with a height greater than 1.00 m.

For cut or fill slopes, the green area design will include the plantation of groups of shrubs and small trees (groves) covering 30% of the slope surface.

For level surfaces, trees will be planted in at least 25% of the area. For roundabouts, groves of trees and small trees will be planted in 25% of the total surface area. The irrigation system is at the discretion of the CONCESSIONAIRE.

Enhancement of Green Areas

In compliance with Clause 15.2 of the Concession Agreement, concerning interventions required for the execution of Section 3 of the Project on Avenida Separadora Industrial, the CONCESSIONAIRE must design a linear park as part of the Final Engineering Study for Section 3. Public consultations with the population of the corresponding district regarding the elements they consider necessary for the design of the park to be constructed should be carried out. With the collected suggestions, through means deemed appropriate by the CONCESSIONAIRE, design proposals for the implementation of the final solution will be presented. Additionally, modern green areas for the community will be implemented along Avenida Separadora Industrial, analyzing existing species and implementing measures to enable their conservation or replanting, as well as the inclusion of new native species from the area. This can be complemented with amphitheaters, play areas, facilities for adults, sports tracks, green spaces, pet zones, among others, based on the requests of the population and always considering technical and economic viability. The design of the linear park must allow access for people with disabilities, in accordance with Applicable Laws and Regulations; it must also include facilities for public transportation (bus stops) in an organized manner and with access for people with disabilities.

Likewise, regarding Section 2 of the Project, the Parties agree that the CONCESSIONAIRE must restore sports areas, parks, and/or similar facilities that may be affected and/or removed due to the construction of the Project in said section.

15 Requirements for the Design of Installations and Equipment necessary for the Operation and Maintenance of the Road

15.1 Installations

Outdoor lighting (outside tunnels)

Lighting will be installed in the following elements, in addition to along the trunk road:

- All interchanges will have lighting on the branches from the speed change lanes to the connections with the merging lanes. The section of the highway trunk between exit and entrance branches to the interchanges (trunk road section within the interchange) will also be illuminated.
- Toll booths at main and side toll plazas.
- Roundabouts and underpasses are illuminated.
- Facilities in the control and maintenance area.
- Control areas of main toll booths.
- Weighing zones.
- On auxiliary lanes, in case existing lights have been removed by the CONCESSIONAIRE.

The posts, lights, and required lighting levels will comply with the regulations.

Installed power

The necessary power will be installed for the lighting of the planned elements. Thus, the following

connections will be required to provide electrical supply:

- Connections at all interchanges, main and side toll booths, and both tunnels.
- Connections at roundabouts and underpasses.
- Connection for the facilities in the control and maintenance area.
- Connection for the control areas of the main toll booths.

Conduits

Main Conduits

The conduit layout will run along one of the sides of the Peripheral Ring Road throughout its entire length.

This conduit will have four PVC pipes of 110 mm each, in a section of 40x35 cm of HM15 mass concrete. The rest of the trench fill will consist of compacted selected material, with a minimum thickness of 50 cm. In any case, the final depth of the conduits will not impede the drainage of the pavement layers. Tritubes will also be included according to current regulations (4 tri-tubes of 40 mm PVC).

Secondary Conduit

The secondary connection conduit from the main conduit to the various specific facilities of the CONCESSIONAIRE will be arranged in:

- Connections between the highway and/or other roads
- ITS equipment
- Roadway Crossings

Intelligent Transportation Systems (ITS)

The CONCESSIONAIRE must comply with the provisions of the specifications and/or technical standards listed below:

International nature:

- I. ISO NORMS AND STANDARDS of the TC-204 TECHNICAL COMMITTEE, on Intelligent Transportation System.
- II. The Optical Fiber to be installed for the purpose of building the central Telecommunications infrastructure must comply with the ITU-T G.652d recommendation, with a minimum of forty-eight (48) wires.
- III. The characteristics and specifications of optical fiber must comply with the ITU-T G.600 series to G.900 series recommendations, applicable and relevant in relation to the transport network and fiber optics.
- Other specifications:
 - IV. Management systems must comply with the physical, functional and information architecture model, ITU-T Recommendation M.3010.
 - V. Structured cabling systems must comply with the recommendations of the EIA/TIA 568A standard.

The technical requirements for ITS systems described here are complemented by the requirements of Appendix 2 to this Annex.

a) TV cameras

A video surveillance system using TV cameras shall be installed in at least the following locations:

- Control and Maintenance Center (4)
- Trunk Toll Units (2 per station)
- Side toll units (1 per station)
- Tunnel 1 (enough to visualize full movements)
- Tunnel 2 (enough to visualize full movements)
- Entrances and exits (sufficient to view complete movements)
- Black points

The camera system must allow continuous monitoring 24 hours/365 days a year, coverage of at least 70% of the entire road and registration in the event of low light or adverse weather.

b) Variable Messaging Panels

The fundamental objective of Variable Messaging Panels (VMP) is to inform users of incidents that have occurred on the road and, if necessary, to recommend the use of road alternatives. The location of the Variable Messaging Panels is considered in the approaches to the main links, in order to be able to inform traffic about any incident on the Highway in the vicinity of the links.

In this way, the location of the variable message panels is proposed at the following points:

- Approaches to Evitamiento Link (one VPM per direction)
- Approaches to the Central Link (one VPM per direction)
- Approaching the entrance to Tunnel II North direction (a VPM)
- Approach to the entrance of Tunnel I South direction (a VPM)
- Approaches to Panamericana Norte Link/Peripheral Ring Road (one VPM per direction)
- Approaches to Ramiro Prialé Link/Peripheral Ring Road (one VPM per direction)

The VPM will have an area of 64x64 pixels for the dissemination of pictograms and three lines of 12 characters. Since they are located in open space, they will be vandal-resistant and will have automatic brightness and contrast control. The installation of the panels will be carried out in a metal structure in accordance with current regulations.

The information displayed on the panels will be managed by the Control Center operators through the centralized traffic management application. For this purpose, VMP will have an IP communication interface with the centralized traffic management network. The NTCIP protocol will be used.

These devices need a box for connecting power and communications and in the case of those that are located in the opposite direction to where the pipeline runs, they will need a crossing Roadway. This crossing can be avoided if a pair of SOS posts are installed nearby.

c) SOS Posts

SOS posts will be installed in the tunnels and outdoors in those sections where there is no cellular coverage and approximately every 2.500 m away.

d) SCADA

The Tunnel's CONCESSIONAIRE must adopt a state-of-the-art supervisory, control and data acquisition (SCADA) system for operation and maintenance that allows recording and reporting, with special attention to incident indicators.

The Supervisory, Control and Data Acquisition System (SCADA) must be the tool that integrates all ITS systems into the tunnels, with the Control and Operations Center defined for the Concession.

Under this model, we will have the following features as the main ones:

- Acquisition and storage of data; to collect, process and store the information received, in a continuous and reliable manner.
- Graphical and animated representation of ITS system variables and their monitoring by means of alarms.
- Open and flexible architecture with the ability to expand and adapt.
- Connectivity with other applications and databases, local or distributed in communication networks.
- Supervision, to observe from a monitor the evolution of the control variables of the different systems.

The control of each system must be fully computerized, with man-machine interfaces to allow operators' orders.

Computer equipment must have specialized operating, communication and application programs to monitor and control the system.

Toll Units

The technical requirements for Toll Units described here are complemented by the requirements of Appendix 2 to this Annex.

Location

Toll Units will be installed at the following points:

Toll Area	Name	Р.К.
S1	Canta Callao Trunk (Section 1)	3+800/4+200
S2	Northern Road Peripheral Trunk (Section 2)	13+700/14+200
S3	Separador Industrial Trunk (Section 3)	31+300/31+800
L1	Lateral Los Alamos	15+800/15+900.
L2	Lateral Central	26+400/26+900

• Toll system:

The toll system must be a comprehensive toll control system and must be designed to:

- be safe and efficient,
- allow maximum control of collection procedures, fraud control and incident control,
- operate 24 hours a day, 365 days a year without interruption,
- support different types of routes: manual, automatic, mixed, dedicated (exclusive for electronic tolling),
- support different means of payment and/or collection: cash, magnetic cards, contactless cards and electronic tolls.
- facilitate the integration of new technologies,
- be aligned with the Interoperability policies defined by the MTC.

The system must apply security mechanisms that:

- a) Prevent access to unauthorized personnel.
- b) Protect against erroneous actions by operators.
- c) Guarantee the integrity and confidentiality of data, both in its manipulation and in its transmission.
- Means of payment and types of routes.

Toll roads must accept the following payment and/or collection methods:

- cash,
- magnetic cards,
- contactless cards,
- electronic toll.

Tolls must have at least 1 exclusive electronic toll road per direction in trunk stations (or the integer part of the value resulting from calculating 20% of the number of routes per direction if it is a larger number). In addition, other payment methods that are committed to innovation and that facilitate payment agility and better service to drivers will be accepted, such as those through the use of Apps (mobile applications) on phones, tablets and other mobile devices.

If the GRANTOR establishes a technology or standard for electronic tolling for the entire country, the CONCESSIONAIRE must participate in that standard and adopt the technology installed in the toll stations of the road (s) subject to the concession to the regulations established for this purpose.

The CONCESSIONAIRE will define the number of roads of each type (manual, automatic, mixed, dedicated) that are necessary in each Toll Unit to guarantee the level of service requested.

• Roads and traffic islands

Each of the toll roads will have a width of 3.50m, with special attention to passageways for trucks and/or cargo transportation, which may have a wider width. There will be as many traffic islands as there are toll roads. Each road will be equipped with a signal to indicate the status of the road, with adjustable luminance and with access for maintenance.

Each toll road will have an entry barrier and an automatic exit barrier. The entry barrier prevents entry to a closed lane. The automatic exit bar is the element that controls the passage of vehicles through collection roads.

Pavements

Each toll area will have a pavement made of reinforced concrete that will cover the entire width of the toll station.

• Service gallery

This gallery will be made of reinforced concrete and will have a cross section with minimum interior dimensions b x h = $2.50m \times 2.50m$, which will connect the toll building with the roads and will also carry energy and systems wiring.

Service galleries will be implemented only when connecting the booths located at main tolls to the toll control building.

♦ Marquee

A marquee will be installed in each toll station covering the roads.

Collection booths

Collection booths will be implemented on the lane separating islands, depending on the traffic flow and the design of the type of collection mechanism.

Counting stations

A capacity location per direction will be installed in each section between the main links of the project. These sections are shown in the following table:

SECTIONS FOR LOCATION OF THE COUNTING STATIONS
Faucet-Canta Callao
Canta-Callao-Universidad
Universidad-Panamericana Norte
Panamericana Norte-Los Álamos
Los Álamos-Ramiro Prialé
Ramiro Prialé-Central
Central-Huarochirí
Huarochirí-La Molina
La Molina-Evitamiento
Evitamiento-Circunvalación

15.2 Buildings and urbanization

The minimum works and elements to be available by the CONCESSIONAIRE are as follows: The areas of use and urbanization of each of the zones are detailed:

-	Zone 1 PK 4+000. Trunk toll station.	
	Total area to be developed	4.000 m2
	Toll building surface	300 m2
	Building surface and facilities	60 m2
-	Zone 2 PK 14+000. Trunk toll station and maintenance area (between tunn	nels).
	Total area to be developed	10.000 m2
	 Maintenance building area (offices and garage) 	750 m2
	 Office building area 	300 m2
	 Workshop-garage area 	450 m2
	 Toll building area (separate from the previous one) 	300 m2
	Building surface and facilities	60 m2
-	Zone 3 PK 32+000. Trunk toll station and control and administration area.	
	Total area to be developed	3.000 m2
	Toll building area, control and administration center	600 m2
	Building surface and facilities	60 m2
	.	

Control, maintenance and administration building

Specific facilities and equipment.

Space must be available in the Operation Room and in the Server Room of the control centers. Based on the equipment being installed and the functionalities of these spaces, they are defined as minimum space requirements for them:

- Operation Room: 20m2

Server Room: 15m2

Considering the dimensions of the spaces and the technical characteristics of the equipment installed in them, air conditioning and fire extinguishing installations must be arranged.

The difference in the uses of the different spaces that are defined in the Control Building must be taken into account, highlighting:

- Operating Room: 24-hour staff presence.
- Server Room

It is considered necessary to have the following basic facilities in the centers:

- Drinking water supply
- Wastewater treatment
- Uninterruptible power supply
- Technical floor
- Emergency lighting
- Air conditioning

Toll control area and buildings

Specific facilities and equipment

The toll buildings associated with the different toll areas (toll areas and ramps) of the highway will also have the following requirements:

Requirements
Water supply
Electricity supply
50kVA generator in trunk stations/25kVA generator in side ramps
UPS (uninterruptible power supply)
Air conditioning
Wastewater treatment

In toll stations, it will be necessary to send the electrical power wiring to the toll road equipment

ANNEX No. 3 TECHNICAL ASPECTS

Appendix 1 Minimum Technical Requirements of the Design and Construction Project SECTION B

MINIMUM MANDATORY TECHNICAL REQUIREMENTS FOR INTELLIGENT NFORMATION SYSTEMS - ITS

1. CONSTANT INFORMATION

- **1.1.** The CONCESSIONAIRE shall keep the information technology infrastructure (hardware, software, information systems, apps and web portals, interphase, local voice and data network, telecommunication networks and in general all constituent part of tele informatics) constantly available, usable and attainable in order to have updated status information of all road-related aspects.
- **1.2.** Information technology infrastructure shall also include, among others, all toll stations, tunnels, weighing stations, traffic station and Operation Control Center.
- **1.3.** This information shall be constantly available to the GRANTOR, the Supervisor, Users and community in general as the case may be.
- **1.4.** Data uploaded to Internet through WEB SERVICES shall follow the market standards for each used type of data (which shall be agreed with the GRANTOR before its installation) and include data consolidation in plain text tables in such a manner that communication compatibility and corresponding coordination are guaranteed.

2. INFORMATION CHANNEL

- 2.1. The CONCESSIONAIRE shall implement a communication system addressing this Contract requirements. For that purpose, they shall implement a system, along the road and tunnels, that includes optical fiber and piping through which all elements of traffic control systems (ITS) become integrated, which also could be partially used upon prior agreement of the terms and conditions arranged with the GRANTOR. The optical fiber operation will be required at the beginning of the Operation and Maintenance stage. In the pre-operating stage, the CONCESSIONAIRE could use alternative means to meet the requested information requirements.
- **2.2.** Prior to the installation of communication services, the CONCESSIONAIRE shall agree with the GRANTOR all the information that shall be sent and the protocols through which it will be sent; established agreements shall remain specified in a minute.
- **2.3.** Information requirements shall be endorsed in meetings between the GRANTOR, the Supervisor and the CONCESSIONAIRE, every year to foresee technological changes, potential improvements and additional services that could be included for the appropriate monitoring of the roads. The results of this meeting shall be specified in a Minute.
- **2.4.** Communication systems shall use cutting-edge technology to decrease a potential obsolescence during the validity period of the Contract.
- **2.5.** Monthly availability of communication equipment shall belong to the indicated levels of service.

2.6. WEB SITE

The CONCESSIONAIRE shall create a web site available for all users through which it is possible to disclose important aspects of the Concession.

As part of the web site design and operation, which is a service that should be available 24 hours a day, the CONCESSIONAIRE shall include an informative module for the user and the following aspects, among others, should be indicated:

- Current rate values as per time zone.
- o notices of scheduled changes in current rate values as per time zone.
- Travelling time
- o Working areas
- Traffic interruptions
- o Tunnel conditions
- Situations to be considered in urban streets and neighboring populations that may affect the operating conditions and road safety, and other situations that may affect the trafficability of the road.
- o Road traceability
- Regulations
- o Maximum allowed weight
- Maps with the location of service areas and weighing areas.
- Use of electronic toll service, with adherence channels and service locations.

The site shall also offer information about all possible forms of communication between users and the CONCESSIONAIRE, the GRANTOR and the Highway police, as well as offering a space for users to express any aspect that may concern them.

The CONCESSIONAIRE shall continuously update the web site information in such a manner that the available information is updated, relevant and suitable for users.

2.7. QUARTERLY NEWSLETTER

The CONCESSIONAIRE shall prepare and edit a quarterly newsletter with the same essential information for the web site user. The publication shall be distributed for free to any user requesting it.

2.8. BROADCASTING STATION

The CONCESSIONAIRE shall provide and operate a broadcasting station engaged in the spread of road information.

The channel to set the broadcasting station and dial changes will be informed to the Users through variable Message Panels and Fixed Signaling. The broadcasting station shall be tunable along the road and in any kilometric point within the project space.

2.9. MOBILE APP

The CONCESSIONAIRE shall create a mobile available for Android platform and IOS, allowing all interested users to have access to the information on the concession by using their smartphone.

The mobile app will allow viewing the same information presented in the Web site of the concession, and also customized information channels User-Concession shall be available based on their location.

The above-mentioned information channels shall offer the information corresponding to each project's stage.

The scope and content of information channels shall be submitted to the supervisor and or GRANTOR under EDI stage as part of the engineering of INFORMATION TECHNOLOGY SYSTEMS.

3. AMS TECHNOLOGY PLATFORM:

The CONCESSIONAIRE shall design and develop an asset control system that allows the integral IT operation and maintenance control by developing a platform or setting parameters to one existing platform that allows the formal registry of all the information generated during the execution of the Contract under such stages. This Platform will have as reference the abbreviation AMS.

This information will be the basis to evaluate management indicators and service levels in real time in order to become aware of the work status and progress, the status of the road under operation and maintenance, as well as the most important indicators organized by management areas.

The CONCESSIONAIRE could use the desired platform provided that technical specifications stipulated in this document are fully met for both functionalities and external connections, APIS and Web Services.

This platform shall include the management of all equipment through a software (SCADA type) otherwise, getting connected to each equipment through web services or APIS; thus, showing real time information and evaluating service levels.

3.1. SCOPE, FUNCTIONAL DESCRIPTION AND TECHNICAL SPECIFICATIONS

The platform shall provide all the required functionalities to allow the recording of information generated in the road, tunnels, toll, a forum and portal in such a manner that this information allows the subsequent estimation of service levels.

All the information recorded and processed in the platform will allow getting to know the status and availability of the road, toll, weighing and portals.

Minimum modules to be considered in the platform:

The platform shall have modules or differentiated parts:

- a) Basic Modules
 - Geographical Information System GIS.
 - Module for the measurement of indicators, Service Levels.
 - Communications Module and OCC
 - Reports module and control panel
- b) Specific Modules:
 - Information management module obtained through the weighing control system.
 - Information management module obtained through the weighing control system and over-sized loads.
 - Information management module obtained through the ITS in roads and tunnels: Portals, posts, S.O. etc.
 - Road safety management system, accident management and road events.
 - Routine, corrective, and preventive management system for roads such as tunnels, tolls, weighing, portals, and other ITS.

Minimum Technical Specifications:

To guarantee that all systems matching become implemented in the outsourcing contracts of the country and guarantee a standardization and structuring of information at a higher level, the following minimum technical requirements will be demanded:

- The developed system shall be a WEB application compatible with at least Chrome, Firefox and Smartphones (responsive design).
- The GRANTOR and the Regulator/Supervisor shall have two app users allowing non-restrictive access, report generation and access to control panels developed with all indicators and service levels calculated in real time.

One mobile app (at least Android) is required with disconnected capacities, that is, it shall allow to record the field work without any network coverage in such a manner that it is possible to insert data in the road, equipment status, portals, cameras and other ITS, works performed on the equipment and their response time. In the case of response time, the user will not be able to modify the time (date and time) nor its status in the road, and all these aspects will be automatically attained through mobile app. The mobile app will have the following minimum functionalities:

- 1. The mobile app shall have a local database to review the information on site,
- 2. It shall allow discharging and modifying data of events, reviews, inspection, incidences, inventories, etc, on the site and without any connection for then matching in the process
- 3. uploading and downloading.
- 4. It shall allow taking two photos, save and enclose them to different documents, then it shall be synchronized and uploaded to the server.
- 5. By using the GPS, it will be able to inform about axis K and even at even several meters away from the current location, even at "disconnected" status (without any network).
- The platform shall allow the connection to toll systems, web services or APIs of existing connections, as well as real time connection with ITS of the road such as portals, cameras and different media equipment stipulated in the contract annexes, in such a manner that there is availability of equipment and data generated in real time. It shall allow the control of toll stations, weighing and portals in a manner that it is possible to know its level of service, failure time and average time of failure, SLA execution by the contractor, evaluation of the service level of the equipment and corresponding indicator.
- The platform shall allow recording all corrective, preventive and routine maintenance performed in the road.
- The platform shall allow the connection to weighing systems implemented as per Contract, using web services or existing APIs connections. In order to control the weight of load vehicles (Weighing stations) and the surveillance of installations of Weighing Stations, monitoring on availability, failure time and average failure time as well as the gathering of all routine, corrective or preventive maintenance operations conducted upon the evaluation of the response time based on service levels, the following minimum data shall be gathered:
 - 1. Vehicles classification based on current categories in the Operation console.
 - 2. Automatic information about the payable amount.
 - 3. Reception of cash payment.
 - 4. Delivery of the change and the corresponding receipt.
 - 5. Authorization to lift the exit barrier.
 - 6. Classification of vehicles based on the current categories.
- With the information of the toll, it will be possible to estimate the IMD (daily average index), choosing the date, daily, monthly, quarterly and annually.
- The platform shall be integrated with radio systems and IP (Call Center) to save emergency calls related to operations in the road, toll, tunnels, portals and other ITS equipment.

- The platform shall manage security, traffic and the status of the Project, guaranteeing a homogeneous road safety level, as per general operation plan:
 - 1. Guaranteeing optimal conservation conditions of installations, equipment and services reporting in the system all the operations conducted in the road or the equipment (ITS, camera, toll, weighing etc).
 - 2. The platform shall manage road safety during 24 hours a day and 365 days of the year, recording each event arising in the road, in toll stations or related to any ITS.
 - 3. It shall manage maintenance and conservation of the physical structure and all the equipment, roadway and installations of different systems.
 - 4. Transit control and dangerous goods recording the most important data of the vehicle, the load, date time of transit along the toll, portal, weighing station or road.
 - 5. Automated or manual recording of all data to estimate service levels as per indicator, stipulated in the second deliverable.
- All reports and control panels shall be generated with the most important management indicators and service levels related to each subsystem or module in such a manner that all the information recorded in the system can be downloaded to Excel file.
- The platform shall guarantee the no-variability of information that has been recorded. For such purpose, any operation adding, amending or deleting data shall keep recorded in the system; thus, guaranteeing the traceability, saving the user that made the changes of date, time and what the amendments were. It is essential to Access this information and that it can be shared through a Web Service or API REST.
- It shall present an API Rest that will return a JSON or XML structure, allowing to deliver events as per parameters with the most important data fields.
- It is suggested as PostgreSQL and PostGIS database manager or similar but it is essential having a spatial database manager.
- Cloud systems hired as service ("software as a service") will be valid; however, to guarantee the
 maintenance and functionality of the system, it is necessary to reset the configuration of the Flow
 of information and internal processes, licenses and reports in such a manner that the platform
 allows making all these procedures without rescheduling or re-compiling or re-deployment of the
 app, in this case, at the completion of the concession, the source code will not be required but the
 alphanumeric database, geospatial database and enclosed files will be required. All tehse
 deliverables shall be compatible with PostgreSQL and PostGIS.
- Other technical specifications:
 - 1. Security copies at least 12 hours and preferably every 6 hours.
 - 2. Firewall and enough safety (protocol https://).
 - 3. High availability over 99,0% on a monthly basis
 - 4. Monitoring the application in real time and estimation of its response time lesser than 3 seconds.
 - 5. Keeping online the information on road availability recorded for a period no lesser than 2 years.

3.2. GEOGRAPHIC INFORMATION SYSTEM (GIS)

The CONCESSIONAIRE shall continuously manage the file of the as-built designs of the road, tunnels, toll, weighing, portal and other ITS with the complete equipment and disaggregated unit, type and model of equipment, within a geographic information system using a special spatial database, PostGis module or similar with the following functionalities:

- To georeference each element of the inventory and equipment in a two-dimension CAD model. The following elements will be at least georeferenced:
 - 1. Portal and equipment
 - 2. Cameras
 - 3. S.O.S. posts
 - 4. ITS
 - 5. Toll equipment
 - 6. Dynamic and static scales
 - 7. Viaduct
 - 8. Road sign
 - 9. Pavement marking
 - 10. Cross-cutting and longitudinal drainage
 - 11. Slopes
 - 12. Pavement types
 - 13. Metallic and concrete defense
- The platform should manage spatial and alphanumeric information of each inventory element following the standard data model Unidad, type and model and National Road, kilometer, meters, latitude and length (WGS84).
- Make consultations on any of these elements (characteristics of the viaduct, typology, dimensions, etc.), verifying inspection dates, related photographies, etc.
- Make specific searches in the inventory (last inventoried elements, specific typology elements, road sections with a specific type of pavement, etc.)
- The CONCESSIONAIRE shall establish a procedure to update as-built designs every time an action of maintenance or additional work amends it.

3.3. TOLL MANAGEMENT MODULE

The CONCESSIONAIRE of the road will register vehicles traveling through each Toll Station including vehicles that are exempted from payment, if any and organizing the information as per the classification by categories established in each Toll.

There may be three types of collection, manual, automatic collection or remote toll collection system. In any of the three modalities, the toll management system shall deliver through connection via API or web service, the following data:

- Total vehicles per hour and day by lane.
- Total time by shift.
- Total Schedule Total day Calendar by direction.
- Total time Total calendar day Total station.
- Daily total by lane and category.
- Daily total by direction.
- Daily total Total station.
- Total by shift ad by lane.
- Total by shift.
- Number of inconsistencies and/or discrepancies when comparing the information identified from motion detectors and the registration data of the collector located in the Operation Console, either through classification of the vehicle or form of payment. Time and day will be indicated indicating the plate, booth, shift and responsible personnel.
- Generation of total reports in a specific period, between dates.

• Total collected amount by category, day, time and/or between dates.

The CONCESSIONAIRE will define the number of lanes and required technology for each Toll Station to guarantee the requested service level.

The toll management system shall have the following functions for the manual and automatic collection:

I. For manual collection:

- Classification of vehicles according to current categories in the Operation Console.
- Automatic information about the amount to be paid.
- Reception of cash payment
- Delivery of the change and corresponding payment receipt.
- Authorization to lift the exit barrier

II. For automatic collection:

- Classification of vehicles based on current categories;
- Automatic information about the amount to be paid;
- Authorization of the payment and debit of the card for the corresponding amount;
- Delivery of the corresponding payment receipt if requested by the User.
- Information of the amount or number of remaining tolls in the prepaid card;
- Authorization to lift the exit barrier.

The platform to be developed shall be a Traffic Control System through which it is possible to control and monitor the vehicle traffic in the road system.

It is essential having a camera system allowing the identification of vehicles queue in toll roads. This system will be sized in a certain number of cameras necessary to allow the real-time recording of the length and time of duration of vehicles queues, by toll station and direction.

Each toll station has an integral equipment that shall report in real time to such Traffic Control System and at least, the following information shall be received:

- Detection equipment and sensor systems of trails (or lane)
- Variable message panel
- Metereological monitoring equipment
- Traffic inspection vehicles
- Closed-circuit television (CCTV)
- Panoramic camera
- Height detectors
- Speed control systems
- Other complementary systems provided by the CONCESSIONAIRE as additional aspects

All these equipment will report the information on availability and data obtained in real time using APIS or web services.

3.4. WEIGHING MANAGEMENT MODULE AND ADDITIONAL LOADING

The platform shall allow the connection to weighing systems using web services or APIS that have or become developed by the CONCESSIONAIRE for each equipment in order to know the weighing operation in real time.

Any type of weighing shall report to the platform, the weighing information of vehicles that are weighted with daily registries of the number of controls, time, type of vehicles, category, weight and if the weight is not within the legal aspects, the corresponding traffic offence.

Also, the CONCESSIONAIRE shall establish a procedure or the control of load transport, either oversized and/or extra-heavy and/or dangerous based on the applicable regulations that allow:

• The Registry of the platform of the detailed description of all load transport events of this type that are presented in the road.

• The file and Registry of minutes issued by authorities related to the control process, if any.

3.5. – MANAGEMENT MODULE OF PORTALS, CAMERAS, SOS POSTS AND OTHER ITS.

The platform shall allow the connection to management systems of portals, cameras, SOS posts and other ITS through Webservices or APIS and other ITS through Webservices or APIS.

The platform shall allow the real time control of the availability of each equipment, failure time and average time of failures, as well as the gathering of all routine, corrective or preventive maintenance operations conducted in each of the installed equipment and dividing it in sub-equipments or subparts.

The platform shall evaluate the response time when repairing each equipment based on the service levels using the mobile road app abovementioned.

The platform shall issue alerts when any of the systems collapses and make the corresponding report when it is up& working estimating the time of availability and evaluating it against the service level in real time.

3.6. ROAD SAFETY MANAGEMENT SYSTEM (SGSV)

The platform shall have a road safety system through which all and each data generated in the road operation, accident management, incidents and various events can be recorded, registering the response time and evaluating them in rea time, creation of new operation parts, services provided in the road, consolidated operation reports in the road, log of incidents and accidents and other information required in the project.

To record the events arising in the road, the platform shall have an IT control log updated in real time in such a way that by using the mobile app, all assistance procedures stipulated in the Operation Manual are recorded. This log is a base software for the operation control center which controls and manages all the events arising in the project.

The platform shall estimate response time of assistance equipment in the road. For that purpose, the abovementioned mobile app will be used and it will not allow the changes of date, time, user, latitude and length. The platform shall have the call record of information and/or emergencies related to each event or situation, connecting them to IP centralists or radio systems, recording date, time, type of occurrence, assistance personnel, adopted actions and other data obtained in the Call Center of the project.

The following data will be gathered in the road:

- a) Information of accidents, binding each of them in a card that contains at least the following data:
- i. Location of the accident (PK adjusted to tens of meters and exact place of the roadway).
- ii. Number of victims and classification by age and gender.
- iii. Number of serious injured people and classification by age and gender.
- iv. Number of slightly injured people and classification by age and gender.
- v. Number of involved vehicles and category, brand, type, class and description of each of them.
- b) Registry of events or incidents:
- i. Location of the incident (PK adjusted to tens of meters and exact place of the roadway).
- ii. Type of incident and the most probable cause of incident.
- iii. Type of collapse or object in the road if any.

3.7. ROUTINE, CORRECTIVE AND PREVENTIVE MAINTENANCE MANAGEMENT SYSTEM RELATED TO THE MEASUREMENT OF INDICATORS, EQUIPMENT, ITS, PORTALS, TOLL AND WEIGHING EQUIPMENT, AND ROAD ELEMENTS.

All maintenance works of equipment and/or road elements shall be included in the platform with special focus on tunnels, in such a manner that the platform measures response times for each maintenance and evaluates whether service levels established in the Concession arrangement are met.

Any measurement of an indicator recording a value below or above the stipulated value of service levels will be considered a corrective maintenance.

The corrective action will be considered successful when the evaluated condition parameter meets the corresponding service level.

The minimum fields that should have a successful corrective action should be:

- The identifier of the status parameter
- The descriptive of the conducted corrective action and response time
- Digital photography or video recording made before making the corrective action, which will clearly allow to see the evidence on non-compliance.
- The re-evaluation report of the condition parameter

For preventive actions, the CONCESSIONAIRE shall be obliged to formulate the declaration of commencement of preventive work at least five (5) days prior to the beginning of the maneuvers that reduce the availability of the road, gantry, toll, weighing or other ITS, in the intervention zone. This report must be made on the technology platform for the road system through the mobile application.

Finally, the platform must allow the organization and planning of routine operations so that all the work carried out on the road, its elements and/or equipment, tolls, weighing, gantries, and other ITS can be recorded.

The platform shall generate a report between dates of actions on the physical elements of the road system, equipment, tolls, weighing and other ITS, indicating the modified characteristics and inventory codes of the changed elements and the maintenance operations carried out and the updated service levels.

3.8. MODULE FOR THE MEASUREMENT AND EVALUATION OF SERVICE LEVELS

This module should be deeply interrelated with the preventive, corrective and routine maintenance and conservation management module in such a way that the necessary work orders can be automatically generated for the correction of the non-compliances in the service levels detected in the inspection process of each indicator.

This relation must allow the monitoring of the time and execution of these work orders and must alert and inform pertinently of the maximum execution times for the correction of each non-compliance in a level of service.

This module must allow the configuration and subsequent control and alert of the maximum times allowed for the correction of non-compliances detected in the inspection process for each indicator.

It is essential that these maximum correction times can be configured for each indicator, for each differentiated section, and for each type of non-compliance.

3.9. COMMUNICATIONS MODULE AND OCC

The technological platform must coordinate the entire operation of the project in the Operations Control Center (OCC). To this end, the Geographic Information System (GIS) must be provided with the monitoring of the road system, with the real-time position of the events on the road, tolls, tunnels, weighing, ITS and the units that attend to them.

The Operations Control Center will also receive the warnings issued from the emergency stations, including gantries, S.O.S. posts and other ITS that can report alerts, through the protocols described above (Web

Service or API connection) and all of this will be displayed in the Geographic Information System, showing the current availability (Active or not) geopositioned equipment in the CAD 2 D representation.

The switching on and off of the lighting installation of the illuminated sections of the road(s) can also be controlled from the Control Center, regardless of whether it has local programmers that allow establishing a switching schedule, all of which will be recorded in the system manually as the mobile application or automatically with Web Services or connection Apis.

The CONCESSIONAIRE shall carry out the necessary Operation activities so that the operation of the communication systems complies with the stipulated service levels.

The contractor must guarantee the integration of all the elements of the traffic control systems (ITS), as well as the equipment that integrates the tolling or weighing, tunnel equipment and other road equipment installed or required.

Communication systems should use state-of-the-art technology to reduce the possibility of obsolescence during the term of the contract.

3.9.1. Communication Systems

The platform must have a REST API that will return a JSON or XML structure, which as a basic example must deliver the events between the two parameter dates (<to be defined list of fields>), vehicles (<to be defined list of fields>), people involved (<to be defined list of fields>) and assigned services (<to be defined list of fields>).

If you do not have a REST API, you must have WEB SERVICES that collect all the information registered in the Operational Control Center (OCC).

These WEB SERVICES shall be configurable to be accessed with or without a username and password combination, and ensuring data security; each of the WEB SERVICES shall allow at least ten (10) concurrent users.

The data uploaded to the Internet through WEB SERVICES must follow the market standards for each of the data types being used and add consolidated information in plain text tables, so as to always guarantee the compatibility of the appropriate communication and coordination (JSON or/and XML).

Either by means of the REST API or Web Services, consolidated historical information should be generated on a daily, monthly, quarterly, annual and inter-annual basis, generating data tables for the following items:

- 1. Concession monitoring indicators, both in the construction and operation phases.
- 2. Vehicles per category and per direction at each toll station, with a minimum periodicity of hours (24 data per day) and a daily consolidation.
- 3. Collection by vehicle category per toll and per direction
- 4. Information on accidents identified or reported on the road(s), giving a typification of the accident and the km where the accident is reported.
- 5. Information on weather conditions on the road(s),
- 6. Availability of toll stations, weighing stations, tunnels, gantries and other ITS, as well as messages displayed on fixed information panels, detailing the message and the frequency with which it is displayed.
- 7. Availability of Operations Control
- 8. Availability of the technological platform for the road system
- 9. Information on any circumstance that affects or interrupts the normal operation of the road
- 10. Maintenance operations detailing the variables, type of operation, response time, kilometer, operation performed and personnel assigned.

Additionally, and with the objective of consulting the geo-referenced information, all the geopositioned elements can be consulted, knowing their main data and their geoposition (WGS84) so that this Web Service allows exporting these inventories to other platforms.

3.10. - REPORTS, STATEMENTS AND CONTROL PANELS MODULE

In order to be able to know all the information recorded in the system and the evaluation of the indicators,

the system must generate as many reports and statements as necessary to know the status of each service level, maintenance operations, all between dates.

On the other hand, the platform will generate a control panel ("*Dashboard*") with all the most important indicators for equipment management, service levels and work, operation and maintenance status.

A monthly report must be generated on the status of all service levels detailing each level and the operations performed on it. This report will be generated and submitted on a monthly basis using the platform, within the term defined in the Concession Contract. These reports must have date, time and user that generated it.

3.11. START OF OPERATIONS AND REVERSION OF AMS TECHNOLOGY PLATFORM

3.11.1. Start:

Prior to the start of operation of the platform, a battery of 10 test sessions will be carried out jointly by the CONCESSIONAIRE, the GRANTOR and the specialists to be determined in order to verify full compliance with the technical specifications stipulated in this document.

Once the tests have been successfully carried out, the GRANTOR will issue a report including the entire testing protocol, the success cases and the no objection to the system, allowing the platform to start operating and initiating the measurement of the indicators and generating a monthly report of the same.

3.11.2. Reversion:

The platform license must be reversible to the GRANTOR so that at the end of the contract term, the GRANTOR owns the system. Two types of platform licensing are allowed:

- 1) Cloud systems contracted as a service ("software as a service") will be valid. However, to ensure the maintenance and functionality of the system, it must be possible to reconfigure the information flows and internal processes, permissions and reports in such a way that the platform allows to perform all these tasks without the need for reprogramming, or recompilation or redeployment of the application, in this case at the end of the concession, in the case of cloud systems as a service, the source code will not be required but the alphanumeric database, geospatial database and attachments will be required. All of these deliverables must be compatible with PostgreSQL and PostGIS.
- 2) In the event that the system requires reprogramming, recompilation or redeployment for the creation of new flows and internal processes, reports or permits, the CONCESSIONAIRE shall deliver the source code and the minimum necessary training to the concessionaire for its correct subsequent maintenance and expansion based on current and future needs.

3.12. END-OF-WORK REGISTRATION

Once a section has been completed, all the geospatial information of both the road structures and its elements and/or ITS will be entered into the AMS, so that the measurement of indicators can be started at the time of delivery of the section.

4. SPEED CONTROL SYSTEM

The speed control system will allow electronic monitoring of vehicles in areas with the highest risk of accidents, with special attention to tunnel sections.

As a guideline, the devices will be installed on a transverse gantry at the beginning and end of the monitored

track section.

It will be up to the CONCESSIONAIRE to propose the technology and composition of the speed detection systems, following proven international standards in the absence of local regulations.

The CONCESSIONAIRE will propose the points of implementation of these systems according to the variables mentioned above:

- Accidentability
- Traffic Black Points

The minimum requirement is the installation of a speed control system in sections of the tunnels in both directions.

The information captured must be processed by the Concessionaire, generating both traffic behavior reports, according to speed, as well as generating "digital files" for those transits that exceed certain speed thresholds to be defined jointly with the GRANTOR and with the capacity to be adjusted during the entire operation time.

The digital files will be shared with the GRANTOR or its designee. Likewise, both the format and the way of sending the digital files generated for each transit that exceeds the speed limit, will be specified jointly to the GRANTING authority.

5. VEHICLE IDENTIFICATION SYSTEM

Overweight vehicles are a serious threat to the road infrastructure and pose a safety hazard to all road users, with special attention to tunnel traffic.

It is therefore proposed to implement a system for monitoring vehicles for excess weight and dimensions under normal traffic conditions, i.e. without affecting in any way their passing speed or current trajectory.

The CONCESSIONAIRE shall systematically verify the weight and dimensions of the vehicles that travel on the roadway subject to this project, so that it can identify those outside the permissible weight and/or dimensions limits in order to both communicate them to the competent authorities and take the actions defined in the operating manuals for such cases, with a view to guaranteeing safety at all times on the roadway.

This system performs vehicle classification functions by identifying the main parameters such as vehicle dimensions and axle numbers, weighing in motion at normal road speed and identification by front and rear license plate for trucks.

- **5.1.** Minimum devices that make up the system:
 - WIM Dynamic Weighing System or Weigh in Motion.
 - LPR camera with color context.
 - Sensor Classifier laser and/or radar technology
 - Camera
 - Laser and/or Raser

5.2. Basic functions to be implemented:

- Weight Characteristics:
 - Gross weight
 - o Trailer weight
 - o Axle weight
 - Weight of axle groups
 - Unbalanced weight
- Vehicle characteristics
 - Vehicle type

- Vehicle speed
- Trailer detection
- o Number of axles
- Double wheel detection
- o 3D vehicle profile measurement
- o Plate

5.3. Measuring accuracy

 If there are no local regulations governing the WIM system, the requirements of COST-323 type A (5) must be complied with.

5.4. Characteristics and Functionalities

The system must be installed at least one in each direction of the road, so that the vehicle's data is identified throughout its stay on the road.

It shall be up to the CONCESSIONAIRE to propose the technology and composition of the vehicle identification systems that allow obtaining the weight and vehicle characteristics as required, following international standards proven in effectiveness, in case there are no local standards that regulate it.

The devices that make up the vehicle detection system will be installed on a gantry transversal to the monitored roadway, complying with the corresponding technical safety requirements.

ANNEX No. 3 TECHNICAL ASPECTS

Appendix 1 Minimum Technical Requirements of the Project for Design and Construction

SECTION C

MINIMUM MANDATORY PROJECT TECHNICAL REQUIREMENTS FOR BUILDING INFORMATION MODELLING (BIM)

1.0 INTRODUCTION

This document should serve as a basis for defining the requirements regarding the implementation and application of BIM methodology in the Concession Contract, as established by Applicable Laws and Provisions.

The use of the BIM (Building Information Modeling) methodology will be implemented in all stages of the Concession Contract.

In this context, the CONCESSIONAIRE shall take into account the following:

- General aspects associated with the application of BIM methodology;
- Objectives of the application of BIM methodology;
- Application BIM uses at each stage of the Project;
- Development of BIM models;
- Information Management; and,
- Deliverables: Plans, BIM Execution Plan (hereinafter "<u>BEP</u>") and BIM models of the construction project.

2.0 GENERAL ASPECTS ASSOCIATED WITH THE APPLICATION OF BIM METHODOLOGY

• General Conditions

The BIM particular conditions do not change any contractual relationship or modify the responsibilities agreed by the Parties to the Contract.

The CONCESSIONAIRE shall be responsible for the digital 3D models of information and the quality and shall have the role of Principal Designated Party (hereinafter referred to as the "Principal Designated Party"). It must also answer for its subcontractors and the quality of the information they provide. In this sense, the CONCESSIONAIRE will also have the role of "BIM Coordinator" with the contractor companies, complying with the provisions of the National BIM Guide - Information Management for Investments Developed with BIM Methodology, approved by the Ministry of Economy and Finance (hereinafter, the "BIM National Guide"), and other Applicable Laws and Provisions.

• Property of the model

The GRANTOR declares itself the owner of all the information produced in the Contract, whether digital or non-digital; and the right to its use, enjoyment, reproduction, among others.

The BIM model generated for the Project, is part of the Concession Contract, and is and will be the exclusive property of the GRANTOR, which includes, without limitation, the designs, plans, tables, images, schedules, metrics, tables, memories, technical specifications, metadata, among others, contained therein. It also includes content within the BIM model and any other content presented as part of it.

During the Construction of the Project, the CONCESSIONAIRE will be responsible for ensuring the suitability of the models generated.

Any lucrative or non-lucrative use of the BIM models, by the CONCESSIONAIRE and/or any third party, must be authorized in advance and in writing by the GRANTOR.

The dissemination or communication of plans, models and other information provided by the CONCESSIONAIRE and/or generated in the BIM model process, without express authorization from the GRANTOR, is prohibited, under the responsibility of the GRANTOR. The CONCESSIONAIRE is responsible for compliance with these obligations in addition to maintaining the corresponding confidentiality, as appropriate.

• Rights of GRANTOR and the REGULATOR

The CONCESSIONAIRE shall give full access to the CONCESSIONAIRE and/or the REGULATOR to perform the quality and collaborative audits in the "common data environment", in accordance with the provisions of ISO 19650 and NTP-ISO 19650-1:2021 and NTP-ISO 19650-2:2021, as amended; in addition to considering the processes established in the BIM National Guide. In a manner that the GRANTOR and/or the REGULATOR can access the BIM information models resulting from corresponding official deliveries.

• Standards

The CONCESSIONAIRE will be responsible for defining a standardization scheme based on the principles of the BIM Methodology, taking as the main reference the BIM National Guide, as as amended.

The use of other standards and classifications such as ISO 19650, ISO 16739, ISO 12006, ISO 29481, PAS 1192 and others duly justified, as appropriate, shall be permitted.

• Software

BIM models shall be carried out with the software at the option of the CONCESSIONAIRE with the prior agreement of the GRANTOR, as established by Applicable Laws and Provisions.

A software proposal will be submitted as part of the BEP to respond to each of the required BIM uses, preferably in the form of a software map. The chosen software(s) must allow the revision and/or audit of the GRANTOR and/or the REGULATOR in any of its deliveries.

The CONCESSIONAIRE must carry out the necessary training to guarantee the use of the chosen software(s), in addition to training the GRANTOR and the REGULATOR with the necessary and sufficient knowledge to be able to perform their respective functions. The content of the trainings, both at the level of subject, terms, number of participants, hours of training among others, must be indicated in the BEP.

The software(s) selected must be able to perform exhaustive 3D models with the levels of detail required by the GRANTOR, the REGULATOR and the Applicable Laws and Provisions, taking into account the particularities of the Works covered by this Contract.

The CONCESSIONAIRE shall make all necessary tests and adjustments so that the information structure of the native models and their export to open BIM formats meets the requirements of the GRANTOR and the Applicable Laws and Provisions, defined and approved in the BEP.

The "BIM final model" will be delivered in native file defined in the BEP, including all libraries, families, objects, among others.

• Shared infrastructure

The CONCESSIONAIRE shall provide, throughout the period of the Concession, the necessary infrastructure (hardware, software and licenses) to execute the BIM methodology by the CONCESSIONAIRE and/or the REGULATOR, according to the responsibilities defined in the Concession Contract.

This infrastructure should be included in the BEP in sufficient technical detail to enable it to assess its efficiency. A cloud infrastructure will also be supported. Likewise, the number of users will be defined in the BEP.

BIM Roles

The CONCESSIONAIRE shall coordinate the execution of the information models of the different specialties, ensuring compliance with the Information requirements, regulations and procedures established for the management of BIM information, according to the BIM National Guide and other Applicable Laws and Provisions. To do this, the CONCESSIONAIRE must present within the BEP, a team of specialists who can articulate the implementation of this methodology in the Project, who can be part of its subcontractors.

The dimension of the BIM equipment and the suggested requirements for the BIM roles, to be assigned by the CONCESSIONAIRE, will be defined by reference to the BIM National Guide and will conform to the needs that the CONCESSIONAIRE deems appropriate.

• Quality assurance

The CONCESSIONAIRE shall share, as part of the BEP, the definition of the BIM quality assurance system to ensure compliance with the provisions of this document, including international quality standards (ISO 9001, as amended). Coordination meetings will be held during the design and construction of the Project to ensure compliance with the BEP and control spatial coordination.

The CONCESSIONAIRE should promote the development of ICE (Integrated Concurrent Engineering) sessions with the participation of Project stakeholders.

• Information Management

Within the process of generating information in the BIM models, the activities of the BIM information management process should be considered, with special attention to the main steps indicated in the BIM National Guide: (5) mobilization, (6) collaborative information production, (7) delivery of the information model and (8) completion of the implementation phase.

3.0 OBJECTIVES OF THE APPLICATION OF BIM METHODOLOGY

The objectives to be achieved through the implementation of the BIM methodology in the Project are listed and described below.

The accomplishment of these objectives will be achieved through the application of the "BIM uses" determined for each objective.

			EXECUTION OF WORKS	OPERATION AND MAINTENANCE
GENERAL OBJECTIVE	SPECIFIC OBJECTIVE	Does it apply?	Does it apply?	Does it apply?
Provide	Increased knowledge of the	Х	Х	Х
support in	solution proposals.			
decision-	Improved ability to react to	Х	Х	Х
making	unforeseen events.	Х	V	V
	Improved communication between agents involved.		Х	Х
Centralization of asset	Improved quality of processes avoiding duplication of information.	Х	Х	Х
information	Reduced risk of construction cost overruns due to the use of up-to-date information.		Х	
Facilitate interpretation	Improved requirements compliance analysis.	Х	Х	
and communicatio	Faster external approval cycles (procedures).	Х	Х	
n of the constructive process	Display of project prescriptions.	Х	Х	
	Detailed definition of multidisciplinary solutions.	Х	Х	
	Collaboration between property/design of teams/builders.	Х	Х	
Ensure				
coordination between	Coordination between disciplines/subcontractors.		Х	
disciplines of the constructive process	Anticipation in the detection of coordination problems on site.	Х	Х	
Define reliable construction	Facilitate the evaluation of construction processes.	Х	Х	
processes while	Have reliable production plans detailed by discipline	Х	Х	
minimizing	Increasing personal productivity		Х	
deviations	Risk reduction in critical activities		X	
Improve change	Traceability of change decisions.	Х	Х	
management during the construction process	Efficient assessment of the economic impact of alternatives.	Х		
Facilitate management of completed infrastructure	Prepare executed work documents with the most reliable and accurate information.		Х	Х
	Facilitate the transfer of operation and conservation data.		Х	Х
Support the transfer of	Connect design, construction and operation and maintenance	Х	Х	Х

information	equipment using BIM models.			
from design and construction to the operation and maintenance phases	Generate accurate information previously agreed between teams for management, operation and maintenance.	Х	Х	Х
Facilitate operation and maintenance management	Facilitate asset management during operation and maintenance		Х	Х

4.0 APPLICATION OF BIM USES AT EACH PHASE OF THE PROJECT

In accordance with the provisions of the BIM National Guide, the main uses of the BIM model are listed. It is necessary to specify that the aforementioned uses may be subject to revision and more uses may be added as requested by the GRANTOR. The initial uses considered are as follows and will be validated through the BEP:

No.	Use	EDI	EXECUTION OF WORKS	OPERATION AND MAINTENANCE
NO.	056	Does it apply?	Does it apply?	Does it apply?
1	Lifting of existing conditions 16	YES	YES	NO
3	Design of specialties	YES	YES	NO
4	Preparation of documentation	YES	YES	YES
5	3D visualization	YES	YES	YES
6	Coordination of information	YES	YES	YES
8	Estimated amounts and costs	YES	YES	YES
9	Design revision	YES	YES	YES
16	Interference detection and incompatibilities	YES	YES	NO
17	Planning for the implementation phase	NO	YES	YES
21	Construction logistics planning	NO	YES	YES
22	Record information about the built model AS-BUILT	NO	YES	YES
23	Programming preventive maintenance	NO	YES	YES

• Verification of BIM Uses

The CONCESSIONAIRE will prepare the BIM uses tables and BIM process maps to show and evidence the strategy for each of the "BIM uses" described above, in order to meet the objectives.

5.0 DEVELOPMENT OF BIM MODELS

The models will be updated progressively and iteratively in intervals agreed with the Grantor as part of the official deliveries, being the main procedure from which the deliverables related to the technical graphic documentation of this contract are generated in whole or in part.

The traceability of deliverables, as well as the processes by which they will be produced, including postprocessing with other "cad" or text editing tools, will be explained as part of the BEP.

Any documentation referenced in the BIM models will be delivered in native formats or, failing that, in the original formats upon receipt, if they were not produced by the CONCESSIONAIRE or any of its subcontractors for the development of the Project.

Level of information required LOIN

According to what is indicated in the BIM National Guide, the level of information to be recorded in the developed models should include the level of detail and the level of information. The level of detail contemplates geometric information; while the level of information contemplates alphanumeric information and associated model documentation.

• Level of detail

The elements modelled on the different disciplines shall be developed according to a "Level of Development" (hereinafter "<u>LOD</u>") based on the levels of development included in the latest standard published in the BIM National Guide, or other duly justified international guides, if applicable.

Models shall be divided into disciplines to be proposed by the CONCESSIONAIRE, as deemed necessary by the nature of the Project and shall form part of the BEP for approval.

The models may include 2D information based on the 3D geometry of the models for some cases such as construction details, type sections, schematic representations of the longitudinal sections of vials and viaducts and other particular conditions.

Below is a table with the minimum LOD to apply, as a reference, according to the main disciplines to be considered and according to project type.

DISCIPLINE	CONSTRUCTIVE PROJECT	MODEL AS BUILT
EXISTING LAND	300	500
SURFACE AND PAVEMENTS	300	500
STRUCTURES	300	500
DRAINAGE	300	500
EARTHWORKS	300	500
SIGNAGE, BEACONING AND DEFENCES	300	500
ADDITIONAL EQUIPMENT AND WORKS	300	500

• Exceptions

All elements that are not part of the BIM models for justified reasons of time and dedication required shall be detailed as part of the BEP.

The existing situation models, if any, will include all the elements that are affected by the execution of the Works. The CONCESSIONAIRE will carry out and treat the modeling of what is existing and what is actually executed in the scope of the Works carried out.

For existing infrastructure, the CONCESSIONAIRE must integrate all relevant documentation using 2D mapping. In general, the existing infrastructures will not be modeled, until their analysis is necessary for the development of the Works of the main components of the Project. If it is deemed necessary to include infrastructure modeling, the CONCESSIONAIRE shall provide such models in open BIM format.

In any case, 3D modelling of the reinforcements is excluded for concrete structures.

By way of indication, but not limitation, and unless it is considered essential for the definition of the Work or the traceability of the measurements, the previous work and demolitions, dismantling, auxiliary means, protections, lifting and chopping mechanical or manual, received from cement mortar, masonry aids, polyester meshes, fillers, fiberglass meshes, pickling and chafing, pickling, sanding and varnishing (paints, treatments and protections will be associated with the type of material or finish of the element), excavations, rebar, repairs with mortar, cables, lines (although its channels), sealing system; circuits (although its records), conductors, wiring and protections less than 5cm thick will not be modeled.

• Information level

The non-graphical information of the model elements (metadata) will be structured around a property grouping (property set).

The properties and set of properties of the elements that will make up the different BIM models, will be organized homogeneously, standardized, taking as reference the classification systems proposed in the BIM National Guide.

Elements will not be supported in models that do not contain the defined property set structure. These groups of parameters or sets of properties should be proposed in the BEP, with reference to the BIM National Guide, and thereby achieve:

- The ability to selectively segregate all the constituent elements of the models for the different BIM uses required.
- The traceability of measurements from the elements included in the models.
- The comprehensive project centralization strategy based on BIM models.

These custom property sets will be prepared on native models prior to delivery of information.

• Classification of construction elements

A hierarchical structure shall be defined to designate each of the elements of the three-dimensional models. This seeks a greater degree of standardization and traceability of the information generated.

Once implemented and standardized, data can be processed through the three-dimensional information models of different Works, unifying the coding of elements, the revision, the generation of lists linked to elements and future price base.

There are currently different classification systems for elements in the sector. This project will prioritize the standard classification of the BIM National Guide, with the option of using other international guides, duly justified, if appropriate.

In order to be able to standardize the classification of constructive elements, the classification systems proposed in the BIM National Guide should be taken as a reference.

6.0 MANAGEMENT OF INFORMATION

• Common Data Environment – CDE

For the development of any contract under BIM methodology a specific framework has to be defined that has to meet a number of requirements on the treatment of information, the relationship between its agents and the technological environment to be implemented, i.e. a *common data environment* (hereinafter, a "<u>CDE</u>").

This flow of information makes it necessary to create areas of work within the different information management platforms, according to the productive flows of the Project and the different actors involved.

Areas of the collaborative work environment should follow the provisions of the BIM National Guide, based on developing within the BEP the use of the recommended areas: **wip-share-published-archive.** The flow of information evolution between work areas must respond to the evolution of three processes: "approved", "authorized" and "verified".

Information flow should follow the rules governing common information repositories based on the BIM National Guide.

To this end, the CONCESSIONAIRE must propose in the BEP a CDE for collaborative interdisciplinary work and in real time, which will allow controlled access to all the documentation of the Project, as well as its visualization and consumption, according to the profile of each user; and whose use will be obligatory, and will be the only valid source of information for each user profile to collect, manage and disseminate the documentation, models and graphic and non-graphic data for all the teams involved.

Access to information shall be restricted to agents defined in the BEP by means of permits. In addition, the CONCESSIONAIRE will also be responsible for ensuring the maintenance and integrity of the CDE, and in particular the model, making appropriate backups at appropriate intervals.

Visualization and exchange of information

During all phases of the life cycle, a methodology based on open models will be used, prioritizing the exchange of information using "open BIM" files for the visualization and monitoring of works. The CONCESSIONAIRE may propose another alternative format that guarantees access to and consumption of the information by all agents, including the GRANTOR and/or the REGULATOR in connection with the Project.

These models will be shared in the CDE for periodic revision and coordination of work through management and visualization software accessible to all actors, including the GRANTOR and the REGULATOR.

The exchange of information by e-mail, or by any means other than the common repository of CDE information, shall be avoided to the extent possible by sharing the files in the common repository of data through links to data files and models, as appropriate.

Schedule for information exchange

In addition to exchanges of information due to official deliveries, a delivery schedule may be established as part of the collaborative process between the actors involved in the different phases of the Project.

Such a process shall be defined in the BEP and shall take place through the CDE.

The CONCESSIONAIRE will propose in the BEP, a schedule of periodic meetings in the progress of the

Project, as a key part of the BIM coordination strategy.

It will therefore be a priority to enhance the use of the BIM models in these meetings to explain and transmit to the GRANTOR and/or the REGULATOR, as appropriate, the progress of the Project made since the previous meeting.

Asset Management System (AMS) in Project Operation and Maintenance

It shall be the responsibility of the CONCESSIONAIRE to design an information exchange plan between the BIM model used and the AMS platform designed for the Operation and Maintenance phase of the Project, with particular attention to data on the life cycle of the assets or elements constructed and/or installed, which require preventive maintenance or renovation.

It should also be allowed to identify the assets or elements built and/or installed in terms of the technical specifications, as a record of modifications that may be made to them, during the Operation and Maintenance of the Project.

A proposal to use information from the BIM model within the Asset Management System (AMS) shall be submitted as part of the BEP at the beginning of the Project Operation and Maintenance.

7.0 DELIVERABLES

BIM deliverables will be prepared according to the deliverables defined in the Concession Contract and it will be mandatory to list within the BEP the list of BIM documentation that must be delivered for the achievement of the Project by means of milestone table.

All required BIM deliverables should be included in the Project Documentation Index. In particular, the constructive elements should be named in the same way in all documents (report, annexes, plans, sheet and models) in order to ensure greater traceability and consistency in the information generated.

And there must be a biunivocal relationship between the information in the specification, the calculations made and the graphical information generated.

These BIM deliverables shall include at least

- Plans
- <u>BEP</u>
- BIM models of constructive project in native and "open BIM" formats.

• Plans

<u>BIM models should be the means by which the information contained in the "plans" document is consistent.</u> For this purpose, the plans should generally come from the three-dimensional information model.

All elements which, for justifiable reasons of suitability, terms and dedication, are not part of the BIM models shall be detailed as part of the BEP. These shall be duly justified and approved by the GRANTOR.

The CONCESSIONAIRE shall provide the GRANTOR with the native and open BIM working models including the properly integrated and linked Project plans, without losing the traditional delivery of the PDF plans package.

The Project Plan Index shall contain the following information:

- <u>Differentiation between plans from three-dimensional information models</u>, plans not from three-dimensional information models and plans from both sources.
- <u>Native three-dimensional model of information from which it comes or is linked.</u>

• Code of the plan according to coding of the BEP and the master plan for delivery of the information.

BIM – BEP IMPLEMENTATION PLAN

The objective of the BEP is to define the framework in which the GRANTOR, the REGULATOR and the CONCESSIONAIRE use the "BIM methodology" under the same working scheme.

The BEP explains the working methodology, processes, technical characteristics, BIM roles, responsibilities and deliverables that respond to the information requirements of the GRANTOR and that the parties involved must follow for the development of the Project.

The BEP will undergo a series of validation and start-up sessions, focusing on the implementation of BIM uses and processes for each of the project phases, which will be at least:

- 1) Preliminary BEP design (to be delivered within the first six (6) months after the Closing Date):
 - BEP presentation meeting
 - Trainings
 - Equipment and BIM roles
 - Verification of BIM uses
 - A pilot test to verify the proposed technical scope, with particular attention to:
 - o Data structuring
 - Classification of constructive elements
 - \circ The properties and set of properties of the elements that will make up the different BIM models
 - o CDE for collaborative interdisciplinary work
 - \circ The software(s) with which are proposing to prepare the models
 - Approval in the take-over record of the BEP by all actors involved in the Project.
 - Approval and publication of the Project's BEP.
- 2) Design's BEP (To be delivered before validation of all design packages)
 - o BEP presentation meeting
 - o Trainings
 - o Equipment and BIM roles
 - Verification of BIM uses
 - A pilot test to verify the proposed technical scope, with particular attention to:
 - Data structuring
 - Classification of constructive elements
 - The properties and set of properties of the elements that will make up the different BIM models
 - CDE for collaborative interdisciplinary work
 - The software(s) with which are proposing to prepare the models
 - Approval in the take-over record of the BEP by all actors involved.
 - Approval and publication of the Project's BEP.
- 3) Execution's BEP (to be delivered for up to 6 months after the start of execution of the first approved design packages)
 - BEP presentation meeting
 - Trainings
 - Equipment and BIM roles
 - Verification of BIM uses
 - A pilot test to verify the proposed technical scope, with particular attention to:
 - Data structuring
 - Classification of constructive elements

- The properties and set of properties of the elements that will make up the different BIM models
- CDE for collaborative interdisciplinary work
- The software(s) with which are proposing to prepare the models
- \circ Approval in the take-over record of the BEP by all actors involved
- o Approval and publication of the Project's BEP
- 4) Operation and Maintenance of the Project's BEP (to be delivered up to the maximum period of three (3) months from the completion of the execution of the Works by the CONCESSIONAIRE)
 - BEP presentation meeting
 - \circ Trainings
 - Equipment and BIM roles
 - o Verification of BIM uses
 - A pilot test to verify the proposed technical scope, with particular attention to:
 - Data structuring
 - Classification of constructive elements
 - The properties and set of properties of the elements that will make up the different BIM models
 - CDE for collaborative interdisciplinary work
 - The software(s) with which are proposing to prepare the models
 - Approval in the take-over record of the BEP by all actors involved.
 - o Approval and publication of the Project's BEP

8.0 Scope of the BEP

In accordance with the BIM National Guide, the BEP submitted shall consist of at least the following detailed sections:

Section A: General aspects of the investment and the Execution Team

- 1. Investment characteristics
- 2. Scope and collaborative objectives of the execution team
 - Activities comprising the BEP in general
 - Objectives defining the intentions and overview of activities within the scope of the execution team
- 3. BIM information management responsibilities of the execution team
 - BIM information management process
 - Organization/work team

Section B: Information delivery strategy of the execution team

- 1. Objectives for collaborative production of the information model
 - Priority level of BIM information management objectives
 - BIM uses
- 2. Organizational structure and composition of the execution team
 - Participant's BIM role
- 3. List of computer resources required
 - Type of information
 - Level of information required
 - Name of the computer resource
 - Native information format
- 4. Federation strategy

- 5. Mobilization plan
 - Activities to be carried out
 - Delivery term
- 6. Delivery strategy of the information model
 - No. Deliverables
 - Information containers
 - Delivery method

Section C: Proposed amendment or addition of reporting rules

- 1. Reporting rules
 - Identification of information containers
- 2. Methods and procedures for producing information
 - Inter-specialty coordination strategy
 - Activities for interference detection and resolution
 - Interference tolerance and evaluation
 - Information security requirements
 - Safety level

9.0 Priority Reference

Finally, it should be noted that all the recommendations in these guidelines and standards will take as a reference compliance with the latest published version of the BIM National Guide and its annexes, which is therefore the maximum reference to be used for the definition of the BEP.

However, it is open in particular cases within the scope of the BEP, the use of other references, guides and Applicable Laws and Provisions, provided that the CONCESSIONAIRE duly justifies it and has the prior and express approval of the GRANTOR.

ANNEX No. 3 TECHNICAL ASPECTS

Appendix 2 Terms of Reference for the Preparation of EDIs

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TERMS OF REFERENCE

FINAL ENGINEERING STUDY FOR THE CONSTRUCTION OF THE PERIPHERAL RING ROAD

1. TECHNICAL CHARACTERISTICS OF THE SERVICE OVERVIEW

For the preparation of the Final Engineering Study of each section, the Minimum Technical Requirements of the Project for Design and Construction provided for in Appendix 1 of Annex No. 3 of the Concession Contract must be taken into consideration, as well as the following:

- Construction of a Highway with a design speed of 80 km/h consisting of 2 roadways. Each roadway consists of 3 lanes 3.60 m wide, berm according to the Highway Manual. Geometric Design DG-2018 considering the exception given by the Directorate General of Roads and Railways Memorandum No. 674-2014-MTC/14 dated 20.03.2014 that attaches Report No. 010/2014- MTC/14.01.JAC dated 03.19.2014 that is validated by Memorandum No. 1041-2018-MTC/14 dated 06.21.2018 and that indicates the dimensions of the berms: External Berm 1.40 m. and Internal Berm 0.50 m. In urban areas, the design of 2 unidirectional lateral service roads with 2 lanes of 3.00 m each, parking area in some cases and sidewalks of 1.50 m is contemplated.
- The Peripheral Ring Road runs through 1 district of the Constitutional Province of Callao and 11 districts of Metropolitan Lima, of which 5 are located in the North Area of Lima (San Martín de Porres, Los Olivos, Independencia, Comas and San Juan de Lurigancho) and 6 are in the East Area (Lurigancho, El Agustino, Santa Anita, Ate Vitarte, La Molina and San Luis).
- For the connectivity of the Peripheral Ring Road with the adjacent road infrastructure, road interchanges shall be designed with the main thoroughfares and crosswalks and pedestrian bridges shall be established for the connectivity of persons and vehicles in the adjacent areas
- Consideration is given to the construction of two double tunnels, one for each roadway, with a reference length of 2,285 and 1,936 meters respectively equipped with lighting, ventilation, signaling and fire protection facilities.

These Terms of Reference set forth the scope of services, as well as the products that the CONCESSIONAIRE will develop and submit.

SCOPE OF THE SERVICE

The CONCESSIONAIRE shall prepare the Definitive Engineering Study of each section complying with the scope indicated in this document and thereafter, shall submit the referred EDI to the Directorate General of Transport Concessions of the Ministry of Transport and Communications (hereinafter the CONCESSIONAIRE) for revision and approval.

The description of the scopes of the services below is not limiting, and will serve for the elaboration of the Definitive Engineering Study, should the CONCESSIONAIRE expand, improve and deepen them as it deems necessary (without reducing its scope), if it considers that the contribution constitutes the best way to carry out the study.

The study will be developed in its entirety by the CONCESSIONAIRE, including all the necessary studies, as well as contemplate all the details and designs at definitive level to carry out a constructive process without problems and finally guarantee the operation of the highway (including tunnels and / or bridges and / or variants if required) during its service life.

THE CONCESSIONAIRE will carry out the studies adopting methodologies according to the reality of the project area. For this purpose, the head of the study and all specialists according to the work plan must be in the project area during the preparation of the study in order to have full knowledge of the characteristics of the highway under study.

Under no circumstances will the contents of these TORs rule out knowledge of the basic principles of engineering and related techniques, as well as appropriate professional judgment; consequently, the CONCESSIONAIRE will be directly responsible for all work and studies carried out, as well as the quality of the services provided and the suitability of the personnel in charge.

Any calculation, assertion, estimate or data shall be conceptually and analytically justified; estimates or assessments shall not be accepted from the CONCESSIONAIRE without proper support.

1.1 BACKGROUND REVISION AND EVALUATION

For the preparation of the Definitive Engineering Study for the construction of the Peripheral Ring Road, the CONCESSIONAIRE must investigate, locate, review and evaluate all relevant records that exist and may be applicable to the study to be prepared, as well as some other information that is in the archives of PROVIAS NACIONAL related to this route and adjacent to it (traffic, tolls, serviceability, pre-investment studies, definitive, and / or maintenance, etc.), and other documents that can be consulted in the Ministry of Transport and Communications or in other public and private bodies.

The Pre-Investment Study of the Peripheral Ring Road Construction Project is available to the CONCESSIONAIRE.

The main sources of information available include:

1.1.1 Standards relating to road works

Standards relating to road works (including the amending and/or replacing rules) and which are mandatory in use such as:

- Highway Manual: **Tunnels, Walls and Complementary Works**, approved with a Directorial Resolution No. 036-2016-MTC/14 of 10.27.2016.
- Highway Manual: **Testing of Road Materials**, approved with Directorial Resolution No. 018-2016-MTC/14 of 06.03.2016 of 06.27.2016.
- Road Safety Manual, approved with Directorial Resolution No. 05-2017-MTC/14 of 08.01.2017.
- Automotive Traffic Control Devices for Streets and Roads Manual, approved Directorial Resolution No. 016-2016-MTC/14 of 05.31.2016 of 06.25.2016.
- Highway Manual: Geometric Design DG-2018, approved with Directorial Resolution No. 03-2018-MTC/14 of 01.30.2018.
- Highway Manual: "Soils, Geology, Geotechnics and Pavements", Section Soils and Pavements, approved with Directorial Resolution No. 10-2014-MTC/14 of 04.09.2014.
- Highway Manual: Manual of Road Inventories, approved with Directorial Resolution No. 09-2014-MTC/14, of 04.03.2014.
- Highway Manual: Road Maintenance or Conservation, approved with Directorial Resolution No. 08-2014-MTC/14 of 03.27.2014.
- Road Manual "General Technical Specifications for Construction" (EG-2013), approved with Directorial Resolution No. 003-2013-MTC14 of 02.16.2013, updated with Directorial Resolution No. 22-2013-MTC/14 published on 08.07.2013.
- Manual of "Hydrology, Hydraulics and Drainage", approved with D.R. No. 20-2011-MTC/14 of 09.12.2011.
- Geodetic Technical Standard: Technical Specifications for Vertical Geodetic Surveys, approved with Head Resolution No. 057-2016/IGN/UCCN of 06.10.2016.
- Geodetic Technical Standard: Technical Specifications for Static Geodetic Positioning relative to Global Navigation Satellite System Receivers, approved with Chief Resolution No. 139-2015-GN/UCCN of 12.25.2015.

- Technical Standard, Technical specifications for the production of 1:1000 scale topographic maps approved with Resolution No. 089-2011-IGN/JEF/OGA of 05.10.2011
- Incorporation in the Glossary of Frequently Used Terms in Road Infrastructure Projects, of the term Critical Sectors, approved with DR No. 02-2015-MTC/14, of 02.06.2015.
- Requirements for Authorization of Use of the Right of Way of Roads of the National Road Network of competence of the MTC, approved with Directorial Resolution No. 05-2014-MTC/14 of 03.14.2014 and its amendment DR. No. 017-2014 MTC/14, of 07.21.2014
- Glossary of Terms of Frequent Use in Road Infrastructure Projects, approved with Directorial Resolution No. 18-2013-MTC/14 of 07.14.2013, modified with DR. No. 12-2015-MTC/14.
- Technical Specifications of Paints for Road Works, approved with Directorial Resolution No. 02-2013-MTC/14 of 02.22.2013.
- Glossary of Items, applicable to rehabilitation, improvement and construction of roads and bridges, approved with Directorial Resolution No. 17-2012-MTC/14 of 09.20.2012.
- Directive No. 001-2011-MTC/14 "Reducers of Speed type Relief for the National Highway System", approved with Directorial Resolution No. 23-2011-MTC/14 of 10.13.2011.
- Provisions for the Demarcation and Signage of the Right of Way of the Roads of the National Highway System • SINAC, established with Ministerial Resolution No. 404-2011- MTC/02 of 06.07.2011.
- Directive No. 007-2008-MTC/02 "Security Barrier Vehicle Containment Systems", approved with Ministerial Resolution No. 824-2008-MTC/02 of 11.10.2008.
- Environmental Manual for the Design and Construction of Roads.
- Directive on Concordance between the National Environmental Impact Assessment System (SEIA) and the National Public Investment System (SNIP), approved by Ministerial Resolution No. 052-2012-MINAM of 03.07.2012.
- Regulations of Law No. 27446, National Environmental Impact Assessment System Law, approved by Supreme Decree No. 019-2009-MINAM, published on 09.25.2009.
- Law 28296-Law on the Protection of the Cultural Heritage of the Nation, Supreme Decree No. 054-2013- PCM of 06.16.13, Supreme Decree No. 060-2013-PCM, Deputy Ministerial Resolution No. 037-2013- VMPCIC-MC, approving its Directive No. 001-2013-MC, Supreme Decree No. 003-2014-MC (Regulation of Archaeological Interventions) and the TUPA of the Ministry of Culture.
- AASHTO LRFD Bridge Design Specifications (current version) is complemented for the particular aspects of our country with the Manual of Bridges MTC-2018 effective from 01.15.2019 (published in the Official Gazette El Peruano on 01.14.2019).
- AASHTO Guide Specifications for LRFD Seismic Bridge Design (current version).
- AASHTO Manual for Bridge Evaluation (current version).
- LRFD Guide Specification for Design of Pedestrian Bridges (current version).
 - Other Standards related to road infrastructure and its amendments

1.1.2 Rules, manuals and/or directives of the National System for Multiannual Programming and Investment Management-INVIERTE.pe

By Legislative Decree No. 1252, Legislative Decree creating the National System for Multiannual Programming and Investment Management, the National System for Multiannual Programming and Investment Management was created as a State Administrative System with the purpose of guiding the use of public resources allocated to investment for the effective provision of services and the provision of the infrastructure necessary for the development of the country;

Paragraph 5.2 of Article 5 of Legislative Decree No. 1252 establishes that the Ministry of Economy and Finance, through the General Directorate of Multiannual Investment Programming, is the governing body of the National System for Multiannual Programming and Investment Management and in its capacity as the highest technical-regulatory authority; it dictates the procedures and guidelines for multi-year investment programming and the Investment Cycle;

Subsection 1 of paragraph 8.2 of article 8 of the Regulations of Legislative Decree No. 1252 and its amendment approved by Supreme Decree No. 179-2020-EF, establishes that the DGPMI approves the directives, procedures, guidelines, methodological instruments of general scope and other complementary standards necessary for the operation of the said National System and the application of the phases of the Investment Cycle;

Through Directorial Resolution No. 001-2019-EF/63.01, published in the Official Gazette El Peruano on January 23, 2019, the General Directorate of Multiannual Investment Programming approved Directive No. 001-2019-EF/63.01, General Directive of the National System for Multiannual Programming and Investment Management, which establishes the provisions that regulate the operation of said National System and the processes and procedures for the application of the phases of the Investment Cycle;

In addition, for the preparation of the Final Engineering Study, all the regulations amending, complementary and related to Legislative Decree No. 1252, its Regulations approved by Supreme Decree No. 179-2020-EF and Directive No. 001-2019-EF/63.01 must be observed.

1.2 CONTENT OF THE FINAL ENGINEERING STUDY

The Final Engineering Study for the Construction of the Peripheral Ring Road will consist of three (03) components, which will be prepared in compliance with the requirements established in these Terms of Reference (TORs).

The components of this Study are the following:

- Engineering Component
- Environmental Component
- Archaeological Component

A Technical File will be prepared for each of the following sections:

Section	Description	Length
1	From the óvalo 200 millas to the Panamericana Norte at the height of the 8.70 Ovalo del Naranjal.	
II	From the Naranjal oval in the North Pan- American Highway to the Ramiro Prialé 15.1 Highway Road interchange	
	From Ramiro Prialé Highway to Circun	11

	(passing Circunvalación	
approxi	mately 70 meters before read	ching Rd
Avenue		

1.3 TECHNICAL REQUIREMENTS FOR THE PREPARATION OF THE FINAL ENGINEERING STUDY

1.3.1 TRAFFIC STUDY

The Traffic Study to be carried out by the CONCESSIONAIRE will be aimed at determining the basic elements for the geometric design of the road, the structural design (pavement and bridges) and for the analysis of capacity and service levels of the current and future road. The study will serve as a basis for economic analysis, specifically for the calculation of vehicle operation and maintenance costs and savings due to reduced travel time for users and the reduction in the cost of accidents attributable to road improvement. The CONCESSIONAIRE will present the results of the field and cabinet work in Word, Excel and CAD formats, containing the calculations made for each of the activities with their respective formulas.

The Traffic Study will be carried out considering the following:

- a. Review and evaluation of the background of studies that have been carried out in the Project area, including the Pre-Investment Study of the said Project.
- b. The Traffic Study will be one of the initial activities that will allow us to define geometric design parameters.
- c. Identification of "homogeneous sections" of demand. Identification of the nodes and their nature, which generate these homogeneous sections.
- d. Volumetric traffic counts classified by type of vehicle in properly supported stations The counts will be carried out for 7 continuous 24-hour days, in the section under study. Homogeneous Sections and counting stations must be graphically presented on at least A3 sheets, indicating their location (Coordinates/Km). The counting stations must be coordinated with the MTC before the start of the work.
- e. With the corresponding correction factors (schedule, daily, seasonal), the Annual Average Daily Traffic Index (IMDA) will be obtained that corresponds to the section or subsection, by type of vehicle and total. The correction factors (hourly, daily, seasonal) are obtained from statistics provided by toll stations.
- f. Origin-Destination Survey (0/D) in duly supported stations of three (03) consecutive 24-hour days (two days a week and a Saturday or Sunday) per station. The workstations must be coordinated with the MTC before the start of the work. The survey must necessarily include by type of vehicle in order to build the matrices and determine the area of direct and indirect influence of the project, the survey will include the types of vehicle, make, model, year, number of seats, number of occupants, type of fuel, origin, destination, purpose of travel, travel frequency, empty weight, loaded weight, payload, product transported, cost of travel to the user (passengers and/or cargo carried), and any additional data that the CONCESSIONAIRE requires for a better evaluation.
- g. If diverted traffic is considered in the study, the CONCESSIONAIRE will carry out vehicle counts and origin-destination survey (0/D) on the corresponding alternate routes, in order to support long-distance traffic that will possibly be diverted to the section under study, which must be carried out with a minimum of seven consecutive days of 24 hours a day, recording data from two working days and one Saturday or Sunday per station.

- h. Declared and revealed preference surveys, to model traffic diverted to the project under study.
- For the Study of heavy Traffic, data from studies carried out in the i. area no older than 1 year may be adopted. In case they do not exist, a cargo Census will be conducted by type of heavy vehicle and by axle (trucks and buses). Workstations must be coordinated with the MTC before the start of the work. The census will be carried out for four (04) days and a minimum of 12 hours each day (day and night shifts) until completing two (02) days of 24 hours, in order to obtain the loads, load factors acting on the pavement, to obtain the adjustment factor to the load factors and the load rail and directional factor that allows determining, for pavement design, the number of equivalent 8.2 TN axles and the number of ES repetitions for the design period, as well as, the traffic composition. The sample must exceed 30% of the day's heavy vehicles. An analysis of overload problems and/or extra wide tires will be included. If the pavement design method requires it, the cargo census will be complemented with tire pressure measurement to obtain the adjustment factor.

The Cargo Equivalence Factors must be determined using the AASHTO methodology version 93. The balance must be composed of two sensors or scales that simultaneously receive the load from each end of the axles, which make up the vehicle. The error of the samples should not be greater than +/ -5%. An analysis of overload problems will be included.

- j. Measuring speeds and obtaining the average operating speed by type of vehicle, per homogeneous section. Analysis of the impact that different design speeds would have on demand, both in volume and composition, considering four (04) control points.
- k. If it is identified that current traffic crosses already consolidated urban areas, the possibility of considering alternative routes (avoidance roads, overpasses, etc.) should be considered, in order to improve and/or maintain the National Highway with its optimal operating characteristics.

The CONCESSIONAIRE must carry out the traffic study for this purpose, in which he obtains the analysis of the intersections of the urban area, the delay times to cross the city, the traffic that will be diverted to the optimal route and speed control in the urban area. The declared preference survey as well as the 0-D should specify "the populated center", "district" and "province" in the location questions, in order to obtain a better analysis.

Traffic counting stations will be located at the intersections where congestion occurs (directional flows), vehicles will be counted according to flows or movement, taking into account vehicle capacity classified with 15-minute intervals in order to find the peak time and the corresponding flow gram will be graphed. The Service Level and Capacity (use Micro Simulation or other software) will also be determined.

Delay times will be determined by type of vehicle. The sample will be taken during the morning, noon and evening rush hour interval. The sample must be recorded simultaneously in both directions of the road.

I. For the analysis of urban traffic, it is necessary to use the Highway Capacity Manual - HCM 2000 or other urban traffic manuals.

- m. The traffic study will also include the analysis of the demand for nonmotorized traffic (pedestrians, cyclists, cattle herding), identification of demand centers such as schools, markets, bus stops, areas for loading and unloading merchandise, etc.
- n. Local flows (purely urban transport) will be differentiated from regional flows (mobilization of agro-industrial inputs and exportable goods), establishing growth rates for both flows, by type of vehicle and main 0/D.
- We will analyze the possibility of qualitative changes in demand (vehicle composition, for example, new passenger transport services, cargo in higher capacity vehicles), due to road improvement or changes in design speed.
- p. Traffic projections will be made for each type of vehicle, considering the annual growth rate calculated and duly based, as appropriate, on the historical trend or socio-economic projections (GDP, engine rates, population projections, income trends, etc.) and the traffic that is estimated after paving, identifying normal, generated and derivative traffic, through homogeneous sections of traffic. THE CONCESSIONAIRE will present the methodologies, criteria or models used for the calculation and projections of normal, generated and diverted traffic.

1.3.2 STUDY OF GEOREFERENCING, TOPOGRAPHY AND GEOMETRIC DESIGN

For the geometric design, a topographic map at 1:500 scale prepared in accordance with the Technical Specifications for the production of topographic maps at 1:1000 scale of the IGN must be available, completing the details of plot borders, building boundaries and urban elements with a topographic survey.

The CONCESSIONAIRE must obtain a georeferenced cartography of the area of action at a scale of 1:500 with a width of no less than 100 m on each side of the axis, being 200 m in the First Order Road Interchanges, allowing us to know the surrounding land, buildings or buildings, urban elements and existing facilities.

Cartography can be obtained by means of a Topographic Survey, or by means of an analytical rendering of a photogrammetric flight.

Field data cannot have an age prior to the signing of the Concession Contract.

GEOREFERENCING

- a. For Georeferencing work, the guidelines of the "Geodetic Technical Standard Technical Specifications for Relative Geodesic-Static Positioning with Receivers of the Global Navigation Satellite System" of the IGN (National Geographic Institute) will be followed, such as planning, recognition, monumental, fieldwork, cabinet calculations, evaluation up to the memory of the works, and according to the details given below.
- b. Dual Frequency Differential GPS (L1/L2) equipment will be used, recommending the use of an elevation mask configuration of 13°, recording intervals of up to 5" and a PDOP of less than 6.
- c. For field measurements, the Static Method will be used.
- d. The Useful Observation Time for the Base Points of the project will be at least 30 minutes, which will increase according to the distance and location between the IGN point and the point to be known based on the criteria of the specialist engineer.
- e. The Useful Observation Time for Control Points within the project will be at least 10 minutes, taking into account the distance between the known BASE point and the project point to be known at the discretion of the specialist engineer, under his responsibility.

- f. The Value Cards will be prepared according to the IGN (Reference Format) model, adding the day and date of reading the data, signed by the Ing. Head of the Studio and the Specialist Engineer.
- g. A Georeferencing Report will be prepared and the following documents will be attached:
 - ✓ Key Plan for the Location of Project Control Points.
 - ✓ Descriptive Memory
 - ✓ Link Sketch and Project Control Point Summary Sheet.
 - ✓ Baseline Post-Process Reports and Network Settings with (03) at least three points.
 - ✓ Network Settings Report with (03) at least three points.
 - Sketch of the location of points within the value cards with their respective reference points (R1, R2) and progressive reference points.
 - Value cards for the IGN Link Points used and for the project's control points.
 - Technical Specifications and Calibration Certificates of the equipment used.
- h. <u>Reference System</u>

The WGS84 Ellipsoid (World Geodetic System 1984), and the UTM (Universal Transverse Mercator) Projection System and the EGM2008 Geoidal Model (Earth Gravitational Model 2008) will be used as Reference System for the calculation and correction of elevations (of georeferencing control points).

i. Link Points

Those that belong to the Official Geodetic System, made up of the Official Horizontal Geodesic Network (REGGEN), the Peruvian Geodetic Network for Continuous Monitoring (REGPMOC) and the Official Vertical Geodetic Network of IGN (NATIONAL GEOGRAPHIC INSTITUTE), which is based on the Geocentric Reference System for the Americas (SIRGAS), will be used as link points

Based on the International Terrestrial Reference Framework 2000 - International Terrestrial Reference Frame 2000 (ITRF2000) of the International Earth Rotation Service (IERS) for the 2000.4 era related to the ellipsoid of the Geodetic Reference System 1980 - Geodetic Reference System 1980 (GRS80). For the classification of the Order of the Geodesic Point, the table located in the "Geodesic Technical Standard" must be taken into account, in Chapter No. 03, Art. 3.1 "Classification of Geodetic Points" of the IGN, item 3.1.5 "Support Points", using at least Order "B" points.

Minimum number of Horizontal Geodesic Network control stations that must be linked:	0	то	В	LINK
0	8			RED
ТО	3	3		RED
В	3	3	3	RED
С	1	1	1	BASELINE
SUPPORT (PFCHA)	1	1	1	BASELINE

Separate from the seasons:	0	TO	В	С	SUPPORT
					(PFCHA)
Maximum (KM) between base	4000	1000	500		
stations within the project area					
Maximum (Km) between base	3500	500	250	100	100
stations and the point to be					
established					

In the same way, for leveling work, the connection points will correspond to **the IGN's Official Vertical Geodesic Network**.

- j. Project Control Points (Georeferenced)
 - Pairs of georeferenced control points will be placed every two (02 km), including at the beginning and end of the section, in order to establish the support polygons closed at a short distance and minimize angular, longitudinal and altimetric closing errors.
 - Pairs of control points (Baseline) will also be placed in additional or complementary survey areas (areas of water source, materials, deposits of excess material, bridges, tunnels, etc.), which are located outside the scope of the project, the CONCESSIONAIRE will coordinate with the Management Unit of Studies.
 - The control points of the project will be monumental with concrete landmarks measuring 0.40x0.40x0.60 m in accordance with the Geodesic Technical Standard: Technical Specifications for Static Geodetic Positioning relative to Global Navigation Satellite System Receivers, approved by Chief Natural Resolution No. 139-2015-GN/UCCN of 25.12.2015 and/or its amending and/or replacement regulations.
 - The points will be located in clear places to avoid satellite signal interference and protected for their safety. The pairs of points must be visible to each other, to allow the respective distance measurement.
 - The tolerance for relative or positional errors of georeferencing control points shall be 1/100000.
- k. Polygonal Support
 - Support polygons will be established whose vertices will be located between the pairs of control points of the project, forming closed polygons.
 - The vertices of the support polygonal will be monumental by concrete landmarks measuring 0.30x0.30x0.40m, with corrugated iron of half an inch (01/2"), with their respective reference points (R1, R2) being recorded.
 - The polygonal adjustments will be made, taking into account the use of the Scale Factors of the control points resulting from Georeferencing.
 - The support polygon adjustment tables will be attached to the report.
 - The angular closure tolerance of each support polygonal will be p" √n where: p= precision of the topographic equipment (p s 5"), n= number of vertices of the polygonal, and as far as the linear closure tolerance is concerned, this will be 1/10000.
 - With tolerable closing errors, angles and distances will be compensated and the final determination of the UTM coordinates of the vertices will be carried out.
 - Finally, the respective conversion of UTM coordinates of the WGS84 system to FLAT TOPOGRAPHIC coordinates will be carried out, which will be verified in the field and with which the required topographic surveys and redesigns will be carried out.
 - It must include the information sheet for the vertices of the basic support polygon and the auxiliary ones, indicating the UTM and topographic coordinates, and the photographic information of their location.
 - The CONCESSIONAIRE must submit a summary table of UTM and Topographic coordinates of the staking of the existing road axis, every 20.00m in tangent and every 10.00m in curves, location of existing bridges, existing works of art, BM's, GPS points.

TOPOGRAPHY

- a. <u>Leveling</u>
 - At least one (01) Vertical Control Point or Bench Mark (BM), belonging to the National Leveling Network of the National Geographic Institute (IGN), close to the project area, will be searched.

- BM's will be established for the project, which must be distributed every 500 m, on average, along the axis of the road, from the beginning (BM-0) to the end, inclusive. These BM's must be placed in duly protected places, out of the reach of future work in the area of the projected axis, and must be referenced to two immovable points.
- The BM's must be monumental using concrete landmarks measuring 0.30x0.30x0.40 m., with corrugated iron of half an inch (ø1/2"), with their respective reference points (R1, R2) being recorded.
- Leveling will be carried out using the Geometric Leveling method. The leveling circuit will be round trip (closed circuit) or of similar characteristics; whose round trip (or return) length will be approximately 500 m.
- Following the same geometric leveling method, with the dimension of the BM of the IGN, the "Starting Elevation" will be obtained. With the "Starting Elevation" you will obtain the dimension of BM-0. From the dimension of BM-0, the dimension of the nearest BM will be obtained.
- To obtain the dimensions of the other BM's, the same procedure will be followed; that is, starting and ending in two (02) consecutive BMs.
- The allowed Closing Tolerance or Closing Error (Ecp) must be in accordance with the following expression expressed in meters: 0.012x √k (or 0.012xk½), where the value of "k" is the development distance of the level expressed in kilometers.
- If an IGN BM belonging to the National Leveling Network is not found near the project area, the dimension of the initial BM will be obtained by the Georeferencing method from the dimension of another BM belonging to the National Leveling Network and in which it will be processed with the EGM2008 Geoidal Model. For the use of this method and the reasons for its use, the CONCESSIONAIRE must support it and submit it to the Management Studies Unit for approval.
- The following must be submitted:
- Report describing the work methodology, the number of circuits made. As well as the Allowed Closing Error (theoretical error) and the Error committed (field error). In addition, the list of topographic equipment used, human resources employed (brigades) and duration will be presented.
- The calculation tables for each Leveling Circuit must be presented, their compensated final dimensions, including theoretical errors and field errors.
- A summary table should be presented of the final dimensions of the BM's, of the Control Points (georeferenced), of the vertices of the Support Polygons, of the Control Points for Complementary Surveys and of some other important point in the project.
- The Calibration Certificates of the Topographic Equipment to be used, issued by well-known companies, must be presented and guarantee the good working condition of such equipment. Calibration certificates may not be older than six (06) months during the execution of the field work.

TOPOGRAPHIC MAP

- The area to be built will be defined, on plans at scales in rural areas of 1/500 taking into account the length of the project and the width sufficient to be able to carry out variants, the minimum acceptable being 100 meters on each side of the preliminary axis and in prior coordination with the requirements of the other specialties.
- The topographic map can be obtained through the analytical rendering of the frames obtained during a photogrammetric flight, following the Technical Specifications for the production of topographic maps at 1:1000 scale of the IGN.

- If carried out with topographic means, they will be carried out with a total radiation station starting from the vertices of the polygons, or through observations with Dual Frequency Differential GPS (L1/L2), recommending the use of an elevation mask configuration of 13°, recording intervals of up to 5" and a PDOP of less than 10; for this purpose, a network of points located at distances no greater than 10 meters will be established.
- Monumented BM's (Bench Mark) with concrete landmarks will be placed every 500 m (each BM must have a level dimension inscribed), in duly protected places, out of the reach of the works and referenced to immovable points, taking as a reference the dimensions of the nearest vertical control landmarks of the IGN that exist in the area.
- The dimensions of the BM's and the polygonal support dimensions will be differentially (geometrically) leveled and closed every 500 m with round trip leveling. The closing tolerance shall be 0.012 √k meters (k: level distance in kilometers).
- If BM's from the IGN National Leveling Network are not found relatively close to the project area, after coordination and agreement with the specialist of the Management Unit of Studies, the orthometric height resulting from a point, processed with the EGM2008 Geoidal Model, measured from an Official BM, using geodetic methods, may be used.

GRAPHICAL REPRESENTATION OF THE TERRAIN

- **Planimetric Details.** All the details and peculiarities of the land surface will be represented, such as: existing roads, populated centers, rivers, watercourses, canals, walls, fences, towers, poles, cables, buildings, houses, sidewalks, façade lines, mailbox covers, pipes, gas pipelines, oil pipelines, etc. (duly represented by appropriate symbolism and with the respective toponymy).
- Altimetric Details.- The terrain altimetry generated in the survey will be represented, which must show all the altimetric details, using the level curves, differentiating the master curves from the intermediate curves by the color and thickness of the line, the first of which must be duly delimited. The interval between the contour lines must be 2 meters, or smaller depending on the slope of the terrain to be represented. The points on the peaks and in the depressions must be indicated by their respective dimension.
- Topographic Plan.- The topographic plan will be drawn up at a scale of 1:2,000 with an indication of the coordinate axes, indicating the North and East values of each grid of the coordinate system, the distance between the coordinate axes must be a maximum of 200 meters.
- The drawing of the contour lines must be reviewed by the specialist engineer responsible for the topographic survey, not by the draftsman.

COMPLEMENTARY TOPOGRAPHIC SURVEYS

This includes the topographic surveys required for the design of bridges, road intersections, walls, works of art, affected areas, areas of material sources, deposits of excess material and quarries, area designated for toll design, etc.

In urban areas, the topography must include all existing details, including dimensions, sidewalks, façade lines, mailbox covers, poles, etc. and must be coordinated with the entities that manage electricity, telephone, communication networks, water and drainage services, etc. The floor plans of the villages crossed by the road will be presented at a 1:500 scale, with level curves every 0.50 meters, indicating the width of the road, berms, sidewalks, buildings (line of facades), intersections with streets or roads, bus stops, poles, mailbox covers, etc. The CONCESSIONAIRE must consider any urban expansion plans that may exist in the area, for which purpose it will coordinate with municipal authorities and/or local governments.

• In river channels, minor watercourses, and gullies, topographic surveys will be carried out to design drainage works and complementary art structures, materializing auxiliary polygons along the channel. The minimum lifting lengths will be:

Existing or Projected		Lifting length	
Structure	Upstream	Downstream	At the ends of La Ribera
Bridges	500m.	350m.	30m.
Sewers	200m.	100m.	30m.
Speed bumps	200m.	100m.	30m.

- Sections, profiles and levels will be taken in detail at the junctions with other roads, intersections of streets, canals, ditches, sewers, speed bumps and projected walls and others that affect the route, in order to define the most suitable solutions.
- A complete record of the occupancy of the right of way will be made, in order to identify buildings, crops, points of sale and others. In case of affecting privately owned buildings or land or in the event of the need for road widening, route correction or variants, complementary topographic surveys will be carried out.
- The extent of the areas and perimeters of the topographic survey, for quarries and deposits of excess material (DME's), must be represented on a topographic plan for respective review and verification by the Management Unit of Studies.
- An inventory will be made of all the works of art, sewers, speed bumps, retaining walls, etc., indicating their location, diameter or dimensions, and the depth dimensions at the entrance and exit.
- The CONCESSIONAIRE must demonstrate, with calibration certificates issued by recognized companies, the good condition of the topographic equipment to be used. Equipment calibration certificates may not be older than six (06) months for use in carrying out field work.

GEOMETRIC DESIGN

a. Regulations

The regulations in force at the date during the preparation of the Study will be used, including their amendments, if applicable. In preparing the Study, the section of the road approved by the Directorate of Roads and Railways and through Memorandum No. 674-2014-MTC/14 dated 20/03/2014, which attaches Report No. 010/2014-MTC/14.01.JAC dated 19/03/2014 and reaffirmed by Memorandum No. 1041-2018-MTC/14 dated 21/06/2018, must also be considered. See attached Table.

ROADWAY	DESIGN	PARAMETERS

VIA TYPE		FIRST-CLASS HIGHWAY				
LOCATION:		URBAN AREA OF THE CITY OF LIMA				
IMD		MORE THAN 6 000 VEH/DAY				
NO. OF ROADWAYS		2, ONE FOR EACH DIRECTION OF TRAFFIC				
NO. OF LANES		3, ON EACH ROADWAY				
LANE SECTION		3.60 M.				
BERM		EXTERIOR = 1.40, INTERIOR = 0.50 M.				
CLEARANCE		5.50 M., CLEAR OVER ROADWAY AND BERMS, IN TUNNELS AND UNDERPASSES (5.50 METERS + 1.0				
DESIGN SPEED		FOOT UNDER PEDESTRIAN BRIDGES).				

MEDIAN	80 KM/HR
MINIMUM RADIUS	2.0 M., INCLUDING THE INNER BERMS AND A NEW JERSEY TYPE GUARDRAIL
TRANSITION CURVE	280 M.
RADIUS WITHOUT TRANSITION CURVES	CLOTOID TYPE, A>= 150, MINIMUM LENGTH= 65 M.
LONGITUDINAL SLOPE	600 M.
KV	M AXIM 0_: 5%, EXCEPTIONAL: 5% IN THE TUNNEL AREA: 3% MAXIMUM
MINIMUM LCV	CONVEX: 4900. CONCAVE: 3200
UNIQUE SECTIONS:	80 m
	TWO DUAL TUNNELS. A SEPARATE TUNNEL FOR EACH ROADWAY, KEEPING THE THREE LANES OF 32.60 M EACH. IN TOTAL 4 TUNNELS

For the design, computer programs (software) for road design, which are accepted internationally or nationally, will be used.

- b. Design Features
 - The project requires achieving a homogeneous horizontal alignment, where tangents and curves follow each other harmoniously, avoiding as far as possible the use of minimum radius.
 - For the projection of typical sections in rugged areas, you should take into account the width necessary for the projection of safety barriers.
 - The points on the axis, spaced every 20 meters in tangents and 10 meters in curves, will be indicated, identified by the corresponding progressive.
 - Curves with spirals (clotoids) will be used to improve the geometric characteristics, visibility and development of the overhang and width.
 - The dimensions of all the points of the axis will be obtained, the longitudinal profile of the terrain being raised and the corresponding grade will be designed, avoiding as far as possible the use of maximum slopes.
 - The cross sections will be obtained at each point of the axis, in a width of not less than 30 meters on each side, and must allow the obtaining of the volumes of earthworks and the design of works of art.
 - In flat or undulating sectors (orographies of type 1 and 2), the design of the cross section shall extend to at least the safety zone, the magnitude of which will be determined by the operating speed at the 85th percentile and traffic intensity. As the height of the embankment increases, the CONCESSIONAIRE's specialist must decide, through an economic study, whether in some sections it is appropriate to extend the slopes up to the mentioned value, thus saving the safety barrier, or to maintain the slope 1.5 (H) :1 (V) with this protection element, in which case it must be equipped with the necessary platform overwidth (including the compaction overwidth) for the operation of the barrier.
 - In sectors where populated centers are crossed, you will mainly consider road safety criteria for designs, so as to separate the different categories of users, whether called vehicles, pedestrians and/or cyclists, in such a way that they interact as little as possible. For the best solution, you will need to coordinate with the Road Safety specialist.

- There must be close coordination with the other specialties, so that the lateral infrastructures that are projected and that make up the design section, called retaining and supporting walls, sewer heads, curbs, etc. do not represent fixed obstacles within the security zone, in which case, the use of safety barriers and/or the widths required on the platform for its operation must be envisaged.
- The radius of curvature is a design parameter of the geometric element of the project that depends on the design speed. See Highway Manual
 Geometric Design approved by Directional Resolution No. 03-2018-MTC/14 of January 30, 2018 in section 204 Design Speed.
- c. <u>Redesign corresponding to the Study</u>
 - The projected axis of the main road, highlighted every 20.00 meters, will be materialized, and greater attention should be paid once vulnerable areas and critical points have been identified.
 - In a complementary way, it should be referenced by means of progressives painted and placed on the edge of the road or in places visible outside traffic and on fixed points that persist during the execution of the study, such as rocks, walls, parapets, etc.
 - Reference should also be made at junctions with watercourses, riverbank erosion areas, landslides, etc.
 - The longitudinal profile of the axis of the projected track will be determined by the geometric leveling of the stakes replanted in the ground.
- d. Presentation of Plans
 - THE CONCESSIONAIRE must submit plans in flat topographic coordinates, to facilitate field replanning work.
 - Present the Key Plan and Location Plan, as well as the Floor Plans and Longitudinal Profile with their respective graphic scale.
 - The Plan and Longitudinal Profile plans must be presented in colors, on a 1/1000 scale and the plans of cross sections on a 1/200 scale, presenting the sections every 20.00m, and the sections of the sewers and projected works of art must also be attached.
 - Plan of Sectorized Typical Sections, as the case may be, attach: or the respective compaction overwidth (SAC).
 - Overlapping information will not be accepted.
 - The text size of the names, coordinate values, angles, distances, progressives, dimensions of the master contour line, etc., must be readable, at the presentation scale set for the revision.
 - You must indicate the names of populated centers, rivers, names of streets, rivers, bridges, streams, and also details that are necessary, etc., close to the axis of the road.
 - The plans will be presented in A-3 format. The plans must be presented in an editable physical and digital format.
 - The delimitation of the right of way will be included in the plan plans so as to project its demarcation and signage (Ministerial Resolution No. 404-2011-MTC/02).
 - The reading of the floor plans and longitudinal profile is as follows; from left to right, from top to bottom, the progressive alignment is ascending, from lower mileage to higher mileage. The reading of the crosssectional plans is from left to right, from bottom to top, and the mileage is ascending.

GEOREFERENCING, TOPOGRAPHY, LAYOUT AND ROAD DESIGN OF TUNNELS

Georeferencing and Topography

General topographic survey of the area corresponding to the Projected Tunnel and accesses, documented in 1:500 scale plans with level curves every 0.50 m.

All information will be linked to the National Geocentric Geodesic Network (REGGEN) and to the UTM (Universal Transverse Mercator) Coordinate System, using the Datum WGS84 as a Reference System.

The areas subject to erosive processes of the road and the stability of current slopes, undermining of the platform, faults and damage to surface drains, detection of gullies and other road damage, which may be found in the topographic works determined by the CONCESSIONAIRE and which will serve in his opportunity for the specialist to design the appropriate solution, in all the integrity of the phenomenon, will be identified.

Topographic information must be prepared for the application of cadastral techniques, in order to obtain a complete record of the occupation of the right of way, individualize buildings, crops and others. In the event that the design affects public or privately owned buildings or property or in the event of the need for road widening, layout correction or variants, complementary topographic surveys will be carried out in situ to allow the preparation of technical identification documents for the Entity to evaluate the boundaries of properties and total areas to be expropriated.

<u>Trace and Road Design</u>

The CONCESSIONAIRE must design the exact location of the tunnel, in the plan, as well as establish the corresponding levels for all its components. This will establish the harmony of the whole depending on the location of the structure and both accesses. Along with the layout, all aspects related to the construction, operation, and maintenance of the tunnel must be considered. The cross-section should include the section designated for pedestrian and vehicular traffic, with a minimum of three bidirectional lanes each 3.60 meters wide, outer and inner berms in accordance with the Highway Manual. DG-2018 Geometric Design and the Highway Manual Tunnels, Walls and Complementary Works, sidewalks of at least 0.75 meters. The minimum gauge of 5.50 m must be respected over the entire width of the roadway.

Specifically, it is indicated that the dimensions of the outer and inner berm must maintain at least the typical design section of the road or highway in which the tunnel is located. See Highway Manual - Geometric Design approved by Master Resolution 03-2018-MTC/14 of January 30, 2018, in subsection 304.12.02 - Tunnels.

The vertical and horizontal alignments must be compatible with the design speed.

- Redesign of Accesses and Axis in the Tunnel Bell Area
- The axis should be redesigned along the road (accesses), and greater attention should be paid once vulnerable areas and critical points have been identified, using total station, using flat topographic distances and not geodetic distances.
- The projected axis and PL's defined in the Geometric Design will be materialized in the access area, staking every 20 meters
- The projected axis of the Tunnel will be materialized in the enclosing area, staking every 50.00m in tangent sections and every 25.00m for curved sections or if there are sudden variations in the relief of the terrain, including the respective Entry and Exit Points.
- Using the monumental landmarks corresponding to the basic polygonal and the auxiliary ones, you must rethink the staking of the axis and PL's, this will

serve to enable the exact position of the works of art and drainage and allow the location required by other engineering specialties.

- In a complementary way, it should be referenced by means of progressives painted and placed on the edge of the road or in places visible outside traffic and on fixed points that persist during the execution of the study, such as rocks, walls, parapets, etc.
- The plans shall have the same presentation requirements as those established in the Geometric Design numeral of the roadway.

RIGHT-OF-WAY DELINEATION:

The CONCESSIONAIRE must submit a geo-referenced plan of the Highway Right on an H scale: 1/500, where the UTM-WGS84 coordinate boxes must be attached, taking into account the following aspects:

- a. If there is a road gauge declared by Ministerial Resolution, the CONCESSIONAIRE will verify that the Construction Area of the works defined in this Final Study are within the declared Right of Way.
- b. If the road width is not delimited by Ministerial Resolution, the CONCESSIONAIRE must establish the vertices of the polygonal line that defines it in accordance with the provisions of the National Road Infrastructure Management Regulations and the Highway Manual: DG-2018 Geometric Design.
- c. The segments of the polygonal line that delimit the Right of Way shall have a minimum length of ten (10) meters.
- d. It must be delimited with a line between cuts where the area of explanations (Foot and edge of Slope), in order to verify the application of the second criterion of the previous item.
- e. The floor plans to be drawn up must be geo-referenced in the WGS84 Reference System and the coordinates of the perimeter points must be presented in the UTM (Universal Transverse Mercator) Projection System.
- f. A descriptive report must be attached that includes the coordinate charts of the perimeter of the right of way, which must include a digital format in the dwg, xls, pdf extensions, for field redesign work.

1.3.3. TRAFFIC SIGNAGE AND ROAD SAFETY STUDY

1.3.3.1 ROAD SAFETY

The following aspects should be included:

- a. Collection and analysis of accident data from the last 5 years:
- Data collection in public bodies with local residences, police, hospitals and others;
- Analysis of road data, types of accidents, factors and accident concentration points (PCA).
- b. Recording and analysis of the current physical characteristics of the road, to identify factors that may affect road safety:
- Inexistence or ineffectiveness of public lighting in urban areas
- Inadequate horizontal and vertical alignment; excessive tangent, reduced stop visibility, etc.
- Irregular or inappropriate accesses and intersections;
- Narrowing of the path or deformations of the surface;
- Non-existent or inadequate berms;
- River crossing points, springs, and irrigation channels are vulnerable to accidents involving hazardous cargo;
- Animal crossing points, pedestrian and cyclist routes, bus stops, inadequate road safety devices.
- Insufficient or inadequate signage.

- Lack and need for lateral defenses (e.g. guards and/or walls).
- c. Analysis of the physical characteristics of the planned road, to identify factors that may affect road safety: Forced quantities of horizontal and vertical alignment; narrowing of the road; speed limitations due to the presence of curves and/or visibility restrictions; crossing points and• intersections; danger zones due to external processes; fixed obstacles; safety zones, etc.
- d. Integrated diagnosis, considering the results of the traffic and demarcation study in the plant of the PCA.
- e. Definition of measures to reduce and prevent traffic accidents
- In sectors where populated centers are crossed, you will consider for designs in a way that allows you to separate the different categories of users, be called vehicles, pedestrians and/or cyclists, and that they interact as little as possible. The design must be coordinated with the Road Design specialist.
- The protection measures that will be studied for vulnerable users will be: traffic calming, central divider, refuge islands, pedestrian crossings, sidewalks, bus stops, etc. The details of its location, features and design will be presented.
- In principle, the implementation of highway type speed reducers is not allowed for this type of road, however, if the situation warrants their use, the Road Safety and Signalling specialist must technically justify it, applying Directive No. 01-2011-MTC/14 Highlight Type Speed Reducers for the National Highway System (SINAC).
- In tunnel sections, transverse connections, emergency vehicle parking areas (squares), pedestrian assistance modules or shelters (niches), and others must be taken into account in accordance with the Manual on Tunnels, Walls and Complementary Works.
- f. Safety Barrier-Type Containment Systems. Based on the provisions of Directive No. 007-2008-MTC/02 Safety Barrier-Type Vehicle Restraint System, the CONCESSIONAIRE must plan the use of vehicle restraint systems that it deems most appropriate for critical areas that represent road safety risks, such as; access to bridges, overpasses, dangerous curves, central separators, embankment slopes, and must be designed to function as a containment element, designing the appropriate length for the system to develop properly complete, consistent with their function.
- g. The specified dimensions and characteristics of the safety devices or planned measures must be consistent in the different documents that make up the Technical File: Descriptive Report, Plans, Technical Specifications, Measurements, etc.
- h. When there is a need to use a combination of rigid concrete barriers with metal barriers, the design of a splice between these types of barriers should be considered.
- i. The sectors that represent road risks or insecurity will be designed with appropriate signage, with additional design, as the case may be, safety elements such as sardines, delineator posts, road safety barriers, guardrails and/or walls and shock absorbers.
- j. If necessary, the CONCESSIONAIRE will design ascent ramps (third lane), brake ramps, over widths, visibility benches, etc.
- k. Emphasis will be placed on measures for the protection of pedestrians and non-motorized transport in urban and suburban areas, designing, if necessary, pedestrian shelter islands, measures to calm traffic, or others.

I. THE CONCESSIONAIRE must establish the necessary safety rules and measures to reduce the risks of traffic accidents during construction.

1.3.3.2 SIGNAGE

- For signage you must take into account the following aspects:
- a. The CONCESSIONAIRE must carry out the study and design of both vertical and horizontal signage of the road, according to its needs and in accordance with the Manual of Devices for the Control of Motor Vehicle Traffic for Streets and Highways in force and its amendments, taking into account the results of road safety studies
- b. The signage design should be compatible with the geometric design of the road, so that the signs contribute to road safety and have good visibility, in accordance with the speed of motorized traffic
- c. The specified dimensions and characteristics must be consistent in the different documents that make up the Technical File: Descriptive Report, Plans, Technical Specifications, Measurements, etc.
- d. In accordance with the results of road safety studies in high-risk areas of the highway or where accident records exist, special attention should be given to the signage design, proposing larger signs with repetitive placement at preceding intervals for speed bump-type reducers, safety barriers or guardrails, or the designed device.

1.3.3.3. Horizontal Signage

Pavement Marks

- THE CONCESSIONAIRE will determine the signs and markings on the pavement necessary to enable road users, both vehicles and pedestrians (a town close to the road), to travel safely.
- You must adequately specify the paint to be used for the marks on the pavement, which must be retro-reflective through the use of glass microspheres applied to the paint.
- The dosage of the paint and the microspheres must be in accordance with the type of floor. The greater the roughness or greater the opening of the asphalt, the greater the dosage must be specified in order to achieve adequate coverage and retroreflectivity. The CONCESSIONAIRE must specify the values of retroreflectivity for each color (white on the edges and yellow on the axis of the road)
- Double application of pavement markings should be included in the measurements and unit prices: a first one of temporary nature on the asphalted sections that are delivered, and the second application once the asphalt work is completed for the final acceptance.

Reflective road studs or cat's eyes

- THE CONCESSIONAIRE must include the use of pavement markers (spots or cat's eyes), particularly in areas of fog, curves, slopes and any other sector that requires better visibility at night. You should avoid the simultaneous or repetitive use of reflective elements (in delineator posts, guard reflectors and studs) to avoid confusion for the road user.
- You should also avoid the simultaneous use of studs on the axle and on the edge of the road, particularly on sharp curves, where it can cause confusion at night.

1.3.3.4. Vertical Signage

- THE CONCESSIONAIRE must plan the placement of vertical signs to prevent, require or inform users
- The dimensions of the signs must be in accordance with the speed of movement of the vehicles, and the "visual pollution" that may exist on the road. In urban areas, where there are a greater number of entertaining elements (poles, advertising, • plants, etc.), larger signs must be specified.
- You must project the dimensions and materials of the panels for each type of sign as well as the corresponding structural support and foundation elements.
- Shall present the location of each type of signal with its respective design, indicating their dimensions and content; as well as summary tables of the dimensions and measurements of the same.
- The height of the concrete die for the support must not protrude more than 0.10 meters above the ground, unless it is outside the safety zone.
- The CONCESSIONAIRE must specify road signs in order to inform the user of the road itself, and familiarize them with the MTC nomenclature. These signs can be placed both on individual poles and on information signs for location and destination. The same criteria must be adopted for departmental routes or neighborhood routes that originate from the national route.
- THE CONCESSIONAIRE must include environmental protection signs. These signs can be placed both on individual poles and on information signs for location and destination. The same criteria must be adopted for departmental routes or neighborhood routes that originate from the national route.

1.3.3.4. Signage and Traffic Control Procedures during the execution of the work.

- You must submit the signage plans and traffic control procedures during the execution of the work, which must be based on the work schedule, including the Contractor's responsibilities and the communication requirements in the affected locations, in order to alert road users to interruptions, traffic diversions and possible impacts on travel times.
- With regard to signage during the execution of the work, this must be in accordance with Chapter 05 of the current Manual of Automotive Traffic Control Devices for Streets and Highways.
- The CONCESSIONAIRE must submit a detailed plan of deviations in accordance with traffic control procedures during the execution of the work.

1.3.3.4. Road Safety Audits

The CONCESSIONAIRE will implement in the EDI the recommendations that the GRANTOR adopts as a result of the Road Safety audits to be carried out according to the Road Safety Manual.

The CONCESSIONAIRE will be responsible for delivering road safety audits to the GRANTOR. The road safety audit in preliminary design must be submitted to the GRANTOR within 60 days after the signing of the Contract. The GRANTOR must communicate to the CONCESSIONAIRE the recommendations to be adopted as a result of the road safety audit in preliminary design within 90 days after the signing of the Contract. The road safety audit in a detailed design will be performed when the detailed design is at 80%. The GRANTOR must communicate to the CONCESSIONAIRE the road safety audit in a detailed design will be performed when the detailed design is at 80%. The GRANTOR must communicate to the CONCESSIONAIRE the recommendations to be adopted as a result of the road safety audit in a detailed design within 30 days after receiving the said audit.

1.3.4. STUDY OF GEOLOGY AND GEOTECHNICS 1.3.4.1. Geological-Geotechnical Highway Study:

THE CONCESSIONAIRE will begin the study by collecting and analyzing information from existing geological and geotechnical studies, from the work area. It will prepare the report and regional geological plan of the road.

Seismic hazard studies for roads, bridges and tunnels will be developed, using appropriate methodologies, based on information from historical and instrumental earthquakes, which define maximum and design accelerations, speeds and/or coefficients. The definition of the design earthquake will correspond to 7% of excess in 75 years, both for surface and underground. For the Seismic Hazard Study, the CONCESSIONAIRE must acquire the records of historic earthquakes in the area to be evaluated, which must be taken into account the seismic history up to the date of the start of the study. This information must be acquired at the Geophysical Institute of Peru (IGP). The result of these studies will be the delivery of Uniform Acceleration Hazard spectra for roads and bridges (according to AASHTO LRFD standards and the criteria of the AASHTO Guide Specifications for LFRD Seismic Bridge Design) and velocity spectra for underground structures (according to the criteria of the Technical Manual of Design and Construction of Road Tunnels-FHWA (2009). The values of PGA and/or PGV must be provided, as appropriate for each type of structure. In addition, the Study must include the Probability Curves of

Acceleration and/or Velocity Excess, with damping calculations, fundamental soil period and seismic classification of differentiated soils, as appropriate to the projected structural requirement. For the liquefaction analysis, apply the design earthquake disaggregation procedure.

1.3.4.2. Geology and Geotechnics:

Geological Study at the Regional Level. - It will commence after the placement of Bench Marks (BM) during the topography works, where the coordinates of the beginning and end of the road will be identified. For this purpose, the geology and geotechnical specialist must make use of definitive topographic information (all structures and recommendations will be referred to final project mileposts); especially in the case of locating test pit excavations, seismic lines, and boreholes at supports. The location of the points where the diamond drills will be carried out will be carried out by topographic redesign after the axis has been defined, according to the progress of the road plan design that is in accordance with the specialty of Topography and tracing for the report to be submitted.

First of all, geological mapping must be carried out at the **Regional** Geology level (1/25,000 scale), for which the Geological Quadrangles published by INGEMMET and the existing topographic information for that same scale (IGN, MINISTRY OF AGRICULTURE, SAN) must be used as base information. For no reason will transcripts of geological information be accepted if the author is not duly referenced.

The Regional Geological Information obtained will be reflected in a respective regional geological map and must describe what is geologically evidenced in the field at the road level. The information described must be consistent with what will be considered in the detailed geological information in Local Geology. Likewise, regional geological information must indicate the geomorphological, stratigraphic, lithographic and structural geology interpretation at the location of the section. These geological interpretations must be reflected in maps or plans at an appropriate scale (1/25,000), on which major villages and streams, existing bridges, toponymy and other geological elements useful to the Study will be identified.

For no reason will transcribed information from INGEMMET quadrangles be accepted because the information is for other purposes, the information provided by this Entity will serve as a basis for the typing of lithostratigraphic units, geomorphological and structural units, and will also serve as a bibliographic reference, also considering the legends used in these quadrangles and approved by the entity.

- 1.3.4.3. **Geological Study at the Local Geology Level.-** Geological Mapping must be carried out at the local geology level (1/2,000 scale), for which purpose an appropriate methodology must be established to carry out the geological survey.
 - ✓ It will begin in accordance with the progress of road plan design in close coordination with the specialty of tracing and road design.
 - ✓ The local geological report and mapping of the road will be developed.
 - ✓ The classification of Materials will be developed along the entire line, every 50 m at most, depending on whether homogeneous sections are found, qualifying and quantifying as a percentage the amount of loose material, loose rock and fixed rock, whose information must support the inclination of the slope sections of the cross sections,
 - ✓ The local geological information obtained must be reflected in the respective map and must describe the geological evidence in the field at the road level.
 - ✓ The information described will serve as a basis and must be in accordance with what will be considered in the geologicalgeotechnical information; the maps or plans prepared will be presented at an appropriate scale (1:2000), on which, in addition to the main villages and streams, unstable sectors will be identified that show mass movements characterized by subsidence, settlement, landslides, collapses, rock cutting sectors and other elements useful for the study.
 - ✓ Identification and analysis of external geodynamic processes that pose a risk to the drivability of the road, defining the magnitude, geometry, evaluating possible causes, consequences, and identifying destabilizing agents to be considered in the planning of mitigation measures or definitive solution works, which must be part of the comprehensive study.

1.3.4.4. Road Geology and Geotechnics:

It will begin on the basis of what is established in the geological study at the local geology level.

- ✓ The report must be prepared and Geotechnical Mapping carried out at the Local Geotechnical level (1/2,000 scale), for which purpose an appropriate methodology must be established to carry out the geotechnical geological survey.
- ✓ All sectors of influence on the road that are affected by external geodynamic processes, unstable sectors, wetlands, etc., must be identified and inventoried.

- ✓ Complement the sectors where external geodynamic processes had been identified and analyzed in the previously defined geological evaluation phase so that geotechnical evaluations can be carried out in situ to allow us to evaluate the problem.
- ✓ The evaluation and solution of external geodynamics processes must be multidisciplinary, so it must have the opinion and approval of the other specialists of the CONCESSIONAIRE. In the case of highly expensive solutions, it will also consider other alternatives with lower investment, but this does not exempt the design of the former.
- ✓ In sectors affected by riverbank erosion processes, if appropriate; the CONCESSIONAIRE will evaluate these problems and establish the corresponding treatment in close coordination with specialists in hydraulics and structures.
- ✓ The local geotechnical geological information will be reflected in the respective map and must describe the geologicalgeotechnical evidence in the field at the road level, the information described must be consistent with that which will be considered in the geological information in detail in the local geology, the maps or plans drawn up will be at an appropriate scale (1:2000), on which will be identified in addition to the main towns and streams, unstable sectors that show evidence of mass movements characterized by subsidence, settlements, landslides, collapses and other elements useful for the study.
- ✓ Slope stability analyses will be developed for both soils using the limit equilibrium method, for which purpose standard and special tests (classification, Atterberg limits, moisture content, direct cut, triaxial, consolidation, etc.) must be carried out as a means of obtaining the geotechnical parameters of the materials present. The analysis must be integrated considering static analysis without project, static with project, pseudo-static with project and solutions. If the susceptibility or existence of collapsible and/or expansive soils is declared, specific characterization tests must be carried out.
- ✓ The use of back analysis or retro analysis can be used to complete and/or adjust the geotechnical parameters of the different formations deduced from laboratory tests.
- ✓ If it is advisable, the CONCESSIONAIRE will carry out in situ static or dynamic penetration tests, in order to obtain resistant and deformation parameters of materials in which it is not possible to obtain unchanged samples for the preparation of laboratory tests. In the case of SPT, on coarse-grained granular soil (gravels), the split bar can be replaced by a conical probe equivalent to that of the bar and thus reference the levels in the survey records, and consider the corrections that correspond to this type of device (not Peck).
- ✓ In the analysis of the stability of slopes in soils, existing hydrogeological conditions will be taken into account: the presence of groundwater or very shallow groundwater levels. In these cases, a sensitivity analysis will be carried out of the stability of the slopes in the face of seasonal variations in the water table (instrumented measurements or direct observation wells), which, together with the geotechnical parameters defined for the constituent geotechnical formations, will allow the definitive alternative solution to be designed.

- ✓ In sectors where structures or works of art (walls) are planned, an exploration program must be programmed along the linear structure, a number of special soil mechanical tests carried out by exploration in a representative number to define the stratigraphy, calculation and foundation parameters, supported. If it is considered that the soil where the structure will be built is made up of unstable materials such as expansive clays, special tests (consolidation, collapse, expansion, etc. must be carried out in these sectors).
- ✓ In the case of structures located on sandy soils, specific tests and tests must be carried out to carry out an analysis of the potential risk of liquefaction of these formations, and their effect on the planned works (Apply the Disaggregation Procedure to determine the design earthquake).
- ✓ If sectors of outcrop of the rock mass are found along the route, they will be carried out at the same geomechanical stations to determine the characteristics of the discontinuity systems of the rock mass: stratification, faults, contacts, diaclases, etc., through kinematic analysis.
- ✓ In cases where it is considered that cuts will be made in slopes formed by rock masses, in addition to geomechanical stations, laboratory tests on rock mechanics must be carried out to complete the geomechanical characterization of these materials, which allows the stability analysis of these cuts to be carried out using methods and software that correspond to this type of material (not software for soils or equivalents) and, if necessary, the required stabilization measures will be designed.
- ✓ When it is considered that excavation work on slopes made of rocks must be carried out using the drilling and blasting method, the load factor with which the excavation must be carried out must be calculated, which must be obtained through the elastic properties of the rocks determined with the indirect exploration carried out in the evaluated sector or by carrying out the test of the elastic properties of the rock mass, and will also present the appropriate methodologies, stating the recommendations and theoretical-technical instructions on blasting controlled and/or pre-cut, the same one that does not affect the instability of the rock mass.
- ✓ In the event that the sectors are made up of material typified as soil, geotechnical zoning and sampling must necessarily be carried out to carry out laboratory tests on soil mechanics to characterize and evaluate their degree of stability, carrying out slope stability analyses, using geotechnical geological sections, establishing possible rupture surfaces.
- ✓ When excavations consider making cuts greater than 7 meters high in soil, slope stability analyses will be carried out using the limit equilibrium method, and the physical and mechanical properties of the soil must be obtained through laboratory tests that provide the geotechnical parameters necessary for stability analysis, for which purpose standard and special tests (classification, Atterberg limits, moisture content, direct cut, triaxial, etc.) must be carried out as means of obtaining of the geotechnical parameters of the materials present, the analysis must be integrated considering the static analysis without a project, static with a project, pseudo-static with a project and solutions, considering the information obtained from the analysis of the seismic hazard.

- ✓ Geotechnical classifications must be carried out applicable to slopes in soils.
- ✓ If necessary, the calculation of the shear strength of the various types of soils found will be carried out, using special tests and own methodologies.
- \checkmark The ultimate bearing capacity and settlement of the foundation soils for walls and other geotechnical works shall be calculated, adopting calculation methods most suitable to the terrain characteristics, which will have been defined based on the corresponding field and laboratory investigations (verified stratigraphy at least 28 feet below the foundation level) Likewise, stability calculations of the structures (overturning, sliding, contact pressure, global stability of the projected work under static, pseudo-static conditions, etc.) shall be performed; verification of the ultimate load capacity in the limit state of strength, serviceability, and extreme event, as appropriate, shall be conceptually determined according to coordination between the specialists the of the CONCESSIONAIRE and the entity in coordination with the structural and civil engineering specialty.
- ✓ Geotechnical investigations, both direct and indirect, will be carried out in accordance with the geotechnical research program presented by the CONCESSIONAIRE, which must first have the approval of the entity's geology and geotechnical specialist. Excavations of limestone and diamond perforations with continuous recovery of witnesses must be carried out in sectors where it is considered that there is instability of the slopes, instability of the road platform where the axis will be located, in each support where bridges, overpasses and/or projected road interchanges will be built, the location may be redefined during the carrying out of the study according to the priorities and main objectives of the study.
- ✓ With direct investigation works such as drilling or open test pit excavations, the water table level will also be identified.
- ✓ Inside diamond perforations, In Situ SPT tests must be carried out. Unaltered samples should be taken with a sample bag suitable for the type of soil being tested. If gravel is found, they can replace the split bar with a conical probe of a diameter equivalent to that of the bar, as well as indicate the standard and prove that the corrections correspond to this type of device (not like Peck). If the Peck Cone test is performed, it must be independent of the SPT.
- ✓ "In situ" tests and sampling will be carried out with the indicated frequency, and each time a lithological change is detected, for which it will be necessary that the execution of the diamond surveys be supervised and testified by a fully dedicated geologist or geologist during the execution of the drilling campaign. Samples for direct shear tests and other special geotechnical characterization tests will be obtained between the level of local undermining, level of liquefaction or collapse and the end of drilling. If it is a deep foundation, at least two must be below the support level of the tip of the piles or pillars (3.0B).

- ✓ If the presence of a water table is detected in diamond drills, Lefranc permeability tests should be performed, in the case of heavily altered and/or fractured soils or rock masses, and Lugeon tests, if drilling is carried out in healthy rock masses that are slightly or moderately fractured.
- ✓ All textual information must be duly supported by test certificates issued by nationally renowned laboratories and the information must also be complemented by graphics, such as photographs, maps, geological, geotechnical and geodynamic plans at scales in accordance with current regulations.
- ✓ Any other consideration not contemplated in these terms of reference, the project will comply with current Peruvian standards and AASHTO LRFD. If there is any contradiction, the criteria established in the AASHTO LRFD will prevail.
- ✓ The foundation dimension must be defined in m.s.n.m. and the minimum information necessary to carry out the design of the works required for slope stability, treatment of unstable sectors and any other external geodynamic process (such as supporting walls, retaining walls, etc.). The foundation of structures on slopes (whether soils and/or rocks) will deserve special attention and stability analyses will be implemented using specific methods, and limit balance may be used.
- ✓ The memory of calculations of the load-bearing capacity of soils and rocks, as well as of the stability calculations of the recommended structure (active thrust, slip verification, rollover verification, etc.) will be presented.
- ✓ The mitigation works necessary for the stabilization of rocky slopes (bolts, anchors, shotcrete, meshes, etc.) must also be indicated by which methodology the rock mechanics analysis was carried out (planar faults, wedge faults, rollovers, etc.) and the design must be supported by the presentation of the respective spreadsheets; in the same way, work will be carried out to stabilize slopes in soils (bolts, anchors, shotcrete, meshes, etc.).
- ✓ The CONCESSIONAIRE specialist should review the final design of the DME and quarries, recommending the cutting and filling slopes, which must be stable.
- ✓ The CONCESSIONAIRE must carry out geotechnical zoning to determine sectors where it could obtain samples representative of sectors with similar characteristics from which it can obtain data to carry out the respective calculations for the design of engineering works.
- 1.3.4.5. <u>Geotechnical design for the road</u>. It will begin on the basis of what is established both in local geological study and in the geotechnical study of the road.
 - The designs of the cutting and filling slopes in soils will be carried out as a result of slope stability analyses using the limit balance method, unavoidably based on standard and special laboratory tests.

- ✓ The required works will be designed for slope stability, treatment of critical points and external geodynamic processes; supporting walls, retaining walls, etc.; defining the foundation dimension in meters above sea level.
- ✓ Global stability analysis will be carried out with the projected work, both under static and pseudo-static conditions, considering the current situation and with intervention.
- ✓ It will present the memory of calculations of the load-bearing capacity of the floors and of the stability calculations of the structure (rollover, slip, contact pressure, overall stability of the projected work under static, pseudo-static conditions, etc.), graphs and considering the current situation and with intervention.
- ✓ The foundation on slopes will require special analysis of their stability using specific methods, and limit equilibrium may be used.
- ✓ The works necessary to stabilize rocky slopes (bolts, anchors, shotcrete, etc.) will be implemented after analyzing planar faults, wedge faults, rollovers, etc. and the design will be based on specific methodologies.
- ✓ If this is the case, the CONCESSIONAIRE will submit recommendations and theoretical-technical instructions on controlled blasting and/or pre-cutting, which does not affect the stability of the rock mass.

1.3.4.6. Geological-Geotechnical Study for the purpose of building Bridges, Overpasses, Road Interchanges:

It will begin in accordance with the progress of road plan design and complementary topographic surveys in the specialty of tracing and topography.

- ✓ The geological-geotechnical evaluation of existing bridges and passage structures will be carried out, considering the type of material where it has been placed, width of the bridge, geographical location within the geomorphological aspect, anthropic aspects, presence of any cleft of abutments, undermining processes, degree of stability, sufficiency and foundation conditions of the structures, in order to recommend their replacement, reinforcement and/or reinforcement, as the case may be; the local geological information of the area where the bridge is located will be captured on a 1/500 scale plane.
- ✓ If a new structure is proposed, the execution of geological and geotechnical studies must be carried out on the basis of topographic surveys covering, in the case of bridges over river channels, 350m upstream and 300m, downstream of the proposed axis. In addition, the topographic survey will cover a width of 75 m on each side of the riverbed axis, thus covering an area of 750m long by 150m wide. On this topographic basis, the CONCESSIONAIRE will capture its detailed investigation of the geological and geotechnical aspects of the area where the structure is located and its influence on the location of the bridge, in accordance with the definitive outline, in such a way that no aspect relating to the stability of the bridge's infrastructure is left out in the design.

- ✓ According to a program of Geological-Geotechnical investigations, the exploratory stage will be carried out through test pits, trenches, refraction seismic surveys, and MASW (Multichannel Analysis of Surface Waves); diamond drilling in the area of the bridge to be replaced and/or new bridge, interchanges, etc.
- ✓ Indirect prospecting work will correspond to seismic refraction and MASW tests, as already indicated. The location of the seismic lines in the field will be distributed in places where the study warrants it, considering mainly critical sectors, sectors with bofedales, bridges and any other sector where it is necessary to evaluate and consider the stratigraphic continuity of soil or rock up to 30 meters deep, and if blasting has been considered such as excavation of fixed rock and/or quarries, seismic research should be considered to be carried out in these sectors in order to establish the elastic properties of rocks, especially determining the particle velocity (Area where the tunnels will be located).

1.3.4.7. Geophysical Investigations

- ✓ The methodology for carrying out geophysical research work using seismic refraction and MASW (with 4.5 Hz).
- ✓ The procedure should consider that with the information obtained from the seismic refraction tests carried out in the field, the longitudinal velocities (vp) will be determined, which will make it possible to estimate the seismic profiles of the subsurface, and the shear wave velocities (vs) will be determined, by means of which the respective onedimensional and two-dimensional profiles of the subsurface will be generated (probable stratigraphy).
- ✓ In relation to MASW tests: achieve the results of the f-k analysis (dispersion curve) for the different shocks tested; how the final dispersion curve was defined, test conditions (geophone spacing, distance to the source, geophone frequency, inversion curve graphs, Rayleigh speeds, software used, etc. It should be noted that in the case of verifying values of Vs lower than 200m/s; the MASW test must be compared with another test using geophones with a frequency lower than 2.5 Hz
- ✓ For the present study, we considered carrying out a refractive and MASW seismic profile, over the entire length of landings over 10 m high, and at least 2 profiles, on each structure and single bridge.
- \checkmark Diamond drilling will be carried out with continuous witness recovery, as follows: when the length of the structure (light) is in the range of 6 to 10 m long, diamond drilling will be carried out with continuous recovery of witnesses in either of the two abutments (the CONCESSIONAIRE will determine which one of them according to the type of material to be investigated). Resistance and/or deformation samples should be taken at a depth of not less than 28 below the probable foundation level, 8 being the width of the projected shoe, or until a minimum of 5.0 m penetrates a substrate of sufficient strength to withstand the loads of the foundation being projected. Under no circumstances will the length of the surveys be less than 15 m supplemented with geophysical information, unless a homogeneous rock is found, in which case the length may be shorter.

- ✓ For light poles taller than 10m, diamond drilling with continuous core recovery shall be conducted, with one drilling operation per support of the structure, the length of which will be established applying the same criteria indicated for the previous case. For intermediate supports, test pits and/or DPSH penetration tests will be performed, complemented with geophysical information (Refraction and MASW).
- ✓ To complete the geotechnical data of the terrain along the structure, sandwiching between the diamond drills, depending on the characteristics of the terrain, peaks or trenches can be carried out. If the diamond drill is found in ground-rock contact, the length of the drill can be reduced to 10 meters, of which at least 5 meters must be in rock with a degree of weathering lower than W3 (according to the weathering scale offered by the ISMR). The geotechnical investigations shall be complemented by excavating a geotechnical test pit at each bridge support location, with a depth of up to 3 meters within the influence area of each support point.
- ✓ With direct investigation works such as drilling or open test pit excavations, the water table level will also be identified.
- ✓ Inside diamond perforations, In Situ SPT tests must be carried out, according to standard intervals. If gravel is found, they can replace the split bar with a conical probe of a diameter equivalent to that of the bar, as well as indicate the standard and prove that the corrections correspond to this type of device (not like Peck). If the Peck Cone test is performed, it must be independent of the SPT. Unaltered samples should be taken using samples appropriate to the type of soil found in the probe.
- ✓ The outer diameter of the drill will be 86 mm, or NQ in the case of using wire-line batteries, and a recovery of no less than 95% in cohesive soils, 60% in gravel, and 90% in rock is accepted, otherwise it will not be valid. Fractured rock will be drilled with a double or triple battery to ensure the indicated recovery rate. In granular soils, the length of the maneuvers will be reduced and the addition of water will be limited to ensure the required recovery.
- ✓ These perforations will serve to:
- ✓ determine detail stratigraphy
- ✓ find the N values of the SPT in soils with granular composition
- ✓ allow the taking of unchanged samples in soils with a cohesive composition, and of paraffined samples of the rock mass.
- ✓ The sampling frequency shall be adjusted to provide at least one sample of each constitutive lithological level of the soil, or at least one sample every 2-3 m of drilling, paying special attention to obtaining samples at the depth where the structure is to be cemented within a range of 28. The samples will be used for carrying out special laboratory tests, consisting of:
- ✓ Granulometry and Atterberg limits
- ✓ one-dimensional resistance not confined to clays
- ✓ direct cut on sandy soils or reshaped in gravels.
- ✓ triaxial CU (consolidated and undrained) for the undrained strength of clays, one-dimensional consolidation in clays
- $\checkmark\,$ free and/or controlled expansion in clays
- ✓ effective unit weight of each stratum

- ✓ The value of the ultimate load will be established, but the value of the admissible load capacity of foundation floors will be determined in coordination with the specialty of structures and works of art and to verify the increased load capacity in the limit state of strength, service and extreme event, as appropriate.
- ✓ The conditions of maximum undermining or maximum liquefaction or collapse should be considered and verified in coordination with the hydrology and hydraulic specialist, compared to the methodology offered by the AASHTO-LRFD.
- ✓ Load capacity calculations must take into account the influence of the water table, so it is the CONCESSIONAIRE's obligation to verify its height, and include this information in the study. The methodology used must be presented, parameters (cohesion, friction, pore pressure, unit weight, etc.) supported by duly certified tests, sheets and/or calculation memories. The stability of the work will be analyzed with regard to settlements and soil liquefying.
- ✓ If a foundation system using driven and/or drilled piles is proposed and there are no National Standards to establish the allowable axial load capacity, the methodology established in the AASHTO Standards (for drilled piles) will be followed, or alternatively, the Reese & O'Neill methodology will be used, considering that the Reese & O'Neill calculation is based on permissible settlement If another methodology is applied, the corresponding settlement analyses will also be carried out in coordination with the entity's Specialist. Verify the requirement for horizontal loads, for consideration in the embedment and/or capacity of the pile.
- ✓ Lateral friction resistance calculations should not consider the material above the total undermining level, nor the strata susceptible to liquefaction, as well as those with low resistance.
- ✓ The Reduction Factor by Group will be carried out in accordance with the recommendations of AASHTO Standards and any variation will be objectively supported, but in no case will it be greater than 0.75.
- ✓ The foundation on slopes will proceed if the Hydraulic specialist determines no undercutting of the support zone, and Stability Analysis of Slopes is conducted for both soils and rocks. For load capacity calculations, methodologies specific to slope foundations will be employed, considering the shear strength of the materials.
- The laboratory tests that must necessarily be carried out are:
 - Standard soil tests: granulometry, consistency limits, humidity, unit weight, etc.
 - Carry out special tests, triaxial tests, direct cutting, consolidation, etc.
 - Chemical analysis of soils and groundwater, to identify the presence of chlorides, sulfates and other aggressive substances to steel and concrete.
- ✓ The CONCESSIONAIRE will carry out the identification, evaluation and interpretation of external geodynamic processes in the area of influence or risk on the project (for the local extension, a radius of 500 m,) with the corresponding control recommendations, duly dimensioned or designed in accordance with the calculated levels of undermining of the hydrological study.

- ✓ It will present the topographic plan of the plan with the exact location of the perforations in each support, they must be referenced by means of progressive project endings as well as located at a distance from the axis of the structure, no greater than 5.0 m and their spatial orientation indicated.
- ✓ In the geotechnical geological plane, you must locate the geodynamic processes, with the location and location of the corresponding units, placing the active units, starting from the base plane.
- ✓ Drilling and/or excavation records must contain stratigraphic, water table, and SPT data, consistent with and consistent with the geological interpretation.
- ✓ You must present the detailed stratigraphic profile plan, longitudinal to the axis of the bridge, with all the information related to the foundation such as: planting height, load capacity, undermining levels, soil liquefaction, collapse, riverbed bottom, lithological and geotechnical contacts, water table. etc.
- ✓ It will present the results of the laboratory tests (certified), which must be issued by a recognized laboratory and meet the requirements established in the Peruvian Technical Standards, as well as what is indicated in the soil chapter.
- Calculation sheet or memory for the analysis, load-bearing capacity of foundation materials and slope stability evaluation runs (including input and output data, supported)
- ✓ If rock masses are found, the arrest and/or suspension of perforations will only proceed as long as the in-situ geological-geotechnical evaluation, with respect to lithological (petrographic analysis), structural (geomechanical stations) characteristics in the support areas), resistance to uniaxial compression (of unchanged sample (s) extracted from the probable level of foundation), resistance to the shear of discontinuities, RQD, Geomechanical classification, and spatial distribution of fissures, diaclases and faults, confirm the quality of the rock mass as a foundation material (minimum: 5m below the foundation level), developing rock foundation analysis, using at least two methodologies, considering, among others, the geotechnical conditions of the massif and consistent with the characteristic conditions of river dynamics.
- ✓ The foundation depth will refer to absolute dimensions (m.s.n.m.), and must be below the total undermining level and under this critical condition, the foundation will have a confined depth no less than that assumed in the load-bearing capacity calculations.
- The design seismic forces will comply with the parameters obtained from the Seismic Hazard study.
- ✓ THE CONCESSIONAIRE will submit the descriptive report of the specialty, which will summarize all the geotechnical competence works recommended in the study (bridges, rigid and flexible walls, unstable sectors and solutions, sectors with slope stability analysis, classification of materials, research carried out, tunnels, etc.) indicating their location with progressive dimensions, dimensions, absolute dimensions and other details that the CONCESSIONAIRE deems appropriate.

1.3.4.8. Geological-Geotechnical Study for the purpose of road tunnel construction

Geological and Geotechnical Study of Portals and Entrances

- ✓ The study will begin according to the progress of road plan design and the topographic surveys complementary to the specialty of tracing and topography, the location of both the entrance and exit portals will be defined by the geology and geotechnical specialist, in close coordination with the specialty of tracing and topography.
- ✓ For the purpose of the study, consideration should be given to naming the entrance and exit area of the tunnel as an entrance portal and an exit portal.
- ✓ To carry out the study of the tunnel portals, it must be divided into two parts: the study of the slopes in both portals and the study of the accesses to the portals.
- ✓ In the case of portals, the CONCESSIONAIRE will carry out a detailed geotechnical geological evaluation, identifying and delimiting in plan the existing lithological formations, as well as the rock outcrops that will be crossed during the excavation of the tunnel portals. A detailed geological-geotechnical plan of the portals will be drawn up at a 1:500 scale.
- ✓ To investigate the thickness of the existing Quaternary deposits in the portal area, test pits, seismic refraction profiles, or any other type enabling adequate characterization of the massif must be conducted. At least one diamond drilling per portal, preferably horizontally, with a length of no less than 25m, should be executed. If it is not horizontal, it must cross the level of the ground of the tunnel at least 5 meters. In the perforations, unchanged samples and paraffined controls must be taken, on which laboratory tests will be carried out for the geotechnical characterization of the materials.
- ✓ If only rock outcrops are found in the portals to be excavated, the CONCESSIONAIRE must carry out a detailed geomechanical survey of them in the area where the portal will be located, defining the main families of discontinuities (using stereographic projection) and qualifying the rock using the RMR classification system. (Beniawsky) Subsequently, the CONCESSIONAIRE must obtain unchanged samples from the portal area by means of diamond drilling. If, due to the orographic conditions of the terrain, it is not possible to obtain suitable samples for testing from the survey, a rock block (approximately cubic-shaped) measuring 0.40 x 0.40 x 0.40 meters in length will be carved in situ.
- ✓ With rock cores, tests must be carried out for resistance to simple compression, unit weight, absorption, porosity, elastic and triaxial constants in rock to obtain all the physical, mechanical and elastic properties of the rock.
- Based on the physical, mechanical and elastic properties of soils or rocks obtained in field investigations, the CONCESSIONAIRE must carry out a stability analysis of slopes in soil and/or rock in at least 03 sections longitudinal to the axis of the Tunnel, calculate the static and pseudo-static safety factor. Subsequently, the CONCESSIONAIRE must recommend the type of support that the necessary slopes and mitigation works should have.

- ✓ Slope stability analyses (soil and/or rock) should be carried out using specialized Geotechnical Software considering the various types of faults that occur in soils and rocks. We must consider the use of circular failure only for soils and evaluate the use of planar failures for rocks, with the corresponding analysis of failure by overturning, wedges, etc. The use of specialized software does not limit the use of only one, two or three types of software can be used at the same time.
- ✓ In the case of accesses, a detailed study will be carried out of the accesses from the main road variant to the portals, evaluating the stability of the slopes using specialized software, the cross sections must be carried out considering the geological and geotechnical factor and sectioning must be carried out every 10 meters, the evaluation of the discontinuities must be in detail and the mapping of the discontinuities must consider all their properties.
- ✓ The same slope stability analysis criteria used in the geotechnical evaluation of portals should be considered. The properties of the rocks should be used with the same results as the samples obtained in the study of the portals, if applicable.
- ✓ In the case of accesses to the planned ventilation chimneys, access to these sectors must be evaluated considering the accessibility for maintenance, an aspect that will be coordinated with the specialty of tracing and topography.

Geological - Geotechnical Study of the Tunnel

THE CONCESSIONAIRE will carry out an evaluation of the tunnel or tunnels planned or existing on the road, considering carrying out the study of the rock mass where the tunnel is located or the new projected tunnel (considering a minimum width of 100 meters on both sides of the tunnel axis), for which a local geological geotechnical mapping of the route approved in this same phase of study must be carried out, and geomechanical stations, which must identify the different types of rocks, course, diving of all discontinuities (strata, faults, diaclases, joints, contacts, etc.), these structural features must be recorded using formats detailing their physical, chemical and mechanical characteristics considering the use of a Schmidt Hammer for rocks.

The local geotechnical geological survey will serve to carry out a statistical survey of the different discontinuity systems that will allow the CONCESSIONAIRE to carry out a geomechanical classification by sections, this classification must be using at least 02 empirical classification systems that must be: The Z Classification, Bieniawski (1989, Southern African Council CSIR System for Scientific and Industrial Research) and the Barton, Líen and Lunde Classification of the N.G.I. System (Norwegian Geotechnical Institute). With the use of these classifications, all factors that influence the stability of the tunnel excavation must be evaluated. If the CONCESSIONAIRE considers that he must use another geomechanical classification other than those indicated, he will be considered only during the development of the study, which is when he will have direct knowledge of the rock mass, for no reason should the CONCESSIONAIRE carry out the study without the use of 02 geomechanically classifications.

- ✓ The data obtained must be evaluated using the stereographic projection method using the respective software and will be used to carry out the geotechnical classification.
- ✓ The total length of the boreholes should not be less than 50% of the length of the projected tunnel and be distributed along the axis taking into account the change in structural geological domain. In diamond drilling, unchanged samples (in soils) and rock samples will be taken on which standard and special laboratory tests must be carried out and the index properties of the rock must be obtained. In addition, in the case of excavating the tunnel in geological formations in which the planes of discontinuity have a special relevance in the geomechanical behavior of the rock mass (formations with dominant stratification or schistosity), the advisability of carrying out direct cut tests on pre-existing planes will be analyzed to determine the cohesion and angle of internal friction of these planes, which must necessarily be the main family of the discontinuities mapped on the tunnel axis.
- ✓ You must also carry out rock permeability tests, such as Lugeon, during diamond drilling.
- ✓ As deemed appropriate, coordination should be carried out with road design and design specialists to evaluate the current axis of the tunnel or existing tunnels in order to improve, expand or change this axis.

Geotechnical Road Tunnel Design

According to the results, analysis and interpretation of the geological and geotechnical studies carried out, the CONCESSIONAIRE will prepare the designs for the excavation of the tunnel and also of the related works. For the preparation of the designs, specialized software must be used for the calculation indicating the stresses that will occur during the excavation, the safety factor and the support measures to be used as a construction aspect.

- The CONCESSIONAIRE must carry out as a final work a geotechnical geological modeling with the use of a modeling program.
- The geotechnical geological design requested to carry out the study must contain the following:
 - The tunnel excavation method (conventional drilling and blasting and/or NATM) including the construction process to be carried out and the estimated times to be used.
 - According to the method, the CONCESSIONAIRE must recommend the type of drilling machine or machines to be used considering their best performance.
 - The drilling and blasting design, indicating the drilling mesh according to the different types of classified rocks, must establish line a and line b of maximum excavation allowed.
 - The load factor and power factor for the different shots to be carried out, categorized by rock type.

- The feed length per shot depending on the type of rock classified.
- The type of support for each type of classified rock must consider that the placement of anchor bolts, the placement of cast concrete (shotcrete- must necessarily be wet), the placement of metal frames and the placement of reinforced concrete are analyzed with specialized software. Recommendations for the type of support using empirical geomechanical and/or geotechnical classifications will be accepted, provided that they are verified through analytical calculations.
- The ventilation and lighting system for the projected tunnel must be defined.
- You will need to consider the location of the instrumentation and monitoring (define program).

1.3.4.9. GEOTECHNICAL INVESTIGATIONS AND IN SITU TESTS

- ✓ The Geotechnical Investigations for this study shall be conducted in two phases. The first phase involves Geotechnical Investigations using indirect methods through Geophysical Surveys, while the second phase involves Geotechnical Investigations using direct methods through test pit excavations and diamond drilling with continuous core recovery in both soils and rocks
- ✓ The field geotechnical investigation works must be supervised by the geology and geotechnical specialist of THE CONCESSIONAIRE throughout the entire duration of the field investigations. At a minimum, the assistant engineer of the specialty considered in the technical proposal of THE CONCESSIONAIRE must be present. If neither of these two professionals is present in the field, the works will not be considered as completed.

1.3.4.9.1 INVESTIGATIONS USING INDIRECT METHODS:

The works to be carried out shall be through geophysical investigations using the seismic method, especially seismic refraction and MASW (Multichannel Analysis of Surface Waves). The location of seismic lines in the field shall be distributed in places where the study warrants it, considering primarily critical sectors, sectors with peatlands, bridges, and any other sector where it is necessary to evaluate and consider the stratigraphic continuity of the soil or rock up to 30 meters deep. Furthermore, if blasting such as rock excavation and/or quarries is considered, seismic investigation should be conducted in these sectors to establish the elastic properties of the rocks, particularly determining the particle velocity.

Geophysical Investigations

The methodology for carrying out geophysical research work using seismic refraction and MASW (with 4.5 Hz).

The procedure should consider that with the information obtained from the seismic refraction tests carried out in the field, the longitudinal velocities (vp) will be determined, which will make it possible to estimate the seismic profiles of the subsurface, and the speeds of shear waves (vs) will be determined, by means of which the respective one-dimensional and two-dimensional profiles of the subsurface will be generated (probable stratigraphy). In relation to MASW tests: achieve the results of the f-k analysis (dispersion curve) for the different shocks tested; how the final dispersion curve was defined, test conditions (geophone spacing, distance to the source, geophone frequency, inversion curve graphs, Rayleigh speeds, software used, etc. It should be noted that in the case of verifying values of Vs lower than 200m/s; the MASW test must be compared with another test using geophones with a frequency lower than 2.5 Hz

Measurements of Geophysical Investigations

For the present study, we considered carrying out a refractive and MASW seismic profile, over the entire length of landings of more than 10 m in height, and at least 2 profiles, in each structure and single bridge.

1.3.4.9.2 INVESTIGATIONS WITH DIRECT METHODS:

This activity may be carried out through the excavation of test pits and/or trenches, as well as diamond drilling.

1.3.4.9.2.1 Excavation of Test Pits and/or Trenches

Test pits and/or trenches excavation works shall be carried out according to the location and type of terrain to be investigated. The excavation shall be done following a research program that the CONCESSIONAIRE must submit before undertaking the works. These works must meet the following objectives (but not limited to):

- Investigate the subsoil with a depth of no less than 3 meters.
- Obtain altered or unaltered samples, if applicable.
- Establish the stratigraphic profile of the evaluated sector by integrating the other excavations.
- Define the possible water table of the area if applicable.

The location in the field where the excavations will be carried out must be mainly (it is not limiting) in the sections of the route being cleared and filled, in bridges, unstable sectors, sectors where wall-like structures will be placed, in the place where the fixed toll unit will be built, and sectors where there are high water tables, bofedales or any other sector where it is considered that instability would be generated depending on the climate.

Quantification of Test Pits, Sample Collection, and Laboratory Testing

Test pits should be carried out at bridges and areas showing evidence of material instability, whether soil or rock, within the corresponding to the axis. Additionally. zone the CONCESSIONAIRE should perform geotechnical zoning to determine sectors where representative samples could be obtained from areas with similar characteristics, providing data for the respective calculations required for engineering design. For the classification of the natural subgrade and the characterization of materials excavated in cut slopes, a test pit will be executed approximately every 250m along the alignment. In these test pits, disturbed samples will be taken from the differentiated lithological layers, on which the following battery of laboratory tests will be conducted (not limited to):

<u>In Soils</u>

Identification tests: granulometry and Atterberg limits State tests: dry density and natural moisture Direct cut on remodeled samples Compaction tests: Modified Proctor and CBR Index Chemical tests: soluble salt content, sulfates, gypsum, and organic matter Collapse test

1.3.4.10. 1.3.4.9.2.2 Diamond Drilling

- Direct Geological and Geotechnical Investigations to investigate the Study Area to be carried out using Diamond Drilling with continuous recovery of witnesses
- ✓ The witness recovery method should be with a single or double tube (for rock) and a single tube (for floors).
- ✓ Photographs must be taken of the samples obtained, for which purpose they must be photographed inside the witness boxes obtained in each drill hole. Sample boxes must be labeled on the back cover, on the front and on the side.
- Diamond perforations in soils must be complemented by In Situ tests such as SPT tests, according to standard intervals. If gravel is found, they can replace the split bar with a conical probe of a diameter equivalent to that of the bar, as well as indicate the standard and prove that the corrections correspond to this type of device (not like Peck). If the Peck Cone test is performed, it must be independent of the SPT.
- ✓ The minimum outside drilling diameter will be 86 mm, and NQ if a wire-line battery is used, a recovery of 95% is accepted in cohesive soils, and 60% in gravel soils, and 90% in rock. Fractured rock will be drilled with a double or triple battery to ensure the indicated recovery rate. In granular soils, the length of the maneuvers will be reduced and the addition of water will be limited to ensure the required recovery.
- ✓ These perforations will serve to:
 - Determine detail stratigraphy
 - Find the N values of the SPT in soils with granular composition
 - Allow the taking of unchanged samples in soils with a cohesive composition, and of paraffined samples of the rock mass.
 - The unchanged and altered samples will be used for the execution of Special Laboratory Tests, consisting of:

<u>In Soils</u>

- Direct cut on sandy soils, or remodeled in gravel.
- Triaxial Cü for undrained clay resistance
- One-dimensional consolidation in clays
- Free and/or controlled expansion in clays
- Effective unit weight of each stratum

<u>On rocks</u>

- Test of Elastic Properties of Rocks (Elastic Modulus and Poisson's Ratio)
- Simple Compressive Strength Test
- Unit Weight, Absorption and Rock Porosity Test
- Induced Cut Test on pre-existing planes (Cohesion and Internal Friction Angle)
- Triaxial Tests
- Brazilian traction tests
- ✓ All diamond drilling work must follow a technical procedure that allows good witness recovery. For no reason will samples with recovery of less than 95% of the drilled section (run) be accepted. It is the responsibility of the CONCESSIONAIRE to carry out good control of the drilling work to ensure that at least 95% of the sample is recovered in rocks. In cases where the drilled section is fractured to very fractured or in any case is present in a fault zone where the rock material to be drilled is not very consistent, then the length of the maneuvers must be adjusted to ensure proper recovery.
- ✓ For no reason will perforations be accepted where the operator has performed long runs and regular to poor recoveries without having made these recommendations.
- ✓ "In situ" research work must be coordinated and supervised by a Geological Engineer or Geologist, with proven experience in this type of work.
- ✓ If it were found in the field that the operator is performing a poor maneuver to carry out diamond drilling work with continuous recovery of rock samples, such as increasing hydraulic pressure and drilling speed, generating a break in the rock sample, which is evidenced by the various fractures generated in the witness, then the drilling work will be suspended, under the responsibility of the CONCESSIONAIRE for carrying out work of poor technical quality.
- ✓ These controls must be carried out by preparing geotechnical geological records for each diamond hole in which: drilling depth, sampling, water levels, sample symbolism, description of the lithology, % of sample recovery, and if rocks are drilled, % of RQD, properties of discontinuities, tests carried out. In addition, a drilling control record must be made indicating all the procedures used during the maneuver to obtain the samples.
 - In Situ Testing and Sampling

When the drilled soils have sufficient cohesion, undisturbed samples shall be taken with double-tube split-spoon sampler When the ground resistance prevents the driving of soil samples (highly consistent soils and rocks), paraffin-coated soil or rock cores should be taken directly from the drillings made with a minimum diameter of NQ (Approx. 47.6 mm) if drilled with wire-line battery, and 76 mm if conventional batteries are used In the undisturbed samples or paraffin-coated cores, the drilling direction should be indicated along with the sample number and its depth, which should be at least 20 cm long. After obtaining the sample, the empty space left by the sample must be replaced with a wooden block and in turn indicate which sample number corresponds. Each of the samples obtained using sampling tubes must be well conditioned and waterproofed for transfer to the respective laboratory.

 On each probe: in-situ stress tests will be performed on each probe, at at least three levels of projected probe length, at 1/3, 1/2 and 2/3, preferably overcoring. Permeability tests according to the type of material (at least 10 in each probe) and starting at 1/3 of the probe length programmed and distributed regularly until the completion of the probe.

Permeability tests will be carried out on healthy rock masses, starting at 2/3 of the drill length, with an interval of one test every 5 meters of drilling, until the completion of the survey

With all this information, you should be able to estimate, as part of the Geotechnical Geological Study for the tunnel, the Tension State and Geological Risk as appropriate, of Sqeezing, Rockburst and/or Spalling, carry out deformation analyses using appropriate software, so that technical support measures and monitoring programs are taken and designed.

1.3.5. STUDY OF HYDROLOGY AND HYDRAULICS 1.3.5.1 Urban Highway Hydrology and Hydraulics

For the development of the Hydrology and Hydraulics Study, the following activities will be carried out:

- a. Review of technical information available, both in the MTC and in other public and private institutions related to this road project. Take into account the conclusions and recommendations of the previous study carried out at the pre-investment level.
- b. Select and obtain from authorized institutions, the necessary historical series of hydrological and/or hydro-meteorological information (discharges and/or rainfall, etc.) from the stations located within the scope of the project, with sufficient recording periods (minimum 40 years) for the development of this study. Also, obtain the necessary cartographic information.
- c. Prepare a detailed field survey report, which will describe the topographic, climatic and hydrological conditions, the current state of the highway axis, existing drainage works, the requirement for drainage structures and hydrodynamic behavior of rivers and streams that affect the stability of the road platform. All of this refers to the definitive outline of the redesigned route.
- d. The field reconnaissance report will be accompanied by photographic views; progressions and magnitude of all unstable sectors affecting the road's stability, such as landslides, collapses, debris flows (Huaycoloro ravine, etc.), riverbank erosion, flood-prone areas, slopes affected by water seepage, rain erosion (gullies), significant stream crossings, potential deviations, etc., will be indicated. The most appropriate engineering solutions, from a hydraulic-drainage and comprehensive study perspective, will be proposed.

 e. Carry out the study of basins and/or microhydrographic basins that intercept the redesigned axis.
 They will determine the physical parameters of the basins (area, length of the main course, slope, vegetation cover, etc.) They will present the watershed plan in CAD print at a convenient scale

(1/25,000 or larger), identifying the name of the streams, the progressive location and the existing drainage works.
f. Present the inventory and hydraulic evaluation of existing drainage and irrigation works along the definitive route (Canal Surco, etc.), indicate their location (progressive), type, material, hydraulic dimensions (light, height), describe the current hydraulic state of each of them and establish the necessary treatments, considering their conservation, rehabilitation or replacement as appropriate.

Existing drainage structures must have a technical evaluation sheet

- and photographic views.
 g. Present the Hydrological Study of the road's location area, including analyses of maximum hydrological events frequencies, obtaining intensity-duration-frequency curves, hydrographs, and estimation of design flows through computerized hydrological modeling (HEC-HMS or others), for the various drainage structures to be designed. The results will be supported by the presentation of the respective spreadsheets or program outputs. The study should not be limited to obtaining only liquid flows, but also to considering solid discharges and sediment contributions from watercourses (streams and rivers) that carry debris flows and reservoirs.
- h. Present the Hydraulic Study of the planned drainage works, with the presentation of the hydraulic calculation of sewers, speed bumps, drains, curbs, drainage ditches, ditches, subdrains and other planned drainage works, including hydraulic sections, driving capacity, flow velocity, slope, maximum tie rod, etc. The results will be supported by the presentation of the respective spreadsheets or outputs of the programs used.
- i. In order to define the granulometric characteristics, determination of groundwater levels, % of moisture, degree of saturation, of the soil below the projected subsurface, the necessary excavations, sampling, tests and evaluations will be carried out to define the sectors that require underdrainage works and the hydraulic design of the elements that compose it.
- j. In cases where external geodynamic problems of water origin occur, such as riverbank erosions, and others that affect the stability of the road structure, the most suitable protective works must be designed, such as walls, railings, etc., determining the geometric and hydraulic characteristics (location, length, height, level of expansion, etc.) of the selected structure. For riprap structures, perform stability analysis based on the diameter of the rocks and the drag capacity of the flows. Additionally, determine the thickness of the riprap, gradation, rock quality, abrasion, and design protection filters to prevent the washing out of fines from the supporting material and/or foundation
- k. The list of required longitudinal and transverse drainage works (sewers, ditches, curbs, spillways and others) will be presented; as well as sub-drainage and erosion or undermining control works.

- I. The CONCESSIONAIRE must carry out definitive studies for the control of riverbank erosion due to the hydrodynamic action of rivers and streams; for this purpose, they must define the levels of flooding, undermining, etc., using appropriate computerized models such as the HEC- RAS or similar; in order to guarantee the operation of the planned road. As far as possible, solutions should not reduce the hydraulic section or unfavorably alter flow conditions, and alternative tracing variants should be evaluated, if necessary.
- m. Present in detail the planned longitudinal and transverse drainage works (sewers, speed bumps, ditches, drainage ditches, drains, curbs, spillways and others); as well as underdrainage and erosion control works.

1.3.5.2 Technical Design Criteria

- a. Drainage works must be designed according to the magnitude and type of structure required, taking into account the behavior of existing drainage works and in accordance with the regulations and manuals in force in the MTC.
- b. The design downloads will be consistent with the risk and estimated useful life of the corresponding work. Also, consider road maintenance and maintenance criteria, among others.
- c. If collector systems are designed for the drainage of rainwater, such works must be designed consistently, ensuring their operability and permanence during the useful life of the work. The respective sinks must have the appropriate hydraulic capacities, according to the results of the corresponding hydrological analyses.

1.3.5.3 Hydrology and Hydraulics for Bridges, Viaducts, Overpasses, and Underpasses

The hydrology and hydraulics studies for Bridges, Viaducts, Overpasses, and Underpasses should reference the minimum scope established in both the Hydrology, Hydraulics, and Drainage Manual as well as the Bridges Design Manual of the Ministry of Transportation and Communications, determining, among others, the following

- a. The design of bridges will be comprehensively evaluated, based on the current conditions of the existing structure, its hydrologicalhydraulic behavior during the last extreme hydrological events.
- b. The CONCESSIONAIRE must determine the design flow based on historical data series of hydrological information (maximum daily discharges and/or their generation from maximum daily precipitation) with a minimum of 40 years of historical records from stations located in the Rimac River basin or elsewhere. It should consider the magnitude of extreme events such as El Niño.
- c. Describe and assess the hydrodynamic characteristics of the river stretch at the bridge site: fluvial morphology (maximum and ordinary water levels, variability of cross-sectional profiles, floodplains, slopes, channel roughness, etc.), flow regimes, sedimentation and/or scouring processes, lateral channel erosion, among others.
- d. Determination of the hydraulic dimensions of the bridge (light, height, gauge) using hydraulic modeling (HEC RAS or other); the hydraulic sections and views of the three-dimensional modeling will also be presented considering the projected structure.

- e. The bridge light must be such that it does not cause narrowing (reduction) of the hydraulic section of the river, in order to avoid the formation of backwater curves and accumulation of sediment upstream; and hydraulic relief immediately downstream of the bridge, whose formation of vortices can seriously compromise the stability of the supports.
- f. The free height of the bridge (gauge) must allow the passage of floating solid material and will be in accordance with the provisions of the Design Standards in force to date.
- g. In order to define the granulometric characteristics of the channel, the necessary excavations, sampling, tests and evaluations will be carried out to determine the representative diameters of the channel in order to estimate the total potential depth of undermining in the area of the bridge supports. The location of test pits for erosion study purposes will be verified by the CONCESSIONAIRE's Hydrology and Hydraulics Specialist, which will be duly reported in the erosion study, showing in a technical sheet, the identification (with photographic view), and results of the field and office evaluation.
- h. The total potential depth of undermining must be calculated, as precisely as possible, in order to define the level of removal of the supports of the corresponding hydraulic structures. The hydrodynamic parameters will be duly supported.
- i. In torrential channels with solid materials and palisades carried away, intermediate supports (piles) must not be projected into the area of the river bed. On the other hand, the abutments must be projected outside the torrential channel and oriented parallel to the flow of the current, to minimize localized undermining.
- j. In the case of existing bridges, hydraulic verification will be carried out on each of them, with the determination of the parameters of hydrological and hydraulic designs using the HEC HMS and HEC-RAS models respectively.
- k. In cases where riverbank erosions occur that could affect the stability of the structure, appropriate protective works must be designed, such as retaining walls, railings, gabions, etc., duly establishing: the lengths, heights, levels of displacement, among others, of the selected structure.
- Regarding the design of grooves, stability analyses must be carried out depending on the diameter of the rocks and the drag capacity of the flows and then establish the diameters, gradation and quality of the rocks. In addition, protective filters must be designed to prevent the washing of fines from the foundation materials.
- m. The hydraulic and geometric characteristics of the bridge, as well as the channeling and protection works must be designed and duly detailed in the respective floor plans, profile, sections and cuts.
- n. In structures such as Viaducts, Overpasses, and Underpasses, drainage elements must be designed in such a way that during eventual precipitation, flooding and/or water accumulation that affects the drivability of the roadway is prevented.

1.3.5.4 Tunnel Hydrology and Hydraulics 1.3.5.4.1 <u>Surface Hydrology.</u>

For the tunnel's area of influence, the surface hydrology study must contain at least the following information:

• Review of existing studies related to this project. Take into account the conclusions and recommendations. They must also submit the historical records of the meteorological stations analyzed (precipitation and/or flow).

- Detailed inventory of all surface water sources found in the component's area of influence and possible connectivity to the tunnel, including recharge and discharge areas, which must be presented on maps at a scale of 1:25,000 or more detailed.
- Determination of the design flows (surface runoff) of natural water courses within the area of influence of the tunnel, using computerized hydrological modeling (HEC - HMS or similar) and/or appropriate hydrological models. The results will be supported by the presentation of the respective spreadsheets or program outputs.
- Identification of the fluvial dynamics of the water sources that may be affected by the execution of the tunnel, as well as the possible alterations to their natural regime.

1.3.5.4.2 Underground Hydrology

Underground hydraulics studies will be carried out on the information or results of geotechnical investigations (hydrogeology) and surface hydrology, contemplated in this Reference Term, with the purpose of estimating or determining the possible maximum design flows and establishing the technical solution for the proper management of water flows within the tunnel, and must have at least the following: 1

- Analysis of existing information: hydrogeological, hydrological, geophysics - geotechnics {geophysical survey reports including georeferencing of vertical electrical surveys (SEV) or other geophysical methods that have been carried out in the area, geo-electrical profiles and correlation of lithological units), geochemistry and existing mapping of the area, identifying in all cases the source of information, with the purpose of:
 - Define or rule out the existence of aquifers in the area where the tunnels are located (determine types of aquifers, recharge zones, border conditions, etc.),
 - Characterize groundwater conditions along the axis of the tunnels; static levels, piezometric levels, hydraulic gradients, water quality, flow network systems, etc., and
 - Determine the flow of filtration or infiltration within tunnels and affected areas in a localized way, taking into account porosity, permeability, water table levels, storage capacity, rock fracture, and others.
- Determine rock permeability using Lugeon-type tests.
- In the design of underdrainage systems using synthetic fabrics (geotextiles), the behavior of these materials must be adequately compatible, taking into account the apparent opening size and the corresponding granulometry of the natural material to be drained.
- If necessary, drainage works inside the tunnel, drainage systems will be designed:
 - Define the most appropriate drainage system for tunnels by evaluating the convenience of different drainage systems for tunnels; for this purpose, they will define the structures for collecting, conducting and evacuating water flows (filtration), during the construction and operation of the road. In addition, alternative waterproofing systems for gables and tunnel vaults should be analyzed, depending on hydrostatic loads; or mixed systems with both alternatives (drained tunnels and undrained or waterproofed tunnels).

- If a longitudinal drainage system is chosen, the hydraulic structures necessary for the evacuation of flows to the outside of the tunnels must be designed; if necessary, drainage galleries, with piping systems, drains, etc., will be designed.
- The drainage works will be designed to be compatible with the underground water supply (filtration flow) along the tunnels; it must establish the location (progressive), hydraulic dimensions (light, height), types of coatings, slopes, discharge points, etc.
- The geometric characteristics of the side ditches, both at the entrances to the tunnels and along the planned road, must be designed according to hydraulic, road safety and DG-2018 criteria. On the other hand, when deliveries to natural terrain, spillways will be provided in order to protect the upper and lower slopes at the exit of the tunnels.
- Present in plain view, profile, sections and cut the entire projected drainage system.

1.3.6. STUDY OF SOILS, QUARRIES, WATER SOURCES AND PAVEMENTS 1.3.6.1. <u>Soil Study:</u>

The work to be carried out in the field, laboratory, and office is aimed at developing activities that allow the evaluation and establishment of the physical-mechanical characteristics of the foundation soils below the subgrade level of the entire section under study, upon which the pavement will be projected. This means that the CONCESSIONAIRE must conduct the study along the alignment of the projected route (including variations and platform widening zones), based on the Soil and Pavements section of the MTC Highway Manual "Soils, Geology, Geotechnics, and Pavements".

To this end, the CONCESSIONAIRE will establish the Stratigraphic Profile of the road and differentiate the sectors where the differences between the future grade and the terrain (red height) are greater than 6 m.

In areas where the difference in elevation between the existing ground level and the future road surface is equal to or less than 6 meters, a test pit campaign will be planned and executed according to the guidelines set forth in the Highway Manual. Soils and Pavements Section" of the "Soils, Geology, Geotechnics, and Pavements" Highway Manual

The execution of test pits will be carried out following the following criteria.

- a. The CONCESSIONAIRE will establish the location of additional test pits.
 - i) Between contiguous test pits in places where there are significant differences in the physical characteristics of the soils.
 ii) To determine the presence or absence of organic or expansive soils, in which case the test pits must be deeper to determine the depth of such strata, establishing the location, length, and depth of said sector. iii) For improvements and/or variations in the road axis of the project.

- b. If potentially expansive thin plastic soils are found, the CONCESSIONAIRE will carry out the tests required to calculate the "A" activity of a clay (physical constants and sedimentation test), and establish the presence of expansive soils, defining the location, length and depth of that sector.
- c. The depth of study for all surveys shall be at least 1.50 m below the projected subgrade line.
- d. The CONCESSIONAIRE must take into account the width of the road at the level of the underlay of the project, on the basis of which he must locate the surveys so that the study has sufficient information on the foundation floor of the pavement and at the established minimum depth.
- e. The CONCESSIONAIRE will submit an Excavation Record for each test pit, where: i) It will indicate the project milestone corresponding to it. ii) It will specify the thickness and description (material type, color, moisture, compactness, etc.) in accordance with ASTM D-2488-09a standard for each of the strata encountered. iii) It will provide photographic views of each test pit, showing the encountered strata and the depth of each excavation.
- f. The test pits must be protected for their evaluation and properly referenced to the alignment polygonal system of the road for their location. For road safety, the test pits will be properly backfilled and compacted once the evaluation has been completed.
- g. The amount of material sampled must be such that it also allows verification tests to be carried out, especially on the strata selected for the execution of Proctor, CBRs and Resilient Module.
- h. The Soil Mechanics laboratory tests to be carried out on the samples of each stratum found in each survey, will be carried out in accordance with the MTC Road Material Testing Manual (current version), which will basically be the following:
 - Granulometric analysis by sieving
 - Natural Humidity
 - Atterberg Limits (Mesh No. 40): Liquid Limit, Plastic Limit, Plasticity Index)
 - Determination of the diameter of 10, 30 and 60% of the material through, depending on the type of soil.
 - Soil Classification by the SUCS and AASHTO Methods
 - Modified Proctor and California Bearing Ratio (CBR) tests will be carried out on the foundation ground for: i) Each type of soil and ii) To control its permanence, every one (01) kilometer at most; in order to be able to carry out the corresponding construction checks during the construction process.
- i. The Resilient Modulus test will be carried out for each type of soil that is at the subgrade level according to its classification established by the AASHTO; the samples must be compacted at optimum humidity and 95% of the maximum dry density, obtained with the Modified Proctor test, in order to be used in pavement design.
- j. In order to establish the Resilient Design Module, soil analysis will be carried out from the point of view of support capacity for the projected pavement, which will result in the sectorization of the road if possible. The Resilient Design Module, for the structuring of the pavement, is the value with the highest impact in the sector.

- k. In addition to the test certificates, the CONCESSIONAIRE must present summary tables of the test results, indicating: test pit number, milestone, sample, stratum depth, percentages of material retained on the sieves: 3", 2", 11/2, 1", 3/4", 3/8", No. 04, No. 10, No. 20, No. 40, No. 60, No. 100 and No. 200, physical constants (Liquid Limit, Plastic Limit and Plasticity Index), natural humidity, SUCS and AASHTO classification, modified Proctor (Maximum Dry Density and Optimal Moisture Content), CBR (al95 and 100% of the MDS) and Resilient Module (constitutive equation with their corresponding coefficients).
- I. The CONCESSIONAIRE will develop the Road Stratigraphic Profile based on field information and laboratory test results, representing graphically the soil types and physical-mechanical characteristics, thickness of strata, presence of water, and any other observations deemed necessary by the CONCESSIONAIRE. It will evaluate the Stratigraphic Profile and, according to the physical and mechanical characteristics, it will determine critical sectors and sectors with homogeneous characteristics.
- m. The Soil Study Descriptive Report must include descriptions of the soils encountered, current condition of the road surface, condition of the foundation soil bearing capacity; location of unsuitable materials (organic and/or expansive soils), geotechnically weak soils (if any), presence of water, analysis of all laboratory test results; with recommendations, treatments, solutions, and any other observations determined by the CONCESSIONAIRE regarding the test results
- descriptive report of the soil n. Within the studv. the CONCESSIONAIRE will develop, if applicable, the Soil Stabilization Chapter, in accordance with Chapter IX of the Soil and Pavements section of the "Soils, Geology, Geotechnics, and Pavements" Highway Manual. In this chapter, current soil stabilization criteria will analyzed and applied, and based on be them, the CONCESSIONAIRE will define or discard the need for soil stabilization measures, specifying for each sector the respective extent (length, width, and depth). Where applicable, the analysis will include stabilization cases in road widening areas, taking into account the type of material in the cuts. Additionally, Dynamic Cone Penetration (DCP) tests will be conducted in the test pits of each stabilization sector, following ASTM test standard D6951-09. Finally, the CONCESSIONAIRE must select between several soil stabilization alternatives, the best after a Technical-Economic analysis.
- o. To determine the characteristics of soils for paving purposes in Tunnel areas, the CONCESSIONAIRE will take technical information from the Geological Geotechnical Study of the Tunnel, if applicable.

1.3.6.2. Study of Quarries and Water Sources:

The work to be carried out in the field, laboratory, and office is aimed at developing activities that allow the evaluation and establishment of the physical-mechanical characteristics of aggregates from quarries, to determine their quality and uses in the different requirements of the project; furthermore, it must take into account what is established in the Highway Manual: Soils, Geology, Geotechnics and Pavements in the Soil and Pavements Section; and the CONCESSIONAIRE must ensure, in quality and quantity, the supply of materials for the work, carrying out at least the following tasks:

- a. The CONCESSIONAIRE will locate banks of materials that will be studied and analyzed to determine their use in the different structural layers of the pavement (granular subbase, granular base, asphalt binder, hydraulic concrete, surface treatment, etc.); as well as stone aggregates for use in Portland cement concrete (for structures, works of art and drainage), embankments, improvements to the underlay, filling, among others, if the case may be the case.
- b. The CONCESSIONAIRE, in order to determine the strata to be exploited, utilization, yields, and usable volumes of the quarries, will carry out explorations [a minimum of three (03) surveys per hectare of exploitation; if the quarry is less than one hectare, a minimum of 5 test pits will be conducted], through drilling, probing, test pits, and/or trenches; to depths not less than the maximum depth of operation considered. The prospecting locations will be placed in a way that covers the entire recommended operation area. The location of the test pits must be detailed on the topographic survey plan of the quarry.
- c. The CONCESSIONAIRE will submit an Excavation Record for each of the surveys carried out in all the quarries studied, where:
 - i. It will locate the survey with UTM coordinates of the WGS 84 Ellipsoid.
 - ii. It will detail the characteristics of the aggregates, shape, size, humidity, color, layer thickness, etc. in accordance with ASTM D-2488-09a.
 - iii. It will present the corresponding photographic views of each test pit conducted and of the analyzed quarry (different perspectives showing the strata to be exploited, the magnitude, and characteristics of the quarry)
- d. Laboratory tests to determine the physical, chemical and mechanical characteristics of quarry materials shall be carried out in accordance with the MTC Road Materials Testing Manual (current version); if tests not covered by this Manual are submitted, ASTM, AASHTO, NTP, etc. standards may be used as an alternative; these will basically be the following:

Standard Tests:

- Granulometric Analysis
- Natural Humidity
- Atterberg Boundaries (Material that passes Mesh No. 40)
 - Liquid Limit
 - Plastic Limit
 - Plasticity Index
 - Soil Classification by the SUCS and AASHTO Methods

Special Tests:

- Material that passes the No. 200 sieve
- Modified Proctor
- California Bearing Ratio (CBR)
- Resilient Module
- Thin and Elongated Particles (ratio is 1/3, 1/5: thickness/length)
- Single and Double-Sided Fracture Particles
- Friable Particles
- Specific Weight and Absorption (Coarse-grained and Fine Aggregate)
- Arena equivalent
- Los Angeles Abrasion
- Durability (Coarse-grained and Fine Aggregate)
- Adhesion between Aggregate and Bitumen
- Angularity of the Fine Aggregate
- Methylene Blue
 - Total Soluble Salts
- Sulfate Content

- Chloride Content
- Organic Impurities
- Loose and Compacted Volumetric Weights of coarse-grained and fine aggregate And any other requirements specified in the current MTC Highway Manual "General Technical Specifications for Construction" according to the proposed use.
- e. Representative samples of materials from each quarry will be subjected to all tests required by the current MTC Highway Manual "General Technical Specifications for Construction," according to the proposed use, with the minimum being:
 - Standard Tests: a set of tests for each survey carried out in the quarry. The number of prospecting locations is determined according to the operation area of the quarry.
 - ✓ Special Tests: five test sets for each quarry. The sampling sites for these tests will be the most representative of the quarry.

In order to cover the entire area and volume of operation, and to determine and establish its physical-mechanical characteristics and support compliance with Technical Specifications. Laboratory tests will be carried out in accordance with the MTC Road Materials Testing Manual (current version). If tests not covered by this Manual are submitted, NTP, ASTM, AASHTO standards may be used as an alternative.

- f. If, in order to comply with the above-mentioned and corresponding General Technical Specifications for Road Construction of the MTC (current version), it is necessary to subject the aggregate to a treatment (washing, venting, mixing, etc.); the Concessionaire must carry out at least five sets of material tests indicated in the previous item; carried out with the aggregates after undergoing such treatments, in order to corroborate and verify whether compliance with the General Technical Specifications for the MTC road construction (current version).
- g. For each quarry and type of application (base, subbase and/or fill), the Resilient Module Test must be performed in accordance with the AASHTO T 307-99 Test Standard (or its update). The samples must be processed according to the treatments proposed for use by the CONCESSIONAIRE in order to support the structural capacity of the quarries to be used in the structuring of the pavement.
- h. The quantity of samples extracted from the quarries must be such as to allow the required tests to be carried out; as well as verification tests to rectify and/or ratify rare results, when requested by the Entity.
- i. In the case of proposing rocks and/or rock outcrops as a quarry, quality tests will also include:
 - The Macroscopic Petrographic Description of the rock.
 - Define the characteristics of the outcrop (volume, fracture, block dimensioning, etc.).
 - Sampling in an appropriate size for conducting Direct Shear Tests on Rocks (c, Ø) and tests to determine the rock's elastic constants will be carried out to determine the loading factor parameters to be used in the blasting process.
 - Recommendation of the operation process methodology (blasting method, crushing method, etc.).

- j. Only the quarries closest to the Work will be selected, and that generate lower costs, that demonstrate that the quality and quantity of existing material are adequate and sufficient for the road project and that the physical, chemical and mechanical characteristics of the aggregates comply with all the corresponding General Technical Specifications for Road Construction of the current MTC according to the proposed use.
- k. The CONCESSIONAIRE will evaluate the requirements for access to quarries and water sources, considering the needs to build, improve or maintain them, etc.; it will also indicate if the accesses are owned by third parties.
- I. In addition to the test certificates, the CONCESSIONAIRE must submit a summary table for each quarry containing all the results of the tests carried out (with proper identification: quarry, calicata, sample, name of the test, results, etc.).
- m. The CONCESSIONAIRE, with the information defined in the Specialty of Route Tracing, Road Design, and Road Safety (plans in plan and cross-sections every 10 m) of all proposed quarries, will calculate the volumes: net, usable, and disposable; will locate the explorations on the plans properly referenced; and will define the period and opportunity of use, calculating the yield for each use. Also, you must establish the operating procedure for each use.
- n. The Description Report must establish information corresponding to: Location of the material bank, accessibility to it, condition of the accesses, type of material source, description of the aggregates, analysis of results, uses, yields, treatment, type and period of operation, ownership, availability of the same, gross and net volume, volume of usable and disposable material, and any other information deemed pertinent by the CONCESSIONAIRE. As well as the corresponding photographic panels of each of the quarries.
- o. The Concessionaire will present a Quarry and Water Sources Diagram, detailing in a concrete and summarized manner the results of field investigations and descriptive memory (among other aspects: location of quarries and water points, length and condition (drivability) of access roads, characteristics of aggregates, laboratory test results, uses, volume (gross, net, usable, and disposable), treatment, and performance for each proposed use).
- p. In the same way, the location of the Water Sources must be determined, their chemical analysis carried out and their quality determined to be used on the construction site (hydraulic concrete or Portland cement, granular layers and others) in accordance with the General Technical Specifications for Road Construction of the current MTC.
- q. In the event that the Concessionaire proposes material processed and marketed by private companies, it must always support the quality of the aggregate according to the proposed use; with the corresponding certification of tests (current/current: no older than six (06) months after its submission) as detailed in the previous items and General Technical Specifications for Road Construction of the current MTC.

1.3.6.3. Pavement Design:

a. The CONCESSIONAIRE will study and analyze the structure of the pavement according to the supporting capacity of the underlay, the expected traffic, the environmental conditions of the area (climate, altitude, rainfall, etc.), the natural materials available in the area, the alternatives for road maintenance, etc.

- b. The CONCESSIONAIRE in the pavement structure, if appropriate, must analyze the possibility of quantifying and considering the structural contribution of the existing granular surface layer, according to the conclusions of the geometric design of the road (axis of the Project) and that of the soil study.
- c. The CONCESSIONAIRE must analyze the behavior of the floors and the traffic study to determine the sectorization of the section, determining the pavement designs for each sector.
- d. With regard to the technical aspects related to structural pavement design procedures, the CONCESSIONAIRE, after determining elastic parameters by a rational or analytical method, will develop the AASHTO methodology version 1993 for flexible pavement and, in addition: ASPHALT INSTITUTE 1991 edition and for rigid pavement the AASHTO methodology version 1993 and in addition to PCA; or any other methodology that is contemplated in the current regulations of the MTC. The CONCESSIONAIRE, according to a technical economic analysis, will determine the road surface of the pavement for the project, except for the case of tunnels, which must be Rigid Pavement.
- e. In addition to the parameters required by the above-mentioned methods, the design should consider the following aspects: Climate, Altitude, Rainfall and Temperature Data, and in the same way, historical records will be evaluated according to SENAMHI and others, finally obtaining representative data and/or parameters for design purposes. The altitude, rainfall and temperature data, necessary for the design of the pavement, and determination of the "Performance Grade" PG of the study area for the definition of the type of asphalt binder must be supported by historical records from SENAMHI and/or others (last 10 years at least).
- f. In the study report, you will present the calculation memory of the pavement design with the support of all the parameters used, following the own instructions/guidelines of the Design Guide used, as well as present the algorithms and equations used in the editable digital version for evaluation.
- g. The design of the Flexible Floor will be carried out for a period of analysis of 30 years carried out in two stages, the first for a period of 20 years and the second for the following period of 10 years, and the Rigid Floor will be carried out for a period of analysis of 30 years executed in a single stage. After the corresponding technical economic analysis, you will establish the alternative to be executed.
- h. For pavement, the Reliability Level will be 95% and the Final Servicability Index will be equal to 3
- i. In the tunnel area, the CONCESSIONAIRE will consider rigid pavement and will design with the AASHTO methodology version 1993, for 30 years in a single stage.
- j. The CONCESSIONAIRE, through the application of the HMD IV Program version 2.08 or the one in force at the time, must detail the policies for routine and periodic maintenance of the pavement according to the required service levels (periods and activities: routine maintenance and periodic maintenance) to be carried out throughout the project design period for both flexible and rigid pavement. The information required by the HMD IV program (in its latest version) must be provided through the AMS platform following the specific interfaces available for each type of data.

- k. The CONCESSIONAIRE, with the knowledge of the proposed quarries and the physical-mechanical characteristics of the aggregates, will carry out a pre-design of the asphalt mixture as well as define the type of asphalt to be used according to the traffic, altitude, temperature and precipitation characteristics of the area. On the pre-designed asphalt mixture, you must carry out moisture susceptibility tests including TSR (AASHTO T283) and Hamburg Wheel Track test (AASHTO T324).
- I. The CONCESSIONAIRE, with the knowledge of the proposed quarries and the physical-mechanical characteristics of the aggregates, will pre-design the hydraulic concrete mix of the rigid pavement with its corresponding strength support obtained and used in the design.

1.3.6.4. Studies for pavement rehabilitation

In those sectors where the rehabilitation of the existing pavement is contemplated, the CONCESSIONAIRE will carry out a detailed evaluation of the functional and structural condition of the pavement; with the objective of supporting and establishing alternatives for rehabilitation and/or improvement.

1.3.6.5. Evaluation of the Functional Condition of the Pavement

The Evaluation of the Functional Condition of the Pavement includes the Evaluation of Failures, the Evaluation of the roughness and texture of the pavement (macrotexture and microtexture)

The CONCESSIONAIRE will evaluate the defects or deterioration of the pavement, by carrying out the fault survey, which should serve to qualify the surface condition of the pavement with the determination of the Pavement Condition Index (PCI), using the method of the same name (application of ASTM D 6433 - 99, Standard Practice for Roads and Parking Lots Pavement Condition Index Surveys).

The survey must be carried out on 100% of the surface of the pavement and the berms; the technology to be used for the detection of faults and the processing of the results of the measurements will be carried out through direct measurements of the fault survey (traditional method). The evaluation will make it possible to sectorize by type of intervention on the pavement surface, considering the structural evaluation of the pavement.

The CONCESSIONAIRE must prepare a detailed table of the evaluation and determination of the ICPs according to the proposed sectorization, according to the formats recommended in the corresponding standard.

The results of this evaluation should make it possible to establish the state of progress of pavement deterioration, and in the first instance its condition and the level of intervention required by the pavement at the date of its evaluation.

The CONCESSIONAIRE will evaluate the functional condition of the existing pavement by measuring its surface regularity (roughness), using equipment and measurement methods that are compatible with the Class 1 or Class 2 measurement methods established in World Bank Technical Paper No. 45 (1986), or with those established in the ASTM E 950 standard. For use in the project, the equipment must first have their respective technical support (calibration and approval, current certification).

If Inertial profilometers are used, the equipment's current calibration certificate will be attached.

In any case, field measurements will be carried out continuously every 100m, along the entire road and in each lane, which will allow us to calculate an IRI value (average and characteristic).

All the native data recorded by the inertial profilometer (source/native file) will be part of the information to be provided in support of the established design parameters. As well as the processing of the data, the algorithms and equations used in an editable digital version for evaluation.

The ultimate objective of evaluating the functional condition of the pavement will be to determine the value of the Present Serviceability Index (PSI) of the pavement based on the measured roughness values, and the use of the theory and algorithms produced by the International Experiment for Road Roughness, whose results were published in the World Bank Technical Paper No. 45 (1986), which will allow us to establish the state of progress of the deterioration of the pavement through the Serviceability parameter, and to establish in a second instance the type of treatment that must be performed

The evaluation of the macrotexture (standard MTC E 1005) and microtexture (standard MTC E 1004) of the road surface will be carried out every 100 m alternating in each direction (the measurement will be carried out in each of the lanes and along the entire section) and in specific areas where deficiencies in the surface texture are observed.

1.3.6.6. Evaluation of the Structural Condition of the Pavement

The CONCESSIONAIRE will evaluate the structural condition of the pavement using methods that use equipment or instruments whose measurements of deflection or deformed curves of the pavement allow modeling and calculations of elastic parameters through mechanical theories, such as those using the "Falling Weight Deflectometer" impact deflectometer (Dynatest FWD, Kuab FWD or others). To do this, you must attach the current calibration and/or approval certificate of the equipment, issued by an institution specialized in the maintenance and/or manufacture of such equipment.

In any case, the frequency of measurements of deflection curves may not exceed 50 m alternating in each direction (The measurement will be carried out in each of the lanes and along the entire section). To determine the deflection bowl at the test point, at least seven deflections must be measured, with the maximum deflection and the deflections at 8 and 12 inches from the point of load application being mandatory. With this information, the maximum deflections corrected for load and temperature, the elasticity modules of the subbasement (Eo) and the pavement (E^{*}) must be obtained, values that must be correlated with the resilient modulus in situ determined from the existing field conditions and the constitutive equation established in the corresponding resilient module test, etc., parameters that you will later use in the designs.

Within the structural evaluation of the pavement by means of deflections, parameters of the deflection bowl must be established for analysis and evaluation, such as Radius of Curvature, A (Area), SCI (Surface Curvature Index), BCI (Base Curvature Index), BDI (Base Damage Index), etc.

All the native data recorded by the impact deflectometer (source/native file) will be part of the information to be provided to support the established design parameters, as well as the processing of the data, the algorithms and equations used, in an editable digital version for evaluation.

The ultimate objective of the structural evaluation of the pavement will be to determine its Effective Structural Number (SNe) or similar parameter, which will be used in the design or calculation of the reinforcement.

1.3.6.7. Soil Prospecting and Destructive Pavement Testing

In the case of soils and where it can be seen that the pavement retains its structural characteristics, the minimum number of surveys to be carried out will be a survey every 03 km or at least 03 by sectorization. The execution of these surveys should make it possible to obtain samples for each stratigraphic variation, and the development of stratigraphic columns. Based on this information, the physical characteristics of the underlay materials (granulometry, consistency limits, density, humidity, degree of compaction, CBR, Resilient Module for each type of soil, etc.) will be determined through laboratory tests, to be analyzed and compared with the results of the calculation of elastic parameters of the Structural Evaluation.

The most representative soil subgrade Resilient Module tests will allow the calculation of the correction factor "c" for the retrocalculation methodology of the AASHTO version 1993.

For areas and/or sectors where the evaluation of the pavement indicates that it presents severe structural and/or functional problems, or there are deflections greater than the admissible ones, surveys (test pits) must be carried out and the necessary samples taken, both of the underlay and layers that make up the structure of the pavement, to carry out tests that determine the physical, mechanical and/or chemical characteristics of the sampled materials, so that they can be analyzed together with the results of the evaluations, define their causes, and so that the most appropriate solutions can be considered. The number of surveys and location will be defined by The CONCESSIONAIRE, the same ones that must support the phenomenon (problem) in that sector. For each test pit that is carried out, its georeferenced location must be recorded, which allows easy location and, if necessary, the verification of soil stratigraphy.

The CONCESSIONAIRE will take special care to identify and classify the sectors of the section that present high deformations of the pavement, analyzing their causes, origin and proposing the corresponding duly supported solutions.

Extraction of asphalt binder cores in areas to be defined based on previous works, with the purpose of determining their thicknesses.

1.3.6.8. Sectorization of the Section

Based on the results of the functional and structural evaluation of the pavement, the section will be sectorized using the methodology indicated in Appendix J of the AASHTO 93 Design Guide (Cumulative Differences); the sectors that will have the same Periodic Maintenance treatment (Homogeneous Sectors) will be formulated and supported. Variables such as traffic, climate, altitude, type of pavement structure, geometric characteristics of the sector and others that are applicable will be taken into account.

In any case, the CONCESSIONAIRE must consider that the coefficient of variation of roughness and deflection in each Homogeneous Sector must be 15% and 30% respectively. In specific cases, other limits may be considered, provided they are properly supported.

1.3.6.9. <u>Designs</u>

Based on the results of the pavement evaluation, surveys and destructive tests on the pavement, and the sectorization of the section, the CONCESSIONAIRE will propose the designs and solution alternatives for the rehabilitation of the pavement, including repairs and maintenance work that must be carried out beforehand.

The CONCESSIONAIRE may use the most appropriate methodology to propose the solutions (AASHTO in its 1993 version, or similar), after determining elastic parameters by a rational method for a design period of 20 years, and will present in a calculation report all the criteria adopted, describing step by step how the results have been obtained.

In a supplementary or alternative way, the CONCESSIONAIRE may propose the use of testing and design standards, or technical criteria used by renowned entities or organizations in North America or Europe, provided that their use for the optimization of the project is technically justified.

1.3.7. STUDY OF STRUCTURES AND WORKS OF ART

The CONCESSIONAIRE must consider all the different types of bridges, walls and sewers, etc., without being limited by the material they are made of.

The CONCESSIONAIRE must carry out the Inventory, as well as the Structural Evaluation of existing structures (to withstand HL93 overload) using the AASHTO Manual For Bridge Evaluation, MBE, as well as evaluate their substructure taking into account the criteria of the AASHTO Guide Specifications for LRFD Seismic Bridge Design, as well as the publication Seismic Retrofitting Manual for Highway Structures: Part 1-Bridges (2006) of the Federal Highway Administration; also, if appropriate, the temporary bridge manuals should be taken into account in order to obtain the necessary parameters for use as a temporary pass if appropriate.

The analysis and design of all structures must comply with current standards or regulations (AASHTO LRFD Specifications and the criteria of the AASHTO Guide Specifications for LRFD Seismic Bridge Design; for particular aspects specific to our country, use the MTC Bridge Manual), according to the material determined to be appropriate and the seismic conditions of the area.

- 1. Present the Descriptive Report of the proposed Structures.
- 2. Perform calculations preferably based on computerized systems, whose detailed memory will be provided together with the drawings.
- 3. The design of the structures of bridges and tunnels will be carried out using specialized software that is often used to model the elements that make them up and the application of loads at the different stages of their construction.
- 4. Present the items for each proposed design and work (rehabilitation, extension, reinforcement, construction, etc.).
- 5. The CONCESSIONAIRE must propose a remote instrumentation and monitoring system if there are unique typologies (bolts, pendants...) to monitor and evaluate the behavior of these structures in real time to ensure their proper functioning during their useful life, as well as to have information on their structural behavior, derived from their normal operation and in the face of natural phenomena, which will allow preventive maintenance decisions and implement corrective measures if necessary.
- 6. For public service pipes (water, drainage, electricity, telephony, etc.) that are attached to existing structures and that, as a result of the study, the intervention of these structures is required (replacement, rehabilitation or reinforcement), the CONCESSIONAIRE must propose the temporary relocation of these services during the intervention period so as not to interrupt the service, once the work on the structure has been completed, these pipes must be attached

to the structure; therefore, the weight of these pipes must be considered in the analysis of the structure.

7. In the case of evaluating existing structures, the CONCESSIONAIRE will carry out a series of tests to estimate the quality of the materials that make it up.

BRIDGES

- 1. The structural specialist must constantly coordinate with the road layout and design specialist, in order to make the most of the existing bridge.
- 2. New structures or structures to be replaced should be designed after the best location has been defined according to local conditions.
- 3. The general view plans must show the maximum water levels, foundation levels, level of planting, undermining, in addition to being accompanied by the stratigraphic terrain profile scheme with level references, profiles on the axis and downstream and upstream to allow us to assess topographic conditions, level curves in plan must be bounded, etc., all characteristics must be based on basic studies.
- 4. The type and dimensions of the superstructure and substructure shall be established based on:
 - The parameters resulting from the basic studies, for which the summary table will be presented of the technical data of Hydrology and Hydraulics and Geology and Geotechnics that will be used for the analysis and design of projected bridges.
 - ✓ The location of the planned bridge must be evaluated by the specialties of Topography and Road Design, Hydrology and Hydraulics, Geology and Geotechnics and Structures.
- 5. The design must be done following the AASHTO LRFD Bridge Design Specifications, the LRFD Guide Specification for Design of Pedestrian Bridges and the AASHTO Guide Specifications for LRFD Seismic Bridge Design, complemented for the particular aspects of our country with the MTC Bridge Manual.
- 6. Present the following general plans:
 - Topographic plan including the river or stream with the axis of the bridge (area comprised 350.0 m from the upstream axis and 300 m downstream), indicating reference points (progressive and GPS coordinates) and levels, according to the geometric design of the road.
 - ✓ Topographic plan indicating the existing structure and the planned one.
 - ✓ Location General view in plan and elevation based on a detailed topographic and bathymetric survey of the location area, the general view must present the axis of the track and at least two profiles parallel to it, both upstream and downstream; it must also present the levels of foundation, NAME, the profile of the new projected channel, transmitted pressure, undermining, etc. In the bridge's elevation plan, the NAME and the gauge located upstream (edge of the superstructure) will be used.

- Substructure (excavations, formwork- reinforcement of abutments, pillars or starts).
- Superstructure (formwork reinforcements made of concrete beams and slabs, steel beams, metal lattices, etc.).
- ✓ Plan of structures to be demolished.
- ✓ For unconventional bridges (arches, trusses, hanging, braced and others), a diagram of the assembly and/or construction process must be presented in accordance with the geometry of the accesses and characteristics of the river or ravine.
- Detail plan of the provisional passes (Plan, profile and cross sections).
- ✓ Typical details (supports, expansion joints, drainage pipes, railings, approach slabs).
- ✓ Reinforcement details (for HL93 overload).
- ✓ In the detail plans, you must indicate on one of the stirrups the embossed engraving of the informative summary containing data such as: SIC of design, date of construction, etc.)
- Complementary Works (Riverside Defenses and Protection).
- ✓ Perform an inspection of the Superstructure (element by element) and carry out the structural evaluation (use the Manual for Bridge Evaluation, MBE.).
- Preparation of plans for existing bridges that will be used for structural evaluation (Manual for Bridge Evaluation).
- ✓ Carry out an inspection of the Substructure and complementary elements (expansion joints, supports, railings, etc.), in order to determine the costs that these works will require.

WALLS

- a. These may be made of concrete executed in situ, of prefabricated concrete or of reinforced earth, among the types set for in the Highway Manual. Tunnels, Walls and Complementary Works
- b. For the design of cut and fill retaining walls, soil investigation test pits will be carried out (to obtain strength parameters), at depths that ensure the service life of the structure; complementary sections, profiles, and levels will be taken, determining their layout, elevation, and foundation levels.
- c. Make designs for each floor established as typical, considering that its height may vary.
- d. Perform the verification of rollover and slip stability, for static and dynamic conditions, in accordance with the AASHTO LRFD methodology.
- e. The design must be verified for soil resistance capacity due to the ultimate pressures exerted, in accordance with the AASHTO LRFD methodology.
- f. General view plans (Plan, profile and cross sections) of walls must be submitted, indicating the foundation dimension, heights and lengths, and a summary table of the walls must be presented, indicating: location, height, base length and transmitted pressure.

SEWERS, SPEED BUMPS, CANALS AND WATER PASSES.

a. Designs must be made in accordance with the requirements of the AASHTO LRFD Bridge Design Specifications.

- b. The general view plans (Plan and profile) of the speed bumps and sewers must be presented, this in addition to the drawings of the formwork and reinforcement details.
- c. For speed bumps and sewers, account must be taken of works complementary to the entry and exit of water (stone bolts, dissipation pools, etc.).

TUNNELS

- a. Design the necessary structures based on information on the resistant load capacity, settlement, availability of materials and equipment in the work area, as well as the economic aspect.
- b. Perform calculations based on computerized systems, whose detailed calculation memory will be provided together with the plans.
- c. The CONCESSIONAIRE will carry out the analysis and design of the support, verification, drainage and other structures necessary for pedestrian traffic, and must design all the structures (duets) that are necessary to complement the Tunnel accessories.
- d. The CONCESSIONAIRE must respect the characteristics of the geometric design of the road.
- e. The typical structural design, the selection of materials for construction and the construction procedures to be used must be in accordance with what is indicated in the Technical Manual for Design and Construction of Road Tunnel of the AASHTO year 2010 at least.
- f. Establish a schedule for maintenance and a plan for the operation of the Tunnel.

Once the project is completed, a form with the Tunnel data must be submitted.

1.3.8. MEASUREMENTS, TECHNICAL SPECIFICATIONS, WORK BUDGET, WORK EXECUTION SCHEDULE

Consider a Cost Report where all types of information regarding the preparation of measurements should be included. Construction budget, Work execution schedule, and Technical Specifications, which will include typical sections of the pavement structure, summary table of quarries, water sources, and DMEs (Material Deposit Exploration), summary tables of works of art, etc. Mention environmental authorizations for their operation, indicate the climatic factors or other factors considered to formulate the work schedule, etc.

MEASUREMENTS

The measurements will be carried out considering the work items to be executed, the unit of measurement, the proposed designs indicated in the site plans and longitudinal profile, cross-sections, longitudinal sections, and specific construction designs and details.

The CONCESSIONAIRE must provide proper documentation of the measurements for each work item, in accordance with the plans and technical specifications.

Each measurement sheet must indicate, where applicable, the identification code of the drawing used to determine the quantity of work to facilitate review. Likewise, the measurement sheets should include typical sections and/or diagrams identifying the measurements considered for each item.

TECHNICAL SPECIFICATIONS

The Technical Specifications must be prepared for each of the items that make up the construction budget, defining the nature of the works, construction procedures and forms of payment. These technical specifications constitute the rules that define the specific presentations of the execution stage of the work; that is, description of the works, construction methods, quality of materials, quality control system, measurement methods and payment terms. Those technical specifications will present the same numerical codes or ITEMs as the baseline budget and the summary of measurements.

The **Technical Specifications** will be developed for each item of the project, in terms of particular specifications and will be consistent with the nature of the work, based on the recommendations and solutions formulated by each specialist; they must be subject to the standards indicated in these TORs, and the contractual framework of the Contract, in addition to the AASHTO and ASTM standards and specifications will be used. They will include quality control, tests during the execution of the work, aspects related to environmental conservation and safety factors at each stage of the execution process of the works; so that in the event that they are incorrectly executed, corrective measures can be taken in a timely manner.

The Technical Specifications will include activities for the conservation of the environment, topographic replanning, the construction of camps, the general cleaning of the work, etc.

The Technical Specifications of the project must be prepared in coordination with the other specialists of the CONCESSIONAIRE.

UNIT PRICE ANALYSIS:

Unit Price Analysis will be conducted for each necessary item and subitem according to the particular characteristics of the work, considering the composition of labor, equipment, and materials, the performance of corresponding labor and equipment, the distance to water sources and construction material quarries, their operation cost, the cost of other materials, machinery, and equipment to be installed in the work including freight, taxes, insurance, and in general, all costs indicated in the construction activities recorded in the price analysis must be duly supported with their corresponding quotations. The analyses will be prepared in detail, both for direct and indirect costs (fixed overheads, variables and utility).

The Cost Analysis will include direct and indirect costs separately, dividing them into domestic and foreign currencies, depending on their origin.

CONSTRUCTION BUDGET:

The Work Budget must be calculated based on the measurements and unit price analysis, differentiating the direct costs, indirect costs, and the corresponding VAT. The budget must be prepared using the S10 program or another similar program.

WORK EXECUTION PROGRAM:

The CONCESSIONAIRE must formulate the Work Execution Schedule, considering any restrictions that may exist for the normal development of the works, such as rain or adverse weather conditions, difficulty accessing certain areas, etc. The work execution schedule will be prepared considering the items entered in the work budget, using the PERT-CPM and GANTT methods using the MS Project or another similar software that the entity has available for revision, identifying the activities or items that are in the Critical Path of the project.

In this schedule, the CONCESSIONAIRE must explicitly and explicitly determine the Project's Critical Route.

The CONCESSIONAIRE must make it clearly established that the work execution schedule is applicable for the climatic conditions of the area in accordance with the schedule of economic disbursements established with the term for the execution of the contract and based on the work execution program (PERT-CPM). It will also present a valued work execution schedule, material acquisition schedule and equipment use schedule, agreed with the work execution schedule.

In the programming, special emphasis will be placed on evaluating the mobilization and installation stage of camps.

1.3.9. PLAN FOR SELF-EVALUATION OF SERVICE LEVELS AND INFORMATION TECHNOLOGY SYSTEMS, CONTROL AND MANAGEMENT

The CONCESSIONARE must prepare the Service Level Self-Assessment Plan in accordance with Annex No. 11.

The CONCESSIONAIRE must prepare the Final Engineering Study of the different Information Technology, Control and Management Systems to be used throughout the project and in each of its phases in accordance with the provisions of Appendix 1 of Annex No. 3 with their respective sections included, with at least the following to be considered:

- TOLL systems, with special attention to ELECTRONIC TOLL systems.
- AMS platform, with special attention to integration with the comprehensive management system.
- Tunnel control and management subsystem, with special attention to the SCADA system.
- OCC management system.
- SPEED CONTROL system.
- VEHICLE IDENTIFICATION system.
- Systems used for INFORMATION CHANNELS.

1.3.10. ELECTRIFICATION PROJECT FOR LIGHTING, VENTILATION, OPERATION, TUNNEL SAFETY SYSTEMS

The CONCESSIONAIRE must develop the Comprehensive Electrification Project for the Supply and Electrical Installation of the necessary facilities of the road tunnels, such as lighting, ventilation, operation, and safety systems. This project must be prepared in accordance with the provisions of **Part IV**, **Tunnel Installations**, of the Highway Manual. **Tunnels, Walls and Complementary Works**, approved with a Chief Resolution! W 036-2016-MTC/14 del27.10.2016. The CONCESSIONAIRE must ensure the drivability and safety of road tunnel users.

The Comprehensive Electrification Project for Electrical Supply and Assembly must be delivered directly to the Electric Service Concessionary Company, for review and approval.

2 TECHNICAL FILE

The CONCESSIONAIRE will prepare the Technical File of the Project at the Work Execution level, which will include the development of what is indicated at least as indicated in these TORs, for which the CONCESSIONAIRE must take into account the provisions of current regulations.

The project will be developed under a Building Information Modeling (hereinafter BIM) work scheme, the specification of the scope and limitations of the BIM Model throughout the development of the project, roles, communication, conventions for the elements of each specialty must be presented as part of the BIM Execution Plan as specified in Annex No. 3, Appendix 1, Section C.

The BIM framework will be the working format for all project members: GRANTOR, CONCESSIONAIRE and Supervisor.

The Technical File will be presented according to the minimum structure that the Final Engineering Study must contain and which is made up of the following volumes:

- Volume No. 01 : Executive Summary.
- Volume No. 02 : Descriptive Memory
- Volume No. 03 : Engineering Component (*).
- Volume No. 04 : Measurements.
- Volume No. 05 : Technical Specifications.
- Volume No. 06 : Analysis of Unit Prices, Schedules and Construction Budget.
- Volume No. 07 : Technical Economic Study.
- Volume No. 08 : Right of Way:
- Volume No. 09 : Auxiliary Areas and Authorizations.
- Volume No. 10 : Project Plans.
- Volume No. 11 : Annexes
- Volume No. 12 : Compact Discs with digital files from all over the Studio (Word, Excel Autopad S10 _____ BIM etc.)
- Excel, Autocad, S10, BIM, etc.).
- Volume No. 14 : Auxiliary Areas and Authorizations
- Volume No. 15 : GIRA-PMA Archaeological Component

(*) It must be submitted separately for each specialty.

Volume No. 01 - EXECUTIVE SUMMARY

Consider the general summary of the project, stating in a generic form and with the required clarity the content and objective of the project. It must also include the list of systems and works proposed in each specialty, indicating quantity and type, as well as the work budget, execution term, schedules, and others that describe the characteristics of the project and the solutions adopted.

The list of all the professional personnel who make up your technical offer, responsible for preparing the Study in each activity of the project will be attached; this list will show their specialty, full names and surnames, profession, professional registration and signature according to the registration of the corresponding College.

Volume No. 02 - DESCRIPTIVE REPORT

- 1. introduction
- 2. Overview.
- 3. Location Plan, Key Project Plan, and Typical Pavement Sections.
- 4. Description of the project, location, objectives, goals of the project, methodology used, professional personnel who participated in the project, reference value of the project, execution term, brief summary of each of the studies carried out including photographic views:
 - 4.1 Summary of the Traffic Study.
 - 4.2 Summary of the Georeferencing, Topography, Tracing and Road Design Study.

- 4.3 Summary of the Road Signage and Safety Study.
- 4.4 Summary of the Geotechnical and Geotechnical Study.
- 4.5 Summary of the Hydrology and Hydraulics Study.
- 4.6 Summary of the Study of Quarries, Water Sources, Soils and Pavement.
- 4.7 Summary of the Study of Structures and Works of Art.
- 4.8 Summary of Measurements, Work Budget, Work Execution Schedule, and Disbursement Schedule.
- 4.11 Summary of Auxiliary Areas and Authorizations
- 4.12 Information Technology, Control and Management Systems
- 4.13 Electrification Project for the ventilation, operation, and safety systems in the tunnels.
- 4.14 Service Level Self-Assessment Plan
- 4.15 Conclusions and Recommendations

Volume No. 03 • ENGINEERING STUDIES

The development of Engineering Studies must be submitted separately for each of the specialties required in the scope of the Service,

Volume No. 04- MEASUREMENTS

THE CONCESSIONAIRE will submit the volume taking into account the provisions of numeral 4.3.8 of these TORs.

The measurements will be detailed for each specific item of the budget and will include diagrams, sections, and typical sketches.

- 1. Preliminary Works Measurements.
- 2. Earthworks Measurements.
- 3. Measurements of Sub-base and Base.
- 4. Measurements of Pavements.
- 5. Drainage and Structures Measurements.
- 6. Bridge Measurements
- 6. Transportation Measurements
- 7. Sewerage System Measurements (Rainwater Drainage).
- 8. Measurement of Signaling and Road Safety
- 9. Measurement of Complementary Works.
- 10 Measurement of Slope Stability, Formation of Dumps, Material Sources, etc.
- 11 Calculation of transport distances.
- 12. Measurement of Special Works
- 13. Measurement of Environmental Protection
- 14. Measurement of Information Technology, Control, and Management Systems
- 15. Measurement of the Electrification Project for the ventilation, operation, and safety systems in the tunnels, and trunk lighting.
- 16. Others

Volume No. 05 • TECHNICAL SPECIFICATIONS

THE CONCESSIONAIRE will submit the volumes taking into account what is established at least in these TORs.

With regard to Information, Management and Control Technological Systems, technical specifications are equivalent to presenting Detail Engineering.

With regard to the Service Level Self-Assessment Plan, the technical specifications are equivalent to the full definition of the methodology to be used, as defined in Annex No. 11.

Volume No. 06•ANALYSIS OF UNIT PRICES, SCHEDULES AND CONSTRUCTION BUDGET

THE CONCESSIONAIRE will carry out an analysis of the unit costs by item, taking into account the particular characteristics of the work; the labor requirements; the distance to the construction materials quarries, their operating cost; the cost of other materials and their transport; machinery and equipment to be installed on the site including freight, taxes, insurance and, in general, all the costs indicated in construction and assembly activities.

The cost analysis will include direct and indirect costs separately, dividing them into domestic and foreign currencies, according to their origin:

- 1. GENERAL CONSIDERATIONS
- 2. Bases for calculating unit prices.
- 3. Direct cost analysis.
- 4. Indirect cost analysis, differentiating between fixed and variable costs.
- 5. Relationship of prices and quantities of resources required.
- 6. Summary of cost components and unit prices by item
- 7. Construction Budget.
- 8. Polynomial Formulas.
- 9. Work execution schedule.
- 10. Disbursement Schedule
- 11. Equipment utilization schedule.
- 12. Material acquisition schedule.
- 13. Minimum Equipment Ratio
- 14. Minimum Laboratory Equipment Ratio
- 15. Valued work progress schedule.
- 16. Quotations

Volume No. 10- PROJECT PLANS

The plans will have a uniform presentation and size, and must be delivered properly protected in clipboards that hold them together but that allow them to be easily broken down.

They must be identified by appropriate numbering and coding and will show the date, stamp and signature of the Specialist and the Project Manager.

Without being limited to the list detailed below, the most important plans and their contents will be the following:

- 1. General report and plan index.
- 2. Location plan, showing the roads, populated centers and most important projects, within the area of influence of the study.
- 3. Road Reference Point Plan, where the following information will be placed: geodesic points, points of the main polygonal, points of the support polygon, each of these points with its respective designation and coordinates (North, East and Dimension in UTM coordinates), the existing road, axis of the projected road. These plans will be presented at an appropriate scale that allows them to be read and verified.
- 4. Key plan at 1/25000 scale on non-deformable paper with UTM coordinates, showing the geographical features, populations, means of communication, sources of materials, dumps, etc., existing in the study area, in addition to a table of distances, altitudes, traffic and any other information deemed necessary.
- 5. Plan of standard sections, scale 1:50 (H) and 1:5 (V) indicating all dimensions and other characteristics of the works included in the cross section of the road, such as width and thickness of the different layers of the pavement, berms, ditches and drains, inclination of the slopes, crowning ditches or foothills, width of the Right of Way, etc.
- 6. Floor Plans and Project Profile at the scales 1:2000 (H) and 1:200 (V), with the nomenclature required by Peruvian Standards. The floor plans will indicate the references of the floors, Right of Way limits, slopes, alignments, location of sewers (differentiating existing ones from those projected) indicating the direction of flow and type, walls, crowning and drainage ditches, guardrails and other important complementary works. On the profile drawings, the location and reference of the BMs, sewers (differentiating the existing ones from the planned ones and indicating if they will be replaced), cutting heights, or filling, alignment, bridges, pontoons, ditches, drainage ditches and other structures will be indicated.
- 7. Plans of cross sections indicating the areas of explanations and dimensions of land and underlay in each section, at a scale of 1:200 in rural areas and 1:100 in urban areas. The location of walls, gabions, subdrains, drainage ditches and other road structures must be indicated on the cross sections.

- 8. Floor plans and profiles of urban areas at a scale of 1:500 (H) and 1:50 (V)
- 9. Mass diagram, showing volume compensations, partial transport distances and the classification of materials. Horizontal scale 1:25000.
- 10. Plans of quarries, dumps, water supply sources, plant scale 1:2000, showing location, sections or test pits (vertical scale 1:20), volumes and other technical characteristics, data about the period of use, method of operation, use, yields, access facilities and transport distances according to the distribution diagram you must submit.
- 11. Geological and geotechnical and geodynamic floor plans of the project at 1:2000 (H) and 1:200 (V) scales, slope stability analysis (1:200 scale) and detailed design plans in a 1:1 OO scale, with the nomenclature required by Peruvian Standards. The floor plans will indicate, among other references, the unstable and critical sectors, their location, including the required control and stabilization works, among others; walls, crowning and drainage ditches, bridges and other important complementary structures, the regional geological, geotechnical and geomorphological plan that will be at a t25000 scale (Topographic Base of the PETT).
- Soil profile plan, classification of materials of the different strata, their physical constants, CBR and other technical characteristics as well as their possibilities of use. Scale 1:10000 (H) and for the stratigraphy of the test pits, 1:20 (V).
- 13. Water basin plans and hydrology (scale 1:50000 or less).
- 14. 1:5000 (H) scale plans of the projected drainage system, with the location of ditches, ditches, sewers, etc. The longitudinal profile of ditches and/or drainage ditches parallel to the road will be presented, with an indication of dimensions and their outlets to sewers, pontoons or others, as well as the cross sections of all drainage works, on a scale of 1:100, with an indication of entry and exit dimensions, slopes, type of drainage work, headers, etc.
- 15. Plan of Quarries and Water Sources on a variable scale, in which you will detail in a concrete and summarized form the results of the field investigations.
- 16. Topographic plans of the location of bridges and pontoons, 350 m upstream and 300 m downstream, on a 1/1000 scale and with level curves at intervals of 1.00 m indicating reference points and levels, according to the geometric design of the road. General plan and elevation view based on a topographic and bathymetric survey of the location area.
- 17. Regional and local geotechnical geological road plans, at 1:5000 and 1:500 scales, considering geomorphology, stratigraphy, structural geology, geodynamic risk, unstable and critical sectors, etc. The longitudinal profile of the road will be presented in important sectors or every 5.0 km at most, as well as the cross sections of unstable and critical sectors at a scale of 1:200, with all the geological-geotechnical information in accordance with standards.
- 18. Local geotechnical geological plans of Bridges, Pontoons, Tunnels, Critical and Unstable Road Sectors, at a 1:200 scale, considering geomorphology, stratigraphy, structural geology, geodynamic risk, etc. The longitudinal profile of the structure will be presented, every 30.0m., as well as the cross sections at a 1:100 scale, with all the geological-geotechnical information in accordance with standards.
- 19. Superstructures (formwork, beam and slab reinforcements, lattices, etc.); substructures (excavations, formwork, reinforcement of concrete abutments, pillars, etc.). Details of supports, expansion joints; drainage, railings, approach slabs, complementary works, etc.
- 20. Plans of structures to be demolished, details of reinforcement or repair if applicable
- 21. Variable scale plans depending on the design of works of art (sewers, walls, ditches, etc.) with tables of quantities corresponding to the different items included in the budget and in accordance with the given specifications.
- 22. Signage and Road Safety Plans; they will be presented on a variable scale and will include signage during the execution of the work; vertical signs (preventive, restrictive and informative signs); detail of the fixing posts; road safety elements, guards, tacks, delineating posts, etc. In addition, a general road sign and safety plan will be presented, at a scale of 1:2000, clearly locating the corresponding vertical signs and road safety elements.
- 23. Right of Way Delimitation Plans

Volume No. 11 - ANNEXES

Annex No. 01 : Annex No. 02 :	Traffic Field Information (formats, counting boxes, etc.). Topography and Trace Field Notebooks. THE CONCESSIONAIRE must provide the tracing, leveling and cross- section notebooks; also a list of the BMs, Pis and their references; spreadsheets, diagrams, tables and graphs that have been used to prepare the documents submitted.
Annex No. 03:	Field information and laboratory tests from the Study of Geology and Geotechnics.
Annex No. 04 :	Field information and statistics from the Hydrology and Hydraulics Study
Annex No. 05:	Field information and laboratory tests from the Study of Soils, Quarries, Water Sources, Pavements.
Annex No. 06 :	Field information and testing of Structures and Works of Art.
Annex No. 07 :	Environmental Impact Study—PACRI Field Information

Volume No. 12 •COMPACT DISCS

THE CONCESSIONAIRE must deliver the compact discs, with the files corresponding to the Study, in an orderly manner and with an explanatory report indicating how to fully reconstruct the Final Report. The Final Engineering Study will be presented in AUTOCAD or MICROSTATION formats for Plans, MS WORD for Texts, MS EXCEL for Spreadsheets, MS PROJECT for Programming, S10 or BC3 for Costs, etc., including HDM files.

In the same way, the CONCESSIONAIRE will present the compact discs (CD or DVD) of the digital version (PDF extension) of the scan of the Technical File printed and in BIM version and delivered to PROVIAS NACIONAL, duly sealed and signed by the Legal Representative, Head of the Studio and Specialists responsible for its preparation.

ANNEX No. 4 PROPERTY RELEASES

Appendix 1 Direct Dealing Procedure

1. SCOPE

By virtue of this document, the CONCESSIONAIRE undertakes to carry out all activities related to direct contact with Taxable Persons for the release of property from the Right of Way and/or the relocation of the same to other homes, as described below, and the GRANTOR, for his part, undertakes to recognize to the CONCESSIONAIRE the expenses and costs incurred by the activities described in this appendix.

The payment or reimbursement corresponding to this activity will be made in accordance with the provisions of Appendix 3 to Annex No. 4 of this Concession Contract.

In this regard, the CONCESSIONAIRE will implement a system for the management and monitoring of the property release process described in this Appendix, including the required geographical information, documentation and reports. This technological solution must be integrated with the AMS platform.

Any activity that is not expressly attributed to the CONCESSIONAIRE in this appendix will be understood as the responsibility of the GRANTOR. In this context, all activities outlined in this Appendix that have been executed by the GRANTOR, as progress in the Acquisition and Expropriation of properties necessary to carry out the Project Works, during the structuring, transaction, and/or contractual execution phases, shall be considered by the CONCESSIONAIRE as fulfilled activities as established in subsection viii) of clause 3.8 of the Contract, and shall continue with the property release work regarding the remaining properties as established in the Property Acquisition Plan (LAP) and the work plans for the LAP execution.

Anything not provided for in this appendix will be governed by the Applicable Laws and Provisions to this matter.

1.1 CRITERIA FOR RELOCATING TAXABLE PERSONS TO OTHER HOMES PURCHASED BY THE CONCESSIONAIRE

In accordance with the valuation established in numeral 2.4 of this appendix, the CONCESSIONAIRE will relocate Taxable Persons whose properties and/or buildings have an assessed value lower than the cost of acquiring a social housing established by Supreme Decree No. 007-2019-HOUSING and/or its amending or replacement regulations. In the same way, compensations established by Applicable Laws and Provisions may be made.

For the application of this clause, the Parties shall take into account the Supreme Decree that establishes the update of the maximum value of social housing that is in force at the date of the corresponding appraisal.

1.2 SOCIAL CONTEXT

Social characterization works will identify the following key social issues:

- Related to the relocation of Taxable Persons who claim to be owners of properties located within the Right of Way.
- Related to the relocation of Taxable Persons who own businesses that use public spaces.
- Related to the relocation of owners or occupants (Taxable Subjects) of properties located within the Right of Way.
- Related to the distrust of the population due to negative experiences of other projects.

2. ACTIVITIES IN THE AREA OF PROPERTY RELEASE BY DIRECT TREATMENT

2.1 ACTIVITIES RELATED TO TECHNICAL-LEGAL DIAGNOSIS

The CONCESSIONAIRE shall be responsible for managing the acquisition process, in the direct negotiation phase, of the properties necessary for the execution of the Project, and for this purpose, shall take the necessary actions to obtain the technical-legal diagnosis of the properties or real estate (with or without buildings) to be acquired, as follows:

2.2 PHYSICAL SURVEY OF PROPERTIES

2.2.1 Technical Description of the Physical Survey of Properties or Real Estate

In the case of a project to be carried out in an urban environment, the CONCESSIONAIRE must take into account the characteristics of cadastral surveying and the use of mixed methodology, which requires the direct method (use of differential GPS equipment or classical topography) and the indirect method (use of orthophotos and cartographic plans) or others that are most suitable for the Project.

In general, for physical lifting by the direct method, the following should be taken into account:

- Performing the Physical Survey of Infrastructure and Existing Properties or Real Estate, Linked to the National Geodetic Network (hereinafter referred to as the 'NGN') throughout the approved right-of-way area and its modifications This activity will include information on houses, existing roads, paths, channels, gutters, ditches, wells, property boundaries, and other relevant elements for the proper technical-legal analysis and the formulation of strategies for the acquisition and subsequent legal-physical Sanitation of the affected area
- The physical survey of the affected area along the Right of Way must allow the correct georeferencing of the perimeter of the affected property, in order to determine the agreement or discrepancy between the registration and the physical reality, taking into account the provisions of Directive No. 001-2008-SNCP/CNC and/or its amending or replacement regulations.
- The graphic representation of the physical survey (rethinking) must also contain the geometric scope of the Right of Way represented in a closed polygon (polyline) (it must not contain elements called "arches"), according to the details specified in the Ministerial Resolution approving the right of way, and the modifications of the said Ministerial Resolution if applicable. It will also

contain the graphic representation of the control points used and monumental for the execution of the survey activities. It must also include the progressive ones, toponymies of the sector and other elements that you consider, and the original or raw data (information) must be preserved, as well as the original files of the survey.

- Any graphic representation must refer to Datum WGS 84 in UTM coordinates, using RGN elements for this purpose.

The indirect method will be based on the orthophotos of the flight carried out for the drafting of engineering studies.

With regard to the geodesic control points necessary for fieldwork, these must be monumental using double-frequency GPS equipment with millimeter precision (known as differential GPS) and must at least be spaced from each other every 2,500 meters. These control points must be certified at least every five thousand meters (5,000 meters) by the National Geographic Institute (hereinafter, the "<u>IGN</u>") or the entity that acts in its capacity, in accordance with the provisions of the National Geographic Institute Act, No. 27292, and its regulations and/or regulations amending and/or replacing the previous ones.

The certified control points to be monumental will be of order "C", since these are intended for the establishment of supplementary control in metropolitan areas, to support the development of important engineering projects, for scientific research purposes, and in general for any work that requires an accuracy of no less than 1:100,000.

They must be placed using the DGPS system and must be linked to RGN stations, allowing reference points to be obtained in the WGS 84 system.

- Horizontal topographic surveys (position in coordinates) must be linked to the established geodesic control points and configured in UTM coordinates.
- For the execution of physical survey activities, receiving equipment from the Global Navigation Satellite System (GNSS), total station or other topographic instrument that meets the required precision must be used.

2.2.2 Activities under the CONCESSIONAIRE's responsibility

Physical Lifting

The CONCESSIONAIRE will carry out the physical survey of the properties or real estate that make up each Section, in accordance with the description provided in this appendix, and will submit the Physical Survey Report according to the following schedule:

- Section 1, thirty (30) Calendar Days from the Closing Date.
- Section 2, one hundred and twenty (120) Calendar Days from the Closing Date.
- Section 3, ninety (90) Calendar Days from the Closing Date.

Geodesic Control Points

The CONCESSIONAIRE will request certification of its geodesic control points with the IGN twenty (20) Calendar Days after the Closing Date.

In the event that the IGN makes observations on the records of the geodetic control points, the CONCESSIONAIRE will have a term of three (3) Working Days to submit the said observations.

It will be the responsibility of the CONCESSIONAIRE to obtain the required certifications and everything that corresponds for this purpose.

Work to identify those affected

The CONCESSIONAIRE will carry out fieldwork to identify and/or verify each of the properties of the Taxable Persons; gather information and/or documents of identity; among others, which constitute evidence of the registered ownership or possession of each of the Taxable Persons of the properties or real estate (with or without buildings) identified as affected by the Right of Way, in accordance with the Applicable Laws and Provisions. Among the documents that must be completed in these works, there will be the Field Survey Form Format, which will form part of the Diagnostic Report and Graphic Base.

2.2.3 Activities under the responsibility of the GRANTOR

The GRANTOR will assign the necessary team of specialists to coordinate and collaborate with the CONCESSIONAIRE in the fulfillment of the obligations under his responsibility.

The GRANTOR will comply with the Physical Survey Report within a maximum term of thirty (30) Working Days from the submission by the CONCESSIONAIRE. In the absence of a pronouncement by the GRANTOR, the Report will be considered approved and it will be possible to continue to the next activity.

In the event of the GRANTOR's non-compliance, the CONCESSIONAIRE must submit the comments within a maximum term of ten (10) Working Days from the notification of the non-compliance. If you do not lift them within the term indicated above, the penalties described in Annex No. 10 will apply.

2.2.4 Formats- process documents provided by the CONCESSIONAIRE

The following activities will be carried out by the CONCESSIONAIRE:

- Prior to fieldwork in the affected areas, each Taxable Person must be notified, using Format No. 0001.
- The physical survey of the affected property or building must be carried out with the intervention of the Taxable Person or their corresponding representative, who must sign the Field Survey Form (Format No. 002). If the Taxable Person is not present, the delimitation of the property or building will be carried out in the presence of some local Government Authority such as the Mayor, Governor, Lieutenant Governor, Justice of the Peace, President of the Peasant Community, Leaders of Human Settlements, Police and/or a Notary Public. The CONCESSIONAIRE must coordinate the participation of the authorities described. The GRANTOR must assist in this activity with whatever actions he deems appropriate.

- In the absence of the Taxable Person, his representative or the local authority, the Affidavit of the technical information collected must be submitted, in accordance with Format No. 003.

Formats to Use:

- Format No. 001: Proof of notification.
- Format No. 002: Field Survey Form.
- Format No. 003: Affidavit of collection of information, if the Taxable Person, his representative or the local authority is not present.

2.2.5 CADASTRAL SEARCH

The CONCESSIONAIRE will be responsible for the preparation of files and the management to request the Cadastral Search Certificates.

2.2.5.1 Technical Description of the Cadastral Search

The CONCESSIONAIRE will prepare and process the files for the Cadastral Search of the properties or real estate affected within the Right of Way or the Concession Area, in accordance with Format No. 004, in compliance with the Laws and Applicable Provisions. This cadastral consultation will determine and/or complement the technical-legal analysis for liberation, acquisition, expropriation and/or rehabilitation actions.

To prepare the files, the CONCESSIONAIRE must take into account the following details:

- The descriptive memoirs and plans to be submitted must be signed by an engineer.
- The perimeter plans must be georeferenced to the RGN and projected in official coordinates (WGS84) and with a double technical data table (PSAD56), duly signed by the competent professional designated by the CONCESSIONAIRE. These plans must be adapted to a conventional scale and must be presented in a physical version printed in color and magnetic medium (DXF or DWG or SHAPEFILE format).
- The cadastral consultation plan, which must contain the perimeter plan and the location plan, must be prepared in accordance with Directive No. 002-2014-SUNARP/SN and/or its amending or replacement regulations.

2.2.5.2 Activities under the CONCESSIONAIRE's responsibility

Preparation and Presentation of Files

The CONCESSIONAIRE is responsible for preparing and processing the files for cadastral search of the properties or real estate affected by the Right of Way of the Project.

The CONCESSIONAIRE will prepare and submit the cadastral search files within the following term:

- Section 1, begins fifteen (15) Calendar Days and ends forty (40) calendar days from the Closing Date.
- Section 2, begins at one hundred and twenty (120) Calendar Days and ends at two hundred seventy (270) Calendar Days from the Closing Date, in packages of a minimum number of files to be determined between the Parties, every thirty (30) Calendar Days.
- Section 3, begins at ninety (90) Calendar Days and ends one hundred and fifty (150) Calendar Days from the Closing Date, in packages of a minimum number of files to be determined between the Parties, every thirty (30) Calendar Days.

The CONCESSIONAIRE will submit to the National Superintendency of Public Records (hereinafter, "<u>SUNARP</u>") or the entity acting in his place, the cadastral search files and must provide the GRANTOR with a copy of the delivery charge.

Follow-up and Collection of Observations

The CONCESSIONAIRE will monitor the cadastral searches submitted to the SUNARP for each affected property or property, in coordination with the GRANTOR. Likewise, the CONCESSIONAIRE must correct the observations made by SUNARP within the terms determined by said entity, if applicable.

THE CONCESSIONAIRE will process the collection of comments with SUNARP and will deliver the copy of the delivery charge to the GRANTOR.

Certificate Evaluation

The CONCESSIONAIRE will carry out the technical legal evaluation of the cadastral searches issued by the SUNARP for each affected property, within a maximum term of ten (10) Calendar Days after receiving them.

If the Cadastral Search Certificate obtained advertises the existence of registry overlaps, the CONCESSIONAIRE must issue a clarifying report determining whether such overlap is real or graphical, within a term of thirty (30) calendar days from the issuance of the corresponding certificate, which will subsequently serve as the basis for direct negotiation management. The explanatory report by the CONCESSIONAIRE must be signed by a Cadastral Verifier, in accordance with Applicable Laws and Provisions.

2.2.5.3 Activities under the responsibility of the GRANTOR

CBC Graphical Base Request

It will be the GRANTOR's responsibility to request the Graphic Registry Base (BRG) to SUNARP, so that it is delivered to the CONCESSIONAIRE by the GRANTOR. The request must be submitted by the GRANTOR to SUNARP within a maximum term of 30 Working Days from the Closing Date, in accordance with Resolution No. 050-2019-SUNARP/SN and/or the amending or replacement rules.

Delays by SUNARP

In accordance with the Applicable Laws and Provisions, and only for those properties for which the necessary information could not be obtained from the National Superintendence of Public Registries (SUNARP), the CONCESSIONAIRE shall be authorized to take whatever measures are necessary to obtain advance possession of the aforementioned real estate.

2.2.5.4 Formats - Process Documents

Formats to Use:

- Format No. 004: File (Memory and plan)

2.2.6 COLLECTING AND/OR UPDATING INFORMATION FROM ENTITIES

2.2.6.1 Description of Information Collection Activities

The CONCESSIONAIRE shall request, present, and compile supplementary graphical and/or documentary information from the National Superintendence of State Assets (SBN), National Superintendence of Public Registries (SUNARP), National Water Authority (ANA), sanitation service providers, Formalization Agency for Informal Property (COFOPRI), regional or local governments, among other entities, which may have the necessary information to determine the legal status of the affected properties and/or the Taxable Persons, in accordance with Format No. 005, attaching the necessary plans corresponding to the study area (location plans in UTM coordinates, WGS84 Datum), based on the Right of Way.

2.2.6.2 Activities under the CONCESSIONAIRE's responsibility

The CONCESSIONAIRE is responsible for preparing and submitting the request for information, which will include the plans of the areas subject to the request (in paper format and in digital format); and for collecting the information from the entities mentioned in the previous point, according to the following schedule.

- Section 1, begins thirty (30) Calendar Days from the Closing Date and ends sixty (60) Calendar Days.
- Section 2, begins thirty (30) Calendar Days from the Closing Date. It will be carried out in packages of a minimum number of files to be determined between the Parties, every 30 calendar days as requested. It ends one hundred and fifty (150) Calendar Days after request.
- Section 3, begins thirty (30) Calendar Days from the Closing Date and ends ninety (90) Calendar Days after the request. It will be made in two (2) packages of files that will be delivered every 30 Calendar Days.

If there are comments to the requests made by any of the entities indicated in this Appendix, the CONCESSIONAIRE will correct the comments or additional requirements of the above-mentioned entities within a maximum term of three (3) Working Days after receiving the comments.

The printed and digital drawings that accompany the requests for information will be provided by the CONCESSIONAIRE.

2.2.6.3 Activities under the responsibility of the GRANTOR

If the period of thirty (30) Working Days has elapsed since the corresponding request was made by the CONCESIONARIO, and if the request for information has been repeated from the entities described in the preceding paragraphs, the CONCESSIONAIRE is unable to obtain the information and provided that due diligence has been accredited, the CONCESSIONAIRE must carry out the diagnosis of legal physical sanitation with the available information.

2.2.6.4 Formats to Use:

- Format No. 005: Information request formats.

2.2.7 PREPARATION OF THE TECHNICAL-LEGAL DIAGNOSIS

The CONCESSIONAIRE will be responsible for preparing the legal technical diagnosis.

2.2.7.1 Description of the Process

Using all data from the land registry, the results of the physical survey, cadastral searches, and the collection of corresponding information, each affected property or real estate will be analyzed, and a technical-legal diagnosis will be prepared, resulting in a property sanitation plan to be carried out by the CONCESSIONAIRE.

Taxable Person Classification

The purpose of the classification of the Taxable Person, based on all the information generated, is to identify in which case of the TUO of Legislative Decree No. 1192 and its amending or replacement regulations that subject is framed.

In this sense, the classification must respond to the following:

- 1. Properties that are included in the Direct Deal program or PAP.
- 2. Taxable Persons Relocation Program.
- 3. Properties that require some form of sanitation action.
- 4. Properties that will undergo expropriation proceedings.

Diagnostic Report and Graphical Base

The Legal Technical Diagnostic Report and graphic base must compile all the information processed, both legal and technical. This report contains a general summary of the analysis of the affected properties, property maps and mosaics, and the technical-legal diagnosis files of each property, as detailed below:

- 1. Informe
- Identification of the properties covered by the Right of Way.
- Review and analysis of the physical aspects of the affected property.

- Identification of the physical characteristics of the affected property.
- Review and analysis of the legal aspects of the affected properties.
- Identification of legal loopholes in affected properties.
- Memories, plans and annexes of each affected property, according to
- Format No. 003.

2. Graphic Base or Mosaic Plan

The graphic base or mosaic plan of the area under study and the properties involved are drawn up, showing the complete information (areas, boundaries, etc.) as well as the surrounding areas.

You should consider a general naming of layers, such as:

- Properties
- Right of Way
- Archaeological Areas
- Mining Rights
- Protected Natural Areas
- National Reserve or National Parks
- Risk Zone

3. Database

A database is prepared containing the details of the affected properties included in the Right of Way, with at least the following information:

- Property No.
- Property code
- Progressive
- Location
- Area
- Taxable Person
- Identity Document
- Name of the property
- Land Registry, if applicable.
- Charges and Encumbrances
- 4. Sanitation Plan

According to the results of the classification of the cadastral search certificates, affected properties that require some sanitation action will be identified.

The Legal Physical Sanitation Plan for each property owned by third parties or in the possession of third parties, that requires it, must contain the file of physical modification of the properties or the record of the prevalence of the cadastral information or the file of rectification of areas, and others that may be required.

2.2.7.2 Activities under the CONCESSIONAIRE's responsibility

Taxable Person Classification

The CONCESSIONAIRE must classify the Taxable Person using Format No. 006 as a reference: Classification summary table, in accordance with the Applicable Laws

and Provisions, within the following terms:

- Section 1, begins at sixty (60) Calendar Days and ends at seventy (70) Calendar Days counted from the Closing Date.
- Section 2, which begins at one hundred and fifty (150) Calendar Days and ends at three hundred (300) Calendar Days from the Closing Date, will be delivered in packages of a minimum number of files to be determined by the Parties, every thirty (30) Calendar Days related to the certificates obtained.
- Section 3, begins at one hundred (120) Calendar Days and ends at one hundred and eighty (180) Calendar Days counted from the Closing Date, in packages of a minimum number of files to be determined between the Parties, every thirty (30) Calendar Days related to the certificates obtained.

Diagnostic Report and Graphic Base

The CONCESSIONAIRE will prepare and submit the legal technical diagnostic files using Format No. 007: Report Template and Format No. 008- Legal Technical Diagnostic File, within the following terms:

- Section 1, up to ninety (90) Calendar Days counted from the Closing Date.
- Section 2, up to three hundred sixty (360) Calendar Days counted from the Closing Date.
- Section 3, up to one hundred and eighty (180) Calendar Days counted from the Closing Date.

Sanitation Plan

The CONCESSIONAIRE, in accordance with Applicable Laws and Provisions, will prepare and submit the sanitation plan, using Format No. 007 — Report Template, within the following term:

- Section 1, up to ninety (90) Calendar Days counted from the Closing Date.
- Section 2, up to three hundred sixty (360) Calendar Days counted from the Closing Date.
- Section 3, up to one hundred and eighty (180) Calendar Days counted from the Closing Date.

Legal Technical Diagnostic files may be delivered in packages of a minimum number of files to be determined by the Parties, every thirty (30) Calendar Days.

Once the Sanitation Plan has been carried out, the CONCESSIONAIRE must plan the appropriate sanitation actions in order to achieve the liberation of properties, within a maximum period of ninety (90) Calendar Days.

The CONCESSIONAIRE will notify the GRANTOR in writing, every end of the month, of the results of the physical property release that it is carrying out.

2.2.7.3 Activities under the GRANTOR's responsibility

Taxable Person Classification

The GRANTOR will receive from the CONCESSIONAIRE the classification of the Taxable Person in the Legal Technical Diagnostic Report and will proceed with its review and observations if necessary, allowing a term for the collection of the observations.

Diagnostic Report and Graphic Base

The GRANTOR must review and comply with the Legal Technical Diagnosis submitted by the CONCESSIONAIRE within a maximum period of thirty (30) Calendar Days from the date of delivery of each package of files. If there are comments, the GRANTOR must allow a term for the collection of the comments.

Sanitation Plan

With the original information provided by the CONCESSIONAIRE, the GRANTOR will monitor the planning proposed by the former, and if the terms are exceeded without achieving the physical release of the property through direct negotiation or relocation of the Taxable Persons, it will be the responsibility of the GRANTOR to initiate the corresponding expropriation process.

2.2.7.4 Formats — Process Documents

- Format No. 006: Summary Table of Classification
- Format No. 007: Report Template
- Format No. 008: Diagnostic Record (memory, plans and attachments)

2.3 ACTIVITIES RELATED TO THE IDENTIFICATION OF REAL ESTATE

2.3.1 Technical Description

The CONCESSIONAIRE, once the Cadastral Search Certificate has been obtained, within the term established in the Single Ordered Text (TUO) of Legislative Decree No. 1192, must manage and deliver the communication to the Taxable Persons of the affected properties or buildings, which will be required for the execution of the Project, informing them of their status as Taxable Persons. For such purposes, the CONCESSIONAIRE must prepare the Letter of First Communication and deliver it to the GRANTOR for signature within the following terms:

- Section 1, up to ninety (90) Calendar Days counted from the Closing Date.
- Section 2, begins at two hundred ten (210) Calendar Days and ends at three hundred sixty (360) Calendar Days counted from the Closing Date, in packages of a minimum number of documents to be determined by the Parties, every thirty (30) Calendar Days.
- Section 3, begins at one hundred and eighty (180) Calendar Days and ends at two hundred and forty (240) Calendar Days counted from the Closing Date, in packages of a minimum number of documents to be determined by the Parties, every thirty (30) Calendar Days.

Once the previous terms have elapsed, the properties to be acquired or expropriated will be understood as identified, and the terms established in the TUO of Legislative Decree No. 1192 and/or its amending or replacement regulations will be counted.

2.3.2 Activities under the CONCESSIONAIRE's responsibility

- The CONCESSIONAIRE must prepare the document that will be notified to Taxable Persons in accordance with Format No. 009: Letter of First Communication. Once the documents have been prepared, they will be sent to the GRANTOR for their corresponding signature by the official with sufficient powers.
- The first communication documents will be delivered by the CONCESSIONAIRE to the identified Taxable Persons within a period not exceeding twenty (20) Calendar Days from the date of receipt of the same subscriptions by the GRANTOR.

2.3.3 Activities under the responsibility of the GRANTOR

- Unless it has any comments, the GRANTOR will sign the documents within a maximum term of ten (10) Working Days from their delivery by the CONCESSIONAIRE. If there are comments, the GRANTOR must allow a term for the collection of the comments.
- Once subscribed, the GRANTOR, within a maximum term of three (3) Working Days, will deliver them to the CONCESSIONAIRE to be notified to the identified Taxable Persons.

2.3.4 Formats

- Format No. 009: Letter of First Communication

2.4 PREPARATION OF INDIVIDUAL FILES FOR VALUATION

2.4.1 Technical Description

The CONCESSIONAIRE will prepare the reports, plans and other necessary documentation of the affected properties or buildings, in accordance with the provisions of the Applicable Laws and Provisions, using Format No. 010, for valuation purposes for Taxable Persons.

The CONCESSIONAIRE will prepare individual appraisal files with the following content:

a. <u>Descriptive Memory</u>

In this document, the legal status of the Taxable Person, property registration data, property information (location, property name, areas, boundaries, and perimeter measurements of the total area, affected area, and remaining area) should be recorded. If applicable, technical characteristics of the building (construction features and materials, basic infrastructure services, age of the building, condition, total area, affected area), information on affected complementary works (description and measurements) should also be included. This document must be signed by a civil engineer in case they present buildings on urban properties or an agronomist and/or agricultural engineer with respect to rural property with plantations and/or crops.

If there is a remaining area that suffers a significant devaluation or is useless for the purposes for which the property was intended, such a situation must be indicated for valuation, with adequate support.

The descriptive memory must contain the necessary photographs, in color, of the affected area, in which the affected area is visualized and everything as required by Applicable Laws and Provisions.

b. Plans.

The plan (s) should identify the affected area and the matrix area. These plans must be duly signed by the specialist engineer and must contain:

- Technical data table for boundaries and perimeter measurements.
- Data table for the Taxable Person and other data descriptive of the affected area and matrix area.
- Scheme of location and/or location of the property or building and detail of the damage duly geo-referenced in UTM coordinates. Datum WGS84.

In addition, it is necessary to appreciate the remaining areas with respect to the Right of Way, as well as the outline of the Project's track axis, progressive limits of the Right of Way, toponymy and planimetry. The graphic information of the plan must refer to Datum WGS 84.

In the same way, the location, distribution and elevation plan of the affected property must be considered, for building damage.

The distribution plans of the affected property will be presented, on a scale of 1/100 or an appropriate one and for conventional use, containing a detailed table of construction materials, direct and indirect areas affected, complementary works, if appropriate, as well as elevation plans, and must be presented in physical and digital versions (CAD program and PDF) in color.

If necessary for the release, the file of each affected property must be attached to establish the estimated value of the property, in accordance with the TUO of Legislative Decree No. 1192 and/or its amending or replacement regulations.

In case of damage to properties or buildings (houses), these must be considered up to the structure closest to its stability.

c. Legal Documents.

In addition to the documents established in article 15 of the TUO of Legislative Decree No. 1192, individual appraisal files must include:

- Supporting documentation regarding registered or unregistered property. Among the
 documents to be collected, we have: i) a simple copy of the registered title and/or property
 document in the case of registrars and ii) a document with a certain date and subsequent
 treatment with respect to the registered owner, in the case of unregistered owners.
- In the case of a natural person, a simple copy of the current National Identity Document (hereinafter, "<u>DNI</u>") or the online consultation sheet issued by the National Registry of Identification and Civil Status (hereinafter, "<u>RENIEC</u>").
- In the case of a legal entity, a copy of the current Land Registry issued by SUNARP.
- It should be noted that for files whose owner is a peasant or native community, the corresponding community will be determined as the owner of the affected land, for this purpose it will be supported by the supporting documents that prove the ownership or possession and the legal representation of the respective community.

- Likewise, with regard to the management of community land exercised by its skilled and/or integrated community members, this will be accredited by the certificate and the standard registration of community members provided by the community, taking into account only the impact of improvements, plantations and/or complementary works.
- Informative copy of the Land Registry no older than three (3) months after its issuance, in the case of registered real estate.
- Factory or building declaration, if any.
- Affidavit of Self-Assessment, corresponding to the last year, if any.
- Quantified ratio of permanent and/or transient crops indicating their characteristics if any (type, species, age, quantified by area for transient crops and per unit for permanent crops) subscribed by an agronomist and/or agricultural engineer this item must be part of the descriptive memory.
- Quantified list of complementary works and fixed and permanent installations, if any, which will be part of the descriptive memory.
- In the case of special constructions; when any, the following documentation is accompanied: plans, descriptive memory and related technical specifications.

In the case of holders, the corresponding Certificate or Proof of Possession will be attached, which must be provided by the holder during the physical survey of affected properties. If the holder does not provide the documents, the CONCESSIONAIRE must obtain them from the competent entity. The said certificate must be in accordance with Applicable Laws and Provisions.

- Document that proves the identity, company name or company name of the Taxable Person:
 - In the case of a natural person, a simple copy of the ID of the affected Taxable Person or of the identity certificate issued by RENIEC.
 - In the case of a legal entity, a copy of the current land registry issued by SUNARP, and a simple copy of the corresponding RUC Consultation of SUNAT, if any.

d. <u>Economic Damage</u>

It includes only consequential damages and lost profits, which must be duly accredited or have a duly supported report, in accordance with Applicable Laws and Provisions.

The expenditure on the transportation of assets within the national territory incurred by the Taxable Person forms part of the actual damage in accordance with the National Regulation of Appraisals.

The individual files will be prepared and submitted by the CONCESSIONAIRE to the GRANTOR within the following term:

- Section 1, within one hundred (100) Calendar Days from the Closing Date.
- Section 2, will begin at two hundred ten (210) Calendar Days and end at five hundred and forty (540) Calendar Days, both counted from the Closing Date, and must be delivered in packages of a minimum number of documents to be determined by the Parties, every thirty (30) Calendar Days.
- Section 3, will begin at one hundred and eighty (180) Calendar Days and will end at two hundred and forty (240) Calendar Days, both counted from the Closing Date, and must be delivered in packages of a minimum number of documents to be determined by the Parties, every thirty (30) Calendar Days.

Once the previous terms have elapsed, the terms established in the TUO of Legislative Decree No. 1192 and/or its amending or replacement regulations will be counted.

For Section 2, priority will be given to the preparation of individual files for the valuation of Critical Properties, located in the entrance and exit area of the tunnels of the said section.

2.4.2 Activities under the CONCESSIONAIRE's responsibility

It will be the responsibility of the CONCESSIONAIRE to prepare and deliver individual files to the GRANTOR for appraisal, in accordance with Applicable Laws and Provisions and the terms indicated above.

2.4.3 Activities under the responsibility of the GRANTOR

It will be the GRANTOR's responsibility to receive the individual files prepared by the CONCESSIONAIRE for the valuation, and to carry out the corresponding evaluation within a maximum term of twenty (20) Working Days of receipt. Within this term, you must send comments to the CONCESSIONAIRE, who will have ten (10) Working Days to correct them.

2.4.4 Formats

The format to be used for the activity described above will be Format No. 010: Individual file for valuation purposes.

2.5 APPRAISAL

2.5.1 Technical Description

Appraisals are prepared and managed as established in the TUO of Legislative Decree No. 1192 and its amending or replacing rules, the National Appraisal Regulations and other Applicable Laws and Provisions. The valuation is carried out on all the individual elements to be valued included in the file for valuation purposes.

Requirements for Preparing the Appraisal

In accordance with Applicable Laws and Provisions, it is necessary to have individual files prepared by the CONCESIONARIO for valuation purposes, duly supported and individualized.

Appointment of Experts

Based on the information from the legal technical diagnosis, the number of properties affected by the Right of Way is established, thus it is possible to project the number of experts necessary for the valuation of the properties, in each of the Sections.

2.5.2 Activities under the responsibility of the GRANTOR

Within the framework of the TUO of Legislative Decree No. 1192 and its amending or replacement rules, the GRANTOR is responsible for carrying out the valuation, and must estimate the number of experts needed for each of the Sections, based on the files submitted by the CONCESSIONAIRE.

It will be the GRANTOR's obligation to coordinate, if appropriate, with the administrative body or competent entity, the appointment of experts within the term established in the TUO of Legislative Decree No. 1192 and at least every thirty (30) Working Days, while continuing with the delivery of individual files.

It is the CONCESSIONAIRE's obligation to coordinate with the GRANTOR the timing of each delivery of individual files for valuation purposes and to provide all the information so that the competent public entity is able to have the necessary experts within the established terms. If the CONCESSIONAIRE does not comply with this obligation, the CONCESSIONAIRE will be responsible for delays that arise from the maximum property release terms established in the Concession Contract.

Appraisal Management

Whenever the competent entity has completed the corresponding appraisal, the GRANTOR will submit the Appraisal Report to the CONCESSIONAIRE in accordance with the following terms:

- Section 1, one hundred and fifty (150) Calendar Days counted from the Closing Date, provided that the CONCESSIONAIRE has delivered the individual files for valuation purposes and duly supported.
- Section 2, from two hundred fifty (250) Calendar Days to five hundred ninety (590) Calendar Days, counted from the Closing Date, provided that the CONCESSIONAIRE has delivered the individual files for valuation and duly supported purposes.
- Section 3, from two hundred and thirty (230) Calendar Days to two hundred ninety (290) Calendar Days, counted from the Closing Date, provided that the CONCESSIONAIRE has delivered the individual files for valuation purposes and duly supported.

In section 2, the Parties must prioritize the appraisals of Critical Properties, located in the entry and exit areas of the tunnels.

Appraisal Delivery

The GRANTOR will deliver the appraisal to the CONCESSIONAIRE, no more than five (5) Working Days after receiving the appraisal by the competent specialized expert entity.

2.5.3 Activities under the CONCESSIONAIRE's responsibility

The CONCESSIONAIRE will review the appraisals, within a maximum term of fifteen (15) Calendar Days of receiving them. If you find comments, you must communicate them to the GRANTOR so that the GRANTOR can coordinate the corrections with the competent entity, provided that the Applicable Laws and Provisions so allow.

2.6 MANAGEMENT FOR THE AVAILABILITY OF RESOURCES FOR PROPERTY ACQUISITION

2.6.1 Technical Description

A requirement for the acquisition is to have the resources to make the payment to the Taxable Persons involved in the Project. In this regard, once the value of the appraisals has been known, the CONCESSIONAIRE must have the financial resources to begin the acquisition of the affected properties or the relocation of the Taxable Persons, as appropriate, and in accordance with the provisions of the Concession Contract.

2.7 NOTIFICATION OF THE TAKEOVER OFFER

2.7.1 Technical Description

The CONCESSIONAIRE will be responsible for notifying the Taxable Person of the letter of intent to acquire the property, within the framework of the TUO of Legislative Decree No. 1192 and/or its amending or replacement regulations. The term for notifying the said letter of intent may not exceed that established in the regulation described above.

2.7.2 Activities under the Responsibility of both Parties

Preparation of Documents

The CONCESSIONAIRE draws up the letters of intent to purchase in accordance with Format No. 014 and will send them to the GRANTOR for subscription.

Document Subscription

The GRANTOR receives the documents in accordance with Format 14 and proceeds with their subscription and numbering, within a maximum term of five (5) Working Days after receiving them from the CONCESSIONAIRE.

Once signed and numbered, the GRANTOR sends them to the CONCESSIONAIRE, within two (2) Working Days for notification.

Document Notification

The CONCESSIONAIRE will notify the Taxable Person within a maximum term of seven (7) Working Days, upon receipt of the signed documents by the GRANTOR. The notification will be made in accordance with Applicable Laws and Provisions, and Notarial means or notarial certification may be used where appropriate.

Response to Document

The Taxable Person has a term of fifteen (15) Working Days to communicate their acceptance (Direct Deal) or their rejection of the purchase offer.

In case of acceptance by the Taxable Person, the GRANTOR must communicate this situation to the CONCESSIONAIRE, within no more than two (2) Working Days after obtaining the said acceptance, and must then issue the corresponding ministerial resolution approving the total value of the assessment and payment, including the incentive established in the Applicable Laws and Provisions.

Once the corresponding ministerial resolution has been issued, within the established legal term, the CONCESSIONAIRE must conclude with the Taxable Person the corresponding instrument of transfer or contract in the name of and in favor of the GRANTOR, in addition to making (i) the payment in the name of the GRANTOR and in favor of the Taxable Person, (ii) the appropriation of said payment (if applicable, and in the terms of the respective trusts) and (iii) register in Public Records the ownership of the property in favor of the GRANTOR.

In addition, once the instrument of transfer or contract of the corresponding property is concluded, The CONCESSIONAIRE shall be responsible for carrying out the effective vacating of the property, the demolition of the buildings, and the removal of the corresponding debris, as well as the relocation of the Taxable Persons and their respective movable assets to the designated location. Additionally, they will be responsible for fencing, security, and custody of the vacated property for its subsequent use in the execution of the Project Works.

If the offer to acquire the property or to relocate is rejected by the Taxable Person, is not answered by the Taxable Person or, having accepted, the latter does not effectively vacate the purchased property, the CONCESSIONAIRE will communicate this situation to the GRANTOR no more than five (5) calendar days after the occurrence of the event, so that the GRANTOR initiates the procedure for expropriation of the said property, in accordance with Applicable Laws and Provisions. Within the term described above, the CONCESSIONAIRE is obliged to provide all the original information to the GRANTOR, so that he can initiate the expropriation procedure.

2.7.3 Formats:

The format to be used will be No. 014: Letter of intent to acquire, which must be accompanied by a copy of the appraisal and model of the registration form.

2.8 FINAL THOUGHTS

With regard to State property, the CONCESSIONAIRE undertakes to initiate and process all necessary administrative procedures and/or activities, in the name and account of the GRANTOR, to carry out the transfer of said properties, as well as their registration in the Public Registries, in favor of the GRANTOR.

The GRANTOR undertakes to carry out the physical-legal rehabilitation of the properties acquired through direct treatment and/or transferred, in accordance with the provisions of the Applicable Laws and Provisions, including, but not limited to, what is described in article 32 of the General Directive of the National System for Multiannual Programming and Investment Management, approved by Directive No. 001-2019-EF/63.01 and/or its amending and/or replacement regulations.

With regard to the relocations of Taxable Persons, where appropriate in accordance with this document and the Applicable Laws and Provisions, the CONCESSIONAIRE undertakes to acquire, build and/or rent housing or real estate units, and in general to implement any other similar mechanism, for the transfer, and delivery of said homes or units to the affected Taxable Persons, in addition to entering into the corresponding transfer instruments with them.

In the same way, the CONCESSIONAIRE undertakes to carry out the effective vacancy of the property of the Taxable Person who is the beneficiary of the new home, the registration of the vacated property in the Public Registries in favor of the GRANTOR. In addition, the CONCESSIONAIRE must be responsible for fencing, security, custody, demolition of buildings, removal of debris and/or waste, among other activities that allow the use of the property for the execution of the Contract Works, and must carry out these activities for all properties that are released, including those buildings or properties acquired by the GRANTOR during the Structuring

and/or Transaction Phases that are delivered on the Closing Date and up to a maximum period of one hundred eighty (180) Calendar Days counted from the Closing Date, in accordance with subsection viii) of clause 3.8 of the Contract, so the execution of these activities must be included in the work plans for the execution of the PAP.

2.9 FAILURE TO MEET THE DEADLINES SPECIFIED IN THIS APPENDIX

Failure by the CONCESSIONAIRE to comply with any of the terms or procedures at its expense indicated in this Appendix will result in the application of penalties in accordance with the provisions of Annex No. 10.

ANNEX No. 4 PROPERTY RELEASES

Appendix 2 Critical Property - Section 2

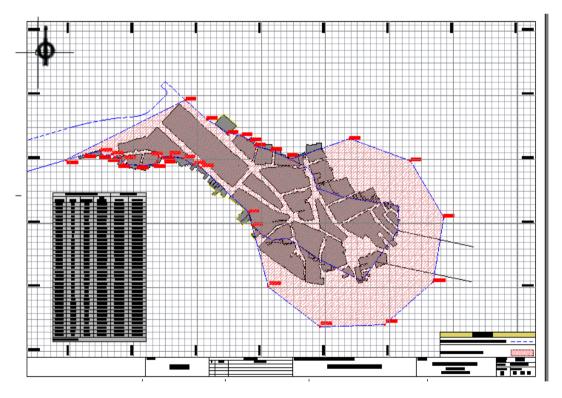
Property Located at the entrances and exits to the tunnels (Critical property) - Section 2

AREA	Approximate Number of Property
TUNNEL 1 ENTRANCE	198
TUNNEL 1 EXIT	389
TUNNEL 2 ENTRANCE	222
TUNNEL 2 EXIT	498
TOTAL	1307

Tunnel 01 Entrance

The sector of the critical property at the entrance of tunnel 01 comprises an area of 87,317.85 m2 with a perimeter of 1,568.66 ml. The georeferenced technical data of the polygonal are described in the plan "CRITICAL ZONE ENTRANCE TO TUNNEL 01" Sheet 1/1.

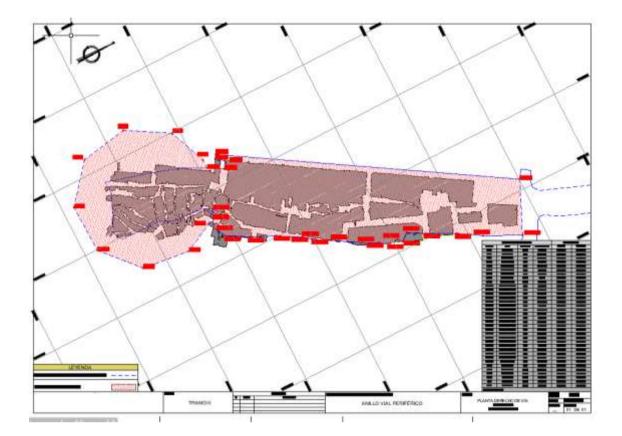
The polygonal contains approximately 198 properties to be liberated. The amount of total properties will be determined in the liberation process.



Tunnel 01 Exit

The sector of the critical property at the exit of tunnel 01 comprises an area of 164,628.62 m2 with a perimeter of 2,423,8152 ml. The georeferenced technical data of the polygonal are described in the plan "CRITICAL AREA EXIT OF TUNNEL 01" Sheet 1/1.

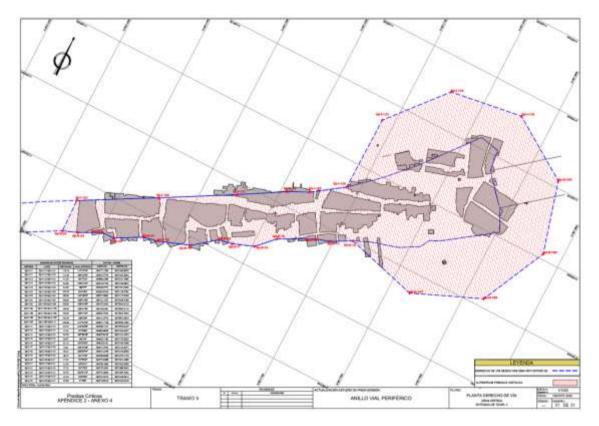
The polygonal contains approximately 389 properties to be liberated. The amount of total properties will be determined in the liberation process.



Tunnel 02 Entrance

The sector of the critical properties at the entrance to tunnel 02 comprises an area of 91,016.47 m2 with a perimeter of 1704.1001 ml, the georeferenced technical data of the traverse is described in the plan "CRITICAL ZONE ENTRANCE OF TUNNEL 02" Sheet 1/1.

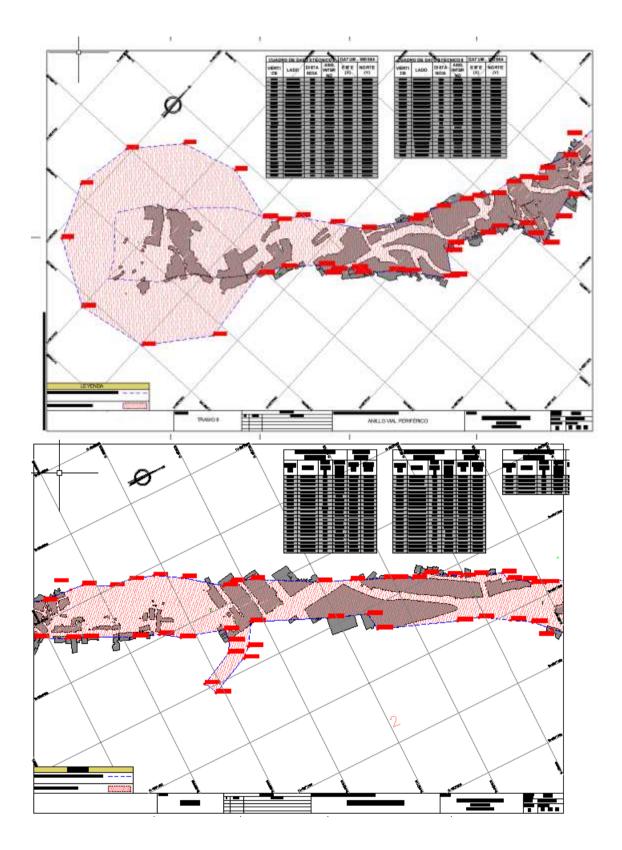
The polygonal encloses approximately 222 properties to be released. The number of total properties will be determined in the release process.

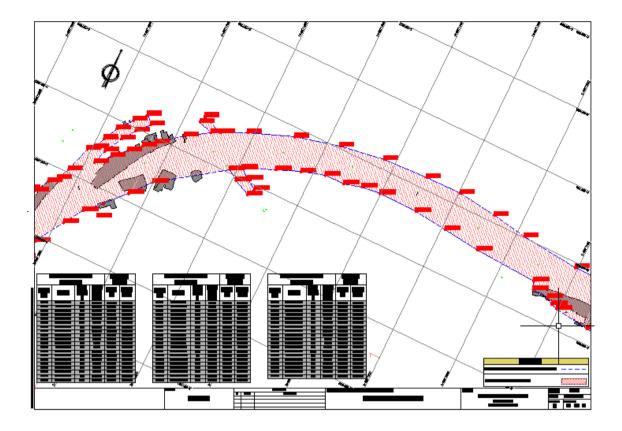


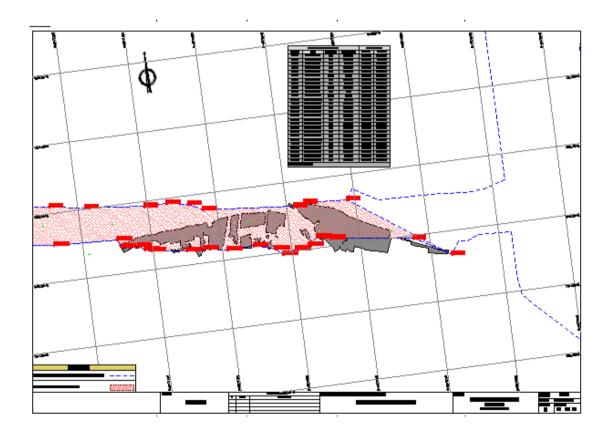
Exit Tunnel 02

The sector of the critical properties at the exit of tunnel 02 comprises an area of 215,888.3923 m2 with a perimeter of 6,401.6036 ml, the georeferenced technical data of the traverse is described in the plan "CRITICAL AREA EXIT OF TUNNEL 02" Plate 1/4.

The polygonal encloses approximately 498 properties to be released. The number of total properties will be determined in the release process.







Appendix 3 On the Recognition and Reimbursement of Property Release

1. The resources necessary for the property acquisition process of all Sections of the Concession, via direct treatment or relocations, will be financed by the CONCESSIONAIRE and reimbursed by the GRANTOR as established in this Appendix 3.

It is established that, if the CONCESSIONAIRE does not finance the resources necessary for the property acquisition process as established in this Appendix 3, it will always and at all times be obliged to execute the property acquisition process of all the Section in accordance to what is established in the Contract. Likewise, in said case, the CONCESSIONAIRE will be responsible for preparing the technical appraisal files for the properties to be acquired for the Project, with the GRANTOR being responsible for directly financing the property release in accordance with the Applicable Laws and Provisions.

On the accreditation of resources for property release

2. The CONCESSIONAIRE is obliged to prove to the GRANTOR that it has the resources to timely make payments of expenses for property acquisition property defined in subparagraph b) of numeral 7 of this Appendix for a minimum term of one (1) year. from the communication mentioned below. For this purpose, the CONCESSIONAIRE will inform the GRANTOR within fifteen (15) Calendar Days following whichever occurs first between the delivery by the GRANTOR of the Appraisal Report for Section 1, the Appraisal Report for Section 2 or the Appraisal of Section 3 referred to in numeral 2.5.2. of Appendix 1 of this Annex, informing under oath that (i) it has a revolving credit line of at least US\$ 15,000,000.00 (Fifteen million and 00/100 US Dollars) or its equivalent in Soles at the Purchase Exchange Rate in force on the Working Day prior to the presentation of your communication; or, (ii) that the property expenses of the property acquisition will be covered with funds from its shareholders.

In the event of failure to comply with this obligation by the CONCESSIONAIRE, the penalty provided for in Annex No. 10 of this Contract will be applicable. Without prejudice to this, the GRANTOR may directly assume the financing of the property release in accordance with the Applicable Laws and Provisions, for which it must notify the CONCESSIONAIRE in this regard, being that, in the aforementioned case, said penalty will no longer be applicable. as of the Calendar Day following the aforementioned notification made by the GRANTOR.

3. For the purposes of accrediting the resources mentioned in the previous numeral, the CONCESSIONAIRE must present to the GRANTOR: (i) a contract or other document that evidences the existence of the revolving credit line agreed with the respective financial entity; or, (ii) a certificate issued by its majority shareholder stating that it has the necessary resources to assume the expenses for properties defined in subparagraph b) of numeral 7 of this Appendix.

If the accreditation of these resources is carried out with its shareholders' own resources, the CONCESSIONAIRE must attach a guarantee of faithful fulfillment in favor of the GRANTOR in terms substantially equal to the format contained in Appendix 7 of this Annex No. 4, issued by any of the authorized entities according to Annex No. 6 and up to an amount of US\$ 15,000,000.00 (Fifteen million and 00/100 US Dollars). This guarantee must be renewed for annual periods and will be executed if the CONCESSIONAIRE does not

make the payment in favor of the Taxable Person after the Ministerial Resolution referred to in numeral 2.7.2 of Appendix 1 of this Annex is issued, in which case must be refunded within a term of fifteen (15) Working Days after being notified of its execution.

4. Subsequent to the accreditation of the resources mentioned in numeral 2 above, the CONCESSIONAIRE may inform the GRANTOR in writing that it does not have the necessary resources to carry out the expenses for the properties defined in paragraph b) of numeral 7 of this Appendix so that The GRANTOR directly assumes said expenses. It is established that the communication mentioned above must be sent at least nine (9) months in advance of the date on which the GRANTOR must directly assume the expenses for the properties, so that the GRANTOR has sufficient time to include them in its budget. . For clarification purposes, the CONCESSIONAIRE must continue to assume the resources indicated in numeral 2 above during the course of the nine (9) months mentioned above.

Likewise, in the event that the GRANTOR directly assumes the expenses for properties derived from the property release process, the CONCESSIONAIRE may, after at least (6) months have elapsed from the moment the GRANTOR has begun to assume said expenses, inform the GRANTOR that has the resources to make payments for property expenses in the terms provided in numeral 2 above. In such case, the GRANTOR may choose to delegate again to the CONCESSIONAIRE the financing of the resources necessary for the property acquisition process of all or some of the Sections of the Concession, which will reimburse the CONCESSIONAIRE as established in this Appendix. 3. However, the CONCESSIONAIRE may again inform the GRANTOR that it does not have the resources to make the expenses for the properties in the terms provided in the previous paragraph, in which case the provisions of this paragraph will apply again.

Financing of management expenses and property expenses

- 5. For the financing of management expenses and, if applicable in accordance with numeral 15 of this Appendix, property expenses, the GRANTOR will recognize to the CONCESSIONAIRE a financial cost of working capital equivalent to (i) the TRS available on the date of submission of the request for reimbursement of management expenses or the request for reimbursement of property expenses, as applicable, for a term of ninety (90) Calendar Days plus (ii) [2.04%] annual cash.
- 6. The financial cost will be calculated on the amount of management expenses or on the amount of property expenses that are indicated in the reimbursement requests mentioned in numeral 9 of this Appendix, applying the interest rate indicated in the previous numeral. The financial cost to be recognized will correspond to the quarter to which the request for reimbursement of expenses refers, without prejudice to which said financial cost will be recognized for a maximum period of forty-five (45) Calendar Days. No additional financial cost to that indicated will be recognized.

Of the expenses of the property release process

- 7. The CONCESSIONAIRE will incur the following expenses in the property release process:
 - a) By management, which will be limited to: (i) cost of property physical survey reports,
 (ii) cost of files for cadastral search, (iii) cost of legal technical diagnosis files, (iv) cost of individual files for appraisal, (v) registration and notarial expenses, if these are not included in another item, (vi) taxes, if applicable, (vii) temporary rental expenses for the Taxable Person, as applicable, (viii) others actually incurred by the CONCESSIONAIRE and that are directly linked to the property release process; and, (ix) those that the GRANTOR has expressly requested from the

CONCESSIONAIRE.

Management expenses, for the purposes of reimbursement to the CONCESSIONAIRE in accordance with the provisions of this Appendix 3, will have the unit prices established in Appendix 6 of this Annex. These unit prices do not prevent the CONCESSIONAIRE from presenting for the approval of the GRANTOR, according to numeral 8 of this Appendix, expenses that do not have unit prices defined in this Contract.

- b) For properties, which will be limited to: (i) appraised value of the property that will be acquired from the Taxable Person, which considers the commercial value of the property, as well as the value of the economic damage, (ii) incentive; (iii) estimated value of the property in which the Taxable Person will be relocated, if applicable; and, (iv) any other costs, expenses or compensation related or permitted under Applicable Laws and Provisions. These items must be estimated in accordance with the provisions of the Single Ordered Text (TUO) of Legislative Decree No. 1192 or standard that modifies, replaces or complements it.
- 8. For the recognition of management expenses and property expenses incurred by the CONCESSIONAIRE, the CONCESSIONAIRE must present to the GRANTOR, quarterly and prior to incurring them, as appropriate, a request for conformity of the management expense budget and a request for compliance of the budget for property expenses. The GRANTOR must review and, if applicable, give conformity to the budgets presented within the term of ten (10) Working Days counted from the presentation of the corresponding requests for the purposes that the CONCESSIONAIRE proceeds to carry them out. If your ruling is unfavorable, within the same term you must notify your observations to the CONCESSIONAIRE, so that the CONCESSIONAIRE can correct them within a term of five (5) Working Days of notifying said ruling. In such case, the GRANTOR will have an additional term of five (5) Working Days from the presentation of the CONCESSIONAIRE's corrections to issue its statement. If the GRANTOR does not issue its statement within any of the term granted to it, it will be understood that it is favorable.

In the event that there are variations in the management expenses or in the property expenses that the CONCESSIONAIRE must incur after the GRANTOR provides its agreement to the budgets presented in accordance with the previous paragraph, the CONCESSIONAIRE may choose to (a) present a new request for budget conformity of the corresponding expenses for approval by the GRANTOR, in the same terms as the previous paragraph, which covers only the variations in expenses before proceeding to carry them out; or, (b) incorporate said expenses in the request for budget conformity of the expenses that correspond to the following quarter so that they are incurred after being approved by the GRANTOR.

9. Once the expenses have been incurred in accordance with the above, the CONCESSIONAIRE must submit to the GRANTOR, as appropriate, a request for reimbursement of management expenses and a request for reimbursement of expenses for properties incurred during the quarter, which must include the expenses incurred. both in Dollars and Soles. If expenses have been made in soles, these must be converted to Dollars at the Exchange Rate on the date of presentation.

Each request must be accompanied by (i) an Affidavit signed by a legal representative of the CONCESSIONAIRE in which the management expenses or property expenses incurred are detailed, as applicable, according to the model contained in Appendix 4 of this Annex; (ii) the documentation that supports the management expenses or the property expenses incurred (including, as applicable, invoices, receipts or other proof of payment

and/or additional supporting documentation); and, (iii) in the case of requests for property expenses, the corresponding invoice issued by the CONCESSIONAIRE, or by whoever represents it, in accordance with the Applicable Laws and Provisions.

10. The CONCESSIONAIRE will be responsible for preparing the formats for the requests for compliance with the expense budget and the requests for reimbursement of expenses mentioned, respectively, in numerals 8 and 9 above. To this end, the CONCESSIONAIRE, fifty (50) Calendar Days in advance of the presentation of the first request for conformity of the expense budget, must send to the GRANTOR the formats to be used for the preparation of said requests. Within a term of ten (10) CalendarDays, the GRANTOR will send its observations or approval to the CONCESSIONAIRE. If the GRANTOR has observations, the CONCESSIONAIRE must correct them within a term of five (5) Calendar Days of receipt. In this case, the GRANTOR will have a term of five (5) Calendar Days to send its approval to the CONCESSIONAIRE.

Reimbursement of management expenses derived from the property release process

- 11. The GRANTOR will be responsible for reviewing and approving management expenses. To do so, the GRANTOR will have a term of no more than ten (10) Working Days to review the documentation presented in accordance with numeral 9 above. Within said term, the GRANTOR must proceed as follows:
 - a) If satisfied, approve the management expenses presented by the CONCESSIONAIRE; either,
 - b) Request the CONCESSIONAIRE to correct observations. In this case, the CONCESSIONAIRE will have a term of ten (10) Working Days to present to the GRANTOR the correction of observations. The GRANTOR will have a term of ten (10) Working Days to approve the corrections to the observations made. No new observations may be made to those made initially.
- 12. In case of discrepancy between the parties regarding management expenses, it will be up to the GRANTOR to approve and make payment of the approved expenses, leaving the CONCESSIONAIRE empowered to resort to the dispute resolution mechanism established in the Concession Contract to request the amounts in quarrel.
- 13. After the approval indicated in numeral 11 above, the CONCESSIONAIRE must present to the GRANTOR a final reimbursement request that includes the management expenses approved by the latter, which must be accompanied by the corresponding invoice issued by the CONCESSIONAIRE, or by whoever issued it. represent, in accordance with the Applicable Laws and Provisions. The GRANTOR has a maximum term of thirty (30) Working Days counted from the receipt of the aforementioned request to reimburse the management expenses to the CONCESSIONAIRE.
- 14. For delays in payment of the reimbursement, a rate equivalent to the Legal Interest Rate plus two percent (2%) annually on the unpaid balance will be recognized, from the deadline of the term until the effective date of payment, unless delays are due to causes attributable to the CONCESSIONAIRE. Said interests constitute the only means of compensation for the delay, and no other type of interest or additional payment is recognized to the CONCESSIONAIRE.

Reimbursement of property expenses derived from the property release process

15. After the presentation of the request for reimbursement of property expenses in accordance with numeral 9 above, the GRANTOR will reimburse the CONCESSIONAIRE for the property expenses referred to in paragraph b) of numeral 7 of this Appendix 3. For this purpose, the GRANTOR may choose to (i) reimburse the property expenses to the CONCESSIONAIRE in a single payment or (ii) issue a CALP for the property expenses indicated in the reimbursement request submitted.

In the event that the GRANTOR chooses to reimburse property expenses in a single payment in accordance with item (i) above, it must recognize to the CONCESSIONAIRE a cost of working capital in accordance with the provisions of numerals 5 and 6 above. Likewise, said reimbursement must be made within a term of thirty (30) Working Days from the presentation of the request for reimbursement of property expenses by the CONCESSIONAIRE.

On the other hand, in the event that the GRANTOR chooses to issue a CALP in accordance with item (ii) above, it must be issued within a term of thirty (30) Working Days counted from the presentation of the request for reimbursement of property expenses. by the CONCESSIONAIRE and will be calculated as follows:

$$CALP_i = GP_i$$

Where:

- CALP_i : Certificate for Progress in Property Release, corresponding to the "i"th quarter.
 - GP_i : Property expenses corresponding to the "i"th quarter, indicated in the corresponding reimbursement request.

If the GRANTOR chooses to issue a CALP, the issuance of said CALP will have the cancellation effects established for reimbursement in article 23.6 of the Single Ordered Text (TUO) of Legislative Decree No. 1192. Therefore, the interest mentioned in said article will not be generated.

16. Each CALP will give rise to ten (10) semiannual payments in Dollars that will be calculated with the following formula:

Semiannual Payment
$$CALP_i = CALP_i \times \left[\frac{i_{calp} \times (1 + i_{calp})^n}{(1 + i_{calp})^n - 1}\right]$$

Where:

- CALP_i : Certificate for Progress in Property Release, corresponding to the "i"th quarter.
 - i_{calp} : The interest rate at which the CALPs are discounted, which will be equivalent to: $(1 + TRS_i + 2.04\%) \wedge {}^{(6/12)} 1$

The TRS will be that available on the date of issuance

of the CALP for a period of 1,080 Calendar Days.

n : Payment term, which will be equal to ten (10) semesters.

In the event that the GRANTOR chooses to issue a CALP in accordance with numeral 15 above and in accordance with this numeral 16, the cost of working capital will be defined as established in this numeral 16 and not as provided in Numerals 5 and 6. of this Appendix.

17. The semiannual CALP payments will be made according to the following schedule:

CALP _i Semiannual Payment	Payment Date of each CALP _i
First Payment	6 months from the date of issuance of the CALP
Second Payment	12 months from the date of issuance of the CALP
Third Payment	18 months from the date of issuance of the CALP
Fourth Payment	24 months from the date of issuance of the CALP
Quinto Pago	30 months from the date of issuance of the CALP
Sexto Pago	36 months from the date of issuance of the CALP
Seventh Payment	42 months from the date of issuance of the CALP
Eighth Payment	48 months from the date of issuance of the CALP
Ninth Payment	54 months counted from the date of issuance of the CALP
Tenth Payment	60 months from the date of issuance of the CALP

Without prejudice to any other provision contained in the Contract, the GRANTOR declares that once the CALP is issued, the corresponding payments will be made uninterruptedly in accordance with the above.

- 18. The GRANTOR will have the unconditional and irrevocable obligation to pay the CALP issued to the CONCESSIONAIRE. The right to collect each CALP is freely transferable and its transfer or assignment does not require any type of authorization from the GRANTOR. Likewise, the CONCESSIONAIRE may grant or constitute guarantees on said collection rights, without authorization from the GRANTOR.
- 19. The right to collect each CALP will not be conditioned to any event or circumstance after the issuance of the corresponding CALP. Likewise, the GRANTOR may not raise exceptions, compensations, obligations, counterclaims, exceptions of non-compliance or any other defense or right, derived or not from the Contract, that tends or has the purpose of delaying, withholding, reducing or preventing CALP payments. Likewise, the GRANTOR may not take these payments as compensation for any obligation that the CONCESSIONAIRE may have.
- 20. The semiannual payments corresponding to each CALP will be paid by the GRANTOR in Dollars and through the Administration Trust. Payments will be made considering the amount that must be added as VAT, and the applicable Regulatory Contribution.
- 21. The suspension of obligations of the Concession, as well as the Expiration of the Concession for the reasons set for in the Concession Contract, will not limit or affect in any way the unconditional and irrevocable obligation of the GRANTOR to pay to the CONCESSIONAIRE the CALP issued.
- 22. For the timely lack of semiannual payment of each CALP, the GRANTOR, through the Administration Trust, will pay the CONCESSIONAIRE a rate equivalent to the Legal Interest Rate plus two percent (2%) annually on the unpaid balance, from the start of the delay

period until its end. Said interests constitute the only means of compensation for the delay, and no other type of interest or additional payment is recognized to the CONCESSIONAIRE.

- 23. The resources necessary to pay the CALP will be included in the public sector budget for the corresponding fiscal year. To this end, the GRANTOR undertakes to program each year the budget items necessary for the payment of the annual amount of the CALP, taking into account the provisions of the annual budget laws, as well as Legislative Decree No. 1440, Legislative Decree of the National Public Budget System.
- 24. In the event that the GRANTOR has not complied with the payment of the CALP for more than six (6) consecutive months counted from when payment of said obligation becomes due, the CONCESSIONAIRE may request Expiration of the Contract in accordance with Clause 18.10.

Appendix 4 Affidavit of Expenses Template

Hereby, I, $[\bullet]$, identified with National Identity Document No. $[\bullet]$, in my capacity as General Manager of $[\bullet]$, in accordance with the powers that are accredited with the validity of power attached to this declaration, on the occasion of the execution of the Concession Contract for the design, financing, Construction, Operation, Operation and Maintenance of the Peripheral Ring Road Project dated $[\bullet]$ (the "<u>Concession Contract</u>"), I declare under oath the following:

- 1. The data and information contained in the reimbursement request for [management expenses / land expenses] submitted by the CONCESSIONAIRE on the same date as this affidavit are true, correct, and valid.
- 2. All [management expenses / property expenses] that are considered and supported in the reimbursement request have been made by the CONCESSIONAIRE.
- 3. That there is and will not be any duplication with respect to the amounts required via reimbursement in the application submitted to the GRANTOR.
- That all documents supporting the reimbursement of [management expenses / property expenses] have been correctly issued and the copies presented are faithful to their originals.

For the purposes of this affidavit, capitalized terms not defined in this document will have the same meanings attributed to them in the Concession Contract.

If the falsity or inaccuracy of this statement is proven, I will be civilly and criminally responsible in my capacity as General Manager, having to respond to the Peruvian judicial authorities as appropriate, without prejudice to the sanctions that correspond to the CONCESSIONAIRE under the Contract of Concession. For this purpose, I renounce the jurisdiction of my domicile and submit to the judges and courts of Lima – Cercado.

Appendix 5 Certified for Advancement of Property Release (CALP) Template

CALP No. ______ - Concession Contract for the Project: "Peripheral Ring Road"

This Certificate for Advancement of Property Release (CALP) is issued in accordance with the provisions of the Concession Contract for the "Peripheral Ring Road" Project (hereinafter, the "<u>Contract</u>"), signed on the date _____, ____, between the Ministry of Transport and Communications (hereinafter, the "GRANTOR") and _____ (hereinafter, the "CONCESSIONAIRE").

Certification for Progress of Property Release

In accordance with the provisions of the Contract, the GRANTOR grants its consent regarding the reimbursement of property expenses required through a request dated ______ corresponding to Section ______, made by the CONCESSIONAIRE.

The GRANTOR certifies that the expenses for the properties subject to this CALP have been incurred in accordance with the provisions of the Contract and in accordance with the Applicable Laws and Provisions, as this term is defined in the Contract.

CALP No	
Categories for properties corresponding to the "i" th quarter (US\$)	
Daily effective interest rate	
Number of days from the date of reimbursement request to the fixed date of start of payment of CALP No.	
Total amount (US\$)	
Amount per annual CALP (US\$)	

Issued in Lima, _____

GRANTOR

Appendix 6 Unit prices of management expenses

Concept	Unit	Maximum Cost (Soles)	
Files for liberation of areas			
Property physical survey report			
File for cadastral search	By housing	Altogether, up to [S/. 8,136.00] ^{1/2}	
Legal technical diagnosis file	By housing		
Appraisal file			
Notarial charges	•		
Legalization of signature by Notary of Lima	For each signature	Up to S/. 25.00	
Banking expenses	·	•	
Issuance of cashier's check	Check units	Up to S/. 15.00	

It includes: social awareness, negotiating staff, collection of field and office information, among others directly related to the property release process. It also includes general expenses, utilities and taxes.

The unit prices provided for in Appendix 6 will be adjusted for inflation considering the Peruvian consumer price index (CPI) published by the National Institute of Statistics and Informatics (INEI), from the date of the Declaration of Interest until the date on which payment is made.

Appendix 7 Guarantee of Faithful Fulfillment Template for the Recognition and Reimbursement of Property Release

Lima, [•], 20[•]

Messieurs Ministry of Transport and Communications

Ref.: Letter of guarantee No. [•]

Expiration: [•]

From our consideration:

Hereby and at the request of our clients, gentlemen [•] (name of the legal entity) (hereinafter, the "<u>CONCESSIONAIRE</u>") we constitute this joint and several bond, irrevocable, unconditional and of automatic realization, without benefit of excussion or division, up to the sum of US\$ [•] ([•] and [•]/100 US Dollars) in favor of the Ministry of Transport and Communications to guarantee the correct and timely fulfillment of the payment in favor of the Taxable Persons in accordance with the provisions of Numeral 3 of Appendix 3 of Annex No. 4 of the Concession Contract for the design, financing, construction, operation and maintenance of the Peripheral Ring Road signed between the State of the Republic of Peru and our clients.

To honor this bond in your favor, a written request through a notary from the Ministry of Transport and Communications will suffice, which must be signed by a person duly authorized by said organization. Payment will be made within 72 hours of your request at our offices located at[•].

Any delay on our part to honor the aforementioned guarantee will accrue interest equivalent to the effective annual legal interest rate in foreign currency set by the Central Reserve Bank of Peru in accordance with article 1244 of the Civil Code, plus a margin (spread). 3% annually. The legal interest rate will be that published daily by the Superintendency of Banking, Insurance and AFP, and interest must accrue from the date on which compliance has been required and until the effective date of payment.

Our obligations under this bond will not be affected by any dispute between the Ministry of Transport and Communications, or any entity of the Government of Peru, and our clients.

This bond will be valid from $[\bullet] [\bullet]$, 20 $[\bullet]$, until $[\bullet] [\bullet]$, 20 $[\bullet]$, inclusive.

Sincerely,

Signature: Name: Entity:

ANNEX No. 5

PRELIMINARY TECHNICAL FILES OF REMOVAL AND/OR REPLACEMENT WORK OF ESSENTIAL INTERFERENCES AND NON-ESSENTIAL INTERFERENCES

Essential Interferences are a priority. These must be released from in accordance with the schedule established in Clause 6.39 of the Contract.

On the other hand, the Parties agree that, in accordance with the provisions of subparagraph vii) of Clause 3.8 of the Contract, on the Closing Date, the GRANTOR will deliver to the CONCESSIONAIRE the preliminary technical files of works, removal and/or replacement of Essential Interferences and Non-Essential Interferences, as applicable.

ANNEX No. 6 LIST OF ENTITIES AUTHORIZED TO ISSUE GUARANTEES

Guarantee of Faithful Fulfillment may be issued by the following entities:

- a) National banking companies authorized by the Superintendence of Banking, Insurance and AFP to issue a letter of guarantee that have, at least, one of the following qualifications:
 - Financial Strength: TO
 - Short-Term Instruments: minimum rating of CP-1, Category-1, CLA-1 or EQL-1
 - Long Term Instruments: AA

The classifications or ratings indicated above must be current at the time of submitting the letter of guarantee and be granted by at least two risk rating agencies authorized by the Securities Market Superintendency.

- b) National insurance companies authorized by the Superintendency of Banking, Insurance and AFP to issue a letter of guarantee and that on the date of issuance of the letter of guarantee have a minimum rating of "A" for financial strength assigned by two risk rating agencies authorized by the Securities Market Superintendence.
- c) Entities designated as First Category Foreign Banks in the current official letter issued by the Central Reserve Bank of Peru.
- d) Any international financial entity with investment grade, assigned by an international risk rating entity of recognized prestige that classifies the Republic of Peru.
- e) Any multilateral credit institution of which the State of the Republic of Peru is a member.

The guarantees issued by First Category Foreign Banks or international financial entities, or by any of their subsidiaries or branches, must necessarily be confirmed by one of the banking companies of the national financial system referred to in subparagraph a) above.

ANNEX No. 7 GUARANTEES IN FAVOR OF THE GRANTOR

Appendix 1 Concession Contract Guarantee of Faithful Fulfillment Template

Lima, [•], 20[•]

Messieurs Ministry of Transport and Communications

<u>-</u>

Ref.: Letter of guarantee No. [•] Expiration: [•]

From our consideration:

Hereby and at the request of our clients, gentlemen [•] (name of the legal entity) (hereinafter, the "<u>CONCESSIONAIRE</u>") we constitute this joint and several bond, irrevocable, unconditional and of automatic realization, without the benefit of excussion or division, up to the sum of US\$ [•] ([•] and [•]/100 US Dollars) in favor of the Ministry of Transport and Communications to guarantee the correct and timely compliance with each and every one of the obligations borne by the CONCESSIONAIRE, including the payment of penalties, derived from the execution of the Concession Contract for the design, financing, construction, operation and maintenance of the Peripheral Ring Road signed between the State of the Republic of Peru and our clients.

This bond will also guarantee the correct and timely compliance with the obligations of the CONCESSIONAIRE established by virtue of the provisions contained in Legislative Decree No. 1362 and its Regulations, or standards that complement or replace them.

To honor this bond in your favor, a written request through a notary from the Ministry of Transport and Communications will suffice, which must be signed by a person duly authorized by said organization. Payment will be made within 72 hours of your request at our offices located at [•].

Any delay on our part to honor the aforementioned guarantee will accrue interest equivalent to the legal interest rate set by the Central Reserve Bank of Peru in accordance with article 1244 of the Civil Code, plus a margin (spread) of 3% per year. The legal interest rate will be that published daily by the Superintendency of Banking, Insurance and AFP, and interest must accrue from the date on which compliance has been required and until the effective date of payment.

Our obligations under this bond will not be affected by any dispute between the Ministry of Transport and Communications, or any entity of the Government of Peru, and our clients.

This bond will be valid from $[\bullet] [\bullet]$, 20 $[\bullet]$, until $[\bullet] [\bullet]$, 20 $[\bullet]$, inclusive.

Sincerely, Signature: Name: Entity:

ANNEX No. 7 GUARANTEES IN FAVOR OF THE GRANTOR

Appendix 2 Guarantee of Faithful Compliance of Construction of Works Template

Lima, [•], 20[•]

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Messieurs Ministry of Transport and Communications

Ref.: Letter of guarantee No. [•] Expiration: [•]

From our consideration:

Hereby and at the request of our clients, gentlemen [\bullet] (name of the legal entity) (hereinafter the "<u>CONCESSIONAIRE</u>") we constitute this joint and several bond, irrevocable, unconditional and of automatic realization, without the benefit of excussion or division, up to the sum of US\$ [\bullet] ([\bullet] and [\bullet]/100 US Dollars) in favor of the Ministry of Transport and Communications to guarantee the correct and timely completion of the construction of the Works to charge of the CONCESSIONAIRE of the Section [\bullet], including the payment of penalties, derived from the celebration of the Concession Contract for the design, financing, construction, operation and maintenance of the Peripheral Ring Road signed between the State of the Republic of Peru and our clients.

To honor this bond in your favor, a written request through a notary from the Ministry of Transport and Communications will suffice, which must be signed by a person duly authorized by said organization. Payment will be made within 72 hours of your request at our offices located at [•].

Any delay on our part to honor the aforementioned guarantee will accrue interest equivalent to the legal interest rate set by the Central Reserve Bank of Peru in accordance with article 1244 of the Civil Code, plus a margin (spread) of 3% per year. The legal interest rate will be that published daily by the Superintendency of Banking, Insurance and AFP, and interest must accrue from the date on which compliance has been required and until the effective date of payment.

Our obligations under this bond will not be affected by any dispute between the Ministry of Transport and Communications, or any entity of the Government of Peru, and our clients.

This bond will be valid from $[\bullet] [\bullet]$, 20 $[\bullet]$, until $[\bullet] [\bullet]$, 20 $[\bullet]$, inclusive.

Sincerely,

Signature: Name: Entity:

ANNEX No. 8 DECLARATIONS FOR PERMITTED GUARANTEED INDEBTEDNESS TEMPLATE

Appendix 1 Permitted Creditor Declaration Template

Lima, [•], 20[•]

Messieurs **The Private Investment Promotion Agency - PROINVERSIÓN - PROINVERSIÓN** [•] Lima - Peru

Permitted Creditor: [•]

Reference: Concession Contract for the Lima and Callao Peripheral Ring Road Project

In accordance with the provisions of the Concession Contract for the Peripheral RIng Road Project, we declare the following:

- a) That, we are not subject to impediments or restrictions (by contractual, judicial, arbitral, administrative, legislative or other means) that prevent us from qualifying as a Permitted Creditor / Administrative Agent / Guarantee Agent / [insert other applicable condition] according to the terms of the Concession Contract for the Peripheral Ring Road Project.
- b) That, subject to our internal bodies approving our participation in a financing operation of the CONCESSIONAIRE, we comply with the requirements established in the Concession Contract of the Peripheral RIng Road Project, as well as all those required by the Applicable Laws and Provisions, to qualify as Permitted Creditor / Administrative Agent / Guarantee Agent / [insert other applicable condition].
- c) That, the financing indicated in paragraph b) above will be carried out, if approved, among others, according to the provisions of the contract called [•] that will be signed by, among others, [•] (CONCESSIONAIRE) and [•] (financial entity / representative of bondholders / [insert other applicable condition]), through which the CONCESSIONAIRE will be provided with financing up to an approximate amount of [•], funds that will be destined to comply with the CONCESSIONAIRE's obligations derived from the Concession Contract / finance or refinance the share capital contributed by the shareholders / partners of the CONCESSIONAIRE / refinance previous financing of the CONCESSIONAIRE.
- d) That, if the financing indicated in subparagraph b) above is approved, it does not contravene the Concession Contract of the Peripheral Ring Road Project and is not enforceable against the GRANTOR.

Sincerely,

Signature: [•] Name: [•] Position: [•] Entity: [•] Permitted Creditor / Administrative Agent / Guarantee Agent / [insert other applicable condition]

Table: Conditions of Permitted Creditor Financing

#	Terms	Description
1.	Permitted Creditor(s)	
2.	Financing amount	
3.	Interest rate	
4.	Guarantees	
5.	Grace period	
6.	Amortization Schedule Summary	
7.	Applicable Law	

ANNEX No. 8 DECLARATIONS FOR PERMITTED GUARANTEED INDEBTEDNESS TEMPLATE

Appendix 2 CONCESSIONAIRE Declaration Template

Lima, [•], 20[•]

Messieurs The Private Investment Promotion Agency - PROINVERSIÓN - PROINVERSIÓN [•] Lima - Peru --

Permitted Creditor: [•]

Reference: Concession Contract for the Lima and Callao Peripheral Ring Road Project

In accordance with the provisions of the Concession Contract for the Peripheral Ring Road Project, we declare the following:

- a) That, we are not subject to impediments or restrictions (by contractual, judicial, arbitral, administrative, legislative or other means) that prevent us from assuming and complying with the obligations derived from the Permitted Guaranteed Indebtedness contracts and the guarantees that support them that we have presented before you.
- b) That the terms and conditions of the Permitted Guaranteed Indebtedness contracts and the guarantees that support them that we have presented to you comply with the terms of the Concession Contract for the Peripheral RIng Road Project.
 Sincerely,

Signature: [•] Name: [•] Position: [•] Entity: [•] Concessionaire

ANNEX No. 9 Financial Regime

Appendix 1 About Remuneration for Investments (RPI)

- 1. The GRANTOR will have the unconditional and irrevocable obligation to pay to the CONCESSIONAIRE the amounts for the RPI-CAO of the Sections, through the Administration Trust.
- 2. The RPI of each Section indicated in the Awardee's [Declaration of Interest/Economic Offer], which will form an integral part of this Contract, is the amount to which the RPI adjustment mechanisms contemplated in the Contract will be applied and which, once applied, will be the maximum amount that the CONCESSIONAIRE will be entitled to receive for the execution of the Works paid with RPI, so any additional expenses during the execution of the Works will be assumed by the CONCESSIONAIRE, without the right to any recognition or reimbursement.
- 3. The RPI of each Section indicated in the Awardee's Declaration of Interest/Economic Offer must represent the following percentages with respect to the RPI of the entire Project:
 - a) Section 1: 18.28159%;
 - b) Section 2: 57.91513
 - c) Section 3: 23.80328%.
- 4. The CONCESSIONAIRE acquires the right to collect the RPI-CAO as a consequence of obtaining each CAO, as established in Appendix 2 of this Annex. This collection right is freely transferable, and its transfer or assignment does not require authorization from the GRANTOR. Likewise, the CONCESSIONAIRE may grant or constitute guarantees on said collection rights, without prior authorization from the GRANTOR.
- 5. The RPI Payment Start Date, for each Section, will be the earliest of:
 - 5.1 The first Working Day of the month of June or December immediately following the signing of the Works Acceptance Certificate for the corresponding Section; either
 - 5.2 The first Working Day of the month of June or December immediately following the expiration, as applicable:
 - a) For Section 1, thirty-eight (38) months counted from the date of signing the Work Initiation Act for Section 1.
 - b) For Section 2, sixty-one (61) months counted from the date of signing the Work Initiation Act for Section 2.
 - c) For Section 3, forty-two (42) months counted from the date of signing the Work Initiation Act for Section 3.
- 6. The payment of the RPI-CAO of each Section and the amount that must be added as VAT, will be made semiannually in arrears, for thirty (30) consecutive semesters. The semiannual

payment will be made on the first Working Day of the months of June and December of each year.

If a CAO is issued after the corresponding RPI Payment Start Date, the payment of the RPI-CAO of the applicable Section will be made semi-annually starting on the first Working Day of the month of June or December immediately following the date of issuance of said CAO and as established in the previous paragraph.

Without prejudice to any other provision contained in the Contract, the GRANTOR declares that once the RPI-CAO is issued, the corresponding payments will be made uninterrupted.

- 7. The procedure for the recognition of the RPI-CAO will be carried out based on what is established in Appendix 2 of this Annex and the following will be taken into consideration:
 - a) The RPI of the respective Section indicated in the Declaration of Interest/Economic Offer of the Successful Bidder, which shall form an integral part of this Contract and shall be paid by the GRANTOR to the CONCESSIONAIRE, shall be adjusted solely and exclusively as stipulated in Appendix 2 of this Annex.
 - b) The RPI will be paid in Dollars, in thirty (30) semiannual installments starting from the RPI Payment Start Date of the corresponding Section, in accordance with the terms and conditions established in the Concession Contract. Each semiannual payment will amount to fifty (50%) of the annual amount of the RPI-CAO corresponding to the CAO issued, in accordance with Appendix 2 of this Annex.
 - c) The suspension of obligations or the Concession, as well as the termination of the Contract, for the causes set for in in the Concession Contract or for any other cause will not limit or affect under any circumstances the unconditional and irrevocable obligation of the GRANTOR to pay the CONCESSIONAIRE the RPI-CAO generated by the issued CAOs. Therefore, both the Administration Trust and the provisions of the Contract and its Annexes, which are applicable to ensure such payment, shall remain in force for the necessary term
- 8. The right to collect from each RPI-CAO will not be conditional on the execution or approval of the works carried out after the issuance of the certificate that originated the RPI-CAO. Likewise, the GRANTOR may not raise exceptions, compensations, obligations, counterclaims, exception of non-compliance or any other defense or right, derived or not from the Contract, that tends or has the purpose of delaying, withholding, reducing or preventing the payments of the RPI. CAO. Likewise, the GRANTOR may not take these payments as compensation for any obligation that the CONCESSIONAIRE may have.
- 9. For the timely failure to pay the RPI-CAO of the corresponding Section, the GRANTOR, through the Administration Trust, will pay the CONCESSIONAIRE a rate equivalent to the Legal Interest Rate plus two percent (2%) annually on the balance. unpaid from the beginning of the delay period until its end. Said interests constitute the only means of compensation for the delay, and no other type of interest or additional payment is recognized to the CONCESSIONAIRE.

10. The resources necessary for the payment of the RPI-CAO will be contemplated in the Public Sector Budget for the corresponding fiscal year. For this purpose, the GRANTOR undertakes to budget each year the necessary budget items for the payment of the annual amount of the RPI-CAO, taking into account the provisions of the annual budget laws, as well as Legislative Decree No. 1440, Legislative Decree of the National Public Budget System and/or its modifying and/or substitute regulations.

ANNEX No. 9 Financial Regime

Appendix 2 Work Progress Certification Mechanism

1. Overview

- 1.1 "<u>Constructive Milestone</u>" are construction progress achievements of each of the Sections expressed in percentages, which will be verified by the REGULATOR based on the execution of the budget provided in the EDI approved by the GRANTOR for the corresponding Section using the unit prices and measurements of said EDI.
- 1.2 The CONCESSIONAIRE will prepare the EDI for each Section in accordance with what is indicated in Chapter VII of the Concession Contract.
- 1.3 The budgets contained in the EDIs approved in accordance with the Contract are solely referential and, therefore, do not generate any right of compensation or similar to the CONCESSIONAIRE.
- 1.4 No adjustments will be applied to the RPI or the CAOs, except as expressly provided for in this Appendix. This provision prevails over any other that could establish or allow a contrary interpretation.

2. Of the Constructive Milestones

- 2.1 Construction Milestones They will have a periodicity of no less than a quarter and a minimum value of:
 - a) 10% of the EDI budget for Section 1;
 - b) 10% of the EDI budget for Section 3; and,
 - c) 5% of the EDI budget for Section 2.

The total value of the Construction Milestones must add up to one hundred percent (100%) of the EDI budget for each Section. The established minimum value does not apply to the last Construction Milestone of the corresponding Section.

- 2.2 The configuration of each Construction Milestone must consider at least the following:
 - a) Percentage that the Construction Milestone represents with respect to the total EDI budget of the corresponding Section.
 - b) Constructive Milestones are not allowed with items that only include the supply of materials or equipment or the mobilization of machinery. The Construction Milestones must include Work Progress actually executed.
- 2.3 If the CONCESSIONAIRE reports that it will carry out the Financial Closing of Section 2 in two phases in accordance with what is indicated in Clause 4.4 and as determined in Annex No. 19 of the Contract, the configuration of each Construction Milestone must consider at least, in addition to what is indicated in numeral 2.2 above, the following:

a) For the purposes of calculating the Work Progress of Section 2 in this case, the term "Z%" will be considered to mean the percentage that results from applying the following formula:

Z	=	CF _{Section2.1}
		$\overline{(EDI_{Section2} - Capital_{Section2})}$
Z	<	1
Z	>	0
$CF_{Section 2.1}$:	Amount credited in the Financial Closing of Section 2
		phase 1
$CF_{Section 2.1}$	>=	400,000,000 USD (four hundred million US dollars)
$EDI_{Section2}$:	EDI Budget for Section 2
Capital _{Section2}	:	US\$198,041,159.50 (One hundred ninety-eight million
		forty-one thousand one hundred fifty-nine and 50/100 US
		dollars), which corresponds to the difference between the
		minimum capital stock indicated in clause 3.6 and that
		indicated in clause 3.7 of the Contract.

b) Constructive Milestone Section 2 phase 1: are Work Progress of Section 2 expressed in percentages (which will be verified by the REGULATOR) of the execution of the percentage Z% of the budget contemplated in the EDI approved by the GRANTOR for Section 2 using the unit prices and measurements of said EDI.

The configuration of each Construction Milestone Section 2 phase 1 must consider the percentage it represents with respect to the Z% of the total EDI budget for Section 2.

The total value of the Construction Milestones of Section 2 phase 1 must add up to Z percent (Z%) of the EDI budget of Section 2.

c) Constructive Milestone Section 2 phase 2: are Work Progress of Section 2 expressed in percentages that will be verified by the REGULATOR based on the execution of the percentage 100% - Z% of the budget contemplated in the EDI approved by the GRANTOR for Section 2 using the unit prices and measurements of said EDI.

The configuration of each Construction Milestone Section 2 phase 2 must consider the percentage it represents with respect to 100% - Z% of the total EDI budget for Section 2.

The total value of the Construction Milestones of Section 2 phase 2 must add up to one hundred percent (100%) minus Z percent (Z%) of the EDI budget of Section 2.

d) Regarding what is indicated in the last paragraph of numeral 2.1 above, it is specified that the total value of the Construction Milestones of phase 1 and phase 2 of Section 2 must add up to one hundred percent (100%) of the EDI budget of Section 2.

3. Work Progress Reports for each Section

- 3.1 From the date of signing the Work Initiation Act, the CONCESSIONAIRE will present to the REGULATOR, with a copy to the GRANTOR, a Works Progress Report every three months and at the completion of each Construction Milestone, which must indicate at least the following:
 - a) Compliance with the corresponding Construction Milestone.
 - b) The valuation of the Work Progress of the Milestone of the corresponding Section, determined as the sum of the amounts (unit prices for executed measurements) of the executed items and subitems of the budget approved in the EDI of the corresponding Section.
 - c) The list of items and subitems, with their respective quantities and units of measurement executed during the period corresponding to the corresponding Construction Milestone and accumulated since the beginning of the execution of the Works of the respective Section. A subitem is understood as each of the activities that allow the completion or execution of a item.
 - d) Percentage with respect to the total EDI budget of the corresponding Section or, if the CONCESSIONAIRE chooses to accredit the Financial Closing of Section 2 in two phases in accordance with what is indicated in Clause 4.4 and as determined in Annex No. 19 of the Contract, must indicate:
 - (i) The phase (1 or 2) of Section 2 to which the Construction Milestone must be assigned;
 - (ii) The percentage with respect to the total EDI budget of the Section and corresponding phase: for phase 1, the percentage with respect to Z% of the total EDI budget of Section 2 and for phase 2, the percentage with respect to 100% - Z% of the total EDI budget for Section 2.
- 3.2 The reports referred to in numeral 3.1 above will be prepared independently for each Section. The Work Progress Reports must be presented by the CONCESSIONAIRE to the REGULATOR, with a copy to the GRANTOR, within three (3) Working Days of completing each Construction Milestone of the corresponding Section.
- 3.3 The CONCESSIONAIRE will be responsible for preparing the format of the Work Progress Reports. To this end, the CONCESSIONAIRE, fifty (50) Calendar Days in advance of the issuance of the first Works Progress Report, must send to the REGULATOR the format to be used for the preparation of said reports. Within a term of ten (10) CalendarDays, the REGULATOR will send its observations or approval to the CONCESSIONAIRE. If the REGULATOR has observations, the CONCESSIONAIRE must correct them within a term of five (5) Calendar Days of receipt and must send the revised Works Progress Report format to the REGULATOR within said term. In this case, the REGULATOR will have a term of five (5) Calendar Days to send its approval to the CONCESSIONAIRE.
- 3.4 The REGULATOR will have a term of no more than fifteen (15) Working Days to review the Work Progress Report from its presentation by the CONCESSIONAIRE and verify that the items have been executed in accordance with the EDI of the corresponding Section.

Within this term, the REGULATOR must proceed as follows:

- a) If satisfied, approve the Works Progress Report; either,
- b) Request the CONCESSIONAIRE to correct observations. In this case, the CONCESSIONAIRE will have a term of ten (10) Working Days to submit to the REGULATOR the correction of observations.
- c) The REGULATOR will have a term of five (5) Working Days to approve the corrections to the observations made. No new observations may be made to those made initially.
- 3.5 If the REGULATOR does not issue a statement regarding the approval of the Work Progress Report within the terms indicated in Numeral 3.4 above, the following must be followed:
 - a) The CONCESSIONAIRE must again submit to the REGULATOR, with a copy to the GRANTOR, the respective Work Progress Report within three (3) Working Days of the expiration of the term for the REGULATOR to issue its statement in accordance with Numeral 3.4 above.
 - b) The REGULATOR will have a term of no more than ten (10) Working Days to review the Work Progress Report again from its second presentation by the CONCESSIONAIRE and verify that the items have been executed in accordance with the EDI of the corresponding Section.

Within this term, the REGULATOR must proceed as follows:

- (i) If satisfied, approve the Works Progress Report; either,
- (ii) Request the CONCESSIONAIRE to correct observations. In this case, the CONCESSIONAIRE will have a term of five (5) Working Days to submit to the REGULATOR the correction of observations.
- (iii) The REGULATOR will have a term of five (5) Working Days to approve the corrections to the observations made. No new observations may be made to those made initially.

If the REGULATOR does not issue a statement regarding the approval of the Work Progress Report within the corresponding term on this second opportunity, it must be understood that it has been approved.

- 3.6 Design and construction errors will not be recognized in the valuation of the Work Progress of the corresponding Section.
- 3.7 Once the corresponding Work Progress Report is approved, the REGULATOR will have a period of five (5) Working Days to issue the Work Revision Report, which must be delivered to the GRANTOR and the CONCESSIONAIRE.

3.8 With the approval of the Works Progress Report by the REGULATOR and the issuance of the corresponding Work Review Report, where the completion of a Construction Milestone is verified, the issuance of the corresponding CAO may be requested, in accordance with what is indicated in Numeral 4 of this Appendix.

4. Procedure for the recognition and issuance of CAOs

4.1 Once a Construction Milestone has been completed, as well as the Works Progress Report has been approved and the corresponding Work Revision Report has been issued as indicated in Numeral 3 of this Appendix, the CONCESSIONAIRE may submit to the REGULATOR a request for recognition of the progress of the Works. executed. The REGULATOR has a term of fifteen (15) Working Days counted from the presentation of said request by the CONCESSIONAIRE to issue the corresponding CAO, in accordance with the format included in Appendix 3.1 or Appendix 3.2 of this Annex, as appropriate.

The issuance of the last CAO of the corresponding Section will be conditional on the acceptance, by the GRANTOR, of all the Works of the corresponding Section.

4.2 Each CAO issued by the REGULATOR will generate collection rights in favor of the CONCESSIONAIRE, proportional to the RPI, called RPI-CAO, and obtaining all the CAO of each Section (and phase, if applicable) will mean obtaining the right to collect 100% of the RPI of the corresponding Section (and phase, if applicable). Consequently, once each CAO is issued, the GRANTOR will have the irrevocable and unconditional obligation to pay the CONCESSIONAIRE the corresponding RPI-CAO, through the Administration Trust, in accordance with the provisions of the Contract.

To this end, once each CAO is issued by the REGULATOR in accordance with the provisions of the previous numeral and the corresponding invoice is presented by the CONCESSIONAIRE, or by whoever represents it, in accordance with the Applicable Laws and Provisions, the GRANTOR must deposit in the account of the Administration Trust that corresponds to the monetary amounts necessary to pay the CONCESSIONAIRE the corresponding RPI-CAO and, in addition, if applicable in accordance with the Administration Trust, it must instruct the trustee of the Administration Trust to make the payment of the corresponding RPI-CAO in accordance with the provisions of the Contract.

4.3 For Section 1, Section 3 and Section 2, if the Financial Closing is credited on a single occasion, each RPI-CAO will be determined as follows:

$$RPI_CAO_{i \text{ Section } N} = CAO_{i \text{ Tramo } N} \times \frac{RPI_{Section N}}{2}$$

RPI-CAO _{i Section N}	:	Aliquot of the RPI of Section N, corresponding to the "i"th CAO.
CAO _{i Section N}	:	Percentage of work progress of Section N certified in the "i"th CAO.

- RPI_{Section N} : For Tranche 1, Tranche 2 and Tranche 3, it corresponds to the RPI adjusted in accordance with Numeral 5 of this Appendix.
- Section N : Referring to Section 1, Section 2 or Section 3, as appropriate.
- 4.4 If the CONCESSIONAIRE chooses to credit the Financial Closing of Section 2 in two phases (as determined in Annex No. 19 of the Contract), each RPI-CAO of Section 2 will be determined as follows:

$$RPI_CAO_{i \text{ Section 2.f}} = CAO_{i \text{ Section 2.f}} \times \frac{RPI_{\text{Section 2.f}}}{2}$$

Where:

RPI-CAOi Section 2.f	:	Aliquot of the RPI of Section 2 Phase f, corresponding to the "i" th CAO.
CAOi Section 2.f	:	Percentage of work progress of Section 2 phase f certified in the "i" th CAO.
RPI Section 2.f	:	It corresponds to the adjusted RPI of Section 2 phase f in accordance with Numeral 5 of this Appendix, numeral 5.3.
Section 2.f f	:	Referring to Section 2 phase f as appropriate. Referring to phase 1 or phase 2 of Section 2, as appropriate

- 4.5 Each CAO will give rise to thirty (30) RPI-CAO corresponding to (i) RPI of Section 1, (ii) RPI of Section 2 or RPI of Section 2 phase 1 and RPI of Section 2 phase 2, and (iii) RPI of the Section 3, as the case may be.
- 4.6 The REGULATOR will affect each CAO by the construction price adjustment index (IAP), established in the EDI of the corresponding Section, from [January 1, 2023 / the date of the Economic Offer] until the date of completion of the Construction Milestone of the corresponding CAO. The polynomial formula that is used to determine the IAP and that will be established in each EDI must be written in accordance with Supreme Decree No. 011-79-VC, supreme decree that implements and adapts the supreme decree on public works contracting. This formula will reflect the cost composition of the work determined in the corresponding EDI.

Each adjusted CAO_i will give rise to a Δ CAO_i, measured as a percentage of the CAO_i, and will be calculated as follows:

$$CAO_{i \text{ Section N adjusted}} = CAO_{i \text{ Section N}} \quad x \ \frac{1}{FIR_{Section N}} x \ IAP_{i \text{ Section N}}$$

$$\Delta \text{CAO}_{\text{i Section N}} = \frac{(\text{CAO}_{\text{i Section N adjusted}} - \text{CAO}_{\text{i Section N}})}{\text{CAO}_{\text{i Section N}}}$$

Where:

- CAO_{i Section N} : Percentage of work progress of Section N certified in the "i"th CAO.
- CAO_{i Section N adjusted} : Percentage of work progress of Section N certified in the "i"th CAO adjusted based on the construction price adjustment index.
 - FIR Section N : Referential inflation factor for Section N, whose value is: $FIR_{Section N=} \begin{cases} 1.141920, N = 1\\ 1.204859, N = 2\\ 1.151415, N = 3 \end{cases}$
 - IAP_{i Section N} : Construction price adjustment index, whose value (greater or less than 1) results from the application of the polynomial price formula from [January 1, 2023 / the date of the Economic Offer] until the date of completion of the Milestone Constructive of the corresponding CAO. If the prices contained do not suffer any variation, the IAP will be equivalent to 1. If the price variation is positive, the IAP will be greater than 1, and if the price variation is negative, the IAP will be less than 1.

The Δ CAOi will be recorded in each CAO issued by the REGULATOR in accordance with the model included in Appendix 3.1 or Appendix 3.2 of this Annex, as appropriate.

The RPI-CAO_i will be adjusted proportionally to the variation of the corresponding CAO, giving rise to a variation of the RPI-CAO i called a Δ RPI-CAO_i, with the following expression:

 $\Delta \operatorname{RPI_CAO_{i \, Section \, N}} = \Delta \operatorname{CAO_{i \, Section \, N}} x \operatorname{RPI_CAO_{i \, Section \, N}}$

Therefore:

 $RPI_CAO_{i \text{ Section N adjusted}} = RPI_CAO_{i \text{ Section N}} + \Delta RPI_CAO_{i \text{ Section N}}$

RPI-CAO_i Section N : Aliquot of the RPI of Tranche N, corresponding to the adjusted "i"th CAO adjusted based on the construction price adjustment index.

4.7 For the purposes of controlling the progress of the Works of each Section, the CAO_i will be used. The Works of the corresponding Section will be considered completed when the sum of the CAO_i is equivalent to 100%. For Section 2, if the CONCESSIONAIRE chooses to accredit the Financial Closing of Section 2 in two phases (as determined in Annex No. 19 of the Contract), the Works of Section 2 will be considered completed when the sum of the sum of the CAO_i phase 1 and the sum of the CAO_i phase 2 are both equivalent to 100%.

The adjusted CAO_i may add more or less than 100% depending on the behavior of the 4.8 price index throughout the execution period of the Works of the respective Section.

The effect of the adjusted CAO i is only for the determination of the RPI- adjusted CAO i.

5. Procedure for adjusting the RPI due to TRS variation

- 5.1 The RPI of each of the Sections will be updated by the variation of the Sovereign Risk Rate (TRS) between that indicated in the Declaration of Interest/the date of the Economic Offer and the average observed during the ten (10) Calendar Days counted. from the fifteenth (15) Calendar Day prior (i) to the Pricing Date until the sixth (6) Calendar Day prior to the Pricing Date (in case the Financial Closing for said Section is accredited through an issue of transferable securities, debt instruments, securitization and/or any form of financing in the capital markets, whether national and/or international) or, (ii) the date of submission of the request for compliance with the Financial Closing (in the case of the Financial Closing is accredited under one or more financing contracts) (as applicable, according to the formulas in the following numeral) of the corresponding Section.
- 5.2 For the adjustment of the RPI of the corresponding Section and, in the case of Section 2, when the CONCESSIONAIRE has chosen to credit the Financial Closing on a single occasion, the following formulas will be applied:

Based on the RPI indicated in the Declaration of Interest/Economic Offer, the following is calculated:

$$v\text{RPI}_{\text{Section N [DI/PE]}} = \frac{\text{RPI}_{\text{Section N [DI/PE]}}}{2} \times \frac{1 - (1 + i_{\text{Section N_s [DI/PE]}})^{-n \times 2}}{i_{\text{Section N_s [DI/PE]}}}$$
$$i_{\text{Section N_s [DI/PE]}} = (1 + i_{\text{Section N [DI/PE]}})^{1/2} - 1$$

$$i_{Section N_{S}[DI/PE]} = (1 + i_{Section N}[DI/PE])$$

- : Present value of the semiannual RPI payments of vRPI Section N [DI/PE] Section N discounted at the semiannual interest rate indicated in the [Declaration of Interest/as of the date of the Financial Offer]. Said present value is calculated one semester before the RPI Payment Start Date of Section N.
- RPI_{Section N [DI/PE]} Annual RPI of Section N indicated in the Declaration of Interest/Economic Offer.

- $i_{Section N_s [DI/PE]}$: Semiannual interest rate determined based on the $i_{TramoN [DI/PE]}$
 - n : RPI payment term, in years, equal to fifteen (15) years.

It calculates the $vRPI_{Section N [CF]}$ of the corresponding Section according to the following formula:

$$v\text{RPI}_{\text{Section N [CF]}} = v\text{RPI}_{\text{Section N [DI/PE]}} \times \left[\left(\frac{1 - i_{\text{Section N [DI/PE]}} \times n_{\text{Section N}}}{1 - i_{\text{Section N [CF]}} \times n_{\text{Section N}}} \right) \right]$$

- vRPI_{Section N [CF]} : Present value of S N RPI payments adjusted by the interest rate as of the Financial Closing date.
 - If the Financial Closing is carried out through the : n_{Section N} market, transferable securities, capital debt instruments and/or securitizations, it will be the fraction of years between the Pricing Date of Section N and six months before the RPI Payment Start Date of the Section N. If the Financial Closing is carried out through any other mechanism, it will be the fraction of years between the Financial Closing Date of Section N and six months before the RPI Payment Start Date of Section N.
 - *i*_{Section N [CF]} : Annual interest rate, which is estimated as the sum of: (i) 2.04% annually and (ii) the TRS calculated according to the following:
 - If the Financial Closing is carried out through the capital market, transferable securities, debt instruments and/or securitizations, the TRS will be the average observed during the ten (10) Calendar Days counted from the fifteenth (15) Calendar Day prior to the Date of Pricing until the sixth (6) Calendar Day prior to the Pricing Date for the Section that is credited.
 - If the Financial Closing is carried out through any other mechanism, the TRS will be the average observed for ten (10) Calendar Days counted from the fifteenth (15) Calendar Day prior to the date of submission of the request for compliance with the Financial Closing of each Section.

• The TRS reference period for each Section is:

4,140 Calendar Days in the case of Section 1;4,860 Calendar Days for Section 2; and,4,230 Calendar Days for Section 3.

It calculates the RPI $_{TramoN [CF]}$ of the corresponding Section according to the following formula:

$$RPI_{Section [CF]} = vRPI_{Section [CF]} \times \left[\frac{i_{Section N_{s} [CF]} \times \left(1 + i_{Section N_{s} [CF]}\right)^{n \times 2}}{\left(1 + i_{Section N_{s} [CF]}\right)^{n \times 2} - 1}\right] \times 2$$
$$i_{Section N_{s} [CF]} = \left(1 + i_{Section N [CF]}\right)^{1/2} - 1$$

Where:

RPI Section N [CF]	:	Adjusted annual RPI value for Section N
$i_{\text{Section } _s \ [CF]}$:	Semiannual interest rate determined based on the $i_{\text{Section N}[\text{CF}]}$

5.3 In case the CONCESSIONAIRE chooses to accredit the Financial Closing of Section 2 in two phases as established in Clause 4.4 of the Contract and as determined in Annex No. 19 of the Contract, the readjustment for the RPI of Section 2 of phase 1 and Phase 2 will be carried out as follows:

Based on the RPI indicated in the Declaration of Interest/Economic Offer, the following is calculated:

$$\text{vRPI}_{\text{Section 2.f}[DI/PE]} = \frac{\text{RPI}_{\text{Section 2.f}[DI/PE]}}{2} \times \frac{1 - \left(1 + i_{\text{Section 2.f}_{S}[DI/PE]}\right)^{-n \times 2}}{i_{\text{Section 2.f}_{S}[DI/PE]}}$$

$$\begin{split} \text{RPI}_{\text{Section 2.1 [DI/PE]}} = & \text{RPI}_{\text{Section 2 [DI/PE]}} \times Z \\ \text{RPI}_{\text{Section 2.2 [DI/PE]}} = & \text{RPI}_{\text{Section 2 [DI/PE]}} - \text{RPI}_{\text{Section 2.1 [DI/PE]}} \end{split}$$

$$i_{\text{Section 2.f}_s [DI/PE]} = \left(1 + i_{\text{Section 2.f} [DI/PE]}\right)^{1/2} - 1$$

vRPI _{Section 2.f [DI/PE]}	:	Present value of the semiannual RPI payments of phase f of Section 2 discounted at the semiannual interest rate indicated in the Declaration of Interest/as of the date of the Economic Offer. Said present value is calculated one semester before the RPI Payment Start Date of phase f of Section 2.
RPI _{Section 2 [DI/PE]}	:	Annual RPI of Section 2 indicated in the Declaration of Interest/Economic Offer.
RPI _{Section 2.1 [DI/PE]}	:	Annual RPI of Section 2 of phase 1.
RPI _{Section 2.2 [DI/PE]}	:	Annual RPI of Section 2 of phase 2.
i _{Section 2.1 [DI/PE]}	:	Annual interest rate, which is estimated as the sum of: (i) the TRS of Section 2 indicated in the Declaration of Interest/as of the date of the Economic Offer and (ii) 2.04%

		annually.
i _{Section 2.2} [DI/PE]	:	Annual interest rate, which is estimated as the sum of: (i) the TRS of Section 2 indicated in the Declaration of Interest/as of the date of the Economic Offer and (ii) 2.04% annually and (iii) -0.114% annual.
<i>i</i> _{Section 2.<i>f_s</i> [<i>DI</i>/<i>PE</i>]}	:	Semiannual interest rate of phase f determined based on the $~i_{Tramo2.f[DI/PE]}$
n	:	RPI payment term, in years, equal to fifteen (15) years.
Z	=	$\frac{CF_{Tramo2.1}}{(EDI_{Tramo2} - Capital_{Tramo2})}$
Z	<	1
Z		0
CF _{Section 2.1}	:	Amount credited in the Financial Closing of Section 2 phase 1
CF _{Section 2.1}	>=	400,000,000 USD (four hundred million US dollars)
EDI _{Section 2}	:	EDI Budget for Section 2
Capital _{Section 2}	:	US\$ 198,041,159.50 (One hundred ninety-eight million forty-one thousand one hundred fifty-nine and 50/100 US dollars), which corresponds to the subtraction of the minimum capital stock indicated in Clause 3.6 and that indicated in Clause 3.7 of the Contract.

It calculates the $vRPI_{Section\;2.f\,[CF]}$ of the corresponding phase according to the following formula:

$$v\text{RPI}_{\text{Section 2.f [CF]}} = v\text{RPI}_{\text{Section 2.f [DI/PE]}} \times \left[\left(\frac{1 - i_{\text{Section 2.f [DI/PE]}} \times n_{\text{Section 2.f}}}{1 - i_{\text{Section 2.f [CF]}} \times n_{\text{Section 2.f}}} \right) \right]$$

vRPI Section 2.f [CF]	:	Present value of the RPI payments of Section 2 of phase f adjusted by the interest rate on the date of the Financial Closing of phase f.
n _{Section 2.f}	:	If the Financial Closing is carried out through the capital market, transferable securities, debt instruments and/or securitizations, it will be the fraction of years between the Pricing Date of Section 2 phase f and six months before the RPI Payment Start Date of Section 2 phase f.
		If the Financial Closing is carried out through any other mechanism, it will be the fraction of years between the Financial Closing Date of Section 2 phase f and six months before the RPI Payment Start Date of Section 2 phase f.
i _{Section 2.f [CF]}	:	Annual interest rate, which is estimated as the sum of: (i) 2.04% annually and (ii) the TRS calculated according to the following:
		 If the Financial Closing is carried out through the capital market, transferable securities, debt instruments and/or securitizations, the TRS will be the average observed during ten (10) Calendar Days counted from the fifteenth (15) Calendar Day prior to the Closing Date.

Pricing until the sixth (6) Calendar Day prior to the Pricing Date of each phase of Section 2 that is accredited.
• If the Financial Closing is carried out through any other mechanism, the TRS will be the average observed for ten (10) Calendar Days counted from the fifteenth (15) Calendar Day prior to the date of submission of the request for compliance with the Financial Closing of each phase. of Section 2.
• The TRS reference period for each phase of Section 2 is:
4,860 Calendar Days for Section 2 phase 1; and, 4,410 Calendar Days for Section 2 phase 2.

It calculates the RPI $_{Section\ 2.f\ [CF]}$ of Section 2 corresponding phase f according to the following formula:

$$\operatorname{RPI}_{\operatorname{Section 2.f[CF]}} = \operatorname{vRPI}_{\operatorname{Section 2.f[CF]}} \times \left[\frac{i_{\operatorname{Section 2.f_s[CF]}} \times \left(1 + i_{\operatorname{Section 2.f_s[CF]}}\right)^{n \times 2}}{\left(1 + i_{\operatorname{Section 2.f_s[CF]}}\right)^{n \times 2} - 1}\right] \times 2$$
$$i_{\operatorname{Section 2.f_s[CF]}} = \left(1 + i_{\operatorname{Section 2.f[CF]}}\right)^{1/2} - 1$$

Where:

RPI Section 2.f [CF]	:	Adjusted annual RPI value for Section 2 phase f	
i _{Section 2.f_s [CF]}	:	Semiannual interest rate determined based on the	
		i _{Section 2.f [CF]}	

- 5.4 The RPI of each of the Section updated by the variation of the Sovereign Risk Rate (TRS) in accordance with the formulas of the previous numerals and that the CONCESSIONAIRE will have the right to receive for the execution of the Works paid with RPI will be the value that the formulas of the previous numerals give for the factor "RPI TramoN [CF]".either, "RPI Tramo2.f [CF]", as appropriate.
- 5.5 It is established that the parameters that make up the interest rates, indicated in numeral 5.2 and 5.3 above, will be solely and exclusively used for the adjustment of the RPI of each of the Section indicated in this Appendix.
- 5.6 The updating of the RPI in accordance with the provisions of this numeral 5 will be determined, at the expense, cost and risk of the CONCESSIONAIRE, by a financial or multilateral institution selected and contracted by the CONCESSIONAIRE that qualifies as one of the institutions indicated in the numerals (i), (iii) or (v) of Clause 1.14.1 of this Contract.

The financial or multilateral institution chosen and contracted by the CONCESSIONAIRE will have to issue the corresponding report that includes the update of the RPI in accordance with the provisions of this numeral 5 and deliver it to the CONCESSIONAIRE, with a copy to the GRANTOR, within a term of no less than four (4) 4) Calendar Days before the Pricing Date. The aforementioned report will be

binding on the Parties, except for manifest error, in which case, any of the Parties may request the financial or multilateral institution to correct said error and deliver the corrected report within the Calendar Day following the request for correction by the Party. respective, provided that said request is made within a term of two (2) Calendar Days before the Pricing Date.

5.7 For the purposes of this procedure for adjusting the RPI due to variation in the TRS, it must be taken into consideration that, in accordance with the provisions of numerals 1.14.58 and 4.3 of this Contract, the Pricing Date must occur after the accreditation of the Financial Closing and at the latest within ten (10) Working Days after the signing of the Work Initiation Act corresponding to the Section applicable to said Financial Closing. Notwithstanding the above, for the purposes of this Contract in relation to Section 2, if the CONCESSIONAIRE chooses to carry out the Financial Closing in two phases, the Pricing Date for phase 2 of Section 2 must occur within fifteen (15) Working Days after the accreditation of the Financial Closing of phase 2 of Section 2.

Notwithstanding the above, if the Financial Closing is carried out through a mechanism other than the capital market, transferable securities, debt instruments and/or securitizations, the reference to Pricing Date in numeral 5.6 above and this numeral 5.7. must be replaced by the date of submission of the request for compliance with the Financial Closing of each Section and/or phase in the case of Section 2.

ANNEX No. 9 Financial Regime

Appendix 3.1

Model of Work Progress Certificate (CAO) for Section 1, Section 3 and Section 2 with Financial Closing accredited in a single opportunity

CAO No. ______ - Concession Contract for the Project: "Peripheral Ring Road"

This Work Progress Certificate (CAO) is issued in accordance with the provisions of the Concession Contract for the "Peripheral Ring Road" Project (hereinafter, the "<u>Contract</u>"), signed on the date ____ of _____, between the Ministry of Transport and Communications (hereinafter, the "GRANTOR") and _____ (hereinafter, the "CONCESSIONAIRE").

Certification of Progress of Works

In accordance with the provisions of the Contract, the REGULATOR grants its approval regarding Work Progress No. ______ of Section ____, executed by the CONCESSIONAIRE.

The REGULATOR certifies that the Works subject to this CAO have been executed in accordance with the standards, technical and socio-environmental requirements established in the Contract, in the EDI and in accordance with the Applicable Laws and Provisions, according to these terms are defined in the Contract.

CAO No	
Percentage (%) of Work Progress of Section	%
Percentage (%) of total Work Progress of the Section	%
CAO adjustment (ΔCAO) in accordance with Numeral 4.6 of Appendix 2 of Annex No. 9 of the Contract	%
Adjusted CAO	%

Issued in Lima, _____

THE REGULATOR

ANNEX No. 9 Financial Regime

Appendix 3.2

Model of Work Progress Certificate (CAO) for phase 1 or 2 in case of Financial Closure of Section 2 in two phases, as determined in Annex No.19 of the Contract

CAO No. ______ - Concession Contract for the Project: "Peripheral Ring Road"

This Work Progress Certificate (CAO) is issued in accordance with the provisions of the Concession Contract for the "Peripheral Ring Road" Project (hereinafter, the "<u>Contract</u>"), signed on the date ____ of _____ of _____, between the Ministry of Transport and Communications (hereinafter, the "GRANTOR") and _____ (hereinafter, the "CONCESSIONAIRE").

Certification of Progress of Works

In accordance with the provisions of the Contract, the REGULATOR grants its approval regarding Work Progress No. _____ of Section ____ phase ____, executed by the CONCESSIONAIRE.

The REGULATOR certifies that the Works subject to this CAO have been executed in accordance with the standards, technical and socio-environmental requirements established in the Contract, in the EDI and in accordance with the Applicable Laws and Provisions, according to these terms are defined in the Contract.

CAO No	
Percentage (%) of Work Progress of Section 2 phase	%
Percentage (%) of total Work Progress of Section 2 phase	%
CAO adjustment (Δ CAO) in accordance with Numeral 4.6 of Appendix 2 of Annex No. 9 of the Contract	%
Adjusted CAO	%

Issued in Lima, _____

THE REGULATOR

ANNEX No. 9 Financial Regime

Appendix 4 Present Value of Toll Revenue (VPIP) and calculation of VPIPm

- The Present Value of Toll Income (VPIP) on the Closing Date will be equal to S/ 3,772,795,544.03 (three billion seven hundred seventy-two million seven hundred ninetyfive thousand five hundred forty-four and 3/100 Soles). This value will be referred to as the "Full VPIP" for the purposes of Clause 18.32.
- 2. If the contract is terminated due to the impossibility of acquiring pro as established in Clause 6.34 et seq., the VPIP will be readjusted, in accordance with the provisions of Clauses 6.36 and/or 6.38. The VPIP readjusted to the Closing Date will be equal to S/ 1,925,781,954.34 (one billion nine hundred twenty-five million seven hundred eighty-one thousand nine hundred fifty-four and 34/100 Soles). This value will be referred to as the "Partial Termination VPIP" for the purposes of Clause 18.32.
- 3. According to what is described in Clause 11.3 of the Contract, within fifteen (15) Calendar Days after the close of each Calendar Month from the beginning of the Operation Stage of the Section that first enters Operation, the CONCESSIONAIRE must calculate the value present on the Reference Date the Toll revenues accumulated up to that moment (VPIPm) and report the result to the GRANTOR and the REGULATOR.
- 4. The VPIPm will be calculated according to the following formula:

$$VPIP_m = \sum_{i=1}^m \frac{Toll_i}{(1+TD)^i}$$

Where:

VPIPm : Present value as of the Reference Date of the Toll Revenues accumulated until the last Calendar Day of the month m.

In the event that Expiration is declared in month m, it will correspond to the Present Value on the Reference Date of the Toll Revenues accumulated up to the Calendar Day prior to the date on which Expiration is declared.

Tolls i : Value of Toll revenues actually received in month i expressed in constant Soles of the Reference Date, according to the following formula:

$$Peajes_i = Tolls E_i * \left(\frac{IPC_r}{IPC_i}\right)$$

Where:

TollsEi = Value of Toll revenues actually received in month i in current Soles CPIr = CPI corresponding to the month of the Reference Date CPI = CPI corresponding to month i*

*For the calculation of toll revenues received during the month in which the expiration of the IPCi is declared, it will correspond to the Peruvian Consumer Price Index of the last month available on the date in which the Expiration is declared, published by the National Institute of Statistics and Informatics (INEI).

- TD : Real monthly discount rate of income, which amounts to 0.68190% in Soles.
- i : Counter of each of the months from the month subsequent to the one in which the Closing Date took place until the month m
- m : Month until which the VPIPm calculation is made
- 5. If during the term of the Concession and before completing thirty (30) Years of the Concession counted from the Closing Date (i) the VPIPm is greater than or equal to the VPIP and (ii) no Toll Unit of the Project is being compensated with the compensation mechanism established in Clause 11.4 and in Annexes No. 17 and 18 of this Contract, from that moment on the distribution of the collection of income from the collection of Fees will be thirty percent (30%) for the CONCESSIONAIRE and seventy percent (70%) for the GRANTOR. For this purpose, the trustee of the Administration Trust must transfer the amounts corresponding to the GRANTOR to the GRANTOR Remuneration Account of the Administration Trust within the first five (5) Working Days of each month in accordance with the mechanisms that will be agreed in the Administration Trust. Seventy percent (70%) of the income from the collection of the Rate that will be deposited in favor of the GRANTOR as provided in this Clause, will be deposited after subtracting any applicable tax, including without limitation, the VAT and Regulatory Contribution.
- 6. If during the term of the Concession and before completing thirty (30) Years of the Concession counted from the Closing Date (i) the VPIPm is greater than or equal to the VPIP and (ii) there is at least one (1) Unit of Toll of the Project that is being compensated with the compensation mechanism established in Clause 11.4 and in Annexes No. 17 and 18 of this Contract, the Parties will agree following the corresponding contractual modification procedure established in the Applicable Laws and Provisions, regarding the distribution of the collection of income from the collection of Rates and/or compensation with respect to the corresponding Toll Units, according to the Applicable Laws and Provisions. The Parties agree that the presentation of the request to start negotiation must be submitted to the other Party at most when the VPIPm is equal to or greater than 90% of the VPIP. In the event that an addendum is not concluded between the Parties before reaching the VPIP, this Contract will expire giving it the effects of termination upon expiration of the term, as established in Clause 18.3.

ANNEX No. 9 Financial Regime

Appendix 5 Administration Trust

The Administration Trust will be entered into in accordance with the following basic terms and conditions, the stipulations that are normally part of the contracts of trust for similar purposes in Peru, as well as the provisions of the Applicable Laws and Provisions.

a) Purpose of the Administration Trust

The Administration Trust is established to facilitate and guarantee adequate compliance with the obligations derived from this Contract through the administration of the resources derived from the Contract.

The main source of resources that will be managed by the Administration Trust are the Rates, the Optional Income, the RPI, the income derived from the CALP, among others that may correspond to the CONCESSIONAIRE under the Contract, as well as the flows that by concept of penalties that may correspond to the GRANTOR.

b) Trustors

The CONCESSIONAIRE and the GRANTOR will be trustors, as appropriate.

c) Trust

It will be a banking company or other national financial entity qualified and duly authorized by the Superintendence of Banking, Insurance and AFP, who will act as a fiduciary entity in accordance with the Applicable Laws and Provisions, which will be approved by the GRANTOR at the request of the CONCESSIONAIRE.

d) Trustees

They will be the CONCESSIONAIRE, the GRANTOR, the owner of the RPI-CAO and/or the owner of the CALP, as appropriate.

e) Trust Estate

It will be constituted by the flows derived from the CONCESSIONAIRE's Income and all the monetary flows that it is entitled to receive under the Contract, the flows that, due to penalties, could correspond to the GRANTOR, as well as all the monetary flows that are credited in the accounts. of the trust at all times. The Trustee will open different accounts to receive and manage said contributions, so that at all times it is possible to distinguish the origin of the transferred resources that make up part of the Trust Assets.

It is established that the CONCESSIONAIRE will only transfer to the Administration Trust the monetary flows that it is entitled to receive under the Contract, but not the corresponding collection rights. In that sense, the CONCESSIONAIRE, and not the Administration Trust, will be the owner of the collection rights corresponding to the RPI-CAO, the CALP and the Rate, which will be freely transferable in accordance with the provisions of this Contract.

f) Trust Management Agreement

The CONCESSIONAIRE may propose to the GRANTOR in the draft of the Trust contract other provisions that it considers appropriate to achieve the Financial Closing and for the correct execution of the Concession Contract, as long as these do not alter the conditions established in the Contract and are duly supported.

No later than fifteen (15) Working Days from the Closing Date, the CONCESSIONAIRE must present to the GRANTOR, with a copy to the REGULATOR, a draft Administration Trust contract, which will follow the following approval procedure:

- a) The GRANTOR must issue its opinion and comments, if applicable, on the Administration Trust contract within a maximum period of ten (10) Working Days, from receipt of the respective project.
- b) In the event that within the term referred to in subparagraph a) above the GRANTOR makes observations on the draft Administration Trust contract, the CONCESSIONAIRE must correct them within a term of no more than five (5) Working Days from the time it is notified, and must send the corrections corresponding to the GRANTOR. In this case, the GRANTOR will have a term of five (5) Working Days to make its decision.
- c) For the approval of the Administration Trust contract, the GRANTOR must request a favorable opinion of the draft Administration Trust contract from the Ministry of Economy and Finance, following the procedure established in article 116 of the Regulations.
- d) After obtaining the favorable opinion of the Ministry of Economy and Finance, the GRANTOR will sign the Administration Trust contract and send it to the CONCESSIONAIRE for its corresponding and subsequent notarial legalization and registration with the Public Registries.

The Administration Trust contract must respect the obligations and standards established in the Concession Contract, with express indication of the obligation of the GRANTOR to issue instructions.

In the event that the CONCESSIONAIRE does not comply with its obligation to constitute Administration Trust in the terms and deadlines indicated, must pay GRANTOR a daily penalty referred to in Annex No. 10.

If the Administration Trust has not been established within a maximum term of thirty (30) Calendar Days counted from obtaining the favorable opinion of the Ministry of Economy and Finance, the GRANTOR will proceed with the execution of the Guarantee of Faithful Fulfillment of the Contract. of Concession.

In no case may the Trust contract be modified without the intervention of the GRANTOR.

g) Administration Trust Accounts

The Administration Trust will have, at least, the following separate accounts:

- Collection Account
- Penalties Account
- Fee Account
- RPI account
- Remuneration Account to the GRANTOR
- Property Release Account
- Insurance Account
- Fee Withholding Account
- (i) <u>Collection Account</u>: This account will be valid from the constitution of the Administration Trust until the end of the Concession. In this account all the CONCESSIONAIRE'S Income will be collected, as well as all those flows that the CONCESSIONAIRE is responsible for receiving under the Contract; except for the RPI, which will be deposited in the RPI Account; and, the income derived from the CALP, which will be deposited in the Property Release Account.

The funds deposited in this account will be transferred according to instructions sent by the CONCESSIONAIRE. Likewise, once the Administration Trust is completed, the remaining monetary flows credited to this account will be transferred to the CONCESSIONAIRE.

(ii) <u>Penalties Account</u>: This account will be valid from the constitution of the Administration Trust until the end of the Concession. In this account the CONCESSIONAIRE will transfer the resources necessary to pay the corresponding penalties.

The funds credited to this account correspond to the GRANTOR and will be used to cover the payments it must make within the framework of the Concession Contract, according to its instructions. Once the Administration Trust is completed, the remaining monetary flows credited to this account will be transferred to the GRANTOR.

- (iii) <u>Fee Account</u>: This account will be valid from the constitution of the Administration Trust until the end of the Concession. In this account the CONCESSIONAIRE will deposit the resources for the payment of the Trustee's fees.
- (iv) <u>RPI Account</u>: This account will be valid from one (1) month prior to the earlier of the RPI Payment Start Date of Section 1, the RPI Payment Start Date of Section 2 and the RPI Payment Start Date of the Tranche 3, until compliance with the total payment for RPI of the Section to which the CONCESSIONAIRE is entitled.

It will be the responsibility of the GRANTOR, with due advance notice, to deposit the amounts necessary to comply with the payment obligation of the RPI-CAO corresponding to the CAO issued, in accordance with the provisions of Appendix 1 and Appendix 2 of this Annex and, if applicable, instruct the Trustee to pay them.

In the event of a delay in payments by the GRANTOR, the GRANTOR must make an additional payment for late payment interest equivalent to the Legal Interest Rate plus two percent (2%) annually on the unpaid balance since the beginning of the delay period until it ends. Said additional payment will be made jointly with the corresponding payment of the RPI-CAO.

From this account, payments of the RPI-CAO will be made to the CONCESSIONAIRE or to third parties to whom the CONCESSIONAIRE has assigned or transferred the right to receive the payments corresponding to the RPI-CAO, derived from the issuance of the CAOs, which They will have irrevocable, unalterable and unconditional characteristics to any event.

These payments will be made regardless of the Expiration of the Concession, its termination, resolution or the default of any of the Parties.

The Administration Trust must establish that the CONCESSIONAIRE flows corresponding to the RPI-CAO are freely transferable.

(v) <u>Remuneration Account to the GRANTOR</u>: This account will be active from the beginning of the Exploitation of the last Section and until the end of the Concession. To this account the Trustee will transfer from the Collection Account, by instruction of the CONCESSIONAIRE (directed to the Trustee, with a copy to the GRANTOR and the REGULATOR), the amounts corresponding to the GRANTOR that are derived from the distribution of the collection of income from the collection of the Rate, in accordance with the provisions of Appendix 4 of Annex No. 9 of the Contract. The Administration Trust will consider a penalty payable by the CONCESSIONAIRE applicable if said instruction is not sent in a timely manner to the Trustee, an amount that will be determined by the CONCESSIONAIRE and GRANTOR considering the minimum amount referred to in Annex No. 10. If the CONCESSIONAIRE does not send the instruction indicated above, the GRANTOR will be authorized to send it directly to the Trustee (with a copy to the CONCESSIONAIRE and the REGULATOR), the approval of the CONCESSIONAIRE not being necessary.

Without prejudice to the foregoing, the Administration Trust may contemplate a different account structure that allows the amounts corresponding to the GRANTOR that derive from the distribution of the collection of income from the collection of the Fee to be transferred to this account automatically and without the need for prior instruction from the CONCESSIONAIRE.

Once deposited in this account, said resources will be allocated in the following order: (i) to pay the RPI-CAO, if there are pending payment obligations for this concept (in this case, the Trustee will deposit the funds in the Account of RPI) and; (ii) subsequently, as determined by the GRANTOR, to deal with a possible case of Early Expiration of the Concession (in this case, the Trustee will maintain the funds in the GRANTOR'S Remuneration Account) and/or for purposes other than the Concession, provided that the provisions of the Applicable Laws and Provisions are complied with (in this case, the Trustee will deposit the funds in the account informed to him by the GRANTOR).

If the term of the Administration Trust expires, the remainder of this account will correspond to the GRANTOR.

(vi) <u>Property Release Account</u>: This account will be valid from the constitution of the Administration Trust until the fulfillment of the total payment of the CALP to which the CONCESSIONAIRE is entitled. It will be up to the GRANTOR, with due advance notice, to deposit the amounts necessary to comply with the payment obligation of the CALP issued, in accordance with the provisions of Appendix 3 of Annex No. 4 and, if applicable, to instruct the Trustee to pay them.

In the event of a delay in payments by the GRANTOR, the GRANTOR must make an additional payment for late payment interest equivalent to the Legal Interest Rate plus two percent (2%) annually on the unpaid balance since the beginning of the delay period until it ends. Said additional payment will be made jointly with the corresponding CALP payment.

From this account, the CALP payments will be made to the CONCESSIONAIRE or to third parties to whom the CONCESSIONAIRE has assigned or transferred the right to receive the payments corresponding to the CALP, derived from the issuance of the CALP, which will have irrevocable characteristics, unalterable and unconditional to all events.

These payments will be made regardless of the Expiration of the Concession, its termination, resolution or the default of any of the Parties.

The Administration Trust must establish that the CONCESSIONAIRE flows corresponding to the CALP are freely transferable.

(vii) Insurance Account: This account will be activated if the Concession Expiration occurs due to a Fortuitous Event or Force Majeure event that makes the restitution, replacement or repair of damaged goods materially impossible. In this account, the insurance or reinsurance companies will deposit the monetary flows derived from the insurance policies that insure the damaged assets in order to be used to pay the Net Book Value of the Intangible in accordance with Clauses 14.1 and 18.19 of the Contract and according to the instructions sent. by the GRANTOR.

The remainder of this account will correspond to the GRANTOR.

(viii) <u>Fee Withholding Account</u>: This account will be activated if the REGULATOR issues a resolution declaring that the CONCESSIONAIRE has executed or is executing undue or excessive charges to the Users. In such cases, the CONCESSIONAIRE will be obliged to deposit in this account the amounts charged improperly or in excess to the Users, unless it has challenged the resolution of the REGULATOR and said challenge has generated the suspension of the effects of the corresponding resolution first. instance. For the purposes of the above, the Parties must agree in the Administration Trust on the applicable procedures for the opening of this account, the deposit of the corresponding funds by the CONCESSIONAIRE and their respective return to Users who present claims for the amounts unduly collected. The remainder of this account will correspond to the GRANTOR. Likewise, if the limitation period provided for in the Applicable Laws and Provisions for Users to claim the return of amounts improperly charged or charged in excess expires, the funds in this account will be released and may be transferred to an account informed by the GRANTOR. It is established that the Administration Trust must provide that the funds deposited in this account may only be transferred to the account informed by the GRANTOR to the extent that there are no litigation, administrative procedures and/or disputes pending resolution by a final and unappealable decision, in relation to improper or excessive charges made by the CONCESSIONAIRE. If this is not the case and the resolution issued by the REGULATOR is revoked or annulled, the funds in this account must be released and transferred to an account informed by the CONCESSIONAIRE.

In order to carry out the short-term financial administration of the resources available in the Trust accounts, the Trustee may invest said resources in Certificates of Deposits of the Central Reserve Bank of Peru or other financial instruments and/or deposits of short term that have the same credit classification and whose term does not exceed one hundred eighty (180) Calendar Days. These investments must not affect the commitments assumed by the GRANTOR through this Contract.

h) Release of liability of the Trustee

In no case will the Trustee be responsible to the trustors and trustees for non-payment caused by lack of available resources in each of the accounts of the Administration Trust.

i) Instructions

The GRANTOR and the CONCESSIONAIRE, in their capacity as trustees, will have the power to issue instructions to the Trustee, in order to manage the resources and arrange their use, according to what is specified in the Trust Contract, considering the provisions of payment that make up the different accounts of the Trust.

Without prejudice to what is indicated above, in the event of the occurrence of any event that prevents the correct compliance with the instructions established in the Administration Trust contract, the GRANTOR and the CONCESSIONAIRE will be authorized to issue the additional instructions necessary for the correct compliance with the respective payments.

j) Termination of the Administration Trust

The Administration Trust will terminate one (1) year after the end of the Concession Term, in accordance with the provisions of Clause 5.1 of the Concession Contract, as well as for those other causes usually provided for in similar trust contracts in Peru and in Law No. 26702, General Law of the Financial System and the Insurance System and Organic Law of the Superintendency of Banking and Insurance or standard that modifies or replaces it.

In the event of early termination of the Concession Contract, the Administration Trust will remain in force for up to a term of six (6) months following the last payment of the RPI-CAO or CALP, in order to guarantee these payments.

k) Resignation of the Trustee

In the event of resignation of the Trustee, the rules of Law No. 26702, General Law of the Financial System and the Insurance System and Organic Law of the Superintendency of Banking and Insurance or the standard that modifies or replaces it.

I) Trustee Fees

The Trustee's fees will be the responsibility of the CONCESSIONAIRE and must be charged to the Fees Account.

m) Applicable Laws and Provisions

The standard framework applicable to the Administration Trust will be the Applicable Laws and Provisions.

n) Registration and Communications

The Administration Trust contract may contain a record of the holders of collection rights with respect to the RPI-CAO and/or the CALP in accordance with the procedure and form that will be established in the Administration Trust contract.

The Administration Trust contract will establish a system of notifications by the parties to be made to the Trustee, regarding those relevant events that may affect the holders of the collection right. These acts will be determined in the respective Administration Trust contract.

o) Additional provisions of the Concession Contract

It is established that the terms and conditions of the Administration Trust provided for in this Appendix are not limiting or exclusive of the provisions of the Concession Contract. In this sense, the terms and conditions of the Concession Contract must be taken into account in the drafting and execution of the contract to establish the Administration Trust.

ANNEX No. 10 Table of Penalties

(*) The penalties indicated in this Annex refer to Calendar Days. Likewise, the Parties agree that these penalties will not be applicable if any of the partial expirations of Section 2, established in Clauses 6.34 to 6.38, materialize, and this impacts or affects any of the contractual obligations of the CONCESSIONAIRE.

Table No. 1:	Penalties referred to Chapter I	of the Contract: Background and Definitions
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Contract Clause	UIT	Penalty Description	Application Criteria
1.14.1	100	Failure of the CONCESSIONAIRE to notify the GRANTOR if one or more Permitted Creditors is within the assumptions (i), (ii), (iii) or (iv) provided for in the first paragraph of subparagraph c) of Clause 1.14.1, affecting the availability of Guaranteed Indebtedness.	Every time non- compliance is verified
1.14.1	1	If one hundred and twenty (120) Calendar Days have elapsed after being notified by the GRANTOR as established in Clause 1.14.1, the CONCESSIONAIRE does not adopt any of the actions provided for in Clause 1.14.1.	Every Day Calendar Delay

Table No. 2: Penalties related to Section III of the Contract: Events as of the Closing Date

Contract Clause	UIT	Description of Noncompliance	Application Criteria
3.5 subsection f), subparagraph ii)	100	Transfer, dispose of or encumber the shares or participations, other than the Minimum Participation, in favor of (i) the other bidding legal entities or the members of the other consortia that submitted economic offers during the Tender; or (ii) from companies that may have a direct or indirect connection or that are part of an Economic Group, related to the bidding legal entities or to the members of the consortia that submitted economic offers during the Project Tender, from the Closing Date. until the fifth calendar year counted from the date of subscription of the Work Acceptance Certificate for the Section that first begins its Operation.	Every time non- compliance is verified
3.5 subsection f), subparagraph iii)	0.50	Adopt any agreement that implies a change in the regime of majorities, classes of shares and proportions of the shareholders or partners, such as any process of modification of the capital stock, merger, excision, transformation or liquidation of the CONCESSIONAIRE, without the prior authorization of the GRANTOR.	Every time non- compliance is verified

Contract Clause	UIT	Description of Noncompliance	Application Criteria
3.6.	0.80	Failure to subscribe and/or pay the difference in the minimum share capital according to the schedule provided in sections i) to iv) of clause 3.6.	Every Day Calendar Delay
3.7	0.50	Failure to subscribe and/or pay the difference in the minimum capital stock according to the schedule provided in sections i) to v) of clause 3.7.	Every Day Calendar Delay

Table No. 3: Penalties referred to Chapter VI of the Contract: Assets Regime

Contract Clause	UIT	Penalty Description	Application Criteria
6.24	20	Failure of the CONCESSIONAIRE to attend to receive the corresponding Concession Area without any justification.	Every Day Calendar Delay
6.29 and 6.30	1	Non-compliance by the CONCESSIONAIRE with any of the terms established in Clause 6.29, in case of modification of the design and/or work plan of any of the PAP of each of the Sections of the Project.	Every Day Calendar Delay
6.42	1	Failure to send to the GRANTOR within the established term, the report on Interferences, with the aspects described in clause 6.41.	Every Day Calendar Delay
6.44	1	Failure to send the corresponding report to the GRANTOR within a term of twenty (20) Working Days counted from the date of receipt of the new technical files and schedules.	Every Day Calendar Delay
6.50	1	Failure to comply with the processing (submission of the application and correction of observations) of the registration in Public Registries of the Easements imposed on the properties owned by third parties.	Every Day Calendar Delay
6.57. y 6.58.	5	Failure to exercise the corresponding possessory defense and/or failure to communicate the fact in accordance with the provisions of the Contract.	Every time non- compliance is verified
6.61	1	Failure to comply with the processing (submission of the application and correction of observations) of the registration in Public Registries of the Works and/or the Additional Works in favor of the GRANTOR.	Each Calendar Day Delay
6.62	20	Failure to comply with the obligation to acquire and maintain complete and operational Concession Assets.	Every time non- compliance is verified
6.67	5	Failure to supplant or replace the Concession Assets, within a term that should not exceed three (3) months from the loss of the asset or its obsolescence being declared.	Every Day Calendar Delay

Contract Clause	UIT	Penalty Description	Application Criteria
6.73	2	Failure to present all the Inventories related to the Concession Assets and the CONCESSIONAIRE Assets, including the Initial Inventory, both to the GRANTOR and to the REGULATOR, on the corresponding date and throughout the entire term of the Concession.	Every Day Calendar Delay
6.74	1	Non-compliance with the payment of taxes, fees, contributions, as well as the payment of water, electricity, telephone, internet and other public or private services that apply to the Concession Assets, as of the Taking of Possession, in accordance with the Applicable Laws and Provisions.	Every Day Calendar Delay

Table No. 4:	Penalties referred to	Chapter VII of the	Definitive	Engineering Study
			Dominitivo	Engineering etaay

Contract Clause	UIT	Penalty Description	Application Criteria
7.4	1	Delay in the delivery of the EDI of the Construction Stage of the corresponding Section, according to the maximum terms indicated in the Contract.	Every Day Calendar Delay
7.5 and 7.6	1	Failure to present the scope of what will be developed in each of the partial EDI deliveries of each Section, according to the maximum terms indicated in the Contract.	Every Day Calendar Delay
7.7	1	Not make any of the partial EDI deliveries of each Section, according to the maximum terms indicated in the Contract.	Every Day Calendar Delay
7.9	0.5	Failure to present to the GRANTOR and the REGULATOR the corrections or clarifications corresponding to the observations made to the partial deliverable of the EDI, within the maximum terms indicated in the Contract.	Every Day Calendar Delay
7.10	0.5	Failure to present to the GRANTOR and the REGULATOR the corrections or clarifications corresponding to the observations made to the EDI within the maximum terms indicated in the Contract.	Every Day Calendar Delay
7.13	1	Unjustified delay in signing the contract with the expert, in paying the expert's fees and/or in implementing the expert's ruling.	Every Day Calendar Delay

<u>Table No. 5:</u> Penalties referred to Chapter VIII of the Contract: Of the Execution of the Works

Contract Clause	UIT	Penalty Description	Application Criteria
4.4 e)	1	Delay in obtaining the Operating Permit and other permits, licenses and authorizations required for the start of the Construction of the Works of the corresponding Section, within the maximum terms indicated in the Contract.	Every Day Calendar Delay
8.9 and 8.10	10	Delay in the completion of the Works Execution Stage of the corresponding Section.	Every Day Calendar Delay
8.13	1	Failure to deliver, either to the GRANTOR or to the REGULATOR, any of the Works Progress Reports, within the maximum terms indicated in the Contract.	Every Day Calendar Delay
8.15. and 9.9	10	Do not give the REGULATOR, the Works supervisor and/or the team he or she has free access to the Concession Area.	Every time non- compliance is verified
8.16	1	Failure to pay costs derived from supervision activities.	Every Day Calendar Delay
8.17	2	Failure to pay the highest costs in the supervision of the Works, if corresponding to the CONCESSIONAIRE.	Every Day Calendar Delay
8.18	0.5	Delay in opening the Work Book with the formalities established in the Contract.	Every Day Calendar Delay
8.18	0.8	Do not give free access to the Logbook during the Construction Stage of the corresponding Section.	Every Day Calendar Delay
8.18	0.5	Failure to deliver to the GRANTOR and the REGULATOR the Logbook, once the Operation has begun, within the maximum terms indicated in the Contract.	Every Day Calendar Delay
8.22	5	Failure to keep public roads, roads and/or variants along which it is necessary to divert traffic due to the execution of the Works, passable and signposted for all types of Vehicles as permitted by the Applicable Laws and Provisions.	Every time non- compliance is verified
8.25	1	Failure of the CONCESSIONAIRE to present to the REGULATOR a Provisional Transit Plan for the execution of the Works and/or Additional Works, within the maximum terms indicated in the Contract.	Every Day Calendar Delay
8.26 and 8.27	1	Failure to communicate to the affected population and/or Users about the activities of execution of the Works, within the maximum terms indicated in the Contract.	Every Day Calendar Delay
8.31. y 8.32.	10	Failure to correct Work defects, within the maximum terms indicated.	Every Day Calendar Delay
8.34	5	Delay in (i) the participation of the expert report, (ii) the signing of the contract with the Expert, (iii) the payment of the Expert's fees and/or (iv) in implementing the expert's ruling.	Every Day Calendar Delay
8.41	10	Failure to incorporate into the respective EDI the obligations of the Backbone Network, as established in the Applicable Laws and Provisions.	Every time non- compliance is verified

Contract Clause	UIT	Penalty Description	Application Criteria
8.41	10	Do not install ducts and/or cameras in the Project for the Backbone Network, according to the Applicable Laws and Provisions.	Every time non- compliance is verified

Table No. 6: Penalties referred to Chapter IX of the Contract: Maintenance

Contract Clause	UIT	Penalty Description	Application Criteria
9.1	5	Failure to carry out the Maintenance of the Concession Assets, as established in the approved Road Maintenance Program.	Every Day Calendar Delay
9.9	4	Failure of the CONCESSIONAIRE to give free access to the work areas to the REGULATOR, the Maintenance supervisor and/or the equipment available.	Every Day Calendar Delay
9.10	5	Delay in the presentation of the Road Maintenance Program, within the maximum terms indicated in the Contract.	Every Day Calendar Delay
9.11	2	Failure to comply with the obligation to attend to Road Emergencies.	Every Day Calendar Delay
9.12	4	Delay in the presentation of the Reports related to the development of the Maintenance of the Concession, within the maximum tems indicated in the Contract.	Every Day Calendar Delay

Table No. 7:	Penalties referred to Chapter X of the Contract: Concession Operation

Contract Clause	UIT	Penalty Description	Application Criteria
10.5	1	Delay in the delivery of Reports related to the development of the Operation of the Concession,	Every Day Calendar Delay
10.5		within the maximum terms indicated in the Contract.	Calendar Delay
		Failure to correct observations to the Reports	Every Day
10.5	0.5	relating to the development of the Operation of the	Calendar Delay
		Concession, within the maximum terms indicated in	
		the Contract.	
		Delay in the presentation to the REGULATOR of the	Every Day
10.9	1	internal regulations, within the maximum terms	Calendar Delay
		indicated in the Contract.	
		Failure to Start Operation of each of the Sections of	Every Day
10.10	5	the Concession, within the maximum term indicated	Calendar Delay
		in the Contract.	
		Failure to implement each of the Mandatory	Every Day
		Services.	Calendar Delay
10.12	10		

Contract Clause	UIT	Penalty Description	Application Criteria
11.3	5	Does not deliver to the REGULATOR the information necessary to calculate the VPIPm, Tolls _i , total income per month, vehicle flows, among others, within the terms indicated in the Contract.	Every Day Calendar Delay
11.7 a)	4	Collection of Fees and/or Tolls in amounts greater than those authorized and published.	Every time non- compliance is verified
11.9	1	Delay in the communication of the new Rate and/or Toll to the REGULATOR and/or to the Users at the indicated opportunity and/or within the maximum terms indicated in the Contract.	Every Day Calendar Delay
11.10	4	Incorrect application of the Toll readjustment formula that is carried out to the detriment of Users.	Every time non- compliance is verified

Table No. 8: Penalties referred to Chapter XI of the Contract: Tolls and Rates

<u> Table No. 9:</u>	Penalties	referred	to	Chapter	XII	of	the	Contract:	Economic-Financial
	Regime								

Contract Clause	UIT	Penalty Description	Application Criteria
4.8	20	Encumber or grant or allow the Concession right or the shares or participations corresponding to the Minimum Participation to be encumbered or granted as security to third parties without the prior consent established in the Concession Contract.	Every time non- compliance is verified
4.22	20	Modify the main financial terms of the Permitted Guaranteed Indebtedness, or carry out any renewal or refinancing thereof, without the prior consent established in the Contract.	Every time non- compliance is verified

Table No. 10: Penalties referred to Chapter XIII of the Contract: Guarantees

Contract Clause	UIT	Penalty Description	Application Criteria
13.2, 13.4 and 13.8	2	Delay in the delivery, restitution or increase of the Guarantee of Faithful Fulfillment of the Concession Contract for the beginning of the Operation Stage of Section 1, within the maximum terms indicated in the Contract. Delay in the delivery, restitution or increase of the Guarantee of Faithful Fulfillment of the Concession Contract for the beginning of the Operation Stage of Section 3, within the maximum terms indicated in the Contract.	Every Day Calendar Delay
	2	Delay in the delivery, restitution or increase of the Guarantee of Faithful Fulfillment of the Concession Contract, for the beginning of the	

Contract Clause	UIT	Penalty Description	Application Criteria
		Operation Stage of Section 2, within the maximum terms indicated in the Contract.	
	2	Delay in the delivery or restitution of the Guarantee of Faithful Fulfillment for Construction of Works of Section 1, within the maximum terms indicated in the Contract.	
13.5	2	Delay in the delivery or restitution of the Guarantee of Faithful Fulfillment of Construction of Works of Section 2, within the maximum terms indicated in the Contract.	Every Day Calendar Delay
	2	Delay in the delivery or restitution of the Guarantee of Faithful Fulfillment of Construction of Works of Section 3, within the maximum terms indicated in the Contract.	
13.2, 13.4 and 13.5	4	Failure to renew the Guarantee of Faithful Fulfillment of Construction of Works and/or Guarantee of Faithful Fulfillment of the Concession Contract.	Every Day Calendar Delay

<u>Table No. 11:</u> Penalties referred to Chapter XIV: Insurance Regime and Liability of the Concessionaire

Contract Clause	UIT	Penalty Description	Application Criteria
14.4	1	Delay in the presentation to the REGULATOR of the insurance policy offers provided for in the Concession Contract, within the maximum terms indicated.	Every Day Calendar Delay
	0.5	Delay in correcting observations on the insurance policy offers, within the maximum terms indicated in the Contract.	
14.7. y 14.8.	1	Delay in the adjustments to current insurance policies, within the maximum terms indicated in the Contract.	Every Day Calendar Delay
	4	Delay in contracting and delivering definitive insurance policies, within the maximum terms indicated in the Contract.	
14.15	5	Failure to renew insurance policies.	Every Day Calendar Delay
14.16	1	Failure to communicate and send the renewed policy to the REGULATOR within the maximum terms indicated in the Contract.	Every Day Calendar Delay
14.17	2	Delay in delivery to the REGULATOR, with a copy to the GRANTOR, annually, no later than January 30 of each year, and during the term of the Concession, a list of the insurance policies that correspond to be taken and/or maintained during each Calendar Year, indicating at least the coverage, the validity of each one, the insurance companies, the reinsurance	Every Day Calendar Delay

Contract Clause	UIT	Penalty Description	Application Criteria
		companies, the claims made during the previous Calendar Year and a certificate issued by an authorized representative of the insurance company indicating that the CONCESSIONAIRE has complied during the previous Calendar Year with the terms of this clause.	
14.23	1	Delay in the presentation of the risk study or the updated risk study, within the maximum terms indicated in the Contract.	Every Day Calendar Delay

Table No. 12: Penalties referred to Chapter XV: Socio-Environmental Environmental

Contract Clause	UIT	Penalty Description	Application Criteria
15.9	2	Failure to comply with any of the environmental obligations derived from the respective Environmental Management Instruments.	Every time non- compliance is verified
15.10	3	Delay in the presentation of the respective Environmental Management Instrument to the Relevant Environmental Authority.	Every Day Calendar Delay
15.12 and 15.13	5	Delay or non-compliance with any of the obligations described in Clause 15.12 and/or 15.13.	Every time non- compliance is verified
15.15	0.8	Failure to train its workers prior to the start of the execution of the Works, regarding the type of activities to be carried out and the environmental measures to be implemented within the framework of the respective approved Environmental Management Instrument.	Every time non- compliance is verified
15.16	5	Delay in the implementation of an internationally recognized environmental management system.	Every time non- compliance is verified
15.17. and 15.18.	5	Failure to comply with the obligation to present environmental reports within the terms established in the approved Environmental Management Instruments.	Every Day Calendar Delay

<u>Table No. 13:</u> Penalties referred to Chapter XVI: Relationship with Third Party Partners and Personnel

Contract Clause	UIT	Penalty Description	Application Criteria
16.1	100	Transfer the rights of the CONCESSIONAIRE and/or assign its contractual position without prior written authorization from the GRANTOR.	Every time non- compliance is verified
16.2	10	Failure to comply with the obligation to include each of the provisions set for in subparagraph a), b), c), and d), as applicable, in the contracts that the CONCESSIONAIRE enters into with its partners, third parties, personnel and Related Companies.	Every time non- compliance is verified
16.8 and 3.5 subsection f), subparagraph i)	100	Transfer, dispose of and/or encumber the shares or participations corresponding to the Minimum Participation of the Strategic Partner without prior approval of the GRANTOR.	Every time non- compliance is verified

Table No. 14: Penalties referred to Chapter XVII: Administrative Competencies

Contract Clause	UIT	Penalty Description	Application Criteria
17.18	1	Delay in submitting the indicated information to the REGULATOR, within the maximum terms indicated.	Every Day Calendar Delay
17.20	1	Failure to pay the Regulatory Contribution.	Every Day Calendar Delay

Table No. 15: Penalties referred to Chapter XIX: Dispute Resolution

Contract Clause	UIT	Penalty Description	Application Criteria
19.12	10	Initiate an arbitration procedure of any nature without having previously complied with direct treatment and/or without complying with Law No. 28933, its Regulations or amendments.	Every time non- compliance is verified

Table No. 16:Penalties referred to Appendix 1 (Direct treatment procedure) of Annex No.4 Property Releases

Appendix numeral	UIT	Penalty Description	Application Criteria
	2	Delay in the presentation of the Physical Survey Report for Section 1, within the maximum terms indicated in the Contract and/or the Applicable Laws and Provisions.	
2.2.2	2	Delay in the presentation of the Physical Survey Report for Section 2, within the maximum terms indicated in the Contract and/or the Applicable Laws and Provisions.	Every Day Calendar Delay
	2	Delay in the presentation of the Physical Survey Report for Section 3, within the maximum terms indicated in the Contract and/or the Applicable Laws and Provisions.	

Appendix numeral	UIT	Penalty Description	Application Criteria
2.2.3	0.5	Delay in raising the GRANTOR's observations, within the maximum terms indicated in the Contract.	Every Day Calendar Delay
	2	Delay in the presentation of the cadastral search files for Section 1, within the maximum terms indicated in the Contract.	
2.2.5, 2.2.5.1	2	Delay in the presentation of the cadastral search files for Section 2, within the maximum terms indicated in the Contract.	Every Day
and 2.2.5.2	2	Delay in the presentation of the cadastral search files for Section 3, within the maximum terms indicated in the Contract.	Calendar Delay
	0.5	Delay in the presentation of the explanatory report(s), within the maximum terms indicated in the Contract.	
	2	Delay in submitting the request for complementary graphic and/or documentary information to the entities for Section 1, within the maximum terms indicated in the Contract.	
2.2.6, 2.2.6.1	2	Delay in submitting the request for complementary graphic and/or documentary information to the entities for Section 2, within the maximum terms indicated in the Contract.	Every Day
and 2.2.6.2	2	Delay in submitting the request for complementary graphic and/or documentary information to the entities for Section 3, within the maximum terms indicated in the Contract.	Calendar Delay
	0.5	Delay in raising the observations or additional requirements of the entities, within the maximum terms indicated in the Contract.	
	2	Delay in the classification of Taxable Persons in Section 1, within the maximum terms indicated in the Contract.	
2.2.7, 2.2.7.1 and 2.2.7.2	2	Delay in the classification of Taxable Persons in Section 2, within the maximum terms indicated in the Contract.	
	2	Delay in the classification of Taxable Persons in Section 3, within the maximum terms indicated in the Contract.	Every Day
2.2.7.3	0.5	Delay in raising observations or additional requirements of the GRANTOR, regarding the classification of Taxable Persons, within the maximum terms indicated in the Contract.	Calendar Delay
2.2.7, 2.2.7.1 and 2.2.7.2	2	Delay in the presentation of the legal technical diagnosis files in Section 1, within the maximum terms indicated in the Contract and/or the Applicable Laws and Provisions.	
	2	Delay in the presentation of the legal technical diagnosis files in Section 2, within the maximum	

Appendix numeral	Penalty Description				
		terms indicated in the Contract and/or the			
	2	Applicable Laws and Provisions. Delay in the presentation of the legal technical diagnosis files in Section 3, within the maximum terms indicated in the Contract and/or the Applicable Laws and Provisions.			
2.2.7.3	0.5	Delay in the lifting of observations or additional requirements of the GRANTOR, with respect to the legal technical diagnosis files, within the maximum terms indicated.			
	2	Delay in the presentation of the legal physical sanitation plan for each property in Section 1, within the maximum terms indicated in the Contract.			
2.2.7, 2.2.7.1 and 2.2.7.2	2	Delay in the presentation of the legal physical sanitation plan for each property in Section 2, within the maximum terms indicated in the Contract.			
	2	Delay in the presentation of the legal physical sanitation plan for each property in Section 3, within the maximum terms indicated in the Contract.			
2.2.7.3	0.5	Delay in the presentation of the planning of the corresponding sanitation actions in order to achieve the release of properties.			
2.2.1.3	0.5	Delay in notifying the GRANTOR of the results of the physical property release being carried out, within the maximum terms indicated.			
	2	Delay in the presentation to the GRANTOR of the Letters of First Communication addressed to the Taxable Persons of the properties or properties affected in Section 1, within the maximum terms indicated in the Contract and/or the Applicable Laws and Provisions.			
2.3.1 and 2.3.2	2	Delay in the presentation to the GRANTOR of the Letters of First Communication addressed to the Taxable Persons of the properties or properties affected in Section 2, within the maximum terms indicated in the Contract and/or the Applicable Laws and Provisions.	Every Day Calendar Delay		
	2	Delay in the presentation to the GRANTOR of the Letters of First Communication addressed to the Taxable Persons of the properties or properties affected in Section 3, within the maximum terms indicated in the Contract and/or the Applicable Laws and Provisions.			
2.3.3	0.5	Delay in raising the GRANTOR's observations or additional requirements, with respect to Letters of First Communication, within the maximum terms indicated.			

Appendix numeral	UIT	Penalty Description	Application Criteria
	3	Delay in the delivery to the GRANTOR of the individual files for appraisal of the properties or properties affected in Section 1, within the maximum terms indicated in the Contract and/or the Applicable Laws and Provisions.	
2.4.1 and 2.4.2	3	Delay in the delivery to the GRANTOR of the individual files for appraisal of the properties or properties affected in Section 2, within the maximum terms indicated in the Contract and/or the Applicable Laws and Provisions.	
	3	Delay in the delivery to the GRANTOR of the individual files for appraisal of the properties or properties affected in Section 3, within the maximum terms indicated in the Contract and/or the Applicable Laws and Provisions.	Every Day Calendar Delay
2.4.3	Delay in raising observations or additional requirements of the GRANTOR, with respect to individual files for appraisal, within the maximum terms indicated in the Contract.		
2.7.1 and 2.7.2	3	Delay in the notification of the letter of intent to acquire the property to the Taxable Person, within the maximum terms indicated.	Every Day Calendar Delay
	2	Failure to execute with the Taxable Person the corresponding transfer instrument or contract in the name and favor of the GRANTOR.	
	2	Failure to make the payment in the name of the GRANTOR and in favor of the Taxable Person or the consignment of said payment.	
	1	Failure to process (submission of the application and correction of observations) the registrations in Public Registries of property ownership in favor of the GRANTOR.	Every time non- compliance is verified
2.7.2	10	Failure to carry out the effective vacating of the property, demolition of buildings, removal of debris, and/or the relocation of the Taxable Persons and their respective movable assets to the designated location.	
	10	Failure to comply with the fencing, security and custody of the released property.	
	1	Failure to communicate to the GRANTOR within the maximum terms indicated, the rejection of the offer to acquire the property or relocation by the Taxable Person, or the latter does not respond or does not effectively vacate the acquired property.	Every Day
	3	Failure to deliver to the GRANTOR within the maximum term indicated, all the original information for the purposes of initiating the expropriation procedure.	Calendar Delay

<u>Table No. 17:</u> Penalties referred to Appendix 3 (On the Recognition and Reimbursement of Property Release) of Annex No. 4 (Property Releases)

Appendix numeral	UIT	Penalty Description	Application Criteria
2	20	Delay in the accreditation of resources to make payments for expenses for property acquisition.	Every Day Calendar Delay

Table No. 18: Penalties referred to Annex No. 9 (Financial Regime)

Appendix Numeral	UIT	Penalty Description	Application Criteria
Appendix 5 Subparagraph f)	1	Delay in the constitution of the Administration Trust in the terms and terms indicated.	Every Day Calendar Delay
Appendix 5 Subparagraph g)	1	Failure to comply with the instruction to transfer funds corresponding to the GRANTOR derived from the distribution of the collection of income from the collection of the Fee.	Every calendar day late

Table No. 19: Penalties referred to Annex No. 11 (Service Levels)

Definition of Service Level	UIT	Application Criteria
Failure to maintain an individual	0.4	Every Calendar Day of delay ¹ or every hour of
Service Level (minor)		delay ¹ (in case the correction term is in hours)
		for Service Levels with a correction term or
		each time non-compliance is verified for
		Service Levels where no correction term
		applies
Failure to maintain an individual	4	Every Calendar Day of delay ¹ or every hour of
Service Level (serious)		delay 1 (in case the correction term is in hours)
		for Service Levels with a correction term or
		each time non-compliance is verified for
		Service Levels where no correction term
		applies
Failure to maintain the Global	4	Every time non-compliance is verified
Service Level of a Section		
Failure to maintain the Global	8	Every time non-compliance is verified
Service Level of the Contract	0	
Measurement of a Waiting Time in	2	Every time non-compliance is verified
Queue greater than five (5) minutes	2	
Failure to modify the service system		Every Day Calendar Delay ²
in relation to the Service Levels of		
operations or the construction or	1	
installation of new lanes within the		
terms granted		
	/correction terr	n are exceeded, the penalty to be applied will be
multiplied by the following factors:		

- 1.00, 1 to 2 times the term;

- 1.25, 2 to 3 times the term;
- 1.50, 3 to 4 times the term; and,

- 2.00, from 4 times the term.

For example, for a correction/remediation term of 7 days and a serious penalty, the penalties would be (counting the days of delay since the detection of the insufficient condition parameter):

- 0 ITU up to 7 Calendar Days overdue;
- 4 ITU/day from 8 to 14 Calendar Days of delay;
- 5 ITU/day from 15 to 21 Calendar Days of delay;
- 6 ITU/day from 22 to 28 Calendar Days of delay; and,
- 8 UIT/day from 29 days late.

Table No. 20:	Penalties referred to Appendix	1 of Annex No.	. 13 – Vizcachera Area
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Annex Numeral	UIT	Penalty Description	Application Criteria
3.1	5	Delay in the presentation of the Technical Study to the GRANTOR, within the maximum terms indicated.	Every Day Calendar Delay
3.2	0.5	Delay in submitting the GRANTOR's observations to the Technical Study, within the maximum terms indicated.	Every Day Calendar Delay
3.9	5	Delay in the completion of the Removal Activities, within the maximum terms indicated.	Every Day Calendar Delay
3.10	2	Delay in raising the observations of the Works Reception Committee, within the maximum terms indicated.	Every Day Calendar Delay
6a)	20	Non-compliance, willful action or omission or an action or omission carried out with gross negligence on the part of the CONCESSIONAIRE and/or an Affiliated, Parent, Subsidiary or Related Company contracted by the CONCESSIONAIRE with respect to the Removal Activities.	Every time non- compliance is verified

ANNEX No. 11 SERVICE LEVELS

- 1.1. Service Levels are defined by specific and measurable indicators and in such a way that they are achievable. Likewise, realistic terms for correction are defined, taking into account road safety. In addition, the maximum frequency of measurement of the indicators by the CONCESSIONAIRE is defined, with the REGULATOR being able to carry out evaluations in shorter periods of time. The measurement method of all parameters may be changed to adapt to new equipment and technologies, in accordance with what is stated in the Highway Manuals of the Ministry of Transport and Communications and/or international standards. To do this, the CONCESSIONAIRE must submit as part of its request adequate support for the correlation between the equipment and/or technologies and that the statistical and probabilistic management of the method is equivalent. The request must be approved by the GRANTOR, following the opinion of the Regulator that the results and thresholds are equivalent.
- 1.2. These Service Levels must be met by the CONCESSIONAIRE at all times. The Concession Contract defines individual Service Levels and global Service Levels (Section and overall Contract). Individual Service Levels are the admissible limits for the various condition parameters, while global Service Levels are an index that allows evaluating the degree of compliance of the individual Service Levels. Appendix 1 to this annex contains the definition of the individual Service Levels. Appendix 2 to this annex contains the methodology for calculating the global Service Level.
- 1.3. During the periods in which Works are being executed in each of the Sections by the CONCESSIONAIRE, the individual Service Levels will not be evaluated nor will they be considered for the calculation of the Global Service Level. The maintenance tasks to be carried out by the CONCESSIONAIRE from the Possession Taking until the completion of the execution of the Works in each Section are described in Appendix 4 to this annex.

Information Channel

- 1.4. All communications between the CONCESSIONAIRE and the REGULATOR related to the evaluation of the Indicators, as well as the communications referred to in this Annex, must be registered on the AMS platform.
- 1.5. The declarations, like all the records made in the AMS, will be permanently available to the GRANTOR and the REGULATOR.

Self Appraisal

- 1.6. The REGULATOR will constantly supervise compliance with the Indicators by the CONCESSIONAIRE, to ensure that the road(s) is maintained in all its sections with an optimal level of service in accordance with the requirements demanded in the Contract and its Annexes, particularly what is indicated in this one.
- 1.7. Without prejudice to the obligations of the REGULATOR in matters of supervision, the CONCESSIONAIRE must permanently evaluate compliance with the Indicators contained in the Contract, for which it will carry out its own verifications and measurements and comply with the self-assessment obligations referred to. this Annex.
- 1.8. The CONCESSIONAIRE must prepare its own Indicator evaluation plan (measurement dates, equipment to be used, methodology, report formats, etc.) which must be incorporated into the EDI of each Section and will be delivered as part of the preparation of the Operation Manual.

1.9. The self-assessment of the Indicators by the CONCESSIONAIRE will also be recorded in the AMS platform, where the necessary work orders will be automatically generated to comply with the levels and/or corrections within the terms established according to Appendix 1 of this annex. If the self-assessment indicates that the CONCESSIONAIRE has not complied with the Service Levels, THE REGULATOR will issue a "Notification of Non-Compliance" and apply the corresponding penalties.

Evaluations by the REGULATOR

- 1.10. Without prejudice to the powers assigned to it by the Applicable Laws and Provisions, the REGULATOR will carry out Continuous Evaluations of all Sections of the road, with the objective of identifying localized defects, and to verify compliance with the individual Service Levels. The REGULATOR may also supervise the working conditions or practices of the CONCESSIONAIRE so that they are not unsafe for Users. In addition, the eleventh month of each Concession Year, the REGULATOR will carry out an annual evaluation with the objective of determining the global Service Level per Sections and overall of all Sections.
- 1.11. The REGULATOR will carry out the Continuous Evaluations at the opportunity and places it deems appropriate within the Project, with or without prior notice to the CONCESSIONAIRE. It may also use information provided by the CONCESSIONAIRE, the Users of the road infrastructure and/or by the GRANTOR to detect insufficient condition parameters or non-compliance.
- 1.12. If in any Continuous Evaluation insufficient condition parameters are detected in any evaluated Section, the REGULATOR will issue a "Notification of insufficient condition parameter".
- 1.13. Once a "Notification of insufficient condition parameter" has been received, the CONCESSIONAIRE must execute the work that once again raises the quality of the road to the required Service Levels, having the terms specified in Appendix 1 of this annex.
- 1.14. When the CONCESSIONAIRE completely repairs the defects detailed in the "Notification of insufficient condition parameter", it will notify the REGULATOR informing the completion of the repair.
- 1.15. In the event that the REGULATOR or whoever he designates, verifies that the repairs of the defects indicated in the "Notification of insufficient condition parameter" have not been carried out within the established terms or the CONCESSIONAIRE's operation reports show non-compliance with the Levels of individual Service, the REGULATOR will issue a "Notification of Non-Compliance" applying the corresponding penalties until the defects indicated in the corresponding "Notification of Non-Compliance" are corrected.
- 1.16. Communication for notification of insufficient condition parameters and non-compliance will be carried out through the AMS platform. Appendix 3 to this annex contains reference communication formats for the notification of insufficient condition parameters and non-compliance.

Reversal Conditions

1.17. Without prejudice to the Road Maintenance Programs defined in Chapter IX of the Concession Contract, three (3) years before the estimated date for the end of the Concession term, the GRANTOR and the REGULATOR may carry out the necessary reviews throughout the Project, in order to determine, in coordination with the CONCESSIONAIRE, the activities that the CONCESSIONAIRE must carry out so that the road is in optimal conditions of use and Operation, and that in this way all the Sections comply for a minimum term of at least three (03) years after the reversion of the assets to the GRANTOR, with the Service Levels required in this annex, in addition to the following minimum residual useful life values:

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- Pavement: 10 years Tunnel ventilation: 10 years Tunnel fire protection system equipment: 5 years Tunnel electrical equipment: 5 years ITS: 5 years Toll systems: 5 years Weighing system: 5 years •
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ANNEX No. 11

APPENDIX 1

INDIVIDUAL SERVICE LEVELS

The Operation of the road through individual Service Levels encourages the CONCESSIONAIRE to monitor the parameters that determine the level of service and to carry out the appropriate tasks to maintain them at all times. However, for this incentive mechanism to work, Service Levels, correction terms and penalties must be adequately defined to achieve this objective. In this sense, the Concession Contract includes the penalties to be applied for non-compliance with the Service Levels, which vary according to the severity of the non-compliance from the point of view of the User's security.

The Concession Contract defines individual Service Levels for the following elements:

- 1. Rolling surface (asphalt concrete or surface treatment);
- 2. Berm
- 3. Drains
- 4. Horizontal Signage
- 5. Vertical Signage
- 6. Road Safety Devices
- 7. Right of Way:
- 8. Bridges, Viaducts and Pedestrian Bridges
- 9. Running Surface and Berms (hydraulic concrete)
- 10. Tunnel
- 11. Lining and Drainage
- 12. Horizontal Signage
- 13. Vertical Signage
- 14. Facilities (lighting, ventilation, fire protection, communication and signaling, surveillance, emergency galleries and electrical supply)
- 15. Operations:
 - Queue Waiting time
 - Customer Service
 - Incidents and Accidents Response
- 16. Walls
- 17. Exterior Lighting
- 18. Buildings and Toll Stations
- 19. ITS and Control Center

The Service Levels and correction terms for each element are summarized below and under the following considerations:

- The scope of the measurements is the entire length of the road and over all the existing discrete elements for frequencies starting from weekly.
- Work to correct non-compliance must be carried out in accordance with the Applicable Laws and Provisions.
- The reference length (which for purposes will mean the measurement length or 100%) will be 100m.
- The reference area (which for purposes will mean the measurement area or 100%) will be found by multiplying the width of a roadway or the width of the berm (depending on the element to be evaluated) by 100m.
- For overpasses, pedestrian bridges and pedestrian crossings built by the CONCESSIONAIRE according to numerals 7 and 8 of Annex No. 3 "Technical aspects"
 Appendix 1 "Minimum Technical Requirements of the Project for Design and Construction" - Section A "Mandatory Minimum Technical Requirements of the Project for Design and Construction", only the Service Levels defined in the table in numeral 8 below ("Bridges, viaducts and pedestrian bridges") apply.
- "Days or days" refer to "calendar days" and "hours" refer to "calendar hours."

1. Asphalt concrete running surface

Parameter	Measurement	Measurement Method	Service Level	Measurement Frequency	Correction Term	Severity of Non- compliance
Surface Width Reduction	Maximum width reduction percentage	By visual inspection, areas with reductions in the width of the rolling surface are identified and the affected width is measured. The reduction percentage is calculated by relating the affected width to the total width of the design roadway.	0%	Quarterly	14 days	Mild
Pavement Thickness Reduction	Maximum percentage reduction in thickness of each layer	By visual inspection and sampling, the areas with reductions in thickness of each of the layers are identified and the affected or reduced thickness is measured. The Reduction percentage is calculated by relating the affected or reduced thickness to the design thickness.	0%	Annual	14 days	Mild
Crocodile Skin	Maximum percentage of area with crocodile skin	By visual inspection, areas with crocodile skin cracks without being perfectly sealed or not sealed are identified. The affected area is calculated as the area of the quadrilateral (with sides parallel and perpendicular to the axis of the roadway) circumscribed by the affected area.	0%	Quarterly	14 days	Serious
Gaps	Maximum percentage of area with holes	By visual inspection, areas with potholes or holes are identified, using a 1.5 m rule to compare the level with the adjacent pavement. The affected area is calculated as the area of the quadrilateral (with sides parallel and perpendicular to the axis of the roadway) circumscribed by the affected area.	0%	Monthly	1 day	Serious
Cracks greater than 3mm thick	Maximum percentage of area with cracks	By visual inspection, areas with cracks greater than 3 mm thick without being perfectly sealed or unsealed (larger or	0%	Monthly (*)	14 days	Mild

Parameter	Measurement	Measurement Method	Service Level	Measurement Frequency	Correction Term	Severity of Non- compliance
	greater than 3 mm thick	critical thickness of the crack) are identified. The affected area is calculated as the product of the length of the crack and the width of influence according to Table 4.12 of the current Highway Manual - Road Conservation (Highway Manual - Road Conservation RD No. 08-2014 MTC/14 - RD No. 05-2016 MTC /14) or standard that modifies or replaces it.				
Cracks between 1 and 3mm thick	Maximum percentage of area with cracks between 1 and 3 mm thick	By visual inspection, areas with cracks between 1 and 3 mm thick without being perfectly sealed or unsealed are identified (larger or critical thickness of the crack). The affected area is calculated as the product of the length of the crack and the width of influence according to Table 4.12 of the current Highway Manual - Road Conservation (Highway Manual - Road Conservation RD No. 08-2014 MTC/14 - RD No. 05-2016 MTC /14) or standard that modifies or replaces it.	2%	Monthly (*)	14 days	Mild
Patches	Maximum percentage of patches in poor condition	By visual inspection, areas with repairs or patches in poor condition are identified (i.e., unacceptable structural condition, very deteriorated, very uneven or level with relevant defects). The affected area is calculated as the area of the quadrilateral circumscribed by the affected area in accordance with the criteria established to delimit each deterioration.	0%	Monthly	2 days	Serious
Rutting	Maximum percentage of area with rutting	By visual inspection, areas with a footprint depth greater than 12 mm are identified, using a 1.5 m ruler that rests on the edges of	0%	Monthly	7 days	Serious

Image: space of the subsidenceImage: space of the subsidence of the subsidenc	Parameter	Measurement	Measurement Method	Service Level	Measurement Frequency	Correction Term	Severity of Non- compliance
SubsidenceMaximum percentage of area with subsidence greater than 25subsidence greater than 25 mm are identified, using a 1.5 m ruler that rests on the edges of the subsidence to then measure the maximum depth. The affected area is calculated as the area of the quadrilateral (with sides parallel and perpendicular to the axis of the roadway) circumscribed by the affected area.0%Monthly7 daysSeriousExudationMaximum percentage of 		•	depth. The affected area is calculated as the length of the affected areas (sum of the two				
ExudationBy visual inspection, areas with exudations with severity levels 2 and 3 are identified according to Table 4.13 of the current Highway Manual - Road Conservation percentage of area with exudation (added 	Subsidence	percentage of area with subsidence greater than 25	subsidence greater than 25 mm are identified, using a 1.5 m ruler that rests on the edges of the subsidence to then measure the maximum depth. The affected area is calculated as the area of the quadrilateral (with sides parallel and perpendicular to the axis of the roadway)	0%	Monthly	7 days	Serious
Existence of loose materialMaximum percentage of area with loose materialmaterials are identified. The affected area is calculated as the area of the quadrilateral (with sides parallel and perpendicular to the axis of the roadway)0%Daily1 hourSerious	Exudation	percentage of area with exudation (added both severity	By visual inspection, areas with exudations with severity levels 2 and 3 are identified according to Table 4.13 of the current Highway Manual - Road Conservation (Highway Manual - Road Conservation RD). No. 08-2014 MTC/14 - RD No. 05-2016 MTC /14) or standard that modifies or replaces it. The affected area is calculated as the area of the quadrilateral (with sides parallel and perpendicular to the axis of the roadway)	0%	Monthly	7 days	Serious
Existence of obstacles Maximum By visual inspection, areas with obstacles on 0% Daily 1 hour Serious		percentage of area with loose material	By visual inspection, areas with loose materials are identified. The affected area is calculated as the area of the quadrilateral (with sides parallel and perpendicular to the axis of the roadway) circumscribed by the affected area.				

Parameter	Measurement	Measurement Method	Service Level	Measurement Frequency	Correction Term	Severity of Non- compliance
	number of obstacles	the pavement are identified by obstacles and the obstacles are quantified.				
Peeling and Delamination	Maximum percentage of area with peeling or delamination	By visual inspection, areas with peeling or delamination are identified. The affected area is calculated as the area of the quadrilateral (with sides parallel and perpendicular to the axis of the roadway) circumscribed by the affected area.	0%	Weekly	3 days	Serious
Edge Delamination	Maximum Edge Delamination Percentage	By visual inspection, the lengths with edge delamination are identified.	0%	Monthly	3 days	Serious
Asphalt concrete roughness (reception of works or after performing the respective periodic maintenance)	Roughness in sections every 100 m.	Using a class I laser profilometer, the IRI is determined every 10 m and the average value is obtained every 100 m. All the lanes of each roadway will be measured, at least in the two driving zones (longitudinal bands of the pavement where contact with the wheels of the vehicles occurs), and the values corresponding to the singular points will be excluded from the measurement. In each lane, only the worst value per lap will be considered.	IRIc =<2.0 m/km (95% reliability, to be determined by what is indicated in the Highway Manual – Road Conservation)	The end of works	30 days	Mild
Asphalt Concrete Roughness (Operation period)	Roughness in sections every 100 m.	Using a class I laser profilometer, the IRI is determined every 10 m and the average value is obtained every 100 m. All the lanes of each roadway will be measured, at least in the two driving zones (longitudinal bands of the pavement where contact with the wheels of the vehicles occurs), and the values corresponding to the singular points will be excluded from the measurement. In each lane, only the worst value per lap will be considered.	IRIc =<3.3m/km (95% reliability, to be determined by what is stated in the Highway Manual – Road	Annually	60 days	Mild

Parameter	Measurement	Measurement Method	Service Level	Measurement Frequency	Correction Term	Severity of Non- compliance
			Conservation)			
Surface Friction	Average friction coefficient on wet pavement	Using SCRIM equipment (Sideway-force Coefficient Routine Investigation Machine), a measurement of the friction coefficient is taken every 20 m. For double carriageways, in the event that all lanes of a Roadway have the same road surface, measurements will be taken in one of the lanes of the lane where the most heavy vehicles on each Roadway circulate. If the wearing courses are different, the lanes where the fastest vehicles circulate will also be measured. On single Roadway, it will be measured in both directions, and the worst lane will be considered for the purposes of average values.	Average value in 1 km>=0.55	Annually	60 days	Serious
Characteristic Deflection	Deflection every 20 m	Using the Benkelman Beam, the deflection is determined in hundredths of a mm at least every 20 m and according to the method indicated in numeral MTC E 1002 of the Materials Testing Manual 2016 or standard that modifies or replaces it. Once the measurements have been made, the characteristic deflection is calculated in homogeneous sections as indicated in numeral 12.4.6 of the Highway Manual - Soils, geology, geotechnics and pavements - Soils and pavements section (RD Nº10- 2014-MTC/14) or standard that modifies or replaces it. On roadway with more than one lane, the lane where heavy vehicles usually circulate will be considered, if they are clearly differentiated. Otherwise it will be	< Allowable deflection	Every 2 years	6 months	Mild

Parameter	Measurement	Measurement Method		Measurement Frequency	Correction Term	Severity of Non- compliance
		necessary to measure all lanes. If more than one lane is measured per lane, the worst situation will be considered, that is, the highest design characteristic deflection values.				
monthly.	•	pavement has been built or periodic maintenar ent equipment, the service level will be the corre	·	•	d, the frequen	cy will be

2. Asphalt Concrete Berm

Parameter	Measurement	Measurement Method	Service Level	Measurement Frequency	Correction Term	Severity of Non- compliance
Berm Width Reduction	Maximum Width Reduction Percentage	By visual inspection, areas with reductions in berm width are identified and the affected width is measured. The reduction percentage is calculated by relating the affected width to the total width of the design roadway.	0%	Quarterly	14 days	Mild
Berm Thickness Reduction	Maximum percentage of berm Thickness Reduction	By visual inspection and sampling, the areas with reductions in thickness of each of the layers are identified and the affected or reduced thickness is measured. The reduction percentage is calculated by relating the affected or reduced thickness to the design thickness.	0%	Annually	14 days	Mild
Gaps	Maximum percentage of area with holes	By visual inspection, areas with potholes or holes are identified, using a 1.5 m rule to compare the level with the adjacent pavement. The affected area is calculated as the area of the	0%	Daily	1 day	Serious

Parameter	Measurement	Measurement Method	Service Level	Measurement Frequency	Correction Term	Severity of Non- compliance
		quadrilateral (with sides parallel and perpendicular to the axis of the roadway) circumscribed by the affected area.				
Cracks greater than 3mm thick	Maximum percentage of area with cracks greater than 3 mm thick	By visual inspection, areas with cracks greater than 3 mm thick without being perfectly sealed or unsealed (larger or critical thickness of the crack) are identified. The affected area is calculated as the product of the length of the crack and the width of influence according to Table 4.12 of the current Highway Manual - Road Conservation (Highway Manual - Road Conservation RD No. 08-2014 MTC/14 - RD No. 05-2016 MTC /14) or standard that modifies or replaces it.	0%	Semiannually	7 days	Serious
Cracks greater between 1 and 3mm thick	Maximum percentage of area with cracks between 1 and 3mm thick	By visual inspection, areas with cracks between 1 and 3 mm thick without being perfectly sealed or unsealed are identified (larger or critical thickness of the crack). The affected area is calculated as the product of the length of the crack and the width of influence according to Table 4.12 of the current Highway Manual - Road Conservation (Highway Manual - Road Conservation RD No. 08-2014 MTC/14 - RD No. 05-2016 MTC /14) or standard that modifies or replaces it.	2%	Semiannually	7 days	Serious
Patches	Maximum percentage of patches in poor condition	By visual inspection, areas with repairs or patches in poor condition are identified (i.e., unacceptable structural condition, very deteriorated, very uneven or level with relevant defects). The affected area is calculated as the area of the quadrilateral circumscribed by the affected area in accordance with the criteria established to delimit	0%	Monthly	7 days	Serious

Parameter	Measurement	Measurement Method	Service Level	Measurement Frequency	Correction Term	Severity of Non- compliance
		each deterioration.				
Subsidence	Maximum percentage of area with subsidence greater than 25 mm	By visual inspection, areas with subsidence greater than 25 mm are identified, using a 1.5 m rule that rests on the edges of the subsidence to then measure the maximum depth. The affected area is calculated as the area of the quadrilateral (with sides parallel and perpendicular to the axis of the roadway) circumscribed by the affected area.	0%	Monthly	7 days	Serious
Exudation	Maximum percentage of area with exudation (added both severity levels 2 and 3, medium and high)	By visual inspection, areas with exudations with severity levels 2 and 3 are identified according to Table 4.13 of the current Highway Manual - Road Conservation (Highway Manual - Road Conservation RD). No. 08-2014 MTC/14 - RD No. 05-2016 MTC /14) or standard that modifies or replaces it. The affected area is calculated as the area of the quadrilateral (with sides parallel and perpendicular to the axis of the roadway) circumscribed by the affected area.	0%	Monthly	7 days	Serious
Existence of loose material	Maximum percentage of area with loose material	By visual inspection, areas with loose materials are identified. The affected area is calculated as the area of the quadrilateral (with sides parallel and perpendicular to the axis of the roadway) circumscribed by the affected area.	0%	Daily	1 hour	Serious
Existence of obstacles	Maximum number of obstacles	By visual inspection, areas with pavement obstruction by obstacles are identified and the obstacles are quantified.	0%	Daily	1 hour	Serious
Unevenness between the Roadway and the berm (reception of works or after the respective periodic maintenance)	Maximum slope height (roadway- berm)	By visual inspection, the affected areas are identified with the edge of the roadway above the edge of the berm. Using a hand level that rests on the edge of the roadway, the unevenness in relation to the berm is measured with a ruler.	0mm	The end of works	7 days	Serious

Parameter	Measurement	Measurement Method	Service Level	Measurement Frequency	Correction Term	Severity of Non- compliance
		By visual inspection, the affected areas are identified				
Unevenness between roadway and berm (during operation)	Maximum slope height (roadway- berm)	with the edge of the roadway above the edge of the berm. Using a hand level that rests on the edge of the roadway, the unevenness in relation to the berm is measured with a ruler.	10 mm	Monthly	7 days	Serious
Unevenness between roadway and berm (during Operation)	Maximum percentage of the length with unevenness greater than 0 mm and less than 10 mm	By visual inspection, the affected areas are identified with the edge of the roadway above the edge of the berm. Using a hand level that rests on the edge of the roadway, the unevenness in relation to the berm is measured with a ruler. determining whether it is between 0 and 10 mm. The affected length is determined as the length of the affected areas.	10%	Monthly	7 days	Serious
Peeling and Delamination	Maximum percentage of area with peeling or delamination	By visual inspection, areas with peeling or delamination are identified. The affected area is calculated as the area of the quadrilateral (with sides parallel and perpendicular to the axis of the roadway) circumscribed by the affected area.	10%	Monthly	7 days	Serious
Berm Edge Delamination	Maximum Delamination Percentage	By visual inspection, the lengths with edge delamination are identified.	0%	Monthly	3 days	Serious
Erosion	Maximum erosion percentage	By visual inspection, areas with erosion on the edges are identified. The affected length is determined as the length of the affected areas with edge erosion.	0%	Monthly	7 days	Serious

3. Sewer system

Parameter	Measurement	Measurement Method	Service Level	Measurement Frequency	Correction Term	Severity of Non- compliance
Obstructions to the free flow of the hydraulic design flow in sewers, ditches, crest ditches, pontoons, drains and subdrains, in addition to the corresponding components of the entry and exit works	Vegetation, sedimentation, clogging or other elements that hinder or alter free flow, poorly sealed joints.	By visual inspection, obstructions to water runoff are identified due to any of the elements indicated or due to defects or deficiencies in the structures as well as poorly sealed joints.	They will not be admitted	Weekly	2 days	Serious
Structural Failures	Settlements, loss of geometry, failures that affect structural or hydraulic capacity.	By visual inspection, structural deterioration of masonry, concrete or metal is identified, such as undercuts, settlements, loss of geometry, cracks greater than 3 mm, breaks, loss of exposed reinforcement parts, oxidation (when applicable depending on the type of material), etc.	They will not be admitted	Monthly	14 days	Serious/Mild (*)
Erosion and/or scour in sewers, ditches, drains, sub-drains, pontoons, and other drainage elements in addition to the corresponding components of the entry and exit works.	Erosion or Scour	By visual inspection, areas with erosions and/or undercuts that affect the structural or hydraulic capacity are identified.	They will not be admitted	Monthly	7 days	Serious
Deterioration in sewers.	Deterioration in sewers (rusty metal and concrete)	By visual inspection, deterioration in sewers is identified	They will not be admitted	Monthly	14 days	Mild
(*) It is considered a serious breach if th	e defect imminently affect	ts road safety.				

4. Horizontal Signage

Parameter	Measurement	Measurement Method	Service Level	Measurement Frequency	Correction Term	Severity of Non- compliance
		Lines with deficiencies are identified by visual inspection and with a winch or rule.	In demarcation of axis and edge lines 10cm	At each repainting or annual	7 days	Serious
	Minimum Line Width	Lines with deficiencies are identified by visual inspection and with a winch or rule.	In demarcation of border lines with highlights or speed reduction indications 15cm	At each repainting or annual	7 days	Serious
	Length of Axis Dotted Lines	Lines with deficiencies are identified by visual inspection and with a winch or rule.	4.5 m ± 2%	At each repainting or annual	7 days	Serious
	Length of Spaces Between Dotted Lines on Axis	Lines with deficiencies are identified by visual inspection and with a winch or rule.	7.5 m ± 2%	At each repainting or annual	7 days	Serious
Incorrect Line Geometry	Maximum deflection of the alignment of the axis lines with respect to the axis of the route	Lines with deficiencies are identified by visual inspection and with a winch or rule.	10cm	At each repainting or annual	7 days	Serious
	Maximum deflection of the dotted lines of the axis (white) with respect to the straight line that joins its ends	Lines with deficiencies are identified by visual inspection and with a winch or rule.	2 cm	At each repainting or annual	7 days	Serious
	Maximum and minimum deflection of the solid line of the axis with respect to the dotted lines of the axis	Lines with deficiencies are identified by visual inspection and with a winch or rule.	Min = 17cm Max = 20 cm	At each repainting or annual	7 days	Serious
	Maximum and	Lines with deficiencies are	Min = 17cm	At each	7 days	Serious

Parameter	Measurement	Measurement Method	Service Level	Measurement Frequency	Correction Term	Severity of Non- compliance
	minimum deflection of the continuous axis line with respect to the axis of the route	identified by visual inspection and with a winch or rule.	Max = 20 cm	repainting or annual		
Discoloration or Soiling of Lines or Marks	"x" and "y" chromatic coordinates (45/0 geometry and standard observation angle of 2°)	With the use of equipment, compliance with the coloring will be verified (reflection colorimeter), according to Table No. 02 Chromatic coordinates of the vertices of the color polygon, of the Technical Specifications of Paints for road works of the current MTC or standard. to modify or replace it.	Chromatic coordinates within the specified color polygon	Semiannually	7 days	Serious
Insufficient night visibility of lines or marks after repainting	Minimum retroreflectance coefficient (30 m geometry) measured with a retroreflectometer with an observation angle of 1.05° and incidence of – 88.76°	To determine the reflection coefficient of each type of line (continuous central, discontinuous central, continuous edge, etc.) or each symbology (arrow, stop, etc.), 3 determinations are made in the reference length, randomly choosing the places, average the results. The retroreflectance coefficient is obtained using a retroreflectometer with an observation angle of 1.05° and incidence of – 88.76° (30 m geometry).	Minimum initial retroreflectance: White: 230 mcd/lux/m ² , Yellow: 175 mcd/lux/m ²	At each repaint	3 days	Serious
Insufficient night visibility of	Minimum	To determine the reflection	Retroreflectivity for	Monthly (*)	7 days	Serious

Parameter	Measurement	Measurement Method	Service Level	Measurement Frequency	Correction Term	Severity of Non- compliance
lines or marks	retroreflectance coefficient (30 m geometry) measured with a retroreflectometer with an observation angle of 1.05° and incidence of – 88.76°	coefficient of each type of line (continuous central, discontinuous central, continuous edge, etc.) or each symbology (arrow, stop, etc.), 3 determinations are made, randomly choosing the places on the reference length, average the results. The retroreflectance coefficient is obtained using a retroreflectometer with an observation angle of 1.05° and incidence of – 88.76° (30 m geometry).				
Excess Horizontal Wear of Lines or Marks	Maximum Deterioration Percentage	By visual inspection, the worn areas (that is, not visible) on the axis (added the different center lines) and on the edges (added the two edges) are determined, taking as the area	5%	Semiannually	7 days	Serious

Parameter	Measurement	Measurement Method	Service Level	Frequency of Measurement	Correction Period	Severity of Non- compliance
		The axis area (sum of the different center lines) and the edges (sum of the two edges) in the reference length.				
Incorrect geometry of retroreflective studs	Distance between tangent and curved studs	By visual inspection and with a tape measure or rule, the distances between studs must be in accordance with Section 804 of the Highway Manual-General Technical Specifications for Construction (EG-2013) or standard that modifies or replaces it.	As specified	At each placement of studs	7 days	Serious
Deterioration of	Displacement from its original position	By visual inspection with a tape measure or rule, the displacement distance from its initial position is identified.	They will not be admitted	Six months	7 days	Serious
retroreflective strikes	Total or partial impairments of the reflective area of the body	Visual inspection identifies deteriorated studs	They will not be admitted	Semiannually	7 days	Serious
Loss or uselessness of retroreflective strikes	Maximum percentage of lost or useless retroreflective strikes	Visual inspection identifies lost or useless tacks and pins the quantity affected on the axis (sum of the different center lines) and at the edges (sum of the two edges) to the reference length	5%	Semiannually	3 days	Serious
Insufficient daytime visibility of lines or markings	Contrast Ratio of Indicator Qd	To determine the reflection coefficient of each type of line (continuous center, broken center, continuous edge, etc.)	Minimum contrast ratio=2	Monthly (*)	7 days	Serious

Parameter	Measurement	Measurement Method	Service Level	Frequency of Measurement	Severity of Non- compliance
		or each symbology (arrow, stop, etc.) 3 determinations are made by randomly choosing the places in the reference length, the results are averaged. The retroreflectance coefficient is obtained using a retroreflectometer with an observation angle of 1.05° and an incidence of – 88.76° (30 m geometry).			
(*) In case the paint is of them	moplastic type, the mea	asurement frequency shall be se	emi-annual.		

5. Vertical Signage

Parameter	Measurement	Measurement Method	Service Level	Frequency of Measurement	Period	Severity of Non- compliance
Missing elements	Missing individual items	Missing items are identified by visual inspection.	They will not be admitted	Daily	2 days	Serious
Discoloration of sign plates	Chromatic coordinates "x" and "y" (45/0 geometry and 2° standard observation angle)	The use of equipment will verify the compliance of the coloration (reflection colorimeter), according to Table 800-Color color coordinates, of Section 800 of the Highway Manual – General Technical Specifications for Construction (EG-2013) or standard that modifies or replaces it.	Color coordinates within the specified color polygon	Annually	7 days	Serious
Insufficient nighttime visibility of signal boards	Minimum retroreflective coefficient (0.2°	To determine the retroreflection coefficient of each signal, 3 determinations are made by	Post sign: Yellow: 270 cd/lux/m ² , White: 360 cd/lux/m ² ,	Quarterly	7 days	Serious

Parameter	Measurement	Measurement Method	Service Level	Frequency of Measurement	Correction Period	Severity of Non- compliance
	observation angle and -4° incidence)	randomly choosing the places in the reference length, and the results are averaged in Cd/lux/m2. The retroreflectance coefficient is obtained using a retroreflectometer with an observation angle of 0.2° and an incidence of -4°.	Orange: 145 cd/lux/m ² , Red: 65 cd/lux/m ² , Green: 50 cd/lux/m ² , Blue: 30 cd/lux/m ² , Brown: 18 cd/lux/m ² Raised signal: Yellow: 435 cd/lux/m ² , White: 580 cd/lux/m ² , Orange: 200 cd/lux/m ² , Red: 87 cd/lux/m ² , Green: 58 cd/lux/m ² , Blue: 26 cd/lux/m ² , Brown: 17 cd/lux/m ² ,			
	Dirty dusty or damaged messages such as stickers or paint, etc.	Visual inspection identifies them.	They will not be admitted	Monthly	7 days	Serious
Deterioration of signal plates message	Perforations or deterioration greater than 1 cm in diameter or compromising the message	Visual inspection identifies them.	They will not be admitted	Monthly	7 days	Serious
	Any bend of length greater than 7.5 cm.	Visual inspection identifies them.	They will not be admitted	Monthly	7 days	Serious
	Oxidation on the faces of the plate	Visual inspection identifies them.	They will not be admitted	Monthly	7 days	Serious
Deterioration of sign plate fasteners, including	Loose or mismatched panels	Visual inspection identifies them.	They will not be admitted	Quarterly	7 days	Serious
measurement of	Full or partial lack	Visual inspection identifies them.	They will not be admitted	Quarterly	7 days	Serious

Parameter	Measurement	Measurement Method	Service Level	Frequency of Measurement	Correction Period	Severity of Non- compliance
rusted bolts	of bolts, includes oxidation					
	Impairment or absence of stiffening structures	Visual inspection identifies them.	They will not be admitted	Quarterly	7 days	Serious
Deterioration of signal supports	Sight cracks, fractures or reinforcements in the case of concrete supports; Oxidations or deformations in the case of metal supports	Visual inspection identifies them.	They will not be admitted	Semiannually	7 days	Serious
	Shortcomings in painting	Visual inspection identifies them.	They will not be admitted	Semiannually	7 days	Serious
	Vegetation in your environment that prevents visibility	Visual inspection identifies them.	They will not be admitted	Monthly	7 days	Serious
	Sight cracks, fractures or armour (in case of concrete posts)	Visual inspection identifies them.	They will not be admitted	Semiannually	7 days	Serious
Deterioration and dirt of the mileposts	Shortcomings in painting	Visual inspection identifies them.	They will not be admitted	Semiannually	7 days	Serious
	Dirt or vegetation in your environment that prevents visibility	Visual inspection identifies them.	They will not be admitted	Semiannually	7 days	Serious

6. Road safety¹ devices

Parameter	Measurement	Measurement Method	Service Level	Frequency of Measurement	Correction Period	Severity of Non- compliance
Missing elements	Any missing individual items	Missing items are identified by visual inspection.	They will not be admitted	Daily	2 days	Serious
Deficiencies in the installation of safety barriers and/or road guards	Location, alignment and height	By visual inspection they are identified according to the approved design taking into account the Highway Manual – General Technical Specializations for Construction (EG-2013), the Road Safety Manual (2017) or standard that modifies or replaces it.	According to specification	In each installation	7 days	Serious
	Bends or damage	Visual inspection identifies them.	They will not be admitted	Weekly	7 days	Serious
	Absence or mismatch of fixing bolts	Visual inspection identifies them.	They will not be admitted	Monthly	7 days	Serious
	Oxidation of side surfaces	Visual inspection identifies them.	They will not be admitted	Monthly	7 days	Serious
Deterioration and cleaning of security barriers and/or road	Dirt, paint, posters or graffiti	Visual inspection identifies them.	They will not be admitted	Monthly	7 days	Serious
guards	Absence of retroreflective paint or foil	Visual inspection identifies them.	They will not be admitted	Monthly	7 days	Serious
	Minimum retroreflective coefficient (0.2° observation angle and -4° incidence)	To determine the retroreflection coefficient, 3 determinations are made by randomly choosing the places in the reference length, and the results are averaged in	As specified for type IV	Semiannually	7 days	Serious

¹ Service levels for video surveillance are included in the service levels for ITS and Control Center in section 18. Road safety devices and associated service levels are consistent with those requested by the ERM from other concessionaire.

Parameter	Measurement	Measurement Method	Service Level	Frequency of Measurement	Correction Period	Severity of Non- compliance
		Cd/lux/m2. The retroreflectance coefficient is obtained by means of a retroreflectometer with an observation angle of 0.2° and incidence of -4° according to Table 800-01, section 800 of the Highway Manual – General Technical Specifications for Construction (EG-2013), the Road Safety Manual (2017) or standard modifying or replacing it.				
Deficiency in the placement of parapets or walls with railing	Location, alienation and height	By visual inspection they are identified according to the approved design taking into account the Highway Manual – General Technical Specializations for Construction (EG-2013), Manual of Automotive Traffic Control Devices for Streets and Roads, the Road Safety Manual (2017) or standard that modifies or replaces it.	As specified	In each installation	7 days	Serious
	Sight cracks, fractures, or armor	Visual inspection identifies them.	They will not be admitted	Monthly	7 days	Serious
Deterioration and cleaning of parapets or walls with railing	Painting deficiencies or graffiti	Visual inspection identifies them.	They will not be admitted	Monthly	7 days	Serious
	Absence of retroreflective paint or foil	Visual inspection identifies them.	They will not be admitted	Monthly	7 days	Serious
	Minimum retroreflective	To determine the retroreflection coefficient, 3 determinations are	As specified for type IV	Semiannually	7 days	Serious

Parameter	Measurement	Measurement Method	Service Level	Frequency of Measurement	Correction Period	Severity of Non- compliance
	coefficient (0.2° observation angle and -4° incidence)	made by randomly choosing the places in the reference length, and the results are averaged in Cd/lux/m2. The retroreflectance coefficient is obtained by means of a retroreflectometer with an observation angle of 0.2° and incidence of -4° according to Table 800-01, Section 800 of the Highway Manual – General Technical Specifications for Construction (EG-2013), the Road Safety Manual (2017) or standard that modifies or replaces it.				
	Vegetation in your environment that prevents visibility	Visual inspection identifies them.	They will not be admitted	Semiannually	7 days	Serious
Deficiency in the placement of horizontal and vertical curve delineators	Location, alignment, spacing and height	By visual inspection they are identified according to the approved design taking into account the Highway Manual – General Technical Specifications for Construction (EG-2013), Manual of Automotive Traffic Control Devices for Streets and Roads and Road Safety Manual (2017) or standard that modifies or replaces it.	As specified for type IV	In each installation	7 days	Serious
Deterioration and cleaning of horizontal and vertical curve delineators	Fissures, fractures or armour in sight (in the case of concrete	Visual inspection identifies them.	They will not be admitted	Semiannually	3 days	Serious

Parameter	Measurement	Measurement Method	Service Level	Frequency of Measurement	Correction Period	Severity of Non- compliance
	eyeliners)					
	Shortcomings in painting	Visual inspection identifies them.	They will not be admitted	Semiannually	3 days	Serious
	Absence of retroreflective paint or foil	Visual inspection identifies them.	They will not be admitted	Monthly	3 days	Serious
	Minimum retroreflective coefficient (0.2° observation angle and -4° incidence)	To determine the retroreflection coefficient, 3 determinations are made by randomly choosing the places in the reference length, and the results are averaged in Cd/lux/m2. The retroreflectance coefficient is obtained by means of a retroreflectometer with an observation angle of 0.2° and incidence of -4° according to Table 800-01, Section 800 of the Highway Manual – General Technical Specifications for Construction (EG-2013), the Road Safety Manual (2017) or standard that modifies or replaces it.	As specified for type IV	Semiannually	3 days	Serious
	Vegetation in your environment that prevents visibility	Visual inspection identifies them.	They will not be admitted	Semiannually	3 days	Serious

7. Right of Way

Parameter	Measurement	Measurement Method	Service Level	Frequency of Measurement	Correction Period	Severity of Non- compliance
Excess height of vegetation	Maximum height of vegetation	Visual inspection identifies areas with excess vegetation.	Shoulder and ditches: they will not allowed Road safety zone: up to 15cm Visibility areas: up to 30cm	Monthly	7 days	Mild
Significant obstacle or depressions	Obstacles in the first 6 m measured from the edge of the shoulder.	Visual inspection identifies areas with obstacles or depressions that pose a traffic hazard, such as: • Stones, mounds, cave-ins or debris. • Tree branches that lie above the roadway and shoulders. Except those obstacles that are expressly exempted.	They will not be admitted	Weekly	7 days	Mild
Erosions and sediments	Erosions or sediments on slopes, counter slopes and in the concession area.	Visual inspection identifies areas with erosion and/or undermining and/or sediment exceeding 2 m ² .	They will not be admitted	Weekly	7 days	Mild
Pozzled waters	Beginning waters in the concession area.	Visual inspection identifies areas with filled water. The affected area is calculated the	They will not be admitted	Weekly	7 days	Mild

Parameter	Measurement	Measurement Method	Service Level	Frequency of Measurement	Correction Period	Severity of Non- compliance
		quadrilateral area (sides parallel and perpendicular to the roadway axis) circumscribed to the affected area.				
Waste	Waste of any nature or elements foreign to the road (dead animals, wreckage of accidents, abandoned cars and cargo, branches and leaves, debris or remains of construction or materials used in maintenance).	Visual inspection identifies waste from the pavement of the road that is either inside municipal temporary warehouses and/or the Concessionaire and if necessary collects it in bags 0.5 m x 0.5 m.	They will not be admitted	Daily	1 day	Mild
Advertising	Unauthorized notices or propaganda in any element of the concession area.	Visual inspection identifies areas with unauthorized advertising.	They will not be admitted	Weekly	7 days	Mild

8. Bridges, viaducts and pedestrian bridges

Parameter	Measurement	I Measurement Method	Service Level	Frequency of Measurement		Severity of Non- compliance
Dirt or Foreign Elements						
Loose material or hazardous items on the board (****)	Loose material or hazardous items for circulation on the board	Visual inspection identifies them.	They will not be admitted	Daily	1 hour	Serious/Mild (*)
Obstruction of drains	Obstruction of drains	Visual inspection identifies them.	They will not be	Weekly	1 day	Serious/Mild (*)

Parameter	Measurement	Measurement Method	Service Level	Frequency of Measurement	Correction Period (*)	Severity of Non- compliance
			admitted			
Stains or deterioration in concrete	Stains or deterioration in concrete	Visual inspection identifies them.	They will not be admitted	Monthly	7 days	Serious/Mild (*)
Foreign materials in joints	Foreign materials in joints	Visual inspection identifies them.	They will not be admitted	Monthly	7 days	Serious/Mild (*)
Bird nests or insect colonies	Bird nests or insect colonies	Visual inspection identifies them.	They will not be admitted	Monthly	7 days	Serious/Mild (*)
Vegetation in crevices	Vegetation in crevices	Visual inspection identifies them.	They will not be admitted	Monthly	7 days	Serious/Mild (*)
Deterioration of the overfloor						
Thickness reduction greater than 10%	Thickness reduction greater than 10%	Visual inspection and sampling identify areas with thickness reductions and measure affected or reduced thickness. The percentage reduction is calculated by relating the affected or reduced thickness to the design thickness.	They will not be admitted	Semiannually	7 days	Serious/Mild (*)
Gaps	Gaps of any dimension or nature	By visual inspection, bumpy or gapped areas are identified, using a 1.5 m rule to compare the level with the adjacent pavement. The affected area is calculated the quadrilateral area (sides parallel and perpendicular to the roadway axis) circumscribed to the affected area.	They will not be admitted	Daily	7 days	Serious/Mild (*)
Unsealed cracks (other than shrinkage cracks)	Unsealed cracks (other than set shrinkage cracks)	Visual inspection identifies cracked areas (other than set shrinkage) without being perfectly	They will not be admitted	Monthly	7 days	Serious/Mild (*)

Parameter	Measurement	Measurement Method	Service Level	Frequency of Measurement		Severity of Non- compliance
		sealed or unsealed.				
Patches in bad shape	Patches in bad shape	Visual inspection identifies areas with poor repairs or patches (i.e. unacceptable structural condition, very deteriorated, very uneven or level with relevant defects). The affected area is calculated as the quadrilateral area circumscribed to the affected area according to the criteria established to define each deterioration.	They will not be admitted	Monthly	7 days	Serious/Mild (*)
Tapes larger than 12mm	Tapes larger than 12mm	Visual inspection identifies areas with a footprint depth greater than 12 mm, using a 1.5 m rule that rests on the edges of the footprints and then measures the maximum depth. The affected area is calculated as the length of the affected areas (sum of the two footprints) multiplied by 0.5 m.	They will not be admitted	Monthly	7 days	Serious/Mild (*)
Subsidence greater than 12mm	Subsidence greater than 12mm	Visual inspection identifies areas with a subsidence greater than 12 mm using a 1.5 m ruler that rests on the edges of the subsidence and then measures the maximum depth. The affected area is calculated as the area of the quadrilateral (sides parallel and perpendicular to the roadway axis) circumscribed to the affected area.	They will not be admitted	Monthly	7 days	Serious/Mild (*)

Parameter	Measurement	Measurement Method	Service Level	Frequency of Measurement	Correction Period (*)	Severity of Non- compliance
Exudations (level 2 and 3)	Exudations (level 2 and 3)	Visual inspection identifies areas with exudates with severity levels 2 and 3 according to Table 4.13 of the current Highway Manual - Road Conservation (Road Manual - Road Conservation R.D. No. 08-2014 MTC/14 - R.D. No. 05-2016 MTC /14) or standard modifying or replacing it. The affected area is calculated as the area of the quadrilateral (sides parallel and perpendicular to the roadway axis) circumscribed to the affected area.	They will not be admitted	Monthly	7 days	Serious/Mild (*)
Delamination of concrete overlay	Delamination of concrete overlay	By visual inspection and with the help of a hammer, a sounding (hammering) is done to detect areas of hollow concrete and delamination. The affected area is calculated as the area of the quadrilateral (sides parallel and perpendicular to the roadway axis) circumscribed to the affected area.	They will not be admitted	Monthly	7 days	Serious/Mild (*)
Deficiencies in end or intermediate	joints		-	1	-	
Greater separation than design	Greater separation than indicated in the design parameters	By visual inspection and using a tape measure or rule, they are identified according to the approved design	They will not be admitted	Monthly	7 days	Serious/Mild (*)
Gaskets not sealed or unsealed	Gaskets not sealed or unsealed	Visual inspection identifies them.	They will not be admitted	Monthly	7 days	Serious/Mild (*)

Parameter	Measurement	Measurement Method	Service Level	Frequency of Measurement	Correction Period (*)	Severity of Non- compliance
Level greater than 5mm	Altimetric gradient greater than 5 mm between edges or between edges and filler	Visual inspection identifies the affected areas with unevenness between the edges or between the edge and filling material, using a hand level that rests on the edge the unevenness is measured with a rule, determining if it is more than 5 mm. The affected length is determined as the length of the affected areas.	They will not be admitted	Monthly	7 days	Serious/Mild (*)
Breakages or delamination at the edges	Breakages or delamination at the edges	Visual inspection identifies them.	They will not be admitted	Monthly	7 days	Serious/Mild (*)
Loose or missing bolts	Loose or missing bolts	Visual inspection identifies them.	They will not be admitted	Monthly	7 days	Serious/Mild (*)
Damage to concrete bordering joints	Damage to concrete bordering joints	Visual inspection identifies them.	They will not be admitted	Monthly	7 days	Serious/Mild (*)
Deteriorations in concrete (**)			•			
Peeling or delamination	Peeling or delamination	Visual inspection identifies them.	They will not be admitted	Semiannually	7 days	Serious/Mild (*)
Exposed armor or surface rust	Exposed armor or surface rust or cracks along the armor location	Visual inspection identifies them.	They will not be admitted	Semiannually	7 days	Serious/Mild (*)
Surface damage of depth greater than 5mm	Surface damage of depth greater than 5mm	Visual inspection identifies them.	They will not be admitted	Semiannually	7 days	Serious/Mild (*)
Fissures of thickness greater than 2mm unsealed	Fissures of thickness greater than 2mm	Visual inspection identifies areas with cracks larger than 2mm	They will not be	Monthly	7 days	Serious/Mild (*)

Parameter	Measurement	Measurement Method	Service Level	Frequency of Measurement	Correction Period (*)	Severity of Non- compliance
	unsealed	without being perfectly sealed or unsealed (larger or critical crack thickness).	admitted			
Impairments in support systems	•			•		
Dirts	Dirts	Visual inspection identifies them.	They will not be admitted	Monthly	10 days	Mild
Signs of corrosion or oxidation	Signs of corrosion or oxidation	Visual inspection identifies them.	They will not be admitted	Monthly	10 days	Mild
Signs of crushing (**)	Signs of crushing	Visual inspection identifies them.	They will not be admitted	Monthly	10 days	Mild
Degradation or crushing (**)	Degradation or crushing	Visual inspection identifies them.	They will not be admitted	Monthly	10 days	Mild
Obstacles to design movement (**)	Obstacles to free movement of the structure within design parameters	Visual inspection identifies them.	They will not be admitted	Monthly	10 days	Mild
Cracks or delamination of concrete around (**)	Cracks or delamination of concrete around the supports	Visual inspection identifies them.	They will not be admitted	Monthly	10 days	Mild
Deterioration in metal elements						
Cracks or fissures (**)	Cracks or fissures	Visual inspection identifies areas with Cracks or fissures	They will not be admitted	Monthly	10 days	Mild
Corrosion (**)	Corrosion	Visual inspection identifies them.	They will not be admitted	Semiannually	10 days	Mild
Breakage, deformation, distortion or buckling (**)	Breakage or deformations or	Visual inspection identifies them.	They will not be	Monthly	10 days	Mild

Parameter	Measurement	Measurement Method	Service Level	Frequency of Measurement	Correction Period (*)	Severity of Non- compliance
	distortions or buckling		admitted			
Loss of connecting elements (**)	Loss of connecting elements	Visual inspection identifies them.	They will not be admitted	Monthly	10 days	Mild
Welding Damage (**)	Welding Damage	Visual inspection identifies them.	They will not be admitted	Monthly	10 days	Mild
Flakering, blistering or cracking in protective paint	Flakering, blistering or cracking in protective paint	Visual inspection identifies them.	They will not be admitted	Semiannually	10 days	Mild
Deterioration of protective galvanizing	Deterioration of protective galvanizing	Visual inspection identifies them.	They will not be admitted	Semiannually	10 days	Mild
Deterioration of metal structure coating	Deterioration of metal structure coating	Visual inspection identifies them.	They will not be admitted	Semiannually	10 days	Mild
Damage or loss of "shear studs"	Damage or loss of "shear studs"	Visual inspection identifies them.	They will not be admitted	Semiannually	10 days	Mild
Support displacement and rotation (**)	Support displacement and rotation	Visual inspection identifies them.	They will not be admitted	Monthly	10 days	Mild
Deterioration in anti-seismic syster	ns	•		+	•	
Missing elements or loss of functionality (**)	Missing and/or loss of functionality of any component element	Visual inspection identifies them.	They will not be admitted	Monthly	30 days	Mild
Suspension system deterioration (***)					
Cables or hanging them with broken wires, bumps or rusting	Cables or hanging them with broken wires, bumps or rusting	Visual inspection identifies them.	They will not be admitted	Semiannually	30 days	Mild
Damage to corrosion protection coatings	Damage to corrosion protection coatings	Visual inspection identifies them.	They will not be	Semiannually	10 days	Mild

Parameter	Measurement	Measurement Method	Service Level	Frequency of Measurement	Correction Period (*)	Severity of Non- compliance
			admitted			
Clamps, staples or bolts in bad condition	Clamps, staples or bolts in bad condition	Visual inspection identifies them.	They will not be admitted	Semiannually	10 days	Mild
Cable supports on towers with dirt or oxidation	Cable supports on towers with dirt or oxidation	Visual inspection identifies them.	They will not be admitted	Semiannually	10 days	Mild
Moisture, dirt or oxidation anchoring chambers	Moisture, dirt or oxidation anchoring chambers	Visual inspection identifies them.	They will not be admitted	Semiannually	10 days	Mild
Changing the geometry of the board or towers	Changing board and/or tower geometry	Visual inspection and topographic equipment identify changes in board and/or tower geometry from their initial position, considering the designs.	They will not be admitted	Annually	60 days	Mild
Cracking in concrete or steel around anchors	Cracking in concrete / structural steel around anchors	Visual inspection identifies them.	They will not be admitted	Annually	30 days	Mild
Masonry Element Deterioration				•		
Unsealed cracks	Unsealed cracks	Visual inspection identifies cracked areas without being perfectly sealed or unsealed. The affected area is calculated as the area of the quadrilateral (sides parallel and perpendicular to the roadway axis) circumscribed to the affected area.	They will not be admitted	Monthly	10 days	Mild
Displacement, warping, misalignment	Displacement, warping, misalignment	By visual inspection and with a tape measure or 1.5 m ruler that rests on the edges of the elements to identify displacements, warpages or misalignments.	They will not be admitted	Semiannually	10 days	Mild

Parameter	Measurement	Measurement Method	Service Level	Frequency of Measurement	Correction Period (*)	Severity of Non- compliance
Deterioration of mortar or similar	Deterioration of mortar or similar	Visual inspection identifies them.	They will not be admitted	Semiannually	7 days	Serious/Mild (*)
Obstructions to free hydraulic runo	ff					
Modifies the design section by an upstream length not less than 3 times the distance between stirrups and one and a half downstream (***)	Modifies the design section by an upstream length not less than 3 times the distance between stirrups and one and a half downstream (***)	Visual inspection identifies them	They will not be admitted	Monthly	7 days	Serious/Mild (*)
Foundation Undermining				•		
Bed level below projected or permitted by design	Levels of beds below the top face of dice or pile heads, unless designed or authorized by supervision	Visual inspection identifies them.	They will not be admitted	Semiannually	7 days	Serious/Mild (*)
Deterioration in access embankme	ents and cladding		-	•		
Rifts, subsidence or missing elements	Rifts, subsidence or missing elements	Visual inspection identifies them.	They will not be admitted	Monthly	7 days	Serious/Mild (*)
Excavations in the beams of Coating Foundation	Excavations in the beams of Coating Foundation	Visual inspection identifies them.	They will not be admitted	Monthly	7 days	Serious/Mild (*)
Deterioration of basins, protective	gabions or hydraulic stru	ctures for stability and protection of	hydraulic ch	aracteristics	-	
Undermining	Undermining	Visual inspection identifies them.	They will not be admitted	Monthly	7 days	Serious/Mild (*)
Settlements that compromise stability	Settlements that compromise stability	Visual inspection and surveying equipment identify changes in geometry or settlements from their initial position, considering the designs.	They will not be admitted	Semiannually	7 days	Serious/Mild (*)

Parameter	Measurement	Measurement Method	Service Level	Frequency of Measurement	Correction Period (*)	Severity of Non- compliance
Missing elements	Missing elements	Visual inspection identifies them.	They will not be admitted	Monthly	7 days	Serious/Mild (*)
Deterioration of railings and parape	ets	•	•	-	•	
Broken, missing, loose, out of alignment or rusty items	Broken, missing, loose, out of alignment or rusty items	By visual inspection and with a tape measure or 1.5 m ruler to identify misaligned elements.	They will not be admitted	Monthly	7 days	Serious/Mild (*)
Deteriorations in painting	Deteriorations in painting	Visual inspection identifies them.	They will not be admitted	Monthly	7 days	Serious/Mild (*)
Deterioration of sidewalks	•					
Unevenness	Unevenness	By visual inspection and with a tape measure or 1.5 m ruler to identify uneven elements.	They will not be admitted	Annually	7 days	Serious/Mild (*)
Dirts	Dirts	Visual inspection identifies them.	They will not be admitted	Monthly	7 days	Serious/Mild (*)
Loose, missing or broken slabs	Loose, missing or broken slabs	Visual inspection identifies them.	They will not be admitted	Monthly	7 days	Serious/Mild (*)
Water pass stains or deterioration	Water pass stains or deterioration on cord and sidewalk joints	Visual inspection identifies them.	They will not be admitted	Monthly	7 days	Serious/Mild (*)
Delamination or discarding of joints	Delamination or discarding of joints	Visual inspection identifies them.	They will not be admitted	Monthly	7 days	Serious/Mild (*)

(*) In case a longer term is required for the correction, duly supported by the Concessionaire, and for reasons not attributable to it, the Grantor may grant a term of up to 30 days according to its evaluation, provided that the Concessionaire implements mitigating measures during such term to the satisfaction of the Grantor. In this case, the severity of the breach will be slight.

(**) Correction of the defect shall be accompanied by an assessment by an independent structural specialist to assess whether the deterioration affects structural integrity.

(***) Provided that the applicable Laws and Provisions on river management allow it, such obligation is not limited to the concession area only, but if necessary, the Concessionaire will have to make the necessary arrangements with the competent authorities and leave the concession area in order to fully

Parameter	Measurement	I Measurement Method		Frequency of Measurement		Severity of Non- compliance	
comply with this level of service. If it detects any impact on the channel beyond the established length, the Concesionario must inform the Grantor, as well as the relevant entities, of this situation in order for them to take the measures they deem appropriate and define the level of detail to which the evaluations and interventions to mitigate the deterioration will be carried out.							
		crossings "above the Ring" accordi Design and Construction" – Section					

9. Rolling surface and hydraulic concrete ber

Parameter	Measurement	Measurement Method	Service Level	Frequency of Measurement		Severity of Non- compliance
Level greater than 5mm in slabs	Maximum percentage length with gradient ≥ 5 mm	Visual inspection identifies areas with unevenness at the edges of slabs, using a hand level that rests on the edge the ascended slab is measured with a ruler the unevenness relative to the descended slab, determining whether it is greater than or equal to 5 mm. The affected length is determined as the length of the affected areas.	0%	Semiannually	14 days	Mild
Longitudinal and transverse cracks larger than 3mm	Maximum percentage of area with cracks greater than 3 mm thick	Visual inspection identifies areas with cracks greater than 3 mm thick without being perfectly sealed or unsealed (larger or critical crack thickness). The affected area is calculated as the product of the crack length by the width of influence according to Table 4.21 and Table 4.22 of the current Highway Manual- Road Conservation (Highway Manual-	0%	Monthly	14 days	Mild

Parameter	Measurement	Measurement Method	Service Level	Frequency of Measurement	Correction Period	Severity of Non- compliance
		Road Conservation R.D. No. 08- 2014 MTC/14 - R.D. No. 05-2016 MTC /14) or standard modifying or replacing it.				
Longitudinal and transverse cracks between 1 and 3mm	Maximum percentage of area with cracks between 1 and 3 mm thick	Visual inspection identifies areas with cracks between 1 and 3 mm thick without being perfectly sealed or unsealed (larger or critical crack thickness). The affected area is calculated as the product of the fissure length by the width of influence according to Table 4.21 and Table 4.22 of the Highway Manual - Road Conservation Current Highway Manual- Road Conservation R.D. No. 08-2014 MTC/14 - R.D. No. 05-2016 MTC /14) or standard modifying or replacing it.	2%	Monthly (*)	14 days	Mild
Oblique cracks larger than 3mm	Maximum percentage of area with cracks greater than 3 mm thick	Visual inspection identifies areas with cracks greater than 3 mm thick without being perfectly sealed or unsealed (larger or critical crack thickness). The affected area is calculated as the product of fissure length by width of influence according to Table 4.22 of the current Highway Manual - Road Conservation (Highway Manual - Road Conservation R.D. No. 08-2014 MTC/14 - R.D. N° 05-2016 MTC /14).) or standard amending or	0%	Monthly (*)	14 days	Mild

Parameter	Measurement	Measurement Method	Service Level	Frequency of Measurement	Correction Period	Severity of Non- compliance
		replacing it.				
Oblique cracks between 1 and 3mm	Maximum percentage of area with cracks between 1 and 3 mm thick	Visual inspection identifies areas with cracks between 1 and 3 mm thick without being perfectly sealed or unsealed (larger or critical crack thickness). The affected area is calculated as the product of fissure length by width of influence according to Table 4.22 of the current Highway Manual - Road Conservation (Highway Manual - Road Conservation R.D. No. 08-2014 MTC/14 - R.D. No. 05-2016 MTC /14) or standard modifying or replacing it.	2%	Monthly (*)	14 days	Mild
Corner cracks	Maximum percentage of area with corner cracks	Areas with corner cracks are identified by visual inspection. The affected area is calculated as the product of fissure length by width of influence according to Table 4.22 of the current Highway Manual - Road Conservation (Highway Manual - Road Conservation R.D. No. 08-2014 MTC/14 - R.D. No. 05-2016 MTC /14) or standard modifying or replacing it.	0%	Monthly (*)	14 days	Mild
Repairs or patches	Maximum percentage of patches in poor condition	Visual inspection identifies areas with poor repairs or patches (i.e. unacceptable structural condition, very deteriorated, very uneven or level with relevant defects).	0%	Monthly	7 days	Serious

Parameter	Measurement	Measurement Method	Service Level	Frequency of Measurement	Correction Period	Severity of Non- compliance
		The affected area is calculated as the area of the quadrilateral (sides parallel and perpendicular to the roadway axis) circumscribed to the affected area.				
Spalling of joints	Maximum percentage of area with joint spalling	Visual inspection identifies the areas in which spalling has occurred. The affected area is calculated as the area of the quadrilateral (sides parallel and perpendicular to the roadway axis) circumscribed to the affected area.	0%	Monthly	7 days	Serious
Delamination	Maximum percentage of area with delamination	Visual inspection identifies areas with delamination The affected area is calculated as the area of the quadrilateral (sides parallel and perpendicular to the roadway axis) circumscribed to the affected area.	0%	Monthly	3 days	Serious
Potholes or gaps	Maximum percentage of area with potholes or gaps	By visual inspection, bumpy or gapped areas are identified, using a 1.5 m rule to compare the level with the adjacent pavement. The affected area is calculated as the area of the quadrilateral (sides parallel and perpendicular to the roadway axis) circumscribed to the affected area.	0%	Weekly	7 days	Serious
Joints not perfectly sealed	Maximum percentage of area with joints that are not perfectly sealed	Areas with joints that are not perfectly sealed are identified by visual inspection. The affected area is calculated as	0%	Monthly	14 days	Mild

Parameter	Measurement	Measurement Method	Service Level	Frequency of Measurement	Correction Period	Severity of Non- compliance
		the length of the affected areas multiplied by 0.5 m.				
Peeling	Maximum percentage of area with peeling	Visual inspection identifies the areas in which the roadway has been stripped. The affected area is calculated as the area of the quadrilateral (sides parallel and perpendicular to the roadway axis) circumscribed to the affected area.	0%	Weekly	7 days	Serious
Subsidence or Lifting	Maximum percentage of area with localized pavement surface level alterations, with gradient greater than 10 mm	Visual inspection identifies areas with a subsidence or lifting greater than 10 mm, using a 1.5 m ruler that rests on the edges of the subsidence and then measures the maximum depth or the center of the survey. The affected area is calculated as the area of the quadrilateral (sides parallel and perpendicular to the roadway axis) circumscribed to the affected area.	0%	Monthly	7 days	Serious
Delamination of surface treatment of asphalt concrete	Maximum percentage of area with delamination of the surface treatment or asphalt concrete	Visual inspection identifies areas with delaminations. The affected area is calculated as the area of the quadrilateral (sides parallel and perpendicular to the roadway axis) circumscribed to the affected area.	0%	Monthly	7 days	Serious
Existence of loose material	Maximum percentage of area with loose material	Visual inspection identifies areas with loose materials. The affected area is calculated as the area of the quadrilateral (sides	0%	Daily	1 hour	Serious

Parameter	Measurement	Measurement Method	Service Level	Frequency of Measurement	Correction Period	Severity of Non- compliance
		parallel and perpendicular to the roadway axis) circumscribed to the affected area.				
Existence of obstacles	Maximum number of obstacles	Visual inspection identifies areas obstructed by obstacles and quantifies obstacles.	0%	Daily	1 hour	Serious
Roughness (reception of works)	Roughness in sections every 100 m.	Class I laser profilometer determines the IRI every 10 m and obtains the average value every 100 m. All lanes of each roadway shall be measured, at least in the two taxiways (longitudinal pavement strips where contact with the wheels of vehicles occurs), and values corresponding to the unique points shall be excluded from the measurement. For each lane only the worst of the values per road shall be considered.		At the end of the works	30 days	Mild
Roughness (Receipt of Asphalt Coating Works)	Roughening of the section with asphalt coating on hydraulic concrete, in sections every 100 m.	Class I laser profilometer determines the IRI every 10 m and obtains the average value every 100 m. All lanes of each roadway shall be measured, at least in the two taxiways (longitudinal pavement strips where contact with the wheels of vehicles occurs), and values corresponding to the unique points shall be excluded from the measurement. For each lane only the worst of the values per road shall be considered.		At the end of the works	30 days	Mild
Roughness (Exploitation Stage)	Roughness in	Sideway-force Coefficient Routine	IRIc≤3.3	Annually	60 days	Mild

Parameter	Measurement	Measurement Method	Service Level	Frequency of Measurement	Correction Period	Severity of Non- compliance
	sessions every 100 m.	Investigation Machine (SCRIM) equipment takes a friction coefficient measurement every 20 m. For dual carriageways, where all lanes of a Roadway have the same tread layer, measurements shall be taken on one of the lane runs where more heavy vehicles on each Roadway are travelling. If the wearing courses are different, the lanes on which the fastest vehicles travel shall also be measured. On single Roadway it shall be measured in both directions and the worst lane shall be considered for average purposes.	m/km (95% reliability)			
Surface Friction	Coefficient of friction measured on wet pavement	Sideway-force Coefficient Routine Investigation Machine (SCRIM) equipment takes a friction coefficient measurement every 20 m. For dual carriageways, where all lanes of a Roadway have the same tread layer, measurements shall be taken on one of the lane runs where more heavy vehicles on each Roadway are travelling. If the wearing courses are different, the lanes on which the fastest vehicles travel shall also be measured. On single Roadway it shall be measured in both directions and the worst lane shall	Average value in 1 km≥0.55	Annually	60 days	Serious

Parameter	Measurement	Measurement Method	Service Level	Frequency of Measurement	Correction Period	Severity of Non- compliance
		be considered for average purposes.				
Unevenness between roadway and shoulder	Maximum unevenness height (roadway– shoulder)	Visual inspection identifies the affected areas with the roadway edge above or below the edge of the shoulder, using a hand level that rests on the upper edge measures the level with respect to the lower edge, determining if it is greater than 0 mm. The affected length is determined as the length of the affected areas.	0mm	Semiannually	14 days	Mild
(*) Semiannual frequency until 2 year	rs after the pavement h	as been built or performed periodic m	naintenance. Fro	om 2 years, the	frequency w	ill be monthly.

10. Tunnel lining and drainage

Parameter	Measurement	Measurement Method	Service Level	Frequency of Measurement	Correction Period	Severity of Non- compliance
Defects in the structural integrity of ceramic coating panels	Defects in the structural integrity of ceramic coating panels	Visual inspection identifies them	They will not be admitted	Annually	7 days/30 days (*)	Serious/Mild (*)
Cracks in Concrete	Maximum percentage of cracked area	Visual inspection identifies cracked areas without being perfectly sealed or unsealed.	0%	Monthly	7 days/30 days (*)	Serious/Mild (*)
Obstructions in the drainage system (any element foreign to the system according to the design sections)	Maximum percentages obstructed.	Visual inspection identifies obstructions in the drainage system.	0%	Weekly	1 day/30 days (*)	Serious/Mild (*)
Dirt or foreign elements	·					
Loose material or items hazardous to circulation	Loose material or items hazardous to circulation	Visual inspection identifies them.	0%	Daily	1 hour	Serious

Parameter	Measurement	Measurement Method	Service Level	Frequency of Measurement	Correction Period	Severity of Non- compliance
Stains or deterioration in concrete	Stains or deterioration in concrete	Visual inspection identifies them.	0%	Weekly	7 days/30 days (*)	Serious/Mild (*)
Foreign materials in joints	Foreign materials in joints	Visual inspection identifies them.	0%	Monthly	3 days/30 days (*)	Serious/Mild (*)
Bird nests or insect colonies	Bird nests or insect colonies	Visual inspection identifies them.	0%	Monthly	3 days/30 days (*)	Serious/Mild (*)
Vegetation in crevices	Vegetation in crevices	Visual inspection identifies them.	0%	Monthly	7 days/30 days (*)	Serious/Mild (*)
Deficiencies in end or intermediate	joints					
Greater separation than indicated in the design parameters	Greater separation than indicated in the design parameters	By visual inspection and with a tape measure or rule are identified approved agreement.	0%	Monthly	7 days/30 days (*)	Serious/Mild (*)
Gaskets not sealed or unsealed	Gaskets not sealed or unsealed	Visual inspection identifies them.	0%	Monthly	7 days/30 days (*)	Serious/Mild (*)
Altimetric gradient greater than 5mm between edges or between edges and filler	Altimetric gradient greater than 5mm between edges or between edges and filler	Visual inspection identifies the affected areas with unevenness between the edges or between the edge and filling material, using a hand level that rests on the edge the unevenness is measured with a rule, determining if it is more than 5 mm. The affected length is determined as the length of the affected areas.	0%	Monthly	7 days/30 days (*)	Serious/Mild (*)
Edge breaks and delaminations	Breakages or delamination at the edges	Visual inspection identifies them.	0%	Monthly	7 days/30 days (*)	Serious/Mild (*)
Loose or missing bolts	Loose or missing bolts	Visual inspection identifies them.	0%	Monthly	7 days/30 days (*)	Serious/Mild (*)
Damage to concrete bordering joints	Damage to concrete bordering joints	Visual inspection identifies them.	0%	Monthly	7 days/30 days (*)	Serious/Mild (*)
Deterioration in concrete elements			1			
Delamination or peeling	Delamination or peeling	Visual inspection identifies them.	0%	Semiannually	7 days/30	Serious/Mild (*)

Parameter	Measurement	Measurement Method	Service Level	Frequency of Measurement	Correction Period	Severity of Non- compliance
					days (*)	
Exposed armor or surface rust or cracks along the armor location	Exposed armor or surface rust or cracks along the armor location	Visual inspection identifies them.	0%	Semiannually	7 days/30 days (*)	Serious/Mild (*)
Surface damage of depth exceeding 5mm	Surface damage of depth exceeding 5mm	By visual inspection and with a tape measure or ruler are identified.	0%	Semiannually	7 days/30 days (*)	Serious/Mild (*)
Fissures of thickness greater than 2mm unsealed	Fissures of thickness greater than 2mm unsealed	Visual inspection identifies areas with cracks larger than 2 mm without being perfectly sealed or unsealed (larger or critical crack thickness).	0%	Monthly	7 days/30 days (*)	Serious/Mild (*)
Deteriorations of the overfloor			·			
Hydraulic concrete levels of service	e apply					
Deterioration in metal elements						
Cracks or fissures	Cracks or fissures	Visual inspection identifies areas with Cracks or fissures	0%	Monthly	7 days/30 days (*)	Serious/Mild (*)
Corrosion	Corrosion	Visual inspection identifies them.	0%	Semiannually	7 days/30 days (*)	Serious/Mild (*)
Breakages or deformations or distortions or buckling (**)	Breakages or deformations or distortions or buckling	Visual inspection identifies them.	0%	Monthly	7 days/30 days (*)	Serious/Mild (*)
Loss of connecting elements	Loss of connecting elements	Visual inspection identifies them.	0%	Monthly	7 days/30 days (*)	Serious/Mild (*)
Welding Damage	Welding Damage	Visual inspection identifies them.	0%	Monthly	7 days/30 days (*)	Serious/Mild (*)
Flakering, blistering or cracking in protective paint	Flakering, blistering or cracking in protective paint	Visual inspection identifies them.	0%	Semiannually	7 days/30 days (*)	Serious/Mild (*)
Deterioration of protective galvanizing	Deterioration of protective galvanizing	Visual inspection identifies them.	0%	Semiannually	7 days/30 days (*)	Serious/Mild (*)
Coating deterioration of the metal	Coating deterioration of	Visual inspection identifies them.	0%	Semiannually	7 days/30	Serious/Mild (*)

Parameter	Measurement	Measurement Method	Service Level	Frequency of Measurement	Correction Period	Severity of Non- compliance
structure	the metal structure				days (*)	
Deteriorations of bands and parape	ets					
Broken, missing, loose, out of alignment or rusty items	Broken, missing, loose, out of alignment or rusty items	By visual inspection and with a tape measure or 1.5 m ruler to identify misaligned elements.	0%	Monthly	7 days/30 days (*)	Serious/Mild (*)
Deteriorations in painting	Deteriorations in painting	Visual inspection identifies them.	0%	Monthly	7 days/30 days (*)	Serious/Mild (*)
Sidewalk deterioration						
Unevenness	Unevenness	By visual inspection and with a tape measure or 1.5 m ruler to identify uneven elements.	0%	Annually	7 days/30 days (*)	Serious/Mild (*)
Dirts	Dirts	Visual inspection identifies them.	0%	Monthly	7 days/30 days (*)	Serious/Mild (*)
Loose, missing or broken slabs	Loose, missing or broken slabs	Visual inspection identifies them.	0%	Monthly	7 days/30 days (*)	Serious/Mild (*)
Water pass stains or deterioration on cord joints or sidewalks	Water pass stains or deterioration on cord joints or sidewalks	Visual inspection identifies them.	0%	Monthly	7 days/30 days (*)	Serious/Mild (*)
Delamination or Spalling of Joints	Delamination or Spalling of Joints	Visual inspection identifies them.	0%	Monthly	7 days/30 days (*)	Serious/Mild (*)
		safety or the structure, in which case an assessment by a structural speci				s structural

II. Horizontai Signa						Coverity of
Parameter	Measurement	Measurement Method	Service Level	Frequency of Measurement	Correction Period	Severity of Non- compliance
Incorrect Geometry of Lines	Minimum Line Width	By visual inspection and with a tape measure or ruler the lines with deficiencies are identified.	In line demarcation of axis and edge 10cm	Every repainting or year	7 days	Serious
		By visual inspection and with a tape measure or ruler the lines with deficiencies are identified.	In edge line demarcation with shoulder or speed reduction indications 15cm	Every repainting or year	7 days	Serious
	Length of dotted shaft lines	By visual inspection and with a tape measure or ruler the lines with deficiencies are identified.	4.5 m ± 2%	Every repainting or year	7 days	Serious
	Length of gaps between dotted lines of the axis	By visual inspection and with a tape measure or ruler the lines with deficiencies are identified.	7.5 m ± 2%	Every repainting or year	7 days	Serious
	Maximum deflection of axis line alignment with respect to the axis of a route	By visual inspection and with a tape measure or ruler the lines with deficiencies are identified.	10 cm	Every repainting or year	7 days	Serious
	Maximum deflection of the dotted lines of the shaft (white) with respect to the line joining its ends	By visual inspection and with a tape measure or ruler the lines with deficiencies are identified.	2 cm	Every repainting or year	7 days	Serious
	Maximum and minimum deflection of the continuous axis line with respect	By visual inspection and with a tape measure or ruler the lines with deficiencies are identified.	Min = 17 cm Max = 20 cm	Every repainting or year	7 days	Serious

11. Horizontal Signage in Tunnel

Parameter	Measurement	Measurement Method	Service Level	Frequency of Measurement	Correction Period	Severity of Non- compliance
	to the dotted axis lines					
	Maximum and minimum deflection of the continuous axis line with respect to the route axis	By visual inspection and with a tape measure or ruler the lines with deficiencies are identified.	Min = 17 cm Max = 20 cm	Every repainting or year	7 days	Serious
Discoloration or dirt of lines or marks	Chromatic coordinates "x" and "y" (45/0 geometry and 2° standard observation angle)	With the use of equipment, compliance with the coloration (reflection colorimeter) is verified, according to Table No. 02 Chromatic coordinates of the vertices of the color range, of the Technical specifications of Paints for roadworks of the MTC.	Color coordinates within the specified color polygon	Semiannually	7 days	Serious
Insufficient nighttime visibility of lines or markings after repainting	Minimum retroreflectance coefficient (30 m geometry) measured with a retroreflectometer with an observation angle of 1.05° and incidence of – 88.76°	To determine the reflection coefficient of each type of line (continuous center, broken center, continuous edge, etc.) or each symbology (arrow, stop, etc.), 3 determinations are made by randomly choosing the places in the reference length, and the results are averaged. The retroreflectance coefficient is obtained using a retroreflectometer with an observation angle of 1.05°	Minimum initial retroreflectance: White: 230 mcd/lux/m ² , Yellow: 175 mcd/lux/m ²	In every repainting	3 days	Serious

Parameter	Measurement	Measurement Method	Service Level	Frequency of Measurement	Correction Period	Severity of Non- compliance
		and an incidence of -88.76° (30 m geometry).				
Insufficient nighttime visibility of lines or markings	Minimum retroreflectance coefficient (30 m geometry) measured with a retroreflectometer with an observation angle of 1.05° and incidence of – 88.76°	To determine the reflection coefficient of each type of line (continuous center, broken center, continuous edge, etc.) or each symbology (arrow, stop, etc.), 3 determinations are made by randomly choosing the places in the reference length, and the results are averaged. The retroreflectance coefficient is obtained using a retroreflectometer with an observation angle of 1.05° and an incidence of -88.76° (30 m geometry).	Retroreflectance for repainting: White: 150 mcd/lux/m ² , Yellow: 100 mcd/lux/m ²	Monthly (*)	7 days	Serious
Excess horizontal wear of lines or markings	Maximum percent deterioration	Visual inspection determines the worn (i.e. not visible) areas on the axis (sum of the different centre lines) and on the edges (sum of the two edges) using the area of reference of the axis (sum of the different centre lines) and the edges (sum of the two edges) in the reference length.	5%	Semiannually	7 days	Serious
Incorrect geometry of retroreflective studs	Distance between tangent and	By visual inspection and with a tape measure or rule,	As specified	At each placement of	7 days	Serious

Parameter	Measurement	Measurement Method	Service Level	Frequency of Measurement	Correction Period	Severity of Non- compliance
	curved studs	the distances between studs must be in accordance with Section 804 of the Highway Manual-General Technical Specifications for Construction (EG-2013) or standard that modifies or replaces it.		studs		
Deterioration of retroreflective strikes	Displacement from its original position	By visual inspection with a tape measure or rule, the displacement distance from its initial position is identified.	They will not be admitted	Semiannually	7 days	Serious
	Total or partial impairments of the reflective area of the body	Visual inspection identifies deteriorated studs	They will not be admitted	Semiannually	7 days	Serious
Loss or uselessness of retroreflective strikes	Maximum percentage of lost or useless retroreflective strikes	Visual inspection identifies lost or useless stubs and pins the quantity affected on the axis (sum of the different centrelines) and at the edges (sum of the two edges), taking 200m as the reference sector.	5%	Semiannually	3 days	Serious

12. Vertical Signage in Tunnel

Parameter	Measurement	Measurement Method	Service Level	Frequency of Measurement	Correction Period	Severity of Non- compliance
Missing elements	Missing individual items	Missing items are identified by visual inspection.	They will not be admitted	Daily	2 days	Serious
Discoloration of sign plates	Chromatic coordinates "x" and "y" (45/0 geometry and 2° standard observation angle)	The use of equipment shall verify compliance with the coloration (reflection colorimeter), according to Table 800-Color color coordinates, of Section 800 of the Highway Manual – General Technical Specifications for Construction (EG-2013) or standard modifying or replacing it	Color coordinates within the specified color polygon	Annually	7 days	Serious
Insufficient nighttime visibility of signal boards	Minimum retroreflective coefficient (0.2° observation angle and -4° incidence)	To determine the retroreflection coefficient of each signal, 3 determinations are made by randomly choosing the places in the reference length, and the results are averaged in Cd/lux/m2. The retroreflectance coefficient is obtained using a retroreflectometer with an observation angle of 0.2° and an incidence of -4°.	Post sign: Yellow: 270 cd/lux/m ² , White: 360 cd/lux/m ² , Orange: 145 cd/lux/m ² , Red: 65 cd/lux/m ² , Green: 50 cd/lux/m ² , Blue: 30 cd/lux/m ² , Brown: 18 cd/lux/m ² Raised signal:	Quarterly	7 days	Serious

Parameter	Measurement	Measurement Method	Service Level	Frequency of Measurement	Correction Period	Severity of Non- compliance
			Yellow: 435 cd/lux/m ² , White: 580 cd/lux/m ² , Orange: 200 cd/lux/m ² , Red: 87 cd/lux/m ² , Green: 58 cd/lux/m ² , Blue: 26 cd/lux/m ² , Brown: 17 cd/lux/m ² ,			
	Dirty dusty or damaged messages such as stickers or paint, etc.	Visual inspection identifies them.	They will not be admitted	Monthly	7 days	Serious
Deterioration of signal plates message	Perforations or deterioration greater than 1 cm in diameter or compromising the message	Visual inspection identifies them.	They will not be admitted	Monthly	7 days	Serious
	Any bend of length greater than 7.5 cm.	Visual inspection identifies them.	They will not be admitted	Monthly	7 days	Serious
	Oxidation on the faces of the plate	Visual inspection identifies them.	They will not be admitted	Monthly	7 days	Serious
Deterioration of sign plate	Loose or mismatched panels	Visual inspection identifies them.	They will not be admitted	Quarterly	7 days	Serious
Deterioration of sign plate fasteners, including measurement of rusted bolts	Full or partial lack of bolts, includes oxidation	Visual inspection identifies them.	They will not be admitted	Quarterly	7 days	Serious
measurement of rusted doits	Impairment or absence of stiffening structures	Visual inspection identifies them.	They will not be admitted	Quarterly	7 days	Serious
Deterioration of signal supports	Sight cracks, fractures or	Visual inspection identifies	They will not be	Semiannually	7 days	Serious

Parameter	Measurement	Measurement Method	Service Level	Frequency of Measurement	Correction Period	Severity of Non- compliance
	reinforcements in the case of concrete supports; Oxidations or deformations in the case of metal supports	them.	admitted			
	Shortcomings in painting	Visual inspection identifies them.	They will not be admitted	Semiannually	7 days	Serious
Deterioration and dirt of the	Dirt or vegetation in your environment that prevents visibility	Visual inspection identifies them.	They will not be admitted	Monthly	7 days	Serious
mileposts	Sight cracks, fractures or armour (in case of concrete posts)	Visual inspection identifies them.	They will not be admitted	Semiannually	7 days	Serious

13. Tunnel Facilities

Parameter	Measurement	Measurement Method	Service Level	Frequency of Measurement	Correction Period	Severity of Non- compliance
Lighting						
Point values of pavement and wall luminance up to 2m high in the access, threshold, transition, interior and exit areas	Point values of luminance in cd/m ² of the pavement and walls up to a height of 2m in the access, threshold, transition, interior and exit areas	Using a luxometer, the luminance in cd/m2 of the pavement and walls is measured to a height of 2m in the access, threshold, transition, interior and exit areas and compared to the approved design.	Projected spot luminance>50%	Monthly	15 days	Mild
Average luminance values of the pavement and walls up to 2m high in the access, threshold, transition, interior and exit areas. Average refers to all luminaires.	Average luminance values in cd/m ² of the pavement and walls up to a height of 2m in the access, threshold, transition, interior and exit areas.	Using a luxometer, the luminance in cd/m2 of the pavement and walls is measured up to a height of 2m in the access, threshold, transition, interior and exit areas, averaged for all luminaires and compared to the approved design.	Average luminance>75% projected	Monthly	15 days	Mild
Emergency lighting defects or malfunctions	Emergency lighting defects or malfunctions	Visual inspection identifies them according to manufacturer's specifications.	They will not be admitted	Weekly	3 days	Serious
Ventilation			1	1	T	
Opacity level for tunnel closure	Opacity level for tunnel closure	By visual inspection and with measuring equipment are identified according to the approved design, the Highway Manual: Tunnels, Walls and Complementary Works or standard modifying or replacing it; Operation	< 9 x 10-3 m-1	Continue	0 hours:	Serious

Parameter			Service Level	Frequency of Measurement	Correction Period	Severity of Non- compliance
		Manual and Maintenance Plan.				
Operating Opacity Level	Operating Opacity Level (exceed service level allowed for up to 15 minutes)	By visual inspection and with measuring equipment are identified according to the approved design, the Highway Manual: Tunnels, Walls and Complementary Works or standard modifying or replacing it; Operation Manual and Maintenance Plan.	< 7 x 10-3 m-1	Continue	1 hour	Serious
CO Level for Tunnel Closure	CO Level	By visual inspection and with measuring equipment are identified according to the approved design, the Highway Manual: Tunnels, Walls and Complementary Works; Operation Manual and Maintenance Plan.	< 150 p.p.m	Continue	0 hours:	Serious
CO level for operation	CO level for operation (exceed service level allowed for up to 15 minutes)	By visual inspection and with measuring equipment are identified according to the approved design, the Highway Manual: Tunnels, Walls and Complementary Works or standard modifying or replacing it; Operation Manual and Maintenance Plan.	< 120 p.p.m	Continue	1 hour	Serious
Fan malfunctions or malfunctions	Fan malfunctions or malfunctions	Visual inspection identifies them according to manufacturer's	They will not be admitted	Daily	3 days (*)	Serious/Mild (*)

Parameter	Measurement	Measurement Method	Service Level	Frequency of Measurement	Correction Period	Severity of Non- compliance
		specifications				
Obstruction in vents	Obstruction in vents	Visual inspection identifies them according to manufacturer's specifications	They will not be admitted	Monthly	4 hours (*)	Serious/Mild (*)
Obstruction in conduits	Obstruction in conduits	Visual inspection identifies them according to manufacturer's specifications	They will not be admitted	Monthly	1 day (*)	Serious/Mild (*)
Deterioration in fastening anchors	Deterioration in fastening anchors	Visual inspection identifies them according to manufacturer's specifications	They will not be admitted	Annually	3 days (*)	Serious/Mild (*)
Deteriorations in system seals	Deteriorations in system seals	Visual inspection identifies them according to manufacturer's specifications	They will not be admitted	Quarterly	3 days (*)	Serious/Mild (*)
Operation of ventilation system with test report	Operation of ventilation system with test report	According to manufacturer's specifications by an accredited company.	Approved	Quarterly	15 days	Mild
Vibration tests of fans and motors	Vibration tests of fans and motors	According to manufacturer's specifications by an accredited company.	Approved	Quarterly	15 days	Mild
Air tightness tests of the duct system	Air tightness tests of the duct system	According to manufacturer's specifications by an accredited company.	Approved	Quarterly	15 days	Mild
Fire Protection System						
Damage or malfunction of the automatic fire detection system	Damage or malfunction of the automatic fire detection system	Visual inspection identifies them according to manufacturer's specifications.	They will not be admitted	Quarterly	3 days (*)	Serious/Mild (*)
Leakage in the water supply system	Leakage in the water supply system (tanks, pipes,	Visual inspection identifies them according to	They will not be admitted	Quarterly	3 days (*)	Serious/Mild (*)

Parameter	Measurement	Measurement Method	Mea		Correction Period	Severity of Non- compliance
	hydrants)	manufacturer's specifications				
Moistures in Joints	Moistures in Joints	Visual inspection identifies them according to manufacturer's specifications	They will not be admitted	Quarterly	3 days (*)	Serious/Mild (*)
Inaccessibility or lack of marking of fire extinguishers, deterioration or lack of seals, insurance, pressure or expiry date of fire extinguishers	Inaccessibility or lack of marking of fire extinguishers, deterioration or lack of seals, insurance, pressure or expiry date of fire extinguishers	Visual inspection identifies them according to manufacturer's specifications	They will not be admitted	Quarterly	3 days (*)	Serious/Mild (*)
Operation of the fire suppression system, with circuit filling tests. Leakage and pressure control	Operation of the fire suppression system, with circuit filling tests. Leakage and pressure control	According to manufacturer's specifications by an accredited company.	They will not be admitted	Semiannually	3 days (*)	Serious/Mild (*)
Communication and signali	0		-			
Communication system defects or malfunctions with SOS poles, radio, telephony, public address	Communication system defects or malfunctions with SOS poles, radio, telephony, public address	Visual inspection identifies them according to manufacturer's specifications	They will not be admitted	Weekly	12 hours:	Serious/Mild (*)
Information system malfunctions, traffic lights and dynamic signaling to users	Information system malfunctions, traffic lights and dynamic signaling to users	Visual inspection identifies them according to manufacturer's specifications	They will not be admitted	Weekly	12 hours:	Serious/Mild (*)
Public address operation	Public address operation	Visual inspection identifies them according to manufacturer's specifications	Inteligible	Weekly	2 days (*)	Serious/Mild (*)
Equipment joint damage, ventilation opening and wiring	Equipment joint damage, ventilation opening and wiring	Visual inspection identifies them according to manufacturer's	They will not be admitted	Monthly	3 days (*)	Serious/Mild (*)

Parameter	Measurement	Measurement Method	Service Level	Frequency of Measurement	Correction Period	Severity of Non- compliance
		specifications				
Complete wiring and battery circuit damage	Complete wiring and battery circuit damage	Visual inspection identifies them according to manufacturer's specifications	They will not be admitted	Monthly	15 days	Mild
Monitoring						
Uncalibrated or damaged CO detectors	Uncalibrated or damaged CO detectors	By visual inspection and with mediation equipment are identified according to the approved design, the Highway Manual: Tunnels, Walls and Complementary Works or standard modifying or replacing it; Operation Manual and Maintenance Plan.	They will not be admitted	Weekly	12 hours:	Serious/Mild (*)
Opacimeters not calibrated or damaged	Opacimeters not calibrated or damaged	By visual inspection and with mediation equipment are identified according to the approved design, the Highway Manual: Tunnels, Walls and Complementary Works or standard modifying or replacing it; Operation Manual and Maintenance Plan.	They will not be admitted	Weekly	12 hours:	Serious/Mild (*)
Impairment or malfunction of the Incident Detection System (ADS)	Impairment or malfunction of the Incident Detection System (ADS)	Visual inspection identifies them according to manufacturer's specifications	They will not be admitted	Weekly	24 hours (*)	Serious/Mild (*)
TV circuit image transmission system malfunction or malfunction,	TV circuit image transmission system malfunction or malfunction, camera	Visual inspection identifies them according to manufacturer's	They will not be admitted	Weekly	24 hours (*)	Serious/Mild (*)

Parameter	Measurement	Measurement Method	Service Level	Frequency of Measurement	Correction Period	Severity of Non- compliance		
camera misfocused, misframed or without signal	misfocused, misframed or without signal	specifications						
Emergency Galleries								
Presence of obstacles, trash or other material in the galleries access to the outside	Presence of obstacles, trash or other material in the galleries access to the outside	Visual inspection identifies them	They will not be admitted	Daily	1 hour	Serious		
Damage preventing opening or access to the outside in a safe condition	Damage preventing opening or access to the outside in a safe condition	Visual inspection identifies them	They will not be admitted	Daily	1 hour	Serious		
Electrical Supply								
Generator set or uninterruptible power system (UPS) damage or malfunction	Generator set or uninterruptible power system (UPS) damage or malfunction	Visual inspection identifies them according to manufacturer's specifications	They will not be admitted	Semiannually	3 days (*)	Serious/Mild (*)		
implements mitigating meas	(*) In case replacement equipment is required, the Grantor may grant a period of up to 15 days according to its evaluation, provided that the Grantor mplements mitigating measures during that period to the satisfaction of the Grantor. In this case, the severity of the breach will be slight. (**) If service levels are not met, the tunnel must be closed to traffic until service levels are met again							

14. Operations

Parameter	Measurement	Measurement Method	Service Level	Frequency of Measurement	Correction Period	Severity of Non- compliance
Queue Timeout (TEC) (*)	Average queue time per vehicle, weighted by the number of vehicles served in three (3) hours, during peak traffic times, per direction, on all toll	Video camera with automatic row recognition.	< 5 minutes	Quarterly	5 days to modify the care system (6 months if new lanes needed)	Not Applicable

Parameter	Measurement	Measurement Method	Service Level	Frequency of Measurement	Correction Period	Severity of Non- compliance
	roads. ECT corresponds to the time from when the vehicle reaches the queue until the barrier is raised					
Maximum waiting time for all calls (**)	Maximum waiting time for the call to be answered by a representative of the Dealer	Visual inspection identifies them	3 minutes	Every occurrence	Not applicable (penalty applies for insufficient parameter detection)	Serious
Incident care time, from notification c						1
Report to law enforcement authorities, dispatch of assistance vehicles and a vehicle of the CONCESSIONAIRE	Maximum period for reporting to law enforcement authorities, dispatch of assistance vehicles (ambulance or crane) and a vehicle of the CONCESSIONAIRE	Visual inspection identifies them	5 minutes	Every occurrence	Not applicable (penalty applies for insufficient parameter detection)	Serious
Arrival of vehicles at the incident area	Maximum time for arrival of vehicles in the incident area	Visual inspection identifies them	15 minutes	Every occurrence	Not applicable (penalty for insufficient parameter detection)	Serious
Response with open-path signaling and beaconing	Maximum time frame for response with signalling and beaconing of the incident area, open road	Visual inspection identifies them	25 minutes	Every occurrence	Not applicable (penalty applies for insufficient parameter detection)	Serious
Response with signaling and beaconing in tunnels	Maximum response time with signaling and beaconing in	Visual inspection identifies them	17 minutes	Every occurrence	Not applicable (penalty applies for insufficient	Serious

Parameter	Measurement	Measurement Method	Service Level	Frequency of Measurement	Correction Period	Severity of Non- compliance
	tunnels				parameter detection)	
Clearance of cave-ins or obstacles less than 200m3 on roadway	Maximum term for clearance of track from cave-ins or obstacles less than 200 m ³ on carriageway	Visual inspection identifies them	4 hours	Every occurrence	Not applicable (penalty applies for insufficient parameter detection)	Serious
Clearance of cave-ins or obstacles less than 200m3 in berms	Maximum time for clearance of track from collapses or obstacles less than 200 m ³ in berm	Visual inspection identifies them	24 hours	Every occurrence	Not applicable (penalty applies for insufficient parameter detection)	Serious
Clearance of cave-ins or obstacles between 200m3 and 2000m3 on roads and berms	Maximum time for clearance of track from collapses or obstacles between 200 m ³ and 2000 m ³ on road and berm	Visual inspection identifies them	24 hours	Every occurrence	Not applicable (penalty applies for insufficient parameter detection)	Serious
Clearance of cave-ins or obstacles larger than 2000m3	Maximum time for clearance of track from collapses or obstacles greater than 2000 m ³	Visual inspection identifies them	7 days or as determined by the Grantor	Every occurrence	Not applicable (penalty applies for insufficient parameter detection)	Serious
Accident and emergency care time, f		ion		1		
Report to law enforcement authorities, dispatch of assistance vehicles and a vehicle of the CONCESSIONAIRE	Maximum period for reporting to law enforcement authorities, dispatch of assistance vehicles (ambulance or tow truck) and a Dealership vehicle	Visual inspection identifies them	5 minutes	Every occurrence	Not applicable (penalty applies for insufficient parameter detection)	Serious
Arrival of vehicles at the incident	Maximum time for	Visual inspection	15 minutes	Every occurrence	Not applicable	Serious

Parameter	Measurement	Measurement Method	Service Level	Frequency of Measurement	Correction Period	Severity of Non- compliance
area	arrival of vehicles (CONCESSIONAIRE's vehicle, ambulance and/or crane) at the accident or emergency area	identifies them			(penalty applies for insufficient parameter detection)	
Response with open track or tunnel signaling and beaconing	Maximum time for response with signalling and beaconing of the accident or emergency area, in open track or tunnel	Visual inspection identifies them	17 minutes	Every occurrence	Not applicable (penalty applies for insufficient parameter detection)	Serious
Arrival of vehicles, transfer of persons and vehicles and clearance until trafficability is restored, unless a Prosecutor is required	Maximum time for the arrival of vehicles, transfer of persons and vehicles, and clearance until the recovery of trafficability, unless a Prosecutor is required	Visual inspection identifies them	1 hour	Every occurrence	Not applicable (penalty applies for insufficient parameter detection)	Serious
Availability and occupancy of lanes	Once a queue has been detected due to a lane cut (total occupation of one lane) or partial occupation of roadway (occupation of part of one lane) by activity of the CONCESSIONAIRE. The length shall be	Visual measurement of the queues by rail, by road cuts related to maintenance work and roadworks, exempt from measurement events exempt from liability such as accidents, incidents, collapses, social conflicts and other	No queue longer than 300 metres for 30 minutes	Every occurrence	Not applicable (penalty applies for insufficient parameter detection)	Mild, up to 2 breaches per month. Serious, if 3 or more breaches per month

Parameter	Measurement	Measurement Method	Service Level	Frequency of Measurement	Correction Period	Severity of Non- compliance
	measured from the narrowing of the roadway.	events that are not the responsibility of the CONCESSIONAIRE.				
 (*) In case the length of the queue is inside the tunnel (**) Control for all calls, not average (***) Penalties Annex contains specifi 			ONAIRE must	manage the traffic	so that there are no ve	hicles standing

15. Walls

Parameter	Measurement	Measurement Method	Service Level	Frequency of Measurement		Severity of non- compliance
Structural faults in walls	Undermining, settlements, loss of geometry, failures affecting structural capacity	By visual inspection they are identified according to the approved design, taking into account the Road Manual – General Technical Specifications for Construction (EG- 2013), Road Manual: Tunnels, Walls and Complementary Works or rule amending or replacing it	They will not be admitted	Annually	7 days	Serious

16. Exterior Lighting

Parameter	Measurement	Measurement Method	Service Level	Frequency of Measurement	Correction Period	Severity of Non-compliance
Luminance	Average values in 1 km luminance in cd/m ² of the pavement	Using a luxometer the luminance in cd/m2 of the pavement is measured, averaged for 1 km and compared to the	Average luminance over 1 km>75% projected	Annually	1 month	Mild

Parameter	Measurement	Measurement Method		Frequency of Measurement	Correction Period	Severity of Non-compliance
		approved design.				
Breakdown affecting 3 or more consecutive points of light	Breakdown affecting 3 or more consecutive points of light	Visual inspection identifies them	None	Weekly	2 days	Serious
Breakdown points of light	Breakdown points of light	Visual inspection identifies them	5%	Weekly	2 days	Serious
Damaged staff	Structural damage to the staff, including anchor bolts	Visual inspection identifies them	None	Weekly	5 days/30 days (*)	Serious/Mild (*)

17. Buildings and Toll Stations

Parameter	Measurement	Measurement Method	Service Level	Frequency	Correction Period	Severity of Non- compliance
Structural failures in buildings	Settlements, loss of geometry, failures affecting structural capacity	Visual inspection identifies them	They will not be admitted	Annually	7 days/30 days (*)	Serious/Mild (*)
Structural failures at toll stations (marquee structural)	Settlements, loss of geometry, failures affecting structural capacity	Visual inspection identifies them	They will not be admitted	Annually	7 days/30 days (*)	Serious/Mild (*)

Parameter	Measurement	Measurement Method	Service Level	Frequency	Correction Period	Severity of Non- compliance		
(*) The first period applies if the defect impendingly affects road safety, in which case the severity of the breach will be serious.								

18. ITS and Control Center

Parameter	Measurement	Measurement Method	Service Level	Frequency of Measurement	Correction Period	Severity of Non- compliance
Availability of toll equipment; (OCR camera, CCTV camera, Traffic light, barrier and sensors.	Availability by toll station, calculating the availability of the axis sensor, barriers, photoelectric sensor and CCTV and OCR cameras, by Ping to the equipment or direct connection by the PLC with the knowledge of the equipment status. Toll station availability is assessed by averaging each of the availabilities per team.	It will be automatically measured using the required functionalities to know the status of equipment availability.	97.0% monthly availability	Monthly (*)	Not applicable (penalty applies for insufficient parameter detection)	Serious
Availability of toll software	The software is Up & Working, with the Web Service active or the rest API sending the information in real time. Necessary condition: Have the server return Ping. Sufficient condition: That the application manager returns Ping and <i>listener</i> (receiver) positive and has response from the database. All vehicles must be registered, classified by assigning the characteristics and capturing the plate, allowing a maximum error of 2 registrations per 100 vehicles.	The availability of the software that manages the equipment will be automatically measured.	97.0% monthly software availability and/or less than 2 unmeasured license plate records per 100 vehicles. Average time between failures less than 17,000 hours.	Monthly (*)	Not applicable (penalty applies for insufficient parameter detection)	Serious
Gantry Crane	Availability per gantry, calculating	It will be automatically	97.0% monthly	Monthly (*)	Not	Serious

Parameter	Measurement	Measurement Method	Service Level	Frequency of Measurement	Correction Period	Severity of Non- compliance
(weighing, camera and OCR camera, speed and dimensions sensors)	the availability of each of the installed equipment such as LPR and CCTV cameras, size and classification sensors, weighing device, etc., by Ping to the equipment or direct connection by PLC with knowledge of the equipment status. The availability of each gantry is evaluated by calculating the average of each of the availabilities per team.	measured using the required functionalities to know the status of equipment availability.	availability		applicable (penalty applies for insufficient parameter detection)	
Availability of gantry software	The software is Up & Working, with the Web Service active or the rest API sending the information in real time. Necessary condition: Have the server return Ping. Sufficient condition: That the application manager returns Ping and <i>listener</i> (receiver) positive and has response from the database. All vehicles must be registered, classified by assigning the characteristics and capturing the plate, allowing a maximum error of 1 axis per 10,000 vehicles.	The availability of the software that manages the equipment will be automatically measured.	97.0% monthly software availability and/or less than 2 axes per 10,000 measured axes	Monthly (*)	Not applicable (penalty applies for insufficient parameter detection)	Serious
Availability of weighing equipment	Availability by weighing station, calculating the availability of each of the installed equipment such as LPR and CCTV cameras, size and classification sensors, weighing device, etc., by Ping to the equipment or direct connection by PLC with knowledge of the equipment status.	The availability of the software that manages the equipment will be automatically measured.	97.0% monthly availability	Monthly (*)	Not applicable (penalty applies for insufficient parameter detection)	Serious

Parameter	Measurement	Measurement Method	Service Level	Frequency of Measurement	Correction Period	Severity of Non- compliance
	The availability of each gantry is evaluated by calculating the average of each of the availabilities per team.					
Availability of Weighing Software	The software is Up & Working, with the Web Service active or the rest API sending the information in real time. Necessary condition: Have the server return Ping. Sufficient condition: That the application manager returns Ping and <i>listener</i> (receiver) positive and has response from the database. All vehicles must be registered, classified by assigning the characteristics and capturing the plate, allowing a maximum error of 1 axis per 10,000 vehicles.	The availability of the software that manages the equipment will be automatically measured.	97.0% monthly software availability and/or less than 2 axes per 10,000 measured axes	Monthly (*)	Not applicable (penalty applies for insufficient parameter detection)	Serious
Availability of ITS Equipment	Availability by ITS equipment, calculating the availability of each of the installed equipment. Through Ping to the equipment or direct connection by PLC with knowledge of the status of the equipment. The availability of each ITS is assessed by averaging each availability per team.	It will be automatically measured using the required functionalities to know the status of equipment availability.	97.0% monthly availability	Monthly (*)	Not applicable (penalty applies for insufficient parameter detection)	Serious
Availability of software for ITS management	The software is Up & Working, with the Web Service active or the rest API sending the information in real time. Necessary condition: Have the server return Ping. Sufficient condition: That the application manager returns Ping	The availability of the software that manages the equipment will be automatically measured.	97.0% monthly software availability	Monthly (*)	Not applicable (penalty applies for insufficient parameter detection)	Serious

Parameter	Measurement	Measurement Method	Service Level	Frequency of Measurement	Correction Period	Severity of Non- compliance
	and <i>listener</i> (receiver) positive and has response from the database.					
SOS Posts	Availability by S.O.S. Post, calculating the availability of each of the installed equipment. Through Ping to the equipment or direct connection by PLC with knowledge of the status of the equipment. The availability of each S.O.S. Post is evaluated by calculating the average of each of the availabilities per team.	It will be automatically measured using the required functionalities to know the status of equipment availability.	97.0% monthly availability	Monthly (*)	Not applicable (penalty applies for insufficient parameter detection)	Serious
Availability SOS Software	The software is Up & Working, with the Web Service active or the rest API sending the information in real time. Necessary condition: Have the server return Ping. Sufficient condition: The application manager returns Ping and <i>listener</i> (receiver) positive and has response from the database.	The availability of the software that manages the equipment will be automatically measured.	97.0% monthly software availability	Monthly (*)	Not applicable (penalty applies for insufficient parameter detection)	Serious
Availability of OCC equipment	Availability by Team, calculating the availability of each of the installed equipment. Through Ping to the equipment or direct connection by PLC with knowledge of the status of the equipment. The availability of each S.O.S. Post is evaluated by calculating the average of each of the availabilities per team.	It will be automatically measured using the required functionalities to know the status of equipment availability.	97.0% monthly availability,	Monthly (*)	Not applicable (penalty applies for insufficient parameter detection)	Serious

Parameter	Measurement	Measurement Method	Service Level		Correction Period	Severity of Non- compliance
Availability COO platforms: new technology platform (AMS), video wall cameras (camera mosaic), IP switchboard emergency calls, radio system, SCADA system for tunnels.	The software will be Up & Working, with the Web Service active or the rest API sending the information in real time. Necessary condition: Have the server return Ping. Sufficient condition: That the application manager returns Ping and <i>listener</i> (receiver) positive and has response from the database.	The availability of the software that manages the equipment will be automatically measured.	97.0% monthly software availability	Monthly (*)	Not applicable (penalty applies for insufficient parameter detection)	Serious

ANNEX No. 11

APPENDIX 2

COMPUTATION OF OVERALL SERVICE LEVEL (INDIVIDUAL AND CONTRACT SECTION)

General

- 1.1. The REGULATOR shall notify the CONCESSIONAIRE of the dates of each annual evaluation at least fifteen (15) Calendar Days in advance, for the purpose of designating the technical staff who will attend it.
- 1.2. From the evaluation carried out, a record will be made in three (3) identical copies, detailing defects, and their location, and the observations that may be made by the REGULATOR (or its representative), as well as considerations that the technical manager of the CONCESSIONAIRE deems appropriate. Each party, the REGULATOR and the CONCESSIONAIRE shall retain a version of the minutes. The absence of the technical staff designated by the CONCESSIONAIRE and / or the lack of discharges in the minutes, will be taken in conformity with the result of the evaluation carried out.
- 1.3. Regardless of what is stated in the minutes, defects identified in an annual evaluation shall be communicated by the REGULATOR to the CONCESSIONAIRE using the "Notification of Insufficient Condition Parameter" procedure established for continuous evaluations.
- 1.4. After carrying out an annual evaluation, the calculation of the Overall Service Level provided by the CONCESSIONAIRE will be carried out in each section and in the Contract in general. The assessment methodology set out in this Appendix shall be followed for this purpose.

Global Service Level of a Section

1.5. The calculation of the Global Service Level of a Section shall be carried out in accordance with the following assessment methodology:

SECTION	LENGTH (KM)	DESCRIPTION
1	8,7	Oval 200 miles – North Pan-American Highway
2	15,1	Panamericana Norte – Ramiro Prialé Highway
3	11	Ramiro Prialé Highway – Av. Circunvalación
TOTAL	34,8	

a) The road shall be subdivided according to the sections set out in the following table:

- b) Each section shall be subdivided into sections of length equal to one (1) kilometre, thus establishing a total number of sections. If the total length of the Section is not integer, a special section corresponding to the remaining fraction of a kilometre shall be defined. At least one section shall be defined in each Section.
- c) It is defined as the size of the sample to be evaluated at ten percent (10%) of the total number of sections in each Section, chosen at random (rounded to the top whole number).
- d) Each selected section is subdivided into ten (10) segments to be evaluated. If a discrete element, such as a bridge, appears partially in a section, it shall be considered fully included.

- e) Each segment analyzes compliance with individual Service Levels for the following items: Rolling surface, shoulder, drainage, bridges and viaducts, tunnels, installations, surveillance and security, Concession area and road safety (references for the format of survey sheets are presented in Appendix 11 to this Annex).
- f) Each section quantifies the number of segments that do not meet the Service Levels of each item (Treading surface, shoulder, etc.).
- g) To obtain the degree of non-compliance of each section, a weighting coefficient is introduced for each item (Treading surface, shoulder, etc.) that will multiply the number of segments with deficiencies:

ASPECT TO BE EVALUATED	Weighting coefficient
Rolling Surface	100
Shoulder	40
Drainage	40
Horizontal Signage	80
Vertical Signage	80
Road safety devices	80
Right of Way	40
Bridges, viaducts, tunnels and walls	80
External lighting and ITS	40

h) The Global Service Level of a Section is calculated according to the procedure indicated in the following table:

Aspect	No. of segments with deficiency of the sample taken from the Section	Weighting coefficient	Percentage of non- compliance by aspect
Rolling Surface			
Shoulder			
Drainage			
Horizontal Signage			
Vertical Signage			(c)=(a)*(b)/sample
Road safety devices	(a)	(b)	length in hm
Right of Way			
Bridges, viaducts,			
tunnels and walls			
External lighting and			
ITS			

Degree of non-compliance with the Section	(d)=average (c)
Global Section Service Level	(e)=100%-(d)

1.6. The allowable Global Service Level values for each Tranche for all years of the Concession are 95%.

Global Contract Service Level

- 1.7. The Global Service Level of the contract shall be calculated as the average of the Global Service Levels of each of the Contract Section, weighted by length and rounded to the corresponding integer.
- 1.8. The Global Service Level of the contract will consider the Section that have entered into service at the time of their evaluation.
- 1.9. The allowable value of the Global Service Level of the contract for all years of the Concession is 95%.

Spreadsheet model for surveying defects in Service Levels field

The following forms are for reference use. The Grantee will submit its proposal for spreadsheets based on them, within the Indicator evaluation plan.

			EVALUACIÓN DE SUI	ACIÓN	DE SUPE	RFICIE	DE ROD	ADURA	DE CON	ICRETO	PERFICIE DE RODADURA DE CONCRETO ASFÁLTICO	
RUTA:				TRAMO:		SECCIÓN:			UNIDAD C	UNIDAD DE MUESTRA (m):	(m):	100
EVALUADOR:	JR:			FECHA:		ANCHO (m):	(m):		AREA TOTAL (m2):	'AL (m2):		
1	1 Reducción del ancho	el ancho			6 Parches			10	10 Existencia de material suelto	e material sue	elto	
2	2 Reducción del espesor	espesor			7 Ahuellamiento	<u>o</u>		11	11 Existencia de obstáculos	e obstáculos		
ſ	3 Piel de cocodrilo	lrilo			8 Hundimiento			12	12 Peladuras o desprendimientos	desprendimie	entos	
4	4 Huecos				9 Exudación			13	13 Desprendimiento de bordes	iento de bord	les	
ы	5 Fisuras											
Defecto					HECTÓMETROS	TROS					TOTAL DE HECTÓMETROS	
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				EVA	EVALUACIÓN	DE BEI	IN DE BERMA DE CONCRETO ASFÁLTICO	CONCR	ETO AS	FÁLTIC	0	
RUTA:				TRAMO:		SECCIÓN:			UNIDAD D	UNIDAD DE MUESTRA (m):	(M):	100
EVALUADOR:	JR:			FECHA:		ANCHO (m):	m):		AREA TOTAL (m2):	AL (m2):		
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2	Reducción d	2 Reducción del espesor de berma	berma		7 Exudación			11	11 Peladuras o desprendimientos	desprendimie	entos	
S	3 Huecos				8 Existencia de	de material suelto	lto	12	12 Desprendimiento de bordes	ento de bord	es	
4	4 Fisuras				9 Existencia de	de obstáculos		13	13 Erosión			
Ŋ	5 Parches											
Defecto					HECTÓMETROS	rros					TOTAL DE HECTÓMETROS	
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10	0 Si no tiene defecto	e defecto						TOTAL DE	HECTÓME	TROS CON	TOTAL DE HECTÓMETROS CON DEFECTOS	3

					E	ALUAC	EVALUACIÓN DE DRENAJES	DRENA	JES			
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2	2 Fallas estructurales	urales										
e	Erosión y/o s	ocavación en	ו alcantarillas, cunet	as, cunetas de	s coronación, cu	unetas de ban	Iqueta, ponton	ies, drenes, si	ub-drenes, ad	lemás de los (3 Erosión y/o socavación en alcantarillas, cunetas, cunetas de coronación, cunetas de banqueta, pontones, drenes, sub-drenes, además de los correspondientes componentes de las obras	is obras
	de ingreso y salida.	salida.										
4	4 Deterioro en alcantarillas.	alcantarillas.										
Defecto					HECTÓMET	METROS					TOTAL DE HECTÓMETROS	
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0	0 Si no tiene defecto	defecto						TOTAL DE	HECTÓMET	TROS CON	TOTAL DE HECTÓMETROS CON DEFECTOS	

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2	Decoloració	n o suciedad c	2 Decoloración o suciedad de las líneas o marcas	Š	9	Deterioro d	6 Deterioro de las tachas reflectivas	flectivas				
ſ	Visibilidad no	3 Visibilidad nocturna insuficiente	ciente		7	Pérdida o in	7 Pérdida o inutilidad de las tachas reflectivas	tachas reflect	ivas			
4	Exceso de de	4 Exceso de desgaste horizontal	ontal		80	Visibilidad d	8 Visibilidad diurna insuficiente	nte				
Defecto					HECTÓMETROS	ROS					TOTAL DE HECTÓMETROS	
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0	0 Si no tiene defecto	e defecto						TOTAL DE	HECTÓME	TROS CON	TOTAL DE HECTÓMETROS CON DEFECTOS	0

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EVALUADOR: 1 Elementos faltantes 2 Decoloración de las placas 3 Visibilidad nocturna insufici		TRAMO:		SECCIÓN:			UNIDAD DE MUESTRA (m):	MUESTR,	A (m):	100
 1 Elementos faltantes 2 Decoloración de las placas 3 Visibilidad nocturna insufici 		FECHA:		ANCHO (m):	:(1	AREA TOTAL (m2):	L (m2):		
 Decoloración de las placas Visibilidad nocturna insufici 			5	5 Deterioro de los elementos de fijación de las placas	os elementos	: de fijación d	e las placas			
3 Visibilidad nocturna insufici	is de las señales		9	6 Deterioro de los soportes	os soportes					
	ciente		7	7 Deterioro y suciedad de los postes kilómetricos	iciedad de los	postes kilóm	etricos			
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				EVAL	EVALUACIÓN DE DISPOSITIVOS DE SEGURIDAD VIAL	DE DISP	OSITIVC	OS DE SI	EGURID		AL	
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1	1 Elementos faltantes	Itantes				4	4 Deterioros y limpieza de los parapetos con baranda	mpieza de lo	s parapetos c	on baranda		
2	Deficiencias (en la colocac	2 Deficiencias en la colocación de barreras de seguridad y/o guardavías	eguridad y/o	guardavías	2	5 Deficiencia en la colocación de delineadores de curvas	n la colocació.	n de delinead	lores de curv.	as	
ſ	Deterioros y	limpieza de b	3 Deterioros y limpieza de barreras de seguridad y/o guardavías	d y/o guardav	rías	9	6 Deterioros y limpieza de delineadores de curvas	impieza de de	lineadores de	e curvas		
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Código	0	0		1	L 1	1	0	0	0	0		
-	1 Si tiene defecto	fecto										
0	0 Si no tiene defecto	defecto					-	FOTAL DE F	<i><u>HECTÓMET</u></i>	TROS CON	TOTAL DE HECTÓMETROS CON DEFECTOS	

					EVAL	UACIÓ	EVALUACIÓN DE DERECHO DE VÍA	SECHO I	DE VÍA			
RUTA:				TRAMO:		SECCIÓN:			UNIDAD DE MUESTRA (m):	MUESTR/	A (m):	100
EVALUADOR:	JR:			FECHA:		ANCHO (m):	:(۱	A	AREA TOTAL (m2):	- (m2):		
H	1 Exceso de altura de la vegetación	tura de la veg	țetación			4	4 Aguas empozadas	adas				
2	Obstáculos o	depresiones	2 Obstáculos o depresiones significativas			S	5 Residuos					
ſ	3 Erosiones y sedimentos	edimentos				9	6 Propaganda					
Defecto					HECTÓMETROS	ROS					TOTAL DE HECTÓMETROS	
c	Ч	2	m	4	5	9	7	∞	6	10	CON DEFECTO n	PURCENIAJE
1			×	×	х						3	30%
2											0	0%
3											0	%0
4											0	%0
S											0	%0
9					x	×					2	20%
Código	0	0		1 1	1	1	0	0	0	0		
H	1 Si tiene defecto	fecto					L					
0	0 Si no tiene defecto	defecto					-	TOTAL DE HECTÓMETROS CON DEFECTOS	ECTÓMETF	ROS CON I	DEFECTOS	4

		EV	<u>ALUACIÓN</u>	DE PUF	NTES. VI	ADUCT	OS.PUE	NTES PE	ATONA	LES. TI	<u>EVALUACIÓN DE PUENTES. VIADUCTOS PUENTES PEATONALES. TÚNELES V MUROS</u>	
RUTA:				TRAMO:		SECCIÓN:	-		UNIDAD DE MUESTRA (m):	MUESTR	A (m):	100
EVALUADOR:	DR:			FECHA:		ANCHO (m)	:(L		AREA TOTAL (m2):	יך (m2):		
1	Suciedad o e	1 Suciedad o elementos extraños	raños	10	10 Obstrucciones al libre escurrimiento	al libre escur	rimiento			18	18 Iluminación en túnel	
2	2 Deterioro del sobrepiso	el sobrepiso		H	11 Socavaciones de fundaciones	de fundacion	es			19	19 Ventilación	
ŝ	Deficiencias	3 Deficiencias en las juntas		1	12 Deterioros en terraplenes de acceso y revestimientos	terraplenes d	le acceso y rev	restimientos		20	20 Sistemas contra incendios	
4	Deterioros e	4 Deterioros en el concreto		Ĥ	13 Deterioro de enrocados o gaviones de protección	enrocados o g	aviones de pro	otección		21	21 Comunicaciones	
S	Deterioros e	5 Deterioros en sistemas de apoyo	e apoyo	1	14 Deterior de barandas y parapetos	irandas y para	apetos			22	22 Vigilancia	
9	Deterioros e	6 Deterioros en elementos metálicos	metálicos	ij	15 Deterioro de veredas	reedas				23	23 Galerias de emergencia	
7	Deterioros e	7 Deterioros en sistemas antisísmicos	ntisísmicos	1(16 Defectos en la integridad estructural de paneles cerámicos	i integridad es	structural de p	aneles cerámi	icos	24	24 Suministro eléctrico	
∞	Deterioros e	8 Deterioros en sistemas de suspensión	e suspensión	1	17 Obstrucciones en el sistema de drenaje	en el sistema	a de drenaje			25	25 Fallas estructurales en muros	
6	Deterioros e	en elementos	9 Deterioros en elementos de mampostería									
Defecto				_	HECTÓMETROS	ROS		-			TOTAL DE HECTÓMETROS	PORCENTAJE
5	-	2	ĸ	4	S	9	7	∞	6	10	CON DEFECTO n	
1			x	×	×						3	30%
2											0	%0
m											0	%0
4											0	%0
S											0	60
9			×		×			×			m	30%
7											0	%0
8											0	0%
6						×	×				2	20%
10											0	%0
11											0	60
12											0	0%
13											0	60
14											0	%0
15											0	%0
16											0	%0
17											0	%0
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19											0	0%
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22											0	%0
23											0	%0
24					×	×					2	20%
25											0	%0
Código	0	0		1 1	1	1	1	1	0	0		
н ,	1 Si tiene defecto	efecto										
D	0 Si no tiene defecto	e defecto						TOTAL DE HECTOMETROS CON DEFECTOS	HECTOME I	ROS CON	DEFECTOS	9

		EV	EVALUACIÓN DE SUPERFIC	DE SUP	Ш	DE ROD	ADURA	Y BERN	1AS DE	CONCR	DE RODADURA Y BERMAS DE CONCRETO HIDRÁULICO	
RUTA:				TRAMO:		SECCIÓN:			UNIDAD D	UNIDAD DE MUESTRA (m):	A (m):	100
EVALUADOR:	JR:			FECHA:		ANCHO (m):	:(۲		AREA TOTAL (m2):	AL (m2):		
1	1 Desnivel en losas	osas		ц	5 Desprendimiento	nto			10	Hundimiento	10 Hundimientos o levantamientos	
2	2 Fisuras			2	7 Baches o huecos	os			12	Desprendimi	12 Desprendimientos del tratamiento superficial de CA	A
ε	3 Parches en mal estado	al estado		30	8 Juntas sin estar perfectamente selladas	r perfectame	nte selladas		13	Existencia de	13 Existencia de material suelto	
4	Despotillami	4 Despotillamiento de juntas	S	01	9 Peladuras				14	14 Existencia de obtáculos	: obtáculos	
Defecto					HECTÓMETROS	ROS					TOTAL DE HECTÓMETROS	DODCENTA IE
c	1	2	3	4	5	9	2	8	6	10	CON DEFECTO n	PURCENIAJE
1			×	×	x						3	30%
2											0	%0
3											0	%0
4											0	%0
5											0	%0
9			×		x			×			3	30%
7											0	%0
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:	¢							,	((
Codigo	0	0	H	-	-	0	0	н	0	0		
	 I SI TIENE DETECTO Si no tiene defecto 	defecto						TOTAL DE HECTÓMETROS CON DEEECTOS	ΗΕCTÓME	TROS CON	DEFECTOS	4
		מרוררוס										t

				EV	EVALUACIÓN DE ALUMBRADO EXTERIOR e ITS	IN DE AL	UMBR	ADO EX	TERIOR (e ITS		
RUTA:				TRAMO:		SECCIÓN:			UNIDAD DE MUESTRA (m):	MUESTR	A (m):	100
EVALUADOR:	OR:			FECHA:		ANCHO (m):			AREA TOTAL (m2):	(m2):		
H	Averia que af	^e cte a 3 o m	1 Averia que afecte a 3 o más puntos de luz consecutivos	nsecutivos								
2	2 Puntos de luz averiados	: averiados										
ŵ	3 Báculo dañado	do										
4	4 ITS disponibles	es										
Defecto					HECTÓMETROS	ROS					TOTAL DE HECTÓMETROS	
L	1	2	3	4	5	9	7	8	6	10	CON DEFECTO n	PURCENIAJE
1			×	×	×						3	30%
2											0	%0
3											0	%0
4											0	%0
Código	0	0		1	1 1	0	0	0	0	0		
1	1 Si tiene defecto	fecto										
0	0 Si no tiene defecto	defecto						FOTAL DE I	TOTAL DE HECTÓMETROS CON DEFECTOS	OS CON	DEFECTOS	3

Global Service Level by Section and Global Contract Service Level spreadsheet model

	Aw	ard of	the Periph	neral F	Ring F	Road.					F	aile	d he	ctor	nete	ers i	n the	sar	nple						W	eigh	ting	by l	head	ding	%	
									Tot	al H	m w	ith d	lefec	t				Ρ	ercer	ntage	Э			10 0	4 0	4 0	8 0	8 0	8 0	40	8 0	4 0
Secti on	Rut a	Fro m	Until 05.05.2 021	Ho me	En d	Lengt h: 245 km	Samp le	S/	B D	S H	S V	D S	D V.	Ρ	T O	S/	в D	s F		D S	D V.	Ρ	T O	S/.	В	D	S H	S V	D S	D V.	Ρ	T O
1																																
2																																
3																																

Legend

S: Rolling Surface B: Shoulders D. Drains

SH: Horizontal Signage SV: Vertical Signage

DS: Road Safety Devices

DV. Right of Way P: Bridges, viaducts, tunnels and walls A. External Lighting and ITS

ANNEX No. 11

Appendix 3

COMMUNICATION FORMATS

Detection of insufficient condition parameter for parameters with correction term

(Note from the Supervising Engineer to the Coordinator of OSITRAN)

Place Date PCI detection No. **Mr. Coordinator:**

According to the provisions of Annex No. 11 of the Concession Contract, it is reported that the following defects have been identified in the Concession of the Peripheral Ring Road. Route:

Section

ltem	Defect not admitted	From Km	Up to Km	Total Km.	Term (days)

Without another particular greets him attentively:

CONTRACT Supervisor Engineer

Insufficient condition parameter detection notification for correction term (Note from OSITRAN to CONCESSIONAIRE)

Place Date PCI Notification No. Ref: PCI detection No.

Mrs. (name of CONCESSIONAIRE):

In accordance with the provisions of Annex No. 11 to the Concession Agreement, it is hereby reported that repairs to the defects indicated in the attached table are due.

Route:

Section

ltem	Defect not admitted	From Km	Up to Km	Total Km.	Term (days)

Without another particular greets them attentively

CONTRACT Responsible for OSITRAN

Insufficient condition parameter resolution notification for correction term DEALER O&M

Place Date PCI Notification No.

Messrs. OSITRAN:

As indicated in Notification of Detection of Insufficient Condition Parameter No.

Route:

Section

Item	Defect not admitted	From Km	Up to Km	Total Km.

Without another particular greets them attentively

Signature Responsible for the CONCESSIONAIRE

Detection of non-compliance for correction term

(Note from the Supervising Engineer to the Coordinator of OSITRAN)

Place Date INS detection No.

Mr. Coordinator:

In accordance with the provisions of Annex No. 11 of the Concession Agreement, it is reported that the terms for the correction of defects established in Notification of Insufficient Condition Parameter No. ______ have not been met, with the penalty for non-compliance corresponding from the date and until the defects are corrected for the following cases. Route:

Section

ltem	Defect not admitted	From Km	Up to Km	Total Km.	New deadline (days)

In addition, in accordance with the provisions of Annex No. 11 to the Contract, it is reported that the terms for correcting defects established in Notification of Insufficient Condition Parameter No. _____ have been met, with the penalty for non-compliance not corresponding to the following cases:

Route:

Section

İt	tem	Defect not admitted	From Km	Up to Km	Total Km.	New deadline (days)

The reasons why the penalty is not applicable in each of these cases are:

CONTRACT Supervising Engineer

Notification of non-compliance for parameters with correction term (Note from OSITRAN to CONCESSIONAIRE)

Place Date Notification of Noncompliance No.:

Mrs. of (name of CONCESSIONAIRE):

In accordance with the provisions of Annex No. 11 of the Concession Agreement, it is reported that the terms for the correction of defects established in Notification of Insufficient Condition Parameter No. ______ have not been met, with the penalty for non-compliance corresponding from the date and until the defects are corrected for the following cases. Route:

Section

ltem	Defect not admitted	From Km	Up to Km	Total Km.	New deadline (days)

In addition, in accordance with the provisions of Annex No. 11 of the Concession Contract it is reported that the terms for the correction of defects established in the Notification of Non-compliance No. ______ have been met, the penalty for non-compliance not being applicable for the following cases:

Route: Section

ltem	Defect not admitted	From Km	Up to Km	Total Km.	New deadline (days)

The reasons why the penalty is not applicable in each of these cases are:

CONTRACT Supervising Engineer Responsible for OSITRAN (name)

Detection of non-compliance for parameters without correction term (Note from the Supervising Engineer to the Coordinator of OSITRAN)

Place Date INS detection No.

Mr. Coordinator:

According to the provisions of Annex No. 11 of the Concession Contract, it is reported that the following insufficient parameters have been located in the Concession of the Peripheral Ring Road for which no correction term applies, corresponding to the penalty for non-compliance for the following cases.

Route: Section

ltem	Insufficient parameter	From Km	Up to Km	Total Km.

CONTRACT Supervising Engineer

Notification of non-compliance for parameters without correction term (Note from OSITRAN to CONCESSIONAIRE)

Place Date Notification of Noncompliance No.:

Mrs. of (name of CONCESSIONAIRE):

According to the provisions of Annex No. 11 of the Concession Contract, it is reported that the following insufficient parameters have been located in the Concession of the Peripheral Ring Road for which no correction term applies, corresponding to the penalty for non-compliance for the following cases.

Route:

Section

ltem	Insufficient parameter	From Km	Up to Km	Total Km.

CONTRACT Supervising Engineer Responsible for OSITRAN (name)

ANNEX No. 11

Appendix 4

MAINTENANCE OF EXISTING SECTIONS

- 1.1. For Existing Sections, and from the Possession Taking to the completion of the Works of each Section, the CONCESSIONAIRE shall perform the following Maintenance tasks:
 - Attention to incidents and accidents
 - Attend to accidents / incidents that occur and restore as soon as possible the previous state to them.
 - Mark occasional danger situations.
 - Channel and/or regulate traffic in exceptional situations to facilitate movement.
 - <u>Correction of anomalies and defects that hinder or endanger vehicular and pedestrian</u> <u>traffic.</u>
 - They shall be tasks aimed at urgent repair of deterioration in the Roadway, signage, beaconing or other elements affecting the safety of the user.
- 1.2. The table below shows the existing main vials for reference.

VÍAS EXISTENTES A OPERAR DURANTE PARTE DE LA FASE DE OBRAS							
P.K.i	P.K.f	L (m)	Sección	Carriles Tonco	Carriles Vías de servicio	Calle	
700	1.300	600	3+3	6	0	Elmer Faucet	
1.500	2.000	500	3+3	6	0	Canta Callao	
2.000	5.700	3.700	3+3 vs2+2	6	4	Canta Callao	
5.800	8.900	3.100	3+3 vs2+2	6	4	Avda. Naranjal	
9.000	9.600	600	1+1	2	0	Calle 1	
9.850	10.800	950	2+2	4	0	Jose G. Condorcanqui	
		A	PROXIMACIO	NES Y TÚNEL	.1		
14.200	14.300	100	2+2	4	0	Avda. Canto Grande	
14.300	15.700	1.400	2+2	4	0	San Carlos	
15.900	16.250	350	1+1	2	0	Los Álamos	
16.700	16.800	100	2+2	4	0	Avda. Sta. Rosa	
		A	PROXIMACIO	NES Y TÚNEL			
23.200	23.450	250	1+1	2	0	Calle	
			CRUCE R	O RIMAC			
24.820	25.920	1.100	2+2	4	0	San Pablo Rd	
25.920	27.120	1.200	1+1	2	0	Avda. 22 de Julio	
27.120	33.970	6.850	2+2	4	0	Separadora Industrial	
33.970	34.470	500	1+1	2	0	Prolongación Sep. Ind.	
34.470	34.786	316	2+2	4	0	Avda. del Aire	

ANNEX No. 12

CONTROL OF REGISTRATIONS AND TERMINATIONS OF CONCESSION ASSETS

In all matters relating to the Property Regime, the Regulations Applicable to the Control of the Registrations and Terminations of the Assets of the Concession, approved by Board of Directors Resolution No. 006-2006-CD-OSITRAN, as well as other standards and procedures on the individual the REGULATOR establishes for the control and supervision of Assets; in all those aspects that are not contrary to the provisions of the Contract.

ANNEX No. 13 VIZCACHERA AREA

Appendix 1 Procedure for the implementation of remediation, recovery and restitution of the Vizcachera area

The CONCESSIONAIRE shall carry out the following work and activities related to the Vizcachera area, as follows:

I. SCOPE:

The CONCESSIONAIRE undertakes to carry out all the activities of remediation, recovery, and restitution of the degraded land under and on the area Vizcachera returning it to its initial topographical condition and in condition of foundation of the embankments of the Project, in addition to carrying out the final disposal of the waste and other components located in the aforesaid area Vizcachera (hereinafter, together, the "<u>Removal Activities</u>"), in order that the Works established in Contract can be executed, in accordance with the Applicable Laws and Provisions. The GRANTOR, for its part, undertakes to pay to the CONCESSIONAIRE all expenses and costs incurred for the execution of these activities, under the terms established in Section V of this annex.

II. GENERAL OBLIGATIONS:

- 2.1. The CONCESSIONAIRE shall be responsible for the following activities:
- a. Prepare technical studies necessary for the implementation of the Removal Activities (hereinafter referred to as the "<u>Technical Study</u>"). Such Technical Survey shall include, but not be limited to, the following sections: (i) the technical specifications and technology to be used to carry out the Removal Activities, route survey and transport of the material removed from the Vizcachera area, final disposal of the material removed in authorized landfills in accordance with Applicable Laws and Provisions, further taking into account the rules on the treatment of Environmental Liabilities issued by the competent Governmental Authority, meeting the technical specifications necessary for the execution of the Contract Works, (ii) detailed schedule for the execution of the Removal Activities, (iii) detailed item budget of the Removal Activities and (iv) the polynomial formula for the revision of prices of common inputs, which does not include the costs for the final disposal service of solid waste.
- b. Management and processing of administrative procedures necessary for the approval of the relevant Environmental Management Instrument(s) and necessary for the implementation of Removal Activities, if any. This obligation includes the correction of comments received under the respective administrative procedures.
- c. If applicable, carry out the management and processing of the administrative procedures necessary to obtain the Certificate of Absence of Archaeological Remains - CIRA corresponding to the area where the execution of the Removal Activities will be carried out including, if necessary, the management and implementation of the projects of archaeological evaluation, archaeological rescues, among others. This obligation includes

the correction of comments received under these administrative procedures.

- d. Management and processing of the necessary administrative procedures before the Relevant Governmental Authority to obtain the Operating Permit necessary for the execution of the Removal Activities. This obligation includes the correction of comments received under these administrative procedures.
- e. To carry out the activities for the property release and Interferences, in accordance with the provisions of Clauses 6.31 to 6.48 of the Concession Contract.
- f. Execute the Removal Activities in accordance with the approved Technical Study, the approved Environmental Management Instrument (if any) and the corresponding Operating Permit, duly approved by the Governmental Authorities in addition to complying with the Applicable Laws and Provisions.
- 2.2. The GRANTOR shall be responsible for the following obligations:
- a. Provide the CONCESSIONAIRE with access to the Vizcachera area whitin a maximum term of three (3) months from the Closing Date.
- b. Approve the Technical Study mentioned in numeral 2.1 a) above, in accordance with the provisions of the Contract and the Applicable Laws and Provisions. This obligation includes making such observations by the GRANTOR as may be necessary for the subsequent execution of the Removal Activities by the CONCESSIONAIRE.
- c. Obtain the approval of the corresponding Environmental Management Instrument(s) necessary for the execution of the Removal Activities, if any, assuming all costs of its implementation and development during the term of such activities.
- d. Perform the activities of property expropriation and release of interference, in accordance with the provisions of Chapter VI and Annex No. 4 of the Concession Contract.
- e. Obtain the Certificate of Non-existence of Archaeological Remains CIRA corresponding to the area where the execution of the Removal Activities will take place, including approvals for the implementation of the archaeological assessment and archaeological rescue projects, if necessary, assuming all the costs of its implementation and development during the term of such activities.
- f. Obtain the approval of the Governmental Authorities of the Operating Permit necessary for the execution of the Removal Activities, assuming all the costs of its implementation and development during the terms of such activities.
- g. Reimburse the CONCESSIONAIRE for all expenses incurred in carrying out the activities mentioned in numeral 2.1. above.

III. DEVELOPMENT OF TECHNICAL STUDY AND IMPLEMENTATION OF REMOVAL ACTIVITIES

3.1. The CONCESSIONAIRE shall prepare the Technical Survey in accordance with the environmental and technical terms of reference set out in Appendix 2 to this Annex. This Technical Study must be submitted to the CONCESSIONOR within the first five (5) Working Days of month ten (10), counted from the Closing Date, for the latter to review, issue observations and/or determine necessary modifications of the Technical Study and, if applicable, approve it.

- 3.2. For the revision and approval of the Technical Study, the procedure and terms indicated in Clause 7.9 of the Contract must be followed.
- 3.3. It is expressly established that the Technical Study prepared by the CONCESSIONAIRE, as well as the formalities and procedures for obtaining (i) the Environmental Management Instrument(s) (if any); (ii) the Certificate of Non-existence of Archaeological Remains CIRA; (iii) the other Operatin Permit and (iv) the activities of land property, are carried out at the risk of the CONCESSIONOR. In no case can it be understood that the GRANTEE will assume the responsibilities or risks for the non-approval thereof.
- 3.4. In case the GRANTOR considers high the costs of execution of the Removal Activities considered in the Technical Study, it may resume the execution of the Removal Activities, must remove the Vizcachera area within a maximum term of thirty (30) months, whose beginning will be at most in the forty-eighth month (48) and ending at most in the month seventy-eight (78), counted from the Closing Date; releasing or relieving the CONCESSIONAIRE of said obligations. In the event that GRANTOR elects to directly execute the Removal Activities, CONCESSIONAIRE shall itself inform GRANTOR of such decision (relieving GRANTOR of the obligations described in this annex) no later than the last Working Day of the twentieth (20) month after the Closing Date and shall comply with the maximum removal term set forth in this Contract and its annexes.
- 3.5. The Removal Activities shall be carried out in accordance with the provisions of the Technical Study approved by the CONCESSIONOR, with the GRANTOR assuming the archaeological risks arising from possible archaeological findings during the execution of the work, as well as the geological and environmental risks arising from contaminated materials existing in the Vizcachera area and possible adjacent contaminations.

In addition, The CONCESSIONAIRE shall not assume any responsibility, cost or risk for the delays caused by the GRANTOR, third parties or other Governmental Authorities, of the obligations provided in numeral 2.1. of this Annex. Without prejudice to the foregoing, the CONCESSIONAIRE shall be responsible for the proper execution of the Removal Activities, which allow, in the remedied areas, the Works of Section 2 set for in this Contract to be executed.

3.6. Once the Technical Study has been approved by the GRANTOR, as well as the activities described in subparagraphs (b) to (e) of numeral 2.1 above, the Parties will proceed to sign the "Act of Compliance with the Previous Activities and Commencement of the Works" (hereinafter the "Act"). The subscription of this Deed shall allow the CONCESSIONAIRE to begin the execution of the Removal Activities, which shall be carried out in accordance with the schedule contained in the Technical Study, whose term shall not exceed thirty (30) months as from the date of subscription of the referred Act.

- 3.7. The Removal Activities may be carried out directly by the CONCESSIONAIRE or through an Affiliated, Parent, Subsidiary or Related Company, which shall carry them out in accordance with the Technical Study, the Environmental Management Instrument (if applicable) and the respective Operating Permit, approved by the Governmental Authorities, in addition to the Applicable Laws and Provisions. In the event the latter occurs, the CONCESSIONAIRE shall always be liable to the GRANTOR for the execution of the Removal Activities, under the terms provided in this Annex and the Applicable Laws and Provisions, as well as the construction risk and its respective consequences related to the execution of the Removal Activities, as well as the actions and/or omissions, duly proven, of the respective Affiliated, Parent, Subsidiary or Related Company contracted by the CONCESSIONAIRE.
- 3.8. The execution of the Removal Activities shall be supervised by the GRANTOR directly or by the supervisor previously appointed by the GRANTOR and timely communicated to the CONCESSIONAIRE prior to the commencement of the execution thereof. The cost generated by the aforementioned supervision shall be assumed in its entirety by the GRANTOR.
- 3.9. The execution of the Removal Activities shall conclude with the execution of the Certificate of Completion of the Removal Activities, which shall be executed by the Parties within the maximum term described in Clause 3.6 of this Appendix. For such purpose, the CONCESSIONAIRE shall communicate to the GRANTOR the completion of the Removal Activities so that it may proceed to its reception.
- 3.10. Upon receipt of such communication, the GRANTOR, within a maximum term of five (5) Working Days from the date of receipt, shall appoint a reception committee for the Vizcachera remediated area, in order to determine, within a maximum term of twenty (20) Working Days from the date of its appointment, the rejection or acceptance of the Vizcachera remediated area. In the event of rejection, the CONCESSIONAIRE shall lift the observations presented by the reception committee of the Vizcachera remediated area, within the term granted by the committee, which shall not be less than twenty (20) Working Days.
- 3.11. Any fact or situation, regardless of its nature, not attributable to the CONCESSIONAIRE, which causes delays related to the Technical Study, the Environmental Management Instrument(s) (if applicable) and other Enabling Titles, the Certificate of Non-existence of Archaeological Remains CIRA, the property of land and Interferences, such as the appearance of archaeological remains, failure to obtain the necessary permits or licenses, social protests, acts of violence or demonstrations by social or political organizations, the unavailability for any reason of the authorized sanitary landfill or landfills receiving the materials removed from the Vizcachera area, which affect the execution of the Removal Activities and/or the use of said authorized sanitary landfills, causing delays in the start or progress of said Removal Activities, shall legitimize the CONCESSIONAIRE to request the GRANTOR the suspension of the same until the referred fact or situation is definitively overcome. Notwithstanding the foregoing, the CONCESSIONAIRE shall be entitled to request from the GRANTOR the payment of the cost and expenses incurred during such

period of suspension, due to the event or situation produced, for which purpose it shall submit the documents evidencing such costs, all of which shall be expressly reviewed and approved by the GRANTOR, if applicable, for the corresponding payment.

3.12. The GRANTOR shall have a term of thirty (30) Working Days, counted from the reception of the documents indicated in the previous numeral, to approve or reject the referred request. In case of approval, the GRANTOR shall pay the respective amount with the settlement of the Removal Activities. In the event of rejection, the Parties shall resolve their discrepancies in accordance with the provisions of Section VIII of this Annex.

VARIATIONS DURING THE EXECUTION OF THE REMOVAL ACTIVITIES

- 3.13. In the event that during the Removal Activities the presence of different materials and/or additional units not foreseen to those considered in the Technical Study is discovered, the CONCESSIONAIRE shall submit to the GRANTOR a supporting technical report with an additional budget so that the GRANTOR may review it and make the pertinent observations, for its approval, if applicable.
- 3.14. The supporting technical report and the additional budget shall be reviewed and, if applicable, approved no later than ten (10) Working Days after being submitted to the GRANTOR. If there are any observations by the GRANTOR, these shall be notified to the CONCESSIONAIRE within the term indicated above. After the term of ten (10) Working Days has elapsed, it shall be understood that the GRANTOR has no observations on the supporting technical report submitted by the CONCESSIONAIRE.
- 3.15. In the event of any observations by the GRANTOR, the CONCESSIONAIRE shall evaluate such observations and proceed with their correction within a maximum term of ten (10) Working Days as from the notification of the GRANTOR.
- 3.16. Upon receipt of the observations, the GRANTOR shall have five (05) Working Days to approve the increase of the removals and the budget for such works. If further engineering studies or modifications to the existing Technical Studyare required for the execution of the major removals, these shall be prepared by the CONCESSIONAIRE and, if applicable, shall be approved by the GRANTOR and the Relevant Governmental Authority, prior to their execution. Such execution shall be in charge of the CONCESSIONAIRE, at the account, cost and risk of the GRANTOR, who shall extend the execution term of these activities to carry out greater removals.
- 3.17. In case of disagreement between the Parties with respect to the variations of the materials, the Parties shall resolve their disagreements in accordance with the provisions of Section VIII of this Annex.

IV. PAYMENT FOR PRICE CHANGES

- 4.1. In the event that the prices associated to the Removal Activities are altered, the GRANTOR shall recognize in favor of the CONCESSIONAIRE the corresponding price adjustment, according to the polynomial formula of the Technical Study.
- 4.2. Likewise, the GRANTOR shall recognize to the CONCESSIONAIRE the variation of the costs of the solid waste final disposal service, provided that they are duly accredited.

V. PAYMENT OF COSTS AND EXPENSES

5.1. The costs and expenses for the execution of the Removal Activities shall be assumed and paid by the GRANTOR to the CONCESSIONAIRE through the submission, revision and approval of monthly appraisals. The monthly valuations will have to be previously reviewed and, if applicable, approved by the supervisor appointed by the GRANTOR, in order for the GRANTOR to approve and pay them.

On a monthly basis, the GRANTOR and the CONCESSIONAIRE shall determine by mutual agreement and in writing the part of the Removal Activities actually executed, after revision and approval by the supervisor, during the previous month, and shall prepare a monthly valued list, based on the unit prices approved in the Technical File, for which payment shall require the agreement of the supervisor and the GRANTOR on the works executed according to the schedule contained in the Technical Study.

In the event that there is no agreement, only the part of the Removal Activities in which both Parties agree and previously have the supervisor's approval will be invoiced and paid, leaving the rest to be discussed for the next monthly assessment or for the final settlement. In case of discrepancies with respect to the corresponding valuations or payments, the Parties shall resolve their discrepancies in accordance with the provisions of Section VIII of this Annex.

- 5.2. For the purpose of determining the monthly amount to be paid, the budget approved by the GRANTOR and the supervisor's opinion will be taken into account, according to the effective volume of the type of material removed according to the existing classification in the Applicable Laws and Provisions.
- 5.3. For the lack of timely payment of the cost of execution of the Removal Activities, the GRANTOR shall pay the CONCESSIONAIRE a fee equivalent to the Legal Interest Rate plus two percent (2%) per annum, calculated on the amount to be disbursed, from the beginning of the period of delay until the end thereof, provided that such omission or delay is not attributable to the CONCESSIONAIRE.

The referred interest shall be applied as from the Calendar Day following the due date of the payment until the date of the effective payment. The amounts generated by this concept shall be paid by the GRANTOR to the CONCESSIONAIRE.

VI. RESPONSIBILITY

- (a) <u>CONCESSIONAIRE Liability.</u> The CONCESSIONAIRE shall only be liable for the execution of the Removal Activities, under the terms of this Annex, and for the respective construction risk, its consequences and for the loss or damage suffered by the GRANTOR as a consequence of a breach, wilful act and/or omission or an act and/or omission carried out with serious negligence by the CONCESSIONAIRE and/or an Affiliated, Parent, Subsidiary or Related Company contracted by the CONCESSIONAIRE for such purpose. In this case, the penalties set forth in Annex No. 10 of the Concession Contract shall apply.
- (b) <u>CONCESSIONAIRE Liability.</u> Taking into account what is described in subparagraph a) above, the GRANTOR shall hold harmless the CONCESSIONAIRE, its representatives, directors, subordinates, employees, affiliates, successors and assigns from any liability, claim, loss, demand, suit, legal action, attachment, payment, damage, expense, (including, but not limited to attorney's fees and other legal costs) suffered as a consequence of the performance of the activities of this Annex.

Any delay due to causes attributable to the GRANTOR or to the Relevant Governmental Authority, in excess of the legally established term, related to (i) the Technical Study; (ii) Environmental Management Instrument(s) (if applicable); (iii) Certificate of Non-existence of Archaeological Remains - CIRA; and, (iv) other Operating Permit, which has an impact on the Removal Activities, will lead to an extension of the CONCESSIONAIRE's terms for the execution of such activities, in the same proportion of the delay.

VII. EFFECTS WITH RESPECT TO THE CONCESSION CONTRACT

The GRANTOR acknowledges and accepts that in the event that the CONCESSIONAIRE does not carry out the Removal Activities or does not carry them out properly, as set forth in this Annex, such fact shall in no event exonerate the GRANTOR from the performance of its obligations under the Concession Contract, which include those related to the payments set forth in the Concession Contract in favor of the CONCESSIONAIRE and/or the release of the properties lands from the Concession Area; unless the foregoing results from a cause attributable, directly or indirectly, to the CONCESSIONAIRE and due to the CONCESSIONAIRE's willful misconduct or inexcusable fault.

VIII. RESOLUTION OF DISPUTES RELATED TO THIS ANNEX

5.1 In the event of any discrepancy or dispute between the Parties arising out of or in connection with this Annex, including but not limited to those described in numerals 3.10, 3.15 and/or 5.3 of this Annex, it is agreed that the Parties submit to the binding opinion of an Expert, as set forth in Clause 7.13 of the Concession Contract. During the term that delays the issuance of the Expert's binding opinion and only until such date, the affected obligations of the

CONCESSIONAIRE shall not be suspended, and the CONCESSIONAIRE shall continue with its respective obligations.

- 5.2 If the referred opinion is favorable to the CONCESSIONAIRE, the GRANTOR shall approve within five (05) Working Days from the notification of the binding opinion, the amounts to be paid, if any, and/or reimburse the CONCESSIONAIRE, within the term of five (05) Working Days, the expenses incurred by the latter as a consequence of the suspension of its activities, if any, or any other compensation included in the binding opinion.
- 5.3 If the Expert's binding opinion is favorable to the GRANTOR, the CONCESSIONAIRE shall, within five (05) Working Days from the notification of the binding opinion, comply with (i) lifting the observations of the GRANTOR, (ii) with the execution of the Removal Activities in the direction stated by the Expert and/or (iii) perform any other action or omission ordered by the Expert in his opinion, without prejudice to the application of the corresponding penalties as set forth in Annex No. 10 of the Concession Contract.
- 5.4 The Parties declare and accept that the Expert's opinion shall be binding but not final for the Parties, and the Party that does not agree with such decision may resort to the corresponding arbitration procedure, according to the dispute resolution clause established in this Contract.

ANNEX No. 13 VIZCACHERA AREA

Appendix 2

Terms of Reference for the Preparation of the Technical Study

I. SCOPE

The CONCESSIONAIRE shall prepare the Technical Study including, but not limited to, the section below:

- 1.1. Identification of the intervention area according to the polygon established in this Annex or the required technical modifications if the Right of Way is affected. The property where the Vizcachera area is located is associated with the execution of the Project, so it must be affected as an asset of the Transport sector, as contemplated in the respective Environmental Management Instrument and in the Applicable Laws and Provisions.
- 1.2. Technical specifications of the removal activities, study of routes and transportation of the material removed from the Vizcachera area, final disposal of the removed material in authorized sanitary landfills, recovery and restoration of the land in accordance with the Applicable Laws and Provisions, complying with the technical specifications necessary for the execution of the Works.
- 1.3. Detailed schedule for the execution of the removal activities.
- 1.4. Detailed line-item budget of the Removal Activities and the corresponding polynomial formula.
- 1.5. Applicable Laws and Provisions will be considered, including those related to the identification and management of environmental liabilities and/or contaminated sites, as appropriate, in coordination with the Relevant Governmental Authority, in addition to taking into account the contributions contained in Official Communication No. 2423-2020-MTC/19 and Report No. 052-2020 MTC/16.02.JFU.JCS.LMQ.JGP, among others.

II. OBJECTIVE

The objective of the Technical Study is to identify the composition of the materials and/or wastes existing in the subsoil and above ground of the area called "Vizcachera", considering the previous studies and the new ones determined by these Terms of Reference (hereinafter, the "<u>TORs</u>") in addition to the Applicable Laws and Provisions.

With the precise identification of the subsoil and topsoil composition of the study area and its volume, the Removal Activities and the treatment of the affected area and the estimation of term and costs should be defined.

In this regard, in accordance with Article 6 of Supreme Decree No. 012-2017-MINAM a preliminary assessment must be performed and, if applicable, an identification sampling, concluding with a contaminated sites identification report.

III. STUDY AREA

Section A of this Annex shows the study area called "Vizcachera", in which there is evidence that there would be materials and/or waste of different nature.

The area called "Vizcachera" is located within the hydrological basin of the Rimac River, more specifically within the basin of one of its tributaries on its right bank, the Huaycoloro River. The Huaycoloro riverbed runs approximately 350 m from the southeast (SE) boundary of the Vizcachera area.

The Vizcachera area is located on a granitic substrate with the development of a jabre type alteration that is locally fossilized by glacis or fan deposits. On this natural terrain, with a dense to very dense compactness, and taking advantage of the hollows or excavation of an old artisanal sand exploitation, the anthropic filling of this depression has taken place, currently supporting leisure infrastructures (soccer and basketball courts) and informal recycling activities.

The Vizcachera area includes two (2) types of possible wastes with very different characteristics where eighty percent (80%) would correspond to inert components:

- Anthropic sanitary landfill (garbage), studies to date indicate that the thickness of six (6) to thirteen (13) meters with an extension of approximately nineteen thousand square meters (19,000 m2) and a volume between one hundred and fifty thousand cubic meters (150,000 ^{m3}) and one hundred and seventy thousand cubic meters (170,000 ^{m3}).
- The anthropic inert fills (cuttings and/or construction debris) are found on the surface of the entire landfill with thicknesses between fifteen (15) to one point five (1.5) meters and volumes of approximately seven hundred and seventy cubic meters (770,000 ^{m3}).

IV. ACTIVITIES

The minimum activities have been distributed in the following stages:

a. STAGE I: PLANNING

Prior to the beginning of the planning works, the CONCESSIONAIRE will hold a coordination meeting with the GRANTOR in order to detail the scope of the works, procedures and responsibilities to be carried out, as well as the communication with the Relevant Governmental Authority and with the local population settled in the Vizcachera area to be intervened.

Planning tasks include coordination to ensure the accompaniment of security personnel or the National Police of Peru for the entry of personnel and machinery into the work area, as well as the necessary steps to ensure the availability of land for the field campaign and the coordination of the necessary permits and licenses.

In addition, a geographic delimitation of the study area or area of interest will be made, based on the number and distribution of the monitoring points, among other criteria that could be established, in order to have it as a tool, prior to the field work, which could be adjusted after the results obtained from the field work, in order to have clarity regarding the scope of the Removal Activities.

b. STAGE II: FIELDWORK

a) Determination of air quality, through evaluation at two monitoring stations (leeward and windward), to identify the levels and types of gases and particulate matter in the Vizcachera area, in accordance with Applicable Laws and Provisions on air quality.

The following are considered for this task:

- Evaluate the presence of combustion gases and particles using analyzing equipment through which the following parameters will be measured: carbon monoxide, sulfur dioxide, particulate matter, volatile organic compounds, sulfur dioxide, among others.
- Install the monitoring equipment according to the wind direction, also considering the presence of local population in the Vizcachera study area.
- Also measure wind direction and speed, including other parameters such as temperature and relative humidity.
- b) Evaluation of the soil and residue through a sampling of the cores extracted from the borings as well as the samples taken in the test pits, in accordance with the Applicable Laws and Provisions. The following will be considered for this task:
 - Evaluate the presence of contaminants in the soil considering parameters such as total petroleum hydrocarbons and/or BTEX (benzene, toluene, ethyl benzene and xylenes). The purpose of evaluating these parameters is to determine the amount of hazardous waste that may be contaminated with hydrocarbon remnants in the Vizcachera area.
- c) Vector Control. Evaluation of the biological characteristics of the Vizcachera area. The following will be considered for this task:
 - Evaluate the presence of zoonosis vectors, including especially rodents. It will be necessary to evaluate them from a sanitary point of view to prevent and, if necessary, control risks.
 - A characterization of the vectors present in the study area should be carried out in order to determine the methodology to be applied for vector control and/or eradication.

This work will be carried out by a biologist and is part of the previous environmental characterization of the Vizcachera study area. Its results will allow, together with the rest of the information obtained, to have more elements of judgment for the selection of the most favorable alternative for the recovery of the referred area, according to the Applicable Laws and Provisions.

- d) Placement of two piezometers for evaluation of leachate. The following will be considered for this task:
 - Determine whether leachates are present in the Vizcachera area. Leachate requires differential treatment in solid waste management.
 - Analyze and evaluate the possible presence of aquifers in the Vizcachera area and the probability that they have been contaminated by leachate migration.
- e) Hydrogeological Studies. Determine the distance from water bodies and water intake points for human consumption, water table depth, flood zones, risk zones or geological faults.
- f) Social Evaluation. The following will be considered for this task:
 - Conduct the basic social evaluation, mainly considering the possible activities that can be developed in the waste-dependent area (e.g., recycling activities).
 - Evaluate the basic socioeconomic conditions in the Vizcachera area, associating them mainly with health and sanitation conditions.

The ultimate purpose of the social assessment is to determine the impact, both positive and negative, on the population of the Vizcachera area of influence.

This work will provide sufficient information to select the most favorable alternative for the recovery of the Vizcachera area.

g) Quantification and characterization of solid waste deposited in the Vizcachera area.

The estimation of the volume of waste deposited in the Vizcachera area will be made by combining the three (3) procedures described below:

i. Topographic survey of the entire current surface of the Vizcachera study area, using a total station and of its basal surface by means of a projection of the surrounding topography. Cross-sectional profiles will be made for the cubing of the Vizcachera study area to determine the estimated volume of waste disposed based on the complementary studies of seismic refraction and drilling. This survey must be linked to the National Geodetic Network (WGS84 Datum System), establishing at least two (2) ground control points (BM) in the field, duly monumentalized, which must be validated by the National Geographic Institute - IGN or the Governmental Authority that takes its place.

- ii. Determination of bottom topography using the seismic refraction geophysics techniques described in Section C of this Appendix. With this technique, waste volumes and bottom topography can be accurately determined. In this way, it is possible to separate the volumes of waste from the volumes of waste and their detailed distribution. At least eight (8) seismic profiles will be carried out with an estimated length of each one of them (indicated in Section A of this Appendix):
 - Longitudinal seismic profile A, B, each 600 m.
 - Transversal profile 1, 2 and 3 of 250 m (total 600 m).
 - Transversal profile 4 of 300 m.
 - Transversal profile 5 of 300 m.
 - Transversal profile 6 of 250 m.
- iii. Following the results obtained from the geophysical campaign, an investigation by means of test pits and borings on the surface of the Vizcachera study area will be proposed. This campaign will be precisely defined once the geophysical results have been obtained and analyzed, and will be composed of:
 - Execution of thirty (30) test pits, to the depth that can be reached by the machine, to determine the composition of the materials that make up the Vizcachera study area.
 - Rotary drilling with continuous core recovery and unaltered sampling. It will be drilled down to the vessel, i.e. the natural ground, and thus the depth of the discharge will be determined at several points. The selection of the drilling points will be carried out using the information obtained in the topographic surveys and profiles carried out. The estimated minimum number of surveys to be carried out will be thirty (30) distributed homogeneously over the surface of the Vizcachera study area. Once the cores have been extracted, the percentage composition of the residue and its characteristics will be visually analyzed and, if necessary, samples will be taken for analysis.
 - A visual and olfactory analysis of the material extracted from the test pits and boreholes will be carried out in order to characterize the nature of the materials dumped in the Vizcachera area throughout its history. If deemed necessary (indication or presence of hazardous materials such as hydrocarbons or asbestos), laboratory analysis will be performed.

The estimated locations of the borings and test pits to be drilled are shown in Section A of this Appendix. As mentioned above, this location may be varied, depending on the results obtained from the geophysics.

With the characterization of the waste, it will be possible to determine the
percentage composition of the waste deposited in the Vizcachera study area,
detecting the presence or absence of contaminating elements that could
generate leachate, as well as the proportion of organic matter and its state of
degradation.

h) Characterization of Methane Presence.

Depending on the chemical composition of the organic waste and using procedures such as, for example, the Buswell equation for methanogenesis, it is possible to estimate the amount of gas that can be produced, considering the total waste and its weighted biodegradability. The methodology is detailed in Section B of this Appendix.

c. SECURITY MEASURES TO BE TAKEN

During the work to be carried out in the Vizcachera study area, safety measures must be taken to avoid risks derived from the possible presence of toxic and/or explosive gases.

During the study phase, the following safety measures, among others, will be implemented:

- Workers shall be provided with individual protective equipment.
- Workers will be informed to act according to the emergencies that may arise.
- Portable methane detectors will be available during the surveys.
- Measures to be adopted in the waste removal phase of the Vizcachera area:
 - Workers shall be provided with individual protective equipment.
 - Workers shall wear respiratory protection.
- If possible, ventilation in the truck loading area will be encouraged.
- Truck cabins must remain closed at all times and have a filtering system that allows clean air to enter.
- Periodic controls of the extracted waste will be established to detect, control and eliminate possible hazardous waste.
- Action protocols will be established in the event that high gas concentrations are detected.
- Workers will be informed to act according to the emergencies that may arise.
- Specific work protocols will be established for the extraction and waste load.
- Workers will be provided with portable gas detectors, taking into account the Applicable Laws and Provisions related to sanitary protocols on COVID-19 disease.

d. STAGE III: CABINET WORK

The following tasks will be performed at this stage:

- a) Collection, systematization, analysis and interpretation of information obtained in the field, including analysis and interpretation of laboratory results (soil and air samples).
- b) Evaluation of alternatives for the recovery of the land occupied by the Vizcachera area.

Based on the results obtained in the previous stages of the study, a series of alternatives for the recovery and/or treatment of the Vizcachera area will be analyzed and presented to the GRANTOR for its consideration, for which a presentation meeting will be held.

c) Measurements, technical specifications, budget and remediation execution schedule.

<u>Measurements</u>: adequate support must be provided for the measurements for each item, in accordance with the plans and the technical specifications of the Removal Activities. Each measurement sheet should indicate, when applicable, the identification code of the plan used.

The Technical Specifications must be prepared for each of the items that make up the construction budget, defining the nature of the works, construction procedures and forms of payment. These technical specifications constitute the rules that define the specific presentations of the execution stage of the work; that is, description of the works, construction methods, quality of materials, quality control system, measurement methods and payment terms. Those technical specifications will present the same numerical codes or ITEMs as the baseline budget and the summary of measurements.

<u>The unit price analysis</u>: will be performed for each item and subitem required according to the particular characteristics of the Removal Activities, considering: (i) the composition of work, equipment and materials, (ii) the performance of the corresponding labor and equipment, (iii) the distance to water sources and quarries of fill and construction materials, (iv) cost of exploitation, (v) the cost of other materials, machinery and equipment to be installed in the work including freight, transportation of the material removed from the Vizcachera area, final disposal of the removed material in authorized sanitary landfills, (vi) taxes, (vii) insurance and (viii) in general, all costs related to the Removal Activities included in the price analysis, which must be duly supported and with the corresponding quotations. The analyses will be prepared in detail, both for direct and indirect costs (fixed overheads, variables and utility).

<u>The budget for the removal activities</u> should be calculated based on the measurements and unit price analysis, differentiating the direct and indirect costs and the corresponding VAT, and the elaboration of the polynomial formula. The budget must be prepared using the S10 program or another similar program.

e. STAGE IV: FINAL REPORT:

The results of the study will be presented in a final report detailing the methodology followed and the conclusions obtained. The report and annexes will describe and characterize the current situation of the Vizcachera study area and all the actions necessary for, if applicable, the removal and transfer of the wastes, and for the decontamination, recovery and restoration of the land (the Removal Activities).

Regardless of which alternative is finally selected, a final report will be prepared with sufficient detail for its execution and the methodology for the reclamation of the Vizcachera area. Whether it is decided to remove the waste or to keep it *in situ*, the methodological offer will describe and budget for the actions necessary for the removal and transfer of the waste, as well as for the decontamination, recovery and restoration of the land in question. The final restoration will be designed according to the uses to which they will be put, but will take into consideration, among others, the following actions.

- Regularization and waterproofing layers.
- Protocol for soil decontamination.
- Adequacy of soil profiles to ensure its stability.
- Actions for land inertization and reclamation.
- Soil contributions for sealing.
- Provision of topsoil to facilitate landscape integration, if applicable.
- Conditioning of roads and drainage network to facilitate conservation and evacuation of rainfall, if necessary.
- Revegetation Plan.
- Guidelines for land management after reclamation.
- Budget, unit cost analysis, prices and Measurements.

V. TERM OF EXECUTION

The CONCESSIONAIRE shall submit the scope of the studies and its schedule of activities to the GRANTOR, with a copy to the REGULATOR, within twenty (20) Working Days from the Closing Date.

The Technical Study shall be prepared by the CONCESSIONAIRE and submitted to the GRANTOR within the first five (5) Working Days of the month ten (10) counted from the Closing Date.

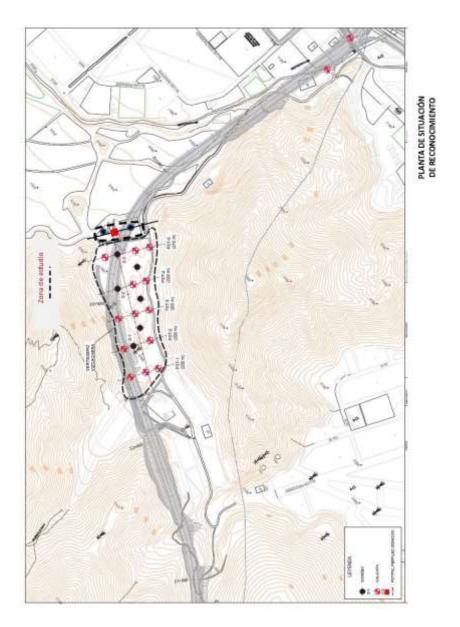
VI. DELIVERABLES

The final report shall be delivered in three (3) original printed copies, which shall be duly signed by the specialist responsible for the study according to his specialty, and a digital version (in original editable format) for the REGULATOR and for the GRANTOR.

ANNEX No. 13 VIZCACHERA AREA

Appendix 2 Terms of Reference for the Preparation of the Technical Study

> Section A Study area, location plan of borings and test pits.



ANNEX No. 13 VIZCACHERA AREA

Appendix 2 Terms of Reference for the Preparation of the Technical Study

Section B Procedures for methane quantification

The volume of gases generated in a possible landfill, as a consequence of the anaerobic decomposition of the accumulated organic waste, is a function of a multitude of factors, so its quantification is complicated.

On the other hand, other factors such as humidity, temperature, the number of organisms present in the waste, the presence and concentration of nutrients, pH, nutrient composition, cover and compaction density, among others, also play a role in the amount of gas generated.

However, some empirical formulas have been developed to predict the amount of methane (CH4) and carbon dioxide (C02) generated from waste decomposition.

Theoretically, the amount of biogas generated from one ton of biodegradable carbon corresponds to 1,868 Nm3 (Nm3 = Normal cubic meter). In industrialized countries, the theoretical amount is 370 Nm3 of biogas per ton of garbage deposited, although experience shows that, at least in developed countries, biodegradation occurs imperfectly, so it is considered that biogas generation would be closer to 200 Nm3 per ton of garbage deposited than the previous figure.

Some authors have made theoretical estimates based on assumptions about the chemical composition of household garbage, and have applied these assumptions to the Buswell equation of metallogenesis, which governs the methanogenic process.

These calculations have obtained theoretical biogas yields, considering the total waste or considering a weighted biodegradability.

On the other hand, the Landfill Methane Outreach Program of the U.S. EPA recommends several methods to estimate more or less accurately the biogas generation in a landfill. Among them, the "Simple Approximation" method, which is based on the amount of waste deposited in a landfill, stands out. The procedure is based on an empirical ratio of waste quantity to biogas flow observed in the many and varied landfill biogas recovery projects studied by this program. It is a reflection of the characteristics of the average landfill and may not accurately represent the different characteristics of the waste, weather and other variables that may be present in a specific landfill. EPA generally recommends using this rule only as a preliminary process to determine if more complex methods are needed.

This simple rule of thumb approximation requires only knowledge of the amount of waste deposited in the landfill of interest and draws on the judgment and experience of industry experts, who have established that biogas generation ranges from 0.05 to more than 0.20 cubic feet (pe) per year per pound (lb) of waste. This gives the following equation:

Annual biogas generation (pc) = 0.10 pc/lb K 2000 lb/ton x amount of garbage deposited (ton)

This method does not consider a number of site characteristics, including the length of time the waste has been deposited, which has a negative influence on biogas generation (after the stabilization stage), so the above generation ratio may only be useful for estimating generation for a couple of years after gas collection begins. Thereafter, the EPA recommends starting to apply an annual decline factor of between 2% and 3% to biogas generation.

With the characterization of the waste and the substrate, it will be possible to estimate the amount of gases generated. Once this amount is known, a system for disposal and landfill restoration can be articulated. Depending on the estimated volume and its concentration, it is possible to choose to let it evacuate freely or to capture it with or without combustion.

It is worth mentioning that the Technical Guide for the closure and conversion of solid waste dumps, published by the National Environmental Council ("CONAM") and the General Directorate of Health of the Ministry of Health ("DIGESA") in 2004 and/or other applicable national or international technical guidelines, should be taken into account for the performance of this work.

ANNEX No. 13 VIZCACHERA AREA

Appendix 2 Terms of Reference for the Preparation of the Technical Study

Section C

Application of the seismic refraction technique for the determination of waste and waste rock volumes, their distribution and bottom topography.

a) Geophysical Investigations

Eight (8) seismic refraction lines will be executed. The main objectives of the seismic refraction test are as follows:

- To estimate the strength and deformation parameters of the materials that make up the Vizcachera area.
- Determine the seismic profiles of the Vizcachera area based on their dynamic characteristics and at variable depths of investigation, according to the specific objective of each line.
- Based on this, volumes of solid waste from the Vizcachera area will be determined. The following results can be obtained considering the difference in densities between waste and waste rock, and between these and the substrate:
 - Determination of waste volumes, distinguishing between waste and waste disposal.
 - Spatial distribution of such waste.
 - Bottom Topography.

b) Test Method

The seismic refraction test consists of measuring the travel times of compression and shear waves, P-waves, generated by the impact of a 25 lb. On the metal disk of the equipment. These impacts are located at different distances along an axis on the ground surface, and the start of the recording is given by a device, or SWITCH, which marks the zero time from which the time of the run is evaluated.

The energy is detected, amplified and recorded in such a way that the arrival time at each point and thus the wave velocities can be determined. These time and distance data obtained, varying the trigger point or the application of energy, allow to evaluate the propagation velocities of P-waves through the different soils whose structure, geometry and continuity are investigated.

The "Delay Time" method will be used for the analysis of the data, since it allows the use of criteria that use the assumption of Snell's Law regarding the reflection and refraction of the waves. With the recording of P- and S-wave velocities (VP and VS), and the specialist's due judgment, it is possible to define the density changes of the strata, their dynamic and static deformation

parameters (dynamic modulus of elasticity ED, Poisson's ratio μ and static modulus of elasticity E) and to estimate the angle of internal friction \emptyset .

ANNEX No. 13 VIZCACHERA AREA

Appendix 2 Terms of Reference for the Preparation of the Technical Study

Section D Applicable Regulations

For the preparation of the documents related to Annex No. 13, the following Applicable Laws and Provisions shall be taken into account, as they may be amended and/or replaced:

- Emergency Decree No. 022-2020.
- Legislative Decree No. 1501.
- Supreme Decree No. 010-2019-MINAM.
- Supreme Decree No. 012-2017-MINAM.
- Ministerial Resolution No. 085-2014-MINAM.
- Other Applicable Laws and Provisions.

ANNEX No. 14 CONCESSIONARY COMPANY

Appendix 1 STATEMENT OF INCORPORATION

ANNEX No. 14 CONCESSIONARY COMPANY

Appendix 2 POWERS OF LEGAL REPRESENTATIVE

ANNEX No. 15 ECONOMIC OFFER

ANNEX No. 16 REFERENTIAL COMPENSATION MECHANISMS

As established in Clause 11.4 of the Contract, in a referential and non-binding manner, the Parties may take into account the following compensation mechanisms:

The GRANTOR may compensate the CONCESSIONAIRE with one, or a combination, of the following mechanisms:

- a) With the difference of the traffic that would have occurred if the toll unit had been installed in the initial location minus the traffic generated in the new location until the end of the Concession. In case such difference generates a positive balance, the balance will be considered for the calculation of the next period in favor of the GRANTOR; or
- b) With the difference of the CONCESSIONAIRE'S income that would have occurred had the toll unit been installed at the initial location -considering the Tariff in force- minus the incremental income generated by the revision of the base Tariff, which shall be validated and approved by the REGULATOR; or
- c) Other form of compensation mutually agreed upon by the Parties.

In any of the compensation mechanisms, the CONCESSIONAIRE shall install a daily traffic counter, at its own cost and expense, at the location of the initial toll. The installation, traffic counting and the result to be compensated shall be validated and/or approved by the REGULATOR. The GRANTOR shall pay the first compensation no later than thirty (30) Calendar Days from the beginning of the following semester (semesters are from January to June or from July to December). Subsequently, the compensations will be paid no later than thirty (30) Calendar Days after the expiration of each semester.

ANNEX No. 17

PROCEDURE FOR THE SELECTION OF THE EXPERT AND DETERMINATION OF THE COMPENSATION UNDER CLAUSE 11.4 OF THE CONCESSION CONTRACT

Pursuant to Clause 11.4 of the Contract, in the event that the Parties cannot agree on the determination of compensation, they shall select an Expert to determine, among others, the mechanism and formula for the calculation of such compensation, following the procedure described below:

- 1. The Party wishing to submit the technical dispute of compensation determination to an Expert shall send a request to the other Party stating the technical issues in dispute, its claims and the technical support thereof.
- 2. The Parties agree that, once the above request is submitted, those obligations of the CONCESSIONAIRE that are affected by the non-installation and/or operation of the affected Toll Unit(s) and/or by the implementation of the compensation mechanism described herein shall be automatically suspended. The identification of the CONCESSIONAIRE's obligations to be suspended shall be determined by the GRANTOR in the corresponding suspension act issued, which suspension term may be extended so that the expiration effects set forth in Clause 5.22 of the Contract are not applicable.
- 3. The Parties have a term of five (5) Working Days, counted from the notification of the request established in the preceding paragraph, to, by mutual agreement and by means of minutes signed by their representatives, designate the Expert, who must correspond to an entity dedicated to engineering, technical consulting, financial consulting or any other specialty that the matter requires and that is of recognized international prestige and with broad experience in the subject matter of the technical dispute, and may not have economic ties or be directly or indirectly rendering any type of direct or indirect service of any kind, financial or any other specialty that the subject matter requires and that is of recognized international prestige and with broad experience in the subject matter requires and that is of recognized international prestige and with broad experience in the subject matter of the technical dispute, and may not have economic ties or be directly or indirectly providing any type of service in favor of the Parties, their shareholders or Related Company, in Peru or abroad, from the year prior to the one designated and up to one (1) year after the resolution of the technical dispute.
- 4. In the event that the Parties are unable to reach an agreement on the appointment within the above term, the Parties or any of them shall request the appointment of the Expert to the International Centre for ADR of the International Chamber of Commerce, to proceed, within a maximum term of thirty (30) Calendar Days from the date of submission of the corresponding request to the appointment of the Expert in accordance with the Regulations on the Appointment of Experts and Third Parties. The appointment made by the above institution shall be binding on the Parties. The application to the International Chamber of Commerce shall include a description of the technical dispute.
- 5. The parties state that the appointment of the Expert and his/her acceptance constitute a sufficient contract for the execution of the Expert's assignment.

- 6. Once the Expert has been appointed and the acceptance of the assignment has been received, the procedure for the resolution of the technical dispute and, therefore, for the determination of the compensation to be applied shall be initiated. Proceedings for the resolution of a technical dispute and determination of compensation shall be held in the City of Lima, Peru.
- 7. The Expert shall request the Parties to submit all the necessary information to resolve the technical dispute within five (5) Working Days from receipt of the request, including, but not limited to, the information on the traffic for the affected Toll Unit(s) (considering the effect of the impossibility of Operation), and the Parties may also submit their offers for determining the mechanism and the corresponding compensation formula with a non-binding nature for the Expert, which may be, at most, up to two (2) proposals for each Party. The Parties shall have a maximum term of twenty (20) Working Days from the notification of the Expert's request for information to submit all the information described above.
- All non-binding offers for the determination of the compensation mechanism and formula submitted by the Parties shall be aimed at compensating the CONCESSIONAIRE for the noninstallation, operation and/or exploitation of the affected Toll Unit(s) from the beginning of the respective affectation.
- 9. Upon receipt of such information, the Expert may request from the Parties the additional information and/or clarifications that he/she deems necessary for the resolution of the technical dispute within a term of ten (10) Working Days following the receipt of the information by the Parties. The Parties shall have a maximum term of five (5) Working Days to evaluate and submit additional information and/or clarifications. Any of the terms governing this procedure may be extended by mutual agreement of the Parties. In view of all the information, documentation and/or clarifications previously received, the Expert will proceed to communicate his/her final decision to the Parties within a maximum term of fifteen (20) Working Days. The Expert will decide on how to resolve the dispute that has arisen in accordance with this Contract. The Parties declare and accept that the decision of the Expert shall be binding and of immediate execution, that is to say, it must be fully complied with without delay by the Parties, being that, if challenged by any of the Parties by means of the notice of request for conscientious arbitration, according to the present Contract, such challenge shall not suspend the effects of the Expert's decision. For this purpose, the Parties will have a term of ten (10) Working Days from the time the Expert notifies his/her decision, to submit the request for arbitration in accordance with the Arbitration Rules of the Center for Analysis and Resolution of Conflicts of the Pontifical Catholic University of Peru. If this term has expired without any of the Parties submitting such a request for arbitration, the Parties agree that the technical and/or factual decision of the Expert is final and cannot be questioned by any means.
- 10. Once the Expert's decision is final, if by its nature it has to be implemented by an arbitral tribunal or a judicial court, the arbitrators or judges may not modify the decision in whole or in part, and must execute the technical and/or factual decision as established by the Expert, in accordance with the provisions of the Thirteenth Supplementary Provision of Legislative Decree No. 1071, Arbitration Law.

- 11. The Expert shall resolve to the best of his/her knowledge, in good faith and to the best of his/her knowledge, and in accordance with this Contract.
- 12. The Expert must maintain absolute reserve and confidentiality regarding all the information that he or she learns from his or her participation in the resolution of a technical dispute.
- 13. During the course of the procedure described above, the Parties shall continue with the performance of their contractual obligations, as far as possible, except for those that are the subject of this procedure. If the technical dispute submitted to such procedure deals with the fulfillment of obligations guaranteed by the Guarantees of Faithful Fulfillment, the collection of the penalties that accrue and the execution of the respective Guarantees of Faithful Fulfillment will be suspended during the execution of the expert procedure. The penalties that accrue during the expert procedure may be collected; in case the Expert determines the breach of the respective obligations.
- 14. All expenses incurred in the resolution of a technical dispute, including the fees of the Expert involved in the resolution of a dispute, shall be borne fifty percent (50%) each by both Parties.
- 15. Excluded from the provisions of this Clause are costs and expenses such as internal costs or others that are ascribable to an individual Party.
- 16. The Parties may, by mutual agreement, supplement these rules. In the event that they cannot agree within a maximum term of five (5) Working Days from the time a Party requests in writing the other Party to establish a new rule, the Expert will have the power to establish any rule, that is absolutely necessary for the execution of the technical dispute resolution procedure.
- 17. Once the procedure described above has been completed, the Parties are entitled to initiate the Dispute Resolution procedure provided for in Chapter XIX, and the initiation of the Dispute Resolution procedure does not suspend the effects of the decision issued by the Expert.

ANNEX No. 18

MECHANISMS AND MANDATORY CRITERIA FOR THE EXPERT RELATED TO THE DETERMINATION AND PAYMENT OF THE COMPENSATION UNDER CLAUSE 11.4 OF THE CONCESSION CONTRACT

As established in Clause 11.4 of the Contract, in case the Parties do not agree on the determination of a compensation, the selected Expert shall obligatorily comply, for the purpose of issuing its final decision, with the following mechanisms and/or criteria for the determination of the mechanism and formula of the corresponding compensation:

- 1. In determining the compensation mechanism and formula, the Expert shall take into account the difference in traffic that would have occurred if the Toll Unit had been installed and the consequent difference in both revenues and operating costs generated, including the costs introduced as a result of the implementation of the compensation mechanism. This analysis should be carried out considering the entire Concession and not only the affected Toll Unit(s), since the impacts on traffic, costs and income could also occur in the other Sections and/or Toll Unit(s) of the Concession.
- 2. The compensation to be determined shall be a quarterly payment to be made by the GRANTOR in favor of the CONCESSIONAIRE.
- 3. The first settlement of the compensation, which shall also be calculated by the Expert and included in its binding and immediately enforceable decision, shall cover the period from three (3) months after the occurrence of the impossibility of Operation of the affected Toll Unit(s) until the date of notification of the Expert's final decision. Subsequent settlements shall cover the quarter immediately following the previous settlement.
- 4. Once the Expert's decision has been notified to the Parties, the CONCESSIONAIRE shall apply the compensation mechanism and formula and send to the GRANTOR its offer of the amount to be paid. The GRANTOR, upon receipt of the above offer, shall have a term of fifteen (15) Working Days to approve or disapprove the offer. In case of disapproval, it shall grant five (5) Working Days to the CONCESSIONAIRE to adjust the same. Once adjusted, the CONCESSIONAIRE shall submit its new offer for the evaluation and approval of the GRANTOR within fifteen (15) Working Days from receipt of the new offer. In the event of a second disapproval, the Parties agree to submit the present technical dispute to the Expert that determined the original compensation mechanism and formula or to another Expert that may be appointed, as the case may be, for the purpose of determining the amount to be paid by the GRANTOR, following the applicable rules set forth in Annexes No. 17 and 18 of this Contract.
- 5. The maximum term for the payment by the GRANTOR of the compensations in favor of the CONCESSIONAIRE shall be ninety (90) Calendar Days after the approval of each settlement or the notification to the Parties of the Expert's decision regarding the determination of the amount to be paid, as set forth in the preceding numeral.

- The compensation payments made by the GRANTOR, effectively received by the CONCESSIONAIRE, will be considered Income of the CONCESSIONAIRE for the calculation of the VPIPm, according to the terms established in the Concession Contract.
- 7. The quarterly payment of compensation may not exceed the calculation of the actual observed traffic of the affected Toll Unit or Units, by the corresponding Tariff for the year of operation according to the tariff structure in force at the time of the impossibility of Operation of the affected Toll Unit or Units.
- 8. This compensation mechanism, determined by the Expert, shall be in force until the GRANTOR and/or the Relevant Governmental Authority definitively solve the facts or circumstances that prevent the CONCESSIONAIRE the installation and/or operation of the affected Toll Unit(s), the Operation of the Concession and/or the collection of the Tariff.

ANNEX No. 19 FINANCIAL CLOSING SECTION 2 IN TWO PHASES

Pursuant to Clause 4.4, the Parties agree that the CONCESSIONAIRE has, at its sole discretion, the option to choose to credit the Section 2 Financial Closing in a single opportunity or to credit it in two phases.

In case the CONCESSIONAIRE chooses to credit the Financial Closing of Section 2 in two phases, the procedure indicated below shall be followed:

 Opportunity to exercise the option: the CONCESSIONAIRE may opt for the accreditation in two phases, being sufficient for such purpose only that the informs the GRANTOR, at the latest until the date of subscription of the Deed of Compliance with the Requirements for the Financial Closing of Section 2 or the deadline foreseen for the subscription of such Deed, whichever occurs first.

The exercise of the option mentioned in the previous paragraph by the CONCESSIONAIRE shall only require to be communicated to the GRANTOR for information purposes. It is hereby stated for the record that it is not necessary to have the approval of the GRANTOR, PROINVERSION or the REGULATOR, without prejudice to the powers of each entity in accordance with the Contract and/or Applicable Laws.

- 2. Amount The Financial Closing of Section 2 carried out in two phases shall comply with the accreditation that the necessary financial resources are available for the execution of the Works, as indicated in Clause 4.6, in accordance with the following amount:
 - (i) For Phase 1 of Section 2: at least US\$ 400,000,000.00 (four hundred million and 00/100 U.S. Dollars).
 - (ii) For Phase 2 of Section 2: the remaining resources necessary to cover one hundred percent (100%) of the amount appropriated in the approved Section 2 EDI.

At all times the CONCESSIONAIRE is obliged to comply with the provisions indicated in Clauses 3.6, 4.2 and 4.6, regardless of whether the Financial Close of Section 2 is credited in one or two phases.

The possibility of accrediting the Financial Closing of Section 2 in two different phases does not limit or alter the Construction requirements or the maximum terms established for the execution of the Section 2 Works, which shall comply with the provisions of Clause 8.7 and following, regardless of whether a Section 2 Financial Closing is chosen in a single opportunity or in two phases in accordance with the provisions of this Annex No. 19.

In case the CONCESSIONAIRE accredits the Financial Closure of Section 2 in two phases, it shall be obliged to start the Construction of the Works corresponding to the Critical Properties established in Appendix 2 of Annex No. 4 of the Contract.

ANNEX No. 20 INTERCONNECTION OF SECTION 3 OF THE PROJECT WITH THE VIA DE EVITAMIENTO HIGHWAY

In accordance with Clause 7.7, the Parties agree that, in order to comply with the functionality of the Project and to benefit the Users, it will be necessary for the Works of Section 3 of the Project to interconnect with the Via de Evitamiento Highway (hereinafter, the "Via de Evitamiento Highway"), which was granted in concession to Lima Expresa S.A.C. (hereinafter, including its successor, the "Concessionaire of the Via de Evitamiento Highway") and/or with other infrastructure works, as the case may be. In this regard, the Parties agree that the following rules will be followed for the purpose of implementing the interconnection of the Via de Evitamiento Highway with Section 3 of the Project:

Interconnection with the Via de Evitamiento Highway

- 1. Within a maximum term of (15) Calendar Days from the Closing Date, the CONCESSIONAIRE shall deliver to the GRANTOR the conceptual design of the Works and interventions required for the interconnection of the Project with the Via de Evitamiento Highway, which shall be prepared in accordance with the Technical Requirements of the Project and the Terms of Reference established in Annex No. 3 of the Concession Contract, and shall include a series of alternative solutions to make the interconnection of Section 3 of the Project with the Via de Evitamiento Highway feasible.
- 2. Once the feasible solution alternative has been chosen by the GRANTOR and within a maximum term of eight (8) months as from the Closing Date, which may be automatically extended for a similar term, the GRANTOR shall make its best efforts to deliver to the CONCESSIONAIRE a copy of the agreement subscribed between the GRANTOR, the Concessionaire of the Via de Evitamiento Highway and/or the competent Governmental Authority acting as grantor of such project, allowing, among other matters, the interconnection, easement and/or access of the Project to the Via de Evitamiento Highway that allows the CONCESSIONAIRE to comply with this Contract, pursuant to the provisions of Clause 7.7 of the Contract.
- 3. In the event the GRANTOR does not comply or partially complies with the obligation set forth in numeral 2 above within the maximum term established for such purpose, provided it is not due to a cause attributable to the CONCESSIONAIRE, any of the Parties may request the suspension of its obligations, inaccordance with the provisions of Clauses 5.5 and/or 5.6 of this Contract, as the case may be. In case the suspension lasts for more than one hundred and eighty (180) Calendar Days counted from the respective suspension declaration of the GRANTOR, any of the Parties may invoke the Expiration of the Concession for the reason of Fortuitous Event or Force Majeure, according to subparagraph f) of Clause 18.1 of the Concession Contract, or may agree to modify the terms described above, within the framework of the provisions of Clause 20.1 of the Contract and the Applicable Laws and Provisions.

- 4. Likewise, in case the agreement is signed, but is breached by the GRANTOR's counterparties that signed the agreement and such breach (i) affects the obligations of the CONCESSIONAIRE with respect to the Interconnection Works with the Via de Evitamiento and (ii) is maintained for a period equal to or longer than six (6) months from the date of its commission, any of the Parties may request the suspension of its obligations, pursuant to the provisions of Clauses 5.5 and 5.6 of this Contract, as the case may be. In case the suspension lasts for more than one hundred and eighty (180) Calendar Days counted from the respective suspension declaration of the GRANTOR, the Parties may invoke the Expiration of the Concession for the following reasons on the grounds of Fortuitous Event or Force Majeure, pursuant to subparagraph f) of Clause 18.1 of the Concession Contract.
- 5. The agreed conceptual design included in the agreement subscribed between the GRANTOR, the Concessionaire of the Via de Evitamiento Highway and the Relevant Governmental Authority acting as grantor of said project, may have variations with respect to the conceptual design (i) as long as it allows the interconnection between both projects and (ii) respects the Technical Requirements of the Project and the Terms of Reference established in Annex No. 3. In such case, the corresponding variation shall be considered an Additional Work requested by the GRANTOR and shall be treated in accordance with Clause 7.15 of the Contract.